

# 2018 National Healthcare Quality and Disparities Report

## Measure Specifications

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HEALTH AND HUMAN SERVICES**  
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## Introduction

This document briefly describes the definitions of the 2018 National Healthcare Quality and Disparities Report measures which are posted on the NHQDR website - <https://nhqrnet.ahrq.gov/inhqdr>. The descriptions for each measure include a measure title, a measure source, data source, data tables supporting the measure, definitions of numerator and denominator, as well as other comments. The measures are organized by the chapters followed by sections and subsections based on the NHQDR Measure List. The measure specification is also linked to each measure on the Data Query page on the website.

This sources of this documentation are either based on the information from the source data system websites or from the QDR source data contributing agencies and organizations.

## Chapter 2. Access to Care

### 2.1. Getting Appointments for Care

**Measure ID:** MEPS\_16, 20101011

**Measure Title:** Adults who had an appointment for routine health care in the last 12 months who sometimes or never got an appointment for routine care as soon as wanted

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, and U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over who made an appointment for regular or routine health care in the past 12 months and had a valid response to the question, “In the last 12 months, how often did you get an appointment for regular or routine health care as soon as you wanted?”

**Numerator:** Subset of the denominator who answered “Sometimes” or “Never”

**Comments:** National Table Descriptions report data from the MEPS Self-Administered Questionnaire (SAQ).

**Measure ID:** MEPS\_17, 20101021

**Measure Title:** Children who had an appointment for routine health care in the last 12 months who sometimes or never got an appointment for routine care as soon as wanted

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, and U.S. born



**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population under age 18 who had an appointment for regular or routine health care in the past 12 months and with a valid response to the question “In the last 12 months, how often did [the person] get an appointment for regular or routine health care as soon as you wanted?”

**Numerator:** Subset of the denominator who, according to their parents or guardians, answered the above question “Sometimes” or “Never”

**Comments:** Data are from the MEPS Child Health section. The MEPS entry in the Data Sources appendix -- <http://www.ahrq.gov/research/data/dataresources/index.html> -- has more information.

Nonrespondents and “Don’t Know” responses were excluded.

**Measure ID:** MEPS\_18, 20101031

**Measure Title:** Adults who needed care right away for an illness, injury, or condition in the last 12 months who sometimes or never got care as soon as wanted

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, and U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized adults age 18 and over who in the past 12 months had an illness or injury who needed care right away and had a valid response to the question, “In the last 12 months, when you needed care right away for an illness or injury, how often did you get care as soon as you wanted?”

**Numerator:** Subset of the denominator who responded “Sometimes” or “Never” to the above question

**Comments:** Nonrespondents and “Don’t Know” responses were excluded.

## 2.2. Waiting Time

**Measure ID:** HHCAHPS\_16, 20201021

**Measure Title:** Adults who reported getting the help or advice they needed the same day they contacted their home health provider

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “When you contacted this agency’s office, how long did it take for you to get the help or advice you needed?,” excluding nonrespondents and respondents indicating “did not contact this agency.”

**Numerator:** Subset of the denominator who responded “same day” to the above question

**Measure ID:** 20201031

**Measure Title:** Emergency department visits triaged as immediate or emergent at which patients waited to see a physician for one hour or more, United States

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Hospital Ambulatory Medical Care Survey (NHAMCS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2006-2007 to 2014-2015
- Population Subgroups: Age, sex, race/ethnicity, geographic location (residence)

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Hospital Ambulatory Medical Care Survey (NHAMCS)

**Denominator:** Number of visits to emergency departments where the patient disposition status was triaged as immediate or emergent

**Numerator:** Number of visits which patients waited to see a physician for one hour or more among the population represented by the denominator

**Measure ID:** 20201041

**Measure Title:** Emergency department visits triaged as urgent at which patients waited to see a physician for one hour or more, United States

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Hospital Ambulatory Medical Care Survey (NHAMCS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2006-2007 to 2014-2015
- Population Subgroups: Age, sex, race/ethnicity, geographic location (residence)

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Hospital Ambulatory Medical Care Survey (NHAMCS)

**Denominator:** Number of visits to emergency departments where the patient disposition status was triaged as urgent

**Numerator:** Number of visits which patients waited to see a physician for one hour or more among the population represented by the denominator

**Measure ID:** NHAMCS\_10, 20201051

**Measure Title:** Emergency department visits where the patient was transferred or admitted to the hospital and length of visit was six hours or more per 10,000 population

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Hospital Ambulatory Medical Care Survey (NHAMCS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2006 -2007 to 2013 – 2014
- Population Subgroups: Age, sex, race/ethnicity, location (hospital), insurance

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Hospital Ambulatory Medical Care Survey (NHAMCS)

**Denominator:** Number of visits to emergency departments where the patient disposition status was listed as transferred or admitted

**Numerator:** Number of visits for which the length of visit was six hours or more among the population represented by the denominator

**Measure ID:** 20201061

**Measure Title:** Median time in minutes spent in the emergency department (ED) from ED arrival to ED departure for admitted patients

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2016
- Population Subgroups: Age, gender, race, ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** The sample includes all emergency department (ED) visits where the patients were then admitted to the facility, excluding patients with missing values of ED arrival date and time, or ED departure date and time

**Numerator:** Not applicable. The estimate is the median of time (in minutes) spent in the emergency department from ED arrival to ED departure for patients admitted to the facility

**Comments:** This measure is referred as ED-1B (reporting measure) by the HIQR program. The estimate was not risk adjusted.

This is CMS measure “ED-1B” as described in “Emergency Department (ED) National Hospital Inpatient Quality Measures.” Further information on this measure and other measures is available at <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1228760666430>.

**Measure ID:** 20201071

**Measure Title:** Median time in minutes spent in the emergency department (ED) from admission decision to ED departure for admitted patients

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2016
- Population Subgroups: Age, gender, race, ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** The sample includes all emergency department (ED) visits where the patients were then admitted to the facility, excluding patients with missing values of admission decision date and time, or ED departure date and time

**Numerator:** Not applicable. The estimate is the median of time (in minutes) spent in the emergency department from the time the admission decision was made to the time of ED departure for patients admitted to the facility

**Comments:** This measure is referred as ED-2B (reporting measure) by the HIQR program.

This is CMS measure “ED-2B” as described in “Emergency Department (ED) National Hospital Inpatient Quality Measures.” Further information on this measure and other measures available at <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1228760666430>.

**Measure ID:** 20201081

**Measure Title:** Median time in minutes patients spent at emergency department (ED) from ED arrival to ED departure

**Measure Source:** Centers for Medicare & Medicaid Services (CMS) Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2016
- Population Subgroups: Age, gender, race, ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** The sample includes all emergency department (ED) visits, excluding patients with missing values of ED arrival date and time, or ED departure date and time

**Numerator:** Not applicable. The estimate is the median of time (in minutes) spent in the emergency department from ED arrival to ED departure for patients discharged from the emergency department

**Comments:** This measure is referred as OP-18B by the HIQR program. More information is available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/HospitalOutpatientQualityReportingProgram.html>.

**Measure ID:** 20201091

**Measure Title:** Median time in minutes patients spent in the emergency department before they were seen by a healthcare professional

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2016
- Population Subgroups: Age, gender, race, ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** The sample includes all emergency department (ED) visits, excluding patients with missing values of ED arrival date and time, or the time they were seen by a healthcare professional

**Numerator:** Not applicable. The estimate is the median of time (in minutes) spent in the emergency department from ED arrival to the patients were seen by a healthcare professional

**Comments:** This measure is referred as OP-20 by the HIQR program. More information is available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/HospitalOutpatientQualityReportingProgram.html>.

**Measure ID:** 20201101

**Measure Title:** Median time in minutes patients who came to the emergency department with broken bones had to wait before getting pain medication

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2016
- Population Subgroups: Age, gender, race, ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** The sample includes emergency department (ED) visits where patients with broken bone, excluding patients with missing values of ED arrival date and time, or the time they received pain medication

**Numerator:** Not applicable. The estimate is the median of time (in minutes) spent in the emergency department from ED arrival to the patients received pain medication

**Comments:** This measure is referred as OP-21 by the HIQR program. More information is available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/HospitalOutpatientQualityReportingProgram.html>.

**Measure ID:** 20201111

**Measure Title:** Median time in minutes patients with psychiatric or mental health conditions spent at emergency department (ED) from ED arrival to ED departure

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2016
- Population Subgroups: Age, gender, race, ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** The sample includes emergency department (ED) visits where patients with patients with psychiatric or mental health conditions, excluding patients with missing values of ED arrival time, or ED departure time

**Numerator:** Not applicable. The estimate is the median of time (in minutes) spent in the emergency department from ED arrival to ED departure

**Comments:** This measure is referred as OP-18C by the HIQR program. More information is available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/HospitalOutpatientQualityReportingProgram.html>.

## 2.3. Health Insurance

**Measure ID:** NHIS\_15, 20501031

**Measure Title:** People under age 65 with health insurance

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2000-2017
- Population Subgroups: Activity limitations, age, education, geographic location

(residence), income, race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Denominator:** U.S. civilian noninstitutionalized population under age 65

**Numerator:** Subset of the Denominator: who reported coverage by any type of public or private health insurance

**Comments:** This measure is referred to as measure AHS-1.1 in Healthy People 2020 documentation. Persons with Indian Health Service coverage only are considered to have no coverage.

**Measure ID:** NHIS\_17, 20501051

**Measure Title:** People under age 65 with any private health insurance

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2000-2017
- Population Subgroups: Activity limitation, age, education, geographic location (residence), income, race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Denominator:** U.S. civilian noninstitutionalized population under age 65

**Numerator:** Subset of the Denominator: who reported coverage by private health insurance only

**Measure ID:** NHIS\_18, 20501061

**Measure Title:** Adults age 65 and over with any private health insurance

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)



**Table Description:**

- Geographic Representation: National
- Years Available: 2000-2017
- Population Subgroups: Activity limitation, education, geographic location (residence), income, race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Denominator:** U.S. civilian noninstitutionalized population age 65 and over

**Numerator:** Subset of the Denominator: who reported coverage by any private health insurance

**Measure ID:** MEPS\_40, 20501071

**Measure Title:** People under age 65 who were uninsured all year

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002-2016
- Population Subgroups: Activity limitations, age, education, ethnicity, gender, family income, perceived health status, language spoken at home, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population under age 65

**Numerator:** Subset of the denominator who reported no private or public health insurance coverage at any time during the year

**Comments:** People who are “ full-year uninsured “ include those whose number of uninsured months is equal to the number of available months in MEPS.

**Measure ID:** MEPS\_41, 20501081

**Measure Title:** People under age 65 with any period of uninsurance during the year

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: Activity limitations, age, education, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population under age 65

**Numerator:** Subset of the denominator who reported they had no public or private health insurance coverage at any month during the year

**Measure ID:** NHIS\_22, 20501091

**Measure Title:** People under age 65 without health insurance

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2010-2017
- Population Subgroups: Activity limitation, age, education, race/ethnicity, geographic location (residence), income, race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Denominator:** Number of people under age 65 without health insurance

**Numerator:** Subset of the Denominator: who reported they were without insurance

**Comments:** Estimates are not age adjusted.

**Measure ID:** NHIS\_16, 20501101

**Measure Title:** People under age 65 with public health insurance only

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2000-2017
- Population Subgroups: Activity limitation, age, education, geographic location (residence), income, race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Denominator:** U.S. civilian noninstitutionalized population under age 65

**Numerator:** Subset of the Denominator: who reported only being covered by public health insurance

**Comments:** Public insurance includes Medicare, Medicaid, and other public programs that provide hospital and/or physician coverage.

**Measure ID:** MEPS\_42, 20501111

**Measure Title:** People under age 65 with any period of public insurance during the year

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002-2016
- Population Subgroups: Activity limitations, age, education, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population under age 65

**Numerator:** Subset of the denominator who reported they had public health insurance coverage some time during the year

**Comments:** Public insurance includes Medicare, Medicaid, and other public programs that provide hospital and/or physician coverage.

**2.4. Usual Source of Care**

**Measure ID:** NHIS\_19, 20601011

**Measure Title:** People with a specific source of ongoing care

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2017
- Population Subgroups: Activity limitation, age, education, geographic location (residence), income, race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Denominator:** U.S. civilian noninstitutionalized population

**Numerator:** Subset of the Denominator: who reported having a specific source of primary care

**Comments:** A specific source of primary care includes urgent care/walk-in clinic, doctor's office, clinic, health center facility, hospital outpatient clinic, health maintenance or preferred provider organization, military or other Veterans Affairs health care facility, or some other place. A hospital emergency room is not included as a specific source of primary care.

This measure is referred to as measure AHS-5.1 in Healthy People 2020 documentation.

**Measure ID:** MEPS\_46, 20601021

**Measure Title:** People with a usual primary care provider

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002-2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, and U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population

**Numerator:** Subset of the denominator who have a usual primary care provider

**Comments:** A person is determined to have had a primary care provider if his or her usual source of care setting was either a physician's office or a hospital (setting other than an

emergency room), and he or she reported going to this usual source of care for new health problems, preventive health services, and referrals.

**Measure ID:** NHIS\_20, 20601041

**Measure Title:** People in fair or poor health with a specific source of ongoing care

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2017
- Population Subgroups: Activity limitation, age, education, geographic location (residence), income, race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Denominator:** Number of people who reported being in fair or poor health

**Numerator:** Subset of the Denominator: who reported having a specific source of ongoing care

**Comments:** A specific source of ongoing care includes urgent care/walk-in clinic, doctor's office, clinic, health center facility, hospital outpatient clinic, health maintenance or preferred provider organization, military or other Veterans Affairs health care facilities, or some other place. A hospital emergency room is not included as a specific source of ongoing care.

Estimates are not age adjusted.

**Measure ID:** NHIS\_21, 20601051

**Measure Title:** People who identified a hospital, emergency room, or clinic as a source of ongoing care

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2017
- Population Subgroups: Activity limitation, age, education, geographic location (residence), income, race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Denominator:** U.S. civilian noninstitutionalized population

**Numerator:** Subset of the Denominator: who reported a hospital, emergency room, or clinic as their source of primary care

**Comments:** Estimates are not age adjusted.

## 2.5. Patient Perceptions of Need

**Measure ID:** MEPS\_70, 20701011

**Measure Title:** People unable to get or delayed in getting medical care, dental care, or prescription medications

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

### Table Description:

- Geographic Representation: National
- Years Available: 2002-2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, and U.S. born

**Data Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Denominator:** U.S. civilian noninstitutionalized population

**Numerator:** Subset of the denominator who indicated difficulties or delays in obtaining medical care, dental care, or prescription medications

**Measure ID:** MEPS\_51, 20701021

**Measure Title:** People unable to get or delayed in getting medical care in the last 12 months

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

### Table Description:

- Geographic Representation: National
- Years Available: 2002-2016

- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population

**Numerator:** Subset of the denominator who did not receive or delayed receiving needed medical care in the last 12 months

**Measure ID:** MEPS\_52, 20701031

**Measure Title:** People unable to get or delayed in getting dental care in the last 12 months

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002-2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population

**Numerator:** Subset of the denominator who did not receive or delayed receiving needed dental care in the last 12 months

**Measure ID:** MEPS\_53, 20701041

**Measure Title:** People unable to get or delayed in getting prescription medicine in the last 12 months

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002-2016

- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population

**Numerator:** Subset of the denominator who did not receive or delayed receiving needed prescription medicine in last 12 months

**Measure ID:** MEPS\_54, 20701051

**Measure Title:** People with a usual source of care, excluding hospital emergency rooms, whose care source has office hours at night or on weekends

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002-2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population who reported having a usual source of care

**Numerator:** Subset of the denominator who reported that their provider has night or weekend office hours

**Measure ID:** MEPS\_55, 20701061

**Measure Title:** People with difficulty contacting their usual source of care during regular business hours over the telephone about a health problem

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002-2016



- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population who report having a usual source of care

**Numerator:** Subset of the denominator who reported that they have difficulty contacting their provider over the telephone during regular business hours

**Measure ID:** MEPS\_56, 20701071

**Measure Title:** Adults who needed to see a specialist in the last 12 months who sometimes or never found it easy to see a specialist

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2008 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized age 18 and over who reported that, during the previous 12 months, they or a doctor thought they needed to see a specialist

**Numerator:** Subset of the denominator who reported problems getting a referral to a specialist in the past year

**Comments:** Table Descriptions report data from the MEPS Self-Administered Questionnaire (SAQ).

**Measure ID:** MEPS\_58, 20701081

**Measure Title:** Children who needed to see a specialist in the last 12 months who sometimes or never found it easy to see a specialist

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2008 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized children under age 18 whose parents reported that, during the previous 12 months, they or a doctor thought they needed to see a specialist

**Numerator:** Subset of the denominator whose parent reported problems getting a referral to a specialist in the past year.

**Measure ID:** MEPS\_59, 20701091

**Measure Title:** Adults who needed care, tests, or treatments in the last 12 months who sometimes or never found it easy to get the care, tests, or treatments

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2008 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, and U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized adults (age 18 and over) who needed care, tests, or treatments in the last 12 months

**Numerator:** Subset of the denominator who sometimes or never found it easy to get the care, tests, or treatments in the last 12 months

**Comments:** Data were obtained from the MEPS Self-Administered Questionnaire (SAQ).

**Measure ID:** MEPS\_60, 20701101

**Measure Title:** Children who needed care, tests, or treatments in the last 12 months who sometimes or never found it easy to get the care, tests, or treatments

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2008 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, and U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized children under age 18 who needed care, tests, or treatments in the last 12 months

**Numerator:** Subset of the denominator who sometimes or never found it easy to get the care, tests, or treatments in the last 12 months

## Chapter 3. Patient Safety

### 3.1. Healthcare Associated Infections

**Measure ID:** HCUP\_1, 30101011

**Measure Title:** Postoperative sepsis per 1,000 elective-surgery admissions of length 4 or more days, adults

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Patient Safety Indicators (PSIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, expected primary payer, median household income of the patient's ZIP Code, urbanized location, region of the United States, bed size of hospital, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** All elective hospital surgical discharges among people age 18 or over with a length of stay of 4 or more days

**Numerator:** Subset of the denominator with any secondary diagnosis of sepsis

**Comments:** The AHRQ PSI software requires that the sepsis be reported as a secondary diagnosis (rather than the principal diagnosis). Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission

(POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** MPSMS\_1, 30101021

**Measure Title:** Hospitalized patients who develop catheter-associated urinary tract infections (CAUTIs)

**Measure Source:** The Medicare Patient Safety Monitoring System (MPSMS): In 2009, the lead agency for MPSMS transitioned from the Centers for Medicare & Medicaid Services (CMS) to the Agency for Healthcare Research and Quality (AHRQ)

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2016
- **Population Subgroups:** Age, CHF/pulmonary edema, COPD, cerebrovascular disease, coronary artery disease, corticosteroids, diabetes, gender, obesity, race/ethnicity, renal disease, smoking

**Data Source:** CMS Inpatient Quality Reporting (IQR) Program, formerly referred to as the CMS Reporting Hospital Quality Data for Annual Payment Update Program, MPSMS

**Denominator:** All patients from the MPSMS sample with documented placement of a urinary catheter

**Numerator:** A subset of the denominator with the diagnosis and treatment of a catheter-associated urinary tract infection

**Comments:** Beginning with the 2004 MPSMS data, the “Post-operative UTI” measure was discontinued, and the “Catheter-Associated Urinary Tract Infection” measure was implemented in its place. MPSMS data are abstracted from the medical record for the index hospital stay. Beginning with the 2009 MPSMS data, Medicare Eligibility and National Claims History databases were no longer applicable or available for the MPSMS sample.

**Measure ID:** HCUP\_2, 30101031

**Measure Title:** Admissions with central venous catheter-related bloodstream infection per 1,000 medical and surgical discharges of length 2 or more days, age 18 and over or obstetric admissions

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Patient Safety Indicators (PSIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, expected primary payer, median household income of the patient's ZIP Code, urbanized location, region of the United States, bed size of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** All medical and surgical hospital discharges or obstetric admissions, age 18 and over

**Numerator:** Subset of the denominator with any secondary diagnosis of infection

**Comments:** The AHRQ PSI software requires that the central venous catheter-related bloodstream infection be reported as a secondary diagnosis (rather than the principal diagnosis). Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that

failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

## 3.2. Surgical Care

**Measure ID:** MPSMS\_4, 30201011

**Measure Title:** A composite measure of hospitalized adult surgical patients who experience postoperative pneumonia or a venous thromboembolic event(s)

**Measure Source:** The Medicare Patient Safety Monitoring System (MPSMS)

### Table Description:

- Geographic Representation: National
- Years Available: 2009-2016
- Population Subgroups: Age, CHF/pulmonary edema, COPD, cerebrovascular disease, coronary artery disease, corticosteroids, diabetes, gender, obesity, race/ethnicity, renal disease, smoking

**Data Source:** CMS Inpatient Quality Reporting (IQR) Program, formerly referred to as the CMS Reporting Hospital Quality Data for Annual Payment Update Program (RHQDAPU), MPSMS

**Denominator:** All patients from the MPSMS sample who had one or more of certain major surgical procedures identified as part of the SCIP during the index hospital stay

**Numerator:** A subset of the denominator with a diagnosed pulmonary embolism (PE) or deep vein thrombosis (DVT) during the index hospital stay

**Comments:** MPSMS data were abstracted from the medical record for the index hospital stay. Beginning with the 2009 MPSMS data, Medicare Eligibility and National Claims History databases were no longer applicable or available for the MPSMS sample. In 2009, the lead agency for MPSMS transitioned from the Centers for Medicare & Medicaid Services (CMS) to the Agency for Healthcare Research and Quality (AHRQ).

**Measure ID:** MPSMS\_3, 30201021

**Measure Title:** Hospitalized adult major surgical patients who develop postoperative pneumonia

**Measure Source:** The Medicare Patient Safety Monitoring System (MPSMS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2016
- Population Subgroups: Age, CHF/pulmonary edema, COPD, cerebrovascular disease, coronary artery disease, corticosteroids, diabetes, gender, obesity, race/ethnicity, renal disease, smoking

**Data Source:** CMS Inpatient Quality Reporting (IQR) Program, formerly referred to as the CMS Reporting Hospital Quality Data for Annual Payment Update Program (RHQDAPU), MPSMS

**Denominator:** All patients from the MPSMS sample who had at least one of the selected major surgical procedures identified as part of the SCIP and did not have pneumonia prior to the procedure

**Numerator:** A subset of the denominator with a diagnosis of and treatment for postoperative pneumonia

**Comments:** MPSMS data are abstracted from the medical record for the index hospital stay. Beginning with the 2009 MPSMS data, Medicare Eligibility and National Claims History databases were no longer applicable or available for the MPSMS sample. In 2009, the lead agency for MPSMS transitioned from the Centers for Medicare & Medicaid Services (CMS) to the Agency for Healthcare Research and Quality (AHRQ).

**Measure ID:** MPSMS\_2, 30201031

**Measure Title:** Hospitalized adult surgical patients who experience postoperative pneumonia or a thromboembolic venous event(s)

**Measure Source:** The Medicare Patient Safety Monitoring System (MPSMS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2016
- Population Subgroups: Age, CHF/pulmonary edema, COPD, cerebrovascular disease, coronary artery disease, corticosteroids, diabetes, gender, obesity, race/ethnicity, renal disease, smoking

**Data Source:** CMS Inpatient Quality Reporting (IQR) Program, formerly referred to as the CMS Reporting Hospital Quality Data for Annual Payment Update Program (RHQDAPU), MPSMS

**Denominator:** All patients from the MPSMS sample who had at least one of the selected major surgical procedures identified as part of the SCIP and did not have pneumonia or venous thromboembolic event(s) prior to the procedure



**Numerator:** A subset of the denominator who developed postoperative pneumonia or venous thromboembolic event(s)

**Comments:** MPSMS data are abstracted from the medical record for the index hospital stay. Beginning with the 2009 MPSMS data Medicare Eligibility and National Claims History databases were no longer applicable or available for the MPSMS sample. In 2009, the lead agency for MPSMS transitioned from the Centers for Medicare & Medicaid Services (CMS) to the Agency for Healthcare Research and Quality (AHRQ).

**Measure ID:** HCUP\_3, 30201041

**Measure Title:** Postoperative hemorrhage or hematoma with surgical drainage or evacuation per 1,000 surgical hospital discharges, adults

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Patient Safety Indicators (PSIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, expected primary payer, median household income of the patient's ZIP Code, urbanized location, region of the United States, bed size of hospital, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Inpatient hospital surgical discharges age 18 and over, excluding obstetric

Population measure: U.S. resident population age 18 and over

**Numerator:** Subset of the denominator with a secondary diagnosis indicating postoperative hemorrhage or postoperative hematoma

**Comments:** The AHRQ PSI software requires that the hemorrhage or hematoma complicating procedure be reported as a secondary diagnosis (rather than the principal diagnosis). Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people

covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_4, 30201051

**Measure Title:** Postoperative pulmonary embolism (PE) or deep vein thrombosis (DVT) per 1,000 surgical hospital discharges

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Patient Safety Indicators (PSIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, expected primary payer, median household income of the patient's ZIP Code, urbanized location, region of the United States, bed size of hospital, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Inpatient hospital surgical discharges age 18 and over, excluding patients admitted for deep vein thrombosis (DVT) or pulmonary embolism (PE), obstetric admissions, and patients with secondary procedures for interruption of vena cava before or after surgery or as the only procedure

**Numerator:** Subset of the denominator with any secondary diagnosis of PE or DVT

**Comments:** The AHRQ PSI software requires that the PE or DVT be reported as a secondary diagnosis (rather than the principal diagnosis). Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_5, 30201061

**Measure Title:** Postoperative respiratory failure per 1,000 elective surgical hospital discharges, adults

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Patient Safety Indicators (PSIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, expected primary payer, median household income of the patient's ZIP Code, urbanized location, region of the United States, bed size of hospital, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** All elective hospital surgical discharges (age 18 and over), excluding patients with respiratory disease, circulatory disease, neuromuscular disorders, obstetric conditions, and secondary procedure of tracheostomy before or after surgery or as the only procedure

**Numerator:** Subset of the denominator with any secondary diagnosis of acute respiratory failure or reintubation procedure at specific postoperative intervals

**Comments:** The AHRQ PSI software requires that respiratory failure be reported as a secondary diagnosis (rather than the principal diagnosis). Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_6, 30201081

**Measure Title:** Postoperative acute kidney injury requiring dialysis per 1,000 elective surgical hospital discharges

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Organization, Delivery, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Patient Safety Indicators (PSIs)

## Table Description:

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, expected primary payer, median household income of the patient's ZIP Code, urbanized location, region of the United States, bed size of hospital, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** All elective hospital surgical discharges for people age 18 and over, excluding those with selected serious diseases and obstetric admissions

**Numerator:** Subset of the denominator with any secondary diagnosis indicating postoperative acute kidney injury; discharges with acute renal failure must be accompanied by a procedure code for dialysis.

**Comments:** The AHRQ PSI software requires that the postoperative acute kidney injury be reported as a secondary diagnosis (rather than the principal diagnosis). Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_7, 30201091

**Measure Title:** Postoperative hip fractures per 1,000 surgical admissions who were not susceptible to falling, adults

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Patient Safety Indicators (PSIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, expected primary payer, median household income of the patient's ZIP Code, urbanized location, region of the United States, bed size of hospital, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Inpatient hospital surgical discharges, age 18 and over, who were not susceptible to falling

**Numerator:** Subset of the denominator with any secondary diagnosis indicating hip fracture

**Comments:** The AHRQ PSI software requires that the hip fracture be reported as a secondary diagnosis (rather than the principal diagnosis). Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term

acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_8, 30201101

**Measure Title:** Reclosure of postoperative abdominal wound dehiscence per 1,000 abdominopelvic-surgery admissions of length 2 or more days, adults

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Patient Safety Indicators (PSIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, expected primary payer, median household income of the patient's ZIP Code, urbanized location, region of the United States, bed size of hospital, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Inpatient hospital surgical (abdominopelvic surgery with a length of stay of 2 or more days) discharges age 18 and over, excluding obstetric admissions

**Numerator:** Subset of the denominator with a secondary procedure indicating reclosure of postoperative disruption of abdominal wall

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** MPSMS\_5, 30201111

**Measure Title:** Hospitalized adult patients who develop postoperative adverse events associated with hip joint replacement due to degenerative conditions

**Measure Source:** The Medicare Patient Safety Monitoring System (MPSMS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2016
- Population Subgroups: Age, CHF/pulmonary edema, COPD, cerebrovascular disease, coronary artery disease, corticosteroids, diabetes, gender, obesity, race/ethnicity, renal disease, smoking

**Data Source:** CMS Inpatient Quality Reporting (IQR) Program, formerly referred to as the CMS Reporting Hospital Quality Data for Annual Payment Update Program (RHQDAPU), MPSMS

**Denominator:** All patients in the MPSMS sample who had a surgical procedure performed (defined by procedure code 81.51 in ICD9 or corresponding ICD10 codes) to replace a hip joint due to degenerative conditions

**Numerator:** A subset of the denominator who experienced at least one of the following:

- Postoperative infection (acute or early deep), dehiscence, necrosis, hematoma, nerve injury, major bleeding, dislocation, cardiovascular complications, catheter-associated urinary tract infection or pneumonia.
- Return to operating room after procedure (excludes same side revision).
- Revision during the index hospital stay (same side as index procedure).
- Periprosthetic fracture.
- Postoperative venous thromboembolic event during hospital stay.



**Comments:** Postoperative infections are determined by documentation of early prosthetic joint or wound infection or acute and early deep hip infection, excluding superficial infection. Wound complications other than infection include dehiscence, hematoma, and necrosis. Cardiovascular complications include myocardial infarction, congestive heart failure, and arrhythmia requiring treatment. MPSMS data are abstracted from the medical record for the index hospital stay. Beginning with the 2009 MPSMS data, Medicare Eligibility and National Claims History databases were no longer applicable or available for the MPSMS sample. In 2009, the lead agency for MPSMS transitioned from the Centers for Medicare & Medicaid Services (CMS) to the Agency for Healthcare Research and Quality (AHRQ).

**Measure ID:** MPSMS\_6, 30201121

**Measure Title:** Hospitalized adult surgical patients who develop postoperative adverse events associated with hip joint replacement due to fracture

**Measure Source:** The Medicare Patient Safety Monitoring System (MPSMS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2016
- Population Subgroups: Age, CHF/pulmonary edema, COPD, cerebrovascular disease, coronary artery disease, corticosteroids, diabetes, gender, obesity, race/ethnicity, renal disease, smoking

**Data Source:** CMS Inpatient Quality Reporting (IQR) Program, formerly referred to as the CMS Reporting Hospital Quality Data for Annual Payment Update Program (RHQDAPU), MPSMS

**Denominator:** Patients in the MPSMS sample who had a surgical procedure performed (defined by procedure code 81.52 in ICD9 or corresponding ICD 10 codes) to replace a fractured hip joint

**Numerator:**

Subset of the denominator who experienced at least one of the following:

- Postoperative infections (acute or early deep), dehiscence, necrosis, hematoma, nerve injury, major bleeding, dislocation, cardiovascular complications, catheter-associated urinary tract infection or pneumonia.
- Return to operating room after procedure (excludes same side revision).
- Revision during the index hospital stay (same side as index procedure).
- Periprosthetic fracture.
- Postoperative venous thromboembolic event during hospital stay.

**Comments:**

Postoperative infections are determined by documentation of early prosthetic joint or wound infection or acute and early deep hip infection, excluding superficial infection. Wound complications other than infection include dehiscence, hematoma, and necrosis.

Cardiovascular complications include myocardial infarction, congestive heart failure, and arrhythmia requiring treatment.

MPSMS data are abstracted from the medical record for the index hospital stay. Beginning with the 2009 MPSMS data, Medicare Eligibility and National Claims History databases were no longer applicable or available for the MPSMS sample.

In 2009, the lead agency for MPSMS transitioned from the Centers for Medicare & Medicaid Services (CMS) to the Agency for Healthcare Research and Quality (AHRQ).

**Measure ID:** MPSMS\_7, 30201131

**Measure Title:** Hospitalized adult surgical patients who develop postoperative adverse events associated with hip joint replacement due to fracture or degenerative conditions

**Measure Source:** The Medicare Patient Safety Monitoring System (MPSMS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2016
- Population Subgroups: Age, CHF/pulmonary edema, COPD, cerebrovascular disease, coronary artery disease, corticosteroids, diabetes, gender, obesity, race/ethnicity, renal disease, smoking

**Data Source:** CMS Inpatient Quality Reporting (IQR) Program, formerly referred to as the CMS Reporting Hospital Quality Data for Annual Payment Update Program (RHQDAPU), MPSMS

**Denominator:** All patients in the MPSMS sample who had a surgical procedure performed to replace a hip joint due to degenerative conditions (defined by procedure code 81.51 in ICD9 or corresponding codes in ICD10) or a fractured hip (defined by procedure code 81.52 in ICD9 or corresponding codes in ICD10)

**Numerator:**

A subset of the denominator who experienced at least one of the following:

- Postoperative infections (acute or early deep), dehiscence, necrosis, hematoma, nerve injury, major bleeding, dislocation, cardiovascular complications, catheter-associated urinary tract infection or pneumonia.
- Return to operating room after procedure (excludes same side revision).

- Revision during the index hospital stay (same side as index procedure).
- Periprosthetic fracture.
- Postoperative venous thromboembolic event during hospital stay.

**Comments:** Postoperative infections are determined by documentation of early prosthetic joint or wound infection or acute and early deep hip infection, excluding superficial infection. Wound complications other than infection include dehiscence, hematoma, and necrosis. Cardiovascular complications include myocardial infarction, congestive heart failure, and arrhythmia requiring treatment.

MPSMS data are abstracted from the medical record for the index hospital stay. Beginning with the 2009 MPSMS data Medicare Eligibility and National Claims History databases were no longer applicable or available for the MPSMS sample. In 2009, the lead agency for MPSMS transitioned from the Centers for Medicare & Medicaid Services (CMS) to the Agency for Healthcare Research and Quality (AHRQ).

**Measure ID:** MPSMS\_8, 30201141

**Measure Title:** Hospitalized adult surgical patients who develop postoperative adverse events associated with knee joint replacement

**Measure Source:** The Medicare Patient Safety Monitoring System (MPSMS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2016
- Population Subgroups: Age, CHF/pulmonary edema, COPD, cerebrovascular disease, coronary artery disease, corticosteroids, diabetes, gender, obesity, race/ethnicity, renal disease, smoking

**Data Source:** CMS Inpatient Quality Reporting (IQR) Program, formerly referred to as the CMS Reporting Hospital Quality Data for Annual Payment Update Program (RHQDAPU), MPSMS

**Denominator:** All patients in the MPSMS sample who undergo a knee joint replacement (defined by procedure code 81.54 in ICD9 or corresponding codes in ICD10)

**Numerator:**

A subset of the denominator who experienced at least one of the following:

- Postoperative infections (acute or early deep), dehiscence, necrosis, hematoma, nerve injury, major bleeding, dislocation, cardiovascular complications, catheter-associated urinary tract infection or pneumonia.
- Periprosthetic fracture.
- Return to operating room after procedure (excludes same side revision).

- Revision during the index hospital stay (same side as index procedure).
- Postoperative venous thromboembolic event during hospital stay.

**Comments:** Postoperative infections are determined by documentation of early prosthetic joint or wound infection or acute and early deep knee infection, excluding superficial infection. Wound complications other than infection include dehiscence, hematoma, and necrosis. Cardiovascular complications include myocardial infarction, congestive heart failure, and arrhythmia requiring treatment.

MPSMS data are abstracted from the medical record for the index hospital stay. Beginning with the 2009 MPSMS data, Medicare Eligibility and National Claims History databases were no longer applicable or available for the MPSMS sample.

In 2009, the lead agency for MPSMS transitioned from the Centers for Medicare & Medicaid Services (CMS) to the Agency for Healthcare Research and Quality (AHRQ).

**Measure ID:** OASIS\_11, 30201151

**Measure Title:** Home health care patients whose surgical wound was improved

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** All valid home health care episodes that begin in the survey year

**Numerator:** Subset of the denominator in which a person's surgical wound status improved compared with a prior assessment.

**Comments:** The OASIS instrument defines the most problematic status for surgical wounds using 4 definitions. Further information about risk adjustment and the HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>.

### 3.3. Other Complications of Hospital Care

**Measure ID:** MPSMS\_9, 30301011

**Measure Title:** Composite measure: Rate of either central line-associated bloodstream infections (CLABSIs) or mechanical adverse events per 1,000 patients who had a central line placed during the index hospital stay

**Measure Source:** The Medicare Patient Safety Monitoring System (MPSMS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2016
- Population Subgroups: Age, CHF/pulmonary edema, COPD, cerebrovascular disease, coronary artery disease, corticosteroids, diabetes, gender, obesity, race/ethnicity, renal disease, smoking

**Data Source:** CMS Inpatient Quality Reporting (IQR) Program, formerly referred to as the CMS Reporting Hospital Quality Data for Annual Payment Update Program (RHQDAPU), MPSMS

**Denominator:** All patients from the MPSMS sample with documentation of placement of at least one vascular access device terminating at, or close to, the heart in one of the central vessels, who do not have an infection on admission. The following are considered central veins for this measure: aorta; vena cava; brachiocephalic veins; iliac vein; internal jugular veins; and subclavian veins. Pulmonary artery catheters (Swan-Ganz catheters) are included in this measure.

**Numerator:** Subset of the denominator who develop a central line-associated bloodstream infection, or experience a central line-associated mechanical adverse event

**Comments:** In order for a blood stream infection (BSI) to be associated with a central line, the patient did not have an infection on admission, had no other source of infection, and had the first central line in place for at least two days prior to a positive blood culture for a BSI pathogen\* (as determined by expert review).

\* At least two positive cultures are required to count “coagulase negative Staphylococcus,” “Staphylococcus epidermidis,” “Staphylococcus not otherwise specified,” and “Staphylococcus other” as a BSI.

Central line-associated mechanical adverse event is determined by documentation of:

- An allergic reaction (only when CPR is administered within 15 minutes of catheter insertion).
- Arrhythmia.
- Perforation.
- Pneumothorax.
- Hematoma/bleeding.

- Shearing off of catheter.
- Air embolism.
- Misplaced catheter.
- Thrombosis/embolism.
- Knotting of pulmonary artery catheter.
- Catheter occlusion.
- Leaking.
- Others as determined by review of clinical expert.

MPSMS data are abstracted from the medical record for the index hospital stay.

In 2009, the lead agency for MPSMS transitioned from the Centers for Medicare & Medicaid Services (CMS) to the Agency for Healthcare Research and Quality (AHRQ).

**Measure ID:** MPSMS\_10, 30301021

**Measure Title:** Hospitalized adult patients with central line-associated bloodstream infections (CLABSIs)

**Measure Source:** The Medicare Patient Safety Monitoring System (MPSMS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2016
- Population Subgroups: Age, CHF/pulmonary edema, COPD, cerebrovascular disease, coronary artery disease, corticosteroids, diabetes, gender, obesity, race/ethnicity, renal disease, smoking

**Data Source:** CMS Inpatient Quality Reporting (IQR) Program, formerly referred to as the CMS Reporting Hospital Quality Data for Annual Payment Update Program (RHQDAPU), MPSMS

**Denominator:** All patients from the MPSMS sample with documentation of placement of at least one vascular access device terminating at, or close to, the heart in one of the central vessels, who do not have an infection on admission. The following are considered central veins for this measure: aorta; vena cava; brachiocephalic veins; iliac vein; internal jugular veins; subclavian veins. Pulmonary artery catheters (Swan-Ganz catheters) are included in this measure.

**Numerator:** A subset of the denominator with a CLABSI

**Comments:**

In order for a blood stream infection (BSI) to be associated with a central line, the patient did not have an infection on admission, had no other source of infection, and had the first central line in place for at least two days prior to a positive blood culture for a BSI pathogen\* (as determined by expert review).

\* At least two positive cultures are required for Coagulase-negative staphylococci, *Staphylococcus epidermis*, *Staphylococcus* not otherwise specified, *Staphylococcus* other.

MPSMS data are abstracted from the medical record for the index hospital stay. In 2009, the lead agency for MPSMS transitioned from the Centers for Medicare & Medicaid Services (CMS) to the Agency for Healthcare Research and Quality (AHRQ).

**Measure ID:** MPSMS\_11, 30301031

**Measure Title:** Mechanical adverse events in adult patients receiving central line placement

**Measure Source:** The Medicare Patient Safety Monitoring System (MPSMS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2016
- Population Subgroups: Age, CHF/pulmonary edema, COPD, cerebrovascular disease, coronary artery disease, corticosteroids, diabetes, gender, obesity, race/ethnicity, renal disease, smoking

**Data Source:** CMS Inpatient Quality Reporting (IQR) Program, formerly referred to as the CMS Reporting Hospital Quality Data for Annual Payment Update Program (RHQDAPU), MPSMS

**Denominator:** All Medicare fee-for-service (FFS) discharges from the MPSMS sample with placement of at least one vascular access device terminating at, or close to, the heart or in one of the great vessels The following are considered great vessels for this measure: aorta, vena cava, brachiocephalic vein, iliac vein, internal jugular vein, and subclavian vein

**Numerator:**

Subset of the denominator with central line associated mechanical adverse events. A central-line-associated mechanical adverse event is defined as the presence in the medical record of at least one of the following:

- Allergic reaction (only when CPR is performed within 15 minutes).
- Perforation.
- Pneumothorax.
- Hematoma.
- Shearing off of the catheter.
- Air embolism.
- Misplaced catheter.
- Thrombosis/embolism.
- Knotting of the pulmonary artery catheter.
- Bleeding.
- Catheter occlusion.

- Leaking.
- Other.

**Comments:**

MPSMS is a nationwide surveillance system designed to identify rates of specific adverse events within the hospitalized Medicare FFS population.

An adverse event is defined as an unintended patient harm, injury, or loss more likely associated with the patient’s interaction with the health care delivery system than from diseases the patient may have.

In 2009, the lead agency for MPSMS transitioned from the Centers for Medicare & Medicaid Services (CMS) to the Agency for Healthcare Research and Quality (AHRQ).

**Measure ID:** HCUP\_9, 30301041

**Measure Title:** Accidental puncture or laceration during procedure per 1,000 medical and surgical admissions, adults

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Patient Safety Indicators (PSIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, bed size (hospital), sex, expected primary payer, geographic location (hospital and residence), income, ownership of hospital, region, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Hospital medical and surgical admissions among adults age 18 and over, excluding obstetric admissions

**Numerator:** Subset of the denominator with secondary diagnosis denoting accidental cut, puncture, perforation, or laceration during a procedure

**Comments:** The AHRQ PSI software requires that the accidental puncture or laceration be reported as a secondary diagnosis (rather than the principal diagnosis). Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.



The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_58, 30301051

**Measure Title:** Accidental puncture or laceration during procedure per 1,000 medical and surgical admissions, children

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, expected primary payer, median household income of the patient's ZIP Code, urbanized location, region of the United States, bed size of hospital, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Hospital medical and surgical discharges among children age less than 18 years, excluding obstetric admissions

**Numerator:** Subset of the denominator with secondary diagnosis denoting accidental cut, puncture, perforation, or laceration during a procedure

**Comments:** The AHRQ PDI software requires that the accidental puncture or laceration be reported as a secondary diagnosis (rather than the principal diagnosis). Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_10, 30301061

**Measure Title:** Hospital admissions with iatrogenic pneumothorax per 1,000 medical and surgical admissions, adults

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Patient Safety Indicators (PSIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

- Population Subgroups: Age, sex, race/ethnicity, expected primary payer, median household income of the patient's ZIP Code, urbanized location, region of the United States, bed size of hospital, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** All medical and surgical hospital discharges, age 18 and over, excluding patients with chest trauma or pleural effusion, thoracic surgery, lung or pleural biopsy, cardiac surgery, diaphragmatic surgery, or obstetric admissions

**Numerator:** Subset of the denominator with any secondary diagnosis of iatrogenic pneumothorax

**Comments:** The AHRQ PSI software requires that the iatrogenic pneumothorax be reported as a secondary diagnosis (rather than the principal diagnosis). Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_11, 30301071

**Measure Title:** Deaths per 1,000 elective-surgery admissions having developed specified complications of care during hospitalization, ages 18-89 or obstetric admissions

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Patient Safety Indicators (PSIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, expected primary payer, median household income of the patient's ZIP Code, urbanized location, region of the United States, bed size of hospital, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Hospital inpatient discharges, ages 18-89 years, with potential complications of care, excluding patients transferred in or out or patients admitted from long-term-care facilities

**Numerator:** Subset of the denominator with discharge disposition indicating death

**Comments:** The AHRQ PSI software requires that the complication of care be reported as a secondary diagnosis (rather than the principal diagnosis). Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_12, 30301081

**Measure Title:** Deaths per 1,000 discharges with expected low-mortality

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Patient Safety Indicators (PSIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, expected primary payer, median household income of the patient's ZIP Code, urbanized location, region of the United States, bed size of hospital, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Hospital admissions among people age 18 and over or obstetric conditions, in low-mortality DRGs (defined as DRGs with less than a 05% mortality rate), excluding patients with trauma, immunocompromised state, or cancer

**Numerator:** Subset of the denominator with discharge disposition indicating death

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and

(3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 30301091

**Measure Title:** In-hospital deaths per 100,000 delivery hospitalizations, women ages 12-55

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, community-level income, race location of patient residence, expected source of payment, location of patient

treatment, and ownership/control, bedsize, teaching status, critical access, safety net, and minority serving of hospitals.

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Sample (SID)

**Denominator:** Total number of delivery hospitalizations, women ages 12-55. Delivery includes any delivery diagnosis, procedure, or DRG and not abortion - Codes from QTA-2019-03

**Numerator:** A subset of the denominator where patients died in the hospital

**Comments:**

Delivery codes include:

- Any DX of Z37X: Z370, Z371, Z372, Z373, Z374, Z3750, Z3751, Z3752, Z3753, Z3754, Z3759, Z3760, Z3761, Z3762, Z3763, Z3764, Z3769, Z377, Z379.
- Any DX of O80 (vaginal delivery)
- Any DX of O82 (encounter for cesarean delivery without indication)
- Any Delivery DRG - 765-768 or 774-775
- Any procedure codes 10D00Z0-10D00Z2, 10D07Z3-0D07Z8, 10E0XZZ.
- Abortion codes include:
- Any DX of 'O00', 'O01', 'O02', 'O03', 'O04', 'O07', 'O08' (including all subcodes)

- Any PR of ‘10A00ZZ’, ‘10A03ZZ’, ‘10A04ZZ’, ‘10A07Z6’, ‘10A07ZW’, ‘10A07ZX’, ‘10A07ZZ’, ‘10A08ZZ’.

**Measure ID:** 30301101

**Measure Title:** Patients who developed a blood clot while in the hospital who did not get treatment that could have prevented it

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2016
- Population Subgroups: Age, gender, race, ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** Patients diagnosed with confirmed Deep Vein Thrombosis (VTE) or Pulmonary Emboli (PE) during hospitalization

**Numerator:** Subset of the denominator who did not receive VTE prophylaxis between hospital admission and the day before the VTE diagnostic testing order date

**Comments:** This measure is referred as VET-6 by the HIQR program. This measure assesses the number of patients diagnosed with confirmed VTE during hospitalization (not present at admission) who did not receive VTE prophylaxis between hospital admission and the day before the VTE diagnostic testing order date. Information and resources regarding this measure can be accessed on *QualityNet* at <http://www.qualitynet.org/>, by selecting the “**Specifications Manual**” link under the “**Hospital-Inpatient**” tab in the left navigation bar and then the latest version and the measure.

### 3.4. Complications of Medication

**Measure ID:** MPSMS\_12, 30401011

**Measure Title:** Hospitalized adult patients who have an adverse event associated with the anticoagulant warfarin

**Measure Source:** The Medicare Patient Safety Monitoring System (MPSMS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2016

- Population Subgroups: Age, CHF/pulmonary edema, COPD, cerebrovascular disease, coronary artery disease, corticosteroids, diabetes, gender, obesity, race/ethnicity, renal disease, smoking

**Data Source:** CMS Inpatient Quality Reporting (IQR) Program, formerly referred to as the CMS Reporting Hospital Quality Data for Annual Payment Update Program (RHQDAPU), MPSMS

**Denominator:** All patients from the MPSMS sample who received warfarin during hospitalization and had a documented international normalized ratio (INR) result during the index hospital stay

**Numerator:**

A subset of the denominator who during the hospital-stay experienced:

- INR  $\geq 4.0$  with one or more of the following: cardiac arrest/emergency measures to sustain life, death, gastrointestinal bleeding, genitourinary bleeding, hematocrit drop of 3 or more points more than 48 hours after admission, intracranial bleeding (subdural hematoma), new hematoma, other types of bleeding, or pulmonary bleeding.
- INR  $> 1.5$  and an abrupt cessation/hold of warfarin with one or more of the above symptoms.
- INR  $> 1.5$  and administration of vitamin K or fresh frozen plasma with one or more of the above symptoms.
- INR  $> 1.5$  and a blood transfusion absent a surgical procedure with one or more of the above symptoms.

**Comments:**

The above symptoms are counted as adverse events only when they occur within two days prior to two days after the INR  $> 4.0$ , abrupt cessation/ hold of warfarin, administration of vitamin K or fresh frozen plasma or blood transfusion absent a surgical procedure.

MPSMS data are abstracted from the medical record for the index hospital stays.

In 2009, the lead agency for MPSMS transitioned from the Centers for Medicare & Medicaid Services (CMS) to the Agency for Healthcare Research and Quality (AHRQ).

**Measure ID:** MPSMS\_13, 30401021

**Measure Title:** Hospitalized adult patients who have an adverse event associated with intravenous (IV) heparin

**Measure Source:** The Medicare Patient Safety Monitoring System (MPSMS)

**Table Description:**

- Geographic Representation: National



- Years Available: 2009-2016
- Population Subgroups: Age, CHF/pulmonary edema, COPD, cerebrovascular disease, coronary artery disease, corticosteroids, diabetes, gender, obesity, race/ethnicity, renal disease, smoking

**Data Source:** CMS Inpatient Quality Reporting (IQR) Program formerly referred to as the CMS Reporting Hospital Quality Data for Annual Payment Update Program (RHQDAPU), MPSMS

**Denominator:** All patients from the MPSMS sample who received IV heparin during hospitalization and had a documented partial thromboplastin time (PTT) result during the hospital stay

**Numerator:**

A subset of the denominator who experienced: PTT  $\geq 100$  with one or more of the following: cardiac arrest/emergency measures to sustain life, death, gastrointestinal bleeding, genitourinary bleeding, hematocrit drop of 3 or more points more than 48 hours after admission, intracranial bleeding (subdural hematoma), new hematoma, other types of bleeding, or pulmonary bleeding.

PTT  $>45$  and an abrupt cessation/hold of IV heparin with one or more of the above symptoms.

PTT  $>45$  and administration of protamine or fresh frozen plasma with one or more of the above symptoms.

PTT  $>45$  and a blood transfusion (absent a surgical procedure) with one or more of the above symptoms.

**Comments:**

Not included are PTTs  $\geq 100$ , PTTs  $>45$ , and an abrupt cessation/hold of IV heparin, PTTs  $>45$  and administration of Vitamin K or fresh frozen plasma, and PTTs  $>45$  and a blood transfusion (absent a surgical procedure) that occur the date of arrival.

MPSMS data are abstracted from the medical record for the index hospital stays.

In 2009, the lead agency for MPSMS transitioned from the Centers for Medicare & Medicaid Services (CMS) to the Agency for Healthcare Research and Quality (AHRQ).

**Measure ID:** MPSMS\_14, 30401031

**Measure Title:** Hospitalized adult patients who have an adverse event associated with low-molecular-weight heparin (LMWH) or factor Xa inhibitor

**Measure Source:** The Medicare Patient Safety Monitoring System (MPSMS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2016
- Population Subgroups: Age, CHF/pulmonary edema, COPD, cerebrovascular disease, coronary artery disease, corticosteroids, diabetes, gender, obesity, race/ethnicity, renal disease, smoking

**Data Source:** CMS Inpatient Quality Reporting (IQR) Program, formerly referred to as the CMS Reporting Hospital Quality Data for Annual Payment Update Program (RHQDAPU), MPSMS

**Denominator:** All patients from the MPSMS sample who received LMWH or factor Xa inhibitor during the index hospital stay

**Numerator:**

A subset of the denominator who experienced:

- Abrupt cessation/hold of LMWH or factor Xa with one of the following: cardiac arrest/emergency measures to sustain life, death, gastrointestinal bleeding, genitourinary bleeding, hematocrit drop of three or more points more than forty-eight hours after admission, intracranial bleeding (subdural hematoma), new hematoma, other types of bleeding, or pulmonary bleeding or death.
- Administration of protamine or fresh frozen plasma (FFP) with one or more of the above symptoms.
- Blood transfusion (absent a surgical procedure) with one or more of the above symptoms.

**Comments:**

Not counted in this measure are abrupt cessation/holds of LMWH or factor Xa, administration of Vitamin K or FFP, and blood transfusions (absent a surgical procedure) that occur on the date of arrival.

MPSMS data are abstracted from the medical record for the index hospital stays. In 2009, the lead agency for MPSMS transitioned from the Centers for Medicare & Medicaid Services (CMS) to the Agency for Healthcare Research and Quality (AHRQ).

**Measure ID:** MPSMS\_15, 30401041

**Measure Title:** Hospitalized adult patients who have an adverse event associated with a hypoglycemic agent

**Measure Source:** The Medicare Patient Safety Monitoring System (MPSMS)

**Table Description:**

- Geographic Representation: National

- Years Available: 2009-2016
- Population Subgroups: Age, CHF/pulmonary edema, COPD, cerebrovascular disease, coronary artery disease, corticosteroids, diabetes, gender, obesity, race/ethnicity, renal disease, smoking

**Data Source:** CMS Inpatient Quality Reporting (IQR) Program, formerly referred to as the CMS Reporting Hospital Quality Data for Annual Payment Update Program (RHQDAPU), MPSMS

**Denominator:** All patients from the MPSMS sample who received insulin, oral hypoglycemics, or both, and had glucose result during the hospital stay

**Numerator:** A subset of the denominator who experienced: a glucose level  $\leq 70$  with one or more of the following adverse events documented on the day of the serum glucose: administration of D50, administration of glucagon, administration of juice or sugar, anxiety, code blue (CPR), confusion, death, drowsiness, sweating, weakness, trembling, increased heart rate, irritability, seizure, stroke, transient ischemic attack, myocardial infarction, and coma/loss of consciousness or death

**Comments:**

MPSMS data are abstracted from the medical record for the index hospital stays.

In 2009, the lead agency for MPSMS transitioned from the Centers for Medicare & Medicaid Services (CMS) to the Agency for Healthcare Research and Quality (AHRQ).

**Measure ID:** OASIS\_4, 30401051

**Measure Title:** Home health care patients whose management of oral medications improved

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with a discharge during the year, excluding episodes for which the patient, at start/resumption of care, was able to take oral medications correctly without assistance or supervision, episodes that end with inpatient facility transfer or death, or patient is nonresponsive, or patient has no oral medications prescribed.

**Numerator:** Subset of the denominator in which a person showed improvement in ability to manage oral medications compared with a prior assessment in the episode

**Comments:** The OASIS instrument measures management of oral medications on a 4-level scale from 0 (fully independent) to 3 (entirely dependent) and refers to ability, not medication compliance. Further information about HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>.

The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted.

**Measure ID:** OASIS\_18, 30401061

**Measure Title:** Short-stay home health patients who had drug education on all medications

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with a discharge or transfer to inpatient facility during the year, excluding episodes for which the patient was not taking any drugs since the last OASIS assessment prior to transfer/discharge, or the patient died

**Numerator:** Number of home health quality episodes during which patient/caregiver was instructed on how to monitor the effectiveness of drug therapy, how to recognize potential adverse effects, and how and when to report problems (at the time of or at any time since the most recent SOC/ROC assessment)

**Comments:** The OASIS instrument measures management of oral medications on a 4-level scale from 0 (fully independent) to 3 (entirely dependent) and refers to ability, not medication compliance. Further information about HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>.

The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted.

### 3.5. Birth-Related Complications

**Measure ID:** HCUP\_40, 30501011

**Measure Title:** Birth trauma - injury to neonate per 1,000 selected live births

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Patient Safety Indicators (PSIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Gender, race/ethnicity, bed size of hospital, expected primary payer, location of hospital, location of residence, median household income of patient's ZIP Code, control of hospital, region, teaching status

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** All newborns

**Numerator:** Subset of the denominator with any diagnosis of birth trauma, excluding preterm infants with a birth weight less than 2,000 grams, infants with any diagnosis of injury to brachial plexus, and infants with any diagnosis code of osteogenesis imperfecta.

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term

acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_41, 30501021

**Measure Title:** Obstetric trauma per 1,000 vaginal deliveries without instrument assistance

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Patient Safety Indicators (PSIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, race/ethnicity, bed size of hospital, expected primary payer, location of hospital, location of residence, median household income of patient's ZIP Code, control of hospital, region, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** All hospital discharges with a diagnosis of vaginal delivery without instrument assistance

**Numerator:** Subset of the denominator with any diagnosis or procedure indicating obstetric trauma with 3rd or 4th degree lacerations

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_42, 30501031

**Measure Title:** Obstetric trauma per 1,000 instrument-assisted deliveries

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Patient Safety Indicators (PSIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, race/ethnicity, bed size of hospital, expected primary payer, location of hospital, location of residence, median household income of patient's ZIP Code, control of hospital, region, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** All instrument-assisted vaginal deliveries discharged from hospital

**Numerator:** Subset of the denominator with any diagnosis or procedure indicating obstetric trauma with 3rd or 4th degree lacerations

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set

of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 30501041

**Measure Title:** Venous thromboembolism or pulmonary embolism per 1,000 delivery discharges, women ages 12-55

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, community-level income, race location of patient residence, expected source of payment, location of patient treatment, and ownership/control, bedsize, teaching status, critical access, safety net, and minority serving of hospitals.

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Sample (SID)

**Denominator:** Total number of delivery hospitalizations, women ages 12-55. Delivery includes any delivery diagnosis, procedure, or DRG and not abortion - Codes from QTA-2019-03

**Numerator:** A subset of the denominator where patients were diagnosed with any Venous thromboembolism or pulmonary embolism



**Comments:**

Delivery codes include:

- Any DX of Z37X: Z370, Z371, Z372, Z373, Z374, Z3750, Z3751, Z3752, Z3753, Z3754, Z3759, Z3760, Z3761, Z3762, Z3763, Z3764, Z3769, Z377, Z379.
- Any DX of O80 (vaginal delivery)
- Any DX of O82 (encounter for cesarean delivery without indication)
- Any Delivery DRG - 765-768 or 774-775
- Any procedure codes 10D00Z0-10D00Z2, 10D07Z3-0D07Z8, 10E0XZZ.
- Abortion codes include:
  - Any DX of ‘O00’, ‘O01’, ‘O02’, ‘O03’, ‘O04’, ‘O07’, ‘O08’ (including all subcodes).
  - Any PR of ‘10A00ZZ’, ‘10A03ZZ’, ‘10A04ZZ’, ‘10A07Z6’, ‘10A07ZW’, ‘10A07ZX’, ‘10A07ZZ’, ‘10A08ZZ’.

**3.6. Inappropriate Treatment**

**Measure ID:** MEPS\_38, 30601011

**Measure Title:** Adults age 65 and over who received potentially inappropriate prescription medications in the calendar year (11 medications)

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population age 65 and over

**Numerator:** Subset of the denominator who received at least 1 of the 11 medications that are potentially inappropriate for older adults

**Comments:** Prescription medications received include all prescribed medications initially purchased or otherwise obtained during the calendar year, as well as any refills. For additional information concerning potentially inappropriate medications, refer to:

Zhan C, Sangl J, Bierman AS, et al. Potentially inappropriate medication use in the community-dwelling elderly: findings from 1996 Medical Expenditure Panel Survey. *JAMA* 2001; 286(22):2823-29.

**Measure ID:** MEPS\_39, 30601021

**Measure Title:** Adults age 65 and over who received potentially inappropriate prescription medications in the calendar year (33 medications)

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population age 65 and over

**Numerator:** Subset of the denominator who received who received 1 or more of the 33 potentially inappropriate medications

**Comments:** Prescription medications received include all prescribed medications initially purchased or otherwise obtained during the calendar year, as well as any refills

For additional information concerning potentially inappropriate medications, refer to: Zhan C, Sangl J, Bierman AS, et al. Potentially inappropriate medication use in the community-dwelling elderly: findings from 1996 Medical Expenditure Panel Survey. *JAMA* 2001; 286(22):2823-29.

### **3.7. Supportive and Palliative Care**

**Measure ID:** MDS\_18, 30701011

**Measure Title:** High-risk, long-stay nursing home patients with pressure ulcer

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: National and State
- Years Available: 2013-2016

- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and Metropolitan status

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Chronic Conditions Data Warehouse (CCW), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare chronic care nursing home long-stay residents with a valid target assessment and with any of the following conditions: impaired in bed mobility or transfer, comatose, or suffering from malnutrition on the target assessment; excludes admission assessments and residents with certain disqualifying responses.

**Numerator:** Subset of the denominator with stages 2-4 pressure ulcer on target assessment

**Comments:** Long stay quality measures include all residents in an episode whose cumulative days in the facility is greater than or equal to 101 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User’s manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

**Measure ID:** MDS\_8, 30701021

**Measure Title:** Low-risk long-stay nursing home residents with a catheter inserted and left in the bladder

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: National and State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and Metropolitan status

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Chronic Conditions Data Warehouse (CCW), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare chronic care nursing home long-stay residents with a valid target assessment, excluding admission assessments or assessments with missing data

**Numerator:** Subset of the denominator with indwelling catheters on target assessment

**Comments:** Long stay quality measures include all residents in an episode whose cumulative days in the facility is greater than or equal to 101 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User’s manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

**Measure ID:** MDS\_5, 30701031

**Measure Title:** Long-stay nursing home residents with a urinary tract infection

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013 to 2016
- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and metropolitan status

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare chronic care nursing home long-stay residents with a valid target assessment, excluding admission assessments and target assessments with missing values

**Numerator:** Subset of the denominator where a urinary tract infection is reported on the target assessment within the last 30 days

**Comments:** Long stay quality measures include all residents in an episode whose cumulative days in the facility is greater than or equal to 101 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User’s manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

**Measure ID:** MDS\_24, 30701041

**Measure Title:** Long-stay nursing home residents experiencing a fall with major injury

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013 to 2016
- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and metropolitan status

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare chronic care nursing home long-stay residents with a valid target assessment; experiencing one or more falls resulting in major injury; excludes residents who were not assessed for a fall or where the number of falls was not assessed

**Numerator:** Subset of the denominator who experienced a fall with major injury

**Comments:** Long stay quality measures include all residents in an episode whose cumulative days in the facility is greater than or equal to 101 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User’s manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

**Measure ID:** MDS\_25, 30701052

**Measure Title:** Short-stay nursing home residents with pressure sores that are new or worsening

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013 to 2016
- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and metropolitan status

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare chronic care nursing home short-stay residents with valid current and look back assessments, excluding patients with disqualifying responses for previous pressure sores in the look back assessment

**Numerator:** Subset of the denominator indicating one or more new or worsening Stage 2-4 pressure sores

**Comments:** Short stay quality measures include all residents in an episode whose cumulative days in the facility is less than or equal to 100 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User’s manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

### 3.8. Home Health Communication

**Measure ID:** HHCAHPS\_2, 30801021

**Measure Title:** Adults who reported a home health provider talking with them about how to set up their home so they can move around safely when they first started getting home health care

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

#### **Table Description:**

- Geographic Representation: National, State
- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “When you first started getting home health care from this agency, did someone from the agency talk with you about how to set up your home so you can move around safely?,” excluding nonrespondents and respondents indicating “do not remember”

**Numerator:** Subset of the denominator who responded “yes” to the above question

**Measure ID:** HHCAHPS\_3, 30801031

**Measure Title:** Percent of adults who reported a home health provider talking with them about all the prescription and over-the-counter medicines you were taking, when they first started getting home health care

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “When you first started getting home health care from this agency, did someone from the agency talk with you about all the prescription and over-the-counter medicines you were taking?,” excluding nonrespondents and respondents indicating “do not remember.”

**Numerator:** Subset of the denominator who responded “yes” to the above question

**Measure ID:** HHCAHPS\_4, 30801041

**Measure Title:** Adults who reported a home health provider asking to see all the prescription and over-the-counter medicines they were taking, when they first started getting home health care

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “When you first started getting home health care from this agency, did someone from the agency ask to see all the prescription and over-the-counter medicines you are taking?,” excluding nonrespondents and respondents indicating “do not remember”

**Numerator:** Subset of the denominator who responded “yes” to the above question

**Measure ID:** HHCAHPS\_7, 30801071

**Measure Title:** Adults who reported that home health providers talked with them about the purpose for taking their new or changed prescription medicines in the last 2 months of care

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “In the last 2 months of care, did home health providers from this agency talk with you about the purpose for taking your new or changed prescription medicines?,” excluding nonrespondents and respondents indicating “did not take any new prescription medicines or change and medicines”

**Numerator:** Subset of the denominator who responded “yes” to the above question

**Measure ID:** HHCAHPS\_8, 30801081

**Measure Title:** Adults who reported that home health providers talked with them about when to take medicines in the last 2 months of care

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “In the last 2 months of care, did home health providers from this agency talk with you about when to take these medicines?,” excluding nonrespondents and respondents indicating “did not take any new prescription medicines or change and medicines”

**Numerator:** Subset of the denominator who responded “yes” to the above question

**Measure ID:** HHCAHPS\_9, 30801091

**Measure Title:** Adults home health patients age 18 and over who reported that home health providers talked with them about the side effects of medicines in the last 2 months of care



**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012- 2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “In the last 2 months of care, did home health providers from this agency talk with you about the side effects of these medicines?,” excluding nonrespondents and respondents indicating “did not take any new prescription medicines or change and medicines”

**Numerator:** Subset of the denominator who responded “yes” to the above question

## Chapter 4. Person-Centered Care

### 4.1. Patient Experience of Care

**Measure ID:** MEPS\_20, 40101011

**Measure Title:** Adults who had a doctor’s office or clinic visit in the last 12 months whose health providers sometimes or never listened carefully, explained things clearly, respected what they had to say, and spent enough time with them

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized adults age 18 and over who visited a doctor’s office or clinic to get health care in the past 12 months, excluding those with missing or invalid responses to all of the questions that make up this composite measure

**Numerator:** Subset of the denominator who responded “Sometimes” or “Never” to any of the four questions making up this composite measure

**Comments:** Estimates are weighted and adjusted for nonresponse based on the number of questions (out of four) with a valid response.

**Measure ID:** MEPS\_22, 40101031

**Measure Title:** Adults who had a doctor’s office or clinic visit whose health providers sometimes or never listened carefully to them

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016

- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized adults age 18 and over who visited a doctor’s office or clinic to get health care in the past 12 months and had a valid response to the question, “In the last 12 months how often did doctors or other health providers listen carefully to you?”

**Numerator:** Subset of the denominator who answered “Sometimes” or “Never” to the above question

**Comments:** Nonrespondents and respondents indicating “Don’t Know” were excluded.

**Measure ID:** MEPS\_24, 40101051

**Measure Title:** Adults who had a doctor’s office or clinic visit whose health providers always explained things in a way they could understand

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized adults age 18 and over who visited a doctor’s office or clinic to get health care in the past 12 months and provided a valid response to the question, “In the last 12 months how often did doctors or other health providers explain things in a way you could understand?”

**Numerator:** Subset of the denominator who responded “Always” to the above question

**Comments:** Nonrespondents and respondents indicating “Don’t Know” were excluded.

**Measure ID:** MEPS\_26, 40101071

**Measure Title:** Adults who had a doctor’s office or clinic visit whose health providers sometimes or never showed respect for what they had to say

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized adults age 18 and over who reported going to a doctor’s office or clinic in the last 12 months and who provided a valid response to the question, “In the last 12 months how often did doctors or other health providers show respect for what you had to say?”

**Numerator:** Subset of the denominator who responded “Sometimes” or “Never” to the above question

**Comments:** Nonrespondents and respondents indicating “Don’t Know” were excluded.

**Measure ID:** MEPS\_28, 40101091

**Measure Title:** Adults who had a doctor’s office or clinic visit whose health providers sometimes or never spent enough time with them

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized adults age 18 and over who reported going to a doctor’s office or clinic in the last 12 months and who provided a valid response to the question, “In the last 12 months how often did doctors or other health providers spend enough time with you?”

**Numerator:** Subset of the denominator who responded “ Sometimes” or “Never” to the above question

**Comments:** Nonrespondents and “Don’t Know” responses were excluded.

**Measure ID:** MEPS\_30, 40101111

**Measure Title:** Rating of health care by adults who had a doctor’s office or clinic visit

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized adults age 18 and over who reported going to a doctor’s office or clinic in the last 12 months and who provided a valid response to the question, “We want to know your rating of all your health care in the last 12 months from all doctors and other health providers. Use any number from 0 to 10 where 0 is the worst health care possible and 10 is the best health care possible. How would you rate all your health care?”

**Numerator:** Subset of the denominator who rated their health care as 0-6 on a scale from 0 to 10

**Comments:** Nonrespondents and “Don’t Know” responses were excluded.

**Measure ID:** MEPS\_32, 40101131

**Measure Title:** Adults with limited English proficiency having a usual source of care that offered language assistance

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2014 - 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized adults age 18 and over with limited English proficiency and a usual source of care

**Numerator:** Subset of the denominator who received language assistance at their usual source of care

**Measure ID:** MEPS\_33, 40101132

**Measure Title:** Adults with limited English proficiency and a usual source of care

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2014 - 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, and U.S. born

**Data Source:** National: AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized adults age 18 and over

**Numerator:** Subset of the denominator who had a usual source of care

**Measure ID:** MEPS\_35, 40101151

**Measure Title:** People with a usual source of care whose health care providers sometimes or never asked for the person's help to make treatment decisions

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 - 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, and U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** Adult US civilian noninstitutionalized population with a usual source of care

**Numerator:** Subset of the denominator who indicated that their usual source of care “Sometimes” or “Never” discussed decisions with them

**Measure ID:** MEPS\_74, 40101161

**Measure Title:** Adults who had a doctor’s office or clinic visit in the last 12 months whose health providers always gave them easy-to-understand instructions about what to do for a specific illness or health conditions

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS); Consistent with Healthy People 2020 objective HIT-1.1

**Table Description:**

- Geographic Representation: National
- Years Available: 2011-2016
- Population Subgroups: age, gender, race, ethnicity, family income, education, employment status, health insurance, Medicaid/CHIP, residence location, language spoken at home, perceived health status, activity limitations, and U.S. born.

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over who had a doctor’s office or clinic visit in the last 12 months and received instructions about what to do for a specific illness or health condition

**Numerator:** Number of persons aged 18 years and over who report that in the last 12 months, doctors or other health providers always gave them easy-to-understand instructions about what to do about a specific illness or health condition. Other possible answers include “Usually,” “Sometimes,” and “Never.” For more information, see “Detailed Methods for the Medical Expenditure Panel Survey.”

**Comments:** Missing responses were excluded. This measure is consistent with Health People 2020 objective HIT-1.1. Data for HIT-1.1 are available at

<https://www.healthypeople.gov/2020/topics-objectives/topic/health-communication-and-health-information-technology/objectives>.

**Measure ID:** MEPS\_75, 40101171

**Measure Title:** Adults who had a doctor’s office or clinic visit in the last 12 months whose health providers always asked them to describe how they will follow the instructions

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS); Consistent with Healthy People 2020 objective HIT-1.2.

**Table Description:**

- Geographic Representation: National
- Years Available: 2011-2016
- Population Subgroups: age, gender, race, ethnicity, family income, education, employment status, health insurance, Medicaid/CHIP, residence location, language spoken at home, perceived health status, activity limitations, and U.S. born.

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over who visited the doctor in the last 12 months for a specific illness or any health condition and were given instructions about what to do about a specific illness or health condition.

**Numerator:** Number of persons aged 18 and over whose health care provider always asks how instructions will be followed. Other possible answers include “Usually,” “Sometimes,” and “Never.” For more information, see “Detailed Methods for the Medical Expenditure Panel Survey.”

**Comments:** Missing responses were excluded. This measure is consistent with CDC’s Healthy People 2020 objective HIT-1.2. Data for HIT-1.2 are available at <https://www.healthypeople.gov/2020/topics-objectives/topic/health-communication-and-health-information-technology/objectives>.

**Measure ID:** MEPS\_76, 40101181

**Measure Title:** Adults who had a doctor’s office or clinic in the last 12 months whose health providers’ office always offered help in filling out forms

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS); Consistent with Healthy People objective HIT-1.3.

**Table Description:**

- Geographic Representation: National
- Years Available: 2011-2016
- Population Subgroups: age, gender, race, ethnicity, family income, education, employment status, health insurance, Medicaid/CHIP, residence location, language spoken at home, perceived health status, activity limitations, and U.S. born.

**Data Source:** AHRQ, CFACT, MEPS



**Denominator:** U.S. civilian noninstitutionalized population age 18 and over who visited their doctor’s office and had to fill out or sign any forms in the last 12 months

**Numerator:** Number of persons aged 18 years and over who report having someone at their doctor’s office always explain the purpose of a form before they signed it (in the last 12 months). Other possible answers include “Usually,” “Sometimes,” and “Never.” For more information, see “Detailed Methods for the Medical Expenditure Panel Survey.”

**Comments:** Missing responses were excluded. This measure is consistent with Healthy People 2020 objective HIT-1.3. Data for HIT-1.3 are available at <https://www.healthypeople.gov/2020/topics-objectives/topic/health-communication-and-health-information-technology/objectives>.

## 4.2. Hospital Communication

**Measure ID:** HCAHPS\_3, 40201031

**Measure Title:** Adult hospital patients who sometimes or never had good communication about medications they received in the hospital

**Measure Source:** Centers for Medicare & Medicaid Services, Hospital Consumer Assessment of Healthcare Providers and Systems

### Table Description:

- Geographic Representation: National, State
- Years Available: 2009-2017
- Population Subgroups: Age, ethnicity, race, education, language spoken at home

**Data Source:** CMS, HCAHPS

**Denominator:** Adult hospital patients

**Numerator:** Subset of the denominator who sometimes or never had good communication about medications they receive in the hospital

## 4.3. Home Health Communication

**Measure ID:** HHCAHPS\_1, 40301011

**Measure Title:** Adults who reported being told what care and services they would get when they first started getting home health care

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

### Table Description:

- Geographic Representation: National, State

- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question “When you first started getting home health care from this agency, did someone from the agency tell you what care and services you would get?,” excluding nonrespondents and respondents indicating “don’t know”

**Numerator:** Subset of the denominator who responded “yes” to the above question

**Measure ID:** HHCAHPS\_6, 40301061

**Measure Title:** Adults who reported that home health providers talk about pain in the last 2 months of care

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “In the last 2 months of care, did you and a home health provider from this agency talk about pain?,” excluding nonrespondents

**Numerator:** Subset of the denominator who responded “yes” to the above question

**Measure ID:** HHCAHPS\_10, 40301101

**Measure Title:** Adults who reported that home health providers always kept them informed about when they would arrive at their home in the last 2 months of care

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “In the last 2 months of care, how often did home health providers from this agency keep you informed about when they would arrive at your home?,” excluding nonrespondents

**Numerator:** Subset of the denominator who responded “always” to the above question

**Measure ID:** HHCAHPS\_11, 40301111

**Measure Title:** Adults who reported that home health providers always treated them as gently as possible in the last 2 months of care

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “In the last 2 months of care, how often did home health providers from this agency treat you as gently as possible?,” excluding nonrespondents

**Numerator:** Subset of the denominator who responded “always” to the above question

**Measure ID:** HHCAHPS\_12, 40301121

**Measure Title:** Adults who reported that home health providers always explained things in a way that was easy to understand in the last 2 months of care

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “In the last 2 months of care, how often did home health providers from this agency explain things in a way that was easy to understand?,” excluding nonrespondents.

**Numerator:** Subset of the denominator who responded “always” to the above question

**Measure ID:** HHCAHPS\_13, 40301131

**Measure Title:** Adults who reported that home health providers always listen carefully to them, in the last 2 months of care

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “In the last 2 months of care, how often did home health providers from this agency listen carefully to you?,” excluding nonrespondents.

**Numerator:** Subset of the denominator who responded “always” to the above question

**Measure ID:** HHCAHPS\_14, 40301141

**Measure Title:** Adults who reported that home health providers always treated them with courtesy and respect, in the last 2 months of care

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “In the last 2 months of care, how often did home health providers from this agency treat you with courtesy and respect?,” excluding nonrespondents

**Numerator:** Subset of the denominator who responded “always” to the above question

**Measure ID:** HHCAHPS\_15, 40301151

**Measure Title:** Adults who reported getting the help or advice they needed when they contacted their home health provider, in the last 2 months of care

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “In the last 2 months of care, when you contacted this agency’s office did you get the help or advice you needed?,” excluding nonrespondents and respondents indicating “did not contact this agency”

**Numerator:** Subset of the denominator who responded “yes” to the above question

**Measure ID:** HHCAHPS\_17, 40301161

**Measure Title:** Adults who reported having any problems with the care they received from their home health provider, in the last 2 months of care

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “In the last 2 months of care, did you have any problems with the care you got through this agency?,” excluding nonrespondents

**Numerator:** Subset of the denominator who responded “No” to the above question

## 4.4. Hospice Care

**Measure ID:** 40401011

**Measure Title:** Hospice patients whose hospice care team always communicated well with their family caregivers about taking care them

Measure title on CMS’s Hospice Compare website: Communication with family

**Measure Source:** Centers for Medicare & Medicaid Services, Consumer Assessment of Healthcare Providers and Systems (CAHPS) Hospice Survey

### **Table Description:**

- Geographic Representation: National, State
- Years Available: 2015-2017
- Population Subgroups: Age, gender, race, ethnicity, language, and education

**Data Source:** CMS, CAHPS Hospice Survey

**Denominator:** Family caregivers of adult hospice patients

**Numerator:** Family caregivers of adult hospice patients who answer “Always” to the first five questions, or “Never” to the sixth question, below:

1. How often did the hospice team listen carefully to you when you talked with them about problems with your family member’s hospice care?
2. While your family member was in hospice care, how often did the hospice team listen carefully to you?
3. While your family member was in hospice care, how often did the hospice team explain things in a way that was easy to understand?
4. While your family member was in hospice care, how often did the hospice team keep you informed about when they would arrive to care for your family member?
5. While your family member was in hospice care, how often did the hospice team keep you informed about your family member’s condition?
6. While your family member was in hospice care, how often did anyone from the hospice team give you confusing or contradictory information about your family member’s condition or care?

### **Comments:**

This is a composite measure. The percent estimates are top-box scored and adjusted for mode of survey administration and case mix. More information about the methods for scoring and adjustment, is available <http://www.hospicecahpsurvey.org/en/scoring-and-analysis>.

The possible responses include “Always,” “Usually,” “Sometime “ and “Never.”

**Measure ID:** 40401021

**Measure Title:** Hospice patients and family caregivers who always got help as soon as they need from hospice care team

Measure title on CMS’s Hospice Compare website: Getting timely help

**Measure Source:** Centers for Medicare & Medicaid Services, Consumer Assessment of Healthcare Providers and Systems (CAHPS) Hospice Survey.

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2015-2017
- Population Subgroups: Age, gender, race, ethnicity, language, and education

**Data Source:** CMS, CAHPS Hospice Survey

**Denominator:** Family caregivers of adult hospice patients

**Numerator:** Family caregivers of adult hospice patients who answer “Always” to the two questions below:

1. While your family member was in hospice care, when you or your family member asked for help from the hospice team, how often did you get help as soon as you needed it?
2. How often did you get the help you needed from the hospice team during evenings, weekends, or holidays?

**Comments:**

This is a composite measure. The percent estimates are top-box scored and adjusted for mode of survey administration and case mix. More information about the methods for scoring and adjustment, is available at <http://www.hospicecahpsurvey.org/en/scoring-and-analysis>.

The possible responses include “Always,” “Usually,” “Sometimes,” and “Never.”

**Measure ID:** 40401031

**Measure Title:** Hospice patients whose hospice care team always treated them with dignity and respect, and really cared about them

Measure title on CMS’s Hospice Compare website: Treating patient with respect

**Measure Source:** Centers for Medicare & Medicaid Services, Consumer Assessment of Healthcare Providers and Systems (CAHPS) Hospice Survey

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2015-2017
- Population Subgroups: Age, gender, race, ethnicity, language, and education

**Data Source:** CMS, CAHPS Hospice Survey

**Denominator:** Family caregivers of adult hospice patients

**Numerator:** Family caregivers of adult hospice patients who answer “Always” to the two questions below:

1. While your family member was in hospice care, how often did the hospice team treat your family member with dignity and respect?
2. While your family member was in hospice care, how often did you feel that the hospice team really cared about your family member?

**Comments:**

This is a composite measure. The percent estimates are top-box scored and adjusted for mode of survey administration and case mix. More information about the methods for scoring and adjustment, is available at <http://www.hospicecahpsurvey.org/en/scoring-and-analysis>.

The possible responses include “Always,” “Usually,” “Sometimes,” and “Never.”

**Measure ID:** 40401041

**Measure Title:** Hospice patients who always received enough helps for pain, sadness, breathing, or constipations from hospice care team

Measure title on CMS’s Hospice Compare website: Help for pain and symptoms

**Measure Source:** Centers for Medicare & Medicaid Services, Consumer Assessment of Healthcare Providers and Systems (CAHPS) Hospice Survey

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2015-2017
- Population Subgroups: Age, gender, race, ethnicity, language, and education

**Data Source:** CMS, CAHPS Hospice Survey

**Denominator:** Family caregivers of adult hospice patients



**Numerator:** Family caregivers of adult hospice patients who answer “Always” to the first three questions or “Yes, definitely” to the last question below:

1. How often did your family member receive the help he or she needed from the hospice team for feelings of anxiety or sadness?
2. How often did your family member get the help he or she needed for trouble with constipation?
3. How often did your family member get the help he or she needed for trouble breathing?
4. Did your family member get as much help with pain as he or she needed?

**Comments:**

This is a composite measure. The percent estimates are top-box scored and adjusted for mode of survey administration and case mix. More information about the methods for scoring and adjustment, is available at <http://www.hospicecahpsurvey.org/en/scoring-and-analysis>.

For the first three questions, the possible responses include “Never,” “Sometimes,” “Usually,” and “Always.” For the final question, the possible responses include “No”; “Yes, somewhat”; and “Yes, definitely.”

**Measure ID:** 40401051

**Measure Title:** Family members who definitely received trainings about taking care their family member from hospice care team

Measure title on CMS’s Hospice Compare website: Training family to care for patient

**Measure Source:** Centers for Medicare & Medicaid Services, Consumer Assessment of Healthcare Providers and Systems (CAHPS) Hospice Survey

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2015-2017
- Population Subgroups: Age, gender, race, ethnicity, language, and education

**Data Source:** CMS, CAHPS Hospice Survey

**Denominator:** Family caregivers of adult hospice patients

**Numerator:** Family caregivers of adult hospice patients who answer “Yes, definitely” to the five questions below:

1. Did the hospice team give you the training you needed about how to help your family member if he or she had trouble breathing?
2. Did the hospice team give you enough training about what side effects to watch for from pain medicine?

3. Did the hospice team give you the training you needed about what to do if your family member became restless or agitated?
4. Did the hospice team give you the training you needed about if and when to give more pain medicine to your family member?
5. Side effects of pain medicine include things like sleepiness. Did any member of the hospice team discuss side effects of pain medicine with you or your family member?

**Comments:**

This is a composite measure. The percent estimates are top-box scored and adjusted for mode of survey administration and case mix. More information about the methods for scoring and adjustment, is available at <http://www.hospicecahpsurvey.org/en/scoring-and-analysis>.

The possible responses include “No”; “Yes, somewhat”; and “Yes, definitely.”

**Measure ID:** 40401061

**Measure Title:** Family caregivers who received right amount of emotional and spiritual supports from hospice care team

Measure title on CMS’s Hospice Compare website: Emotional and spiritual support

**Measure Source:** Centers for Medicare & Medicaid Services, Consumer Assessment of Healthcare Providers and Systems (CAHPS) Hospice Survey

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2015-2017
- Population Subgroups: Age, gender, race, ethnicity, language, and education

**Data Source:** CMS, CAHPS Hospice Survey

**Denominator:** Family caregivers of adult hospice patients

**Numerator:** Family caregivers of adult hospice patients who answer “Right amount” to the three questions below:

1. In the weeks after your family member died, how much emotional support did you get from the hospice team?
2. While your family member was in hospice care, how much emotional support did you get from the hospice team?
3. Support for religious or spiritual beliefs includes talking, praying, quiet time, or other ways of meeting your religious or spiritual needs. While your family member was in hospice care, how much support for your religious and spiritual beliefs did you get from the hospice team?

**Comments:**

This is a composite measure. The percent estimates are top-box scored and adjusted for mode of survey administration and case mix. More information about the methods for scoring and adjustment, is available at <http://www.hospicecahpsurvey.org/en/scoring-and-analysis>.

The possible responses include “Too little,” “Right amount,” and “Too much.”

**Measure ID:** 40401071

**Measure Title:** Family caregivers who rated the hospice care for their family member best (9-10) on a scale of 0-10 (where 0 is the worst and 10 is the best)

Measure title on CMS’s Hospice Compare website: Rating of this hospice

**Measure Source:** Centers for Medicare & Medicaid Services, Consumer Assessment of Healthcare Providers and Systems (CAHPS) Hospice Survey

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2015-2017
- Population Subgroups: Age, gender, race, ethnicity, language, and education

**Data Source:** CMS, CAHPS Hospice Survey

**Denominator:** Family caregivers of adult hospice patients

**Numerator:** Family caregivers of adult hospice patients who respond 9 or 10 out of 10, in response to the question below:

1. What number would you use to rate your family member’s hospice care?

**Comments:**

The percent estimates are top-box scored and adjusted for mode of survey administration and case mix. More information about the methods for scoring and adjustment, is available at <http://www.hospicecahpsurvey.org/en/scoring-and-analysis>.

The possible responses include numbers from 0 to 10, where 0 is the worst hospice care possible and 10 is the best hospice care possible.

**Measure ID:** 40401081

**Measure Title:** Family caregivers who would definitely recommend this hospice to their friends and family

Measure title on CMS’s Hospice Compare website: Willing to recommend this hospice

**Measure Source:** Centers for Medicare & Medicaid Services, Consumer Assessment of Healthcare Providers and Systems (CAHPS) Hospice Survey

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2015-2017
- Population Subgroups: Age, gender, race, ethnicity, language, and education

**Data Source:** CMS, CAHPS Hospice Survey

**Denominator:** Family caregivers of adult hospice patients

**Numerator:** Family caregivers of adult hospice patients who answer “Definitely yes” to the question below:

1. Would you recommend this hospice to your friends and family?

**Comments:**

The percent estimates are top-box scored and adjusted for mode of survey administration and case mix. More information about the methods for scoring and adjustment, is available at <http://www.hospicecahpsurvey.org/en/scoring-and-analysis>.

The possible responses include “Definitely no,” “Probably no,” “Probably yes,” and “Definitely yes.”

## Chapter 5. Care Coordination

### 5.1. Transitions of Care

**Measure ID:** HCAHPS\_4, 50101021

**Measure Title:** Adult hospital patients who did not receive good communication about discharge information

**Measure Source:** Centers for Medicare & Medicaid Services, Hospital Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2009-2017
- Population Subgroups: Age, ethnicity, race, education, language spoken at home

**Data Source:** CMS, HCAHPS

**Denominator:** Adult hospital patients

**Numerator:** Subset of the denominator who did not receive good communication about discharge information

**Measure ID:** HCAHPS\_5, 50101031

**Measure Title:** Adult hospital patients who strongly disagree or disagree that staff took their preferences and those of their family and caregiver into account when deciding what the patients discharge health care would be

**Measure Source:** Centers for Medicare & Medicaid Services, Hospital Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2014-2017
- Population Subgroups: Age, ethnicity, race, education, language spoken at home

**Data Source:** CMS, HCAHPS

**Denominator:** Adult hospital patients

**Numerator:** Subset of the denominator who strongly disagree or disagree that staff took their preferences and those of their family and caregiver into account when deciding what the patients discharge health care would be

## 5.2. Medication Information

**Measure ID:** MEPS\_37, 50201011

**Measure Title:** People with a usual source of care whose health provider usually asks about prescription medications and treatments from other doctors

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

### Table Description:

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population who had a usual source of care and a valid response to the question, “Does [respondent’s usual care provider] usually ask about prescription medications and treatments other doctors may give you?”

**Numerator:** Subset of the denominator who answered “Yes” to the question identified in the denominator

**Comments:** Usual source of care is defined as a particular doctor’s office, clinic, health center, or other health care facility to which an individual usually would go to obtain health care service.

## 5.3. Preventable Emergency Department Visits

**Measure ID:** HCUP\_52, 50301022

**Measure Title:** Emergency department visits with a first-listed diagnosis related to mental health only per 100,000 population

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

### Table Description:

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, geographic location (residence), median household income of the patient’s ZIP Code, region

**Data Source:** AHRQ, CDOM, HCUP, Nationwide Emergency Department Sample (NEDS)

**Denominator:** U.S. resident population

**Numerator:** Emergency department visits in the U.S. with a first-listed diagnosis related to mental health disorders (see comments)

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System (ICD-10-CM/PCS). ICD-10-CM diagnosis codes related to mental health disorders include the following:

ICD-10-CM DIAGNOSIS	DESCRIPTION
F064	Anxiety disorder due to known physiological condition
F4000	Agoraphobia, unspecified
F4001	Agoraphobia with panic disorder
F4002	Agoraphobia without panic disorder
F4010	Social phobia, unspecified
F4011	Social phobia, generalized
F40210	Arachnophobia
F40218	Other animal type phobia
F40220	Fear of thunderstorms
F40228	Other natural environment type phobia
F40230	Fear of blood
F40231	Fear of injections and transfusions
F40232	Fear of other medical care
F40233	Fear of injury
F40240	Claustrophobia
F40241	Acrophobia
F40242	Fear of bridges
F40243	Fear of flying
F40248	Other situational type phobia
F40290	Androphobia
F40291	Gynephobia
F40298	Other specified phobia
F408	Other phobic anxiety disorders
F409	Phobic anxiety disorder, unspecified
F410	Panic disorder [episodic paroxysmal anxiety]
F411	Generalized anxiety disorder
F413	Other mixed anxiety disorders
F418	Other specified anxiety disorders
F419	Anxiety disorder, unspecified
F422	Mixed obsessional thoughts and acts
F423	Hoarding disorder
F424	Excoriation (skin-picking) disorder

ICD-10-CM DIAGNOSIS	DESCRIPTION
F428	Other obsessive-compulsive disorder
F429	Obsessive-compulsive disorder, unspecified
F4311	Post-traumatic stress disorder, acute
F4312	Post-traumatic stress disorder, chronic
F930	Separation anxiety disorder of childhood
F940	Selective mutism
R466	Undue concern and preoccupation with stressful events
F0633	Mood disorder due to known physiol cond w manic features
F0634	Mood disorder due to known physiol cond w mixed features
F3010	Manic episode without psychotic symptoms, unspecified
F3011	Manic episode without psychotic symptoms, mild
F3012	Manic episode without psychotic symptoms, moderate
F3013	Manic episode, severe, without psychotic symptoms
F302	Manic episode, severe with psychotic symptoms
F303	Manic episode in partial remission
F308	Other manic episodes
F309	Manic episode, unspecified
F310	Bipolar disorder, current episode hypomanic
F3110	Bipolar disord, crnt episode manic w/o psych features, unsp
F3111	Bipolar disord, crnt episode manic w/o psych features, mild
F3112	Bipolar disord, crnt episode manic w/o psych features, mod
F3113	Bipolar disord, crnt epsd manic w/o psych features, severe
F312	Bipolar disord, crnt episode manic severe w psych features
F3130	Bipolar disord, crnt epsd depress, mild or mod severt, unsp
F3131	Bipolar disorder, current episode depressed, mild
F3132	Bipolar disorder, current episode depressed, moderate
F314	Bipolar disord, crnt epsd depress, sev, w/o psych features
F315	Bipolar disord, crnt epsd depress, severe, w psych features
F3160	Bipolar disorder, current episode mixed, unspecified
F3161	Bipolar disorder, current episode mixed, mild
F3162	Bipolar disorder, current episode mixed, moderate
F3163	Bipolar disord, crnt epsd mixed, severe, w/o psych features
F3164	Bipolar disord, crnt episode mixed, severe, w psych features
F3171	Bipolar disord, in partial remis, most recent epsd hypomanic
F3173	Bipolar disord, in partial remis, most recent episode manic
F3175	Bipolar disord, in partial remis, most recent epsd depress
F3177	Bipolar disord, in partial remis, most recent episode mixed
F3181	Bipolar II disorder
F3189	Other bipolar disorder
F319	Bipolar disorder, unspecified
F340	Cyclothymic disorder



ICD-10-CM DIAGNOSIS	DESCRIPTION
F0630	Mood disorder due to known physiological condition, unsp
F0631	Mood disorder due to known physiol cond w depressv features
F0632	Mood disord d/t physiol cond w major depressive-like epsd
F320	Major depressive disorder, single episode, mild
F321	Major depressive disorder, single episode, moderate
F322	Major depressv disord, single epsd, sev w/o psych features
F323	Major depressv disord, single epsd, severe w psych features
F324	Major depressv disorder, single episode, in partial remis
F328	Other depressive episodes
F3281	Premenstrual dysphoric disorder
F3289	Other specified depressive episodes
F329	Major depressive disorder, single episode, unspecified
F330	Major depressive disorder, recurrent, mild
F331	Major depressive disorder, recurrent, moderate
F332	Major depressv disorder, recurrent severe w/o psych features
F333	Major depressv disorder, recurrent, severe w psych symptoms
F3341	Major depressive disorder, recurrent, in partial remission
F338	Other recurrent depressive disorders
F339	Major depressive disorder, recurrent, unspecified
F341	Dysthymic disorder
F348	Other persistent mood [affective] disorders
F3481	Disruptive mood dysregulation disorder
F3489	Other specified persistent mood disorders
F349	Persistent mood [affective] disorder, unspecified
F39	Unspecified mood [affective] disorder
O906	Postpartum mood disturbance
F631	Pyromania
F632	Kleptomania
F6381	Intermittent explosive disorder
F6389	Other impulse disorders
F639	Impulse disorder, unspecified
F910	Conduct disorder confined to family context
F911	Conduct disorder, childhood-onset type
F912	Conduct disorder, adolescent-onset type
F913	Oppositional defiant disorder
F918	Other conduct disorders
F919	Conduct disorder, unspecified
F440	Dissociative amnesia
F441	Dissociative fugue
F442	Dissociative stupor
F4481	Dissociative identity disorder

ICD-10-CM DIAGNOSIS	DESCRIPTION
F4489	Other dissociative and conversion disorders
F449	Dissociative and conversion disorder, unspecified
F481	Depersonalization-derealization syndrome
F5000	Anorexia nervosa, unspecified
F5001	Anorexia nervosa, restricting type
F5002	Anorexia nervosa, binge eating/purging type
F502	Bulimia nervosa
F508	Other eating disorders
F5081	Binge eating disorder
F5082	Avoidant/restrictive food intake disorder
F5089	Other specified eating disorder
F509	Eating disorder, unspecified
F9821	Rumination disorder of infancy
F9829	Other feeding disorders of infancy and early childhood
F983	Pica of infancy and childhood
F980	Enuresis not due to a substance or known physiol condition
F981	Encopresis not due to a substance or known physiol condition
F641	Dual role transvestism
F642	Gender identity disorder of childhood
F648	Other sex identity disorders
F649	Gender identity disorder, unspecified
F938	Other childhood emotional disorders
R45850	Homicidal ideations
F0150	Vascular dementia without behavioral disturbance
F0151	Vascular dementia with behavioral disturbance
F0280	Dementia in oth diseases classd elswhr w/o behavrl disturb
F0281	Dementia in oth diseases classd elswhr w behavioral disturb
F0390	Unspecified dementia without behavioral disturbance
F0391	Unspecified dementia with behavioral disturbance
F04	Amnestic disorder due to known physiological condition
F05	Delirium due to known physiological condition
F0781	Postconcussional syndrome
F0789	Oth personality & behavrl disord due to known physiol cond
F079	Unsp personality & behavrl disord due to known physiol cond
F482	Pseudobulbar affect
G300	Alzheimers disease with early onset
G301	Alzheimers disease with late onset
G308	Other Alzheimers disease
G309	Alzheimers disease, unspecified
G3101	Picks disease
G3109	Other frontotemporal dementia

<b>ICD-10-CM DIAGNOSIS</b>	<b>DESCRIPTION</b>
G311	Senile degeneration of brain, not elsewhere classified
G3183	Dementia with Lewy bodies
R4181	Age-related cognitive decline
R54	Age-related physical debility
F70	Mild intellectual disabilities
F71	Moderate intellectual disabilities
F72	Severe intellectual disabilities
F73	Profound intellectual disabilities
F78	Other intellectual disabilities
F79	Unspecified intellectual disabilities
F800	Phonological disorder
F801	Expressive language disorder
F802	Mixed receptive-expressive language disorder
F804	Speech and language development delay due to hearing loss
F8081	Childhood onset fluency disorder
F8082	Social pragmatic communication disorder
F8089	Other developmental disorders of speech and language
F809	Developmental disorder of speech and language, unspecified
F810	Specific reading disorder
F812	Mathematics disorder
F8181	Disorder of written expression
F8189	Other developmental disorders of scholastic skills
F819	Developmental disorder of scholastic skills, unspecified
F82	Specific developmental disorder of motor function
F840	Autistic disorder
F842	Retts syndrome
F843	Other childhood disintegrative disorder
F845	Aspergers syndrome
F848	Other pervasive developmental disorders
F849	Pervasive developmental disorder, unspecified
F88	Other disorders of psychological development
F89	Unspecified disorder of psychological development
F900	Attn-defct hyperactivity disorder, predom inattentive type
F901	Attn-defct hyperactivity disorder, predom hyperactive type
F902	Attention-deficit hyperactivity disorder, combined type
F908	Attention-deficit hyperactivity disorder, other type
F909	Attention-deficit hyperactivity disorder, unspecified type
F948	Other childhood disorders of social functioning
F949	Childhood disorder of social functioning, unspecified
F950	Transient tic disorder
F951	Chronic motor or vocal tic disorder

ICD-10-CM DIAGNOSIS	DESCRIPTION
F952	Tourettes disorder
F958	Other tic disorders
F959	Tic disorder, unspecified
F984	Stereotyped movement disorders
F985	Adult onset fluency disorder
R480	Dyslexia and alexia
F42	Obsessive-compulsive disorder
F4521	Hypochondriasis
F4522	Body dysmorphic disorder
F633	Trichotillomania
R4681	Obsessive-compulsive behavior
F068	Oth mental disorders due to known physiological condition
F09	Unsp mental disorder due to known physiological condition
F488	Other specified nonpsychotic mental disorders
F489	Nonpsychotic mental disorder, unspecified
F939	Childhood emotional disorder, unspecified
F99	Mental disorder, not otherwise specified
F650	Fetishism
F651	Transvestic fetishism
F652	Exhibitionism
F653	Voyeurism
F654	Pedophilia
F6551	Sexual masochism
F6552	Sexual sadism
F6581	Frotteurism
F6589	Other paraphilias
F659	Paraphilia, unspecified
F070	Personality change due to known physiological condition
F21	Schizotypal disorder
F600	Paranoid personality disorder
F601	Schizoid personality disorder
F602	Antisocial personality disorder
F603	Borderline personality disorder
F604	Histrionic personality disorder
F605	Obsessive-compulsive personality disorder
F606	Avoidant personality disorder
F607	Dependent personality disorder
F6081	Narcissistic personality disorder
F6089	Other specific personality disorders
F609	Personality disorder, unspecified
F6811	Factitious disorder w predom psych signs and symptoms

ICD-10-CM DIAGNOSIS	DESCRIPTION
F6812	Factitious disorder w predom physical signs and symptoms
F6813	Factitious disord w comb psych and physcl signs and symptoms
F688	Other specified disorders of adult personality and behavior
F69	Unspecified disorder of adult personality and behavior
F060	Psychotic disorder w hallucin due to known physiol condition
F061	Catatonic disorder due to known physiological condition
F062	Psychotic disorder w delusions due to known physiol cond
F200	Paranoid schizophrenia
F201	Disorganized schizophrenia
F202	Catatonic schizophrenia
F203	Undifferentiated schizophrenia
F205	Residual schizophrenia
F2081	Schizophreniform disorder
F2089	Other schizophrenia
F209	Schizophrenia, unspecified
F22	Delusional disorders
F23	Brief psychotic disorder
F24	Shared psychotic disorder
F250	Schizoaffective disorder, bipolar type
F251	Schizoaffective disorder, depressive type
F258	Other schizoaffective disorders
F259	Schizoaffective disorder, unspecified
F28	Oth psych disorder not due to a sub or known physiol cond
F29	Unsp psychosis not due to a substance or known physiol cond
F520	Hypoactive sexual desire disorder
F521	Sexual aversion disorder
F5221	Male erectile disorder
F5222	Female sexual arousal disorder
F5231	Female orgasmic disorder
F5232	Male orgasmic disorder
F524	Premature ejaculation
F525	Vaginismus not due to a substance or known physiol condition
F526	Dyspareunia not due to a substance or known physiol cond
F528	Oth sexual dysfnct not due to a sub or known physiol cond
F529	Unsp sexual dysfnct not due to a sub or known physiol cond
F53	Puerperal psychosis
F640	Transsexualism
F6550	Sadomasochism, unspecified
F66	Other sexual disorders
R37	Sexual dysfunction, unspecified
F5101	Primary insomnia

ICD-10-CM DIAGNOSIS	DESCRIPTION
F5102	Adjustment insomnia
F5103	Paradoxical insomnia
F5104	Psychophysiologic insomnia
F5105	Insomnia due to other mental disorder
F5109	Oth insomnia not due to a substance or known physiol cond
F5111	Primary hypersomnia
F5112	Insufficient sleep syndrome
F5113	Hypersomnia due to other mental disorder
F5119	Oth hypersomnia not due to a substance or known physiol cond
F513	Sleepwalking [somnambulism]
F514	Sleep terrors [night terrors]
F515	Nightmare disorder
F518	Oth sleep disord not due to a sub or known physiol cond
F519	Sleep disorder not due to a sub or known physiol cond, unsp
F444	Conversion disorder with motor symptom or deficit
F445	Conversion disorder with seizures or convulsions
F446	Conversion disorder with sensory symptom or deficit
F447	Conversion disorder with mixed symptom presentation
F450	Somatization disorder
F451	Undifferentiated somatoform disorder
F4520	Hypochondriacal disorder, unspecified
F4529	Other hypochondriacal disorders
F4541	Pain disorder exclusively related to psychological factors
F4542	Pain disorder with related psychological factors
F458	Other somatoform disorders
F459	Somatoform disorder, unspecified
F54	Psych & behavrl factors assoc w disord or dis classd elswhr
F6810	Factitious disorder, unspecified
R45851	Suicidal ideations
T1491	Suicide attempt (through FY 2017)
T1491XA	Suicide attempt, initial encounter
T360X2A	Poisoning by penicillins, intentional self-harm, init encntr
T361X2A	Poison by cephalospor/oth beta-lactm antibiot, slf-hrm, init
T362X2A	Poisoning by chloramphenicol group, self-harm, init
T363X2A	Poisoning by macrolides, intentional self-harm, init encntr
T364X2A	Poisoning by tetracyclines, intentional self-harm, init
T365X2A	Poisoning by aminoglycosides, intentional self-harm, init
T366X2A	Poisoning by rifampicins, intentional self-harm, init encntr
T367X2A	Poisoning by antifungal antibiot, sys used, self-harm, init
T368X2A	Poisoning by oth systemic antibiotics, self-harm, init
T3692XA	Poisoning by unsp systemic antibiotic, self-harm, init

ICD-10-CM DIAGNOSIS	DESCRIPTION
T370X2A	Poisoning by sulfonamides, intentional self-harm, init
T371X2A	Poisoning by antimycobacterial drugs, self-harm, init
T372X2A	Poison by antimalari/drugs act on bld protzoa, slf-hrm, init
T373X2A	Poisoning by oth antiprotozoal drugs, self-harm, init
T374X2A	Poisoning by anthelmintics, intentional self-harm, init
T375X2A	Poisoning by antiviral drugs, intentional self-harm, init
T378X2A	Poison by oth systemic anti-infect/parasit, self-harm, init
T3792XA	Poison by unsp sys anti-infect and antiparastc, slf-hrm, init
T380X2A	Poisoning by glucocort/synth analog, self-harm, init
T381X2A	Poisoning by thyroid hormones and sub, self-harm, init
T382X2A	Poisoning by antithyroid drugs, intentional self-harm, init
T383X2A	Poison by insulin and oral hypoglycemic drugs, slf-hrm, init
T384X2A	Poisoning by oral contraceptives, self-harm, init
T385X2A	Poisoning by oth estrogens and progestogens, self-harm, init
T386X2A	Poison by antigonadtr/antiestr/antiandrg, NEC, slf-hrm, init
T387X2A	Poison by androgens and anabolic congeners, self-harm, init
T38802A	Poison by unsp hormones and synthetic sub, self-harm, init
T38812A	Poisoning by anterior pituitary hormones, self-harm, init
T38892A	Poisoning by oth hormones and synthetic sub, self-harm, init
T38902A	Poisoning by unsp hormone antagonists, self-harm, init
T38992A	Poisoning by oth hormone antagonists, self-harm, init
T39012A	Poisoning by aspirin, intentional self-harm, init encntr
T39092A	Poisoning by salicylates, intentional self-harm, init encntr
T391X2A	Poisoning by 4-Aminophenol derivatives, self-harm, init
T392X2A	Poisoning by pyrazolone derivatives, self-harm, init
T39312A	Poisoning by propionic acid derivatives, self-harm, init
T39392A	Poison by oth nonsteroid anti-inflam drugs, self-harm, init
T394X2A	Poisoning by antirheumatics, NEC, self-harm, init
T398X2A	Poison by oth nonopio analges/antipyret, NEC, self-harm, init
T3992XA	Poison by unsp nonopi analgs/antipyr/antirheu, slf-hrm, init
T405X2A	Poisoning by cocaine, intentional self-harm, init encntr
T407X2A	Poisoning by cannabis (derivatives), self-harm, init
T408X2A	Poisoning by lysergide, intentional self-harm, init encntr
T40902A	Poisoning by unsp psychodysleptics, self-harm, init
T40992A	Poisoning by oth psychodysleptics, self-harm, init
T410X2A	Poisoning by inhaled anesthetics, self-harm, init
T411X2A	Poisoning by intravenous anesthetics, self-harm, init
T41202A	Poisoning by unsp general anesthetics, self-harm, init
T41292A	Poisoning by oth general anesthetics, self-harm, init
T413X2A	Poisoning by local anesthetics, intentional self-harm, init
T4142XA	Poisoning by unsp anesthetic, intentional self-harm, init

<b>ICD-10-CM DIAGNOSIS</b>	<b>DESCRIPTION</b>
T415X2A	Poisoning by therapeutic gases, intentional self-harm, init
T420X2A	Poisoning by hydantoin derivatives, self-harm, init
T421X2A	Poisoning by iminostilbenes, intentional self-harm, init
T422X2A	Poison by succinimides and oxazolidinediones, self-harm, init
T423X2A	Poisoning by barbiturates, intentional self-harm, init
T424X2A	Poisoning by benzodiazepines, intentional self-harm, init
T425X2A	Poisoning by mixed antiepileptics, self-harm, init
T426X2A	Poison by oth antieplptc and sed-hypntc drugs, slf-hrm, init
T4272XA	Poison by unsp antieplptc and sed-hypntc drugs, slf-hrm, init
T428X2A	Poison by antiparkns drug/centr musc-tone depr, slf-hrm, init
T43012A	Poisoning by tricyclic antidepressants, self-harm, init
T43022A	Poisoning by tetracyclic antidepressants, self-harm, init
T431X2A	Poisoning by MAO inhib antidepressants, self-harm, init
T43202A	Poisoning by unsp antidepressants, self-harm, init
T43212A	Poison by slctv seroton/norepineph reup inhibtr, slf-hrm, init
T43222A	Poison by slctv serotonin reuptake inhibtr, self-harm, init
T43292A	Poisoning by oth antidepressants, self-harm, init
T433X2A	Poison by phenothiaz antipsychot/neurolept, self-harm, init
T434X2A	Poison by butyrophen/thiothixen neuroleptc, self-harm, init
T43502A	Poisoning by unsp antipsychot/neurolept, self-harm, init
T43592A	Poisoning by oth antipsychot/neurolept, self-harm, init
T43602A	Poisoning by unsp psychostimulants, self-harm, init
T43612A	Poisoning by caffeine, intentional self-harm, init encntr
T43622A	Poisoning by amphetamines, intentional self-harm, init
T43632A	Poisoning by methylphenidate, intentional self-harm, init
T43692A	Poisoning by oth psychostimulants, self-harm, init
T438X2A	Poisoning by oth psychotropic drugs, self-harm, init
T4392XA	Poisoning by unsp psychotropic drug, self-harm, init
T440X2A	Poisoning by anticholinesterase agents, self-harm, init
T441X2A	Poisoning by oth parasympathomimetics, self-harm, init
T442X2A	Poisoning by ganglionic blocking drugs, self-harm, init
T443X2A	Poison by oth parasympath and spasmolytics, self-harm, init
T444X2A	Poison by predom alpha-adrenocpt agonists, self-harm, init
T445X2A	Poisoning by predom beta-adrenocpt agonists, self-harm, init
T446X2A	Poisoning by alpha-adrenocpt antagonists, self-harm, init
T447X2A	Poisoning by beta-adrenocpt antagonists, self-harm, init
T448X2A	Poison by centr-acting/adren-neurn-block agnt, slf-hrm, init
T44902A	Poison by unsp drugs aff the autonm nrv sys, slf-hrm, init
T44992A	Poison by oth drug aff the autonm nervous sys, slf-hrm, init
T450X2A	Poisoning by antiallerg/antiemetic, self-harm, init
T451X2A	Poisoning by antineopl and immunosup drugs, self-harm, init



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T452X2A	Poisoning by vitamins, intentional self-harm, init encntr
T453X2A	Poisoning by enzymes, intentional self-harm, init encntr
T454X2A	Poisoning by iron and its compounds, self-harm, init
T45512A	Poisoning by anticoagulants, intentional self-harm, init
T45522A	Poisoning by antithrombotic drugs, self-harm, init
T45602A	Poisoning by unsp fibrin-affct drugs, self-harm, init
T45612A	Poisoning by thrombolytic drug, intentional self-harm, init
T45622A	Poisoning by hemostatic drug, intentional self-harm, init
T45692A	Poisoning by oth fibrin-affct drugs, self-harm, init
T457X2A	Poison by anticoag antag, vit K and oth coag, slf-hrm, init
T458X2A	Poison by oth prim sys and hematolog agents, slf-hrm, init
T4592XA	Poison by unsp prim sys and hematolog agent, slf-hrm, init
T460X2A	Poison by cardi-stim glycos/drug similar act, self-harm, init
T461X2A	Poisoning by calcium-channel blockers, self-harm, init
T462X2A	Poisoning by oth antidysrhythmic drugs, self-harm, init
T463X2A	Poisoning by coronary vasodilators, self-harm, init
T464X2A	Poison by angiotens-convert-enzyme inhibtr, self-harm, init
T465X2A	Poisoning by oth antihypertensive drugs, self-harm, init
T466X2A	Poison by antihyperlip and antiarterio drugs, self-harm, init
T467X2A	Poisoning by peripheral vasodilators, self-harm, init
T468X2A	Poison by antivaric drugs, inc scler agents, self-harm, init
T46902A	Poison by unsp agents aff the cardiovasc sys, self-harm, init
T46992A	Poison by oth agents aff the cardiovasc sys, self-harm, init
T470X2A	Poisoning by histamine H2-receptor blockers, self-harm, init
T471X2A	Poison by oth antacids & anti-gstrc-sec drugs, slf-hrm, init
T472X2A	Poisoning by stimulant laxatives, self-harm, init
T473X2A	Poisoning by saline and osmotic laxatives, self-harm, init
T474X2A	Poisoning by oth laxatives, intentional self-harm, init
T475X2A	Poisoning by digestants, intentional self-harm, init encntr
T476X2A	Poisoning by antidiarrheal drugs, self-harm, init
T477X2A	Poisoning by emetics, intentional self-harm, init encntr
T478X2A	Poisoning by oth agents aff GI sys, self-harm, init
T4792XA	Poisoning by unsp agents aff the GI sys, self-harm, init
T480X2A	Poisoning by oxytotic drugs, intentional self-harm, init
T481X2A	Poisoning by skeletal muscle relaxants, self-harm, init
T48202A	Poisoning by unsp drugs acting on muscles, self-harm, init
T48292A	Poisoning by oth drugs acting on muscles, self-harm, init
T483X2A	Poisoning by antitussives, intentional self-harm, init
T484X2A	Poisoning by expectorants, intentional self-harm, init
T485X2A	Poisoning by oth anti-common-cold drugs, self-harm, init
T486X2A	Poisoning by antiasthmatics, intentional self-harm, init

ICD-10-CM DIAGNOSIS	DESCRIPTION
T48902A	Poison by unsp agents prim act on the resp sys, slf-hrm, init
T48992A	Poison by oth agents prim act on the resp sys, slf-hrm, init
T490X2A	Poison by local antifung/infect/inflamm drugs, slf-hrm, init
T491X2A	Poisoning by antipruritics, intentional self-harm, init
T492X2A	Poisoning by local astringents/detergents, self-harm, init
T493X2A	Poison by emollients, demulcents and protect, self-harm, init
T494X2A	Poison by keratolyt/keratplst/hair trmt drug, self-harm, init
T495X2A	Poisoning by oph drugs and preparations, self-harm, init
T496X2A	Poisoning by otorhino drugs and prep, self-harm, init
T497X2A	Poison by dental drugs, topically applied, self-harm, init
T498X2A	Poisoning by oth topical agents, intentional self-harm, init
T4992XA	Poisoning by unsp topical agent, intentional self-harm, init
T500X2A	Poisoning by mineralocorticoids and antag, self-harm, init
T501X2A	Poisoning by loop diuretics, intentional self-harm, init
T502X2A	Poison by crbnc-anhydr inhibtr,benzo/oth diuretc,slf-hrm,init
T503X2A	Poison by electrolytic/caloric/wtr-bal agnt, self-harm, init
T504X2A	Poisoning by drugs aff uric acid metab, self-harm, init
T505X2A	Poisoning by appetite depressants, self-harm, init
T506X2A	Poisoning by antidotes and chelating agents, self-harm, init
T507X2A	Poison by analeptics and opioid receptor antag, slf-hrm, init
T508X2A	Poisoning by diagnostic agents, intentional self-harm, init
T50902A	Poisoning by unsp drug/meds/biol subst, self-harm, init
T50992A	Poisoning by oth drug/meds/biol subst, self-harm, init
T50A12A	Poison by pertuss vaccn, inc combin w pertuss, slf-hrm, init
T50A22A	Poison by mixed bact vaccines w/o a pertuss, self-harm, init
T50A92A	Poisoning by oth bacterial vaccines, self-harm, init
T50B12A	Poisoning by smallpox vaccines, intentional self-harm, init
T50B92A	Poisoning by oth viral vaccines, intentional self-harm, init
T50Z12A	Poisoning by immunoglobulin, intentional self-harm, init
T50Z92A	Poisoning by oth vaccines and biolg substnc, self-harm, init
T510X2A	Toxic effect of ethanol, intentional self-harm, init encntr
T511X2A	Toxic effect of methanol, intentional self-harm, init encntr
T512X2A	Toxic effect of 2-Propanol, intentional self-harm, init
T513X2A	Toxic effect of fusel oil, intentional self-harm, init
T518X2A	Toxic effect of oth alcohols, intentional self-harm, init
T5192XA	Toxic effect of unsp alcohol, intentional self-harm, init
T520X2A	Toxic effect of petroleum products, self-harm, init
T521X2A	Toxic effect of benzene, intentional self-harm, init encntr
T522X2A	Toxic effect of homologues of benzene, self-harm, init
T523X2A	Toxic effect of glycols, intentional self-harm, init encntr
T524X2A	Toxic effect of ketones, intentional self-harm, init encntr

ICD-10-CM DIAGNOSIS	DESCRIPTION
T528X2A	Toxic effect of organic solvents, self-harm, init
T5292XA	Toxic effect of unsp organic solvent, self-harm, init
T530X2A	Toxic effect of carbon tetrachloride, self-harm, init
T531X2A	Toxic effect of chloroform, intentional self-harm, init
T532X2A	Toxic effect of trichloroethylene, self-harm, init
T533X2A	Toxic effect of tetrachloroethylene, self-harm, init
T534X2A	Toxic effect of dichloromethane, intentional self-harm, init
T535X2A	Toxic effect of chlorofluorocarbons, self-harm, init
T536X2A	Tox eff of halgn deriv of aliphatic hydrocarb, slf-hrm, init
T537X2A	Toxic eff of halgn deriv of aromatic hydrocarb, slf-hrm, init
T5392XA	Tox eff of unsp halgn deriv of aromat hydrocarb,slf-hrm, init
T540X2A	Toxic effect of phenol and phenol homolog, self-harm, init
T541X2A	Toxic effect of corrosive organic compounds, self-harm, init
T542X2A	Tox eff of corrosv acids & acid-like substnc, slf-hrm, init
T543X2A	Tox eff of corrosv alkalis & alk-like substnc, slf-hrm, init
T5492XA	Toxic effect of unsp corrosive substance, self-harm, init
T550X2A	Toxic effect of soaps, intentional self-harm, init encntr
T551X2A	Toxic effect of detergents, intentional self-harm, init
T560X2A	Toxic effect of lead and its compounds, self-harm, init
T561X2A	Toxic effect of mercury and its compounds, self-harm, init
T562X2A	Toxic effect of chromium and its compounds, self-harm, init
T563X2A	Toxic effect of cadmium and its compounds, self-harm, init
T564X2A	Toxic effect of copper and its compounds, self-harm, init
T565X2A	Toxic effect of zinc and its compounds, self-harm, init
T566X2A	Toxic effect of tin and its compounds, self-harm, init
T567X2A	Toxic effect of beryllium and its compounds, self-harm, init
T56812A	Toxic effect of thallium, intentional self-harm, init encntr
T56892A	Toxic effect of oth metals, intentional self-harm, init
T5692XA	Toxic effect of unsp metal, intentional self-harm, init
T570X2A	Toxic effect of arsenic and its compounds, self-harm, init
T571X2A	Toxic effect of phosphorus and its compnd, self-harm, init
T572X2A	Toxic effect of manganese and its compounds, self-harm, init
T573X2A	Toxic effect of hydrogen cyanide, self-harm, init
T578X2A	Toxic effect of inorganic substances, self-harm, init
T5792XA	Toxic effect of unsp inorganic substance, self-harm, init
T5802XA	Toxic eff of carb monx from mtr veh exhaust, slf-hrm, init
T5812XA	Toxic effect of carb monx from utility gas, self-harm, init
T582X2A	Tox eff of carb monx fr incmpl combst dmst fuel,slf-hrm,init
T588X2A	Toxic effect of carb monx from oth source, self-harm, init
T5892XA	Toxic effect of carb monx from unsp source, self-harm, init
T590X2A	Toxic effect of nitrogen oxides, intentional self-harm, init

ICD-10-CM DIAGNOSIS	DESCRIPTION
T591X2A	Toxic effect of sulfur dioxide, intentional self-harm, init
T592X2A	Toxic effect of formaldehyde, intentional self-harm, init
T593X2A	Toxic effect of lacrimogenic gas, self-harm, init
T594X2A	Toxic effect of chlorine gas, intentional self-harm, init
T595X2A	Tox eff of fluorine gas and hydrogen fluoride, slf-hrm, init
T596X2A	Toxic effect of hydrogen sulfide, self-harm, init
T597X2A	Toxic effect of carbon dioxide, intentional self-harm, init
T59812A	Toxic effect of smoke, intentional self-harm, init encntr
T59892A	Toxic effect of gases, fumes and vapors, self-harm, init
T5992XA	Toxic effect of unsp gases, fumes and vapors, slf-hrm, init
T600X2A	Toxic eff of organophos and carbamate insect, slf-hrm, init
T601X2A	Toxic effect of halogenated insecticides, self-harm, init
T602X2A	Toxic effect of insecticides, intentional self-harm, init
T603X2A	Toxic effect of herbicides and fungicides, self-harm, init
T604X2A	Toxic effect of rodenticides, intentional self-harm, init
T608X2A	Toxic effect of oth pesticides, intentional self-harm, init
T6092XA	Toxic effect of unsp pesticide, intentional self-harm, init
T6102XA	Ciguatera fish poisoning, intentional self-harm, init encntr
T6112XA	Scombroid fish poisoning, intentional self-harm, init encntr
T61772A	Other fish poisoning, intentional self-harm, init encntr
T61782A	Oth shellfish poisoning, intentional self-harm, init encntr
T618X2A	Toxic effect of oth seafood, intentional self-harm, init
T6192XA	Toxic effect of unsp seafood, intentional self-harm, init
T620X2A	Toxic effect of ingested mushrooms, self-harm, init
T621X2A	Toxic effect of ingested berries, self-harm, init
T622X2A	Toxic effect of ingested (parts of) plant(s), slf-hrm, init
T628X2A	Toxic effect of noxious substnc eaten as food, slf-hrm, init
T6292XA	Toxic eff of unsp noxious sub eaten as food, slf-hrm, init
T63002A	Toxic effect of unsp snake venom, self-harm, init
T63012A	Toxic effect of rattlesnake venom, self-harm, init
T63022A	Toxic effect of coral snake venom, self-harm, init
T63032A	Toxic effect of taipan venom, intentional self-harm, init
T63042A	Toxic effect of cobra venom, intentional self-harm, init
T63062A	Toxic effect of venom of N & S American snake, slf-hrm, init
T63072A	Toxic effect of venom of Australian snake, self-harm, init
T63082A	Toxic eff of venom of African and Asian snake, slf-hrm, init
T63092A	Toxic effect of venom of snake, intentional self-harm, init
T63112A	Toxic effect of venom of gila monster, self-harm, init
T63122A	Toxic effect of venom of venomous lizard, self-harm, init
T63192A	Toxic effect of venom of reptiles, self-harm, init
T632X2A	Toxic effect of venom of scorpion, self-harm, init

ICD-10-CM DIAGNOSIS	DESCRIPTION
T63302A	Toxic effect of unsp spider venom, self-harm, init
T63312A	Toxic effect of venom of black widow spider, self-harm, init
T63322A	Toxic effect of venom of tarantula, self-harm, init
T63332A	Toxic effect of venom of brown recluse spider, slf-hrm, init
T63392A	Toxic effect of venom of spider, intentional self-harm, init
T63412A	Toxic effect of venom of centipede/millipede, slf-hrm, init
T63422A	Toxic effect of venom of ants, intentional self-harm, init
T63432A	Toxic effect of venom of caterpillars, self-harm, init
T63442A	Toxic effect of venom of bees, intentional self-harm, init
T63452A	Toxic effect of venom of hornets, self-harm, init
T63462A	Toxic effect of venom of wasps, intentional self-harm, init
T63482A	Toxic effect of venom of arthropod, self-harm, init
T63512A	Toxic effect of contact w stingray, self-harm, init
T63592A	Toxic effect of contact w oth venomous fish, self-harm, init
T63612A	Toxic effect of contact w Portugese Man-o-war, slf-hrm, init
T63622A	Toxic effect of contact w oth jellyfish, self-harm, init
T63632A	Toxic effect of contact w sea anemone, self-harm, init
T63692A	Toxic eff of cntct w oth venom marine animals, slf-hrm, init
T63712A	Toxic effect of contact w venom marine plant, slf-hrm, init
T63792A	Toxic effect of contact w oth venomous plant, slf-hrm, init
T63812A	Toxic effect of contact w venomous frog, self-harm, init
T63822A	Toxic effect of contact w venomous toad, self-harm, init
T63832A	Toxic effect of contact w oth venomous amphib, slf-hrm, init
T63892A	Toxic effect of contact w oth venom animals, slf-hrm, init
T6392XA	Toxic effect of contact w unsp venom animal, slf-hrm, init
T6402XA	Toxic effect of aflatoxin, intentional self-harm, init
T6482XA	Toxic effect of mycotoxin food contaminants, self-harm, init
T650X2A	Toxic effect of cyanides, intentional self-harm, init encntr
T651X2A	Toxic effect of strychnine and its salts, self-harm, init
T65212A	Toxic effect of chewing tobacco, intentional self-harm, init
T65222A	Toxic effect of tobacco cigarettes, self-harm, init
T65292A	Toxic effect of tobacco and nicotine, self-harm, init
T653X2A	Tox eff of nitrodrv/aminodrv of benzn/homolog, slf-hrm, init
T654X2A	Toxic effect of carbon disulfide, self-harm, init
T655X2A	Tox eff of nitro & oth nitric acids & esters, slf-hrm, init
T656X2A	Toxic effect of paints and dyes, NEC, self-harm, init
T65812A	Toxic effect of latex, intentional self-harm, init encntr
T65822A	Toxic eff of harmful algae and algae toxins, slf-hrm, init
T65832A	Toxic effect of fiberglass, intentional self-harm, init
T65892A	Toxic effect of oth substances, intentional self-harm, init
T6592XA	Toxic effect of unsp substance, intentional self-harm, init

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T71112A	Asphyxiation due to smothering under pillow, self-harm, init
T71122A	Asphyxiation due to plastic bag, intentional self-harm, init
T71132A	Asphyx due to being trapped in bed linens, self-harm, init
T71152A	Asphyxiation due to smothering in furniture, self-harm, init
T71162A	Asphyxiation due to hanging, intentional self-harm, init
T71192A	Asphyx d/t mech thrt to breathe d/t oth cause, slf-hrm, init
T71222A	Asphyx due to being trapped in a car trunk, self-harm, init
T71232A	Asphyx d/t being trap in a (discarded) refrig, slf-hrm, init
X710XXA	Intentional self-harm by drown while in bathtub, init
X711XXA	Intentional self-harm by drown while in swimming pool, init
X712XXA	Self-harm by drown after jump into swimming pool, init
X713XXA	Intentional self-harm by drown in natural water, init
X718XXA	Oth intentional self-harm by drowning and submersion, init
X719XXA	Intentional self-harm by drowning and submersion, unsp, init
X720XXA	Intentional self-harm by handgun discharge, init encntr
X730XXA	Intentional self-harm by shotgun discharge, init encntr
X731XXA	Intentional self-harm by hunting rifle discharge, init
X732XXA	Intentional self-harm by machine gun discharge, init encntr
X738XXA	Intentional self-harm by oth larger firearm discharge, init
X739XXA	Intentional self-harm by unsp larger firearm discharge, init
X7401XA	Intentional self-harm by airgun, initial encounter
X7402XA	Intentional self-harm by paintball gun, initial encounter
X7409XA	Self-harm by oth gas, air or spring-operated gun, init
X748XXA	Intentional self-harm by oth firearm discharge, init encntr
X749XXA	Intentional self-harm by unsp firearm discharge, init encntr
X750XXA	Intentional self-harm by explosive material, init encntr
X760XXA	Intentional self-harm by smoke, fire and flames, init encntr
X770XXA	Intentional self-harm by steam or hot vapors, init encntr
X771XXA	Intentional self-harm by hot tap water, initial encounter
X772XXA	Intentional self-harm by other hot fluids, initial encounter
X773XXA	Intentional self-harm by hot household appliances, init
X778XXA	Intentional self-harm by other hot objects, init encntr
X779XXA	Intentional self-harm by unsp hot objects, init encntr
X780XXA	Intentional self-harm by sharp glass, initial encounter
X781XXA	Intentional self-harm by knife, initial encounter
X782XXA	Intentional self-harm by sword or dagger, initial encounter
X788XXA	Intentional self-harm by other sharp object, init encntr
X789XXA	Intentional self-harm by unsp sharp object, init encntr
X790XXA	Intentional self-harm by blunt object, initial encounter
X800XXA	Intentional self-harm by jumping from a high place, init
X810XXA	Self-harm by jumping or lying in front of mtr veh, init

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X811XXA	Slf-hrm by jumping or lying in front of (subway) train, init
X818XXA	Slf-hrm by jumping or lying in front of moving object, init
X820XXA	Intentional collision of motor vehicle w mtr veh, init
X821XXA	Intentional collision of motor vehicle w train, init encntr
X822XXA	Intentional collision of motor vehicle w tree, init encntr
X828XXA	Oth intentional self-harm by crashing of motor vehicle, init
X830XXA	Intentional self-harm by crashing of aircraft, init encntr
X831XXA	Intentional self-harm by electrocution, initial encounter
X832XXA	Intentional self-harm by exposure to extremes of cold, init
X838XXA	Intentional self-harm by other specified means, init encntr
F59	Unsp behavrl synd assoc w physiol disturb and physcl factors
F988	Oth behav/emotn disord w onset usly occur in chldhd and adol
F989	Unsp behav/emotn disord w onst usly occur in chldhd and adol
R452	Unhappiness
R453	Demoralization and apathy
R454	Irritability and anger
R455	Hostility
R456	Violent behavior
R457	State of emotional shock and stress, unspecified
R4581	Low self-esteem
R4582	Worries
R4583	Excessive crying of child, adolescent or adult
R4584	Anhedonia
R4586	Emotional lability
R4589	Other symptoms and signs involving emotional state
R460	Very low level of personal hygiene
R461	Bizarre personal appearance
R462	Strange and inexplicable behavior
R463	Overactivity
R464	Slowness and poor responsiveness
R465	Suspiciousness and marked evasiveness
R467	Verbosity and circumstantial detail obscuring rsn for cntct
R4689	Other symptoms and signs involving appearance and behavior
F430	Acute stress reaction
F4310	Post-traumatic stress disorder, unspecified
F4320	Adjustment disorder, unspecified
F4321	Adjustment disorder with depressed mood
F4322	Adjustment disorder with anxiety
F4323	Adjustment disorder with mixed anxiety and depressed mood
F4324	Adjustment disorder with disturbance of conduct
F4325	Adjustment disorder w mixed disturb of emotions and conduct

ICD-10-CM DIAGNOSIS	DESCRIPTION
F4329	Adjustment disorder with other symptoms
F438	Other reactions to severe stress
F439	Reaction to severe stress, unspecified
F941	Reactive attachment disorder of childhood
F942	Disinhibited attachment disorder of childhood

The HCUP Nationwide Emergency Department Sample (NEDS) was created to enable analyses of emergency department (ED) utilization patterns and is the largest all-payer ED database that is publicly available in the United States. The NEDS is a 20-percent stratified sample of hospital-owned EDs in the United States. The NEDS is drawn from statewide data organizations that provide HCUP with data from ED visits that may or may not have resulted in hospital admission. Weights are provided to calculate national estimates.

For more information, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_53, 50301023

**Measure Title:** Emergency department visits with a first-listed diagnosis related to substance abuse only, per 100,000 population

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, geographic location (residence), median household income of the patient’s ZIP Code, region

**Data Source:** AHRQ, CDOM, HCUP, Nationwide Emergency Department Sample (NEDS)

**Denominator:** U.S. resident population

**Numerator:** Emergency department visits in the U.S. with a first-listed diagnosis related to substance use (see comments)

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System (ICD-10-CM/PCS). ICD-10-CM diagnosis codes related to substance use include the following:

ICD-10-CM DIAGNOSIS	DESCRIPTION
F1010	Alcohol abuse, uncomplicated
F10120	Alcohol abuse with intoxication, uncomplicated



<b>ICD-10-CM DIAGNOSIS</b>	<b>DESCRIPTION</b>
F10121	Alcohol abuse with intoxication delirium
F10129	Alcohol abuse with intoxication, unspecified
F1014	Alcohol abuse with alcohol-induced mood disorder
F10150	Alcohol abuse w alcoh-induce psychotic disorder w delusions
F10151	Alcohol abuse w alcoh-induce psychotic disorder w hallucin
F10159	Alcohol abuse with alcohol-induced psychotic disorder, unsp
F10180	Alcohol abuse with alcohol-induced anxiety disorder
F10181	Alcohol abuse with alcohol-induced sexual dysfunction
F10182	Alcohol abuse with alcohol-induced sleep disorder
F10188	Alcohol abuse with other alcohol-induced disorder
F1019	Alcohol abuse with unspecified alcohol-induced disorder
F1020	Alcohol dependence, uncomplicated
F10220	Alcohol dependence with intoxication, uncomplicated
F10221	Alcohol dependence with intoxication delirium
F10229	Alcohol dependence with intoxication, unspecified
F10230	Alcohol dependence with withdrawal, uncomplicated
F10231	Alcohol dependence with withdrawal delirium
F10232	Alcohol dependence w withdrawal with perceptual disturbance
F10239	Alcohol dependence with withdrawal, unspecified
F1024	Alcohol dependence with alcohol-induced mood disorder
F10250	Alcohol depend w alcoh-induce psychotic disorder w delusions
F10251	Alcohol depend w alcoh-induce psychotic disorder w hallucin
F10259	Alcohol dependence w alcoh-induce psychotic disorder, unsp
F1026	Alcohol depend w alcoh-induce persisting amnestic disorder
F1027	Alcohol dependence with alcohol-induced persisting dementia
F10280	Alcohol dependence with alcohol-induced anxiety disorder
F10281	Alcohol dependence with alcohol-induced sexual dysfunction
F10282	Alcohol dependence with alcohol-induced sleep disorder
F10288	Alcohol dependence with other alcohol-induced disorder
F1029	Alcohol dependence with unspecified alcohol-induced disorder
F10920	Alcohol use, unspecified with intoxication, uncomplicated
F10921	Alcohol use, unspecified with intoxication delirium
F10929	Alcohol use, unspecified with intoxication, unspecified
F1094	Alcohol use, unspecified with alcohol-induced mood disorder
F10950	Alcohol use, unsp w alcoh-induce psych disorder w delusions
F10951	Alcohol use, unsp w alcoh-induce psych disorder w hallucin
F10959	Alcohol use, unsp w alcohol-induced psychotic disorder, unsp
F1096	Alcohol use, unsp w alcoh-induce persist amnestic disorder
F1097	Alcohol use, unsp with alcohol-induced persisting dementia
F10980	Alcohol use, unsp with alcohol-induced anxiety disorder
F10981	Alcohol use, unsp with alcohol-induced sexual dysfunction

<b>ICD-10-CM DIAGNOSIS</b>	<b>DESCRIPTION</b>
F10982	Alcohol use, unspecified with alcohol-induced sleep disorder
F10988	Alcohol use, unspecified with other alcohol-induced disorder
F1099	Alcohol use, unsp with unspecified alcohol-induced disorder
G621	Alcoholic polyneuropathy
I426	Alcoholic cardiomyopathy
K2920	Alcoholic gastritis without bleeding
K2921	Alcoholic gastritis with bleeding
K700	Alcoholic fatty liver
K7010	Alcoholic hepatitis without ascites
K7011	Alcoholic hepatitis with ascites
K702	Alcoholic fibrosis and sclerosis of liver
K7030	Alcoholic cirrhosis of liver without ascites
K7031	Alcoholic cirrhosis of liver with ascites
K7040	Alcoholic hepatic failure without coma
K709	Alcoholic liver disease, unspecified
O99310	Alcohol use complicating pregnancy, unspecified trimester
O99311	Alcohol use complicating pregnancy, first trimester
O99312	Alcohol use complicating pregnancy, second trimester
O99313	Alcohol use complicating pregnancy, third trimester
O99314	Alcohol use complicating childbirth
O99315	Alcohol use complicating the puerperium
P043	Newborn affected by maternal use of alcohol
Q860	Fetal alcohol syndrome (dysmorphic)
F1210	Cannabis abuse, uncomplicated
F12120	Cannabis abuse with intoxication, uncomplicated
F12121	Cannabis abuse with intoxication delirium
F12122	Cannabis abuse with intoxication with perceptual disturbance
F12129	Cannabis abuse with intoxication, unspecified
F12150	Cannabis abuse with psychotic disorder with delusions
F12151	Cannabis abuse with psychotic disorder with hallucinations
F12159	Cannabis abuse with psychotic disorder, unspecified
F12180	Cannabis abuse with cannabis-induced anxiety disorder
F12188	Cannabis abuse with other cannabis-induced disorder
F1219	Cannabis abuse with unspecified cannabis-induced disorder
F1220	Cannabis dependence, uncomplicated
F12220	Cannabis dependence with intoxication, uncomplicated
F12221	Cannabis dependence with intoxication delirium
F12222	Cannabis dependence w intoxication w perceptual disturbance
F12229	Cannabis dependence with intoxication, unspecified
F12250	Cannabis dependence with psychotic disorder with delusions
F12251	Cannabis dependence w psychotic disorder with hallucinations

<b>ICD-10-CM DIAGNOSIS</b>	<b>DESCRIPTION</b>
F12259	Cannabis dependence with psychotic disorder, unspecified
F12280	Cannabis dependence with cannabis-induced anxiety disorder
F12288	Cannabis dependence with other cannabis-induced disorder
F1229	Cannabis dependence with unsp cannabis-induced disorder
F1290	Cannabis use, unspecified, uncomplicated
F12920	Cannabis use, unspecified with intoxication, uncomplicated
F12921	Cannabis use, unspecified with intoxication delirium
F12922	Cannabis use, unsp w intoxication w perceptual disturbance
F12929	Cannabis use, unspecified with intoxication, unspecified
F12950	Cannabis use, unsp with psychotic disorder with delusions
F12951	Cannabis use, unsp w psychotic disorder with hallucinations
F12959	Cannabis use, unsp with psychotic disorder, unspecified
F12980	Cannabis use, unspecified with anxiety disorder
F12988	Cannabis use, unsp with other cannabis-induced disorder
F1299	Cannabis use, unsp with unsp cannabis-induced disorder
T407X1A	Poisoning by cannabis (derivatives), accidental, init
T407X3A	Poisoning by cannabis (derivatives), assault, init encntr
T407X4A	Poisoning by cannabis (derivatives), undetermined, init
T407X5A	Adverse effect of cannabis (derivatives), initial encounter
F1610	Hallucinogen abuse, uncomplicated
F16120	Hallucinogen abuse with intoxication, uncomplicated
F16121	Hallucinogen abuse with intoxication with delirium
F16122	Hallucinogen abuse w intoxication w perceptual disturbance
F16129	Hallucinogen abuse with intoxication, unspecified
F1614	Hallucinogen abuse with hallucinogen-induced mood disorder
F16150	Hallucinogen abuse w psychotic disorder w delusions
F16151	Hallucinogen abuse w psychotic disorder w hallucinations
F16159	Hallucinogen abuse w psychotic disorder, unsp
F16180	Hallucinogen abuse w hallucinogen-induced anxiety disorder
F16183	Hallucign abuse w hallucign persisting perception disorder
F16188	Hallucinogen abuse with other hallucinogen-induced disorder
F1619	Hallucinogen abuse with unsp hallucinogen-induced disorder
F1620	Hallucinogen dependence, uncomplicated
F16220	Hallucinogen dependence with intoxication, uncomplicated
F16221	Hallucinogen dependence with intoxication with delirium
F16229	Hallucinogen dependence with intoxication, unspecified
F1624	Hallucinogen dependence w hallucinogen-induced mood disorder
F16250	Hallucinogen dependence w psychotic disorder w delusions
F16251	Hallucinogen dependence w psychotic disorder w hallucin
F16259	Hallucinogen dependence w psychotic disorder, unsp
F16280	Hallucinogen dependence w anxiety disorder

ICD-10-CM DIAGNOSIS	DESCRIPTION
F16283	Hallucinogen dependence with hallucinogen persisting perception disorder
F16288	Hallucinogen dependence with other hallucinogen-induced disorder
F1629	Hallucinogen dependence with unspecified hallucinogen-induced disorder
F1690	Hallucinogen use, unspecified, uncomplicated
F16920	Hallucinogen use, unspecified with intoxication, uncomplicated
F16921	Hallucinogen use, unspecified with intoxication with delirium
F16929	Hallucinogen use, unspecified with intoxication, unspecified
F1694	Hallucinogen use, unspecified with hallucinogen-induced mood disorder
F16950	Hallucinogen use, unspecified with psychotic disorder with delusions
F16951	Hallucinogen use, unspecified with psychotic disorder with hallucinations
F16959	Hallucinogen use, unspecified with psychotic disorder, unspecified
F16980	Hallucinogen use, unspecified with anxiety disorder
F16983	Hallucinogen use, unspecified with hallucinogen persisting perception disorder
F16988	Hallucinogen use, unspecified with other hallucinogen-induced disorder
F1699	Hallucinogen use, unspecified with unspecified hallucinogen-induced disorder
T408X1A	Poisoning by lysergide, accidental (unintentional), initial encounter
T408X3A	Poisoning by lysergide [LSD], assault, initial encounter
T408X4A	Poisoning by lysergide, undetermined, initial encounter
T408X5A	Adverse effect of lysergide [LSD] initial encounter
T40901A	Poisoning by unspecified psychodyslept, accidental, initial encounter
T40903A	Poisoning by unspecified psychodysleptics, assault, initial encounter
T40904A	Poisoning by unspecified psychodysleptics, undetermined, initial encounter
T40905A	Adverse effect of unspecified psychodysleptics, initial encounter
T40991A	Poisoning by other psychodyslept, accidental, initial encounter
T40993A	Poisoning by other psychodysleptics, assault, initial encounter
T40994A	Poisoning by other psychodysleptics, undetermined, initial encounter
T40995A	Adverse effect of other psychodysleptics, initial encounter
F1810	Inhalant abuse, uncomplicated
F18120	Inhalant abuse with intoxication, uncomplicated
F18121	Inhalant abuse with intoxication delirium
F18129	Inhalant abuse with intoxication, unspecified
F1814	Inhalant abuse with inhalant-induced mood disorder
F18150	Inhalant abuse with inhalant-induced psychotic disorder with delusions
F18151	Inhalant abuse with inhalant-induced psychotic disorder with hallucinations
F18159	Inhalant abuse with inhalant-induced psychotic disorder, unspecified
F1817	Inhalant abuse with inhalant-induced dementia
F18180	Inhalant abuse with inhalant-induced anxiety disorder
F18188	Inhalant abuse with other inhalant-induced disorder
F1819	Inhalant abuse with unspecified inhalant-induced disorder
F1820	Inhalant dependence, uncomplicated
F18220	Inhalant dependence with intoxication, uncomplicated

<b>ICD-10-CM DIAGNOSIS</b>	<b>DESCRIPTION</b>
F18221	Inhalant dependence with intoxication delirium
F18229	Inhalant dependence with intoxication, unspecified
F1824	Inhalant dependence with inhalant-induced mood disorder
F18250	Inhalant depend w inhalnt-induce psych disorder w delusions
F18251	Inhalant depend w inhalnt-induce psych disorder w hallucin
F18259	Inhalant depend w inhalnt-induce psychotic disorder, unsp
F1827	Inhalant dependence with inhalant-induced dementia
F18280	Inhalant dependence with inhalant-induced anxiety disorder
F18288	Inhalant dependence with other inhalant-induced disorder
F1829	Inhalant dependence with unsp inhalant-induced disorder
F1890	Inhalant use, unspecified, uncomplicated
F18920	Inhalant use, unspecified with intoxication, uncomplicated
F18921	Inhalant use, unspecified with intoxication with delirium
F18929	Inhalant use, unspecified with intoxication, unspecified
F1894	Inhalant use, unsp with inhalant-induced mood disorder
F18950	Inhalant use, unsp w inhalnt-induce psych disord w delusions
F18951	Inhalant use, unsp w inhalnt-induce psych disord w hallucin
F18959	Inhalant use, unsp w inhalnt-induce psychotic disorder, unsp
F1897	Inhalant use, unsp with inhalant-induced persisting dementia
F18980	Inhalant use, unsp with inhalant-induced anxiety disorder
F18988	Inhalant use, unsp with other inhalant-induced disorder
F1899	Inhalant use, unsp with unsp inhalant-induced disorder
F1110	Opioid abuse, uncomplicated
F11120	Opioid abuse with intoxication, uncomplicated
F11121	Opioid abuse with intoxication delirium
F11122	Opioid abuse with intoxication with perceptual disturbance
F11129	Opioid abuse with intoxication, unspecified
F1114	Opioid abuse with opioid-induced mood disorder
F11150	Opioid abuse w opioid-induced psychotic disorder w delusions
F11151	Opioid abuse w opioid-induced psychotic disorder w hallucin
F11159	Opioid abuse with opioid-induced psychotic disorder, unsp
F11181	Opioid abuse with opioid-induced sexual dysfunction
F11182	Opioid abuse with opioid-induced sleep disorder
F11188	Opioid abuse with other opioid-induced disorder
F1119	Opioid abuse with unspecified opioid-induced disorder
F1120	Opioid dependence, uncomplicated
F11220	Opioid dependence with intoxication, uncomplicated
F11221	Opioid dependence with intoxication delirium
F11222	Opioid dependence w intoxication with perceptual disturbance
F11229	Opioid dependence with intoxication, unspecified
F1123	Opioid dependence with withdrawal

ICD-10-CM DIAGNOSIS	DESCRIPTION
F1124	Opioid dependence with opioid-induced mood disorder
F11250	Opioid depend w opioid-induc psychotic disorder w delusions
F11251	Opioid depend w opioid-induc psychotic disorder w hallucin
F11259	Opioid dependence w opioid-induced psychotic disorder, unsp
F11281	Opioid dependence with opioid-induced sexual dysfunction
F11282	Opioid dependence with opioid-induced sleep disorder
F11288	Opioid dependence with other opioid-induced disorder
F1129	Opioid dependence with unspecified opioid-induced disorder
F1190	Opioid use, unspecified, uncomplicated
F11920	Opioid use, unspecified with intoxication, uncomplicated
F11921	Opioid use, unspecified with intoxication delirium
F11922	Opioid use, unsp w intoxication with perceptual disturbance
F11929	Opioid use, unspecified with intoxication, unspecified
F1193	Opioid use, unspecified with withdrawal
F1194	Opioid use, unspecified with opioid-induced mood disorder
F11950	Opioid use, unsp w opioid-induc psych disorder w delusions
F11951	Opioid use, unsp w opioid-induc psych disorder w hallucin
F11959	Opioid use, unsp w opioid-induced psychotic disorder, unsp
F11981	Opioid use, unsp with opioid-induced sexual dysfunction
F11982	Opioid use, unspecified with opioid-induced sleep disorder
F11988	Opioid use, unspecified with other opioid-induced disorder
F1199	Opioid use, unsp with unspecified opioid-induced disorder
P961	Neonatal w/drawal symp from matern use of drugs of addiction
T400X1A	Poisoning by opium, accidental (unintentional), init encntr
T400X2A	Poisoning by opium, intentional self-harm, initial encounter
T400X3A	Poisoning by opium, assault, initial encounter
T400X4A	Poisoning by opium, undetermined, initial encounter
T400X5A	Adverse effect of opium, initial encounter
T401X1A	Poisoning by heroin, accidental (unintentional), init encntr
T401X2A	Poisoning by heroin, intentional self-harm, init encntr
T401X3A	Poisoning by heroin, assault, initial encounter
T401X4A	Poisoning by heroin, undetermined, initial encounter
T401X5A	Adverse effect of heroin initial encounter
T402X2A	Poisoning by oth opioids, intentional self-harm, init encntr
T403X2A	Poisoning by methadone, intentional self-harm, init encntr
T404X2A	Poisoning by oth synthetic narcotics, self-harm, init
T40602A	Poisoning by unsp narcotics, intentional self-harm, init
T40692A	Poisoning by oth narcotics, intentional self-harm, init
F1910	Other psychoactive substance abuse, uncomplicated
F19120	Oth psychoactive substance abuse w intoxication, uncomp
F19121	Oth psychoactive substance abuse with intoxication delirium

<b>ICD-10-CM DIAGNOSIS</b>	<b>DESCRIPTION</b>
F19122	Oth psychoactv substance abuse w intox w perceptual disturb
F19129	Other psychoactive substance abuse with intoxication, unsp
F1914	Oth psychoactive substance abuse w mood disorder
F19150	Oth psychoactv substance abuse w psych disorder w delusions
F19151	Oth psychoactv substance abuse w psych disorder w hallucin
F19159	Oth psychoactive substance abuse w psychotic disorder, unsp
F1916	Oth psychoactv substance abuse w persist amnestic disorder
F1917	Oth psychoactive substance abuse w persisting dementia
F19180	Oth psychoactive substance abuse w anxiety disorder
F19181	Oth psychoactive substance abuse w sexual dysfunction
F19182	Oth psychoactive substance abuse w sleep disorder
F19188	Oth psychoactive substance abuse w oth disorder
F1919	Oth psychoactive substance abuse w unsp disorder
F1920	Other psychoactive substance dependence, uncomplicated
F19220	Oth psychoactive substance dependence w intoxication, uncomp
F19221	Oth psychoactive substance dependence w intox delirium
F19222	Oth psychoactv substance depend w intox w perceptual disturb
F19229	Oth psychoactive substance dependence w intoxication, unsp
F19230	Oth psychoactive substance dependence w withdrawal, uncomp
F19231	Oth psychoactive substance dependence w withdrawal delirium
F19232	Oth psychoactv sub depend w w/drawal w perceptl disturb
F19239	Oth psychoactive substance dependence with withdrawal, unsp
F1924	Oth psychoactive substance dependence w mood disorder
F19250	Oth psychoactv substance depend w psych disorder w delusions
F19251	Oth psychoactv substance depend w psych disorder w hallucin
F19259	Oth psychoactv substance depend w psychotic disorder, unsp
F1926	Oth psychoactv substance depend w persist amnestic disorder
F1927	Oth psychoactive substance dependence w persisting dementia
F19280	Oth psychoactive substance dependence w anxiety disorder
F19281	Oth psychoactive substance dependence w sexual dysfunction
F19282	Oth psychoactive substance dependence w sleep disorder
F19288	Oth psychoactive substance dependence w oth disorder
F1929	Oth psychoactive substance dependence w unsp disorder
F1990	Other psychoactive substance use, unspecified, uncomplicated
F19920	Oth psychoactive substance use, unsp w intoxication, uncomp
F19921	Oth psychoactive substance use, unsp w intox w delirium
F19922	Oth psychoactv sub use, unsp w intox w perceptl disturb
F19929	Oth psychoactive substance use, unsp with intoxication, unsp
F19930	Oth psychoactive substance use, unsp w withdrawal, uncomp
F19931	Oth psychoactive substance use, unsp w withdrawal delirium
F19932	Oth psychoactv sub use, unsp w w/drawal w perceptl disturb

ICD-10-CM DIAGNOSIS	DESCRIPTION
F19939	Other psychoactive substance use, unsp with withdrawal, unsp
F1994	Oth psychoactive substance use, unsp w mood disorder
F19950	Oth psychoactv sub use, unsp w psych disorder w delusions
F19951	Oth psychoactv sub use, unsp w psych disorder w hallucin
F19959	Oth psychoactv substance use, unsp w psych disorder, unsp
F1996	Oth psychoactv sub use, unsp w persist amnesic disorder
F1997	Oth psychoactive substance use, unsp w persisting dementia
F19980	Oth psychoactive substance use, unsp w anxiety disorder
F19981	Oth psychoactive substance use, unsp w sexual dysfunction
F19982	Oth psychoactive substance use, unsp w sleep disorder
F19988	Oth psychoactive substance use, unsp w oth disorder
F1999	Oth psychoactive substance use, unsp w unsp disorder
F550	Abuse of antacids
F551	Abuse of herbal or folk remedies
F552	Abuse of laxatives
F553	Abuse of steroids or hormones
F554	Abuse of vitamins
F558	Abuse of other non-psychoactive substances
F630	Pathological gambling
O355XX0	Maternal care for (suspected) damage to fetus by drugs, unsp
O355XX1	Maternal care for damage to fetus by drugs, fetus 1
O355XX2	Maternal care for damage to fetus by drugs, fetus 2
O355XX3	Maternal care for damage to fetus by drugs, fetus 3
O355XX4	Maternal care for damage to fetus by drugs, fetus 4
O355XX5	Maternal care for damage to fetus by drugs, fetus 5
O355XX9	Maternal care for (suspected) damage to fetus by drugs, oth
O99320	Drug use complicating pregnancy, unspecified trimester
O99321	Drug use complicating pregnancy, first trimester
O99322	Drug use complicating pregnancy, second trimester
O99323	Drug use complicating pregnancy, third trimester
O99324	Drug use complicating childbirth
O99325	Drug use complicating the puerperium
P0449	Newborn affected by maternal use of other drugs of addiction
P962	Withdrawal symptoms from therapeutic use of drugs in newborn
F1310	Sedative, hypnotic or anxiolytic abuse, uncomplicated
F13120	Sedatv/hyp/anxiolytc abuse w intoxication, uncomplicated
F13121	Sedatv/hyp/anxiolytc abuse w intoxication delirium
F13129	Sedative, hypnotic or anxiolytic abuse w intoxication, unsp
F1314	Sedative, hypnotic or anxiolytic abuse w mood disorder
F13150	Sedatv/hyp/anxiolytc abuse w psychotic disorder w delusions
F13151	Sedatv/hyp/anxiolytc abuse w psychotic disorder w hallucin



ICD-10-CM DIAGNOSIS	DESCRIPTION
F13159	Sedatv/hyp/anxiolytc abuse w psychotic disorder, unsp
F13180	Sedative, hypnotic or anxiolytic abuse w anxiety disorder
F13181	Sedative, hypnotic or anxiolytic abuse w sexual dysfunction
F13182	Sedative, hypnotic or anxiolytic abuse w sleep disorder
F13188	Sedative, hypnotic or anxiolytic abuse w oth disorder
F1319	Sedative, hypnotic or anxiolytic abuse w unsp disorder
F1320	Sedative, hypnotic or anxiolytic dependence, uncomplicated
F13220	Sedatv/hyp/anxiolytc dependence w intoxication, uncomp
F13221	Sedatv/hyp/anxiolytc dependence w intoxication delirium
F13229	Sedatv/hyp/anxiolytc dependence w intoxication, unsp
F13230	Sedatv/hyp/anxiolytc dependence w withdrawal, uncomplicated
F13231	Sedatv/hyp/anxiolytc dependence w withdrawal delirium
F13232	Sedatv/hyp/anxiolytc depend w w/drowal w perceptual disturb
F13239	Sedatv/hyp/anxiolytc dependence w withdrawal, unsp
F1324	Sedative, hypnotic or anxiolytic dependence w mood disorder
F13250	Sedatv/hyp/anxiolytc depend w psychotic disorder w delusions
F13251	Sedatv/hyp/anxiolytc depend w psychotic disorder w hallucin
F13259	Sedatv/hyp/anxiolytc dependence w psychotic disorder, unsp
F1326	Sedatv/hyp/anxiolytc depend w persisting amnestic disorder
F1327	Sedatv/hyp/anxiolytc dependence w persisting dementia
F13280	Sedatv/hyp/anxiolytc dependence w anxiety disorder
F13281	Sedatv/hyp/anxiolytc dependence w sexual dysfunction
F13282	Sedative, hypnotic or anxiolytic dependence w sleep disorder
F13288	Sedative, hypnotic or anxiolytic dependence w oth disorder
F1329	Sedative, hypnotic or anxiolytic dependence w unsp disorder
F1390	Sedative, hypnotic, or anxiolytic use, unsp, uncomplicated
F13920	Sedatv/hyp/anxiolytc use, unsp w intoxication, uncomplicated
F13921	Sedatv/hyp/anxiolytc use, unsp w intoxication delirium
F13929	Sedatv/hyp/anxiolytc use, unsp w intoxication, unsp
F13930	Sedatv/hyp/anxiolytc use, unsp w withdrawal, uncomplicated
F13931	Sedatv/hyp/anxiolytc use, unsp w withdrawal delirium
F13932	Sedatv/hyp/anxiolytc use, unsp w w/drowal w perceptl disturb
F13939	Sedatv/hyp/anxiolytc use, unsp w withdrawal, unsp
F1394	Sedative, hypnotic or anxiolytic use, unsp w mood disorder
F13950	Sedatv/hyp/anxiolytc use, unsp w psych disorder w delusions
F13951	Sedatv/hyp/anxiolytc use, unsp w psych disorder w hallucin
F13959	Sedatv/hyp/anxiolytc use, unsp w psychotic disorder, unsp
F1396	Sedatv/hyp/anxiolytc use, unsp w persist amnestic disorder
F1397	Sedatv/hyp/anxiolytc use, unsp w persisting dementia
F13980	Sedatv/hyp/anxiolytc use, unsp w anxiety disorder
F13981	Sedatv/hyp/anxiolytc use, unsp w sexual dysfunction

ICD-10-CM DIAGNOSIS	DESCRIPTION
F13982	Sedative, hypnotic or anxiolytic use, unsp w sleep disorder
F13988	Sedative, hypnotic or anxiolytic use, unsp w oth disorder
F1399	Sedative, hypnotic or anxiolytic use, unsp w unsp disorder
F1410	Cocaine abuse, uncomplicated
F14120	Cocaine abuse with intoxication, uncomplicated
F14121	Cocaine abuse with intoxication with delirium
F14122	Cocaine abuse with intoxication with perceptual disturbance
F14129	Cocaine abuse with intoxication, unspecified
F1414	Cocaine abuse with cocaine-induced mood disorder
F14150	Cocaine abuse w cocaine-induc psychotic disorder w delusions
F14151	Cocaine abuse w cocaine-induc psychotic disorder w hallucin
F14159	Cocaine abuse with cocaine-induced psychotic disorder, unsp
F14180	Cocaine abuse with cocaine-induced anxiety disorder
F14181	Cocaine abuse with cocaine-induced sexual dysfunction
F14182	Cocaine abuse with cocaine-induced sleep disorder
F14188	Cocaine abuse with other cocaine-induced disorder
F1419	Cocaine abuse with unspecified cocaine-induced disorder
F1420	Cocaine dependence, uncomplicated
F14220	Cocaine dependence with intoxication, uncomplicated
F14221	Cocaine dependence with intoxication delirium
F14222	Cocaine dependence w intoxication w perceptual disturbance
F14229	Cocaine dependence with intoxication, unspecified
F1423	Cocaine dependence with withdrawal
F1424	Cocaine dependence with cocaine-induced mood disorder
F14250	Cocaine depend w cocaine-induc psych disorder w delusions
F14251	Cocaine depend w cocaine-induc psychotic disorder w hallucin
F14259	Cocaine dependence w cocaine-induc psychotic disorder, unsp
F14280	Cocaine dependence with cocaine-induced anxiety disorder
F14281	Cocaine dependence with cocaine-induced sexual dysfunction
F14282	Cocaine dependence with cocaine-induced sleep disorder
F14288	Cocaine dependence with other cocaine-induced disorder
F1429	Cocaine dependence with unspecified cocaine-induced disorder
F1490	Cocaine use, unspecified, uncomplicated
F14920	Cocaine use, unspecified with intoxication, uncomplicated
F14921	Cocaine use, unspecified with intoxication delirium
F14922	Cocaine use, unsp w intoxication with perceptual disturbance
F14929	Cocaine use, unspecified with intoxication, unspecified
F1494	Cocaine use, unspecified with cocaine-induced mood disorder
F14950	Cocaine use, unsp w cocaine-induc psych disorder w delusions
F14951	Cocaine use, unsp w cocaine-induc psych disorder w hallucin
F14959	Cocaine use, unsp w cocaine-induced psychotic disorder, unsp

<b>ICD-10-CM DIAGNOSIS</b>	<b>DESCRIPTION</b>
F14980	Cocaine use, unsp with cocaine-induced anxiety disorder
F14981	Cocaine use, unsp with cocaine-induced sexual dysfunction
F14982	Cocaine use, unspecified with cocaine-induced sleep disorder
F14988	Cocaine use, unspecified with other cocaine-induced disorder
F1499	Cocaine use, unsp with unspecified cocaine-induced disorder
F1510	Other stimulant abuse, uncomplicated
F15120	Other stimulant abuse with intoxication, uncomplicated
F15121	Other stimulant abuse with intoxication delirium
F15122	Oth stimulant abuse w intoxication w perceptual disturbance
F15129	Other stimulant abuse with intoxication, unspecified
F1514	Other stimulant abuse with stimulant-induced mood disorder
F15150	Oth stimulant abuse w stim-induce psych disorder w delusions
F15151	Oth stimulant abuse w stim-induce psych disorder w hallucin
F15159	Oth stimulant abuse w stim-induce psychotic disorder, unsp
F15180	Oth stimulant abuse with stimulant-induced anxiety disorder
F15181	Oth stimulant abuse w stimulant-induced sexual dysfunction
F15182	Other stimulant abuse with stimulant-induced sleep disorder
F15188	Other stimulant abuse with other stimulant-induced disorder
F1519	Other stimulant abuse with unsp stimulant-induced disorder
F1520	Other stimulant dependence, uncomplicated
F15220	Other stimulant dependence with intoxication, uncomplicated
F15221	Other stimulant dependence with intoxication delirium
F15222	Oth stimulant dependence w intox w perceptual disturbance
F15229	Other stimulant dependence with intoxication, unspecified
F1523	Other stimulant dependence with withdrawal
F1524	Oth stimulant dependence w stimulant-induced mood disorder
F15250	Oth stim depend w stim-induce psych disorder w delusions
F15251	Oth stimulant depend w stim-induce psych disorder w hallucin
F15259	Oth stimulant depend w stim-induce psychotic disorder, unsp
F15280	Oth stimulant dependence w stim-induce anxiety disorder
F15281	Oth stimulant dependence w stim-induce sexual dysfunction
F15282	Oth stimulant dependence w stimulant-induced sleep disorder
F15288	Oth stimulant dependence with oth stimulant-induced disorder
F1529	Oth stimulant dependence w unsp stimulant-induced disorder
F1590	Other stimulant use, unspecified, uncomplicated
F15920	Other stimulant use, unsp with intoxication, uncomplicated
F15921	Other stimulant use, unspecified with intoxication delirium
F15922	Oth stimulant use, unsp w intox w perceptual disturbance
F15929	Other stimulant use, unsp with intoxication, unspecified
F1594	Oth stimulant use, unsp with stimulant-induced mood disorder
F15950	Oth stim use, unsp w stim-induce psych disorder w delusions

ICD-10-CM DIAGNOSIS	DESCRIPTION
F15951	Oth stim use, unsp w stim-induce psych disorder w hallucin
F15959	Oth stimulant use, unsp w stim-induce psych disorder, unsp
F15980	Oth stimulant use, unsp w stimulant-induced anxiety disorder
F15981	Oth stimulant use, unsp w stim-induce sexual dysfunction
F15982	Oth stimulant use, unsp w stimulant-induced sleep disorder
F15988	Oth stimulant use, unsp with oth stimulant-induced disorder
F1599	Oth stimulant use, unsp with unsp stimulant-induced disorder
P0441	Newborn affected by maternal use of cocaine
T405X1A	Poisoning by cocaine, accidental (unintentional), init
T405X3A	Poisoning by cocaine, assault, initial encounter
T405X4A	Poisoning by cocaine, undetermined, initial encounter
T405X5A	Adverse effect of cocaine, initial encounter

The HCUP Nationwide Emergency Department Sample (NEDS) was created to enable analyses of emergency department (ED) utilization patterns and is the largest all-payer ED database that is publicly available in the United States. The NEDS is a 20-percent stratified sample of hospital-owned EDs in the United States. The NEDS is drawn from statewide data organizations that provide HCUP with data from ED visits that may or may not have resulted in hospital admission. Weights are provided to calculate national estimates.

For more information, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_54, 50301024

**Measure Title:** Emergency department visits with a first-listed diagnosis related to co-occurring of mental health, alcohol and substance abuse, per 100,000 population

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, geographic location (residence), median household income of the patient’s ZIP Code, region of hospital

**Data Source:** AHRQ, CDOM, HCUP, Nationwide Emergency Department Sample (NEDS)

**Denominator:** U.S. resident population age 18 and over

**Numerator:** Emergency department visits in the U.S. with a first-listed diagnosis related to mental health disorders and a secondary diagnosis related to substance use, or a first-listed

diagnosis related to substance use and a secondary diagnosis related to mental health disorders (see comments)

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System (ICD-10-CM/PCS). ICD-10-CM coding for mental health disorders listed under Measure ID HCUP\_52; ICD-10-CM coding for substance use listed under Measure ID HCUP\_53.

The HCUP Nationwide Emergency Department Sample (NEDS) was created to enable analyses of emergency department (ED) utilization patterns and is the largest all-payer ED database that is publicly available in the United States. The NEDS is a 20-percent stratified sample of hospital-owned EDs in the United States. The NEDS is drawn from statewide data organizations that provide HCUP with data from ED visits that may or may not have resulted in hospital admission. Weights are provided to calculate national estimates.

For more information, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_55, 50301031

**Measure Title:** Emergency department visits with a principal diagnosis related to dental conditions per 100,000 population

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, geographic location (residence), median household income of the patient's ZIP Code

**Data Source:** AHRQ, CDOM, HCUP, Nationwide Emergency Department Sample (NEDS)

**Denominator:** U.S. resident population, all ages

**Numerator:** Emergency department visits in the U.S. with a principal diagnosis related to dental conditions defined using ICD-10-CM diagnosis codes of K000, K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K023, K0251, K0252, K0253, K0261, K0262, K0263, K027, K029, K030, K031, K032, K033, K034, K035, K036, K037, K0381, K0389, K039, K0401, K0402, K041, K042, K043, K044, K045, K046, K047, K048, K0490, K0499, K0500, K0501, K0510, K0511, K0520, K05211, K05212, K05213, K05219, K05221, K05222, K05223, K05229, K0530, K05311, K05312, K05313, K05319, K05321, K05322, K05323, K05329, K054, K055, K056, K06010, K06011, K06012, K06013, K06020, K06021, K06022, K06023, K061, K062, K063, K068, K069.

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System.

The HCUP Nationwide Emergency Department Sample (NEDS) was created to enable analyses of emergency department (ED) utilization patterns and is the largest all-payer ED database that is publicly available in the United States. The NEDS is a 20-percent stratified sample of hospital-owned EDs in the United States. The NEDS is drawn from statewide data organizations that provide HCUP with data from ED visits that may or may not have resulted in hospital admission. Weights are provided to calculate national estimates.

For more information, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_13, 50301041

**Measure Title:** Emergency department encounters for asthma, adults ages 18-39

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, geographic location (residence), median household income of the patient's ZIP Code, region of hospital

**Data Source:** AHRQ, CDOM, HCUP, Nationwide Emergency Department Sample (NEDS) and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population ages 18 to 39

**Numerator:** Number of emergency department visits with a first-listed diagnosis of asthma

**Comments:** The AHRQ IQ software requires asthma to be the first-listed diagnosis.

The HCUP Nationwide Emergency Department Sample (NEDS) was created to enable analyses of emergency department (ED) utilization patterns and is the largest all-payer ED database that is publicly available in the United States. The NEDS is a 20-percent stratified sample of hospital-owned EDs in the United States. The NEDS is drawn from statewide data organizations that provide HCUP with data from ED visits that may or may not have resulted in hospital admission. Weights are provided to calculate national estimates.

For more information, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_56, 50301042

**Measure Title:** Emergency department encounters for asthma, children ages 2-17

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDIs)

**Table Description:**

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, geographic location (residence), median household income of the patient's ZIP Code, region

**Data Source:** AHRQ, CDOM, HCUP, Nationwide Emergency Department Sample (NEDS), and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population ages 2 to 17

**Numerator:** Emergency department visits in the U.S. with a first-listed diagnosis of asthma

**Comments:** The AHRQ PDI software requires that asthma must be the first-listed diagnosis and the following cases are excluded: admissions with cystic fibrosis or anomalies of the respiratory system, and transfers from other institutions. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP Nationwide Emergency Department Sample (NEDS) was created to enable analyses of emergency department (ED) utilization patterns and is the largest all-payer ED database that is publicly available in the United States. The NEDS is a 20-percent stratified sample of hospital-owned EDs in the United States. The NEDS is drawn from statewide data organizations that provide HCUP with data from ED visits that may or may not have resulted in hospital admission. Weights are provided to calculate national estimates.

For more information, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** NHAMCS\_13, 50301043

**Measure Title:** Children ages 2-19 with hospital emergency department for asthma

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Hospital Ambulatory Medical Care Survey

**Table Description:**

- Geographic Representation: National
- Years Available: 2006-2008 to 2013-2015
- Population Subgroups: Sex, race/ethnicity, health insurance status, geographic location (patient)

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Hospital Ambulatory Medical Care Survey

**Denominator:** U.S. civilian population ages 2-19

**Numerator:** Number of visits to an emergency department with a first-listed diagnosis of asthma among children ages 2-19

**Measure ID:** NHAMCS\_13, 50301044

**Measure Title:** Children ages 2-9 who visited emergency department for asthma

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Hospital Ambulatory Medical Care Survey

**Table Description:**

- Geographic Representation: National
- Years Available: 2007-2009 to 2013-2015
- Population Subgroups: Sex, race/ethnicity, health insurance status, geographic location (patient)

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Hospital Ambulatory Medical Care Survey

**Denominator:** U.S. civilian population ages 2-9

**Numerator:** Number of visits to an emergency department with a first-listed diagnosis of asthma among children ages 2-9

**Measure ID:** NHAMCS\_13, 50301045

**Measure Title:** Children ages 10-19 who visited emergency department for asthma

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Hospital Ambulatory Medical Care Survey



**Table Description:**

- Geographic Representation: National
- Years Available: 2007-2009 to 2013-2015
- Population Subgroups: Sex, race/ethnicity, health insurance status, geographic location (patient)

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Hospital Ambulatory Medical Care Survey

**Denominator:** U.S. civilian population ages 10-19

**Numerator:** Number of visits to an emergency department with a first-listed diagnosis of asthma among children ages 10-19

## 5.4. Preventable Hospitalizations

**Measure ID:** HCUP\_32, 50401011

**Measure Title:** Hospital admissions for uncontrolled diabetes without complications per 100,000 population, adults

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, median household income of patient's ZIP Code, location of residence, region

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population, age 18 years and over

**Numerator:** Hospital admissions of adults age 18 and over with discharges with a principal diagnosis of uncontrolled diabetes and without mention of short-term or long-term complications

**Comments:** Obstetric admissions and transfers from other institutions are excluded. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_33, 50401021

**Measure Title:** Hospital admissions for short-term complications of diabetes per 100,000 population, adults

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, median household income of patient's ZIP Code, location of residence, region

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population age 18 and over

**Numerator:** Adult discharges age 18 and over with a principal diagnosis of diabetes with short-term complications

**Comments:** The AHRQ PQI software requires diabetes to be the principal diagnosis and short-term complications include ketoacidosis, hyperosmolarity, and coma. Transfers from other institutions are excluded. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_34, 50401022

**Measure Title:** Hospital admissions for short-term complications of diabetes per 100,000 population, children ages 6-17

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, median household income of patient's ZIP Code, location of residence, region

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population ages 6-17

**Numerator:** Pediatric discharges ages 6-17 with a principal diagnosis of diabetes with short-term complications. Consistent with the AHRQ PDI software, diabetes must be the principal diagnosis and short-term complications include ketoacidosis, hyperosmolarity, and coma. Transfers from other institutions are excluded

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_35, 50401031

**Measure Title:** Hospital admissions for long-term complications of diabetes per 100,000 population, adults

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, median household income of patient's ZIP Code, location of residence, region

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population age 18 and over

**Numerator:** Hospitalization of adults age 18 and over with hospital inpatient discharges with a principal diagnosis code for diabetes with long-term complications

**Comments:** The AHRQ PQI software requires diabetes to be the principal diagnosis and long-term complications include renal, eye, neurologic, circulatory, and other unspecified complications. Transfers from other institutions and obstetric admissions are excluded. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (unadjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_43, 50401041

**Measure Title:** Hospital admissions for lower extremity amputations among admissions for diabetes per 100,00 population, age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, median household income of the patient's ZIP Code, urbanized location, region of the United States

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population of adults age 18 and older

**Numerator:** Hospitalizations of adults with a procedure for lower-extremity amputation and a diagnosis of diabetes

**Comments:** The AHRQ PQI software requires a procedure code for lower-extremity amputation and a diagnosis of diabetes to be present. Exclusions include admissions for toe amputation or traumatic amputations of the lower extremity, obstetric discharges, and transfers from other institutions. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to

the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_39, 50401071

**Measure Title:** Hospital admissions for asthma per 100,000 population, ages 18-39

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, median household income of the patient's ZIP Code, region

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population of adults age 18 to 39

**Numerator:** Hospitalization of adults ages 18-39 with hospital inpatient discharges with a principal diagnosis code of asthma

**Comments:** The AHRQ PQI software requires asthma to be the principal diagnosis on admissions ages 18 to 39 years old, and the following cases are excluded: admissions with cystic fibrosis or anomalies of the respiratory system and transfers from other institutions. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_59, 50401072

**Measure Title:** Hospital admissions for asthma per 100,000 population, ages 2-17

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, expected primary payer, median household income of the patient's ZIP Code, urbanized location, region of the United States, bed size of hospital, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population of adults ages 2 to 17

**Numerator:** Hospitalization of children ages 2-17 with a principal diagnosis code of asthma

**Comments:** The AHRQ PDI software requires asthma to be the principal diagnosis. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people



covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

## 5.5. Preventable Hospitalizations among Home Health and Nursing Home Patients

**Measure ID:** HCUP\_17, 50501031

**Measure Title:** Hospitalizations and emergency department encounters for heart failure (HF)

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

### Table Description:

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, median household income of the patient's ZIP Code, urbanized location, and region of the United States

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and Nationwide Emergency Department Sample (NEDS), and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population age 18 and over

**Numerator:** Number of hospitalizations or emergency department visits for heart failure (HF)

**Comments:** Consistent with the AHRQ PQI software, HF must be the principal diagnosis and the following are excluded: admissions with cardiac procedures and transfers from other institutions. Rates prior to 2016 are not reported because of the transition to the International

Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

The HCUP Nationwide Emergency Department Sample (NEDS) was created to enable analyses of emergency department (ED) utilization patterns and is the largest all-payer ED database that is publicly available in the United States. The NEDS is a 20-percent stratified sample of hospital-owned EDs in the United States. The NEDS is drawn from statewide data organizations that provide HCUP with data from ED visits that may or may not have resulted in hospital admission. Weights are provided to calculate national estimates.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** OASIS\_19, 50501042

**Measure Title:** Home health care patients who had an emergency department visit and then hospitalized

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with a discharge or transfer to inpatient facility during the year, excluding episodes for which the emergency department use is unknown at transfer or discharge, the episode of care ended in death at home

**Numerator:** Number of home health quality episodes where the transfer to inpatient facility assessment indicates the patient required emergency medical treatment from a hospital emergency department, with hospital admission

**Comments:** Further information about HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>. The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted.

**Measure ID:** OASIS\_7, 50701011

**Measure Title:** Home health care patients who had an emergency department visit without a hospitalization

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health stays that begin during the 12-month observation period

**Numerator:** Subset of the denominator with a Medicare claim for outpatient emergency department use and no claims for acute care hospitalization in the 60 days following the start of the home health stay

**Comments:** Further information about HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>. The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted.

## 5.6. Potentially Harmful Services Without Benefit

**Measure ID:** HCUP\_18, 50601011

**Measure Title:** Perforated appendixes per 1,000 admissions with appendicitis

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, expected primary payer, median household income of the patient's ZIP Code, urbanized location, region of the United States, bed size of hospital, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Nonmaternal discharges with principal or secondary diagnosis of appendicitis, excluding transfers from other institutions

**Numerator:** Subset of the denominator with principal or secondary diagnosis code for perforation or abscess of appendix

**Comments:** The AHRQ PQI software requires that transfers from other institutions are excluded. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_60, 50601031

**Measure Title:** Hospital admissions for perforated appendix per 1,000 admissions with appendicitis, children

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, expected primary payer, median household income of the patient's ZIP Code, urbanized location, region of the United States, bed size of hospital, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Discharges ages 1-17 with principal or secondary diagnosis of appendicitis, excluding obstetric admissions and transfers from other institutions

**Numerator:** Subset of the denominator with principal or secondary diagnosis code for perforation or abscess of appendix

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission

(POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HHCAHPS\_5, 50701041

**Measure Title:** Adults who reported that home health providers always seem informed and up-to-date about all the cares or treatments they got at home in the last 2 months of care

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “In the last 2 months of care, how often did home health providers from this agency seem informed and up-to-date about all the care or treatment you got at home?,” excluding nonrespondents and respondents indicating “only had one provider in the last 2 months of care”

**Numerator:** Subset of the denominator who responded “always” to the above question

## 5.7. Supportive and Palliative Care

**Measure ID:** OASIS\_7, 50701011

**Measure Title:** Home health care patients who had an emergency department visit without a hospitalization

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State

- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health stays that begin during the 12-month observation period

**Numerator:** Subset of the denominator with a Medicare claim for outpatient emergency department use and no claims for acute care hospitalization in the 60 days following the start of the home health stay

**Comments:** Further information about HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>. The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted.

**Measure ID:** OASIS\_10, 50701021

**Measure Title:** Home health care patients who had to be admitted to the hospital

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with a discharge or transfer to inpatient facility during the reporting period, excluding episodes that end in patient death

**Numerator:** Number of home health quality episodes for which the assessment completed at the conclusion of the episode indicates the patient was admitted to a hospital for a reason other than a scheduled treatment or procedure

**Comments:** Hospitalization may be for emergent, urgent, or elective conditions. Further information about risk adjustment and the HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>. The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted.

**Measure ID:** OASIS\_20, 50701031

**Measure Title:** Home health patients who had timely initiation of care

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with discharge, death, or transfer to inpatient facility during the year

**Numerator:** Number of home health quality episodes in which the start or resumption of care date was either on the physician-specified date or within 2 days of the referral date or inpatient discharge date, whichever is later

**Comments:** Further information about risk adjustment and the HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>. The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted.

**Measure ID:** HHCAHPS\_5, 50701041

**Measure Title:** Adults who reported that home health providers always seem informed and up-to-date about all the cares or treatments they got at home in the last 2 months of care

**Measure Source:** Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012-2017
- Population Subgroups: Age, ethnicity/race, education, language spoken at home

**Data Source:** CMS, HHCAHPS

**Denominator:** Adult home health patients age 18 and over who provided a valid response to the question, “In the last 2 months of care, how often did home health providers from this agency seem informed and up-to-date about all the care or treatment you got at home?,” excluding nonrespondents and respondents indicating “only had one provider in the last 2 months of care”

**Numerator:** Subset of the denominator who responded “always” to the above question



## 5.8. Potentially Avoidable Admissions

**Measure ID:** HCUP\_22, 50801011

**Measure Title:** Hospital admissions for hypertension per 100,000 population, adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

### Table Description:

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, median household income of the patient's ZIP Code, urbanized location, and region of the United States

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population age 18 and over

**Numerator:** Number of hospitalizations with principal diagnosis of hypertension, excluding patients with cardiac procedures, obstetric admissions, and transfers from other institutions

**Comments:** The AHRQ PQI software requires hypertension to be the principal diagnosis. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term

acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_44, 50801012

**Measure Title:** Hospital admissions for dehydration per 100,000 population, adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, median household income of the patient's ZIP Code, urbanized location, and region of the United States

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population of adults age 18 and older

**Numerator:** Hospital admissions of adults with a principal diagnosis of dehydration

**Comments:** The AHRQ PQI software allows dehydration to be a principal diagnosis or a secondary diagnosis with a principal diagnosis of hyperosmolality and/or hypernatremia, gastroenteritis, or acute kidney injury. Exclusions include the following: admissions with a diagnosis code for chronic renal failure and transfers from other institutions. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_24, 50801031

**Measure Title:** Hospital admissions for chronic obstructive pulmonary disease or asthma per 100,000 population, adults age 40 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, median household income of the patient's ZIP Code, urbanized location, and region of the United States

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population age 40 and over

**Numerator:** Adults age 40 and over with hospital admissions and principal diagnosis of COPD, asthma, or acute bronchitis with COPD as a secondary diagnosis

**Comments:** The AHRQ PQI software requires the principal diagnosis to be COPD, asthma, or acute bronchitis with COPD as a secondary diagnosis. Transfers from other institutions are excluded. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_25, 50801041

**Measure Title:** Hospital admissions for bacterial pneumonia per 100,000 population, adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, median household income of the patient's ZIP Code, urbanized location, and region of the United States

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population age 18 and over

**Numerator:** Adults age 18 and over with hospital admissions and with a principal diagnosis of bacterial pneumonia, excluding sickle cell or hemoglobin-S conditions, and transfers from other institutions

**Comments:** The AHRQ PQI software requires bacterial pneumonia to be the principal diagnosis. Admissions for sickle cell disease or HB-S disease, admissions in an immunocompromised state, and transfers from other institutions are excluded. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_46, 50801051

**Measure Title:** Admissions for urinary tract infection (UTI) per 100,000 population, age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, median household income of the patient's ZIP Code, urbanized location, and region of the United States

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population of adults age 18 and older

**Numerator:** Hospital admissions of adults with a principal diagnosis of UTI

**Comments:** The AHRQ PQI software requires UTI to be the principal diagnosis and exclusions include the following: admissions with kidney or urinary tract disorders, admissions in an immunocompromised state, and transfers from other institutions. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_61, 50801052

**Measure Title:** Admissions for urinary tract infection (UTI) per 100,000 population, ages 3 months to 17 years

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, median household income of the patient's ZIP Code, urbanized location, and region of the United States

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population of children ages 3 months to 17 years

**Numerator:** Hospital inpatient discharges with a principal diagnosis of UTI in the denominator

**Comments:** The AHRQ PDI software require UTI to be the principal diagnosis. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_62, 50801061

**Measure Title:** Admissions for pediatric gastroenteritis per 100,000 population, ages 3 months to 17 years

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, median household income of the patient's ZIP Code, urbanized location, and region of the United States

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population of children ages 3 months to 17 years

**Numerator:** Hospital inpatient discharges of children ages 3 months to 17 years with a principal diagnosis or a secondary diagnosis with a principal diagnosis of dehydration

**Comments:** The AHRQ PDI software requires gastroenteritis to be the principal diagnosis or a secondary diagnosis with a principal diagnosis of dehydration. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).



## Chapter 6. Effectiveness of Care

### 6.1. Cancer

#### 6.1.1. Breast Cancer

**Measure ID:** NCDB\_2, 60101011

**Measure Title:** Women with clinical Stage I-IIb breast cancer who received axillary node dissection or sentinel lymph node biopsy at the time of breast cancer surgery (lumpectomy or mastectomy)

**Measure Source:** Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Table Description:**

- Geographic Representation: National, State
- Years Available: State, 2005 - 2015; National, 2005 - 2015
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National and State: Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Denominator:** Women age 18 and over with stage I/IIb breast cancer who were surgically treated by breast-conserving surgery or mastectomy

**Numerator:** The subset of the denominator who received lymph node surgery (axillary node dissection or sentinel lymph node biopsy) at the time of their breast cancer surgery

**Comments:** There is not full agreement regarding the appropriate population (denominator) for this measure. In the most current draft form during production of the NHQR and NHDR, the measure specification from the National Quality Forum included only women with stage I/II cancer. Women classified as having stage III disease during lymph node surgery (based on four or more positive nodes) were excluded if their stage prior to surgery (i.e., clinical stage) was not recorded. This may artificially lower the rates for this measure.

**Measure ID:** NCDB\_1, 60101021

**Measure Title:** Radiation therapy is administered within 1 year (365 days) of diagnosis for women under age 70 receiving breast conserving surgery for breast cancer

**Measure Source:** Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Table Description:**

- Geographic Representation: National, State
- Years Available: State, 2005 - 2015; National, 2005 - 2015
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National and State: Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Denominator:** Women under age 70 with American Joint Committee on Cancer (AJCC) stage I, II, or III primary invasive epithelial breast cancer that was surgically treated by breast-conserving surgery. Breast cancer diagnoses are known or assumed first or only cancer diagnosis, and patients were known to be alive within 1 year of their diagnosis

**Numerator:** Subset of denominator for whom radiation therapy to the breast was initiated within 1 year of date of diagnosis

**Comments:** Breast-conserving surgery is defined for this measure as surgical excision less than mastectomy. Includes only women who received all or part of their first course of treatment at a facility with a CoC-accredited cancer program.

**Measure ID:** NVSS\_2, 60101031

**Measure Title:** Breast cancer deaths per 100,000 female population per year

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2000-2016; State: 2000-2016
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National and State: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)—Mortality

**Denominator:** U.S. female resident population

**Numerator:** Number of female deaths per year due to breast cancer

**Comments:** This measure is referred to as measure C-3 in Healthy People 2020 documentation. Respondents for whom age is not reported are excluded from numerators

**Measure ID:** NCDB\_1, 60101041

**Measure Title:** Radiation therapy was recommended or administered following any mastectomy within 1 year of diagnosis of breast cancer for women with 4 or more positive regional lymph nodes

**Measure Source:** Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2005 - 2015; National: 2005 - 2015
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National and State: Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Denominator:** Women with diagnosis of breast cancer and with 4 or more positive regional lymph nodes, excluding manually censored cases and metastatic disease

**Numerator:** Subset of denominator for whom Radiation therapy was recommended or administered following any mastectomy within 1 year of diagnosis of breast cancer

**Comments:** NCDB refers this measure as MASTRT.

There is consensus that post-mastectomy radiation should be recommended for women with breast cancer and with  $\geq 4$  positive regional lymph nodes. Numerous studies have shown a significant reduction in locoregional recurrence rates, disease-free survival rates, and even overall survival with this adjuvant therapy. As a result of this proven benefit, guidelines from both the American Society of Clinical Oncology (ASCO) and the National Comprehensive Cancer Network (NCCN) include this recommendation, which was also adopted by the Quality Integration Committee of the Commission on Cancer in May of 2012.

NCDB Cancer Programs Practice Profile Reports (CP3R) Rapid Quality Reporting System (RQRS), BREAST MEASURE SPECIFICATIONS has more information.

**Measure ID:** NCDB\_1, 60101051

**Measure Title:** Tamoxifen or third generation aromatase inhibitor was recommended or administered within 1 year of diagnosis for women with AJCC T1cN0M0 or stage IB to stage III hormone receptor-positive breast cancer

**Measure Source:** Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2005 - 2015; National: 2005 - 2015
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National and State: Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Denominator:** Women with diagnosis of AJCC T1cN0M0 or stage IB to stage III hormone receptor-positive breast cancer

**Numerator:** Subset of denominator for whom hormone therapy administered within 365 days following diagnosis or hormone therapy recommended, but not administered

**Comments:** NCDB refers this measure as HT or NQF # 0220.

There is extensive evidence that hormone (endocrine) therapy with hormone receptor positive breast cancer reduces the risk of local recurrence, contralateral breast cancer, distant recurrence, and death. Measure specifies use of Tamoxifen or third-generation aromatase inhibitor rather than specifying Tamoxifen for premenopausal and aromatase inhibitor for postmenopausal because of (a) difficulty in clearly identifying from records or administrative data the menopause status, and (b) variation in appropriate use of Tamoxifen in postmenopausal women and some reasonable use of aromatase inhibitor in premenopausal women with the use of ovarian suppression.

NCDB Cancer Programs Practice Profile Reports (CP3R) Rapid Quality Reporting System (RQRS), BREAST MEASURE SPECIFICATIONS has more information.

**Measure ID:** NCDB\_1, 60101061

**Measure Title:** Combination chemotherapy was recommended or administered within 4 months of diagnosis for women under 70 with AJCC T1cN0M0 or Stage IB-III hormone receptor negative breast cancer

**Measure Source:** Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2005 - 2015; National: 2005 - 2015
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National and State: Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Denominator:** Women under 70 with AJCC T1cN0MO or Stage IB-III hormone receptor negative breast cancer, excluding pathologic evidence of in situ or metastatic disease

**Numerator:** Subset of denominator for whom combination chemotherapy was recommended or administered within 4 months of diagnosis

**Comments:** NCDB refers this measure as MAC.

There is extensive documentation of the benefit of multi-agent chemotherapy in women with hormone receptor negative breast cancer. Chemotherapy reduces the risk of distant disease recurrence and death by about one-third. The restriction to women under age 70 is because this measure is for the purpose of provider accountability. There are limited data in women over age 70 to guide recommendations, and a higher fraction of these women have reasons to omit chemotherapy, including co-morbidity

NCDB Cancer Programs Practice Profile Reports (CP3R) Rapid Quality Reporting System (RQRS), BREAST MEASURE SPECIFICATIONS has more information.

**6.1.2. Cervical Cancer**

**Measure ID:** 60102011

**Measure Title:** Radiation therapy was completed within 60 days of initiation of radiation among women diagnosed with any stage of cervical cancer

**Measure Source:** Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2005 - 2015; National: 2005 - 2015
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National and State: Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Denominator:** Women diagnosed with any stage of cervical cancer, excluding pathologic evidence of in situ or metastatic disease

**Numerator:** Subset of denominator for whom radiation therapy was completed within 60 days of initiation of radiation

**Comments:** NCDB refers this measure as CERRT.

NCDB Cancer Programs Practice Profile Reports (CP3R) Rapid Quality Reporting System (RQRS), CERVIX MEASURE SPECIFICATIONS has more information.

**Measure ID:** 60102021

**Measure Title:** Use of brachytherapy in patients treated with primary radiation with curative intent in any stage of cervical cancer

**Measure Source:** Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2005 - 2015; National: 2005 - 2015
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National and State: Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Denominator:** Women diagnosed with any stage of cervical cancer and treated with primary radiation with curative intent

**Numerator:** Subset of denominator for whom radiation therapy was completed within 60 days of initiation of radiation

**Comments:** Although not fully documented in the literature, it is clear that radiation oncologists are using IMRT as a “replacement” for brachytherapy. Experts in cervical cancer routinely state that intracavitary brachytherapy for the treatment of locally advanced cervical cancer is perhaps the most important component of treatment and local disease control. Substituting IMRT for

brachytherapy or omitting it entirely puts the patient at substantial risk of local recurrence and failure.

NCDB Cancer Programs Practice Profile Reports (CP3R) Rapid Quality Reporting System (RQRS), CERVIX MEASURE SPECIFICATIONS has more information.

### **6.1.3. Colorectal Cancer**

**Measure ID:** NCDB\_3, 60103011

**Measure Title:** At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer

**Measure Source:** Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

#### **Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2005 - 2015; National: 2005 - 2015
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

#### **Data Source:**

National and State: Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Denominator:** Adults age 18 and over with AJCC stage I, II, or III primary invasive epithelial colon cancer that underwent surgical resection (surgery more than local excision). Colon cancer diagnoses are known or assumed first or only cancer diagnosis

**Numerator:** Subset of denominator with 12 or more regional lymph nodes pathologically examined

**Comments:** Staging describes the severity of a person's cancer based on the extent of the original (primary) tumor and whether cancer has spread in the body. Higher numbers indicate more extensive disease. Stage I, II, and III cancers indicate a larger tumor size or spread of the cancer beyond the organ in which it first developed to nearby lymph nodes or organs adjacent to the location of the primary tumor.

NCDB Cancer Programs Practice Profile Reports (CP3R) Rapid Quality Reporting System (RQRS), COLON MEASURE SPECIFICATIONS has more information.

**Measure ID:** NVSS\_1, 60103021

**Measure Title:** Colorectal cancer deaths per 100,000 population

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2005 - 2015; National: 2005 - 2015
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National and State: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)-Mortality

**Denominator:** U.S. resident population

**Numerator:** Number of deaths per year due to colorectal cancer

**Comments:** This measure is referred to as measure C-5 in Healthy People 2020 documentation. Estimates are age adjusted to the 2000 U.S. standard population. Respondents for whom age is not reported are not included in the age adjustment calculations and are excluded from numerators.

**Measure ID:** 60103031

**Measure Title:** Adjuvant chemotherapy was recommended or administered within 4 months of diagnosis for patients under the age of 80 with AJCC Stage III lymph node positive colon cancer

**Measure Source:** Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2005 - 2015; National: 2005 - 2015
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National and State: Commission on Cancer (CoC), American College of Surgeons (ACoS) and American Cancer Society (ACS), National Cancer Data Base (NCDB)

**Denominator:** Adults ages 18-79 and over with AJCC Stage III lymph node positive colon cancer. Colon cancer diagnoses are known or assumed first or only cancer diagnosis.



**Numerator:** Subset of denominator for whom adjuvant chemotherapy was recommended or administered within 4 months of diagnosis

**Comments:** There are substantial data that there is underuse and wide variation in the use of chemotherapy with Stage III colon cancer.

NCDB Cancer Programs Practice Profile Reports (CP3R) Rapid Quality Reporting System (RQRS), COLON MEASURE SPECIFICATIONS has more information.

#### **6.1.4. Other Cancers**

**Measure ID:** NVSS\_3, 60104031

**Measure Title:** Lung cancer deaths per 100,000 population

**Measure Source:** Healthy People 2020

##### **Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2000-2016; National: 2000-2016
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

##### **Data Source:**

National and State: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)—Mortality

**Denominator:** U.S. resident population

**Numerator:** Number of deaths per year due to lung cancer

**Comments:** This measure is referred to as measure C-2 in Healthy People 2020 documentation. Estimates are age adjusted to the 2000 U.S. standard population. Age data are unadjusted. Respondents for whom age is not reported are not included in the age adjustment calculations and are excluded from numerators.

**Measure ID:** NVSS\_4, 60104011

**Measure Title:** Cancer deaths per 100,000 population

**Measure Source:** Healthy People 2020

##### **Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2000-2016; National: 2000-2016

- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National and State: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)—Mortality

**Denominator:** U.S. resident population

**Numerator:** Number of deaths per year due to any type of cancer

**Comments:** This measure is referred to as measure C-1 in Healthy People 2020 documentation. Estimates are age adjusted to the 2000 U.S. standard population. Age data are unadjusted. Respondents for whom age is not reported are not included in the age adjustment calculations and are excluded from numerators.

## 6.2. Cardiovascular Disease

### 6.2.1. Prevention of Heart Disease

**Measure ID:** NHANES\_2, 60201011

**Measure Title:** Adults with hypertension with blood pressure less than 140/90 mm/Hg

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National
- Years Available: 2001-2004 to 2013-2016
- Population Subgroups: Age, education, sex, income, ethnicity

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health and Nutrition Examination Survey (NHANES)

**Denominator:** U.S. civilian noninstitutionalized adults age 18 and over with high blood pressure/hypertension, excluding pregnant women

**Numerator:** Subset of denominator whose mean systolic blood pressure is less than 140 mm Hg and mean diastolic blood pressure is less than 90 mm Hg

**Comments:** Controlled hypertension is defined as having an average blood pressure reading of < 140/90 mm/Hg. Percentages are age adjusted to the 2000 U.S. standard population, except where indicated, using three age groups: 18-39, 40-59, and 60 and over. This measure is referred to as measure HDS-12 in Healthy People 2020 documentation.

## 6.2.2. Treatment of Heart Attack

**Measure ID:** HCUP\_26, 60202011

**Measure Title:** Deaths per 1,000 adult hospital admissions with acute myocardial infarction (AMI)

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Centers for Delivery Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Inpatient Quality Indicators (IQIs)

### Table Description:

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, bed size of hospital, expected primary payer, location of

hospital, location of residence, median household income of

patient's ZIP Code, control of hospital, region, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** All hospital inpatient discharges among people age 18 and over with a principal diagnosis of AMI. Excluded from the denominator are obstetric admissions and patients transferring to another short-term hospital or missing a discharge disposition

**Numerator:** Subset of the denominator who died

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and

(3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** QIO\_12, 60202031

**Measure Title:** Acute myocardial infarction (AMI) patients who received fibrinolytic medication within 30 minutes of hospital arrival

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2005 to 2015
- Population Subgroups: Age, gender, race/ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** Discharged hospital patients 18 years of age or older with a principal diagnosis of acute myocardial infarction, an ST-segment elevation or LBBB on the ECG performed closest to hospital arrival and thrombolytic therapy within 6 hours after hospital arrival and is the primary reperfusion therapy

**Numerator:** Subset of the denominator who received thrombolytic therapy within 30 minutes of arrival

**Comments:** Estimates are calculated using hospital-level scores.

**Measure ID:** 60202041

**Measure Title:** Median time in minutes outpatients with chest pain or possible heart attack from emergency department arrival to get electrocardiogram (ECG)

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2016
- Population Subgroups: Age, gender, race, ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** Emergency department outpatients with chest pain or possible heart attack, excluding patients with missing ED arrival time or missing the time of getting the electrocardiogram

**Numerator:** Not applicable. The estimate is the median of time (in minutes) spent in the emergency department from ED arrival to the time patients get the electrocardiogram

**Comments:** This measure is referred as OP-5 by the HIQR program and was finalized to be removed for the 2021 (2Q2019-1Q2020) payment determination and subsequent years. More information is available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/HospitalOutpatientQualityReportingProgram.html>.

**Measure ID:** 60202051

**Measure Title:** Median time in minutes outpatients with chest pain or possible heart attack who got drugs to break up blood clots after arrival

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2016
- Population Subgroups: Age, gender, race, ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** Emergency department outpatients with chest pain or possible heart attack, excluding patients with missing ED arrival time or missing the time of getting drugs to break up blood clots after arrival

**Numerator:** Not applicable. The estimate is the median of time (in minutes) spent in the emergency department from ED arrival to the time patients get drugs to break up blood clots

**Comments:** This measure is referred as OP-1 by the HIQR program. This measure was removed from the HIQR program. More information is available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/HospitalOutpatientQualityReportingProgram.html>.

**Measure ID:** 60202061

**Measure Title:** Outpatients with chest pain or possible heart attack who received fibrinolytic therapy within 30 minutes of arrival

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2016
- Population Subgroups: Age, gender, race, ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** Emergency department outpatients with chest pain or possible heart attack, excluding patients with missing ED arrival time or missing the time of receiving fibrinolytic therapy

**Numerator:** Subset of the denominator who received fibrinolytic therapy within 30 minutes of ER arrival

**Comments:** This measure is referred as OP-2 by the HIQR program. More information is available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/HospitalOutpatientQualityReportingProgram.html>.

**Measure ID:** 60202071

**Measure Title:** Median time in minutes before outpatients with chest pain or possible heart attack were transferred to another hospital

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2016
- Population Subgroups: Age, gender, race, ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** Emergency department outpatients with chest pain or possible heart attack and were discharged or transferred to a short-term general hospital for inpatient care or to a federal healthcare facility, excluding patients under 18 years of age, patients who received fibrinolytic administration, or patients with missing ED arrival or transfer time

**Numerator:** Not applicable. The estimate is the median of time (in minutes) spent in the emergency department from ED arrival to the time patients were transferred

**Comments:** This measure is referred as OP-3B by the HIQR program. More information is available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/HospitalOutpatientQualityReportingProgram.html>.

### 6.2.3 Treatment of Heart Failure

**Measure ID:** HCUP\_27, 60203021

**Measure Title:** Hospital admissions for heart failure (HF) per 100,000 population

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

#### **Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, median household income of the patient's ZIP Code, urbanized location, and region of the United States

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population, age 18 years and over

**Numerator:** Hospital admissions of adults age 18 and over with a principal diagnosis of HF, excluding transfers from other institutions, and cases with cardiac procedure codes

**Comments:** The AHRQ PQI software requires heart failure to be the principal diagnosis and exclusions include the following: admissions with cardiac procedures and transfers from other institutions. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_28, 60203031

**Measure Title:** Deaths per 1,000 adult hospital admissions with heart failure (HF)

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Inpatient Quality Indicators (IQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, bed size of hospital, expected primary payer, location of hospital, location of residence, median household income of patient's ZIP Code, control of hospital, region, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** All discharges among people age 18 and over with principal diagnosis code of HF, excluding transfers to another short-term hospital, obstetric admissions, and cases with a missing discharge disposition

**Numerator:** Subset of the denominator who died



**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

#### **6.2.4. Surgery for Heart and Vascular Disease**

**Measure ID:** HCUP\_29, 60204011

**Measure Title:** Deaths per 1,000 adult hospital admissions with abdominal aortic aneurysm (AAA) repair

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Inpatient Quality Indicators (IQIs)

#### **Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, bed size of hospital, expected primary payer, location of hospital, location of residence, median household income of patient's ZIP Code, control of hospital, region, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Discharges age 18 years and over with an AAA repair code in any procedure field and a diagnosis of AAA in any field, excluding obstetric admissions, transfers to another short-term hospital, and cases with a missing discharge disposition

**Numerator:** Subset of the denominator who died

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_30, 60204021

**Measure Title:** Deaths per 1,000 hospital admissions with coronary artery bypass graft surgery (CABG), age 40 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Inpatient Quality Indicators (IQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, bed size of hospital, expected primary payer, location of hospital, location of residence, median household income of patient's ZIP Code, control of hospital, region, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Hospital inpatient discharges, age 40 and over, with a CABG in any procedure field, excluding obstetric admissions and transfers to another hospital

**Numerator:** Subset of the denominator who died

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_31, 60204031

**Measure Title:** Deaths per 1,000 hospital admissions with percutaneous transluminal coronary angioplasty (PTCA), age 40 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Inpatient Quality Indicators (IQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, bed size of hospital, expected primary payer, location of hospital, location of residence, median household income of patient's ZIP Code, control of hospital, region, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Hospital inpatient discharges, age 40 and over, with PTCA in any procedure field, excluding obstetric admissions, transfers to another hospital, and cases with a missing discharge disposition

**Numerator:** Subset of the denominator who died

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term

acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

### **6.2.5. Stroke**

**Measure ID:** QIO\_18, 60205011

**Measure Title:** Stroke patients who received venous thromboembolism (VTE) prophylaxis

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

#### **Table Description:**

- Geographic Representation: National, State
- Years Available: 2013 to 2015
- Population Subgroups: Age, sex, race/ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** All stroke patients

**Numerator:** stroke patients who received VTE prophylaxis

**Comments:** Further information on this and other stroke measures is available at <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPPage%2FQnetTier3&cid=1228760666430>.

**Measure ID:** QIO\_16, 60205041

**Measure Title:** Acute stroke patients for whom IV thrombolytic therapy was initiated at hospital within 3 hours (less than or equal to 180 minutes) of time last known well

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

#### **Table Description:**

- Geographic Representation: National, State
- Years Available: 2013 to 2016
- Population Subgroups: Age, sex, race/ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** All Patients aged 18 years and older with a diagnosis of acute stroke whose time of arrival is within 3 hours (less than or equal to 180 minutes) of time last known well

**Numerator:** Acute stroke patients for whom IV thrombolytic therapy was initiated at hospital within 3 hours (less than or equal to 180 minutes) of time last known well

**Comments:** Further information on this and other stroke measures is available at <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1228760666430>

**Measure ID:** QIO\_17, 60205061

**Measure Title:** Stroke patients prescribed statin medication at hospital discharge

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013 to 2015
- Population Subgroups: Age, sex, race/ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** Patients with a principal diagnosis of stroke

**Numerator:** Patients prescribed statin medication at hospital discharge

**Comments:** Further information on this and other stroke measures is available at <https://www.qualitymeasures.ahrq.gov/summaries/summary/49168/stroke-percent-of-ischemic-stroke-patients-who-are-prescribed-a-statin-medication-at-hospital-discharge>.

**Measure ID:** QIO\_19, 60205071

**Measure Title:** Stroke patients with educational material addressing activation of emergency medical system, follow-up after discharge, educations prescribed at discharge, risk factors for stroke, warning signs and symptoms of stroke

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013 to 2015
- Population Subgroups: Age, sex, race/ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** Ischemic stroke or hemorrhagic stroke patients discharged home

**Numerator:** Ischemic or hemorrhagic stroke patients with documentation that they or their caregivers were given educational material addressing all of the following:

1. Activation of emergency medical system
2. Follow-up after discharge
3. Medications prescribed at discharge
4. Risk factors for stroke
5. Warning signs and symptoms of stroke

**Comments:** Further information on this and other stroke measures is available at <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1228760666430>.

**Measure ID:** 60205081

**Measure Title:** Patients who came to the emergency department (ED) with stroke symptoms and received head CT or MRI who received the interpretation of the results within 45 minutes of ED arrival

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** Patients who came to the emergency department (ED) with stroke symptoms and received head CT or MRI

**Numerator:** Subset of denominator who received the interpretation of the results within 45 minutes of ED arrival

**Comments:** Further information on this and other stroke measures is available at <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FOnetTier3&cid=1228760666430>.

## 6.3. Chronic Kidney Disease

### 6.3.1. Chronic Care of End Stage Renal Disease

**Measure ID:** USRDS\_1, 60301011

**Measure Title:** Adult end stage renal disease (ESRD) patients who saw a nephrologist at least 12 months prior to initiation of renal replacement therapy

**Measure Source:** National Institutes of Health (NIH), National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), US Renal Data System (USRDS)

#### Table Description:

- Geographic Representation: National, State
- Years Available: State: 2012 to 2016; National: 2005 to 2016
- Population Subgroups: Age, sex, race/ethnicity

#### Data Source:

National and State: National Institutes of Health (NIH), National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), United States Renal Data System (USRDS)

**Denominator:** All incident ESRD patients, limited to those patients for whom it is known whether they saw a nephrologist prior to initiation of renal replacement therapy

**Numerator:** Subset of the denominator who saw a nephrologist at least 12 months prior to initiation of renal replacement therapy

**Comments:** This measure is referred to as measure CKD-10 in Healthy People 2020 documentation. These analyses use data from the newest versions of the Medical Evidence form. The cohort includes incident ESRD patients, limited to those patients for whom it is known whether they saw a nephrologist prior to initiation.

**Measure ID:** UMKECC\_2, 60301021

**Measure Title:** Adult hemodialysis patients with adequate dialysis - (Kt/V) 1.2 or higher

**Measure Source:** University of Michigan Kidney Epidemiology and Cost Center (UM-KECC), Dialysis Facility Report (DFR)

#### Table Description:

- Geographic Representation: National and State



- Years Available: National: 2015 - 2017; State: 2015 - 2017
- Population Subgroups: Age, ESRD Cause, Ethnicity, Race, Sex

**Data Source:** UM-KECC, DFR

**Denominator:** Total number of hemodialysis patient-months with end-stage renal disease (ESRD) for more than 90 days, not indicating frequent dialysis, and assigned to the facility for the entire reporting month were included

**Numerator:**

Kt/V: Patients with Kt/V (K-dialyzer clearance of urea; t-dialysis time; V-patient's total body water) 1.2 or higher among the denominator population

**Comments:** Patient-months with a missing or out of range Kt/V are included in the denominator but not the numerator. For more information, see the Guide to the Dialysis Facility Reports for Fiscal Year 2017 available at [https://dialysisdata.org/sites/default/files/content/Methodology/FY2017\\_DFR\\_Guide.pdf](https://dialysisdata.org/sites/default/files/content/Methodology/FY2017_DFR_Guide.pdf).

**Measure ID:** UMKECC\_1, 60301031

**Measure Title:** Standardized mortality ratio (SMR) for dialysis patients

**Measure Source:** University of Michigan Kidney Epidemiology and Cost Center (UM-KECC), Dialysis Facility Report (DFR)

**Table Description:**

- Geographic Representation: State
- Years Available: 2000 - 2017

**Data Source:** UM-KECC, DFR

**Denominator:** Total number of expected deaths among dialysis patients in facilities in the state. The expected death count adjusts for calendar year, patient age, race, ethnicity, sex, diabetes, duration of end-stage renal disease (ESRD), nursing home status, patient comorbidities at incidence such as diabetes as a cause of end-stage renal disease (ESRD), body size of the patient (i.e., body mass index) at onset of ESRD, and age-adjusted state and population death rates

**Numerator:** Total number of deaths among the population in the denominator

**Comments:** This measure takes a state's expected patient death rate and compares it to the actual death rate. The SMR estimates the relative death rate ratio for the facility, as compared to the national death rate in the same year, and indicates whether patients treated in the facility had higher or lower mortality given the characteristics of patients treated at the facility. Similarly, the degree to which the facility's yearly SMR varies from 1.00 is the degree to which it differs from the national death rates that year for patients with the same characteristics as those in the facility.

For more information, see the Guide to the Dialysis Facility Reports for Fiscal Year 2017 available at [https://dialysisdata.org/sites/default/files/content/Methodology/FY2017\\_DFR\\_Guide.pdf](https://dialysisdata.org/sites/default/files/content/Methodology/FY2017_DFR_Guide.pdf).

**Measure ID:** USRDS\_2, 60301041

**Measure Title:** Dialysis patients who were registered on a waiting list for transplantation

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2000 to 2016; National: 2000 to 2016
- Population Subgroups: Age, sex, race/ethnicity

**Data Source:**

National and State: National Institutes of Health (NIH), National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), United States Renal Data System (USRDS)

**Denominator:** All incident end stage renal disease (ESRD) patients who are under the age of 70 at the initiation of ESRD, without a living donor available (i.e. patients receiving a living donor transplant are excluded)

**Numerator:** Subset of the denominator registered on the kidney transplant waiting list or have received a deceased-donor kidney within 1 year of their ESRD initiation date

**Comments:** This measure is referred to as measure CKD-12 in Healthy People 2020 documentation. The cohort includes incident ESRD patients who are younger than 70 at the initiation of ESRD, without a living donor available (i.e. patients receiving a living donor transplant are excluded). Patients are followed from ESRD certification to being placed on the deceased donor organ waiting list or receiving a deceased donor transplant, censoring at death or one year after initiation of ESRD. Percentages are calculated using the Kaplan-Meier methodology.

**Measure ID:** USRDS\_3, 60301051

**Measure Title:** Patients with treated chronic kidney failure who received a transplant within 3 years of date of renal failure

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2000 to 2013; National: 2000 to 2013

- Population Subgroups: Age, sex, race/ethnicity

**Data Source:**

National and State: National Institutes of Health (NIH), National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), United States Renal Data System (USRDS)

**Denominator:** All incident ESRD patients who are younger than 70 at the initiation of ESRD

**Numerator:** Subset of the denominator that received a transplant within 3 years of renal failure

**Comments:** This measure is referred to as measure CKD-13.1 in Healthy People 2020 documentation. The cohort includes incident ESRD patients who are younger than 70 at the initiation of ESRD. Patients are followed from ESRD certification to transplant, censoring at death or three years after initiation of ESRD. Percentages are calculated using the Kaplan-Meier methodology.

**Measure ID:** UMKECC\_3, 60301061

**Measure Title:** Percent of hemodialysis patients whose hemoglobin level is less than 10 g/dL

**Measure Source:** University of Michigan Kidney Epidemiology and Cost Center (UM-KECC), Dialysis Facility Report (DFR)

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2006 to 2015; National: 2009 to 2015
- Population Subgroups: Age, sex, race/ethnicity

**Data Source:** UM-KECC, DFR

**Denominator:** Total number of hemodialysis patient-months with end-stage renal disease (ESRD) for more than 90 days, not indicating frequent dialysis, and assigned to the facility for the entire reporting month were included.

**Numerator:** Patients whose hemoglobin level is less than 10 g/dL among the denominator population

**Comments:** For more information, see the Guide to the Dialysis Facility Reports for Fiscal Year 2017 available at

[https://dialysisdata.org/sites/default/files/content/Methodology/FY2017\\_DFR\\_Guide.pdf](https://dialysisdata.org/sites/default/files/content/Methodology/FY2017_DFR_Guide.pdf).

**Measure ID:** USRDS\_5, 60301071

**Measure Title:** Adult hemodialysis patients who use arteriovenous fistulas as the primary mode of vascular access

**Measure Source:** National Institutes of Health (NIH), National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), United States Renal Data System (USRDS)

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2012 to 2016; National: 2012 to 2016
- Population Subgroups: Age, sex, race/ethnicity

**Data Source:**

National and State: NIH, NIDDK, USRDS

**Denominator:** Prevalent HD patients with a valid ESRD Medical Evidence CMS-2728 form, who are aged 18 and older

**Numerator:** Subset of denominator who use arteriovenous fistulas as the primary mode of vascular access

**Comments:** This measure is referred to as measure CKD-11.1 in Healthy People 2020 documentation. These analyses use data from CROWNWeb. The cohort includes prevalent HD patients with a valid ESRD Medical Evidence CMS 2728 form, who are aged 18 and older. Access type represents the last access type used in the year, according to CROWNWeb data.

## 6.4. Diabetes

### 6.4.1. Management of Diabetes

**Measure ID:** MEPS\_65, 60401011

**Measure Title:** Adults age 40 and over with diagnosed diabetes who received all four recommended services for diabetes in the calendar year (two or more hemoglobin A1c measurement, dilated eye examination, foot examination, and flu vaccination)

**Measure Source:** National Diabetes Quality Improvement Alliance

**Table Description:**

- Geographic Representation: National
- Years Available: 2008 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Denominator:** U.S. civilian noninstitutionalized adults age 40 and over with diabetes and a positive Diabetes Care Survey weight, excluding records with missing values

**Numerator:** Subset of the denominator who responded “Yes” to each of the four items related to receipt of diabetes services: (1) received two or more HbA1c measurements, (2) received dilated eye exam, (3) received foot exam, and (4) received flu shot

**Comments:** The method for defining the numerator and denominator for this measure changed beginning with the 2008 edition of the reports; rates may not be comparable with those reported in earlier editions. The MEPS entry in the Data Sources appendix, <http://www.ahrq.gov/research/data/dataresources/index.html>, provides more information on the DCS and MEPS panels.

Nonrespondents and “Don’t Know” responses to the DCS question were excluded from the analysis.

Estimates are age-adjusted to the 2000 U.S. standard population with two age groups, 40-59 and 60 and over.

**Measure ID:** MEPS\_66, 60401021

**Measure Title:** Adults age 40 and over with diagnosed diabetes who received at least two hemoglobin A1c tests in the calendar year

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2002 to 2016; State: 2013-2015
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:**

National: Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

State: Centers for Disease Control and Prevention (CDC), Behavioral Risk Factor Surveillance System (BRFSS)

**National Denominator:** U.S. civilian noninstitutionalized adults age 40 and over with diabetes who had a positive Diabetes Care Survey (DCS) weight and who responded to the DCS question, “How many times did a doctor, nurse, or other health professional check for glycosylated hemoglobin or ‘hemoglobin A-one-C’?”

**National Numerator:** Subset of the denominator who had a positive DCS weight and who had a hemoglobin A1c test at least twice in the last calendar year

**State Denominator:** Adults age 40 and over with diabetes

**State Numerator:** Adults with diabetes who had at least two hemoglobin A1c test in the survey year

**Comments:** The MEPS method for defining the numerator and denominator for this measure changed beginning with the 2008 edition of the reports; rates may not be comparable with those reported in earlier editions. The MEPS entry in the Data Sources appendix, <http://www.ahrq.gov/research/data/dataresources/index.html>, provides more information on the DCS and MEPS panels.

Nonrespondents and “Don’t Know” responses to the DCS question were excluded from the analysis.

Estimates are age-adjusted to the 2000 U.S. standard population with two age groups, 40-59 and 60 and over.

This measure is referred to as measure D-11 in Healthy People 2020 documentation.

**Measure ID:** MEPS\_67, 60401031

**Measure Title:** Adults age 40 and over with diagnosed diabetes who received a dilated eye examination in the calendar year

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2002 to 2016; State: 2013-2015
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:**

National: Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

State: Centers for Disease Control and Prevention (CDC), Behavioral Risk Factor Surveillance System (BRFSS)

**National Denominator:** U.S. civilian noninstitutionalized adults age 40 and over with diabetes who responded to the Diabetes Care Survey (DCS) question: “When was the last time you had an

eye exam in which the pupils were dilated? This would have made you temporarily sensitive to light”

**National Numerator:** Subset of denominator who indicated they had at least one retinal eye examination in the calendar year

**State Denominator:** Adults age 40 and over with diabetes

**State Numerator:** Adults with diabetes who had at least one retinal eye examination in the survey year

**Comments:** The MEPS method for defining the numerator and denominator for this measure changed beginning with the 2008 edition of the reports; rates may not be comparable with those reported in earlier editions. The MEPS entry in the Data Sources appendix, <http://www.ahrq.gov/research/data/dataresources/index.html>, provides more information on the DCS and MEPS panels.

Nonrespondents and “Don’t Know” responses to the DCS question were excluded from the analysis.

Estimates are age-adjusted to the 2000 U.S. standard population with two age groups, 40-59 and 60 and over.

This measure is referred to as measure D-10 in Healthy People 2020 documentation.

**Measure ID:** MEPS\_68, 60401041

**Measure Title:** Adults age 40 and over with diagnosed diabetes who had their feet checked for sores or irritation in the calendar year

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2002 to 2016; State: 2013-2015
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:**

National: Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

State: Centers for Disease Control and Prevention (CDC), Behavioral Risk Factor Surveillance System (BRFSS)

**National Denominator:** U.S. civilian noninstitutionalized adults age 40 and over with diabetes who responded to the question: “How many times did a health professional check your feet for any sores or irritations?”

**National Numerator:** Subset of denominator who had a foot examination one or more times in the calendar year

**State Denominator:** Adults age 40 and over with diabetes

**State Numerator:** Subset of denominator who had one or more foot examinations in the survey year

**Comments:** The method for defining the numerator and denominator for this measure changed beginning with the 2008 edition of the reports; rates may not be comparable with those reported in earlier editions. The MEPS entry in the Data Sources appendix, <http://www.ahrq.gov/research/data/dataresources/index.html>, provides more information on the DCS and MEPS panels.

Nonrespondents and “Don’t Know” responses to the DCS question were excluded from the analysis.

Estimates are age-adjusted to the 2000 U.S. standard population with two age groups, 40-59 and 60 and over.

This measure is referred to as measure D-9 in Healthy People 2020 documentation.

**Measure ID:** MEPS\_69, 60401051

**Measure Title:** Adults age 40 and over with diagnosed diabetes who received an influenza vaccination

**Measure Source:** National Diabetes Quality Improvement Alliance, National Quality Forum

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2008 to 2016; State: 2013 to 2015
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:**

National: Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)



State: Centers for Disease Control and Prevention (CDC), Behavioral Risk Factor Surveillance System (BRFSS)

**National Denominator:** U.S. civilian noninstitutionalized adults age 40 and over with diabetes who responded to the question: “How long since you had a flu shot?” Nonrespondents and “Don’t Know” responses were excluded

**National Numerator:** Subset of the denominator who had an influenza immunization in the past year

**State Denominator:** Adults age 40 and over with diabetes

**State Numerator:** Subset of the denominator who had an influenza immunization in the survey year

**Comments:** The method for defining the numerator and denominator for this measure changed beginning with the 2008 edition of the reports; rates may not be comparable with those reported in earlier editions. The MEPS entry in the Data Sources appendix, <http://www.ahrq.gov/research/data/dataresources/index.html>, provides more information on the DCS and MEPS panels.

Nonrespondents and “Don’t Know” responses to the DCS question were excluded from the analysis.

Estimates are age-adjusted to the 2000 U.S. standard population with two age groups, 40-59 and 60 and over.

**Measure ID:** NHANES\_8, 60401061

**Measure ID:** 60401061

**Measure Title:** Adults age 40 and over with diabetes whose condition was diagnosed

**Measure Source:** National Diabetes Quality Improvement Alliance, National Quality Forum

**Table Description:**

- Geographic Representation: National
- Years Available: 2001-2004 to 2013-2016
- Population Subgroups: Age, education, sex, income, ethnicity

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health and Nutrition Examination Survey (NHANES)

**Denominator:** Adults age 40 and over with diabetes

**Numerator:** Subset of the denominator with diagnosed diabetes

**Comments:** The criteria for selecting the diabetes population from NHANES have changed; reported rates may not be comparable with those found in prior years' editions of the NHQR and NHDR. Estimates are age adjusted to the 2000 U.S. standard population using two age groups: 40-59 and 60 and over.

**Measure ID:** OASIS\_21, 60401071

**Measure Title:** Short-stay home health patients who had diabetic foot care and patient education

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality

Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with discharge or transfer to inpatient facility during the year, excluding episodes where patient was not diabetic or was a bilateral amputee at start (resumption) of care

**Numerator:** Number of home health quality episodes in which the physician-ordered plan of care includes regular monitoring for the presence of skin lesions on the lower extremities and patient education on proper diabetic foot care

**Comments:** Further information about risk adjustment and the HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>. The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted.

### 6.4.2. Control of Diabetes

**Measure ID:** NHANES\_3, 60402011

**Measure Title:** Adults age 40 and over with diagnosed diabetes with hemoglobin A1c less than 8.0% (optimal control)

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health and Nutrition Examination Survey (NHANES)

**Table Description:**

- Geographic Representation: National
- Years Available: 2001-2004 to 2013-2016

- Population Subgroups: Age, education, sex, income, ethnicity

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health and Nutrition Examination Survey (NHANES)

**Denominator:** Adults age 40 and over with diagnosed diabetes

**Numerator:** Subset of the denominator who had hemoglobin A1c level less than 8% at examination

**Comments:**

Optimal control is defined as having an HbA1c less than 8%.

Estimates are age adjusted to the 2000 U.S. standard population using two age groups, 40-59 and 60 and over. The criteria for selecting the diabetes population from NHANES have changed; reported rates may not be comparable with those found in prior years' editions of the NHQR and NHDR.

**Measure ID:** NHANES\_10, 60402013

**Measure Title:** Adults age 18 and over with diagnosed diabetes with hemoglobin A1c more than 9.0% (poor control)

**Measure Source:** Healthy people 2020 D-5.1

**Table Description:**

- Geographic Representation: National
- Years Available: 2001-2004 to 2013-2016
- Population Subgroups: Age, education, sex, income, ethnicity

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health and Nutrition Examination Survey (NHANES)

**Denominator:** Adults age 18 and over who report that they have ever been diagnosed with diabetes

**Numerator:** Adults age 18 and over with doctor diagnosed diabetes and with HbA1c values higher than 9%

**Comments:** Persons are considered to have diagnosed diabetes if they respond 'yes' to ever being told by a doctor or health professional that they have diabetes or sugar diabetes. Those who respond borderline are counted as 'no'. Women who report that the only time they have been diagnosed with diabetes was during pregnancy (gestational diabetes) are excluded. Women who are pregnant at the time of the exam are also excluded.

Estimates are age adjusted to the 2000 U.S. standard population. See Healthy People D-5.1 methodology for more information - [https://www.healthypeople.gov/node/4123/data\\_details](https://www.healthypeople.gov/node/4123/data_details).

**Measure ID:** NHANES\_9, 60402031

**Measure Title:** Adults age 40 and over with diagnosed diabetes with blood pressure less than 130/80mm Hg

**Measure Source:** National Diabetes Quality Improvement Alliance, National Quality Forum

**Table Description:**

- Geographic Representation: National
- Years Available: 2001-2004 to 2013-2016
- Population Subgroups: Age, education, sex, income, ethnicity

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health and Nutrition Examination Survey (NHANES)

**Denominator:** Adults age 40 and over with diabetes

**Numerator:** Subset of the denominator with blood pressure less than 130/80mm Hg

**Comments:** The criteria for selecting the diabetes population from NHANES have changed; reported rates may not be comparable with those found in prior years' editions of the NHQR and NHDR. Estimates are age adjusted to the 2000 U.S. standard population using two age groups: 40-59 and 60 and over.

### 6.4.3. Hospitalization for Diabetes

**Measure ID:** USRDS\_4, 60403061

**Measure Title:** Adjusted incident rates of end stage renal disease (ESRD) due to diabetes per million population

**Measure Source:** National Institutes of Health (NIH), National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), United States Renal Data System (USRDS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2001 to 2016
- Population Subgroups: Age, sex, race/ethnicity

**Data Source:** National and State: NIH, NIDDK, USRDS

**Denominator:** U.S. Census intercensal population estimates in million

**Numerator:** The number of incident ESRD patients with diabetes as the primary cause of ESRD

**Comments:** This measure is referred to as measure CKD-9.1 in Healthy People 2020 documentation. Kidney failure due to diabetes in this document is expressed as a rate (number/million population/year). The numerator in this rate is the number of incident ESRD patients with diabetes as the primary cause of ESRD. These rates are adjusted to a reference population using the direct method: this means the adjusted rate assumes a constant reference population, thus permitting meaningful comparison across years. The direct method of adjustment involves stratification of the population by the adjustment variables (i.e. overall rates are adjusted for age, sex, and race) and calculation of a weighted average of stratum-specific rates, where the weights are the numbers of persons in a strata of a “standard population,” which is 2012 in this analysis. Each standardized (adjusted) rate for a specific group or year is interpreted as the expected (crude) rate if that group or year had exhibited the age-gender-race distribution of the standard population.

**Measure ID:** USRDS\_6, 60403063

**Measure Title:** Kidney failure due to diabetes among persons with diabetes

**Measure Source:** National Institutes of Health (NIH), National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), United States Renal Data System (USRDS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2014 to 2016
- Population Subgroups: Age, sex, race/ethnicity

**Data Source:**

National and State: NIH, NIDDK, USRDS

**Denominator:** Estimate of U.S. population with diabetes (using U.S. Census intercensal population estimates, and National Health Interview Survey estimated prevalence of diabetes)

**Numerator:** The number of incident ESRD patients with diabetes as the primary cause of ESRD

**Comments:** Kidney failure due to diabetes among persons with diabetes in this document is expressed as a rate (number/million population/year). Data comes from the National Health Interview Survey; all ages are included. Three-year data are used to estimate the prevalence of diabetes in the middle year, and the size of the population with diabetes is based on U.S. census data. The incident rate per million of ESRD caused by diabetes is calculated as the number of incident ESRD patients with a primary cause of ESRD of diabetes, divided by the size of the population with diabetes in that group. These rates are adjusted to a reference population using the direct method, which involves stratification of the population by the adjustment variables (i.e. overall rates are adjusted for age, sex, and race) and calculation of a weighted average of

stratum-specific rates, where the weights are the numbers of persons in a strata of a “standard population,” which is 2012 in this analysis.

**Measure ID:** UMKECC\_5, 60403071

**Measure Title:** Percent of dialysis patients with end stage renal disease due to diabetes

**Measure Source:** University of Michigan Kidney Epidemiology and Cost Center (UM-KECC), Dialysis Facility Report (DFR)

**Table Description:**

- Geographic Representation: National and State
- Years Available: 2009 - 2017
- Population Subgroups: Age, ESRD Cause, Ethnicity, Race, Sex

**Data Source:** UM-KECC, DFR

**Denominator:** All dialysis patients treated on December 31 of each year. Dialysis patients were included in a facility once they reached day 91 of ESRD and were treated by the facility for at least 60 days

**Numerator:** ESRD caused by diabetes among in the denominator population

**Comments:**

The percentages in the national table are the distribution of ESRD caused by diabetes between subgroups within each demographic category.

For more information, see the Guide to the Dialysis Facility Reports for Fiscal Year 2017 available at [https://dialysisdata.org/sites/default/files/content/Methodology/FY2017\\_DFR\\_Guide.pdf](https://dialysisdata.org/sites/default/files/content/Methodology/FY2017_DFR_Guide.pdf).

## 6.5. HIV/AIDS

### 6.5.1. Management of HIV/AIDS

**Measure ID:** 60501011

**Measure Title:** New AIDS cases per 100,000 population age 13 and over

**Measure Source:** National Center for HIV, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), Division of HIV/AIDS (DHAP), National HIV/AIDS Surveillance System (NHSS)

**Table Description:**

- Geographic Representation: National, State

- Years Available: 2000 to 2015
- Population Subgroups: Age, sex, race/ethnicity

**Data Source:** CDC, NCHHSTP, DHAP, NHSS, ATLAS Website

**Denominator:** U.S. population age 13 and over

**Numerator:** Reported new AIDS cases among adolescents and adults age 13 and over

**Comments:** This measure is referred to as measure HIV-4 in Healthy People 2020 documentation. For more information, see NCHHSTP AtlasPlus, <https://www.cdc.gov/nchhstp/atlas/index.htm>.

**Measure ID:** NCHHSTP\_1, 60501021

**Measure Title:** New HIV cases per 100,000 population age 13 and over

**Measure Source:** National Center for HIV, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), Division of HIV/AIDS (DHAP), National HIV/AIDS Surveillance System (NHSS)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2008 to 2015
- Population Subgroups: Age, sex, race/ethnicity

**Data Source:** CDC, NCHHSTP, DHAP, NHSS, ATLAS Website

**Denominator:** U.S. population age 13 and over

**Numerator:** Reported new HIV cases among adolescents and adults age 13 and over in the calendar year

**Comments:** This measure is referred to as measure HIV-1 in Healthy People 2020 documentation. For more information, see NCHHSTP AtlasPlus, <https://www.cdc.gov/nchhstp/atlas/index.htm>.

**Measure ID:** 60501031

**Measure Title:** Persons living with HIV who know their serostatus

**Measure Source:** National Center for HIV, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), Division of HIV/AIDS (DHAP), National HIV/AIDS Surveillance System (NHSS)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2010-2015
- Population Subgroups: Age, sex, race/ethnicity, and transmission category

**Data Source:** National and State: CDC, NCHHSTP, DHAP, NHSS

**Denominator:** Adolescents and adults age 13 and over

**Numerator:** Number of persons age 13 and over with diagnosed HIV infection

**Comments:** For more information, see “Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data, United States and 6 Dependent Areas, 2015 “ which is available at <https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-supplemental-report-vol-22-2.pdf>.

**Measure ID:** 60501041

**Measure Title:** Persons living with diagnosed HIV who had at least two CD4 or viral load tests performed at least 3 months apart during the last year, among reporting jurisdictions

**Measure Source:** National Center for HIV, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), Division of HIV/AIDS (DHAP), National HIV/AIDS Surveillance System (NHSS)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2014-2015
- Population Subgroups: Age, sex, race/ethnicity, and transmission category

**Data Source:** National and State: CDC, NCHHSTP, DHAP, NHSS

**Denominator:** Number of adolescents and adults age 13 and over with HIV infection diagnosed by the end of previous year and alive at the end of current year

**Numerator:** A subset of numerator who had at least two CD4 or viral load tests performed at least 3 months apart during the last year

**Comments:** For more information, see “Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data, United States and 6 Dependent Areas, 2015” which is available at <https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-supplemental-report-vol-22-2.pdf>.



**Measure ID:** 60501051

**Measure Title:** Persons living with diagnosed HIV whose most recent viral load in the last 12 months was under 200 copies/MI

**Measure Source:** National Center for HIV, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), Division of HIV/AIDS (DHAP), National HIV/AIDS Surveillance System (NHSS)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2014-2015
- Population Subgroups: Age, sex, race/ethnicity, and transmission category

**Data Source:** National and State: CDC, NCHHSTP, DHAP, NHSS

**Denominator:** Number of persons age 13 and over with diagnosed HIV infection by the end of previous year and alive at the end of current year

**Numerator:** Number of persons diagnosed with HIV with a viral load less than 200 copies/mL

**Comments:** For more information, see “Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data, United States and 6 Dependent Areas, 2015” which is available at <https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-supplemental-report-vol-22-2.pdf>.

Data included 37 States and the District of Columbia.

**Measure ID:** NVSS\_6, 60501061

**Measure Title:** HIV infection deaths per 100,000 population

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2000-2016 State: 2000-2016
- Population Subgroups: Age, sex, location, race, ethnicity

**Data Source:**

National and State: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)—Mortality

**Denominator:** U.S. resident population

**Numerator:** Number of deaths due to HIV infection

**Comments:** Estimates are age adjusted to the 2000 U.S. standard population. Age data are unadjusted. Respondents for whom age is not reported are not included in the age adjustment calculations and are excluded from numerators. This measure is referred to as measure HIV-12 in Healthy People 2020 documentation.

## **6.7. Mental Health & Substance Abuse**

### **6.7.1. Treatment of Depression**

**Measure ID:** NSDUH\_1, 60701011

**Measure Title:** Adults with a major depressive episode (MDE) in the last 12 months who received treatment for depression in the last 12 months

**Measure Source:** Substance Abuse and Mental Health Services Administration (SAMHSA)

#### **Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2008 to 2016; State: 2012-2016
- Population Subgroups: Age, education, income, race, ethnicity, sex, location of residence

**Data Source:** SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health (NSDUH)

**Denominator:** People age 18 and over with a major depressive episode in the past year

**Numerator:** Subset of the denominator who received treatment or counseling for depression in the past year

**Comments:** An MDE is defined as a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of the symptoms for depression as described in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

Treatment is defined as seeing or talking to a medical doctor or other professional or using prescription medication for depression in the past year. Respondents with unknown data for past year MDE measures or unknown treatment data were excluded.

Data prior to 2008 are dropped because they are not appropriate for trend analysis due to survey and questionnaire changes.

**Measure ID:** NSDUH\_2, 60701021

**Measure Title:** Children ages 12-17 with a major depressive episode in the last 12 months who received treatment for depression in the last 12 months

**Measure Source:** Substance Abuse and Mental Health Services Administration (SAMHSA)

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2008 to 2016; State: 2012-2016
- Population Subgroups: Age, education, income, race, ethnicity, sex, location of residence

**Data Source:** SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health (NSDUH)

**Denominator:** Children ages 12-17 with a major depressive episode in the past year

**Numerator:** Subset of the denominator who received treatment for depression in the past year

**Comments:** An MDE is defined as a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of the symptoms for depression as described in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

Treatment is defined as seeing or talking to a medical doctor or other professional or using prescription medication for depression in the past year. Respondents with unknown data for past year MDE measures or unknown treatment data were excluded.

Data prior to 2008 are dropped because they are not appropriate for trend analysis due to survey and questionnaire changes.

**Measure ID:** NVSS\_7, 60701041

**Measure Title:** Suicide deaths per 100,000 population age 12 and over

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2000-2016; State: 2000-2016
- Population Subgroups: Age, sex, race, ethnicity, location of residence

**Data Source:** National and State: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)—Mortality

**Denominator:** U.S. resident population age 12 and over

**Numerator:** Subset of the denominator who died from suicide

**Comments:** Suicides may be undercounted because of difficulty in the determination of suicidal intent by the coroner or medical examiner. Estimates are age adjusted to the 2000 U.S. standard population. Age data are unadjusted. Respondents for whom age is not reported are not included in the age adjustment calculations and are excluded from numerators. This measure is referred to as measure MHMD-1 in Healthy People 2020 documentation.

**Measure ID:** MDS\_6, 60701051

**Measure Title:** Long-stay nursing home residents who have depressive symptoms

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013 to 2016
- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and metropolitan status

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare chronic care nursing home long-stay residents with a valid target assessment, excluding residents who are comatose or missing Mood Scale scores on the target assessment or residents who were comatose or whose comatose status was unknown

**Numerator:** Subset of the denominator with a Mood Scale score indicating little interest or pleasure or a feeling of depression in at least half of the days during a 2 week period preceding a target assessment

**Comments:** Long stay quality measures include all residents in an episode whose cumulative days in the facility is greater than or equal to 101 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User's manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

**Measure ID:** MDS\_23, 60701061

**Measure Title:** Short-stay nursing home residents receiving antipsychotic medicine

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: None
- Years Available: None
- Population Subgroups: None

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare post-acute care patients with valid distinct initial and target assessments; excludes residents with nonresponses on assessments on antipsychotic drug medication questions, or if resident has Schizophrenia, Tourette's Syndrome, or Huntington's Disease

**Numerator:** Subset of the denominator indicating receipt of antipsychotic medication on target assessment and no antipsychotic medication use on the initial assessment

**Comments:** Short stay quality measures include all residents in an episode whose cumulative days in the facility is less than or equal to 100 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). Tables for this measure was not produced for the 2018 NHQDR.

For details about this measure, refer to the MDS 3.0 Quality Measures User's manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

**Measure ID:** MDS\_22, 60701071

**Measure Title:** Long-stay nursing home residents receiving antipsychotic medication

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: None
- Years Available: None
- Population Subgroups: None

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare chronic care nursing home long-stay residents with a valid target assessment; excludes residents with nonresponses on antipsychotic drug medication questions, or if resident has Schizophrenia, Tourette's Syndrome, or Huntington's Disease

**Numerator:** Subset of the denominator indicating receipt of antipsychotic medication on target assessment

**Comments:** Long stay quality measures include all residents in an episode whose cumulative days in the facility is greater than or equal to 101 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). Tables for this measure was not produced for the 2018 NHQDR.

For details about this and other NHQI measures, refer to the MDS 3.0 Quality Measures User's manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

## 6.7.2. Treatment of Substance Abuse

**Measure ID:** NSDUH\_3, 60702011

**Measure Title:** People age 12 and over who needed treatment for illicit drug use or an alcohol problem and who received such treatment at a specialty facility in the last 12 months

**Measure Source:** Substance Abuse and Mental Health Services Administration (SAMHSA)

### Table Description:

- Geographic Representation: National, State
- Years Available: 2015-2016
- Population Subgroups: Age, sex, race, ethnicity, location of residence, education, income

**Data Source:** SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health (NSDUH)

**Denominator:** US civilian noninstitutionalized population age 12 and over who needed treatment for any illicit drug use or alcohol problem

**Numerator:** Subset of the denominator who received treatment for illicit drug use or alcohol problem at a specialty facility in the past year

**Comments:** Respondents were classified as needing treatment for an illicit drug or alcohol problem if they met at least one of three criteria during the past year:

1. Were dependent on illicit drugs or alcohol;
2. Abused illicit drugs or alcohol; or
3. Received treatment for an illicit drug or alcohol problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities), hospital (inpatient only), or a mental health center.

Illicit drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics (nonmedical use) (based on data from original questions), not including methamphetamine items added in 2005 and 2006.

Estimates include people who received treatment specifically for illicit drugs or alcohol, as well as people who received treatment but did not specify for which substances they were treated.

Data prior to 2015 are dropped because they are not appropriate for trend analysis due to survey and questionnaire changes.

**Measure ID:** NSDUH\_4, 60702021

**Measure Title:** People age 12 and over who needed treatment for illicit drug use and who received such treatment at a specialty facility in the last 12 months

**Measure Source:** Substance Abuse and Mental Health Services Administration (SAMHSA)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2015-2016
- Population Subgroups: Age, sex, race, ethnicity, location of residence, education, income

**Data Source:** SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health (NSDUH)

**Denominator:** U.S. civilian noninstitutionalized population age 12 and over who needed treatment for any illicit drug use

**Numerator:** Subset of the denominator who received treatment for illicit drug use at a specialty facility in the past year

**Comments:** Receipt of any illicit drug treatment at a specialty facility refers to treatment received at a hospital (inpatient), a rehabilitation facility (inpatient or outpatient), or mental health center to reduce or stop drug use or for medical problems associated with drug use.

Respondents were classified as needing treatment for an illicit drug problem if they met at least one of three criteria during the past year:

1. Were dependent on any illicit drug or;
2. Abused any illicit drug; or
3. Received treatment for an illicit drug problem at a specialty facility, i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient]), hospitals (inpatient only), or mental health centers.

Illicit drugs include marijuana/hashish, cocaine (including crack), inhalants, hallucinogens, heroin, or prescription-type psychotherapeutic medications (nonmedical use) (based on data from original questions), not including methamphetamine items added in 2005 and 2006.

Data prior to 2015 are dropped because they are not appropriate for trend analysis due to survey and questionnaire changes.

**Measure ID:** NSDUH\_5, 60702031

**Measure Title:** People age 12 and over who needed treatment for an alcohol problem who received such treatment at a specialty facility in the last 12 months

**Measure Source:** Substance Abuse and Mental Health Services Administration (SAMHSA)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2015-2016
- Population Subgroups: Age, sex, race, ethnicity, location of residence, education, income

**Data Source:** SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health (NSDUH)

**Denominator:** U.S. civilian noninstitutionalized population age 12 and over who needed treatment for an alcohol problem

**Numerator:** Subset of the denominator who received treatment for an alcohol problem at a specialty facility in the last 12 months

**Comments:** Receipt of alcohol treatment at a specialty facility refers to treatment received at a hospital (inpatient), a rehabilitation facility (inpatient or outpatient), or a mental health center in order to reduce or stop alcohol use or for medical problems associated with alcohol use.

Respondents were classified as needing treatment for an alcohol problem if they met at least one of three criteria during the past year--(1) were dependent on alcohol, (2) abused alcohol, or (3) received treatment for alcohol use at a specialty facility.

Data prior to 2008 are dropped because they are not appropriate for trend analysis due to survey and questionnaire changes.

**Measure ID:** TEDS\_1, 60702041

**Measure Title:** Adolescents and adults treated for substance abuse who completed treatment course

**Measure Source:** Substance Abuse and Mental Health Services Administration (SAMHSA)



**Table Description:**

- Geographic Representation: National
- Years Available: State: 2008 to 2016; National: 2005 to 2016
- Population Subgroups: Age, education, sex

**Data Source:** SAMHSA, Center for Behavioral Health Statistics and Quality, Substance Abuse Treatment Episode Data Set (TEDS)

**Denominator:** Discharges from substance abuse treatment aged 12 and over

**Numerator:** Subset of the denominator who completed treatment

**Comments:** These data include primarily discharges from publicly-funded substance abuse treatment facilities.

**Measure ID:** 60702071

**Measure Title:** Adults who filled an outpatient opioid prescription in the calendar year

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2013-2016
- Population Subgroups: age, gender, race, ethnicity, family income, education, employment status, health insurance, Medicaid/CHIP, residence location, language spoken at home, perceived health status, activity

limitations, U.S. born.

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over

**Numerator:** Subset of the denominator who filled an outpatient opioid prescription in the calendar year. For more information, see “Detailed Methods for the Medical Expenditure Panel Survey.”

**Comments:** The definition of an opioid prescription of this measure is the same as the one used in Moriya, A.S. and Miller, G.E. *Any Use and Frequent Use of Opioids among Elderly Adults in 2015–2016, by Socioeconomic Characteristics*. September 2018. Statistical Brief #515. Agency for Healthcare Research and Quality, Rockville, MD. [https://meps.ahrq.gov/data\\_files/publications/st515/stat515.shtml](https://meps.ahrq.gov/data_files/publications/st515/stat515.shtml); and Miller, G.E. and Moriya, A.S. *Any Use and Frequent Use of Opioids among Non-Elderly Adults in 2015–2016, by Socioeconomic Characteristics*.

September 2018. Statistical Brief #516. Agency for Healthcare Research and Quality, Rockville, MD. [https://meps.ahrq.gov/data\\_files/publications/st516/stat516.shtml](https://meps.ahrq.gov/data_files/publications/st516/stat516.shtml). The differences are that the Stat Briefs used pooled 2015-2016 data and stratified by elderly adults and nonelderly adults. This measure used one year data from 2103-2016 and includes adults age 18 and over.

**Measure ID:** 60702081

**Measure Title:** Adults who filled four or more outpatient opioid prescriptions in the calendar year

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2013-2016
- Population Subgroups: age, gender, race, ethnicity, family income, education, employment status, health insurance, Medicaid/CHIP, residence location, language spoken at home, perceived health status, activity

limitations, U.S. born.

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over

**Numerator:** Subset of the denominator who filled four or more outpatient opioid prescriptions in the calendar year. For more information, see “Detailed Methods for the Medical Expenditure Panel Survey.”

**Comments:** The definition of four or more outpatient opioid prescription fills of this measure is the same as the one used in Moriya, A.S. and Miller, G.E. *Any Use and Frequent Use of Opioids among Elderly Adults in 2015–2016, by Socioeconomic Characteristics*. September 2018. Statistical Brief #515. Agency for Healthcare Research and Quality, Rockville, MD. [https://meps.ahrq.gov/data\\_files/publications/st515/stat515.shtml](https://meps.ahrq.gov/data_files/publications/st515/stat515.shtml), and Miller, G.E. and Moriya, A.S. *Any Use and Frequent Use of Opioids among Non-Elderly Adults in 2015–2016, by Socioeconomic Characteristics*. September 2018. Statistical Brief #516. Agency for Healthcare Research and Quality, Rockville, MD. [https://meps.ahrq.gov/data\\_files/publications/st516/stat516.shtml](https://meps.ahrq.gov/data_files/publications/st516/stat516.shtml). The differences are that the Stat Briefs used pooled 2015-2016 data and stratified by elderly adults and nonelderly adults. This measure used one year data from 2103-2016 and includes adults age 18 and over.

**Measure ID:** 60702091

**Measure Title:** Adults with opioid (either prescription opioid or heroin) use disorder in the past year

**Measure Source:** Substance Abuse and Mental Health Services Administration (SAMHSA)

**Table Description:**

- Geographic Representation: National
- Years Available: 2017
- Population Subgroups: Age, sex, race, ethnicity, education, income, location of residence

**Data Source:** SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health (NSDUH)

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over

**Numerator:** Subset of the denominator who had opioid (either prescription opioid or heroin) use disorder in the past year

**Comments:** Past-year opioid use disorder is defined as heroin use disorder or prescription opioid use disorder in the past year based on assessments of individual diagnostic criteria from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition.

**Measure ID:** 60702101

**Measure Title:** Hospital inpatient stays involving opioid-related diagnoses per 100,000 population

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2005-2016
- Population Subgroups: Age, sex, community-level income, location of patient residence

**Data Source:**

National: AHRQ, CDOM, HCUP, National Inpatient Sample (NIS)

State: AHRQ, CDOM, HCUP, State Inpatient Databases (SID)

**Denominator:** U.S. resident population

**Numerator:** Number of hospital discharges which are related to the opioid use stemming from illicit opioids such as heroin, illegal use of prescription opioids, and the use of opioids as prescribed

**Comments:** This information was exported from HCUP Fast Stats, Opioid-Related Hospital Use ([www.hcup-us.ahrq.gov/faststats/OpioidUseServlet](http://www.hcup-us.ahrq.gov/faststats/OpioidUseServlet)). The following is from the Data Notes and Methods available on the HCUP Fast Stats Web page for Opioid-Related Hospital use. Inpatient stays including opioid-related hospital use are identified by any diagnosis (all-listed) in the following ranges of ICD-10-CM and ICD-9-CM codes:

#### ICD-10-CM Codes Starting October 1, 2015

- F11 series: Opioid-related disorders (except F11.21)
- T40 series: Poisoning by, adverse effect of, and underdosing of narcotics and psychodysleptics [hallucinogens]; includes poisoning accidental, intentional self-harm, assault, undetermined, and adverse effect (except heroin); with a seventh digit indicating initial, subsequent encounter, sequela
  - 0X1, 0X2, 0X3, 0X4, 0X5: Opium
  - 1X1, 1X2, 1X3, 1X4: Heroin
  - 2X1, 2X2, 2X3, 2X4, 2X5: Other opioids
  - 3X1, 3X2, 3X3, 3X4, 3X5: Methadone
  - 4X1, 4X2, 4X3, 4X4, 4X5: Other synthetic narcotics
  - 601, 602, 603, 604, 605: Unspecified narcotics
  - 691, 692, 693, 694, 695: Other narcotics

There are some differences in the reporting of opioid-related inpatient stays and ED visits identified using ICD-10-CM codes. These differences are explored within the *Case Study: Exploring How Opioid-Related Diagnosis Codes Translate from ICD-9-CM to ICD-10-CM*, which is found under “Doing Analysis with ICD-10 Data” on the [ICD-10-CM/PCS Resources](#) page of HCUP-US.

#### ICD-9-CM Codes Prior to October 1, 2015

- 304.00-304.02: Opioid type dependence (unspecified; continuous; episodic)
- 304.70-304.72: Combinations of opioid type drug with any other drug dependence (unspecified; continuous; episodic)
- 305.50-305.52: Opioid abuse (unspecified; continuous; episodic)
- 965.00-965.02; 965.09: Poisoning by opium (alkaloids), unspecified; heroin; methadone; other opiates and related narcotics
- 970.1: Poisoning by opiate antagonists
- E850.0-E850.2: Accidental poisoning by heroin; methadone; other opiates and related narcotics
- E935.0-E935.2: Heroin, methadone, other opiates and related narcotics causing adverse effects in therapeutic use

- E940.1: Opiate antagonists causing adverse effects in therapeutic use

#### Excluded Codes

It should be noted that ICD-10-CM and ICD-9-CM diagnosis codes related to opioid dependence or abuse “in remission” are not used to identify opioid-related hospital use because remission does not indicate active use of opioids. Codes indicating neonatal abstinence syndrome (NAS) are also not included.

**Measure ID:** 60702111

**Measure Title:** Emergency department visits involving opioid-related diagnoses per 100,000 population

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

#### Table Description:

- Geographic Representation: National, State
- Years Available: 2005-2016
- Population Subgroups: Age, sex, community-level income, location of patient residence

#### Data Source:

National: AHRQ, CDOM, HCUP, Nationwide Emergency Department Sample (NEDS)

State: AHRQ, CDOM, HCUP, State Emergency Department Databases (SEDD)

**Denominator:** U.S. resident population

**Numerator:** Total number of emergency department visits which are related to the opioid use stemming from illicit opioids such as heroin, illegal use of prescription opioids, and the use of opioids as prescribed

**Comments:** This information was exported from HCUP Fast Stats, Opioid-Related Hospital Use ([www.hcup-us.ahrq.gov/faststats/OpioidUseServlet](http://www.hcup-us.ahrq.gov/faststats/OpioidUseServlet)). The following is from the Data Notes and Methods available on the HCUP Fast Stats Web page for Opioid-Related Hospital use.

Emergency department (ED) visits including opioid-related hospital use are identified by any diagnosis (all-listed) in the following ranges of ICD-10-CM and ICD-9-CM codes:

ICD-10-CM Codes Starting October 1, 2015

- F11 series: Opioid-related disorders (except F11.21)
- T40 series: Poisoning by, adverse effect of, and underdosing of narcotics and psychodysleptics [hallucinogens]; includes poisoning accidental, intentional self-harm,

assault, undetermined, and adverse effect (except heroin); with a seventh digit indicating initial, subsequent encounter, sequela

- 0X1, 0X2, 0X3, 0X4, 0X5: Opium
- 1X1, 1X2, 1X3, 1X4: Heroin
- 2X1, 2X2, 2X3, 2X4, 2X5: Other opioids
- 3X1, 3X2, 3X3, 3X4, 3X5: Methadone
- 4X1, 4X2, 4X3, 4X4, 4X5: Other synthetic narcotics
- 601, 602, 603, 604, 605: Unspecified narcotics
- 691, 692, 693, 694, 695: Other narcotics

There are some differences in the reporting of opioid-related inpatient stays and ED visits identified using ICD-10-CM codes. These differences are explored within the *Case Study: Exploring How Opioid-Related Diagnosis Codes Translate from ICD-9-CM to ICD-10-CM*, which is found under “Doing Analysis with ICD-10 Data” on the [ICD-10-CM/PCS Resources](#) page of HCUP-US.

#### ICD-9-CM Codes Prior to October 1, 2015

- 304.00-304.02: Opioid type dependence (unspecified; continuous; episodic)
- 304.70-304.72: Combinations of opioid type drug with any other drug dependence (unspecified; continuous; episodic)
- 305.50-305.52: Opioid abuse (unspecified; continuous; episodic)
- 965.00-965.02; 965.09: Poisoning by opium (alkaloids), unspecified; heroin; methadone; other opiates and related narcotics
- 970.1: Poisoning by opiate antagonists
- E850.0-E850.2: Accidental poisoning by heroin; methadone; other opiates and related narcotics
- E935.0-E935.2: Heroin, methadone, other opiates and related narcotics causing adverse effects in therapeutic use
- E940.1: Opiate antagonists causing adverse effects in therapeutic use

#### Excluded Codes

It should be noted that ICD-10-CM and ICD-9-CM diagnosis codes related to opioid dependence or abuse “in remission” are not used to identify opioid-related hospital use because remission does not indicate active use of opioids. Codes indicating neonatal abstinence syndrome (NAS) are also not included.

**Measure ID:** 60702121

**Measure Title:** Drug overdose deaths involving any opioid per 100,000 resident population

**Measure Source:** NVSS

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 1999-2017; State: 1999-2017
- Population Subgroups: Age, sex, race, ethnicity, and metropolitan status

**Data Source:**

National and State: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS) - Mortality

**Denominator:** U.S. resident population all ages

**Numerator:** Subset of the denominator who died from overdose involving any opioid drugs

**Comments:** Drug overdose deaths involving opioids include those with an underlying cause of drug overdose and with an opioid mentioned in the ICD–10 multiple causes of death. Any opioid category is defined by multiple cause-of-death codes T40.0-T40.4 and T40.6. The rates are age-adjusted using the 2000 standard population with unrounded population numbers, except age groups. The data were downloaded from CDC Wonder, <https://wonder.cdc.gov>.

**Measure ID:** 60702131

**Measure Title:** Drug overdose deaths involving natural and semisynthetic opioids per 100,000 resident population

**Measure Source:** NVSS

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 1999-2017; State: 1999-2017
- Population Subgroups: Age, sex, race, ethnicity, and metropolitan status

**Data Source:**

National and State: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS) - Mortality

**Denominator:** U.S. resident population all ages

**Numerator:** Subset of the denominator who died from overdose involving natural and semisynthetic opioids

**Comments:** Drug overdose deaths involving opioids include those with an underlying cause of drug overdose and with an opioid mentioned in the ICD-10 multiple causes of death. The Natural and semisynthetic opioids category, which includes codeine, oxycodone, and morphine, among

other drugs, is defined by multiple cause-of-death code T40.2. The rates are age-adjusted using the 2000 standard population with unrounded population numbers, except age groups. The data were downloaded from CDC Wonder, <https://wonder.cdc.gov>.

**Measure ID:** 60702141

**Measure Title:** Drug overdose deaths involving other synthetic opioids (other than methadone) per 100,000 resident population

**Measure Source:** NVSS

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 1999-2017; State: 1999-2017
- Population Subgroups: Age, sex, race, ethnicity, and metropolitan status

**Data Source:**

National and State: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS) - Mortality

**Denominator:** U.S. resident population all ages

**Numerator:** Subset of the denominator who died from overdose other synthetic opioids (other than methadone)

**Comments:** Drug overdose deaths involving opioids include those with an underlying cause of drug overdose and with an opioid mentioned in the ICD–10 multiple causes of death. The Other synthetic opioids (other than methadone) category, which includes fentanyl, tramadol, and propoxyphene (removed from the market in 2010), is defined by multiple cause-of-death code T40.4. A sharp increase in deaths involving synthetic opioids, other than methadone, in 2014 coincided with law enforcement reports of increased availability of illicitly manufactured, or nonpharmaceutical, fentanyl. Illicitly manufactured fentanyl cannot be distinguished from pharmaceutical fentanyl in death certificate data. The rates are age-adjusted using the 2000 standard population with unrounded population numbers, except age groups. The data were downloaded from CDC Wonder, <https://wonder.cdc.gov>.

## 6.8. Musculoskeletal Disease

**Measure ID:** NHIS\_7, 60801051

**Measure Title:** Adults with chronic joint symptoms who have seen a health care provider for their symptoms

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)



**Table Description:**

- Geographic Representation: National
- Years Available: 2009- 2014 and 2017
- Population Subgroups: Age, ethnicity, race, sex, income, insurance, location of residence, education, activity limitation

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), and National Health Interview Survey (NHIS)

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over with chronic joint symptoms

**Numerator:**

Subset of the Denominator: who reported they have ever seen a doctor or other health professional for joint symptoms

**Comments:** Estimates are age adjusted to the 2000 U.S. standard population.

## 6.9. Respiratory Diseases

### 6.9.1. Treatment of Respiratory Infections

**Measure ID:** NAMCS\_NHAMCS\_11, 60901011

**Measure Title:** Doctor's office, emergency department, and outpatient department visits where antibiotics were prescribed for a diagnosis of common cold per 10,000 population

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS) and National Hospital Ambulatory Medical Care Survey (NHAMCS).

**Table Description:**

- Geographic Representation: National
- Years Available: 2010 - 2011 to 2013 - 2014
- Population Subgroups: age, sex, race/ethnicity, location (hospital)

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS) and National Hospital Ambulatory Medical Care Survey (NHAMCS)

**Denominator:** U.S. civilian noninstitutionalized population with doctor's office, emergency department, or outpatient department visits

**Numerator:** Number of visits in the denominator with a sole diagnosis of common cold for which antibiotics were prescribed or continued

**Comments:** Population used for calculation is U.S. Census Bureau estimated civilian noninstitutionalized population on July 1 each year. Ambulatory medical care visits include visits to office-based physicians, community health centers, hospital outpatient departments, and emergency departments. For consistency with previous years, visits to midlevel providers at community health centers were excluded.

**Measure ID:** HCUP\_38, 60901031

**Measure Title:** Deaths per 1,000 adult hospital admissions with pneumonia

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Inpatient Quality Indicators (IQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, bed size of hospital, expected primary payer, location of hospital, location of residence, median household income of patient's ZIP Code, control of hospital, region, teaching status

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** All discharges age 18 and over with principal diagnosis code of pneumonia, excluding patients transferring to another short-term hospital, obstetric admissions, and cases with a missing discharge disposition

**Numerator:** Subset of the denominator who died

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** NTBSS\_1, 60901041

**Measure Title:** Patients with tuberculosis who completed a curative course of treatment within 1 year of initiation of treatment

**Measure Source:** American Thoracic Society Centers for Disease Control and Prevention (CDC), Division of Tuberculosis Elimination

**Table Description:**

- Geographic Representation: National and State
- Years Available: National: 2000 to 2015; State: 2008 to 2015
- Population Subgroups: Age, ethnicity, race, gender

**Data Source:** CDC, National Tuberculosis Surveillance System (NTSS)

**Denominator:** U.S. resident population with verified tuberculosis who are eligible to complete therapy within 1 year

**Numerator:** Subset of the denominator who completed therapy within 1 year

**Comments:** Race designations changed in 2003; estimates in 2003 and later differ slightly from estimates in previous reports.

More information regarding current tuberculosis treatment guidelines is available from:

American Thoracic Society/Centers for Disease Control and Prevention/Infectious Diseases Society of America. Treatment of tuberculosis. *American Journal of Respiratory Critical Care Medicine*, 2003;167:603-62

For a discussion of completion of tuberculosis therapy, refer to Technical Notes of the publication:

**Reported tuberculosis in the United States, 2016**, available at <http://www.cdc.gov/tb/statistics/reports/2016/default.htm>.

### 6.9.3. Management of Asthma

**Measure ID:** MEPS\_1, 60903011

**Measure Title:** People with asthma who are taking daily or almost daily preventive medicine

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

#### **Table Description:**

- Geographic Representation: National
- Years Available: 2003 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population who currently have active asthma

**Numerator:** Subset of the denominator who report taking preventive medicine on a daily or almost daily basis

**Comments:** Estimates are age-adjusted to the 2000 U.S. standard population using four age groups: 0-17, 18-44, 45-64, and 65 and over. Excludes cases for which information on presence of asthma is missing.

**Measure ID:** NHIS\_13, 60903041

**Measure Title:** People with asthma who received written asthma management plans from their health care provider

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

#### **Table Description:**

- Geographic Representation: National
- Years Available: 2009-2013
- Population Subgroups: Activity limitation, age, education, health insurance, income, race, ethnicity, location of residence, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Denominator:** U.S. civilian noninstitutionalized population with asthma

**Numerator:**

Subset of the Denominator: who report receiving written asthma management plans from their health provider

**Comments:** Estimates are age adjusted to the 2000 U.S. standard population. Age data and health insurance data for those aged 65 and over are unadjusted.

**Measure ID:** NHIS\_24, 60903043

**Measure Title:** Persons with current asthma who received education about appropriate response to an asthma episode

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2011-2013
- Population Subgroups : Activity limitations, age, education, race/ethnicity, geographic location (residence), health insurance, income, race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Denominator:** Persons with current asthma

**Numerator:** Subset of the Denominator: who reported they received appropriate response to an asthma episode

**Comments:** Estimates are not age adjusted.

**Measure ID:** NHIS\_25, 60903044

**Measure Title:** Persons with current asthma who were advised to change things to reduce exposure to irritants

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2011-2013
- Population Subgroups: Activity limitations, age, education, race/ethnicity, geographic location (residence), health insurance, income, race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Denominator:** Persons with current asthma

**Numerator:** Subset of the Denominator: who reported they were advised to change things to reduce exposure to irritants

**Comments:** Estimates are not age adjusted.

## Chapter 7. Healthy Living

### 7.1. Maternal and Child Health

**Measure ID:** NVSS\_16, 70101011

**Measure Title:** Live-born infants with low birth weight (less than 2,500 grams)

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2007-2017
- Population Subgroups: Age, sex, location, race, ethnicity

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Denominator:** Population of live-born infants

**Numerator:** Live-born infants whose birth weight was under 2,500 grams

**Comments:** Excluded from these analyses are States that did not use the 2003 Revision to Birth Certificate: Alabama, Alaska, Arizona, Arkansas, Connecticut, District of Columbia, Hawaii, Illinois, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, Nevada, New Jersey, North Carolina, Oklahoma, Rhode Island, Utah, Virginia, West Virginia, and Wisconsin.

**Measure ID:** NVSS\_13, 70101021

**Measure Title:** Women who completed a pregnancy in the last 12 months who received early and adequate prenatal care

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2016

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Denominator:** Live births occurring to residents in those States that use the 2003 revised birth certificate

**Numerator:** Subset of the denominator who received early and adequate prenatal care

**Comments:** Excluded from these analyses are the following States that did not use the 2003 Revision to Birth Certificate: Alabama, Alaska, Arizona, Arkansas, Connecticut, Hawaii, Louisiana, Maine, Massachusetts, Minnesota, Mississippi, New Jersey, North Carolina, Rhode Island, Virginia, West Virginia, and Wisconsin.

**Measure ID:** NVSS\_14, 70101031

**Measure Title:** Infant mortality per 1,000 live births, birth weight less than 1,500 grams

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)-Linked Birth and Infant Death Data

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2006-2016
- Population Subgroups: Age, sex, location, race, ethnicity

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

Denominator:

As appropriate to the birth weight:

For birth weights less than 1500 grams, population of live births, birth weight less than 1,500 grams

**Numerator:** Subset of the denominator who died within the first year

**Measure ID:** NVSS\_14, 70101033

**Measure Title:** Infant mortality per 1,000 live births, birth weights 1,500-2,499 grams

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)-Linked Birth and Infant Death Data

**Table Description:**

- Geographic Representation: National



- Years Available: National: 2006-2016
- Population Subgroups: Age, sex, location, race, ethnicity

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

Denominator:

As appropriate to the birth weight:

For birth weights 1,500-2,499 grams, population of live births, birth weights 1,500-2,499 grams

**Numerator:** Subset of the denominator who died within the first year

**Measure ID:** NVSS\_14, 70101034

**Measure Title:** Infant mortality per 1,000 live births, birth weights 2,500 grams or more

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)-Linked Birth and Infant Death Data

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2006-2016
- Population Subgroups: Age, sex, location, race, ethnicity

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

Denominator:

As appropriate to the birth weight:

For birth weights 2,500 grams or more, population of live births, birth weights 2,500 grams or more.

**Numerator:** Subset of the denominator who died within the first year

**Measure ID:** NVSS\_14, 70101035

**Measure Title:** Infant deaths per 1,000 live births, all birth weight

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)-Linked Birth and Infant Death Data

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2006-2016
- Population Subgroups: Age, sex, location, race, ethnicity

**Data Source:** National and State: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

Denominator:

As appropriate to the birth weight:

For all birth weights, population of live births, all birth weights.

**Numerator:** Subset of the denominator who died within the first year

**Measure ID:** NIS\_15, 70101051

**Measure Title:** Exclusive breastfeeding through 3 months

**Measure Source:** Healthy People 2020 MICH-21.4

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2009-2015
- Population Subgroups: Income, race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS) National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized children aged 19 to 35 months born in the same cohort year

**Numerator:** Number of caregivers of children born in a cohort year who indicate their child was exclusively breastfed (given nothing but breast milk) through 3 months of age

**Comments:** This measure is referred to as measure 2020 MICH-21.4 in Healthy People 2020 documentation, [https://www.healthypeople.gov/node/4862/data\\_details](https://www.healthypeople.gov/node/4862/data_details).

Infants are considered to have been breastfed exclusively through 3 months if the responses to questions about age when first fed formula AND age when first fed something other than breast milk or formula both indicate that the child was 3 month old when either occurred OR that the child has never had formula nor anything but breast milk.

Using a computer-generated list, the National Immunization Survey (NIS) identifies households across the United States with children aged 19-35 months and interviews the person who is most knowledgeable about the child's immunization status ("caregiver"). Survey years are combined to calculate breastfeeding statistics by year of child's birth (cohort) instead of the year in which the participant was surveyed. To calculate breastfeeding indicators by year of child birth, data are combined across all relevant survey years. Because children are 19-35 months of age at the time of the parent interview, each survey year represents children born over three years. For example, breastfeeding data for children in the 2006 birth cohort are obtained from NIS 2007, 2008, and 2009.

## 7.2. Lifestyle Modification

**Measure ID:** MEPS\_15, 70201011

**Measure Title:** Adult smokers with a checkup who received advice to quit smoking

**Measure Source:** Healthy People 2010

### Table Description:

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, and U.S. born

### Data Source:

National: Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over who are current smokers and who had a routine checkup in the past 6 or 12 months, as appropriate

**Numerator:** Subset of the denominator who indicated they had received advice to quit smoking

**Comments:** The National Table Description reports data from the MEPS Self-Administered Questionnaire (SAQ). Nonrespondents and "Don't Know" responses were excluded from the analysis.

The national estimates are age-adjusted to the 2000 U.S. standard population using three age groups: 18-44, 45-64, and 65 and over.

This measure is referred to as measure 1-3c in Healthy People 2010 documentation.

The allowable responses to MEPS question about smoking changed in 2003. Therefore, reported national rates may not be comparable with earlier years.

**Measure ID:** NHIS\_26, 70201021

**Measure Title:** Adult smokers who attempt to quit in the past year

**Measure Source:** Centers for Disease Control and Prevention (CDC)/National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2011-2016
- Population Subgroups: Race, income, education, ethnicity, age, gender, employment, insurance, Medicaid/CHIP, health status, nativity

**Data Source:** National Health Interview Survey (NHIS), CDC/NCHS

**Denominator:** Number of persons aged 18 years and over who are current cigarette smokers or former smokers abstinent less than or equal to 365 days

**Numerator:** Subset of the Denominator: who quit smoking for at least one day

**Comments:** From the Healthy People 2020 objective TU-4.1.

Adults are classified as current smokers if they report having smoked 100 or more cigarettes in their life and currently smoking cigarettes “everyday” or “some days.”

The methodology counts both successful (currently abstinent less than one year) and failed cessation attempts in the last 12 months.

**Measure ID:** NHIS\_27, 70201022

**Measure Title:** Adults who ever smoked and quitted recently

**Measure Source:** Centers for Disease Control and Prevention (CDC)/National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2011-2016
- Population Subgroups: Race, income, education, ethnicity, age, gender, employment, insurance, Medicaid/CHIP, health status, nativity

**Data Source:** National Health Interview Survey (NHIS), CDC/NCHS

**Denominator:** Number of persons aged 18 years and over who have ever smoked 100 cigarettes, who do not smoke now, and last smoked less than or equal to 1 year ago, and current smokers who initiated smoking at least 2 years ago

**Numerator:** Subset of the Denominator: who has stopped smoking for at least 6 months by the time of interview

**Comments:** From the Healthy People 2020 objective TU-5.1.

This indicator measures the proportion of current adult smokers aged 18 years and over who are eligible to be a recent quitter who have had recent smoking cessation success. Persons who are eligible to quit smoking in the last year include persons who have ever smoked 100 cigarettes and who report that they stopped smoking within the past 1 year as well as current (every day or someday) smokers who initiated smoking 2 or more years ago.

Time since initiation is determined by subtracting the age reported for when the respondent first started smoking regularly from the respondent's current age. If the difference is 2 years or greater these persons are considered to be eligible to be a recent quitter. Persons who responded that they were 85 years or older when they first started smoking regularly are counted as initiating at age 85.

Persons who reported that they stopped smoking in the past 1 year can report time since quitting in days, weeks, months, and years and are included in the Denominator: if they reported as follows: (1-95 days; 1-52 weeks; 1-12 months; 1 year). Recent success in smoking cessation included persons who reported that they stopped smoking 6 months to 1 year ago and are included in the **Numerator:** if they reported as follows: (27-52 weeks; 6-12 months; 1 year).

**Measure ID:** NAMCS\_17, 70201023

**Measure Title:** Tobacco cessation medications prescribed or tobacco education that was delivered for tobacco use among adults age 18 and over per 1,000 population

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2008-2009 to 2012-2013
- Population Subgroups: sex, race/ethnicity, health insurance status, geographic location (patient)

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Denominator:** Physician office visits by adults age 18 and over

**Numerator:** Physician office visits by adults age 18 and over who were screened positive for current tobacco use and received tobacco cessation counseling or tobacco cessation medication

**Measure ID:** NHANES\_6, 70201031

**Measure Title:** Children ages 2-19 who were overweight and who were told by a doctor they were overweight

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS)

#### Table Description

- Geographic Representation: National
- Years Available: 2001-2004 to 2013-2016
- Population Subgroups: Age, sex, family income, race, ethnicity

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health and Nutrition Examination Survey (NHANES)

**Denominator:** People ages 2-19 with a body mass index (BMI) greater than or equal to the 95th percentile on the BMI-for-age, sex-specific 2000 CDC growth charts for the United States

**Numerator:** Subset of the denominator who reported they were told by a doctor that they were overweight

**Measure ID:** NHANES\_5, 70201032

**Measure Title:** Adults age 20 and over with obesity who had been told by a doctor or health professional that they were overweight

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS)

#### Table Description:

- Geographic Representation: National
- Years Available: 2001-2004 to 2013-2016
- Population Subgroups: Age, education, sex, income, race, ethnicity

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health and Nutrition Examination Survey (NHANES)

**Denominator:** Adults age 20 and over with a body mass index (BMI) of 30 or greater

**Numerator:** Subset of the denominator who reported they were told by a doctor that they were overweight

**Comments:** Estimates are age adjusted to the 2000 U.S. standard population, except where indicated. Total, race, ethnicity, gender, and family income are adjusted using three age groups: 20-44, 45-64, and 65 and over; education is adjusted using age groups 25-44, 45-64, and 65 and over.

**Measure ID:** NHANES\_1, 70201041

**Measure Titles:** Children ages 2-19 with obesity

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2001-2004 to 2013-2016
- Population Subgroups: Age, education, sex, income, race/ethnicity

**Data Source:** CDC, NCHS, National Health and Nutrition Examination Survey (NHANES)

**Denominator:** Children ages 2-19 years

**Numerator:** Subset of the denominator with a body mass index (BMI) greater than or equal to the 95th percentile on the BMI-for-age, sex-specific 2000 CDC growth charts for the United States

**Comments:** Used new body mass index definition instead of using BMXBMI variable to calculate obesity.

**Measure ID:** MEPS\_10, 70201051

**Measure Title:** Adults with obesity who ever received advice from a health provider to exercise more

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over with a body mass index (BMI) of 30 or greater, excluding pregnant female

**Numerator:** Subset of the denominator who reported they were given advice about exercise by a doctor or health professional

**Comments:** Body mass index is based on reported height and weight. Estimates are age-adjusted to the 2000 U.S. standard population using three age groups: 18-44, 45-64, and 65 and over.

Nonrespondents and “Don’t Know” responses were excluded from the analysis.

**Measure ID:** MEPS\_11, 70201053

**Measure Title:** Adults with obesity who did not spend half an hour or more in moderate or vigorous physical activity at least five times a week

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over with a body mass index (BMI) of 30 or greater, excluding pregnant female

**Numerator:** Subset of the denominator who did not spend half an hour or more in moderate or vigorous physical activity at least five times a week

**Comments:** Body mass index is based on reported height and weight. Estimates are age-adjusted to the 2000 U.S. standard population using three age groups: 18-44, 45-64, and 65 and over.

**Measure ID:** MEPS\_12, 70201061

**Measure Title:** Children ages 2-17 for whom a health provider ever gave advice about the amount and kind of exercise, sports, or physically active hobbies they should pursue

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)



**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: Age, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population ages 2-17

**Numerator:** Subset of the denominator for whom a health provider gave advice within the past 2 years about the amount and kind of exercise, sports, or physically active hobbies they should pursue

**Comments:** Estimates exclude nonrespondents to the question: “Has a doctor or other health provider ever given advice about amount and kind of exercise, sports, or physically active hobbies you should have?” “Don’t Know” responses were also excluded.

**Measure ID:** MEPS\_14, 70201071

**Measure Title:** Adults with obesity who ever received advice from a health provider about eating fewer high-fat or high-cholesterol foods

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over with a body mass index (BMI) of 30 or greater, excluding pregnant female

**Numerator:** Subset of the denominator who reported they were advised by a doctor or health professional about restricting foods high in fat and cholesterol

**Comments:** Body mass index is based on reported height and weight. Estimates are age-adjusted to the 2000 U.S. standard population using three age groups: 18-44, 45-64, and 65 and over. Nonrespondents and “Don’t Know” responses were excluded from the analyses.

**Measure ID:** MEPS\_13, 70201081

**Measure Title:** Children ages 2-17 for whom a health provider ever gave advice about healthy eating

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: Age, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population ages 2-17

**Numerator:** Subset of the denominator for whom a health provider gave advice within the past 2 years about healthy eating

**Comments:** Estimates exclude nonrespondents and “Don’t Know” responses.

**Measure ID:** MEPS\_72, 70201091

**Measure Title:** Adults with obesity

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 – 2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over

**Numerator:** Adults with a body mass index (BMI) of 30 or greater, excluding pregnant women

**Comments:** Race, ethnicity, family income, and education characteristics are those of the family reference person and are used to characterize the entire family unit.

**Measure ID:** MEPS\_73, 70201101

**Measure Title:** Adults who did not spend half an hour or more in moderate or vigorous physical activity at least five times a week

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2011-2016
- Population Subgroups: Activity limitations, age, education, employment status, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over

**Numerator:** Subset of the denominator who did not spend half an hour or more in moderate or vigorous physical activity at least five times a week

**Comments:** Estimates are age-adjusted to the 2000 U.S. standard population using three age groups: 18-44, 45-64, and 65 and over.

### 7.3. Functional Status Preservation and Rehabilitation

**Measure ID:** OASIS\_1, 70301011

**Measure Title:** Home health care patients whose ability to walk or move around improved

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, States
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with a discharge during the year, excluding episodes for which the patient, at start/resumption of care, was able to ambulate independently, episodes that end with inpatient facility transfer or death, or patient is nonresponsive

**Numerator:** Number of home health quality episodes where the value recorded on the discharge assessment indicates less impairment in ambulation/locomotion at discharge than at start (or resumption) of care

**Comments:** The OASIS instrument measures ambulation or locomotion ability on a 7-level scale from 0 (full, independent ambulation) to 6 (bedfast). Further information about HHQI measures is available at <http://wwwcmshhsgov/HomeHealthQualityInits/>. The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted.

**Measure ID:** OASIS\_2, 70301021

**Measure Title:** Home health care patients whose ability to get in and out of bed improved

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, chronic conditions (Beginning with 2013)

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with a discharge during the reporting period, excluding episodes for which the patient, at start/resumption of care, was able to transfer independently, episodes that end with inpatient facility transfer or death, or patient is nonresponsive

**Numerator:** Number of home health quality episodes where the value recorded on the discharge assessment indicates less impairment in bed transferring at discharge than at start (or resumption) of care

**Comments:** The OASIS instrument measures transfers on a 6-level scale from 0 (independent) to 5 (bedfast and unable to turn or position) Further information about HHQI measures is available at <http://wwwcmshhsgov/HomeHealthQualityInits/>. The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted.

**Measure ID:** OASIS\_3, 70301031

**Measure Title:** Home health care patients whose bathing improved

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with a discharge during the reporting period, excluding episodes for which the patient, at start/resumption of care, was able to bath self independently, episodes that end with inpatient facility transfer or death, or patient is nonresponsive

**Numerator:** Number of home health quality episodes where the value recorded on the discharge assessment indicates less impairment in bathing at discharge than at start (or resumption) of care

**Comments:** The OASIS instrument measures bathing ability on a 7-level scale from 0 (fully independent) to 6 (completely dependent). Further information about HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>. The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted.

**Measure ID:** OASIS\_13, 70301041

**Measure Title:** Home health patients who had improvement in toileting

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: None
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with a discharge during the reporting period, excluding episodes for which the patient, at start/resumption of care, was able to get to and from and on and off the toilet without assistance or supervision, episodes that end with inpatient facility transfer or death, or patient is nonresponsive

**Numerator:** Number of home health quality episodes where the value recorded on the discharge assessment indicates less impairment in getting to and from and on and off the toilet

at discharge than at start (or resumption) of care

**Comments:** The OASIS instrument measures toilet hygiene on a 4-level scale from 0 (independent) to 3 (completely dependent). Further information about risk adjustment and the HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>. The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted.

**Measure ID:** MDS\_2, 70301051

**Measure Title:** Long-stay nursing home residents whose need for help with daily activities increased

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013 to 2016
- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and metropolitan status

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare chronic care nursing home long-stay residents with a valid target assessment and a valid prior assessment, excluding residents who cannot show decline due to maximum values on prior assessments; residents with comatose status, residents with a less than 6-month prognosis; residents receiving hospice care; and residents with unknown status for these conditions

**Numerator:** Subset of the denominator with worsening performance scores in at least two or more of the four late-loss activities of daily living (bed mobility, transfers, toilet use, and eating) or who are at have a worsening of at least 2 on one of the four activities

**Comments:** Long stay quality measures include all residents in an episode whose cumulative days in the facility is greater than or equal to 101 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User’s manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

**Measure ID:** MDS\_1, 70301061

**Measure Title:** Long-stay nursing home residents whose ability to move independently worsened

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013 to 2016
- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and metropolitan status

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare chronic care nursing home long-stay residents with a valid target assessment and a valid prior assessment. Excludes: residents with missing values on the target assessment; residents for which assessment performance indicated “total dependence” or “activity did not occur”; residents with missing values on the prior assessment; residents with comatose status or end-stage disease; residents receiving hospice care; and residents with unknown status for these conditions on the target assessment

**Numerator:** Subset of the denominator for which locomotion self-performance scores got worse compared with a prior assessment

**Comments:** Long stay quality measures include all residents in an episode whose cumulative days in the facility is greater than or equal to 101 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User’s manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

## 7.4. Supportive and Palliative Care

**Measure ID:** MDS\_4, 70401011

**Measure Title:** Long-stay nursing home residents who have moderate to severe pain

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013 to 2016
- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and metropolitan status

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare chronic care nursing home long-stay residents with a valid target assessment, excluding admission assessments and assessments with inconsistent or missing responses

**Numerator:** Subset of the denominator where resident reports almost constant or frequent pain and an episode of moderate pain, or any frequency of very severe, horrible pain on the target assessment

**Comments:** Long stay quality measures include all residents in an episode whose cumulative days in the facility is greater than or equal to 101 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User’s manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

**Measure ID:** MDS\_9, 70401021

**Measure Title:** Long-stay nursing home residents with too much weight loss

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: National and State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and Metropolitan status



**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Chronic Conditions Data Warehouse (CCW), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare chronic care nursing home long-stay residents with a valid target assessment and a valid prior assessment, excluding admission assessments and residents with missing weight loss data

**Numerator:** Subset of the denominator who experienced weight loss of 5 percent or more in the last 30 days or 10 percent or more in the last 6 months

**Comments:** Long stay quality measures include all residents in an episode whose cumulative days in the facility is greater than or equal to 101 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User's manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

**Measure ID:** MDS\_7, 70401031

**Measure Title:** Low-risk long-stay nursing home residents who lose control of their bowel or bladder

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: National and State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and Metropolitan status

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Chronic Conditions Data Warehouse (CCW), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare chronic care nursing home residents with a valid target assessment who do not qualify as high risk, excluding admission assessments, residents with missing assessment values, residents with comatose status, residents who had an indwelling catheter or ostomy, or residents with unknown status for these conditions

**Numerator:** Subset of the denominator who indicated frequent or constant loss of control of bowels or bladder on the target assessment

**Comments:** Long stay quality measures include all residents in an episode whose cumulative days in the facility is greater than or equal to 101 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User’s manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

**Measure ID:** MDS\_17, 70401041

**Measure Title:** Long-stay nursing home residents who were physically restrained

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: National and State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and Metropolitan status

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Chronic Conditions Data Warehouse (CCW), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare chronic care long-stay residents with a valid target assessment or assessments with missing values for several classes of restraints

**Numerator:** Subset of the denominator who were physically restrained on target assessment by trunk and limb restraints or by chair use

**Comments:** Long stay quality measures include all residents in an episode whose cumulative days in the facility is greater than or equal to 101 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User’s manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

**Measure ID:** MDS\_16, 70401051

**Measure Title:** Short-stay nursing home residents with moderate to severe pain

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: National and State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and Metropolitan status

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Chronic Conditions Data Warehouse (CCW), Residence Assessment Files, MDS 3.0

**Denominator:** Post-acute care patients with a valid assessment, excluding assessments with uncompleted data, or where pain intensity was zero in the last 5 days

**Numerator:** Subset of the denominator with almost constant or frequent pain and at least one episode of moderate to severe pain, or severe/horrible pain of any frequency

**Comments:** Short stay quality measures include all residents in an episode whose cumulative days in the facility is less than or equal to 100 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User's manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

**Measure ID:** OASIS\_5, 70401061

**Measure Title:** Home health care patients whose shortness of breath (dyspnea) decreased

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with a discharge during the year, excluding episodes for which the patient, at start/resumption of care, was not short of breath at any time, episodes that end with inpatient facility transfer or death

**Numerator:** Subset of the denominator in which a person's dyspneic status improved compared with a prior assessment in the episode

**Comments:** The OASIS instrument measures dyspneic status on a 4-level scale from 0 (not short of breath) to 3 (dyspnea at rest). Further information on HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>. The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted.

**Measure ID:** OASIS\_8, 70401081

**Measure Title:** Home health care patients who stayed at home after an episode of home health care

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with a discharge or transfer to inpatient facility during the year, excluding episodes that end in patient death

**Numerator:** Number of home health episodes where the assessment completed at the discharge indicates the patient remained in the community after discharge

**Comments:** Further information about HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>. The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted.

**Measure ID:** OASIS\_17, 70401091

**Measure Title:** Home health patients who had improvement in upper body dressing

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with a discharge during year, excluding episodes for which the patient, at start/resumption of care, was able to dress upper body without assistance or supervision, episodes that end with inpatient facility transfer or death, or patient is nonresponsive

**Numerator:** Number of home health quality episodes where the value recorded on the discharge assessment indicates less impairment in dressing their upper body at discharge than at start (or resumption) of care

**Comments:** The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted. Further information about HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>.

**Measure ID:** OASIS\_14, 70401101

**Measure Title:** Home health patients who had improvement in confusion frequency.

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with a discharge during year, excluding episodes for which the patient, at start/resumption of care, was not confused at any time, episodes that end with inpatient facility transfer or death, or patient is nonresponsive

**Numerator:** Number of home health quality episodes where the discharge assessment indicates the patient is confused less often at discharge than at start (or resumption) of care

**Comments:** The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted. Further information about risk adjustment and the HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>.

**Measure ID:** OASIS\_9, 70401111

**Measure Title:** Home health care patients whose pain when moving around decreased

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with a discharge during year, excluding episodes for which the patient, at start/resumption of care, had no pain reported, episodes that end with inpatient facility transfer or death, or patient is nonresponsive

**Numerator:** Number of home health quality episodes where the value recorded on the discharge assessment indicates less frequent pain at discharge than at start (or resumption) of care

**Comments:** The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted. Further information about HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>.

## 7.5. Clinical Preventive Services

### 7.5.1. Adult Preventive Care

**Measure ID:** NHIS\_1, 70501011

**Measure Title:** Women ages 50-74 who received a mammogram in the last 2 years

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, States
- Years Available: State: 2014; National: 2000- 2015
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

State: CDC, Behavioral Risk Factor Surveillance System (BRFSS)

**Denominator:** Number of women ages 50-74

**Numerator:** Subset of Denominator: who report receiving a mammogram within the last 2 years

**Comments:** National data is referred to as measure C-17 in Healthy People 2020 documentation. Estimates are age adjusted to the 2000 U.S. standard population using two age groups: 50-64 and 50-74.

**Measure ID:** NPCR\_1, 70501012

**Measure Title:** Breast cancer diagnosed at advanced stage in women age 40 and over

**Measure Source:** Centers for Disease Control and Prevention (CDC) National Program of Cancer Registries (NPCR) and the National Cancer Institute (NCI) Surveillance, Epidemiology, and End Results Program (SEER), United States Cancer Statistics

**Table Description:**

- Geographic Representation: National, States
- Years Available: States: 2004 to 2015; National: 2000 to 2015
- Population Subgroups: Age, race, ethnicity

**Data Source:** CDC NPCR, NCI SEER United States Cancer Statistics

**Denominator:** Women age 40 and over

**Numerator:** Subset of the denominator with new diagnosis of advanced stage invasive breast cancer; advanced stage is defined as regional or distant stage

**Comments:** Advanced stage for this table refers to regional (spread to regional lymph nodes) and distant (cancer has metastasized) Surveillance, Epidemiology, and End Results (SEER) summary stage.

Historically, cancer stage has been collected using three different staging systems, each with a different purpose, dataset, and rules. The American Joint Committee on Cancer (AJCC), in collaboration with North American standard setters, developed a unified dataset that combines and standardizes the information needed to assign stage in the AJCC (Tumor, Node, Metastasis, or TNM), SEER (Extent of Disease, [EOD]), and Summary Stage (SS) 1977 and 2000 systems and to derive the TNM stage group, EOD, and SS applicable to each cancer site beginning with cancers diagnosed in 2004.

The 2005 data were adjusted for areas affected by Hurricanes Katrina and Rita. Hurricanes Katrina and Rita had a huge impact on the populations within the Gulf Coast region for the second half of 2005. Katrina also significantly affected the Louisiana Cancer Registry's ability to report data for that time period. In an effort to provide the most accurate and complete data and statistics possible, the NPCR and SEER programs made several changes for the releases of data and statistics for 2005.

**Measure ID:** NHIS\_2, 70501021

**Measure Title:** Women ages 21-65 who received a Pap smear in the last 3 years

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, States
- Years Available: State: 2014; National: 2000- 2015
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

State: CDC, Behavioral Risk Factor Surveillance System (BRFSS)

**Denominator:** U.S. female civilian noninstitutionalized population ages 21-65

**Numerator:** Subset of Denominator: women who have not had a hysterectomy and who report receiving a Pap smear within the last 3 years

**Comments:** This measure is referred to as measure C-15 in Healthy People 2020 documentation. Estimates are age adjusted to the 2000 U.S. standard population using three age groups: 21-34, 35-44, and 45-65.

**Measure ID:** NPCR\_3, 70501022

**Measure Title:** Cervical cancer diagnosed at advanced stage per 100,000 women age 20 and over

**Measure Source:** Centers for Disease Control and Prevention (CDC) National Program of Cancer Registries (NPCR) and the National Cancer Institute (NCI) Surveillance, Epidemiology, and End Results Program (SEER), United States Cancer Statistics



**Table Description:**

- Geographic Representation: National, States
- Years Available: State: 2004 to 2015; National: 2000 to 2015
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National & State: CDC NPCR, NCI SEER, United States Cancer Statistics

**Denominator:** Number of women age 20 and over

**Numerator:** Subset of denominator with a new invasive cervical cancer diagnosed in the survey years

**Comments:** Invasive cervical cancer is defined as cancer that has spread from the surface of the cervix to tissue deeper in the cervix or to other parts of the body. Estimates include all invasive tumors.

National estimates are age-adjusted to the 2000 US standard population (19 age groups—Census P25-1130) State estimates are age-adjusted to the 2000 US standard million population by 5-year age groups.

Historically, cancer stage has been collected using three different staging systems having three different purposes, datasets, and rules. The American Joint Committee on Cancer (AJCC), in collaboration with North American standard setters, has developed a unified dataset that combines and standardizes the information needed to assign stage in the AJCC (Tumor, Node, Metastasis, [TNM]), SEER (Extent of Disease, [EOD]), and Summary Stage (SS) 1977 and 2000 systems, and to derive the TNM stage group, EOD, and SS applicable to each cancer site beginning with cancers diagnosed in 2004.

The 2005 data were adjusted for areas affected by Hurricanes Katrina and Rita. Hurricanes Katrina and Rita had a huge impact on the populations within the Gulf Coast region for the second half of 2005. Katrina also significantly affected the Louisiana Cancer Registry's ability to report data for that time period. In an effort to provide the most accurate and complete data and statistics possible, the NPCR and SEER programs made several changes for the releases of data and statistics for 2005.

**Measure ID:** NHIS\_3, 70501031

**Measure Title:** Adults ages 50-75 who received any type of colorectal cancer screening

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2000- 2015; State: 2013-2015
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

State: CDC, Behavioral Risk Factor Surveillance System (BRFSS)

**Denominator:** U.S. civilian noninstitutionalized population ages 50 to 75 years

**Numerator:** Number of persons aged 50 to 75 years who have had a blood stool test in the past year, sigmoidoscopy in the past 5 years and blood stool test in the past 3 years, or a colonoscopy in the past 10 years

**Comments:** This measure is referred to as measure C-16 in Healthy People 2020 documentation. Estimates are age adjusted to the 2000 U.S. standard population using two age groups: 50-64, 65-75.

**Measure ID:** NPCR\_2, 70501032

**Measure Title:** Colorectal cancer diagnosed at advanced stage per 100,000 adults age 50 and over

**Measure Source:** Centers for Disease Control and Prevention (CDC) National Program of Cancer Registries (NPCR) and the National Cancer Institute (NCI) Surveillance, Epidemiology, and End Results Program (SEER), United States Cancer Statistics

**Table Description:**

- Geographic Representation: National, States
- Years Available: State: 2004 to 2015; National: 2000 to 2015
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National and State: CDC NPCR, NCI SEER, United States Cancer Statistics

**Denominator:** U.S. population age 50 and over

**Numerator:** Subset of denominator with new colorectal cancers diagnosed as regional or distant staged cancers in the survey years

**Comments:** All rates are age-adjusted to the 2000 standard US population by 5-year age groups, except where indicated. State estimates are per 100,000 population, age 50 and over, and are age-adjusted to the 2000 US standard million population by 5-year age groups.

The 2005 data were adjusted for areas affected by Hurricanes Katrina and Rita. Hurricanes Katrina and Rita had a huge impact on the populations within the Gulf Coast region for the second half of 2005. Katrina also significantly affected the Louisiana Cancer Registry's ability to report data for that time period. In an effort to provide the most accurate and complete data and statistics possible, the NPCR and SEER programs made several changes for the releases of data and statistics for 2005.

Advanced stage refers to tumors diagnosed at regional or distant stage. Regional stage is defined as a neoplasm that has extended beyond the limits of the organ of origin, either directly into surrounding organs or tissues or into regional lymph nodes. Distant stage is defined as a neoplasm that has spread to parts of the body remote from the primary tumor, either by direct extension or by discontinuous metastasis.

Cancer stage historically has been collected using three different staging systems having three different purposes, datasets, and rules. The American Joint Committee on Cancer (AJCC), in collaboration with North American standard setters, has developed a unified dataset that combines and standardizes the information needed to assign stage in the AJCC (Tumor, Node, Metastasis, [TNM]), SEER (Extent of Disease [EOD]), and Summary Stage (SS) 1977 and 2000

systems and to derive the TNM stage group, EOD, and SS applicable to each cancer site beginning with cancers diagnosed in 2004.

**Measure ID:** NHIS\_4, 70501041

**Measure Title:** Adults who received a blood pressure measurement in the last 2 years and can state whether their blood pressure was normal or high

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National
- Years Available: 2003-2017
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Denominator:** U.S. adult population age 18 and over

**Numerator:** Subset of the Denominator: who had their blood pressure measured in the last 2 years and can state whether their blood pressure was normal or high

**Comments:** This measure is referred to as measure HDS-4 in Healthy People 2020 documentation. Estimates are age adjusted to the 2000 U.S. standard population. Age data and health insurance data for the population age 65 and over are unadjusted.

**Measure ID:** NHIS\_5, 70501042

**Measure Title:** Adults who received a blood cholesterol measurement in the last 5 years

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, States
- Years Available: State: 2013-2015; National: 1998 - 2017
- Population Subgroups: Activity limitation, age, education, health insurance, income, race/ethnicity, geographic location (residence)

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

State: CDC, Behavioral Risk Factor Surveillance System (BRFSS)

**Denominator:** U.S. adult population age 18 and over

**Numerator:** Subset of the Denominator: who have had their cholesterol checked within the previous 5 years

**Comments:** Data are age adjusted to the 2000 U.S. standard population. Age-adjusted rates are weighted sums of age-specific rates. This measure is referred to as measure HDS-6 in Healthy People 2020 documentation.

**Measure ID:** NHIS\_8, 70501061

**Measure Title:** Adults ages 18-64 at high risk (e.g., COPD) who received an influenza vaccination in the last flu season

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, States

- Years Available: State: 2013-2015; National: 2009-2017
- Population Subgroups: Activity limitation, age, education, health insurance, income, race, ethnicity, location of residence, sex

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

State: CDC, Behavioral Risk Factor Surveillance System (BRFSS)

**Denominator:** U.S. civilian noninstitutionalized population ages 18-64 who have a high-risk condition

**Numerator:** Subset of the Denominator: who report receiving an influenza vaccination in the last flu season months

**Comments:** This measure is referred to as measure IID-12.6 in Healthy People 2020 documentation. High-risk conditions include diabetes, heart disease, lung disease, kidney disease, liver disease, and cancer. Not all high-risk conditions for complications of influenza can be ascertained by the NHIS (e.g., immunocompromised states), and sample sizes may be too small to estimate. Data are age adjusted to the 2000 U.S. standard population.

**Measure ID:** NHIS\_10, 70501062

**Measure Title:** Adults age 18 and over who received an influenza vaccination in the last flu season

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2017
- Population Subgroups: Activity limitation, age, education, health insurance, income, race, ethnicity, location of residence, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Denominator:** U.S. civilian noninstitutionalized population of adults age 18 and over

**Numerator:** Number of adults age 18 and over who report receiving an influenza vaccination in the last flu season

**Comments:** This measure is referred to as measure IID-12.12 in Healthy People 2020 documentation.

Data are age adjusted to the 2000 U.S. standard population.

**Measure ID:** NHIS\_9, 70501071

**Measure Title:** Adults age 65 and over who received an influenza vaccination in the last 12 months

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, States
- Years Available: State: 2013-2015; National: 2004-2017
- Population Subgroups: Activity limitation, age, education, health insurance, income, race, ethnicity, location of residence, sex

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

State: CDC, Behavioral Risk Factor Surveillance System (BRFSS)

**Denominator:** U.S. civilian noninstitutionalized population of adults age 65 and over

**Numerator:** Number of adults age 65 and over who report receiving an influenza vaccination in the past 12 months

**Comments:** This measure is referred to as measure IID-12.7 in Healthy People 2020 documentation.

Data are age adjusted to the 2000 U.S. standard population.

**Measure ID:** HCUP\_37, 70501081

**Measure Title:** Hospital admissions for immunization-preventable influenza per 100,000 population, age 65 and over

**Measure Source:** Healthy People 2010

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, location of residence, median household income of patient's ZIP Code, region

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates

**Denominator:** U.S. resident population age 65 and over

**Numerator:** Hospitalization of adults age 65 and over with any diagnosis of immunization-preventable influenza, excluding transfers from other institutions

**Comments:** This measure is referred to as measure 1-9c in Healthy People 2010 documentation. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System (ICD-10-CM/PCS). ICD-10-CM codes to identify immunization-preventable influenza include the following: J10.00, J10.01, J10.08, J10.1, J10.2, J10.81, J10.82, J10.83, J10.89, J11.00, J11.08, J11.1, J11.2, J11.81, J11.82, J11.83, and J11.89. Observed (un-adjusted) rates are reported.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** NHIS\_11, 70501091

**Measure Title:** High-risk adults ages 18-64 at who ever received a pneumococcal vaccination

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, States

- Years Available: State: 2013-2015; National: 2000-2017
- Population Subgroups: Activity limitation, age, education, health insurance, income, race, ethnicity, location of residence, sex

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

State: CDC, Behavioral Risk Factor Surveillance System (BRFSS)

**Denominator:** U.S. civilian noninstitutionalized population of adults ages 18-64 with a high-risk condition

**Numerator:** Subset of the Denominator: who report ever receiving a pneumococcal vaccination

**Comments:** This measure is referred to as measure IID-13.2 in Healthy People 2020 documentation.

**Measure ID:** NHIS\_12, 70501101

**Measure Title:** Adults age 65 and over who ever received a pneumococcal vaccination

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, States
- Years Available: State: 2013-2015; National: 2000-2017
- Population Subgroups: Activity limitation, age, education, health insurance, income, race, ethnicity, location of residence, sex

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

State: CDC, Behavioral Risk Factor Surveillance System (BRFSS)

**Denominator:** U.S. civilian noninstitutionalized population of adults age 65 and over

**Numerator:** Subset of the Denominator: who report ever receiving a pneumococcal vaccination

**Comments:** This measure is referred to as measure IID-13.1 in Healthy People 2020 documentation.

Data are age adjusted to the 2000 U.S. standard population.



**Measure ID:** QIO\_15, 70501111

**Measure Title:** Hospital patients who received influenza vaccination

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012 to 2016
- Population Subgroups: Age, sex, race/ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** Hospital patients

**Numerator:** Subset of the denominator who were screened for influenza vaccine status if indicated.

**Comments:** Estimates are calculated using hospital-level scores.

**Measure ID:** QIO\_13, 70501112

**Measure Title:** Hospital patients who received pneumococcal immunization

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2012 to 2015
- Population Subgroups: Age, sex, race/ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** Discharged hospital patients 65 years of age and older, and 5 through 64 years of age who have a high risk condition

**Numerator:** Subset of the denominator who were screened for pneumococcal vaccine status and received pneumococcal vaccine prior to discharge, if indicated

**Comments:** Estimates are calculated using hospital-level scores. Further information on this and other immunization measures is available at <http://www.cms.hhs.gov/HospitalQualityInits/> and

<https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1141662756099>.

**Measure ID:** MEPS\_3c, 70501131

**Measure Title:** Adults who received any preventive dental service in the calendar year

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS). This measure is consistent with but not exactly the same as the *Healthy People 2020* Oral Health Objective OH-8 “Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year.” For example OH-8 includes persons ages 2-18 at or below 200 percent of the Federal poverty level. The QDR measure is for all persons age 65 and over. Information and data for OH-8 are available at <https://www.healthypeople.gov/2020/topics-objectives/topic/oral-health/objectives>.

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: age, gender, race, ethnicity, family income, education, employment status, health insurance, Medicaid/CHIP, residence location, language spoken at home, perceived health status, activity limitations, and U.S. born.

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over

**Numerator:** Subset of denominator who received any preventive dental service in the calendar year. Preventive dental service includes: Cleanings, fluoride, sealants, and periodontal recall visits. For more information, see “Detailed Methods for the Medical Expenditure Panel Survey.”

**Measure ID:** MEPS\_3d, 70501132

**Measure Title:** Adults who had a dental visit in the calendar year

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS). This measure is consistent with but not exactly the same as the *Healthy People 2020* Oral Health Objective OH-7 “Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year.” For example, HP2020 OH-7 includes persons age 2 and over and the estimates are age-adjusted. This measure includes persons age 18 and over and the estimates are not age-adjusted. Information and data for OH-7 are available at <https://www.healthypeople.gov/2020/topics-objectives/topic/oral-health/objectives>.

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: age, gender, race, ethnicity, family income, education, employment status, health insurance, Medicaid/CHIP, residence location, language spoken at home, perceived health status, activity limitations, and U.S. born.

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over

**Numerator:** Subset of denominator who had a dental visit in the calendar year. For more information, see “Detailed Methods for the Medical Expenditure Panel Survey.”

**7.5.2. Childhood Immunization**

**Measure ID:** NIS\_4, 70502011

**Measure Title:** Children ages 19-35 months who received all recommended vaccines

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2009-2016
- Population Subgroups: Race, ethnicity, sex, income

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS) National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population of children ages 19-35 months

**Numerator:** Number of children ages 19-35 months receiving at least 4 doses of diphtheria-tetanus-acellular pertussis (DTaP) vaccine; at least 3 doses of polio vaccine; at least 1 dose of measles-mumps-rubella (MMR) vaccine; at least 3 doses or at least 4 doses of *Haemophilus influenzae* B (Hib) vaccine, depending on product type received; at least 3 doses of hepatitis B vaccine; at least 1 dose of varicella vaccine; and at least 4 doses of pneumococcal conjugate vaccine (PCV).

**Comments:** This is a composite measure; it is referred to as measure IID-8 in Healthy People 2020 documentation. The vaccines included in this measure are based on the corresponding Healthy People 2020 objective. These include at least 4 doses of DTaP vaccine; at least 3 doses of polio vaccine; at least 1 dose of MMR vaccine; at least 3 or at least 4 doses of Hib vaccine, depending on type of vaccine received; at least 3 doses of hepatitis B vaccine; at least 1 dose of

varicella vaccine; and at least 4 doses of PCV. The following vaccines were added to the list of recommended vaccines for children up to 35 months of age but were not added to this measure: influenza vaccine (added in 2004) and hepatitis A vaccine and rotavirus vaccine (both added in 2006).

**Measure ID:** NIS\_5, 70502021

**Measure Title:** Children ages 19-35 months who received 4 doses of diphtheria-tetanus-pertussis vaccine

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2001-2016; State: 2000-2016
- Population Subgroups: Race, ethnicity, sex, income

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population of children ages 19-35 months

**Numerator:** Subset of the denominator receiving at least 4 or more doses of the combination of diphtheria, tetanus, and acellular pertussis antigens

**Comments:** This measure is referred to as measure IID-7.1 in Healthy People 2020 documentation. This baseline measure tracks the number of children ages 19-35 months receiving 4 or more doses of the combination of diphtheria, tetanus, and acellular pertussis antigens, as well as those children who received the combination of diphtheria, tetanus, and pertussis antigens.

Statistical adjustments are made to minimize bias due to (1) lower coverage among children living in households without telephones, (2) discrepancies between vaccinations reported by household compared with immunization providers, and (3) differences in racial/ethnic population distribution in the sample compared with racial/ethnic population distribution at birth.

**Measure ID:** NIS\_6, 70502022

**Measure Title:** Children ages 19-35 months who received 3 or more doses of polio vaccine

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State

- Years Available: National: 2001-2016; State: 2000-2016
- Population Subgroups: Race, ethnicity, sex, income

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population of children ages 19-35 months

**Numerator:** Subset of the denominator receiving at least 3 doses of the polio antigen

**Comments:** This measure is referred to as measure IID-7.5 in Healthy People 2020 documentation.

**Measure ID:** NIS\_7, 70502023

**Measure Title:** Children ages 19-35 months who received at least 1 dose of measles-mumps-rubella vaccine

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2001-2016; State: 2000-2016
- Population Subgroups: Race, ethnicity, sex, income

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population of children ages 19-35 months

**Numerator:** Subset of the denominator receiving at least 1 dose of the combination of measles, mumps, and rubella antigens

**Comments:** This measure is referred to as measure IID-7.4 in Healthy People 2020 documentation.

**Measure ID:** NIS\_8, 70502025

**Measure Title:** Children ages 19-35 months who received 3 doses of hepatitis B vaccine

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2001-2016; State: 2000-2016
- Population Subgroups: Race, ethnicity, sex, income

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population of children ages 19-35 months

**Numerator:** Subset of denominator receiving at least 3 doses of the hepatitis B antigen

**Comments:** This measure is referred to as measure IID-7.3 in Healthy People 2020 documentation.

**Measure ID:** NIS\_9, 70502026

**Measure Title:** Children ages 19-35 months who received 1 dose of varicella vaccine

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2001-2016; State: 2000-2016
- Population Subgroups: Race, ethnicity, sex, income

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population of children ages 19-35 months

**Numerator:** Subset of denominator receiving at least 1 dose of the varicella antigen

**Comments:** This measure is referred to as measure IID-7.6 in Healthy People 2020 documentation.

**Measure ID:** NIS\_2, 70502027

**Measure Title:** Children ages 19-35 months who received 4 or more doses of pneumococcal conjugate vaccine

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2010-2015; State: 2011-2015
- Population Subgroups: Income, race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population of children ages 19-35 months

**Numerator:** Subset of the denominator receiving 4 or more doses of pneumococcal conjugate

**Comments:** This measure is referred to as measure IID-7.7 in Healthy People 2020 documentation.

**Measure ID:** NIS\_1, 70502028

**Measure Title:** Children ages 19-35 months who received a full series of Haemophilus influenzae type B vaccine

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2009-2015; State: 2011-2015
- Population Subgroups: Income, race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population of children ages 19-35 months

**Numerator:** Subset of the denominator receiving a full series of the Haemophilus influenzae B antigen

**Comments:** This measure is referred to as measure IID-7.2 in Healthy People 2020 documentation.

**Measure ID:** NIS\_10, 70502031

**Measure Title:** Adolescents ages 13-15 years who received at least 1 dose of meningococcal conjugate vaccine

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2008-2016; State: 2008-2016
- Population Subgroups: Race, ethnicity, sex, income

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population ages 13-15

**Numerator:** Subset of the denominator who received at least 1 dose of meningococcal conjugate vaccine

**Comments:** This measure is referred to as measure IID-11.3 in Healthy People 2020.

**Measure ID:** NIS\_10, 70502033

**Measure Title:** Adolescents ages 16-17 years who received at least 1 dose of meningococcal conjugate vaccine

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2008-2016; State: 2008-2016
- Population Subgroups: Race, ethnicity, sex, income

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population ages 16-17

**Numerator:** Subset of the denominator who received at least 1 dose of meningococcal conjugate vaccine

**Comments:** This measure is referred to as measure IID-11.3 in Healthy People 2020.

**Measure ID:** NIS\_12, 70502041

**Measure Title:** Adolescents females ages 13-15 who received at least three doses of human papillomavirus vaccine, either quadrivalent or bivalent



**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2008-2016; State: 2008-2016
- Population Subgroups: Race, ethnicity, sex, income

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population of females ages 13-15

**Numerator:** Subset of the denominator who received 3 or more doses of human papillomavirus vaccine

**Comments:** This measure is referred to as measure IID-11.4 in Healthy People 2020 documentation.

**Measure ID:** NIS\_12, 70502042

**Measure Title:** Adolescents females ages 16-17 who received at least three doses of human papillomavirus vaccine, either quadrivalent or bivalent

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2008-2016; State: 2008-2016
- Population Subgroups: Race, ethnicity, sex, income

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population of females ages 16-17

**Numerator:** Subset of the denominator who received 3 or more doses of human papillomavirus vaccine

**Comments:** This measure is referred to as measure IID-11.4 in Healthy People 2020 documentation.

**Measure ID:** NIS\_13, 70502043

**Measure Title:** Adolescents males ages 13-15 who received at least three doses of human papillomavirus vaccine, either quadrivalent or bivalent

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2012-2016; State: 2012-2016
- Population Subgroups: Race, ethnicity, sex, income

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population of males ages 13-15

**Numerator:** Subset of the denominator who received 3 or more doses of human papillomavirus vaccine

**Comments:** This measure is referred to as measure IID-11.4 in Healthy People 2020 documentation.

**Measure ID:** NIS\_13, 70502044

**Measure Title:** Adolescents males ages 16-17 who received at least three doses of human papillomavirus vaccine, either quadrivalent or bivalent

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2012-2016; State: 2012-2016
- Population Subgroups: Race, ethnicity, sex, income

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population of males ages 16-17

**Numerator:** Subset of the denominator who received 3 or more doses of human papillomavirus vaccine

**Comments:** This measure is referred to as measure IID-11.4 in Healthy People 2020 documentation.

**Measure ID:** NIS\_11, 70502045

**Measure Title:** Adolescents ages 13-15 who received at least three doses of human papillomavirus vaccine, either quadrivalent or bivalent

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2012-2016; State: 2012-2016
- Population Subgroups: Race, ethnicity, sex, income

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population ages 13-15

**Numerator:** Subset of the denominator who received 3 or more doses of human papillomavirus vaccine

**Comments:** This measure is referred to as measure IID-11.4 in Healthy People 2020 documentations.

**Measure ID:** NIS\_11, 70502046

**Measure Title:** Adolescents ages 16-17 who received at least three doses of human papillomavirus vaccine, either quadrivalent or bivalent

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2012-2016; State: 2012-2016
- Population Subgroups: Race, ethnicity, sex, income

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population ages 16-17

**Numerator:** Subset of the denominator who received 3 or more doses of human papillomavirus vaccine

**Comments:** This measure is referred to as measure IID-11.4 in Healthy People 2020 documentations.

**Measure ID:** NIS\_14, 70502051

**Measure Title:** Adolescents ages 13-15 who received at least 1 dose of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) since the age of 10 years

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2008-2016; State: 2008-2016
- Population Subgroups: Race, ethnicity, sex, income, geographic location

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population ages 13-15

**Numerator:** Subset of the denominator who received 1 or more doses of Tdap vaccine

**Comments:** This measure is referred to as measure IID-11.1 in Healthy People 2020 documentation.

**Measure ID:** NIS\_14, 70502052

**Measure Title:** Adolescents ages 16-17 who received at least 1 dose of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) since the age of 10 years

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2008-2016; State: 2008-2016
- Population Subgroups: Race, ethnicity, sex, income, geographic location

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population ages 16-17

**Numerator:** Subset of the denominator who received 1 or more doses of Tdap vaccine

**Comments:** This measure is referred to as measure IID-11.1 in Healthy People 2020 documentation.

**Measure ID:** NIS\_3, 70502071

**Measure Title:** Adolescents ages 13-15 years who received at least 2 doses of varicella vaccine

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2008-2016; State: 2008-2016
- Population Subgroups: Income, race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population of adolescents ages 13-15

**Numerator:** Subset of the denominator receiving at least 2 doses of varicella vaccine

**Comments:** This measure is referred to as measure IID-11.2 in Healthy People 2020 documentation.

**Measure ID:** NIS\_3, 70502072

**Measure Title:** Adolescents ages 16-17 years who received at least 2 doses of varicella vaccine

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2008-2016; State: 2008-2016
- Population Subgroups: Income, race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Center for Immunization and Respiratory Diseases (NCIRD), National Immunization Survey (NIS)

**Denominator:** U.S. civilian noninstitutionalized population of adolescents ages 16-17

**Numerator:** Subset of the denominator receiving at least 2 doses of varicella vaccine

**Comments:** This measure is referred to as measure IID-11.2 in Healthy People 2020 documentation.

**Measure ID:** NHIS\_23, 70502061

**Measure Title:** Children ages 6 months to 17 years who received influenza vaccination

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2009-2017
- Population Subgroups: Age, race/ethnicity, health insurance, income, race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Denominator:** Number of children ages 6 months to 17 years

**Numerator:** Subset of the Denominator: who reported they received influenza vaccination

**Comments:** Estimates are not age adjusted.

### 7.5.3. Other Childhood Preventive Care

**Measure ID:** MEPS\_2, 70503011

**Measure Title:** Children who had their height and weight measured by a health provider within the past 2 years

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population under age 18

**Numerator:** Subset of the denominator who had both height and weight measurements taken within the past 2 years by a health provider

**Comments:** This is a composite measure combining responses to both height and weight measurements. “Don’t Know” responses to the questions of when the weight and height were measured were excluded.

**Measure ID:** MEPS\_3, 70503021

**Measure Title:** Children ages 2-17 who had a dental visit in the calendar year

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS). This measure is consistent with but not exactly the same as the *Healthy People 2020* Oral Health Objective OH-7 “Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year.” For example, HP2020 OH-7 includes persons age 2 and over and the estimates are age-adjusted. This measure includes persons ages 2-17 and the estimates are not age-adjusted. Information and data for OH-7 are available at <https://www.healthypeople.gov/2020/topics-objectives/topic/oral-health/objectives>.

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: age, gender, race, ethnicity, family income, health insurance, Medicaid/CHIP, residence location, language spoken at home, perceived health status, CSHCN (children with special health care needs), and U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population ages 2-17 years

**Numerator:** Subset of denominator who had a dental visit in the calendar year. For more information, see “Detailed Methods for the Medical Expenditure Panel Survey.”

**Comments:** With the exception of the “children with special health care needs” category, the age used to subset the child population was defined as a person’s age on December 31 of the data year. Age at the round 2 and 4 interview date was used for “children with special health care needs” because these questions were asked in rounds 2 and 4.

**Measure ID:** MEPS\_3b, 70503025

**Measure Title:** Children ages 2-17 who received any preventive dental service in the calendar year

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS). This measure is

consistent with but not exactly the same as the *Healthy People 2020* Oral Health Objective OH-8 “Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year.” For example OH-8 includes persons ages 2-18 at or below 200 percent of the Federal poverty level. The QDR measure is for all persons ages 2-17. Information and data for OH-8 are available at <https://www.healthypeople.gov/2020/topics-objectives/topic/oral-health/objectives>.

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: age, gender, race, ethnicity, family income, health insurance, Medicaid/CHIP, residence location, language spoken at home, perceived health status, CSHCN (children with special health care needs), and U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population ages 2-17 years

**Numerator:** Subset of denominator who received any preventive dental service in the calendar year. Preventive dental service includes: Cleanings, fluoride, sealants, and periodontal recall visits. For more information, see “Detailed Methods for the Medical Expenditure Panel Survey.”

**Comments:** With the exception of the “children with special health care needs” category, the age used to subset the child population was defined as a person’s age on December 31 of the data year. Age at the interview date for rounds 2 and 4 was used for “children with special health care needs” because these questions were asked in rounds 2 and 4.

**Measure ID:** NHANES\_7, 70503023

**Measure Titles:** Children ages 5-17 with untreated dental caries

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National
- Years Available: 1999-2002 to 2013-2016
- Population Subgroups: Sex, family income, ethnicity

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health and Nutrition Examination Survey (NHANES)

**Denominator:** Children ages 5-17 years

**Numerator:** Subset of denominator with a clinical diagnosis of dental decay in at least one tooth that has not been restored



**Comments:** This measure is referred to as measure OH-2 in Healthy People 2020 documentation. The age ranges have been modified from the original specification.

**Measure ID:** MEPS\_4, 70503032

**Measure Title:** Children ages 3-5 who ever had their vision checked by a health provider

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: Gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population ages 3-5 years

**Numerator:** Subset of the denominator whose vision had ever been checked by a doctor or other health provider

**Comments:** Estimates exclude nonrespondents as well as “Don’t Know” responses.

**Measure ID:** MEPS\_5, 70503041

**Measure Title:** Children for whom a health provider gave advice in the past 2 years about how smoking in the house can be bad for a child

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population under age 18

**Numerator:** Subset of the denominator for whom a doctor or other health provider within the past 2 years had given advice about how smoking in the house can be harmful

**Comments:** Estimates exclude nonrespondents and “Don’t Know” responses.

**Measure ID:** MEPS\_6, 70503042

**Measure Title:** Children 0-40 lbs. for whom a health provider gave advice in the past 2 years about using child safety seats when riding in a car

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized child population weighing 0-40 lbs

**Numerator:** Subgroup of the denominator for whom a doctor or other health provider had given advice within the past 2 years about using child car safety seats

**Measure ID:** MEPS\_7, 70503043

**Measure Title:** Children 41-80 lbs. for whom a health provider gave advice within the past 2 years about using booster seats when riding in a car

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized child population weighing 41-80 lbs

**Numerator:** Subset of the denominator for whom a doctor or other health provider had given advice in the past 2 years about using booster seats

**Measure ID:** MEPS\_8, 70503044

**Measure Title:** Children over 80 lbs. for whom a health provider gave advice within the past 2 years about using lap or shoulder belts when riding in a car

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized child population weighing over 80 lbs.

**Numerator:** Subset of the denominator for whom a doctor or other health provider had given advice within the past 2 years about using lap and shoulder belts

**Measure ID:** MEPS\_9, 70503045

**Measure Title:** Children ages 2-17 years for whom a health provider gave advice within the past 2 years about using a helmet when riding a bicycle or motorcycle

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 to 2010
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population ages 2-17 years

**Numerator:** Subset of the denominator for whom a doctor or other health provider had given advice within the past 2 years about using a helmet when riding a bicycle or motorcycle

**Comments:** Estimates exclude nonrespondents and “Don’t Know” responses.

**Measure ID:** NHIS\_14, 70503061

**Measure Title:** Children age 0 - 17 with a wellness checkup in the past 12 months

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Interview Survey (NHIS)

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National
- Years Available: 2000-2017
- Population Subgroups: Age, ethnicity, race, sex, income, insurance, location of residence

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), and National Health Interview Survey (NHIS)

**Denominator:** Children ages 0-17

**Numerator:** Subset of the Denominator: who received a wellness checkup in the past 12 month

### 7.5.3. Overall Preventive Care

**Measure ID:** MDS\_10, 70504011

**Measure Title:** Long-stay nursing home residents who were assessed and appropriately given an influenza vaccination

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: National and State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and Metropolitan status

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Chronic Conditions Data Warehouse (CCW), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare chronic care long-stay residents with a valid target assessment, excluding those not in the facility during the current or most recent influenza season, not eligible due to medical contraindication, and offered and declined the influenza vaccine

**Numerator:** Subset of the denominator who received an influenza vaccination either in the facility or outside the facility

**Comments:** Long stay quality measures include all residents in an episode whose cumulative days in the facility is greater than or equal to 101 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User's manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

**Measure ID:** MDS\_12, 70504021

**Measure Title:** Long-stay nursing home residents who were assessed and appropriately given the pneumococcal vaccination

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: National and State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and Metropolitan status

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Chronic Conditions Data Warehouse (CCW), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare chronic care nursing home long-stay residents with a valid target assessment

**Numerator:** Subset of the denominator who have an up-to-date pneumococcal vaccination, were offered and declined the vaccine, or were ineligible due to contraindications

**Comments:** Long stay quality measures include all residents in an episode whose cumulative days in the facility is greater than or equal to 101 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User’s manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

**Measure ID:** MDS\_11, 70504031

**Measure Title:** Short-stay nursing home residents who were assessed and appropriately given an influenza vaccination during the flu season

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: National and State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and Metropolitan status

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Chronic Conditions Data Warehouse (CCW), Residence Assessment Files, MDS 3.0

**Denominator:** Medicare chronic care short-stay residents with a valid target assessment, excluding those not in the facility during the current or most recent influenza season, not eligible due to medical contraindication, and offered and declined the influenza vaccine

**Numerator:** Subset of the denominator who received an influenza vaccination either in the facility or outside the facility

**Comments:** Short stay quality measures include all residents in an episode whose cumulative days in the facility is less than or equal to 100 days at the end of the target period.. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User’s manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

**Measure ID:** MDS\_14, 70504041

**Measure Title:** Short-stay nursing home residents who were assessed and appropriately given the pneumococcal vaccination

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Nursing Home Quality Initiative (NHQI)

**Table Description:**

- Geographic Representation: National and State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, marital status, preferred language, and Metropolitan status

**Data Source:** CMS, Skilled Nursing Facility (SNF) Quality Reporting Program (QRP), Chronic Conditions Data Warehouse (CCW), Residence Assessment Files, MDS 3.0

**Denominator:** Short-stay nursing home residents with a valid target assessment

**Numerator:** Subset of the denominator who have an up-to-date pneumococcal vaccination, were offered and declined the vaccine, or were ineligible due to contraindications

**Comments:** Short stay quality measures include all residents in an episode whose cumulative days in the facility is less than or equal to 100 days at the end of the target period. An episode is a period of time spanning one or more stays, beginning with an admission and ending with either a discharge or the end of the target period (whichever comes first). The input data were full year files and the target assessment was the end of the year assessment.

For details about this measure, refer to the MDS 3.0 Quality Measures User's manual, version 11, available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/MDS-30-QM-Users-Manual-V11-Final.pdf>.

**Measure ID:** 70504051

**Measure Title:** Home health patients who had influenza vaccination during flu season

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with a discharge or transfer during year, excluding episodes for which no care was provided during flu season, or the patient died, or the patient does not meet age/condition guidelines for influenza vaccine.

**Numerator:** Number of home health quality episodes during which the patient a) received vaccination from the HHA or b) had received vaccination from HHA during earlier episode of care, or c) was determined to have received vaccination from another provider.

**Comments:** The sample included the latest episode per patient in each calendar year. The estimates are not risk-adjusted. Further information about HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>.

**Measure ID:** 70504061

**Measure Title:** Home health patients who had pneumococcal polysaccharide vaccination

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Home Health Quality Initiative (HHQI)

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2013-2016
- Population Subgroups: Age, gender, race/ethnicity, and health insurance coverage

**Data Source:** CMS, Home Health Quality Initiative (HHQI), Chronic Conditions Data Warehouse (CCW), Home Health Outcome and Assessment Information Set (OASIS)

**Denominator:** Number of home health quality episodes ending with a discharge or transfer during year, excluding episodes for which patient does not meet age/condition guidelines for Pneumococcal Polysaccharide Vaccine.

**Numerator:** Patients have ever received Pneumococcal Polysaccharide Vaccine.

**Comments:** Further information about HHQI measures is available at <http://www.cms.hhs.gov/HomeHealthQualityInits/>.



## Chapter 8. Affordable Care

### 8.1. Financial Burden of Health Care Cost

**Measure ID:** MEPS\_43, 80101011

**Measure Title:** People under age 65 whose family’s health insurance premiums and out-of-pocket medical expenditures were more than 10% of total family income

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2006 to 2016
- Population Subgroups: Activity limitations, age, education, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population under age 65

**Numerator:** Subset of the denominator whose family’s out-of-pocket medical expenditures were more than 10% of total family income

**Comments:** Health insurance premium is determined as the sum of insurance premiums (imputed) and Medicare Part B expenditures. Total family income is the sum of person-level pretax total income, refund income, and sale income. “Family” is defined in terms of health insurance eligibility units (HIEUs), which are composed of individuals who could be covered as a family under most private health insurance plans. For income, insurance, expenditures, and premiums, a family is defined in terms of HIEUs.

### 8.2. Usual Source of Care

**Measure ID:** MEPS\_45, 80201011

**Measure Title:** People without a usual source of care who indicated a financial or insurance reason for not having a source of care

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National

- Years Available: 2002-2016
- Population Subgroups: age, gender, race, ethnicity, family income, education, employment status, health insurance, Medicaid/CHIP, residence location, language spoken at home, perceived health status, activity limitations, and U.S. born.

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population who reported having no usual source of care

**Numerator:** Subset of the denominator who indicated a financial or insurance reason for not having a usual source of care

**Measure ID:** MEPS\_47, 80201021

**Measure Title:** People unable to get or delayed in getting medical care, dental care, or prescription medications due to financial or insurance reasons

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002-2016
- Population Subgroups: age, gender, race, ethnicity, family income, education, employment status, health insurance, Medicaid/CHIP, residence location, language spoken at home, perceived health status, activity limitations, and U.S. born.

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population who were unable to get or delayed in getting needed medical care, dental care, or prescription medications

**Numerator:** Subset of the denominator reporting at least one of the following reasons for being unable to get or delaying in getting needed medical care, dental care, or prescription medications: 1) could not afford care, (2) insurance company would not approve/cover/pay, or (3) doctor refused family insurance plan

**Measure ID:** MEPS\_48, 80201022

**Measure Title:** People unable to get or delayed in getting needed medical care due to financial or insurance reasons

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002-2016
- Population Subgroups: age, gender, race, ethnicity, family income, education, employment status, health insurance, Medicaid/CHIP, residence location, language spoken at home, perceived health status, activity limitations, and U.S. born.

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population who were unable to get or delayed in getting needed medical care, tests or treatments

**Numerator:** Subset of the denominator reporting at least one of the following reasons for being unable to get or delaying in getting needed medical care 1) could not afford care, (2) insurance company would not approve/cover/pay, or (3) doctor refused family insurance plan

**Comments:** HP2020 measure 6.1 is persons unable to obtain or delaying needed medical care, dental care, or prescription medications (percent) HP2020 measure 6.2 is persons unable to obtain or delaying needed medical care (percent).

**Measure ID:** MEPS\_49, 80201023

**Measure Title:** People who were unable to get or delayed in getting needed dental care due to financial or insurance reasons in the last 12 months

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002-2016
- Population Subgroups: age, gender, race, ethnicity, family income, education, employment status, health insurance, Medicaid/CHIP, residence location, language spoken at home, perceived health status, activity limitations, and U.S. born.

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population who were unable to get or delayed in getting needed dental care

**Numerator:** Subset of the denominator reporting at least one of the following reasons for being unable to get or delaying in getting needed dental care: 1) could not afford care, (2) insurance company would not approve/cover/pay, or (3) doctor refused family insurance plan

**Measure ID:** MEPS\_50, 80201024

**Measure Title:** People who were unable to get or delayed in getting needed prescription medications care due to financial or insurance reasons in the last 12 months

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002-2016
- Population Subgroups: age, gender, race, ethnicity, family income, education, employment status, health insurance, Medicaid/CHIP, residence location, language spoken at home, perceived health status, activity limitations, and U.S. born.

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population who were unable to get or delayed in getting needed prescription medications

**Numerator:** Subset of the denominator reporting at least one of the following reasons for being unable to get or delaying in getting needed prescription medications: 1) could not afford care, (2) insurance company would not approve/cover/pay, or (3) doctor refused family insurance plan

**Measure ID:** BRFSS\_14, 80201031

**Measure Title:** Adults who needed to see a doctor but could not because of cost in the past year

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National
- Years Available: 2013 to 2015
- Population Subgroups: Activity limitation, age, education, health insurance, income, race, ethnicity, location of residence, marital status, obesity status, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Behavioral Risk Factor Surveillance System (BRFSS)

**Denominator:** U.S. civilian noninstitutionalized population

**Numerator:** Subset of the denominator who report needing to see a doctor in but could not because of cost in the past year

## Chapter 9. Priority Populations

### 9.1. Health Resources and Services Administration (HRSA) - Uniform Data System (UDS) Measures

#### 9.1.1. Clinical Measures

**Measure ID:** 90501011

**Measure Title:** Adults treated at a HRSA supported health centers who received weight screening and follow-up

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2011 to 2016
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Adults treated at a HRSA supported health center

**Numerator:** Subset of the denominator who with (1) BMI charted and (2) follow-up plan documented if patients are overweight or underweight

**Measure ID:** 90501012

**Measure Title:** Children ages 3-17 treated at a HRSA supported health centers who received weight screening and follow-up

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2011-2016
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Children ages 3-17 treated at a HRSA supported health centers

**Numerator:** Subset of the denominator who with a BMI percentile, and counseling on nutrition and physical activity documented for the current year

**Measure ID:** 90501021

**Measure Title:** Adults ages 18 to 85 treated at a HRSA supported health centers with diagnosed hypertension whose last blood pressure was less than 140/90

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2008 -2016
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Adults ages 18 to 85 treated at a HRSA supported health centers with diagnosed hypertension

**Numerator:** Subset of the denominator whose last blood pressure was less than 140/90

**Measure ID:** 90501031

**Measure Title:** Patients ages 5-40 treated at a HRSA supported health centers with diagnosed asthma who have an acceptable pharmacological treatment plan

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2011 -2016
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Patients ages 5-40 treated at a HRSA supported health centers with diagnosed asthma

**Numerator:** Subset of the denominator who have an acceptable pharmacological treatment plan

**Measure ID:** 90501041

**Measure Title:** Tobacco users aged 18 and above who were screened for tobacco use and received cessation advice or medication

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2011-2016
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Adults tobacco users treated at a HRSA supported health center

**Numerator:** Subset of the denominator who received cessation advice or medication

**Measure ID:** 90501051

**Measure Title:** Adults treated at a HRSA supported health centers with appropriate screening for colorectal cancer

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2012-2016
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Adults treated at a HRSA supported health center

**Numerator:** Subset of the denominator who received appropriate screening for colorectal cancer

**Measure ID:** 90501061

**Measure Title:** Adults ages 18-75 diagnosed with type I or II diabetes with HbA1c 9% or lower

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2016
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Adults ages 18-75 diagnosed with type I or II diabetes treated at a HRSA supported health centers

**Numerator:** Subset of the denominator who with HbA1c level 9% or lower

**Measure ID:** 90501071

**Measure Title:** Children ages 2 years treated at a HRSA supported health center who received age appropriate vaccines

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2008-2016
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Children who had their 2nd birthday during the calendar year treated at a HRSA supported health centers

**Numerator:** Subset of the denominator who received age appropriate vaccines

### **9.1.2. Clinical Visits**

**Measure ID:** 90502011

**Measure Title:** Distribution of visits to HRSA health centers by service category

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System



**Table Description:**

- Geographic Representation: State
- Years Available: 2007-2017
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Total number of visits to HRSA health centers

**Numerator:** Number of visits to HRSA health centers by each type of service category, including medical, dental, vision, mental health, substance abuse, enabling, and other services.

**Comments:** The percentages of this measure are distributions by service category at visit level, not patient level.

**Measure ID:** 90502021

**Measure Title:** Patients treated at HRSA supported health center who had at least one visit for medical service

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2016-2017
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Patients with at least one visit to a HRSA supported health center

**Numerator:** Subset of the denominator who had at least one visit for medical service

**Measure ID:** 90502031

**Measure Title:** Patients treated at HRSA supported health center who had at least one visit for dental service

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2016-2017
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Patients with at least one visit to a HRSA supported health center

**Numerator:** Subset of the denominator who had at least one visit for dental service

**Measure ID:** 90502041

**Measure Title:** Patients treated at HRSA supported health center who had at least one visit for vision service

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2016-2017
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Patients with at least one visit to a HRSA supported health center

**Numerator:** Subset of the denominator who had at least one visit for vision service

**Measure ID:** 90502051

**Measure Title:** Patients treated at HRSA supported health center who had at least one visit for mental health service

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2016-2017
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Patients with at least one visit to a HRSA supported health center

**Numerator:** Subset of the denominator who had at least one visit for mental health service

**Measure ID:** 90502061

**Measure Title:** Patients treated at HRSA supported health center who had at least one visit for substance abuse service

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2016-2017
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Patients with at least one visit to a HRSA supported health center

**Numerator:** Subset of the denominator who had at least one visit for substance abuse service

**Measure ID:** 90502071

**Measure Title:** HRSA supported health center clinic visits where services were provided by a physician

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2007-2017
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Number of visits to a HRSA supported health centers

**Numerator:** Subset of the denominator where services were provided by a physician

**Measure ID:** 90502081

**Measure Title:** HRSA supported health center services provided by a nurse practitioners, a physician assistants, or a certified nurse midwife

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2007-2017
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Number of visits to a HRSA supported health centers

**Numerator:** Subset of the denominator who received services provided by a nurse practitioners, a physician assistants, or a certified nurse midwife

**Measure ID:** 90502082

**Measure Title:** HRSA supported health center services provided by a nurse

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2007-2017
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Number of visits to a HRSA supported health centers

**Numerator:** Subset of the denominator who received services provided by a nurse

### 9.1.3. Electronic Health Records

**Measure ID:** 90503021

**Measure Title:** HRSA supported health centers with electronic health record system with capacity to provide patients with electronic summaries of office visits or other clinical information when requested

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2014-2016
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Total number of HRSA supported health centers

**Numerator:** Number of HRSA supported health centers with EHR capacity to provide patients with electronic summaries of office visits or other clinical information when requested

**Measure ID:** 90503051

**Measure Title:** HRSA supported health centers with computerized, clinical decision support such as alerts for drug allergies, checks for drug-drug interactions, reminders for preventive screening tests, or other similar functions

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2016
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Total number of HRSA supported health centers

**Numerator:** Number of HRSA supported health centers with EHR capacity to provide clinical decision support such as alerts for drug allergies, checks for drug-drug interactions, reminders for preventive screening tests, or other similar functions

**Measure ID:** 90503071

**Measure Title:** HRSA supported health centers with electronic health record system installed

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2016
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Total number of HRSA supported health centers

**Numerator:** Number of HRSA supported health centers with electronic health record system installed

**Measure ID:** 90503081

**Measure Title:** HRSA supported health centers with electronic health record system installed with capability to exchange key clinical information among providers of care and patient-authorized entities electronically

**Measure Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2016
- Population Subgroups: State

**Data Source:** Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System

**Denominator:** Total number of HRSA supported health centers

**Numerator:** Number of HRSA supported health centers that had a EHR system with a component to exchange clinical information with other key providers/health care settings such as hospitals, emergency rooms, or subspecialty clinicians

## Chapter 15. Supplemental Measures

### 15.1. Access to Care Measures

#### 15.1.1. Getting Appointments for Care

**Measure ID:** NCBD\_1, 150101011

**Measure Title:** Adults who had an appointment for routine health in the last 6 months who sometimes or never got an appointment for routine care as soon as wanted, Medicaid

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: States
- Years Available: 2010-2011, 2014-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had an appointment for routine health care in the last 6 months, Medicaid

**Numerator:** Subset of the denominator who indicated that they sometimes or never got an appointment for routine care as soon as wanted

**Measure ID:** NCBD\_1, 150101012

**Measure Title:** Adults who had an appointment for routine health care in the last 12 months who sometimes or never got an appointment for routine care as soon as wanted, Medicare Managed care

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: States
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had an appointment for routine health care in the last 12 months, Medicare managed care

**Numerator:** Subset of the denominator who indicated that they sometimes or never got an appointment for routine care as soon as wanted

**Measure ID:** NCBD\_1, 150101013

**Measure Title:** Adults who had an appointment for routine health care in the last 12 months who sometimes or never got an appointment for routine care as soon as wanted, Medicare fee-for-service

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: States
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had an appointment for routine health care in the last 12 months, Medicare fee-for-service

**Numerator:** Subset of the denominator who indicated that they sometimes or never got an appointment for routine care as soon as wanted

**Measure ID:** NCBD\_2, 150101021

**Measure Title:** Children who had an appointment for routine health care in last 6 months who sometimes or never got an appointment for routine care as soon as wanted, Medicaid

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2014-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients under age 18 who had an appointment for routine health care in the last 6 months, Medicaid

**Numerator:** Subset of the denominator indicated that they sometimes or never got appointments for routine care as soon as wanted



**Measure ID:** NCBD\_3, 150101031

**Measure Title:** Adults who needed care right away for an illness, injury, or condition in the last 6 months who sometimes or never got care as soon as wanted, Medicaid

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2014-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who needed care right away for an illness, injury, or condition in the last 6 months, Medicaid

**Numerator:** Subset of the denominator who sometimes or never got care as soon as wanted

**Measure ID:** NCBD\_3, 150101032

**Measure Title:** Adults who needed care right away for an illness, injury, or condition in the last 12 months who sometimes or never got care as soon as wanted, Medicare managed care

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who needed care right away for an illness, injury, or condition in the last 12 months, Medicare managed care

**Numerator:** Subset of the denominator who sometimes or never got care as soon as wanted

**Measure ID:** NCBD\_3, 150101033

**Measure Title:** Adults who needed care right away for an illness, injury, or condition in the last 12 months who sometimes or never got care as soon as wanted, Medicare fee-for-service

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD).

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who needed care right away for an illness, injury, or condition in the last 12 months, Medicare fee-for-service

**Numerator:** Subset of the denominator who sometimes or never got care as soon as wanted

### 15.1.2. Workforce Diversity

**Measure ID:** 150103021

**Measure Title:** Physicians and surgeons per 100,000 population

**Measure Source:** U.S. Census, American Community Survey.

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2007-2015
- Population Subgroups: Race/ethnicity, region, and division

**Data Source:** U.S. Census, American Community Survey

**Denominator:** U.S. population

**Numerator:** Number of physicians and/or surgeons as indicated by the occupation code of either OCCP or SOCP

**Measure ID:** 150103031

**Measure Title:** Dentists per 100,000 population

**Measure Source:** U.S. Census, American Community Survey

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2007-2015
- Population Subgroups: Race/ethnicity, region, and division

**Data Source:** U.S. Census, American Community Survey

**Denominator:** U.S. population

**Numerator:** Number of dentists as indicated by the occupation code of either OCCP or SOCP

**Measure ID:** 150103041

**Measure Title:** Registered nurses per 100,000 population

**Measure Source:** U.S. Census, American Community Survey

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2007-2015
- Population Subgroups: Race/ethnicity, region, and division

**Data Source:** U.S. Census, American Community Survey

**Denominator:** U.S. population

**Numerator:** Number of registered nurses as indicated by the occupation code of either OCCP or SOCP

**Measure ID:** 150103051

**Measure Title:** Pharmacists per 100,000 population

**Measure Source:** U.S. Census, American Community Survey

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2007-2015
- Population Subgroups: Race/ethnicity, region, and division

**Data Source:** U.S. Census, American Community Survey

**Denominator:** U.S. population

**Numerator:** Number of pharmacists as indicated by the occupation code of either OCCP or SOCP

**15.1.3. Focus on the health Care Safety Net**

**Measure ID:** HCUP\_47, 150104011

**Measure Title:** Percent of hospital discharges where expected payer is Medicaid or uninsured

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Bed size (hospital), geographic location (hospital), ownership of

hospital, region, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, National Inpatient Sample (NIS)

**Denominator:** All discharges in community hospitals in the U.S., excluding rehabilitation and long-term, acute care hospitals

**Numerator:** Subset of the denominator with an expected primary payer of Medicaid or uninsured (including self-pay, charity, and no charge)

**Comments:** The HCUP National Inpatient Sample (NIS) is drawn from all States participating in HCUP, covering more than 96 percent of the U.S. population. The NIS approximates a 20-percent stratified sample of discharges from U.S. community hospitals, excluding rehabilitation and long-term acute care hospitals. The large sample size in the enables analyses of rare conditions, uncommon treatments, and special patient populations.

For more information, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_48, 150104012

**Measure Title:** Percent of hospital costs where expected payer is Medicaid or uninsured

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

Table Description

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Bed size (hospital), geographic location (hospital), ownership of

hospital, region, teaching status of hospital, sex

**Data Source:** AHRQ, CDOM, HCUP, National Inpatient Sample (NIS)

**Denominator:** Total hospital costs for all discharges in community hospitals in the U.S., excluding rehabilitation and long-term, acute care hospitals

**Numerator:** Subset of the denominator with an expected primary payer of Medicaid or uninsured (including self-pay, charity, and no charge)

**Comments:** The HCUP National Inpatient Sample (NIS) is drawn from all States participating in HCUP, covering more than 96 percent of the U.S. population. The NIS approximates a 20-percent stratified sample of discharges from U.S. community hospitals, excluding rehabilitation and long-term acute care hospitals. The large sample size in the enables analyses of rare conditions, uncommon treatments, and special patient populations.

Total hospital charges were converted to costs using HCUP Cost-to-Charge Ratios based on hospital accounting reports from the Centers for Medicare & Medicaid Services (CMS). Costs reflect the actual expenses incurred in the production of hospital services, such as wages, supplies, and utility costs; charges represent the amount a hospital billed for the case. For each hospital, a hospital-wide cost-to-charge ratio is used. Hospital charges reflect the amount the hospital billed for the entire hospital stay and do not include professional (physician) fees.

For more information, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

#### **15.1.4. Patient Perceptions of Need**

**Measure ID:** NCBD\_5, 150107012

**Measure Title:** Adults who needed to see a specialist in the last 12 months who sometimes or never found it easy to see a specialist Medicare managed care

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD).

#### **Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who needed to see a specialist in the last 12 months, Medicare managed care

**Numerator:** Subset of the denominator who sometimes or never found it easy to see a specialist

**Measure ID:** NCBD\_5, 150107013

**Measure Title:** Adults who needed to see a specialist in the last 12 months who sometimes or never found it easy to see a specialist, Medicare fee-for-service

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD).

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who needed to see a specialist in the last 12 months, Medicare fee-for-service

**Numerator:** Subset of the denominator who sometimes or never found it easy to see a specialist

**Measure ID:** NCBD\_5, 150107017

**Measure Title:** Adults who needed to see a specialist in the last 6 months who sometimes or never found it easy to see a specialist, Medicaid

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD).

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2014-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who needed to see a specialist in the last 6 months, Medicaid

**Numerator:** Subset of the denominator who sometimes or never found it easy to see a specialist

**Measure ID:** NCBD\_6, 150107018

**Measure Title:** Children who needed to see a specialist in the last 6 months who sometimes or never found it easy to see a specialist

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD).

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2014-2017

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients under age 18 who needed to see a specialist in the last 6 months, Medicaid

**Numerator:** Subset of the denominator who sometimes or never found it easy to see a specialist

**Measure ID:** NCBD\_21, 150107051

**Measure Title:** Adults who had a doctor's office or clinic visit in the last 6 months and needed care, tests, or treatment who sometimes or never found it easy to get the care, tests, or treatment

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD).

**Table Description:**

- Geographic Representation: States
- Years Available: 2011, 2014-2017
- Population Subgroups: Race, ethnicity, and education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 6 months and needed care, tests, or treatment, Medicaid

**Numerator:** Subset of the denominator who sometimes or never found it easy to get the care, tests, or treatment

**Comment:** This measure is new from the 2017 NHQDR report.

**Measure ID:** NCBD\_21, 150107052

**Measure Title:** Adults who had a doctor's office or clinic visit in the last 12 months and needed care, tests, or treatment who sometimes or never found it easy to get the care, tests, or treatment, Medicare managed care

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: States
- Years Available: 2011, 2013-2017
- Population Subgroups: Race, ethnicity, and education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 12 months and needed care, tests, or treatment, Medicare managed care

**Numerator:** Subset of the denominator who sometimes or never found it easy to get the care, tests, or treatment

**Comment:** This measure is new from the 2017 NHQDR report.

**Measure ID:** NCBD\_21, 150107053

**Measure Title:** Adults who had a doctor's office or clinic visit in the last 12 months and needed care, tests, or treatment who sometimes or never found it easy to get the care, tests, or treatment, Medicare fee-for-service

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD).

**Table Description:**

- Geographic Representation: States
- Years Available: 2011, 2013-2017
- Population Subgroups: Race, ethnicity, and education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 12 months and needed care, tests, or treatment, Medicare fee-for-service

**Numerator:** Subset of the denominator who sometimes or never found it easy to get the care, tests, or treatment

**Comment:** This measure is new from the 2017 NHQDR report.

**Measure ID:** NCBD\_22, 150107061

**Measure Title:** Children who had a doctor's office or clinic visit in the last 6 months and needed care, tests, or treatment who sometimes or never found it easy to get the care, tests, or treatment



**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD).

**Table Description:**

- Geographic Representation: States
- Years Available: 2010-2011, 2014-2017
- Population Subgroups: Race, ethnicity, and education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients under age 18 who had a doctor's office or clinic visit in the last 6 months and needed care, tests, or treatment, Medicaid

**Numerator:** Subset of the denominator who sometimes or never found it easy to get the care, tests, or treatment

**Comment:** This measure is new from the 2017 NHQDR report.

## 15.2. Person-Centered Care

### 15.2.1. Patient Experience of Care

**Measure ID:** NCBD\_7, 150301012

**Measure Title:** Composite measure: Adults who had a doctor's office or clinic visit whose health providers sometimes or never listened carefully, explained things clearly, respected what they had to say, and spent enough time with them

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** State: AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 12 months, Medicare managed care

**Numerator:** Subset of the denominator whose health providers sometimes or never listened carefully, explained things clearly, respected what they had to say, or spent enough time with them

**Measure ID:** NCBD\_7, 150301013

**Measure Title:** Composite measure: Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never listened carefully, explained things clearly, respected what they had to say, and spent enough time with them

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** State: AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 12 months, Medicare fee-for-service

**Numerator:** Subset of the denominator whose health providers sometimes or never listened carefully, explained things clearly, respected what they had to say, or spent enough time with them

**Measure ID:** NCBD\_7, 150301015

**Measure Title:** Composite measure: Adults who had a doctor's office or clinic visit in the last 6 months whose health providers sometimes or never listened carefully, explained things clearly, respected what they had to say, and spent enough time with them

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2014-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** State: AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 6 months, Medicaid

**Numerator:** Subset of the denominator whose health providers sometimes or never listened carefully, explained things clearly, respected what they had to say, or spent enough time with them

**Measure ID:** MEPS\_21, 150301021

**Measure Title:** Children who had a doctor’s office or clinic visit in the last 12 months whose health providers always listened carefully, explained things clearly, respected what they or their parents had to say, and spent enough time with them

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized children under age 18 who visited a doctor’s office or clinic to get health care in the past 12 months, excluding those with missing or invalid responses to all of the questions that make up this composite measure

**Numerator:** Subset of the denominator whose parents or guardians responded “Always” to any of the four questions making up this composite measure

**Comments:** Estimates are weighted and adjusted for nonresponse based on the number of questions (out of four) with a valid response.

Before 2017, NHQDR used “Sometimes or never” estimates.

**Measure ID:** NCBD\_8, 150301022

**Measure Title:** Composite measure: Children who had a doctor’s office or clinic visit in the last 12 months whose health providers always listened carefully, explained things clearly, respected what they or their parents had to say, and spent enough time with them

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD).

**Table Description:**

- Geographic Representation: State
- Years Available: 2010, 2014-2017

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients under age 18 who had a doctor's office or clinic visit in the last 12 months

**Numerator:** Subset of the denominator whose health providers always listened carefully, explained things clearly, respected what they or their parents had to say, or spent enough time with them

**Measure ID:** NCBD\_9, 150301032

**Measure Title:** Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never listened carefully to them, Medicare managed care

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 12 months, Medicare managed care

**Numerator:** Subset of the denominator whose health providers sometimes or never listened carefully to them

**Measure ID:** NCBD\_9, 150301033

**Measure Title:** Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never listened carefully to them, Medicare fee-for-service

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 12 months, Medicare fee-for-service

**Numerator:** Subset of the denominator whose health providers sometimes or never listened carefully to them

**Measure ID:** NCBD\_9, 150301035

**Measure Title:** Adults who had a doctor’s office or clinic visit in the last 6 months whose health providers sometimes or never listened carefully to them

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2014-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor’s office or clinic visit in the last 6 months, Medicaid

**Numerator:** Subset of the denominator whose health providers sometimes or never listened carefully to them

**Measure ID:** MEPS\_23, 150301041

**Measure Title:** Children who had a doctor’s office or clinic visit whose health providers always listened carefully

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized children under age 18 who visited a doctor’s office or clinic to get health care in the past 12 months whose parents or guardians provided a valid response to the question, “In the last 12 months how often did doctors or other health

providers listen carefully to you?” Nonrespondents and respondents indicating “Don’t Know” were excluded

**Numerator:** Subset of the denominator who, according to their parents or guardians, responded “Always” to the above question

**Comments:** Nonrespondents and respondents indicating “Don’t Know” were excluded.

Before 2017, NHQDR used “Sometimes or never” estimates.

**Measure ID:** NCBD\_10, 150301042

**Measure Title:** Children who had a doctor’s office or clinic visit in the last 6 months whose health providers always listened carefully

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010, 2014-2017

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients under age 18 who had a doctor’s office or clinic visit in the last 6 months, Medicaid

**Numerator:** Subset of the denominator whose health providers always listened carefully

**Measure ID:** NCBD\_11, 150301052

**Measure Title:** Adults who had a doctor’s office or clinic visit in the last 12 months whose doctor sometimes or never explained things in a way they could understand, Medicare managed care

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2013-2017

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor’s office or clinic visit in the last 12 months, Medicare managed care

**Numerator:** Subset of the denominator whose doctor sometimes or never explained things in a way they could understand

**Measure ID:** NCBD\_11, 150301053

**Measure Title:** Adults who had a doctor's office or clinic visit in the last 12 months whose doctor sometimes or never explained things in a way they could understand, Medicare fee-for-service

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2013-2017

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 12 months, Medicare fee-for-service

**Numerator:** Subset of the denominator whose doctor sometimes or never explained things in a way they could understand

**Measure ID:** NCBD\_11, 150301055

**Measure Title:** Adults who had a doctor's office or clinic visit in the last 6 months whose doctor sometimes or never explained things in a way they could understand, Medicaid

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2013-2017

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 6 months, Medicaid

**Numerator:** Subset of the denominator whose doctor sometimes or never explained things in a way they could understand

**Measure ID:** MEPS\_25, 150301061

**Measure Title:** Children who had a doctor’s office or clinic visit in the last 12 months whose health providers always explained things in a way they or their parents could understand

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized children under age 18 who had a doctor’s office or clinic visit in the last 12 months whose parents or guardians provided a valid response to the question, “In the last 12 months how often did [the person’s] doctors or other health providers explain things in a way you could understand?”

**Numerator:** Subset of the denominator whose parent or guardian responded “Always” to the above question

**Comments:** Nonrespondents and respondents indicating “Don’t Know” were excluded.

Before 2017, NHQDR used “Sometimes or never” estimates.

**Measure ID:** NCBD\_12, 150301062

**Measure Title:** Children who had a doctor’s office or clinic visit in the last 6 months whose health providers always explained things clearly to their parents

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010, 2014-2017

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients under age 18 who had a doctor’s office or clinic visit in the last 6 months, Medicaid



**Numerator:** Subset of the denominator whose health providers always explained things clearly to their parents

**Measure ID:** NCBD\_13, 150301063

**Measure Title:** Children who had a doctor’s office or clinic visit in the last 6 months whose health providers always explained things clearly to the child

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010, 2014-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients under age 18 who had a doctor’s office or clinic visit in the last 6 months, Medicaid

**Numerator:** Subset of the denominator whose health providers always explained things clearly to the child

**Measure ID:** NCBD\_14, 150301072

**Measure Title:** Adults who had a doctor’s office or clinic visit in the last 12 months whose health providers sometimes or never showed respect for what they had to say, Medicare managed care

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor’s office or clinic visit in the last 12 months, Medicare managed care

**Numerator:** Subset of the denominator whose health providers sometimes or never showed respect for what they had to say

**Measure ID:** NCBD\_14, 150301073

**Measure Title:** Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never showed respect for what they had to say, Medicare fee-for-service

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 12 months, Medicare fee-for-service

**Numerator:** Subset of the denominator whose health providers sometimes or never showed respect for what they had to say

**Measure ID:** NCBD\_14, 150301075

**Measure Title:** Adults who had a doctor's office or clinic visit in the last 6 months whose health providers sometimes or never showed respect for what they had to say, Medicaid

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2014-2017
- Population Subgroups: Race, ethnicity, education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 6 months, Medicaid

**Numerator:** Subset of the denominator whose health providers sometimes or never showed respect for what they had to say

**Measure ID:** MEPS\_27, 150301081

**Measure Title:** Children who had a doctor’s office or clinic visit whose health providers always showed respect for what they or their parents had to say

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002 - 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** Children under age 18 who had a doctor’s office or clinic visit in the last 12 months and whose parent or guardian provided a valid response to the question, “In the last 12 months how often did doctors or other health providers show respect for what you had to say?”

**Numerator:** Subset of the denominator whose parent or guardian responded “always” to the above question

**Comments:** Nonrespondents and respondents indicating “Don’t Know” were excluded.

**Measure ID:** NCBD\_15, 150301082

**Measure Title:** Children who had a doctor’s office or clinic visit whose health providers always showed respect for what they or their parents had to say

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010, 2014-2017

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients under age 18 who had a doctor’s office or clinic visit in the last 6 months, Medicaid

**Numerator:** Subset of the denominator whose health providers always showed respect for what they or their parents had to say

**Measure ID:** NCBD\_16, 150301092

**Measure Title:** Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never spent enough time with them, Medicare managed care

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, and education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 12 months, Medicare managed care

**Numerator:** Subset of the denominator whose health providers sometimes or never spent enough time with them

**Measure ID:** NCBD\_16, 150301093

**Measure Title:** Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never spent enough time with them

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, and education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 12 months, Medicare fee-for-service

**Numerator:** Subset of the denominator whose health providers sometimes or never spent enough time with them

**Measure ID:** NCBD\_16, 150301095

**Measure Title:** Adults who had a doctor’s office or clinic visit in the last 6 months whose health providers sometimes or never spent enough time with them, Medicaid

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010-2011, 2014-2017
- Population Subgroups: Race, ethnicity, and education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor’s office or clinic visit in the last 6 months, Medicaid

**Numerator:** Subset of the denominator whose health providers sometimes or never spent enough time with them

**Measure ID:** MEPS\_29, 150301101

**Measure Title:** Children who had a doctor’s office or clinic visit whose health providers always spent enough time with them

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized children under age 18 who visited a doctor’s office or clinic to get health care in the past 12 months and whose parent or guardian provided a valid response to the question, “In the last 12 months how often did doctors or other health providers spend enough time with you?”

**Numerator:** Subset of the denominator who responded “Always” to the above question

**Comments:** Nonrespondents and respondents indicating “Don’t Know” were excluded.

Before 2017, NHQDR used “Sometimes or never” estimates.

**Measure ID:** NCBD\_17, 150301102

**Measure Title:** Children who had a doctor’s office or clinic visit whose health providers always spent enough time with them

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: State
- Years Available: 2010, 2014-2017

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients under age 18 who had a doctor’s office or clinic visit in the last 6 months, Medicaid

**Numerator:** Subset of the denominator whose health providers always spent enough time with them

**Measure ID:** NCBD\_18, 150301115

**Measure Title:** Rating of health care 0-6 on a scale from 0 to 10 (best grade) by adults who had a doctor’s office or clinic visit in the last 6 months, Medicaid

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: States
- Years Available: 2010-2011, 2014-2017
- Population Subgroups: Race, ethnicity, and education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients under age 18 who had a doctor’s office or clinic visit in the last 6 months, Medicaid

**Numerator:** Subset of the denominator whose parents gave a rating of health care 0-6 on a scale from 0 to 10 (best grade)

**Measure ID:** NCBD\_18, 150301112

**Measure Title:** Rating of health care 0-6 on a scale from 0 to 10 (best grade) by adults who had a doctor's office or clinic visit in the last 12 months, Medicare managed care

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: States
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, and education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients under age 18 who had a doctor's office or clinic visit in the last 12 months, Medicare managed care

**Numerator:** Subset of the denominator whose parents gave a rating of health care 0-6 on a scale from 0 to 10 (best grade)

**Measure ID:** NCBD\_18, 150301113

**Measure Title:** Rating of health care 0-6 on a scale from 0 to 10 (best grade) by adults who had a doctor's office or clinic visit in the last 12 months, Medicare fee-for-service

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: States
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, and education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients under age 18 who had a doctor's office or clinic visit in the last 12 months, Medicare fee-for-service

**Numerator:** Subset of the denominator whose parents gave a rating of health care 0-6 on a scale from 0 to 10 (best grade)

**Measure ID:** HCAHPS\_1, 150301191

**Measure Title:** Adult hospital patients who always had good communication with doctors in the hospital

**Measure Source:** Centers for Medicare & Medicaid Services, Hospital Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2009-2017
- Population Subgroups: Age, ethnicity, race, education, language spoken at home

**Data Source:** CMS, HCAHPS

**Denominator:** Adult hospital patients

**Numerator:** Subset of the denominator who reported that they always had good communication with doctors in the hospital

**Comments:** The measure flipped from “Sometimes or never” to “Always” from 2017 NHQDR report.

**Measure ID:** HCAHPS\_2, 150301201

**Measure Title:** Adult hospital patients who always had good communication with nurses in the hospital

**Measure Source:** Centers for Medicare & Medicaid Services, Hospital Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2009-2017
- Population Subgroups: Age, ethnicity, race, education, language spoken at home

**Data Source:** CMS, HCAHPS

**Denominator:** Adult hospital patients

**Numerator:** Subset of the denominator who reported that they always had good communication with nurses in the hospital

**Comments:** The measure flipped from “Sometimes or never” to “Always” from 2017 NHQDR report.



**Measure ID:** HCAHPS\_6, 150301211

**Measure Title:** Adult hospital patients who strongly agree or agree that they understood how to manage their health after discharge

**Measure Source:** Centers for Medicare & Medicaid Services, Hospital Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2014-2017
- Population Subgroups: Age, ethnicity, race, education, language spoken at home

**Data Source:** CMS, HCAHPS

**Denominator:** Adult hospital patients

**Numerator:** Subset of the denominator who strongly agree or agree that they understood how to manage their health after discharge

**Comments:** The measure flipped from “Strongly disagree or disagree” to “Strongly agree or agree” from 2017 NHQDR report.

**Measure ID:** HCAHPS\_7, 150301221

**Measure Title:** Adult hospital patients who strongly agree or agree that they understood the purpose for taking each of their medications after discharge

**Measure Source:** Centers for Medicare & Medicaid Services, Hospital Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2014-2017
- Population Subgroups: Age, ethnicity, race, education, language spoken at home

**Data Source:** CMS, HCAHPS

**Denominator:** Adult hospital patients

**Numerator:** Subset of the denominator who strongly agree or agree that they understood the purpose for taking each of their medications after discharge

**Comments:** The measure flipped from “Strongly disagree or disagree” to “Strongly agree or agree” from 2017 NHQDR report.

## 15.3. Care Coordination

### 15.3.1. Medication Information

No measures.

### 15.3.2. Preventable Emergency Department Visits

**Measure ID:** 150402011

**Measure Title:** Emergency department visit per 100,000 population

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, Nationwide Emergency Department Sample (NEDS)

**Denominator:** U.S. resident population

**Numerator:** Total number of emergency department visits

**Comments:** The HCUP Nationwide Emergency Department Sample (NEDS) was created to enable analyses of emergency department (ED) utilization patterns and is the largest all-payer ED database that is publicly available in the United States. The NEDS is a 20-percent stratified sample of hospital-owned EDs in the United States. The NEDS is drawn from statewide data organizations that provide HCUP with data from ED visits that may or may not have resulted in hospital admission. Weights are provided to calculate national estimates.

For more information, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_57, 150402021

**Measure Title:** Emergency department visits with a first-listed diagnosis related to mental health, alcohol, or substance abuse, per 100,000 population

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

- Population Subgroups: Age, sex, geographic location (residence), median household income of patient's ZIP Code, region

**Data Source:** AHRQ, CDOM, HCUP, Nationwide Emergency Department Sample (NEDS)

**Denominator:** U.S. resident population

**Numerator:** Emergency department visits in the U.S. with a first-listed diagnosis related to mental health disorders or substance use (see comments)

**Comments:** Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System (ICD-10-CM/PCS). ICD-10-CM coding for mental health disorders listed under Measure ID HCUP\_52; ICD-10-CM coding for substance use listed under Measure ID HCUP\_53.

The HCUP Nationwide Emergency Department Sample (NEDS) was created to enable analyses of emergency department (ED) utilization patterns and is the largest all-payer ED database that is publicly available in the United States. The NEDS is a 20-percent stratified sample of hospital-owned EDs in the United States. The NEDS is drawn from statewide data organizations that provide HCUP with data from ED visits that may or may not have resulted in hospital admission. Weights are provided to calculate national estimates.

For more information, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

### 15.3.3. Preventable Hospitalizations

**Measure ID:** HCUP\_14, 150403021

**Measure Title:** Potentially avoidable hospitalizations for all conditions per 100,000 population, adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

#### Table Description:

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, median household income of the patient's ZIP Code, urbanized location, and region of the United States

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population age 18 and over

**Numerator:** Adults with hospitalizations who qualified for any of the following PQI measures:

- PQI 1: Diabetes, short-term complications
- PQI 3: Diabetes, long-term complications
- PQI 5: Chronic obstructive pulmonary disease or asthma
- PQI 7: Hypertension
- PQI 8: Heart failure
- PQI 10: Dehydration
- PQI 11: Bacterial pneumonia
- PQI 12: Urinary tract infections
- PQI 14: Uncontrolled diabetes
- PQI 15: Asthma in younger adults
- PQI 16: Lower extremity amputations among patients with diabetes

**Comments:** This measure is based on the 11 AHRQ PQIs for asthma, bacterial pneumonia, chronic obstructive pulmonary disease, heart failure, dehydration, diabetes, hypertension, and urinary tract infection. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_63, 150403041

**Measure Title:** Potentially avoidable hospitalizations for all conditions per 100,000 population, age 6-17

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, median household income of the patient's ZIP Code, urbanized location, region of the United States

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population of children ages 6 to 17 years

**Numerator:** Hospitalizations of children who qualified to be in the numerator for any of the following PDI measures:

- PDI 14: Asthma
- PDI 15: Diabetes, short-term complications
- PDI 16: Gastroenteritis
- PDI 18: Urinary tract infection

**Comments:** This measure is based on the four AHRQ PDIs for asthma, diabetes, gastroenteritis, and urinary tract infection. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission

(POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_15, 150403051

**Measure Title:** Potentially avoidable hospitalizations for acute conditions per 100,000 population, adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, median household income of the patient's ZIP Code, urbanized location, and region of the United States

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population age 18 and over

**Numerator:** Adults with hospitalizations who qualified for any of the following PQI acute care measures:

- PQI 10: Dehydration
- PQI 11: Bacterial pneumonia
- PQI 12: Urinary tract infections

**Comments:** This measure is based on the three AHRQ PQIs for dehydration, bacterial pneumonia, and urinary tract infection. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_64, 150403061

**Measure Title:** Potentially avoidable hospitalizations for acute conditions per 100,000 population, age 6-17

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, median household income of the patient's ZIP Code, urbanized location, region of the United States

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population of children ages 6 to 17 years

**Numerator:** Hospitalizations of children who qualified to be in the numerator for any of the following PDI measures:

- PDI 16: Gastroenteritis
- PDI 18: Urinary tract infection

**Comments:** This measure is based on the two AHRQ PDIs for gastroenteritis and urinary tract infection. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_16, 150403081

**Measure Title:** Potentially avoidable hospitalizations for chronic conditions per 100,000 population, adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National



- Years Available: 2016
- Population Subgroups: Age, sex, geographic location (residence), income, region

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population age 18 and over

**Numerator:** Adults with hospitalizations who qualified for any of the following PQI chronic condition measures:

- PQI 1: Diabetes, short-term complications
- PQI 3: Diabetes, long-term complications
- PQI 5: Chronic obstructive pulmonary disease or asthma
- PQI 7: Hypertension
- PQI 8: Heart failure
- PQI 14: Uncontrolled diabetes
- PQI 15: Asthma in younger adults
- PQI 16: Lower extremity amputations among patients with diabetes

**Comments:** This measure is based on the eight AHRQ PQIs for asthma, chronic obstructive pulmonary disease, diabetes, heart failure, and hypertension. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_65, 150403101

**Measure Title:** Potentially avoidable hospitalizations for chronic conditions per 100,000 population, age 6-17

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, race/ethnicity, expected primary payer, median household income of the patient's ZIP Code, urbanized location, region of the United States, bed size of hospital, teaching status of hospital

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident population of children ages 6 to 17 years

**Numerator:** Hospitalizations of children who qualified to be in the numerator for any of the following PDI measures:

- PDI 14: Asthma
- PDI 15: Diabetes, short-term complications

**Comments:** This measure is based on the 2 AHRQ PDIs for asthma and diabetes. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

#### **15.3.4. Potentially Harmful Services Without Benefit**

**Measure ID:** IHS\_2, 150404012

**Measure Title:** Hospital Admissions for perforated appendices within admissions for appendicitis, per 1,000 population age 18 and older

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

#### **Table Description:**

- Geographic Representation: National
- Years Available: 2003-2017
- Population Subgroups: Age, sex

**Data Source:** Indian Health Service (IHS), Office of Information Technology/National Patient Information Reporting System (NPIRS), National Data Warehouse (NDW)

**Denominator:** Inpatient Discharges containing a diagnosis code for appendicitis

**Numerator:** Subset of the denominator for inpatient discharges containing a diagnosis code for perforation or abscess of appendix

**Comments:** Indian Health Service Areas of Portland and California excluded due to having no inpatient facilities.

**Measure ID:** IHS\_4, 150404021

**Measure Title:** Hospital admissions for urinary tract infections per 100,000 population age 18 and older

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2003-2017
- Population Subgroups: Age, sex

**Data Source:** Indian Health Service (IHS), Office of Information Technology/National Patient Information Reporting System (NPIRS), National Data Warehouse (NDW)

**Denominator:** Area Health Resource File, 2000 Bridged Race Census AI/AN population, age 18 years and over, extrapolated and smoothed to current year

**Numerator:** Discharges with principal diagnosis of urinary tract infection, without mention of kidney or urinary tract disorder, or immune compromised

**Comments:** Indian Health Service Areas of Portland and California excluded due to having no inpatient facilities.

### 15.3.5. Electronic Health Records in Hospitals or in Physician Practices

**Measure ID:** AHA\_33, 150405011

**Measure Title:** Hospitals with computerized system that supports medication lists

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2012 - 2016; National: 2012 – 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for medication management for comparing a patient’s inpatient and preadmission medication lists, providing an updated medication lists at the time of discharge, checking the inpatient prescriptions against an internal formulary, tracking

automatically medications with an electronic medication administration, and prescribing electronically discharge medication orders?”

**Numerator:** Subset of the denominator that responded positively to all components of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_37, 150405012

**Measure Title:** Hospitals with computerized system that supports drug decision

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2012 - 2016; National: 2012 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which supports drug decision?”

**Numerator:** Subset of the denominator that responded positively to the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_35, 150405014

**Measure Title:** Hospitals with computerized system that supports pharmaceutical bar coding

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2012 – 2016; National: 2012 – 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_4, 150405022

**Measure Title:** Hospitals with computerized system that supports electronic clinical documentation including physician notes

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2011 - 2016; National: 2011 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for medication management for comparing a patient’s inpatient and preadmission medication lists, providing an updated medication lists at the time of discharge, checking the inpatient prescriptions against an internal formulary, tracking

automatically medications with an electronic medication administration, and prescribing electronically discharge medication orders? “

**Numerator:** Subset of the denominator that responded positively to all components of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_5, 150405023

**Measure Title:** Hospitals with computerized system that supports electronic clinical documentation including nursing notes

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2011 - 2016; National: 2011 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for medication management for comparing a patient’s inpatient and preadmission medication lists, providing an updated medication lists at the time of discharge, checking the inpatient prescriptions against an internal formulary, tracking automatically medications with an electronic medication administration, and prescribing electronically discharge medication orders? “

**Numerator:** Subset of the denominator that responded positively to all components of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_6, 150405024

**Measure Title:** Hospitals with computerized system that supports electronic clinical documentation including problem lists

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2011 - 2016; National: 2011 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for medication management for comparing a patient’s inpatient and preadmission medication lists, providing an updated medication lists at the time of discharge, checking the inpatient prescriptions against an internal formulary, tracking automatically medications with an electronic medication administration, and prescribing electronically discharge medication orders? “

**Numerator:** Subset of the denominator that responded positively to all components of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_7, 150405025

**Measure Title:** Hospitals with computerized system that supports electronic clinical documentation including medication list

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2011 - 2016; National: 2011 - 2016



- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for medication management for comparing a patient’s inpatient and preadmission medication lists, providing an updated medication lists at the time of discharge, checking the inpatient prescriptions against an internal formulary, tracking automatically medications with an electronic medication administration, and prescribing electronically discharge medication orders? “

**Numerator:** Subset of the denominator that responded positively to all components of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_8, 150405026

**Measure Title:** Hospitals with computerized system that supports electronic clinical documentation including discharge summaries

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2011 - 2016; National: 2011 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for medication management for comparing a patient’s inpatient and preadmission medication lists, providing an updated medication lists at the time of discharge, checking the inpatient prescriptions against an internal formulary, tracking

automatically medications with an electronic medication administration, and prescribing electronically discharge medication orders? “

**Numerator:** Subset of the denominator that responded positively to all components of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_9, 150405027

**Measure Title:** Hospitals with computerized system that supports electronic clinical documentation including advanced directives

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2011 - 2016; National: 2011 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for medication management for comparing a patient’s inpatient and preadmission medication lists, providing an updated medication lists at the time of discharge, checking the inpatient prescriptions against an internal formulary, tracking automatically medications with an electronic medication administration, and prescribing electronically discharge medication orders? “

**Numerator:** Subset of the denominator that responded positively to all components of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_2, 150405028

**Measure Title:** Hospitals with computerized system that supports electronic clinical documentation

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2011 - 2016; National: 2011 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for medication management for comparing a patient’s inpatient and preadmission medication lists, providing an updated medication lists at the time of discharge, checking the inpatient prescriptions against an internal formulary, tracking automatically medications with an electronic medication administration, and prescribing electronically discharge medication orders? “

**Numerator:** Subset of the denominator that responded positively to all components of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_11, 150405031

**Measure Title:** Hospitals with computerized system that allows for results viewing including laboratory reports

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016

- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for computerized provider order entry of medications?”

**Numerator:** Subset of the denominator that responded positively to the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_12, 150405032

**Measure Title:** Hospitals with computerized system that allows for results viewing including radiology reports

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_13, 150405033

**Measure Title:** Hospitals with computerized system that allows for results viewing including radiology images

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_14, 150405034

**Measure Title:** Hospitals with computerized system that allows for results viewing including diagnostic test results

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016

- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_15, 150405035

**Measure Title:** Hospitals with computerized system that allows for results viewing including diagnostic test images

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_16, 150405036

**Measure Title:** Hospitals with computerized system that allows for results viewing including consultant reports

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 20122 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_24, 150405041

**Measure Title:** Hospitals with computerized system that allows for decision support including clinical guidelines

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016

- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_25, 150405042

**Measure Title:** Hospitals with computerized system that allows for decision support including clinical reminders

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question



**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_26, 150405043

**Measure Title:** Hospitals with computerized system that allows for decision support including drug allergy alerts

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_27, 150405044

**Measure Title:** Hospitals with computerized system that allows for decision support including drug-drug interaction alerts

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016

- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_28, 150405045

**Measure Title:** Hospitals with computerized system that allows for decision support including drug-lab interaction alerts

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_29, 150405046

**Measure Title:** Hospitals with computerized system that allows for decision support including drug dosing support

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_23, 150405047

**Measure Title:** Hospitals with computerized system that allows for decision support

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016

- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_18, 150405051

**Measure Title:** Hospitals with computerized system that allows for computerized provider order entry including laboratory test

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_19, 150405052

**Measure Title:** Hospitals with computerized system that allows for computerized provider order entry including radiology test

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_21, 150405053

**Measure Title:** Hospitals with computerized system that allows for computerized provider order entry including consultant request

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016

- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_22, 150405054

**Measure Title:** Hospitals with computerized system that allows for computerized provider order entry including nursing orders

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_17, 150405055

**Measure Title:** Hospitals with computerized system that allows for computerized provider order entry

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_10, 150405056

**Measure Title:** Hospitals with computerized system that allows for results viewing

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016

- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for decision support of drug allergy alerts, drug-drug interaction alerts, drug-lab interaction alerts, and drug dosing support?”

**Numerator:** Subset of the denominator that responded positively to all components of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_20, 150405057

**Measure Title:** Hospitals with computerized system that allows for computerized provider order entry including medications

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for bar coding or radio frequency identification for closed-loop medication tracking for medication administration and pharmacy verification?”

**Numerator:** Subset of the denominator that responded positively to both parts of the question



**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** AHA\_1, 150405061

**Measure Title:** Hospitals with fully implemented electronic medical record system

**Measure Source:** American Hospital Association (AHA) Survey, Information Technology (IT) Supplement

**Table Description:**

- Geographic Representation: National, State
- Years Available: State: 2013 - 2016; National: 2013 - 2016
- Population Subgroups: Hospital bed size, control, geographic location, graduate medical education program, hospital type, medical school affiliation, member of Council of Teaching Hospitals, region

**Data Source:**

National and State: AHA Survey, IT Supplement

**Denominator:** Number of hospitals that responded to the question, “Does your hospital currently have a computerized system which allows for electronic documentation of patient demographics, physician notes, nursing notes, problem lists, medication lists, discharges summaries, and advanced directives?”

**Numerator:** Subset of the denominator that responded positively to all components of the question

**Comments:** The 2012 AHA IT Supplement was sent to 6,241 non-Federal acute care hospitals in the United States, including non-AHA member hospitals. The response rate was 51.9 percent. If data are missing, the hospital is not included in the numerator or denominator of measures.

**Measure ID:** NAMCS\_1, 150405071

**Measure Title:** Office-based physicians with a computerized system ordering prescriptions electronically to the pharmacy

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2012 - 2015

- Population Subgroups: Age of physician, geographic location (practice), practice size, region, specialty

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Denominator:** Physicians in the United States providing direct patient care in office-based practices and clinicians in community health centers. Physicians with specialties in radiology, anesthesiology, and pathology are excluded

**Numerator:** Subset of physicians in the denominator with a computerized system ordering prescriptions electronically to the pharmacy

**Comments:** Since 2008, a supplemental mail survey on EHR systems has been conducted in addition to the core NAMCS, which is an in-person survey. In 2008 and 2009, samples of physicians in the core NAMCS and the supplemental mail survey, stratified by specialty, were chosen from selected geographic areas. Starting in 2010, the NAMCS EHR mail-survey sample size was increased fivefold to produce stand-alone estimates without needing to be combined with the core NAMCS. The 2012-2015 estimates are from the NAMCS EHR survey.

**Measure ID:** NAMCS\_2, 150405072

**Measure Title:** Office-based physicians with a computerized system for sending prescriptions electronically to the pharmacy

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2012 - 2015
- Population Subgroups: Age of physician, geographic location (practice), practice size, region, specialty

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Denominator:** Physicians in the United States providing direct patient care in office-based practices and clinicians in community health centers. Physicians with specialties in radiology, anesthesiology, and pathology are excluded

**Numerator:** Subset of physicians in the denominator with a computerized system for sending prescriptions electronically to the pharmacy

**Comments:** Since 2008, a supplemental mail survey on EHR systems has been conducted in addition to the core NAMCS, which is an in-person survey. In 2008 and 2009, samples of physicians in the core NAMCS and the supplemental mail survey, stratified by specialty, were chosen from selected geographic areas. Starting in 2010, the NAMCS EHR mail-survey sample size was increased fivefold to produce stand-alone estimates without needing to be combined with the core NAMCS. The 2012-2015 estimates are from the NAMCS EHR survey.

**Measure ID:** NAMCS\_3, 150405073

**Measure Title:** Office-based physicians with a computerized system for providing warnings of drug interactions or contraindications

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2012 - 2015
- Population Subgroups: Age of physician, geographic location (practice), practice size, region, specialty

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Denominator:** Physicians in the United States providing direct patient care in office-based practices and clinicians in community health centers. Physicians with specialties in radiology, anesthesiology, and pathology are excluded

**Numerator:** Subset of physicians in the denominator with a computerized system for providing warnings of drug interactions or contraindications

**Comments:** Since 2008, a supplemental mail survey on EHR systems has been conducted in addition to the core NAMCS, which is an in-person survey. In 2008 and 2009, samples of physicians in the core NAMCS and the supplemental mail survey, stratified by specialty, were chosen from selected geographic areas. Starting in 2010, the NAMCS EHR mail-survey sample size was increased fivefold to produce stand-alone estimates without needing to be combined with the core NAMCS. The 2012-2015 estimates are from the NAMCS EHR survey.

**Measure ID:** NAMCS\_4, 150405074

**Measure Title:** Office-based physicians with a computerized system for providing reminders.

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2012 - 2015
- Population Subgroups: Age of physician, geographic location (practice), practice size, region, specialty

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Denominator:** Physicians in the United States providing direct patient care in office-based practices and clinicians in community health centers. Physicians with specialties in radiology, anesthesiology, and pathology are excluded

**Numerator:** Subset of physicians in the denominator with a computerized system for providing reminders

**Comments:** Since 2008, a supplemental mail survey on EHR systems has been conducted in addition to the core NAMCS, which is an in-person survey. In 2008 and 2009, samples of physicians in the core NAMCS and the supplemental mail survey, stratified by specialty, were chosen from selected geographic areas. Starting in 2010, the NAMCS EHR mail-survey sample size was increased fivefold to produce stand-alone estimates without needing to be combined with the core NAMCS. The 2012-2015 estimates are from the NAMCS EHR survey.

**Measure ID:** NAMCS\_5, 150405075

**Measure Title:** Office-based physicians with a computerized system for providing clinical decision support.

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2012 - 2015
- Population Subgroups: Age of physician, geographic location (practice), practice size, region, specialty

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Denominator:** Physicians in the United States providing direct patient care in office-based practices and clinicians in community health centers

Physicians with specialties in radiology, anesthesiology, and pathology are excluded

**Numerator:** Subset of physicians in the denominator with a computerized system for providing clinical decision support. Computerized systems with clinical support are those that have the capability to both provide reminders and provide warnings of drug interactions or contraindications. NAMCS EMR survey does not have a separate variable measuring availability of clinical decision support; availability of two other capabilities (warning system and reminder system) are combined to create this measure.

**Comments:** Since 2008, a supplemental mail survey on EHR systems has been conducted in addition to the core NAMCS, which is an in-person survey. In 2008 and 2009, samples of physicians in the core NAMCS and the supplemental mail survey, stratified by specialty, were chosen from selected geographic areas. Starting in 2010, the NAMCS EHR mail-survey sample size was increased fivefold to produce stand-alone estimates without needing to be combined with the core NAMCS. The 2012-2015 estimates are from the NAMCS EHR survey.

**Measure ID:** NAMCS\_7, 150405076

**Measure Title:** Office-based physicians with a computerized system for recording patient demographic information

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2012 - 2015
- Population Subgroups: Age of physician, geographic location (practice), practice size, region, specialty

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Denominator:** Physicians in the United States providing direct patient care in office-based practices and clinicians in community health centers

Physicians with specialties in radiology, anesthesiology, and pathology are excluded.

**Numerator:** Subset of physicians in the denominator with a computerized system for recording patient demographic information

**Comments:** Since 2008, a supplemental mail survey on EHR systems has been conducted in addition to the core NAMCS, which is an in-person survey. In 2008 and 2009, samples of physicians in the core NAMCS and the supplemental mail survey, stratified by specialty, were chosen from selected geographic areas. Starting in 2010, the NAMCS EHR mail-survey sample size was increased fivefold to produce stand-alone estimates without needing to be combined with the core NAMCS. The 2012-2015 estimates are from the NAMCS EHR survey

**Measure ID:** NAMCS\_8, 150405077

**Measure Title:** Office-based physicians with a computerized system for providing clinical notes

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2012 - 2015
- Population Subgroups: Age of physician, geographic location (practice), practice size, region, specialty

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Denominator:** Physicians in the United States providing direct patient care in office-based practices and clinicians in community health centers

Physicians with specialties in radiology, anesthesiology, and pathology are excluded.

**Numerator:** Subset of physicians in the denominator with a computerized system for providing clinical notes

**Comments:** Since 2008, a supplemental mail survey on EHR systems has been conducted in addition to the core NAMCS, which is an in-person survey. In 2008 and 2009, samples of physicians in the core NAMCS and the supplemental mail survey, stratified by specialty, were chosen from selected geographic areas. Starting in 2010, the NAMCS EHR mail-survey sample size was increased fivefold to produce stand-alone estimates without needing to be combined with the core NAMCS. The 2012-2015 estimates are from the NAMCS EHR survey.

**Measure ID:** NAMCS\_9, 150405078

**Measure Title:** Office-based physicians who have an electronic medical records system (not including billing)

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2012 - 2015
- Population Subgroups: Age of physician, geographic location (practice), practice size, region, specialty

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Denominator:** Physicians in the United States providing direct patient care in office-based practices and clinicians in community health centers

Physicians with specialties in radiology, anesthesiology, and pathology are excluded.

**Numerator:** Subset of physicians in the denominator who have an electronic medical records system (not including billing)

**Comments:** Since 2008, a supplemental mail survey on EHR systems has been conducted in addition to the core NAMCS, which is an in-person survey. In 2008 and 2009, samples of physicians in the core NAMCS and the supplemental mail survey, stratified by specialty, were chosen from selected geographic areas. Starting in 2010, the NAMCS EHR mail-survey sample size was increased fivefold to produce stand-alone estimates without needing to be combined with the core NAMCS. The 2012-2015 estimates are from the NAMCS EHR survey.

**Measure ID:** NAMCS\_14, 150405081

**Measure Title:** Office-based physicians who have a computerized system for discharge summaries

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2012 – 2015

- Population Subgroups: Sex, race/ethnicity, health insurance status, geographic location (patient)

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Denominator:** Physicians in the United States providing direct patient care in office-based practices and clinicians in community health centers

Physicians with specialties in radiology, anesthesiology, and pathology are excluded.

**Numerator:** Subset of physicians in the denominator with a computerized system for discharge summaries

**Comments:** Since 2008, a supplemental mail survey on EHR systems has been conducted in addition to the core NAMCS, which is an in-person survey. In 2008 and 2009, samples of physicians in the core NAMCS and the supplemental mail survey - stratified by specialty - were chosen from selected geographic areas. Starting in 2010, the NAMCS EHR mail-survey sample size was increased fivefold to produce stand-alone estimates without needing to be combined with the core NAMCS. The 2012-2015 estimates are from the NAMCS EHR survey.

**Measure ID:** NAMCS\_15, 150405083

**Measure Title:** Office-based physicians who have a computerized system for receiving follow-up information from other providers

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2012 – 2013
- Population Subgroups: Sex, race/ethnicity, health insurance status, geographic location (patient)

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Denominator:** Physicians in the United States providing direct patient care in office-based practices and clinicians in community health centers

Physicians with specialties in radiology, anesthesiology, and pathology are excluded.



**Numerator:** Subset of physicians in the denominator with a computerized system for receiving follow-up information from other providers

**Comments:** Since 2008, a supplemental mail survey on EHR systems has been conducted in addition to the core NAMCS, which is an in-person survey. In 2008 and 2009, samples of physicians in the core NAMCS and the supplemental mail survey - stratified by specialty - were chosen from selected geographic areas. Starting in 2010, the NAMCS EHR mail-survey sample size was increased fivefold to produce stand-alone estimates without needing to be combined with the core NAMCS. The 2012-2015 estimates are from the NAMCS EHR survey.

**Measure ID:** NAMCS\_16, 150405084

**Measure Title:** Office-based physicians who have a computerized system for hospital discharge summary

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2012 – 2014
- Population Subgroups: Sex, race/ethnicity, health insurance status, geographic location (patient)

**Data Source:**

National: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Ambulatory Medical Care Survey (NAMCS)

**Denominator:** Physicians in the United States providing direct patient care in office-based practices and clinicians in community health centers

Physicians with specialties in radiology, anesthesiology, and pathology are excluded.

**Numerator:** Subset of denominator with a computerized system for hospital discharge summary

**Comments:** Since 2008, a supplemental mail survey on EHR systems has been conducted in addition to the core NAMCS, which is an in-person survey. In 2008 and 2009, samples of physicians in the core NAMCS and the supplemental mail survey - stratified by specialty - were chosen from selected geographic areas. Starting in 2010, the NAMCS EHR mail-survey sample size was increased fivefold to produce stand-alone estimates without needing to be combined with the core NAMCS. The 2012-2015 estimates are from the NAMCS EHR survey.

## 15.4. Effectiveness of Care

### 15.4.1. Hospitalizations for Diabetes

**Measure ID:** IHS\_1, 150502022

**Measure Title:** Hospital admissions for uncontrolled diabetes, per 100,000 population age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

#### **Table Description:**

- Geographic Representation: National
- Years Available: 2000-2017
- Population Subgroups: Age, sex

**Data Source:** Indian Health Service (IHS), Office of Information Technology/National Patient Information Reporting System, National Data Warehouse

**Denominator:** Area Health Resource File, 2000 Bridged Race Census AI/AN population, age 18 years and over, extrapolated and smoothed to current year

**Numerator:** Discharges with a principal diagnosis of uncontrolled diabetes and without mention of short-term or long-term complications

**Comments:** Indian Health Service Areas of Portland and California excluded due to having no inpatient facilities.

**Measure ID:** IHS\_3, 150502023

**Measure Title:** Hospital admissions for short-term complications of diabetes per 100,000 population age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

#### **Table Description:**

- Geographic Representation: National
- Years Available: 2000-2017
- Population Subgroups: Age, sex

**Data Source:** Indian Health Service (IHS), Office of Information Technology/National Patient Information Reporting System (NPIRS), National Data Warehouse (NDW)

**Denominator:** Area Health Resource File, 2000 Bridged Race Census AI/AN population, age 18 years and over, extrapolated and smoothed to current year

**Numerator:** Discharges with principal diagnosis of short term complications of diabetes

**Comments:** Indian Health Service Areas of Portland and California excluded due to having no inpatient facilities.

**Measure ID:** 150502031

**Measure Title:** Hospital admissions for short-term complications of diabetes per 100,000 population diagnosed with diabetes, adults

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident diabetic population, age 18 and over, estimated based on diabetes prevalence from the CDC National Diabetes Surveillance System

**Numerator:** Adult discharges age 18 and over with a principal diagnosis of diabetes with short-term complications

**Comments:** Consistent with the AHRQ PQI software, diabetes must be the principal diagnosis and short-term complications include ketoacidosis, hyperosmolarity, and coma. Transfers from other institutions are excluded. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150502041

**Measure Title:** Hospital admissions for long-term complications of diabetes per 100,000 population diagnosed with diabetes, adults

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident diabetic population, age 18 and over, estimated based on diabetes prevalence from the CDC National Diabetes Surveillance System

**Numerator:** Hospitalization of adults age 18 and over with hospital inpatient discharges with a principal diagnosis code for diabetes with long-term complications

**Comments:** Consistent with the AHRQ PQI software, diabetes must be the principal diagnosis and long-term complications include renal, eye, neurologic, circulatory, and other unspecified complications. Transfers from other institutions and obstetric admissions are excluded. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150502051

**Measure Title:** Hospital admissions for lower-extremity amputations per 100,000 population diagnosed with diabetes, adults

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident diabetic population, age 18 and over, estimated based on diabetes prevalence from the CDC National Diabetes Surveillance System

**Numerator:** Hospitalizations of adults with a procedure for lower-extremity amputation and a diagnosis of diabetes.

**Comments:** The AHRQ PQI software requires that a procedure code for lower-extremity amputation and a diagnosis of diabetes must be present. Exclusions include admissions for toe amputation or traumatic amputations of the lower extremity, obstetric discharges, and transfers from other institutions. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150502061

**Measure Title:** Hospital admissions for uncontrolled diabetes without complications per 100,000 population diagnosed with diabetes, adults

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** U.S. resident diabetic population, age 18 and over, estimated based on diabetes prevalence from the CDC National Diabetes Surveillance System

**Numerator:** Hospital admissions of adults age 18 and over with discharges with a principal diagnosis of uncontrolled diabetes and without mention of short-term or long-term complications

**Comments:** Short-term complications include ketoacidosis, hyperosmolarity, and coma. Long-term complications include renal, eye, neurologic, circulatory, and other unspecified. Obstetric admissions and transfers from other institutions are excluded. Rates prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Observed (un-adjusted) rates are reported, as risk adjustment was unavailable in the AHRQ QI version 7.0.1 software.

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

#### **15.4.2. HIV/AIDS**

**Measure ID:** HRSA\_1, 150503017

**Measure Title:** Ryan White HIV/AIDS Program HIV patients prescribed HIV antiretroviral therapy (ART) during the measurement year

**Measure Source:** Health Resources and Services Administration (HRSA), HIV/AIDS Bureau

**Table Description:**

- Geographic Representation: State
- Years Available: 2015
- Population Subgroups: Age, income, insurance, sex, and race/ethnicity

**Data Source:** Health Resources and Services Administration (HRSA), HIV/AIDS Bureau

**Denominator:** Number of patients, regardless of age, with a diagnosis of HIV with at least one medical visit in the measurement year. Measurement year is January 1 - December 31.

**Numerator:** Number of patients from the denominator prescribed HIV antiretroviral therapy (ART) during the measurement year. HIV antiretroviral therapy is described as the prescription of at least one U.S. Food and Drug Administration approved HIV antiretroviral medication.

**Comments:** The Ryan White HIV/AIDS Program (RWHAP) provides HIV care and treatment to over 500,000 annually. Each year, Ryan White Program providers are required to submit the Ryan White Services Report (RSR). In 2009, the Ryan White Program Services Report (RSR) was initiated to collect client-level data to provide additional information on the characteristics of the funded grantees, their providers, and the clients served with program funds. The data reported to RWHAP assesses client service needs and establishes practical outcome measures for the program.

**Measure ID:** HRSA\_2, 150503018

**Measure Title:** Ryan-White HIV/AIDS Program HIV patients with at least 2 medical care visit dates at least 90 days apart during the year

**Measure Source:** Health Resources and Services Administration (HRSA), HIV/AIDS Bureau

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2010 - 2016; State: 2010 - 2016
- Population Subgroups: Age, income, insurance, sex, and race/ethnicity

**Data Source:** Health Resources and Services Administration (HRSA), HIV/AIDS Bureau

**Denominator:** Number of patients, regardless of age, with a diagnosis of HIV with at least one medical visit in the measurement year. Measurement year is January 1 - December 31

**Numerator:** Number of patients with at least two medical visits 90 days apart during the measurement year with the first visit prior to September 1<sup>st</sup>

**Comments:** RWHAP and RSR comment.



**Measure ID:** HRSA\_3, 150503019

**Measure Title:** Ryan White HIV/AIDS Program patients with a HIV viral load less than 200 copies/mL at last HIV viral load test during the measurement year

**Measure Source:** Health Resources and Services Administration (HRSA), HIV/AIDS Bureau

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2010 - 2016; State: 2010 - 2016
- Population Subgroups: Age, income, insurance, sex, and race/ethnicity

**Data Source:** Health Resources and Services Administration (HRSA), HIV/AIDS Bureau

**Denominator:** Number of patients, regardless of age, with a diagnosis of HIV with at least one medical visit in the measurement year

**Numerator:** Number of patients in the denominator with a HIV viral load less than 200 copies/mL at last HIV viral load test during the measurement year

**Comments:** RWHAP and RSR comment

### 15.4.3. Mental Health & Substance Abuse

**Measure ID:** NSDUH\_6, 150504021

**Measure Title:** Adults who received mental health treatment or counseling in the last 12 months

**Measure Source:** Substance Abuse and Mental Health Services Administration (SAMHSA), Office of Applied Studies, National Survey on Drug Use and Health (NSDUH)

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2002 - 2016; State: 2011 - 2016
- Population Subgroups: Age, education, income, location (residence), race/ethnicity, sex

**Data Source:** SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health (NSDUH)

**Denominator:** US civilian noninstitutionalized population age 18 and over

**Numerator:** Subset of the denominator who reported receipt of mental health treatment or counseling in the past year

**Measure ID:** NSDUH\_7, 150504031

**Measure Title:** Adults who received outpatient mental health treatment or counseling in the last 12 months

**Measure Source:** Substance Abuse and Mental Health Services Administration (SAMHSA)

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2002 - 2016; State: 2011 - 2016
- Population Subgroups: Age, education, income, location (residence), race/ethnicity, sex

**Data Source:** SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health (NSDUH)

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over

**Numerator:** Subset of the denominator who reported receipt of outpatient mental health treatment or counseling in the past year

**Measure ID:** NSDUH\_8, 150504041

**Measure Title:** Adults who received prescription medications for mental health treatment in the last 12 months

**Measure Source:** Substance Abuse and Mental Health Services Administration (SAMHSA)

**Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2002 - 2016; State: 2011 - 2016
- Population Subgroups: Age, education, income, location (residence), race/ethnicity, sex

**Data Source:** SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health (NSDUH)

**Denominator:** US civilian noninstitutionalized population age 18 and over

**Numerator:** Subset of the denominator who reported receipt of counseling or prescription medications for treatment of a mental health condition or problem in the past year

**Measure ID:** 150504051

**Measure Title:** Patients aged 65 and over with an emergency department (ED) visit and with a dementia diagnosis who were not hospitalized

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, community-level income, location of patient residence, expected source of payment, location of patient treatment, ownership/control of hospital, and teaching status of hospital.

**Data Source:** AHRQ, CDOM, HCUP, Nationwide Emergency Department Sample (NEDS)

**Denominator:** Total number of emergency department visits with any diagnosis of dementia, adults age 65 and over, excluding transfers

**Numerator:** A subset of the denominator where the patients were discharged from the ED without a hospital admission

**Comments:**

Dementia was defined using ICD-10-CM codes below:

- F00 Dementia in Alzheimer disease
- F00.0\* Dementia in Alzheimer disease with early onset
- F00.1\* Dementia in Alzheimer disease with late onset
- F00.2\* Dementia in Alzheimer disease, atypical or mixed type
- F00.9\* Dementia in Alzheimer disease, unspecified
- F01 Vascular dementia
- F01.0 Vascular dementia of acute onset
- F01.1 Multi-infarct dementia
- F01.2 Subcortical vascular dementia
- F01.3 Mixed cortical and subcortical vascular dementia
- F01.8 Other vascular dementia
- F01.9 Vascular dementia, unspecified
- F02 Dementia in other diseases classified elsewhere
- F02.0\* Dementia in Pick disease
- F02.1\* Dementia in Creutzfeldt-Jakob disease
- F02.2\* Dementia in Huntington disease
- F02.3\* Dementia in Parkinson disease
- F02.4\* Dementia in human immunodeficiency virus [HIV] disease
- F02.8\* Dementia in other specified diseases classified elsewhere
- F03 Unspecified dementia
- F05 Delirium, not induced by alcohol and other psychoactive substances

- F05.1 Delirium superimposed on dementia
- G30 Alzheimer’s disease
- G30.0 Alzheimer disease with early onset
- G30.1 Alzheimer disease with late onset
- G30.8 Other Alzheimer disease
- G30.9 Alzheimer disease, unspecified

**Measure ID:** 150504061

**Measure Title:** Patients aged 65 and over with an emergency department (ED) visit and with a dementia diagnosis who were hospitalized following the ED visit

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, sex, community-level income, location of patient residence, expected source of payment, location of patient treatment, ownership/control of hospital, and teaching status of hospital.

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Sample (SID)

**Denominator:** Total number of emergency department visits with a any diagnosis of dementia, adults age 65 and over, excluding transfers

**Numerator:** A subset of the denominator where the patients were admitted to hospital following the ED visit

**Comments:**

Dementia was defined using ICD-10-CM codes below:

- F00 Dementia in Alzheimer disease
- F00.0\* Dementia in Alzheimer disease with early onset
- F00.1\* Dementia in Alzheimer disease with late onset
- F00.2\* Dementia in Alzheimer disease, atypical or mixed type
- F00.9\* Dementia in Alzheimer disease, unspecified
- F01 Vascular dementia
- F01.0 Vascular dementia of acute onset
- F01.1 Multi-infarct dementia
- F01.2 Subcortical vascular dementia
- F01.3 Mixed cortical and subcortical vascular dementia

- F01.8 Other vascular dementia
- F01.9 Vascular dementia, unspecified
- F02 Dementia in other diseases classified elsewhere
- F02.0\* Dementia in Pick disease
- F02.1\* Dementia in Creutzfeldt-Jakob disease
- F02.2\* Dementia in Huntington disease
- F02.3\* Dementia in Parkinson disease
- F02.4\* Dementia in human immunodeficiency virus [HIV] disease
- F02.8\* Dementia in other specified diseases classified elsewhere
- F03 Unspecified dementia
- F05 Delirium, not induced by alcohol and other psychoactive substances
- F05.1 Delirium superimposed on dementia
- G30 Alzheimer's disease
- G30.0 Alzheimer disease with early onset
- G30.1 Alzheimer disease with late onset
- G30.8 Other Alzheimer disease
- G30.9 Alzheimer disease, unspecified

#### **15.4.4. Maternal & Child Health**

**Measure ID:** NVSS\_9, 150506011

**Measure Title:** Cesarean delivery of low risk births giving birth for first time

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2007-2017
- Population Subgroups: Age, geographic location (residence), race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Denominator:** Live births to U.S. residents

**Numerator:** Children born via cesarean delivery to mothers who were at low risk and gave birth for first time

**Measure ID:** NVSS\_9, 150506021

**Measure Title:** Cesarean delivery of low risk births with prior cesarean births

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2007-2017
- Population Subgroups: Age, geographic location (residence), race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Denominator:** Live births to U.S. residents

**Numerator:** Children born via cesarean delivery to mothers who were low risk and with prior cesarean births

**Measure ID:** NVSS\_8, 150506031

**Measure Title:** Total cesarean births

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2007-2017
- Population Subgroups: Age, geographic location (residence), race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Denominator:** Live births to U.S. residents

**Numerator:** Subset of the denominator who were born via cesarean delivery

**Measure ID:** NVSS\_10, 150506041

**Measure Title:** Total preterm births

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Table Description:**

- Geographic Representation: National

- Years Available: National: 2007-2017

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Denominator:** Live births to U.S. residents

**Numerator:** Subset of the denominator who were preterm

**Comments:** Preterm birth is the birth of an infant prior to 37 weeks of pregnancy.

**Measure ID:** NVSS\_11, 150506051

**Measure Title:** Late preterm or live births at 34 to 36 weeks of gestation

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2007-2017
- Population Subgroups: Age, geographic location (residence), race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Denominator:** Live births to U.S. residents

**Numerator:** Subset of the denominator who were born at 34 to 36 weeks of gestation

**Measure ID:** NVSS\_17, 150506061

**Measure Title:** Women who completed a pregnancy in the last 12 months who received prenatal care in the first trimester

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2008-2016

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Denominator:** Live births occurring to residents in those States that use the 2003 revised birth certificate

**Numerator:** Subset of the denominator who received prenatal care in the first trimester

**Comments:** Excluded from these analyses are the following States that did not use the 2003 Revision to Birth Certificate: Alabama, Alaska, Arizona, Arkansas, Connecticut, Hawaii, Louisiana, Maine, Massachusetts, Minnesota, Mississippi, New Jersey, North Carolina, Rhode Island, Virginia, West Virginia, and Wisconsin.

#### 15.4.5. Others

**Measure ID:** 150507011

**Measure Title:** Patients who received appropriate care for severe sepsis and septic shock

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

#### **Table Description:**

- Geographic Representation: National, State
- Years Available: National: 2016
- Population Subgroups: Age, sex, race/ethnicity

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** Inpatients ages 18 and over with an ICD-10-CM Principal or Other Diagnosis Code of Sepsis, Severe Sepsis, or Septic Shock

**Numerator:** The numerator for this measure is patients from the denominator who had their lactate levels measured, had blood cultures obtained prior to receiving antibiotics, and who received broad spectrum antibiotics within three hours of presentation of severe sepsis, and who had a repeat lactate level drawn within six hours of presentation of severe sepsis if the initial lactate was elevated. If septic shock is present, the patients also must receive 30 ml/kg of crystalloid fluids for hypotension or lactate  $\geq 4$  mmol/L within three hours of septic shock presentation. Within six hours of presentation of septic shock vasopressors should be given (for hypotension that does not respond to initial fluid resuscitation or lactate is  $\geq 4$  mmol/L) and reassessment of volume status and tissue perfusion performed.

**Comments:** Information and resources regarding this measure can be accessed on *QualityNet* at <http://www.qualitynet.org/>, by selecting the “**Specifications Manual**” link under the “**Hospital-Inpatient**” tab in the left navigation bar, and then the “**Fact Sheets**” and SEP-1 Fact Sheet.



## 15.5. Lifestyle Modification

**Measure ID:** NCBD\_20, 150602021

**Measure Title:** Adults who had a doctor's office or clinic visit in the last 6 months who sometimes or never got advice to quit smoking from provider, Medicaid

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

### Table Description:

- Geographic Representation: States
- Years Available: 2010-2011, 2014-2017
- Population Subgroups: Race, ethnicity, and education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 12 months, Medicare managed care or Medicare fee-for-service

Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 6 months, Medicaid

**Numerator:** Subset of the denominator who sometimes or never got advice to quit smoking from provider

**Measure ID:** NCBD\_20, 150602022

**Measure Title:** Adults who had a doctor's office or clinic visit in the last 12 months who sometimes or never got advice to quit smoking from provider, Medicare managed care

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

### Table Description:

- Geographic Representation: States
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, and education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor's office or clinic visit in the last 12 months, Medicare managed care

**Numerator:** Subset of the denominator who sometimes or never got advice to quit smoking from provider

**Measure ID:** NCBD\_20, 150602023

**Measure Title:** Adults who had a doctor’s office or clinic visit in the last 12 months who sometimes or never got advice to quit smoking from provider, Medicare fee-for-service

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Quality Improvement and Patient Safety (CQIPS), National CAHPS Benchmarking Database (NCBD)

**Table Description:**

- Geographic Representation: States
- Years Available: 2010-2011, 2013-2017
- Population Subgroups: Race, ethnicity, and education

**Data Source:** AHRQ, CQIPS, NCBD

**Denominator:** Ambulatory care patients age 18 and over who had a doctor’s office or clinic visit in the last 12 months, Medicare fee-for-service

**Numerator:** Subset of the denominator who sometimes or never got advice to quit smoking from provider

## 15.6. Affordable Care

### 15.6.1. Financial Burden of Health Care Cost

**Measure ID:** HCUP\_19, 150701041

**Measure Title:** Levels I and II trauma centers utilization per 100 emergency department visits related to all injuries

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, geographic location (residence), income, region, sex

**Data Source:** AHRQ, CDOM, HCUP, Nationwide Emergency Department Sample (NEDS)

**Denominator:** Emergency department visits related to all injuries

**Numerator:** Subset of the denominator who utilized level I and II trauma centers

**Comments:** Trauma centers treat both adults and children. Designation of trauma center levels I, II, and III is based on criteria developed by the American College of Surgeons’ Committee on

Trauma (ACS/COT). Injury records were identified with a principal diagnosis related to injury defined using ICD-10-CM diagnosis codes S00-S99; T07-T34; T36-T50 with a 6<sup>th</sup> character of 1,2, 3, or 4 (except T36.9, T37.9, T39.9, T41.4, T42.7, T43.9, T45.9, T47.9, and T49.9 with a 5<sup>th</sup> character of 1, 2, 3, or 4); T51-T65; T66-T76; T79; T84.01; T84.02; and O9A.2-O9A.5.

The HCUP Nationwide Emergency Department Sample (NEDS) was created to enable analyses of emergency department (ED) utilization patterns and is the largest all-payer ED database that is publicly available in the United States. The NEDS is a 20-percent stratified sample of hospital-owned EDs in the United States. The NEDS is drawn from statewide data organizations that provide HCUP with data from ED visits that may or may not have resulted in hospital admission. Weights are provided to calculate national estimates.

For more information, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_20, 150701042

**Measure Title:** Level III trauma center utilization per 100 emergency department visits related to all injuries

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, geographic location (residence), income, region, sex

**Data Source:** AHRQ, CDOM, HCUP, Nationwide Emergency Department Sample (NEDS)

**Denominator:** Emergency department visits related to all injuries

**Numerator:** Subset of the denominator who utilized trauma level III centers

**Comments:** Trauma centers treat both adults and children. Designation of trauma center levels I, II, and III is based on criteria developed by the American College of Surgeons' Committee on Trauma (ACS/COT). Injury records were identified with a principal diagnosis related to injury defined using ICD-10-CM diagnosis codes S00-S99; T07-T34; T36-T50 with a 6<sup>th</sup> character of 1,2, 3, or 4 (except T36.9, T37.9, T39.9, T41.4, T42.7, T43.9, T45.9, T47.9, and T49.9 with a 5<sup>th</sup> character of 1, 2, 3, or 4); T51-T65; T66-T76; T79; T84.01; T84.02; and O9A.2-O9A.5.

The HCUP Nationwide Emergency Department Sample (NEDS) was created to enable analyses of emergency department (ED) utilization patterns and is the largest all-payer ED database that is publicly available in the United States. The NEDS is a 20-percent stratified sample of hospital-owned EDs in the United States. The NEDS is drawn from statewide data organizations that

provide HCUP with data from ED visits that may or may not have resulted in hospital admission. Weights are provided to calculate national estimates.

For more information, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** HCUP\_21, 150701043

**Measure Title:** Non-trauma centers utilization per 100 emergency department visits related to all injuries

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016
- Population Subgroups: Age, geographic location (residence), income, region, sex

**Data Source:** AHRQ, CDOM, HCUP, Nationwide Emergency Department Sample (NEDS)

**Denominator:** Emergency department visits related to all injuries

**Numerator:** Subset of the denominator who utilized non-trauma centers

**Comments:** Trauma centers treat both adults and children. Designation of trauma center levels I, II, and III is based on criteria developed by the American College of Surgeons' Committee on Trauma (ACS/COT). Injury records were identified with a principal diagnosis related to injury defined using ICD-10-CM diagnosis codes S00-S99; T07-T34; T36-T50 with a 6<sup>th</sup> character of 1,2, 3, or 4 (except T36.9, T37.9, T39.9, T41.4, T42.7, T43.9, T45.9, T47.9, and T49.9 with a 5<sup>th</sup> character of 1, 2, 3, or 4); T51-T65; T66-T76; T79; T84.01; T84.02; and O9A.2-O9A.5.

The HCUP Nationwide Emergency Department Sample (NEDS) was created to enable analyses of emergency department (ED) utilization patterns and is the largest all-payer ED database that is publicly available in the United States. The NEDS is a 20-percent stratified sample of hospital-owned EDs in the United States. The NEDS is drawn from statewide data organizations that provide HCUP with data from ED visits that may or may not have resulted in hospital admission. Weights are provided to calculate national estimates.

For more information, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

### 15.6.2. Cost of Hospitalization

**Measure ID:** 150703011

**Measure Title:** Cost for hospitalizations for dehydration, adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for dehydration, adults age 18 and over

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703021

**Measure Title:** Cost for hospitalizations for urinary tract infection (UTI), adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for urinary tract infection, adults age 18 and over

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703031

**Measure Title:** Cost for hospitalizations for urinary tract infection (UTI), children ages 3 months to 17 years

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for urinary tract infection, children ages 3 months to 17 years

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that

failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703041

**Measure Title:** Cost for hospitalizations for pediatric gastroenteritis, children ages 3 months to 17 years

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for pediatric gastroenteritis, children ages 3 months to 17 years

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.



For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703051

**Measure Title:** Cost for hospitalizations for hypertension, adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for hypertension, adults age 18 and over

**Numerator:** Not applicable

**Comments** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people

covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703071

**Measure Title:** Cost for hospitalizations for chronic obstructive pulmonary disease (COPD), adults age 40 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for chronic obstructive pulmonary disease (COPD), adults age 40 and over

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more

information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703081

**Measure Title:** Cost for hospitalizations for bacterial pneumonia, adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for bacterial pneumonia, adults age 18 and over

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703091

**Measure Title:** Cost for potentially avoidable hospital admissions for all conditions, adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for potentially avoidable admissions for all conditions, adults age 18 and over

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703111

**Measure Title:** Cost for potentially avoidable hospital admissions for all conditions, children ages 6-17

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for potentially avoidable admissions for all conditions, children ages 6-17

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703121

**Measure Title:** Cost for potentially avoidable hospital admissions for acute conditions, adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for potentially avoidable hospital admissions for acute conditions, adults age 18 and over

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term

acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703131

**Measure Title:** Cost for potentially avoidable hospital admissions for acute conditions, children ages 6-17

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for potentially avoidable admissions for acute conditions, children ages 6-17

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10



percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703141

**Measure Title:** Cost for potentially avoidable hospital admissions for chronic conditions, adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for potentially avoidable admissions for chronic conditions, adults age 18 and over

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people

covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703161

**Measure Title:** Cost for potentially avoidable hospital admissions for chronic conditions, children ages 6-17

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDI)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for potentially avoidable admissions for chronic conditions, children ages 6-17

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more

information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703181

**Measure Title:** Cost for hospitalizations for heart failure (HF), adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for heart failure (HF), adults age 18 and over

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703191

**Measure Title:** Cost for hospitalizations for uncontrolled diabetes without complications, adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable

The table includes weighted number of discharges, total cost and average cost per discharge for uncontrolled diabetes without complications, adults age 18 and over.

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703201

**Measure Title:** Cost for hospitalizations for short-term complications of diabetes, adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for short-term complications of diabetes, adults age 18 and over

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703211

**Measure Title:** Cost for hospitalizations for short-term complications of diabetes, children ages 6-17

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for short-term complications of diabetes, children ages 6-17

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703221

**Measure Title:** Cost for hospitalizations for diabetes with long-term complications, adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for diabetes with long-term complications, adults age 18 and over

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.



For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703231

**Measure Title:** Cost for hospitalizations for lower-extremity amputation among patients with diabetes, adults age 18 and over

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for lower-extremity amputation among patients with diabetes, adults age 18 and over

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and

(3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703241

**Measure Title:** Cost for hospitalizations for asthma, adults ages 18-39

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Prevention Quality Indicators (PQIs)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for asthma, adults ages 18-39

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>).

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

**Measure ID:** 150703251

**Measure Title:** Cost for hospitalizations for asthma, children ages 2-17

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets (CDOM), Healthcare Cost and Utilization Project (HCUP), Pediatric Quality Indicators (PDI)

**Table Description:**

- Geographic Representation: National
- Years Available: 2016

**Data Source:** AHRQ, CDOM, HCUP, State Inpatient Databases (SID) weighted to provide national estimates, and AHRQ Quality Indicators, version 7.0.1

**Denominator:** Not applicable. The table includes weighted number of discharges, total cost and average cost per discharge for asthma, children ages 2-17

**Numerator:** Not applicable

**Comments:** Costs prior to 2016 are not reported because of the transition to the International Classification of Diseases, Tenth Edition, Clinical Modification/ Procedure Coding System. Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services. For more information about the HCUP cost-to-charge ratios, visit the HCUP-US Web site (<https://hcup-us.ahrq.gov/db/state/costtocharge.jsp>)

The HCUP State Inpatient Databases (SID) include a powerful set of hospital databases from HCUP Partner organizations in 47 States and the District of Columbia. Together, the SID encompasses about 97 percent of all U.S. community hospital discharges. SID contains a core set of clinical and nonclinical information on all patients, regardless of payer, including people

covered by Medicare, Medicaid, and private insurance, as well as uninsured people. In addition to the core set of uniform data elements common to all SID, some databases within SID include other elements, such as the patient's race.

For generating national QI estimates beginning in data year 2016, SID meeting the following inclusion criteria were combined to create a nationally weighted analysis file: (1) less than 10 percent of discharges failed edit checks on indicators of diagnoses being present on admission (POA); (2) the SID included information on day of principal and secondary procedure days; and (3) the SID included good reporting of race/ethnicity data. After hospitals and discharges that failed POA and race/ethnicity edits were excluded, the remaining discharges were weighted to the universe of community hospitals in the United States, excluding rehabilitation and long-term acute care facilities. In data year 2016, the nationally weighted analysis file includes data from 34 SID and over 30.2 million discharges.

For more information on the sampling approach and included States by data year, see the HCUP Methods Series Report on Methods Applying AHRQ Quality Indicators to HCUP Data (<https://www.hcup-us.ahrq.gov/reports/methods/methods.jsp>).

## Chapter 16. Special Analysis

**Measure ID:** 160101011

**Measure Title:** Breast cancer deaths per 100,000 female population per year by metropolitan status

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National
- Years Available: 1999-2015
- Population Subgroups: Region by metropolitan status

**Data Source:** National and State: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)—Mortality

**Denominator:** U.S. female resident population

**Numerator:** Number of female deaths per year due to breast cancer

**Comments:** This measure is referred to as measure C-3 in Healthy People 2020 documentation. Respondents for whom age is not reported are excluded from numerators.

**Measure ID:** 160101021

**Measure Title:** Colorectal cancer deaths per 100,000 population by metropolitan status

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National
- Years Available: 1999-2015
- Population Subgroups: Region by metropolitan status

**Data Source:** National and State: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)-Mortality

**Denominator:** U.S. resident population

**Numerator:** Number of deaths per year due to colorectal cancer

**Comments:** This measure is referred to as measure C-5 in Healthy People 2020 documentation. Estimates are age adjusted to the 2000 U.S. standard population. Respondents for whom age is

not reported are not included in the age adjustment calculations and are excluded from numerators.

**Measure ID:** 160101031

**Measure Title:** Lung cancer deaths per 100,000 population by metropolitan status

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National
- Years Available: 1999-2015
- Population Subgroups: Region by metropolitan status

**Data Source:** National and State: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)—Mortality

**Denominator:** U.S. resident population

**Numerator:** Number of deaths per year due to lung cancer

**Comments:** This measure is referred to as measure C-2 in Healthy People 2020 documentation. Estimates are age adjusted to the 2000 U.S. standard population. Age data are unadjusted. Respondents for whom age is not reported are not included in the age adjustment calculations and are excluded from numerators.

**Measure ID:** 160101041

**Measure Title:** HIV infection deaths per 100,000 population by metropolitan status

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National
- Years Available: 1999-2015
- Population Subgroups: Region by metropolitan status

**Data Source:** National and State: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)—Mortality

**Denominator:** U.S. resident population

**Numerator:** Number of deaths due to HIV infection

**Comments:** Estimates are age adjusted to the 2000 U.S. standard population. Age data are unadjusted. Respondents for whom age is not reported are not included in the age adjustment calculations and are excluded from numerators. This measure is referred to as measure HIV-12 in Healthy People 2020 documentation.

**Measure ID:** 160101051

**Measure Title:** Suicide deaths per 100,000 population age 12 and over by metropolitan status

**Measure Source:** Healthy People 2020

**Table Description:**

- Geographic Representation: National
- Years Available: 1999-2015
- Population Subgroups: Region by metropolitan status

**Data Source:** National and State: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)—Mortality

**Denominator:** U.S. resident population age 12 and over

**Numerator:** Subset of the denominator who died from suicide

**Comments:** Suicides may be undercounted because of difficulty in the determination of suicidal intent by the coroner or medical examiner. Estimates are age adjusted to the 2000 U.S. standard population. Age data are unadjusted. Respondents for whom age is not reported are not included in the age adjustment calculations and are excluded from numerators. This measure is referred to as measure MHMD-1 in Healthy People 2020 documentation.

## Chapter 17. Retired Measures

**Measure ID:** QIO\_11, 300202021

**Measure Title:** Hospital patients with heart attack given percutaneous coronary intervention within 90 minutes of arrival

**Measure Source:** Centers for Medicare & Medicaid Services (CMS), Quality Improvement Organization (QIO) for Hospital Inpatient Quality Reporting (HIQR) Program

**Table Description:**

- Geographic Representation: National, State
- Years Available: No data

**Data Source:** CMS, Quality Improvement Organization (QIO) Clinical Data Warehouse (CDW) for Hospital Inpatient Quality Reporting (HIQR) Program

**Denominator:** Number of eligible ST segment Elevation Myocardial Infarction (STEMI) patients with heart attacks

**Numerator:** Number of eligible (STEMI) patients with heart attacks who receive percutaneous intervention (PCI) within 90 minutes of hospital arrival

**Measure ID:** 300206011

**Measure Title:** Children who needed care right away for an illness, injury, or condition in the last 12 months who sometimes or never got care as soon as wanted

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized children under age 18 who had an illness or injury that needed care right away in the past 12 months with a valid response to the question, “In the last 12 months, when [the person] needed care right away for an illness or injury, how often did [person] get care as soon as you wanted?”



**Numerator:** Subset of the denominator whose parents or guardians’ answered the above question “sometimes” or “never”

**Comments:** Nonrespondents and respondents indicating “Don’t Know” were excluded.

**Measure ID:** 300206021

**Measure Title:** Children who had a doctor’s office or clinic visit in the last 12 months whose health providers sometimes or never listened carefully, explained things clearly, respected what they or their parents had to say, and spent enough time with them

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S.born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized children under age 18 who visited a doctor’s office or clinic to get health care in the past 12 months, excluding those with missing or invalid responses to all of the questions that make up this composite measure

**Numerator:** Subset of the denominator whose parents or guardians responded “sometimes” or “never” to any of the four questions making up this composite measure

**Comments:** Estimates are weighted and adjusted for nonresponse based on the number of questions (out of four) with a valid response.

Before 2017, NHQDR used “Sometimes or never” estimates.

**Measure ID:** 300206031

**Measure Title:** Children who had a doctor’s office or clinic visit whose health providers sometimes or never listened carefully

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National

- Years Available: National: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized children under age 18 who visited a doctor’s office or clinic to get health care in the past 12 months whose parents or guardians provided a valid response to the question, “In the last 12 months how often did doctors or other health providers listen carefully to you?” Nonrespondents and respondents indicating “Don’t Know” were excluded

**Numerator:** Subset of the denominator who, according to their parents or guardians, responded “sometimes” or “never” to the above question

**Comments:** Nonrespondents and respondents indicating “Don’t Know” were excluded.

Before 2017, NHQDR used “Sometimes or never” estimates.

**Measure ID:** 300206041

**Measure Title:** Children who had a doctor’s office or clinic visit in the last 12 months whose health providers sometimes or never explained things in a way they or their parents could understand

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized children under age 18 who had a doctor’s office or clinic visit in the last 12 months whose parents or guardians provided a valid response to the question, “In the last 12 months how often did [the person’s] doctors or other health providers explain things in a way you could understand?”

**Numerator:** Subset of the denominator whose parent or guardian responded “sometimes” or “never” to the above question

**Comments:** Nonrespondents and respondents indicating “Don’t Know” were excluded.

Before 2017, NHQDR used “Sometimes or never” estimates.

**Measure ID:** 300206051

**Measure Title:** Children who had a doctor’s office or clinic visit whose health providers sometimes or never showed respect for what they or their parents had to say

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** Children under age 18 who had a doctor’s office or clinic visit in the last 12 months and whose parent or guardian provided a valid response to the question, “In the last 12 months how often did doctors or other health providers show respect for what you had to say?”

**Numerator:** Subset of the denominator whose parent or guardian responded “sometimes” or “never” to the above question

**Comments:** Nonrespondents and respondents indicating “Don’t Know” were excluded.

**Measure ID:** 300206061

**Measure Title:** Children who had a doctor’s office or clinic visit whose health providers sometimes or never spent enough time with them

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized children under age 18 who visited a doctor’s office or clinic to get health care in the past 12 months and whose parent or guardian provided a valid response to the question, “In the last 12 months how often did doctors or other health providers spend enough time with you?”

**Numerator:** Subset of the denominator who responded “sometimes” or “never” to the above question

**Comments:** Nonrespondents and respondents indicating “Don’t Know” were excluded.

Before 2017, NHQDR used “Sometimes or never” estimates.

**Measure ID:** MEPS\_31, 300206071

**Measure Title:** Rating of health care 0-6 on a scale from 0 to 10 (best grade) for children who had a doctor’s office or clinic visit in the last 12 months

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2002 to 2016
- Population Subgroups: Age, gender, ethnicity, family income, health insurance, perceived health status, language spoken at home, Medicaid/CHIP, race, residence location, children with special health care needs, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized children under age 18 who had a doctor’s office or clinic visit in the last 12 months and whose parents or guardians provided a valid response to the question, “We want to know your rating of all your health care in the last 12 months from all doctors and other health providers. Use any number from 0 to 10 where 0 is the worst health care possible and 10 is the best health care possible. How would you rate all your health care?”

**Numerator:** Subset of the denominator whose parents or guardians rated their health care as less than 7 on a scale from 0 to 10

**Comments:** Nonrespondents and “Don’t Know” responses were excluded.

**Measure ID:** HCAHPS\_1, 300401041

**Measure Title:** Adult hospital patients who always had good communication with doctors in the hospital

**Measure Source:** Centers for Medicare & Medicaid Services, Hospital Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2009-2017
- Population Subgroups: Age, ethnicity, race, education, language spoken at home

**Data Source:** CMS, HCAHPS

**Denominator:** Adult hospital patients

**Numerator:** Subset of the denominator who reported that they always had good communication with doctors in the hospital

**Comments:** The measure flipped from “Sometimes or never” to “Always” from 2017 NHQDR report.

**Measure ID:** HCAHPS\_2, 300401041

**Measure Title:** Adult hospital patients who always had good communication with nurses in the hospital

**Measure Source:** Centers for Medicare & Medicaid Services, Hospital Consumer Assessment of Healthcare Providers and Systems

**Table Description:**

- Geographic Representation: National, State
- Years Available: 2009-2017
- Population Subgroups: Age, ethnicity, race, education, language spoken at home

**Data Source:** CMS, HCAHPS

**Denominator:** Adult hospital patients

**Numerator:** Subset of the denominator who reported that they always had good communication with nurses in the hospital

**Comments:** The measure flipped from “Sometimes or never” to “Always” from 2017 NHQDR report.

**Measure ID:** 300711011

**Measure Title:** Live-born infants with very low birth weight (less than 1,500 g)

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2007-2017
- Population Subgroups: Age, sex, location, race, ethnicity

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Denominator:** Population of live-born infants

**Numerator:** Live-born infants whose birth weight was under 1,500 grams

**Comments:** Excluded from these analyses are States that did not use the 2003 Revision to Birth Certificate: Alabama, Alaska, Arizona, Arkansas, Connecticut, District of Columbia, Hawaii, Illinois, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, Nevada, New Jersey, North Carolina, Oklahoma, Rhode Island, Utah, Virginia, West Virginia, and Wisconsin.

**Measure ID:** 300711021

**Measure Title:** Very preterm or live births at 32 to 33 weeks of gestation

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2007-2017
- Population Subgroups: Age, geographic location (residence), race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Denominator:** Live births to U.S. residents

**Numerator:** Subset of the denominator who were born at 32 to 33 weeks of gestation

**Measure ID:** 300711031

**Measure Title:** Very preterm or live births at less than 32 weeks of gestation

**Measure Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2007-2017
- Population Subgroups: Age, geographic location (residence), race/ethnicity, sex

**Data Source:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS)

**Denominator:** Live births to U.S. residents

**Numerator:** Subset of the denominator who were born at less than 32 weeks of gestation

**Measure ID:** MEPS\_44, 300811011

**Measure Title:** People under age 65 with private insurance whose family’s health insurance premiums and out-of-pocket medical expenditures were more than 10% of total family income

**Measure Source:** Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access, and Cost Trends (CFACT), Medical Expenditure Panel Survey (MEPS)

**Table Description:**

- Geographic Representation: National
- Years Available: 2006 to 2016
- Population Subgroups: Activity limitations, age, education, ethnicity, gender, family income, health insurance, perceived health status, language spoken at home, race, residence location, U.S. born

**Data Source:** AHRQ, CFACT, MEPS

**Denominator:** U.S. civilian noninstitutionalized population under age 65 who had private insurance, including employer-sponsored and nongroup coverage

**Numerator:** Subset of the denominator whose family’s out-of-pocket medical expenditures were more than 10% of total family income

**Comments:** Total family income was determined as the sum of person-level pretax total income, refund income, and sale income. “Family” is defined in terms of health insurance eligibility units (HIEUs), which are composed of individuals who could be covered as a family under most private health insurance plans. For income, insurance, expenditures, and premiums, a family is defined in terms of HIEUs.

Private health insurance includes:

- Private, employer sponsored: people who had at least 1 month of employer-sponsored insurance and zero months uninsured during the year.
- Private, nongroup: people who had least 1 month of nongroup private insurance and zero months uninsured during the year.

This measure was retired since the 2016 NHQDR.

**Measure ID:** 301581041

**Measure Title:** Adults who received inpatient mental health treatment or counseling in the last 12 months

**Measure Source:** Substance Abuse and Mental Health Services Administration (SAMHSA)

**Table Description:**

- Geographic Representation: National
- Years Available: 2002-2016
- Population Subgroups: Age, education, income, location (residence), race/ethnicity, sex

**Data Source:** SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health (NSDUH)

**Denominator:** U.S. civilian noninstitutionalized population age 18 and over

**Numerator:** Subset of the denominator who reported receipt of inpatient mental health treatment or counseling in the past year

**Measure ID:** 301581051

**Measure Title:** Adolescents and adults who received any treatment for illicit drug use or an alcohol problem in the last 12 months

**Measure Source:** Substance Abuse and Mental Health Services Administration (SAMHSA)

**Table Description:**

- Geographic Representation: National
- Years Available: National: 2010 to 2016
- Population Subgroups: Age, education, income, location (residence), race/ethnicity, sex

**Data Source:** SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health (NSDUH)



**Denominator:** U.S. civilian noninstitutionalized population age 12 and over who needed treatment for any illicit drug use or alcohol problem

**Numerator:** Subset of the denominator who received any treatment for illicit drug use or in the last 12 months

**Comments:** Respondents were classified as needing treatment for an illicit drug or alcohol problem if they met at least one of three criteria during the past year:

1. Dependent on illicit drugs or alcohol;
2. Abuse of illicit drugs or alcohol; or
3. Received treatment for an illicit drug or alcohol problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers).

Illicit drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics (nonmedical use) (based on data from original questions) not including methamphetamine items added in 2005 and 2006.

Receipt of illicit drug or alcohol treatment at a specialty facility refers to treatment received at a hospital (inpatient), a rehabilitation facility (inpatient or outpatient), or mental health center in order to reduce or stop illicit drug or alcohol use, or for medical problems associated with illicit drug or alcohol use.

Estimates include people who received treatment specifically for illicit drugs or alcohol, as well as people who received treatment but did not specify for what substances.

**Comments:** This measure is retired from NHQRDR in 2016

Data prior to 2010 are dropped because they are not appropriate for trend analysis due to survey and questionnaire changes.