DEPARTMENT of HEALTH and HUMAN SERVICES

Fiscal Year

2022

Agency for Healthcare Research and Quality

Justification of Estimates for Appropriations Committees

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Agency for Healthcare
Research and Quality

5600 Fishers Lane
Rockville, MD 20857
www.ahrq.gov

I am pleased to present the Agency for Healthcare Research and Quality's (AHRQ) FY 2022 Congressional Justification. This budget details the activities and efforts needed to fulfill AHRQ's mission to produce evidence to make healthcare safer, higher quality, more accessible, equitable, and affordable, and to work with the U.S. Department of Health and Human Services (HHS) and other partners to ensure that evidence is understood and used.

An independent 2020 report commissioned by AHRQ in response to the Consolidated Appropriations Act of 2018 highlighted both AHRQ's unique role of improving healthcare delivery across all settings for all populations through health services research and the Agency's statutory authority to serve as the home for federal primary care research. This budget allows AHRQ to achieve these goals through:

- $60.8 million in new and continuing investigator-initiated **health services research funding**, including new investments to advance health equity in healthcare delivery, and
- $10.0 million in new research funding directed to revitalizing **primary care**.

Additionally, the President's FY 2022 budget calls on AHRQ to focus its resources on key HHS and national priorities, including:

- $7 million in new and $3 million in continuing funding for research to prevent, identify, and provide integrated treatment for **opioid and multiple substance abuse disorders** in ambulatory care settings.
- $7.4 million to support the Administration's initiative to improve **maternal health**. The Agency's activities will be aimed at ensuring that Federal, State, and local policymakers have timely and accurate data, as well as useful analytic resources, for informed policy.

This budget also allows AHRQ to continue its leadership in **patient safety**, **digital healthcare** research and **telehealth**, and the use **data analytics** to inform healthcare policy and decision making. Across these and other activities, AHRQ is committed to supporting the President's Executive Order on **advancing racial equity** and support for underserved communities. The agency will identify areas in which AHRQ can achieve these goals through research, practice improvement, and data and analytics. The Agency will also revisit agency its policies and procedures and build a culture that makes AHRQ a more diverse, equitable and inclusive work environment.

As an effective steward of federal resources, AHRQ will continue to promote economy, efficiency, accountability and integrity in the management of our resources and by doing so, ensure those investments will have the greatest possible impact on the health and healthcare of all Americans.

David S Meyers

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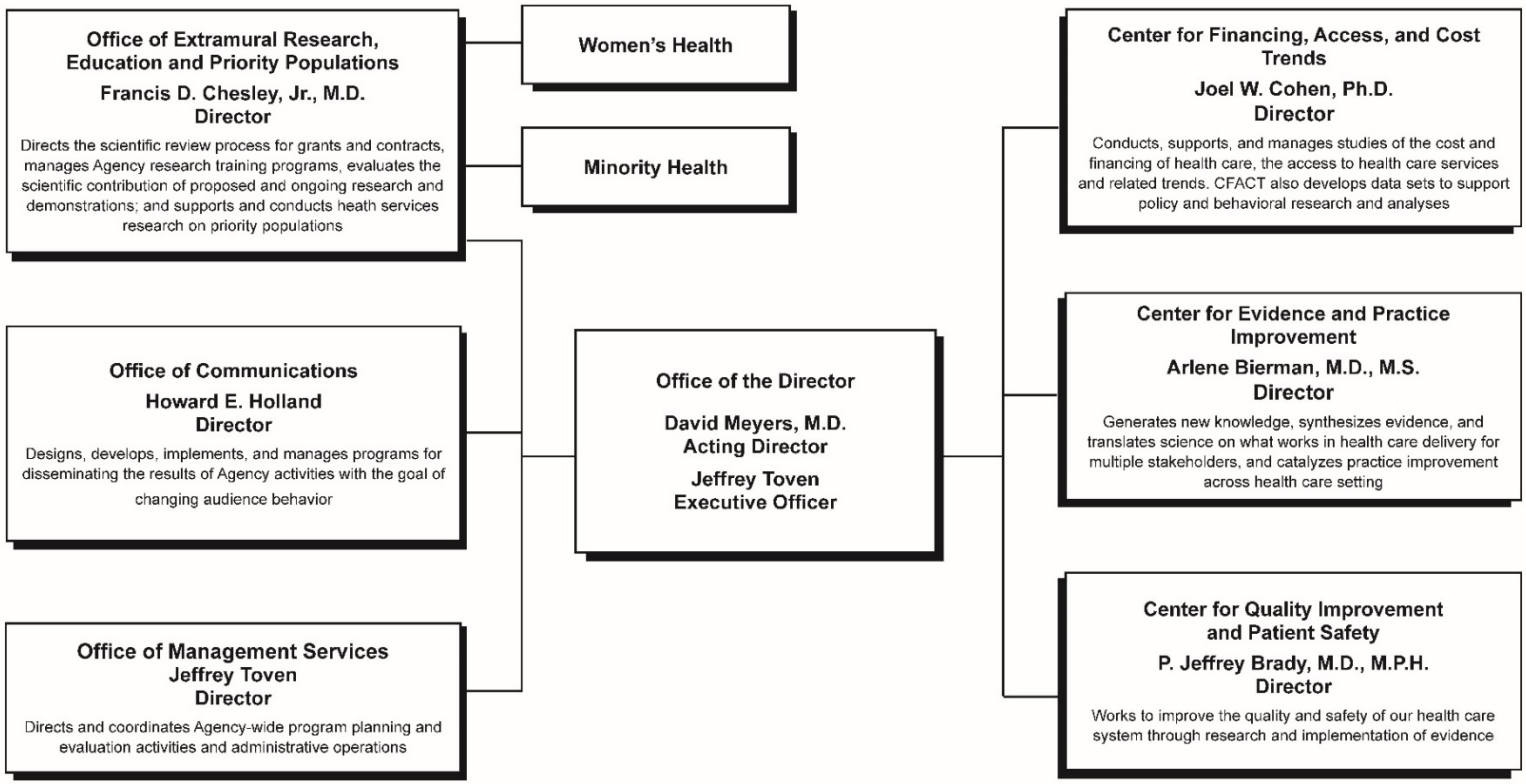
David Meyers, M.D.
Acting Director, Agency for Healthcare Research and Quality

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Agency for Healthcare Research and Quality (AHRQ)

U.S. Department of Health and Human Services
Agency for Healthcare Research and Quality



AHRQ Pub. No. 21-M002-EF
January 2021

EXECUTIVE SUMMARY

Introduction and Mission

I am pleased to present the FY 2022 President's Budget for the Agency for Healthcare Research and Quality (AHRQ). AHRQ's mission is to produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable, and to work within the U.S. Department of Health and Human Services and with other partners to make sure that the evidence is understood and used. We accomplish our mission by focusing on our three core competencies.

- Health Services and Systems Research: AHRQ invests in research that generates evidence about how to deliver high-quality, equitable, safe, high-value healthcare.
- Practice Improvement: AHRQ creates tools and strategies to help health systems and frontline clinicians deliver high-quality, equitable, safe, high-value healthcare.
- Data and Analytics: AHRQ data and analysis help healthcare decision makers understand how the US healthcare system is working and where there are opportunities for improvement.

The FY 2022 Congressional Justification supports the following priorities:

- New research totaling $10.0 million to support primary care research. A Congressionally requested, independent review in 2020 concluded AHRQ should invest in primary care health services research. The COVID-19 pandemic has intensified this priority for AHRQ. Delayed primary care has resulted in foregone care among people with common chronic conditions including diabetes, hypertension, and hyperlipidemia, over 22 million missed cancer screening tests, and over 80,000 delayed cancer diagnoses. These delays have the potential to increase rates of uncontrolled diabetes and other chronic diseases. Only a revitalized primary care system that is well connected with public health and community resources will be able to overcome this deficit in care.

- New research totaling $7.0 million to support the President's initiative to end the opioid crisis. After a brief pause in 2018, drug overdoses are surging again in the US, with 87,000 lives lost in just 12 months from September 2019 to September 2020. While the COVID-19 pandemic exacerbated the crisis, the underlying drivers of the surge – increasing methamphetamine and polysubstance use, fragmented and unequal access to care, and the social determinants that shape vulnerability to drug use – will persist beyond the pandemic. AHRQ will provide $7.0 million in new research grants for a total of $10.0 million total support in FY 2022, to increase equity in treatment access and outcomes, accelerate the implementation of effective evidence-based care in primary and ambulatory care, and develop whole person models of care that address the social factors which shape treatment adherence and long-term recovery.

- New research totaling $7.4 million to support the Administration's initiative to improve maternal health. Today 700 or more American women die each year as a result of pregnancy and childbirth and over 50,000 experience severe complications. These outcomes are not evenly distributed, with underserved women, including African American, being at substantially higher risk of complication and death. AHRQ's work will ensure that Federal,

State, and local policymakers have timely and accurate data and useful analytic resources about maternal health and the healthcare system with which to make informed policy decisions.

- AHRQ is committed to addressing health equity and structural racism. AHRQ will identify priorities related to advancing health equity where AHRQ can have significant impact using health systems research, practice improvement, and data and analytics. The FY 2022 President's Budget includes $3.0 million in new investigator-initiated research grants focused on equity, as well as an additional $1.0 million in new equity research grant supplements. Additionally, AHRQ will revise policies and procedures to increase the impact of our work on advancing equity internally and in the health systems research sphere. AHRQ will allocate $1.0 million in research contract support to allow AHRQ to ensure a culture of diversity, equity, and inclusion at AHRQ.

- Finally, the Administration has made protecting and expanding access to quality, affordable healthcare one of its top priorities. This commitment will require policy decisions on critical issues ranging from expanding access to health insurance to lowering prescription drug prices to addressing persistent healthcare inequities. AHRQ's rich healthcare data resources and data analytical capabilities can play a pivotal role in helping to address these and other complex challenges. Through both the Medical Expenditure Panel Survey (MEPS) sample expansion and AHRQ's proposed investment in Improving Maternal Health, AHRQ is evolving and expanding our data platforms, including the MEPS and the Healthcare Cost and Utilization Project (HCUP), to be more comprehensive, timely, and relevant. We are investing in expanding the MEPS sample size and have developed a new national database on the social determinants of health. We not only produce valid and reliable datasets, we use them. AHRQ has assembled an exceptional team of analysts, data scientists, and economists. Their analytic expertise – the ability to take raw data and translate it into a coherent framework for understanding what factors actually drive healthcare use, costs, and quality – is the engine that drives AHRQ's ability to inform policy making. By combining data and analytic insight, AHRQ's team is able to develop reliable models that can be used to understand the effects of policy options on the delivery of healthcare services.

Overview of Budget

AHRQ's FY 2022 President's Budget will continue to support both AHRQ's mission and our priority areas of research. Our FY 2022 discretionary request totals $380.0 million, an increase of $42.0 million or +12.4 percent from the FY 2021 Enacted level. Of this total, $353.0 million is requested in budget authority and $27.0 million is PHS Evaluation Funds. AHRQ's total program level at the FY 2022 President's Budget level is $488.8 million, an increase of $52.3 million from the FY 2021 Enacted level. The total program level includes $108.8 million in mandatory funds from the Patient-Centered Outcomes Research Trust Fund (PCORTF), an increase of $10.3 million from the prior year.

Details by budget activity and research portfolio are provided in the table below and the following page.

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

Budget Detail by Activity and Research Portfolio
(Dollars in Thousands)

	FY 2020 Final	FY 2021 Enacted	FY 2022 President's Budget
Research on Health Costs, Quality and Outcomes (HCQO)	$196,046	$196,709	$131,318
HCQO: Patient Safety	72,276	71,615	71,615
HCQO: Health Services Research, Data and Dissemination (HSR)	96,284	95,403	128,053
HCQO: Improving Maternal Health	0	0	7,350
HCQO: Digital Healthcare Research (Formerly Health Information Technology)	16,500	16,349	16,349
HCQO: U.S. Preventive Services Task Force (USPSTF)	11,649	11,542	11,542
Medical Expenditure Panel Survey	69,991	71,791	71,791
Program Support	71,300	71,300	73,300
Total, Budget Authority AHRQ	**$338,000**	**$338,000**	**$353,000**
Total, PHS Evaluation Fund, AHRQ			**$27,000**
PCORTF Transfer [1/]	106,493	98,452	108,787
Total, AHRQ Program Level	**$444,493**	**$436,452**	**$488,787**

[1/] Mandatory Funds

The FY 2022 President's Budget provides $380.0 million for the following AHRQ programs:

- Patient Safety Research is funded at $71.6 million, maintaining the same level of support as the FY 2021 Enacted level. Included in this total is $35.7 million in research focused on prevention of Healthcare-Associated Infections (HAIs). Within the HAI activity, the FY 2022 President's Budget provides $10.0 million for Combatting Antibiotic-Resistant Bacteria (CARB). As part of our HAI research program, AHRQ will continue to support research on hospital-acquired conditions. Hospital-acquired conditions have relatively high mortality risk and include central line-associated blood stream infections, ventilator-associated pneumonia, and post-operative venous thromboembolism. AHRQ's efforts combined with a sustained National effort to reduce hospital-acquired conditions has resulted in preventing an estimated 20,500 deaths and saved $7.7 billion between 2014 and 2017, according to recent reporting. The FY 2022 President's Budget also includes $31.1 million in funding to prevent patient safety risk and harms. At the President's Budget level, AHRQ will provide $10.0 million for Patient Safety Learning Labs to use system's engineering approaches to reduce patient harm due to treatment and diagnostic errors. Finally, the patient safety research portfolio will provide $4.8 million to continue conformance with requirements of the Patient Safety Act. The Patient Safety Act provides privilege and confidentiality protection to certain information, including that prepared by health care providers throughout the country working with Patient Safety Organizations (PSOs) for quality and safety improvement activities.

- Health Services Research, Data and Dissemination (HSR) is funded at $128.1 million, an increase of $32.7 million from the FY 2021 Enacted level. The FY 2022 President's Budget provides $60.8 million in total investigator-initiated research and training grant support, an increase of $15.0 million from the prior year. This level of support will allow AHRQ to fund $23.7 million in new investigator-initiated research grants including research to understand the effects of health system innovations responding to the COVID-19 pandemic and investments in supporting health systems in the delivery of equitable health care. AHRQ will provide $7.0 million in new research grants, for a total of $10.0 million in FY 2022, focused on the opioid epidemic. This research will increase equity in treatment access and outcomes, accelerate the implementation of effective evidence-based care in primary and ambulatory care, and develop whole person models of care that address the social factors which shape treatment adherence and long-term recovery. In addition, the FY 2022 President's Budget invests $10.0 million in new primary care research grants and contracts. AHRQ will invest in primary care research to help answer critical questions on new models of primary care that improve individual and population health while increasing access to care and increasing health equity. Finally, the FY 2022 President's Budget provides $45.4 million in total contract support. This level of support fully funds AHRQ's dissemination and implementation activities and measurement and data investments, including the Healthcare Cost and Utilization Project (HCUP). The FY 2022 President's Budget also provides $3.8 million in new research contracts to advance new models of care in a post-COVID-19 learning health system. An additional $1.0 M in new contracts to support HHS and AHRQ's focus on advancing equity within its workplace.

- Improving Maternal Health is funded at $7.4 million. HHS is preparing to address the complex challenge of ensuring safe and healthy pregnancies and childbirth. Today 700 or more American women die each year as a result of pregnancy and childbirth and over 50,000

experience severe complications. These outcomes are not evenly distributed, with underserved women, particularly African-American women, being at substantially higher risk of complication and death. The root causes of this crisis in American health and health care are multifaceted and so the solutions must be as well. The FY 2022 President's Budget funds research to ensure that Federal, State, and local policymakers have timely and accurate data and useful analytic resources about maternal health and the healthcare system with which to make informed policy decisions.

- Health Information Technology is funded at $16.3 million, the same level of support as the FY 2021 Enacted level. The FY 2022 President's Budget requests a name change for this portfolio to Digital Healthcare Research. This new name better reflects the ever-evolving digital healthcare ecosystem that continues to expand beyond traditional Health Information Technology. The FY 2022 President's Budget provides $14.3 million in research grant support and $2.0 million in research contract support. The focus will be on rigorously testing promising digital healthcare interventions aimed at improving the quality, safety, equity, and value of care, as well as synthesizing and disseminating evidence generated by the portfolio.

- The U.S. Preventive Services Task Force (USPSTF) is funded at $11.5 million, the same level of support as the FY 2021 Enacted level. The USPSTF is an independent, volunteer panel of national experts in prevention and evidence-based medicine whose mission is to improve the health of all Americans by making evidence-based recommendations about the effectiveness of clinical preventive services and health promotion. AHRQ provides ongoing scientific, administrative, and dissemination support to assist the USPSTF in meeting their mission.

- The Medical Expenditure Panel Survey (MEPS), is the only national source for comprehensive annual data on how Americans use and pay for medical care. The survey collects detailed information from families on access, use, expenses, insurance coverage and quality. The FY 2022 President's Budget provides $71.7 million to support base MEPS activities and to fund second year costs ($1.2 million) related to expanding sample size of the MEPS that was first funded in the FY 2021 Enacted budget. The sample expansion involved the addition of 1,000 participating households (2,300 persons) to produce improvements in the precision of State level estimates for about 36 States and D.C. (i.e. all except the 7 largest and 7 smallest States). This augmentation enhances the ability of MEPS to support analyses of key population subgroups, such as persons with specific conditions, those at particular income levels or age groups, as well as analyses by insurance status.

- Program Support activities provide administrative, budgetary, logistical, and scientific support in the review, award, and monitoring of research grants, training awards, and research and development contracts. The President's Budget provides $73.3 million for Program Support, an increase of $2.0 million above the FY 2021 Enacted. This funding level provides for a 2.7 percent salary increase, benefits adjustments, and +6 additional full-time equivalents (FTEs) above the FY 2021 Enacted level to support the Agency's increased investments in priority areas of research.

- Patient-Centered Outcomes Research Trust Fund (PCORTF) totals $108.8 million in mandatory funding in FY 2022, an increase of $10.3 million from the FY 2021 level. AHRQ

will use these resources as required in authorization language to disseminate and implement patient-centered outcomes research (PCOR) research findings; obtain stakeholder feedback on the value of the information to be disseminated and to inform future efforts; assist users of health information technology to incorporate PCOR research findings into clinical practice; and provide training and career development for researchers and institutions in methods to conduct comparative effectiveness research.

Overview of Performance

Throughout FY 2020, AHRQ's most recent performance-based accomplishments included:

Medical Expenditure Panel Survey (MEPS) – expanding the MEPS Tables Compendia by 250, bringing the total number of tables available to the user population to 10,457. This represents twenty years of data for both the Household and Insurance Components, enabling the user to follow trends on a variety of topics, including health insurance, accessibility and quality of care, medical conditions and prescribed drugs.

Patient Safety – for intensive care units (ICUs) participating in the Comprehensive Unit-based Safety Program (CUSP) for Catheter-Associated Urinary Tract Infection (CAUTI) project, substantially decreasing the target of a 5% reduction by reducing the National Healthcare Safety Network (NHSN) rate by 29% after intervention. Also, the Patient Safety program updated reports for *Making Healthcare Safer III* and the *Toolkit to Improve Antibiotic Use in Acute Care Hospitals*.

U.S. Preventive Services Task Force (USPSTF) – The Task Force continues to post draft recommendations for public comments and publish final recommendation statements in a peer-reviewed journal. To understand the implementation of Task Force recommendations, AHRQ is conducting data analyses from a nationally representative survey of U.S. adults, the Preventive Services Self-Administered Questionnaire (PSAQ), which captured respondents' use of recommended preventive services along with information about health status, income, employment, and insurance coverage.

Health Services Research, Data and Dissemination – two new contracts began designing and developing the clinical decision support (CDS) for chronic pain management, including meeting with end-users (e.g., patients, clinicians), and planning for integration with pilot sites' electronic health records.

As the Agency continues to refine its internal performance management processes, we rely on our strategic partners and stakeholders to help us set the agenda: Congress – enabling legislation and annual appropriations to set the parameters and priorities for producing evidence-based research and tools; HHS – delivering health service delivery research that support the Secretary's initiatives; Strategic Partners – informing the research agenda and working with Federal and non-Federal partners to make sure the evidence developed is easily applied and used in health care settings. AHRQ sets its Strategic Goals and Objectives by aligning input from strategic partners and stakeholders with the Agency's mission and core competencies to have the greatest impact.

AHRQ's mission is operationalized through a broad array of research that reinforces the agency's competencies: 1) health services research, 2) practice improvement, 3) data and analytics, and 4) operational excellences. Priority-setting is implicit in the activities and programs that are chosen to achieve the mission. These priorities are operationalized through the annual selection of research topics as well as in the annual balancing between funding knowledge creation activities vs. dissemination, implementation, and data gathering and reporting activities. AHRQ has a broad portfolio of activities aimed at improving healthcare quality, safety, equity, and value that must be incorporated into priority setting. For example, within our patient safety portfolio, AHRQ conducts research to identify gaps, generates safety solutions, develops strategies to improve safety and prevent patient harm, and disseminates best practices, works to increase the implementation of safety practices in healthcare delivery, and collects and disseminates data on the frequency of safety incidents. Other Agency efforts include collecting data on Americans use and pay for medical care, health insurance, and out-of-pocket spending as supported by the Medical Expenditure Panel Survey (MEPS); providing scientific, administrative and dissemination support to the U.S. Preventive Services Task Force (USPSTF); and, supporting health services research on the prevention and treatment of opioid addiction by health care delivery organizations in rural communities through primary care. AHRQ's performance goals reflect these diverse set of tactics to improve health and healthcare delivery.

Performance measurement begins with the refinement of existing measures or development of new performance measures to calibrate the activities (grants and contracts), outputs (knowledge creation), and near-term, intermediate and long-term outcomes (dissemination, implementation and impact. A new measure starting in FY 2022 was developed to support another HAI project - CUSP for Methicillin-Resistant Staphylococcus Aureus (MRSA) Prevention.

Performance information is gathered from existing data sources. When necessary, new data sources must be uncovered or developed. When new measures and new data sources are used, the process must be field tested to be certain the theoretical measures can be operationalized.

AHRQ assesses its operational performance through the use of literature scans and input from strategic partners to identify research gaps and new evidence and strategies on patient safety and quality and clinical preventive services and methods for reviewing scientific evidence. This information provides AHRQ with an evidence-based method for prioritizing its program planning.

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

All Purpose Table

(Dollars in Millions)

Activity	FY 2020 Final	FY 2020 Supplemental Funding /1	FY 2021 Enacted	FY 2021 Supplemental Funding /2	FY 2022 President's Budget	FY 2022 +/- FY 2021
AHRQ						
Patient Centered Outcomes Research Trust Fund Transfer 3/	**106.493**	**--**	**98.452**	**--**	**108.787**	**+10.335**
Research on Health Costs, Quality, and Outcomes (HCQO):						--
Patient Safety	*72.276*	--	*71.615*	--	*71.615*	--
Health Services Research, Data and Dissemination	*96.284*	--	95.403	--	*128.053*	*+32.650*
Budget Authority (non-add)	*96.284*		*95.403*		*103.053*	*+7.650*
PHS Evaluation Tap (non-add)	--		--		*25.000*	*+25.000*
Improving Maternal Health	--	--	--	--	7.350	+7.350
Digital Healthcare Research (formerly Health IT)	16.500		16.349		16.349	--
U.S. Preventive Services Task Force	11.649	--	11.542	--	11.542	--
Subtotal, HCQO	**196.709**	**--**	**194.909**	**--**	**234.909**	**+40.000**
Budget Authority (non-add)	*196.709*		*194.909*		*209.909*	*+15.000*
PHS Evaluation Tap (non-add)	--		--		*25.000*	*+25.000*
		--		--		--
Medical Expenditure Panel Survey	**69.991**	**--**	**71.791**	**--**	**71.791**	**--**
Budget Authority (non-add)	*69.991*		*71.791*		*71.791*	--
PHS Evaluation Tap (non-add)	--		--		--	--
Program Support	**71.300**	**--**	**71.300**	**--**	**73.300**	**+2.000**
Budget Authority (non-add)	*71.300*		*71.300*		*71.300*	--
PHS Evaluation Tap (non-add)	--		--		*2.000*	+2.000
Total, AHRQ Program Level	**444.493**	**--**	**436.452**	**--**	**488.787**	**+52.335**
Budget Authority (non-add)	*338.000*	--	*338.000*	--	*353.000*	*+15.000*
PHS Evaluation Tap (non-add)	--		--		*27.000*	*+27.000*
Less Patient Centered Outcomes Research Trust Fund Transfer 3/	*106.493*	--	*98.452*	--	*108.787*	*+10.335*
Total, AHRQ Discretionary Budget Authority	**338.000**	**--**	**338.000**	**--**	**353.000**	**+15.000**
NEF			-			
			-			

1/ Shows supplemental funds post-transfer and post-reallocation

2/ This column includes both supplemental funding and mandatory funds appropriated in the American Rescue Plan Act of 2021, P.L. 117-2 post-transfer and post-reallocation.

3/ Mandatory Funds

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

Mechanism Summary Table by Portfolio [1/]

	FY 2020 Final		FY 2021 Enacted		FY 2022 President's Budget	
	No.	Dollars	No.	Dollars	No.	Dollars
RESEARCH GRANTS						
Non-Competing						
Patient Safety	80	23,969,291	82	36,042,674	68	29,343,459
Health Serv Res, Data & Diss.	157	40,730,913	147	44,045,045	74	39,454,837
Improving Maternal Health	0	0	0	0	0	0
Digital Healthcare Research	38	11,949,446	24	7,862,000	28	9,899,362
U.S. Preventive Services Task Force	0	0	0	0	0	0
Medical Expenditure Panel Survey	0	0	0	0	0	0
Total Non-Competing	275	91,452,725	253	87,949,719	170	78,697,658
New & Competing						
Patient Safety	27	8,918,297	15	7,149,000	34	14,800,000
Health Serv Res, Data & Diss.	64	13,859,123	42	15,661,919	144	43,194,907
Improving Maternal Health	0	0	0	0	0	0
Digital Healthcare Research	8	2,573,041	19	6,491,000	14	4,453,638
U.S. Preventive Services Task Force	0	0	0	0	0	0
Medical Expenditure Panel Survey	0	0	0	0	0	0
Total New & Competing	99	25,350,461	77	29,301,919	191	62,448,545
RESEARCH GRANTS						
Patient Safety	107	43,116,657	97	43,191,674	101	44,143,459
Health Serv Res, Data & Diss.	221	59,164,042	189	59,706,964	218	82,649,744
Improving Maternal Health	0	0		0		0
Digital Healthcare Research	46	14,522,487	43	14,353,000	42	14,353,000
U.S. Preventive Services Task Force	0	0	0	0	0	0
Medical Expenditure Panel Survey	0	0	0	0	0	0
TOTAL, RESEARCH GRANTS	374	116,803,186	330	117,251,638	257	141,146,203
CONTRACTS/IAAs						
Patient Safety		29,159,343		28,423,326		27,471,541
Health Serv Res, Data & Diss.		37,119,958		35,696,036		45,403,256
Digital Healthcare Research		1,977,513		1,996,000		1,996,000
Improving Maternal Health		0		0		7,350,000
U.S. Preventive Services Task Force		11,649,000		11,542,000		11,542,000
Medical Expenditure Panel Survey		69,991,000		71,791,000		71,791,000
TOTAL CONTRACTS/IAAs		149,896,814		149,448,362		165,553,797
PROGRAM SUPPORT		71,300,000		71,300,000		73,300,000
GRAND TOTAL						
Patient Safety		72,276,000		71,615,000		71,615,000
Health Serv Res, Data & Diss.		96,284,000		95,403,000		128,053,000
Improving Maternal Health		0		0		7,350,000
Digital Healthcare Research		16,500,000		16,349,000		16,349,000
U.S. Preventive Services Task Force		11,649,000		11,542,000		11,542,000
Medical Expenditure Panel Survey		69,991,000		71,791,000		71,791,000
Program Support		71,300,000		71,300,000		73,300,000
GRAND TOTAL		338,000,000		338,000,000		380,000,000

[1/] Does not include mandatory funds from the PCORTF.

BUDGET EXHIBITS

AGENCY FOR HEALTCARE RESEARCH AND QUALITY

HEALTHCARE RESEARCH AND QUALITY

For carrying out titles III and IX of the PHS Act, part A of title XI of the Social Security Act, and section 1013 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, *$353,000,000: Provided*, That section 947(c) of the PHS Act shall not apply in fiscal year *2022*: Provided further, That, in addition to amounts provided herein, $27,000,000 shall be available to this appropriation, for the purposes under this heading, from amounts provided pursuant to section 241 of the PHS Act: *Provided* further, That in addition, amounts received from Freedom of Information Act fees, reimbursable and interagency agreements, and the sale of data shall be credited to this appropriation and shall remain available until September 30, 2023.

Appropriations Language Analysis

Language Provision	Explanation
Provided that in addition to amounts herein $27,000,000 shall be available from amounts available under section 241 of the PHS Act:	Language modified so that $27,000,000 of the AHRQ appropriation comes from PHS Evaluation Funds.

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

Amounts Available for Obligation

(Dollars in Thousands)

General Fund Discretionary Appropriation:	FY 2020 Final	FY 2021 Enacted	FY 2022 President's Budget
Appropriation (L/HHS, Ag, or, Interior)	$338,000	$338,000	$353,000
Across-the-board reductions (L/HHS, Ag, or Interior)			
Subtotal, Appropriation (L/HHS, Ag, or Interior)			
Rescission			
Reappropriation			
Proposed Supplemental Appropriation			
Proposed Rescission			
Proposed Reappropriation			
Subtotal, adjusted appropriation			
Real transfer from AHRQ (COVID)	$ (623)	$-	$ -
Comparable transfer from:			
Subtotal, adjusted general fund discretionary appropriation	$ 337,377	$ 338,000	$ 353,000
Trust Fund Discretionary Appropriation:			
Appropriation Lines			
Transfer Lines for PHS Evaluation			27,000
Subtotal, adjusted trust fund discr. Appropriation			
Total, Discretionary Appropriation	$ 337,377	$ 338,000	$ 380,000
Mandatory Appropriation:			
Appropriation Lines			
Transfer Lines for PCORTF (non-add)	$ 106,493	$ 98,452	$108,787
Subtotal, adjusted mandatory. appropriation	$ 106,493	$ 98,452	$ 108,787
Offsetting collections from:			
Unobligated balance, start of year			
Unobligated balance, end of year			
Unobligated balance, lapsing	$ 173		
Total obligations	$ 443,697	$ 436,452	$ 488,787

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

Summary of Changes

(Dollars in Millions)

AHRQ 2021 Enacted Total estimated budget authority…….. (Obligations)……	$ 338,000
AHRQ 2022 President's Budget Total Discretionary…….. (Obligations)……	$ 380,000
Net Change	+$42.,000

	FY 2021 Enacted FTE	FY 2021 Enacted	FY 2022 PB FTE	FY 2022 PB BA	FY 2022 +/- FY 2021 FTE	FY 2022 +/- FY 2021 BA
Increases:						
A. Built-in:						
1. Annualization of 2020 civilian pay increase...	264	$47.000	270	$49,.000	6	$2,000
2. Annualization of 2020 CCorps pay increase..	+ 6	1,000	+ 6	+1,000		
Subtotal, Built-in Increases.....	**270**	**$48,000**	**276**	**$50,000**	**+6**	**+ $2,000**
A. Program:						
1. Health Services Research, Data & Dissem....		$95,403		128,053		+$32,650
2. Improving Maternal Health.....		$--		$7,350		+$ 7,350
Subtotal, Program Increases.....		**$95,403**		**$135,403**		**+$40,000**
Total Increases.....	**270**	**$143,403**	**276**	**$185,403**	**+6**	**+$42,000**
Decreases:						
A. Built-in:						
1.						
2.						
Subtotal, Built-in Decreases.....	0	$0	0	$0	0	$0
A. Program						
Subtotal, Program Decreases.....	0	$0	0	$0	0	$0
Total Decrease	**0**	**$0**	0	**$0**	0	**$0**
Net Change					**+6**	**+$42,000**

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

Budget Authority by Activity
(Dollars in Millions)

	FY 2020 Final	FY 2021 Enacted	FY 2022 President's Budget
Research on Health Costs, Quality and Outcomes	$196.709	$194.909	$234.909
Budget Authority	*$196,709*	*$194.909*	*209.909*
PHS Evaluation Funds	--	--	*25.000*
Medical Expenditure Panel Survey	69.991	71.791	71.791
Budget Authority	*69.991*	*71.791*	*71.791*
PHS Evaluation Funds	--	--	--
Research Management and Support	71.300	71.300	73.300
Budget Authority	*71.300*	*71.300*	*71.300*
PHS Evaluation Funds	--	--	*2.000*
Total, Budget Authority AHRQ	$338.000	$338.000	$353.000
Total, PHS Evaluation Fund, AHRQ	--	--	$ 27.000
FTE	251	271	277

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

Authorizing Legislation [1/, 2/]

(Dollars in Millions)

	FY 2021 Amount Authorized	FY 2021 Amount Appropriated	FY 2022 Amount Authorized	FY 2022 President's Budget
Research on Health Costs, Quality, and Outcomes: Secs. 301 & 926(a) PHSA……..……..	SSAN	$ 194.909	SSAN	$209.909
Research on Health Costs, Quality, and Outcomes: Part A of Title XI of the Social Security Act (SSA) Section 1142(i) [3/ 4/]				
Budget Authority……	_____	_____	_____	_____
Medicare Trust Funds [4/ 5/]				
Subtotal BA & MTF……..……..	Expired [6/]		Expired [6/]	
Medical Expenditure Panel Surveys: Sec. 947(c) PHSA……..	SSAN	$ 71.791	SSAN	$ 71.791
Program Support: Sec. 301 PHSA…….…...	Indefinite	$71.300	Indefinite	$71.300
Evaluation Funds: Sec. 947(c) PHSA……..……..		$0		$27.000
Total appropriations, AHRQ [2/]		$ 338.000		$380.000
Total appropriation against definite authorizations.....				

SSAN = Such Sums As Necessary

[1/] Section 487(d) (3) PHSA makes one percent of the funds appropriated to NIH for National Research Service Awards available to AHRQ. Because these reimbursable funds are not included in AHRQ's appropriation language, they have been excluded from this table.

[2/] Excludes mandatory financing from the PCORTF.

[3/] Pursuant to Section 1142 of the Social Security Act, FY 1997 funds for the medical treatment effectiveness activity are to be appropriated against the total authorization level in the following manner: 70% of the funds are to be appropriated from Medicare Trust Funds (MTF); 30% of the funds are to be appropriated from general budget authority.

[4/] No specific amounts are authorized for years following FY 1994.

[5/] Funds appropriated against Title XI of the Social Security Act authorization are from the Federal Hospital Insurance Trust Funds (60%) and the Federal Supplementary Medical Insurance Trust Funds (40%).

[6/] Expired September 30, 2005.

Agency for Healthcare Research and Quality

Appropriations History Table (2012-2022) [1/]

		Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
AHRQ 2012					
Budget Authority……		$ -	$ -	$ -	$ -
PHS Evaluation Funds……..		$366,397,000	$ -	$372,053,000	$369,053,000
	Total……..	$366,397,000	$ -	$372,053,000	$369,053,000
AHRQ 2013					
Budget Authority……..		$ -	$ -	$ -	$ -
PHS Evaluation Funds……..		$334,357,000	$-	$364,053,000	$365,362,000
	Total……..	$334,357,000	$-	$364,053,000	$365,362,000
AHRQ 2014					
Budget Authority……..		$ -	$ -	$ -	$ -
PHS Evaluation Funds……..		$333,697,000	$ -	$364,008,000	$364,008,000
	Total……..	$333,697,000	$ -	$364,008,000	$364,008,000
AHRQ 2015					
Budget Authority……..		$ -	$ -	$ 373,295,000	$363,698,000
PHS Evaluation Funds……..		$334,099,000	$ -	$-	$-
	Total……..	$334,099,000	$ -	$373,295,000	$363,698,000
AHRQ 2016					
Budget Authority……..		$275,810,000	$ -	$236,001,000	$334,000,000
PHS Evaluation Funds……..		$ 87,888,000	$ -	$ -	$ -
	Total……...	$363,698,000	$ -	$236,001,000	$334,000,000
AHRQ 2017					
Budget Authority……..		$280,240,00	$280,240,000	$324,000,000	$324,000,000
PHS Evaluation Funds……..		$83,458,000	$ -	$ -	$ -
	Total……..	$363,698,000	$ 280,240,000	$224,000,000	$324,000,000
AHRQ 2018					
Budget Authority……..		$272,000,000	$300,000,000	$324,000,000	$334,000,000
PHS Evaluation Funds……..		$-	$ -	$ -	$ -
	Total……..	$272,000,000	$300,000,000	$324,000,000	$334,000,000
AHRQ 2019					
Budget Authority…….		$255,960,000	$334,000,000	$334,000,000	$338,000,000
PHS Evaluation Funds……..		$ -	$ -	$ -	$ -
	Total……..	$255,960,000	$334,000,000	$334,000,000	$338,000,000
AHRQ 2020					
Budget Authority……..		$255,960,000	$339,809,000	$ -	$338,000,000
PHS Evaluation Funds……..		$ -	$ 18,408,000	$ -	$ -
	Total……..	$255,960,000	$358,217,000	$ -	$338,000,000
AHRQ 2021					
Budget Authority……..		$256,660,000	$143,091,000	$256,600,000	$338,000,000
PHS Evaluation Funds……..		$ -	$199.909,000	$0	$0
	Total……..	$256,660,000	$343,000,000	$256,600,000	$338,000,000
AHRQ 2022					
Budget Authority……..		$353,000,000			
PHS Evaluation Funds……..		$ 27,000,000			
	Total……..	$380,000,000			

[1/] Excludes mandatory financing from the PCORTF.

Agency for Healthcare Research and Quality

Appropriations Not Authorized by Law

Program	Last Year of Authorization	Authorization Level	Appropriations in Last Year of Authorization	Appropriations in FY 2021
Research on Health Costs, Quality, and Outcomes	FY 2005	Such Sums As Necessary	$260,695,000	$338,000,000

NARRATIVE BY ACTIVITY

Research on Health Costs, Quality, and Outcomes (HCQO)				
	FY 2020 Final	**FY 2021 Enacted**	**FY 2022 President's Budget**	**FY 2022 +/- FY 2021**
BA	$196,046,000	$196,709,000	$209,909,000	+$15,000,000
PHS Evaluation Funds	$0	$0	$25,000,000	+$25,000,000

Authorizing Legislation: Title III and IX and Section 947(c) of the Public Health Service Act and Section 1013 of the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003.

FY 2022 Authorization……....Expired.
Allocation Method.....Competitive Grant/Cooperative Agreement, Contracts, and Other.

Summary

AHRQ's program level for Research on Health Costs, Quality, and Outcomes (HCQO) at the FY 2022 President's Budget Level is $234.9 million, an increase of $40.0 million from the FY 2021 Enacted level. Of this total, $209.9 million is provided in budget authority and $25.0 million is provided in PHS Evaluation funds. A detailed table by research portfolio is provided below. Detailed narratives by research portfolio begin on the following page.

AHRQ Budget Detail

(Dollars in Millions)

Division	AHRQ FY 2020 Final	AHRQ FY 2021 Enacted	AHRQ FY 2022 President's Budget
Research on Health Costs, Quality, and Outcomes (HCQO):			
Patient Safety	$72.276	$71.615	$71.615
Health Services Research, Data and Dissemination	96.284	95.403	128.053
Improving Maternal Health	0.000	0.000	7.350
Health Information Technology	16.500	16.349	16.349
U.S. Preventive Services Task Force	11.649	11.542	11.542
Subtotal, HCQO	**196.709**	**194.909**	**234.909**
Budget Authority	***196.709***	***194.909***	***209.909***
PHS Evaluation Funds	***0.000***	***0.000***	***25.000***

HCQO: Patient Safety				
	FY 2020 Final	FY 2021 Enacted Level	FY 2022 President's Budget	FY 2022 +/- FY 2021
Budget Authority	$72,276,000	$71,615,000	$71,615,000	$0
PHS Evaluation Funds	$0	$0	$0	$0

Authorizing Legislation: Title III and IX and Section 947(c) of the Public Health Service Act
FY 2022 Authorization……..……..……Expired.
Allocation Method…….....Competitive Grant/Cooperative Agreement, Contracts, and Other.

Patient Safety Research: The objectives of this program are to prevent, mitigate, and decrease patient safety risks and hazards, and quality gaps associated with health care and their harmful impact on patients. This mission is accomplished by funding health services research in the following activities: Patient Safety Risks and Harms, Healthcare-Associated Infections (HAIs), and Patient Safety Organizations (PSOs). A table showing the allocation by these activities is provided below. Projects within the program seek to inform multiple stakeholders including health care organizations, providers, policymakers, researchers, patients and others; disseminate information and implement initiatives to enhance patient safety and quality; improve teamwork and communication to improve organizational culture in support of patient safety; and maintain vigilance through adverse event reporting and surveillance in order to identify trends and prevent future patient harm.

Patient Safety Research Activities
(in millions of dollars)

	FY 2020 Final	FY 2021 Enacted	FY 2022 President's Budget
Patient Safety Risks and Harms	$31.410	$31.123	$31.123
Patient Safety Organizations (PSOs)	4.866	4.821	4.821
Healthcare-Associated Infections (HAIs)	36.000	35.671	35.671
Patient Safety Research Activities	**$72.276**	**$71.615**	**$71.615**

FY 2020 Accomplishments by Research Activity:

Patient Safety Risks and Harms: The issue of diagnostic safety has not received the same level of attention as other patient safety harms. In a study of patients seeking second opinions from the Mayo Clinic, researchers found that only 12 percent were correctly diagnosed by their primary care providers. More than 20 percent had been misdiagnosed, while 66 percent required some changes to their initial diagnoses. In FY 2020, AHRQ funded $10.0 million in continuing Patient Safety Learning Lab (PSLL) grants. The PSLLs funded in FY 2018 and FY 2019 apply systems engineering approaches to address both diagnostic and treatment errors in health care. In FY 2020 AHRQ continued work to develop three different resources to address failures in the diagnostic process. By the end of FY 2020, AHRQ had four resources in different stages of development. One resource engages patients and families in the diagnostic process by helping clinicians provide

patients with one uninterrupted minute to share the reason for their office visit. Another resource, TeamSTEPPS to Improve Diagnosis, will help clinicians improve teamwork and communication related to diagnosis. Another resource will help healthcare organizations start using measurement to enhance diagnostic safety. A final resource focuses on clinician calibration, which is having better alignment between their confidence in their diagnostic performance and their actual performance. During FY 2020, AHRQ developed and posted three issue briefs on different diagnostic safety topics on the AHRQ website and submitted another paper for publication in a peer-reviewed journal.

According to the Joint Commission, an estimated 80 percent of serious medical errors involve miscommunication between caregivers when responsibility for patients is transferred or handed-off. Therefore in FY 2020, AHRQ continued accomplishments built on past successes and focused on the continued expansion of projects that demonstrate impact in improving patient safety, including ongoing support for the use of successful initiatives that seamlessly integrate the use of evidence-based resources in multiple settings such as TeamSTEPPS® (Team Strategies and Tools to Enhance Performance and Patient Safety) and the Surveys on Patient Safety Culture. These projects address the challenges of healthcare teamwork, communication and coordination among provider teams. Better teamwork and the establishment of safety cultures in healthcare organizations are critically important to patient safety. Both of these topics are widely recognized as foundational bases on which patient safety can be improved. By the end of FY 2020, AHRQ had neared completion of the development of a new TeamSTEPPS curriculum focusing on improving diagnostic safety and was beginning to recruit practices for the pilot test.

Research has shown that preventable adverse events constitute nearly 60% of harms experienced by residents in nursing homes. In ambulatory care, a systematic review found there are between 2–3 patient safety incidents per 100 consultations/patient records reviewed and about 4% of these incidents were associated with severe harm. To address these patient safety issues, in FY 2020 AHRQ continued to support grants to a) improve patient safety in ambulatory and long term care settings and b) to improve medication safety.

Healthcare-Associated Infections (HAIs): In FY 2019 and 2020, AHRQ made significant progress in the four CUSP projects that are currently under way.

1) CUSP for antibiotic stewardship (*official title: AHRQ Safety Program for Improving Antibiotic Use)* completed a long-term care cohort involving over 400 long-term care facilities in December 2019. Preliminary data from this cohort show a significant reduction in antibiotic starts over the one-year period and were presented at Infectious Disease (ID) Week in October 2020. An ambulatory care cohort of over 350 ambulatory care practices (e.g. clinics, medical practices, and urgent care centers) was launched in December 2019 and completed in December 2020.
2) In December 2019, CUSP for intensive care units (ICUs) with persistently elevated rates of CLABSI and CAUTI *(official title: AHRQ Safety Program for Intensive Care Units (ICUs): Preventing CLABSI and CAUTI)* launched its sixth and final one-year cohort comprising 54 ICUs to participate in the project. Over 700 ICUs have actively participated in the project overall.
3) CUSP for improving surgical care and recovery *(official title: AHRQ Safety Program for Improving Surgical Care and Recovery)* has worked with 295 hospitals in 44 States through July 2020. The hospitals range from those with fewer than 50 beds to those with more than

500 beds. The first cohort addressed colorectal surgery, the second cohort added a focus on orthopedic surgery, and the third cohort added a focus on gynecological surgery. A fourth cohort of over 100 hospitals – over 50 new hospitals and over 50 hospitals from previous cohorts – adds a focus on emergency general surgery, as well as working with hospitals in the three other focus areas and started work in September 2020.

4) In February 2020, AHRQ launched the CUSP for Methicillin-Resistant Staphylococcus Aureus (MRSA) Prevention project, which aims to reduce MRSA infections in more than 400 ICUs, 400 non-ICUs, 300 high-risk surgical services, and 300 long-term care facilities over five years.

Patient Safety Organizations (PSOs): The U.S. Department of Health & Human Services was directed in the Patient Safety and Quality Improvement Act of 2005 (Patient Safety Act) to create and maintain a Network of Patient Safety Databases (NPSD) to provide an interactive, evidence-based, management resource for health care providers, Patient Safety Organizations (PSOs) listed by AHRQ, and others. In June 2019, AHRQ operationalized the NPSD with the release of the NPSD dashboards, the first NPSD data reporting tool available to the public, and in December 2019 issued an accompanying NPSD Chartbook. In August 2020, a new NPSD Chartbook and NPSD Dashboards with data reflecting over 619,000 additional records was released. The NPSD is the first publicly-available online resource that captures non-identifiable information on patient safety events collected by AHRQ-listed PSOs and their participating providers across the U.S. PSOs collect data using AHRQ's Common Formats for Event Reporting - Hospitals, a standardized reporting format using common language and definitions of patient safety events. The Patient Safety Act also requires AHRQ to prepare a Report to Congress on effective strategies for reducing medical errors and increasing patient safety with deadlines tied to the operationalization of the NPSD. In December 2020, AHRQ made available a draft Report to Congress for National Academy of Medicine review and public comment. In March 2021, AHRQ submitted an annual report in response to the HHS Office of Inspector General's Report, *Patient Safety Organizations: Hospital Participation, Value, and Challenges,* OEI-01-17-00420.

FY 2022 President's Budget Policy: The FY 2022 Request for Patient Safety research is $71.6 million, maintaining the level of support provided in the FY 2021 Enacted.

Research Related to Risk and Harms

At the FY 2022 President's Budget level, Research related to Risk and Harms will total $31.1 million, the same level of support as the FY 2021 Enacted level. The FY 2022 President's Budget will fund $10.8 million in non-competing research grants, $8.5 million in new research grants, and $11.8 million in research contracts. At the President's Budget level, AHRQ will provide $10.0 million ($5.0 million in continuing grants and $5.0 million in new grants) for PSLLs to use system's engineering approaches to reduce patient harm due to treatment and diagnostic errors. In FY 2022 AHRQ will also continue to fund grants to improve patient safety in ambulatory and long-term care settings and to improve medication safety. The Medicare Patient Safety Monitoring System (MPSMS) was being used to help understand the extent of medical errors taking place in U.S. hospitals. Using research contract funding, AHRQ has developed an improved patient safety surveillance system to replace MPSMS that is known as the Quality and Safety Review System (QSRS). Unlike MPSMS, QSRS generates adverse event rates to more easily trend performance over time. In FY 2022, AHRQ will transition from the use of MPSMS to QSRS with the intention of making QSRS available to hospitals in the future. During FY 2022, AHRQ will continue to develop

and post issue briefs related to different diagnostic safety topics. AHRQ will also continue to widely promote the use of the diagnostic safety resources finalized in FY 2021.

Healthcare-Associated Infections

Within the overall patient safety budget, the FY 2022 President's Budget level provides $35.7 million to support research grants and contracts to advance the generation of new knowledge and promote the application of proven methods for preventing Healthcare-Associated Infections (HAIs). Within this amount, $10.0 million will be invested in support of the national Combating Antibiotic-Resistant Bacteria (CARB) enterprise. Program activities will include efforts in antibiotic stewardship, with a focus on ambulatory and long-term care settings, as well as hospitals. In total, at the FY 2022 President's Budget level, HAIs will provide $18.5 million in noncompeting grants, $6.3 million for new research grants, and $10.9 million in research contract support. In FY 2022, AHRQ's Safety Program for Improving Antibiotic Use, which is applying CUSP to promote implementation of antibiotic stewardship, will complete an analysis of data from the project for the final report, and post the ambulatory settings toolkit using FY 2019 funds. AHRQ will also complete the work of the CUSP projects aimed at reducing central line-associated blood stream infections (CLABSI) and catheter-associated urinary tract infections (CAUTI) in intensive care units (ICUs) with elevated level of these infections, and enhancing care and recovery of surgical patients, using FY 2019 funds. Implementation activities in the CUSP for Methicillin-Resistant Staphylococcus Aureus (MRSA) Prevention project will continue in ICUs, non-ICUs, high-risk surgical services and long-term care facilities, using FY 2020 and FY 2021 funds. In addition, AHRQ will assess the history and experience with AHRQ's CUSP and other projects to date, as well as then-current HAI and antibiotic resistance issues, to determine which opportunities for new projects are appropriate to pursue. One new CUSP project could be funded at the FY 2022 President's Budget level. An effort that is likely to be funded is a project to address diagnostic accuracy and antibiotic stewardship in telehealth. Further examination of this and other potential opportunities will be needed. The evidence and products of the CUSP projects are shared with other HHS OPDIVs. CDC and CMS staff serve on the Technical Expert Panels of projects and are involved in the development and dissemination of toolkits that are produced by the projects.

Patient Safety Organization

The FY 2022 President's Budget level provides $4.8 million to continue conformance with requirements of the Patient Safety Act. This is the same level of support as the FY 2021 Enacted level. The Patient Safety Act provides privilege and confidentiality protection to certain information, including that prepared by health care providers throughout the country working with PSOs for quality and safety improvement activities. The Patient Safety Act promotes increased voluntary patient safety event reporting and analysis, as patient safety work product reported to a PSO generally cannot be used as part of litigation (e.g., medical malpractice claims) and other proceedings at the Federal, state, local, or administrative level. HHS issued regulations to implement the Patient Safety Act, which authorized the certification of PSOs, and AHRQ administers the provisions of the Patient Safety Act dealing with PSO requirements for certifications. AHRQ will continue to maintain the NPSD and expand the data available to the public, as the number of providers and PSOs contributing data to the NPSD grows. To make the data available for meaningful, national learning purposes, the NPSD will continue to develop informational tools, such as dashboards and chartbooks. As also required by the Patient Safety Act, in FY 2022 AHRQ will submit the final Report to Congress on effective strategies for reducing medical errors and increasing patient safety.

Program Portrait: Comprehensive Unit-based Safety Program (CUSP)

1. CUSP for Telehealth

FY 2021 Enacted Level:	$8.0 million
FY 2022 President's Budget:	$5.0 million
Change:	-$3.0 million

The Comprehensive Unit-based Safety Program (CUSP), which was developed and shown to be effective with AHRQ funding, involves improvement in safety culture, teamwork, and communication, together with a checklist of evidence-based safety practices. CUSP was highly effective in reducing central line-associated blood stream infections in more than 1,000 ICUs that participated in AHRQ's nationwide CUSP implementation project for central line-associated blood stream infections. Subsequently, AHRQ expanded the application of CUSP to prevent other HAIs, including catheter-associated urinary tract infections in hospitals and long-term care facilities, surgical site infections and other surgical complications in inpatient and ambulatory surgery, and ventilator-associated events.

AHRQ will provide $5.0 million for CUSP activities at the FY 2022 President's Budget level, a decrease of $3.0 million from the prior year. This decrease does not reflect a reduced interest in CUSP implementation. Instead, the decrease is related to the cost of implementation for the different projects in FY 2021 and FY 2022. AHRQ will assess the history and experience with AHRQ's CUSP and other projects to date, as well as then-current HAI and antibiotic resistance issues, to determine which opportunities for new projects are appropriate to pursue. A new CUSP project is proposed to be funded at the FY 2022 President's Budget level to address diagnostic accuracy and antibiotic stewardship in telehealth.

In FY 2022, three of AHRQ's current CUSP projects will complete their expansion efforts. AHRQ's Safety Program for Improving Antibiotic Use, which is applying CUSP to promote implementation of antibiotic stewardship, will complete the expansion of its reach beyond earlier cohorts of hospitals and long-term care facilities to encompass antibiotic stewardship in ambulatory settings, using FY 2019 funds. AHRQ will also complete the work of the CUSP expansion project aimed at reducing central line-associated blood stream infections (CLABSI) and catheter-associated urinary tract infections (CAUTI) in intensive care units (ICUs) with elevated level of these infections, as well as the expansion of the CUSP project for improving care and recovery of surgical patients, using FY 2019 funds. Implementation activities in the CUSP for Methicillin-Resistant Staphylococcus Aureus (MRSA) Prevention project will continue in ICUs, non-ICUs, high-risk surgical services and long-term care facilities, using FY 2020 and FY 2021 funds.

Key Outputs and Outcomes Tables with Performance Narrative: Patient Safety

Measure	Year and Most Recent Result / Target for Recent Result / (Summary of Result)	FY 2021 Target	FY 2022 Target	FY 2022 Target +/-FY 2021 Target
1.3.38 Increase the number of users of research using AHRQ-supported research tools to improve patient safety culture (Outcome)	FY 2020: 2909 users of research Target Not Met	3950 users of research	2950 users of research	-1000 users of research
1.3.41 Increase the cumulative number of evidence-based resources and tools available to improve the quality of health care and reduce the risk of patient harm. (Outcome)	FY 2020: 225 tools Target Exceeded	225 tools	260 tools	+35 tools
1.3.62 Reduce the rate of CAUTI cases in hospital intensive care units (ICUs) (Outcome)	FY 2020: NHSN Rate: Baseline: 1.26 CAUTI/1,000 catheter days Intervention: 0.90 CAUTI/1,000 catheter days Result: 29% reduction ([1.26-0.90]/1.26) Population Rate: Baseline: 6.81 CAUTI/10,000 patient days Intervention: 4.51 CAUTI/10,000 patient days Result: 34% reduction ([6.81-4.51]/6.81) (Target Exceeded)	5% reduction from FY 2021 Baseline NHSN and Population rates	Retire	N/A
1.3.64 Increase the number of units participating in the CUSP for MRSA prevention project	N/A	N/A	400 hospital units participating	+400 hospital units

1.3.38: Increase the number of users of research implementing AHRQ-supported research tools to improve patient safety culture

As an indicator of the number of research users, the Agency relies in part on the Surveys on Patient Safety Culture™ (SOPS®). AHRQ initiated the SOPS program to support a culture of patient safety and quality improvement in the Nation's health care system. The safety culture surveys and related resources are available for hospitals, nursing homes, medical offices, community pharmacies, and ambulatory surgery centers. Each SOPS survey has an accompanying toolkit that contains: survey forms, survey items and dimensions, survey user's guide, and a data entry and analysis tool. Health care organizations can use SOPS to: raise staff awareness about patient safety culture, examine trends in culture over time, conduct internal and external tracking of findings, and identify strengths and areas for improvement. The SOPS surveys can be used to assess the safety culture of individual units and departments or organizations as a whole. Since the 2004 release of the first SOPS survey, thousands of health care organizations have downloaded the surveys and related resources from the AHRQ Web site, implemented them, and have chosen to submit resulting data to the SOPS databases. The interest in these resources has remained strong over the past 16 years as evidenced by submissions to the databases, orders placed for various products, participation in SOPS webinars, and requests for technical assistance.

The SOPS databases were established in response to requests from SOPS users and patient safety researchers. AHRQ established the SOPS databases as central repositories for survey data from health care organizations that have administered the SOPS and have chosen to submit their data to the databases. Upon meeting minimal eligibility requirements, health care organizations can voluntarily submit their survey data for aggregation and compare their safety culture survey results to others. AHRQ moved, in 2014, to bi-annual data submission to enhance accuracy of the survey results and reduce the burden on organizations.

For the purposes of reporting, AHRQ defines “SOPS users” as those organizations who submit results to the databases. This number is only a portion of the total number of users of the SOPS surveys and products; there are others who access the SOPS surveys and materials – which AHRQ is aware of through technical assistance requests and Web downloads – but do not submit data to the databases.

In FY 2020*, the submissions to the databases were provided by the total of 2,909 users of research, including 282 ambulatory surgery centers; 630 hospitals (2018 data**); 1,475*** medical offices; 191 nursing homes; and 331 community pharmacies.

Healthcare organizations provide the numbers to AHRQ on a voluntary basis. Due to COVID-19, the complete number of SOPS users in 2020 is less than in 2019. The AHRQ program suspended the Nursing Home SOPS data submission due to competing priorities of nursing homes. Fewer numbers of hospitals submitted data to the database in 2020. As a result, the targets have not been met in FY20, and could potentially change for subsequent years. The FY 2022 target has been adjusted based on the results from FY 2020 and continuous challenges due to the pandemic.

Further, the Hospital SOPS (HSOPS) had undergone revision to version 2 in 2019, and data submission was delayed for a year until the revision was finalized. In 2020, the SOPS program collected data from HSOPS version 1 and version 2.

**Due to the impact of the COVID-19 pandemic on healthcare organizations, voluntary data submission for the SOPS Databases has been delayed or is not available.*
***The 2018 edition of the AHRQ Hospital Survey on Patient Safety Culture User Database Report presents data from 630 U.S. hospitals. The 1.0 version of the survey was used in 2018. In 2019, there was a pilot of the 2.0 version; however, only preliminary data from 25 hospitals are available for this report.*
****The 2018 SOPS Medical Office (MO) Database was larger (2,437) than the 2020 SOPS MO Database likely due to Merit-based Incentive Payment System (MIPS) administered by CMS. Beginning in 2017, one of the MIPS Improvement Activities was administration of the SOPS MO Survey and submission to AHRQ. This only happens every 4 years*.

1.3.41: Increase the cumulative number of evidence-based resources and tools available to improve the quality of health care and reduce the risk of patient harm.

A major output of the Patient Safety Portfolio is the availability of evidence-based resources and tools that can be utilized by healthcare organizations to improve the care they deliver, and, specifically, patient safety. An expanding set of evidence-based tools is available as a result of ongoing investments to generate knowledge through research and synthesize and disseminate this new knowledge in the optimal format to facilitate its application.

The Agency continues to provide many various resources and tools to improve patient safety. Examples include:

- AHRQ Patient Safety Network (AHRQ PSNet) & Web M&M (Morbidity and Mortality Rounds);
- AHRQ Question Builder App;
- AHRQ's Safety Program for Nursing Homes: On-Time Pressure Ulcer Prevention;
- Common Formats (standardized specifications for reporting patient safety events);
- Guide to Improving Patient Safety in Primary Care Settings by Engaging Patients and Families;
- Healthcare Simulation Dictionary, Second Edition;
- Making Healthcare Safer III Report; Primary Care-Based Efforts To Reduce Potentially Preventable Readmissions;
- *Red*ucing *D*iagnostic *E*rrors in Primary Care Pediatrics (Project RedDE!);
- Re-Engineered Discharge (RED) Toolkit;
- Toolkit To Improve Antibiotic Use in Acute Care Hospitals;
- Understanding Omissions of Care in Nursing Homes.

Two items to highlight in particular for FY 2020 from the list of resources are the updated version of *Making Healthcare Safer III*, that identifies 47 best practices to improve patient safety for a variety of settings and stakeholders, and the *Toolkit To Improve Antibiotic Use in Acute Care Hospitals* that guides users through a step-by-step approach to achieve optimal antibiotic prescribing.

The Patient Safety Portfolio is projecting that the number of evidence-based resources and tools will continue to increase with a projected cumulative number of 250 in FY 2021 and 275 in FY 2022.

1.3.62: Reduce the rate of CAUTI cases in hospital intensive care units (ICUs)

A performance measure has been developed in connection with an HAI project as follow-on to earlier CUSP projects. Data from the CUSP for CAUTI project have shown that hospital units other than intensive care units (ICUs) have achieved greater reductions in CAUTI rates than ICUs. It appears that this difference is related to the clinical culture of the ICU, where staff who are treating critically ill patients favor maintaining indwelling urinary catheters to closely monitor urine output for relatively longer times than in non-ICUs. In a similar vein, some hospitals in the CUSP for CLABSI project did not achieve the significant reductions in CLABSI rates that were attained by their peers. The current HAI project is adapting CUSP to bring down persistently elevated CAUTI and CLABSI rates in ICUs. The performance measure focuses on CAUTI rates because the baseline rate for CAUTI is likely to be easier to estimate and more stable than for CLABSI.

In FY 2021, AHRQ will complete the implementation portion of the CUSP expansion project for reducing CAUTI and CLABSI rates in ICUs with persistently elevated rates of these infections, using FY 2019 funds. This expansion from four regions of the country to nationwide coverage was initially funded with FY 2017 funds, and expansion activities began at the beginning of FY 2018. The FY 2021 HAI performance measure assesses progress toward reducing the rate of CAUTI in ICUs participating in the CUSP project. The performance measure for this project will be retired at the end of FY 2021 and a new performance measure will be instituted starting FY 2022 – see measure 1.3.64.

In the current project, cohorts of ICUs are being recruited on a rolling basis. Progress in reducing CAUTI in a Fiscal Year is therefore assessed by deriving two contemporaneous baseline rates of CAUTI for the ICUs participating in that Fiscal Year's cohort and determining whether the CAUTI rates for those ICUs have been reduced after intervention. The first baseline rate is the National Healthcare Safety Network (NHSN) rate. This rate is defined as the number of CAUTI cases per 1,000 catheter days. An important approach for reducing CAUTI cases is to reduce the use of catheters and thus the number of catheter days. However, to the extent that this effort succeeds, it lowers the denominator in the NHSN rate and thereby appears to raise the CAUTI rate. A second rate is therefore also being used: the population rate, defined as the number of CAUTI cases per 10,000 patient days. The denominator of this rate is not affected by a reduction in the number of catheter days.

The most recent project results are from FY 2020. In FY 2020, as shown in the table, the baseline NHSN rate for the ICUs then participating in the project was 1.26 CAUTI/1,000 catheter days. The NHSN rate after intervention was 0.90 CAUTI/1,000 catheter days, which is a 29% reduction in the NHSN CAUTI rate. The baseline population rate was 6.81 CAUTI/10,000 patient days. The population rate after intervention was 4.51 CAUTI/10,000 patient days, which is a 34% reduction in the population CAUTI rate. These results for reductions in the NHSN and population CAUTI rates substantially exceed the target of a 5% reduction.

In a similar fashion, contemporaneous baseline NHSN and population CAUTI rates will be derived from all the ICUs participating in the project in FY 2021, respectively. Given the virtual absence of reductions in CAUTI rates observed in ICUs in the nationwide CUSP for CAUTI project, the target for FY 2021 has been set quite conservatively in light of the fact that the participating ICUs have

been chosen because they are among the lower-performing units in terms of reducing their rate of CAUTI (and/or CLABSI).

1.3.64 Increase the number of units participating in the CUSP for MRSA prevention project
A performance measure has been developed in connection with an HAI project, CUSP for Methicillin-Resistant Staphylococcus Aureus (MRSA) Prevention. This project was initiated in response to elevated national MRSA rates and in support of the National Action Plan to Prevent Healthcare-Associated Infections, the National Action Plan for Combating Antibiotic-Resistant Bacteria, and Healthy People 2030 MRSA reduction targets. The project aims to prevent MRSA infection in ICUs, non-ICUs, high-risk surgical services, and long-term care facilities over the planned 5-year period. The first phase of the project will focus on ICUs and non-ICUs, supported by FY 2020 funds. In FY 2022, recruitment is anticipated to be complete for this first phase of the project, barring significant delays related to
COVID-19, and data are expected to be available from support contractor records regarding participating hospital units.

Mechanism Table:

Patient Safety
(Dollars in Thousands)

	AHRQ FY 2020 Final		AHRQ FY 2021 Enacted		AHRQ FY 2022 President's Budget	
RESEARCH GRANTS	**No.**	**Dollars**	**No.**	**Dollars**	**No.**	**Dollars**
Non-Competing……	80	34,198	82	36,043	68	29,343
New & Competing…….	27	8,918	15	7,149	34	14,800
Supplemental……	0	0	0	0	0	0
TOTAL, RESEARCH GRANTS…..	**107**	**43,117**	**97**	**43,192**	**101**	**44,143**
TOTAL CONTRACTS/IAAs…..		**29,159**		**28,423**		**27,472**
TOTAL……		**$ 72,276**		**$ 71,615**		**$ 71,615**

5-Year Funding Table:

FY 2018:	$70,276,000
FY 2019:	$72,276,000
FY 2020 Final:	$72,276,000
FY 2021 Enacted:	$71,615,000
FY 2022 President's Budget:	$71,615,000

HCQO: Health Services Research, Data and Dissemination				
	FY 2020 Final	FY 2021 Enacted Level	FY 2022 President's Budget	FY 2022 +/- FY 2021
Budget Authority	$96,284,000	$95,403,000	$103,053,000	+$7,650,000
PHS Evaluation Funds	$0	$0	$25,000,000	+$25,000,000

Authorizing Legislation: Title III and IX and Section 947(c) of the Public Health Service Act
FY 2022 Authorization……..……Expired.
Allocation Method…….Competitive Grant/Cooperative Agreement, Contracts, and Other.

Health Services Research, Data, and Dissemination (HSR): The principle goals of HSR are to identify the most effective ways to organize, manage, finance, and deliver healthcare that is high quality, safe, equitable, and high value. The portfolio first conducts research to identify the most pressing questions faced by clinicians, health system leaders, policy makers and others about how to best provide the care patients need, together with appropriate solutions. These questions include ones about how hospitals can address life threatening infections in their intensive care units to how primary care practices can find and use the best evidence to reduce their patients' chances of developing heart disease or having a stroke. It also includes questions about critical public health crises, such as the nation's opioids epidemic. This research is done both through investigator-initiated and directed research grants programs, as well as through research contracts.

The next step in the HSR continuum is to implement the findings of our research. AHRQ supports the implementation of its research findings by creating practical tools and resources that can be used in real-world settings by professionals on the front lines of health care and policy making. For instance, AHRQ has developed a model program for shared decision making between clinicians and their patients, along with creating modules to train physicians and nurses on using the program and training others to use it, as well. In addition, AHRQ ensures that these kinds of resources are widely available by working with partners inside and outside of HHS through public-private partnerships that maximize AHRQ's expertise by leveraging these organizations own networks and members.

Finally, AHRQ creates and disseminates data and analyses of key trends in the quality, safety, equity, and cost of health care to help users understand and respond to what is driving the delivery of care today. These data and analyses take the form of statistical briefs, interactive presentations of information on a national and state-by-state basis, infographics, and articles and commentaries in leading clinical and policy outlets. AHRQ also develops measures of quality that are used to track changes in quality, safety, equity, and health care costs over time, providing benchmarks and dashboards for judging the effectiveness of clinical interventions and policy changes. AHRQ not only provides National data sets and analyses, but where possible, AHRQ provides insights on the State and local levels, too.

Health Services Research, Data and Dissemination (HSR)

(in millions of dollars)

	FY 2020 Final	FY 2021 Enacted	FY 2022 President's Budget
Health Services Research Grants	$60.098	$59.707	$82.650
(Investigator-Initiated)	*($53.458)*	*($45.827)*	*($60.827)*
Health Services Contract/IAA Research	$12.985	$12.182	$21.737
Measurement and Data Collection	$14.117	$14.678	$14.666
Dissemination and Implementation	$9.084	$8.836	$9.000
Total, HSR	**$96.284**	**$95.403**	**$128.053**

Health Services Research Grants: Health Services Research grants, both targeted and investigator-initiated, focus on research in the areas of quality, effectiveness, equity, and efficiency of health care services. Investigator-initiated research is particularly important. New investigator-initiated research and training grants are essential to health services research – they ensure that both new ideas and new investigators are created each year. Investigator-initiated research grants allow extramural researchers to pursue the various research avenues that lead to successful yet unexpected discoveries. In this light, the investigator-initiated grant funding is seen as one of the most vital forces driving health services research in this country. The FY 2021 Enacted provided $45.8 million for investigator-initiated research. This level of funding was lower than in prior years and additionally AHRQ reallocated $7.5 million in investigator-initiated research grants to fund urgent new COVID-19 research grants and COVID-19 grant supplements.

FY 2022 President's Budget Policy: The FY 2022 President's Budget provides $82.7 million for research grants, an increase of $22.9 million from the FY 2021 Enacted level. After providing $39.5 million in noncompeting grant support, AHRQ will invest $43.2 million in new research and training grants. Details about AHRQ's new research grants funding is provided below.

- $23.7 million is directed to new investigator-initiated research and training grants. Coupled with $37.1 million in continuing investigator-initiated grants, AHRQ will fund a total of $60.8 million in investigator-initiated research grants, an increase of $15.0 million from the prior year. The increase for investigator-initiated research will allow AHRQ to address the backlog in general health services research created by the urgent need to fund COVID-19-realted research in FY 2021. AHRQ will direct the new investigator-initiated research as follows:
    - $15.7 million is directed to traditional new investigator-initiated research and training grants on any topic.
    - $5.0 million is directed to new investigator-initiated HSR grants focused on COVID-19. The grants will focus on improving the quality of care and patient outcomes; improving patient safety; understanding the pandemic's impact on socially vulnerable populations and people with multiple chronic conditions; and understanding how digital health innovations such as telehealth contributed to the health system response to COVID-19.
    - $3.0 million is directed to new investigator-initiated HSR and training grants focused on advancing equity. AHRQ will request applications focused on advancing equity in

healthcare delivery with a particular emphasis on reducing disparities in healthcare delivery for racial and ethnic minorities and other underserved communities consistent with the President's Executive Order 13985.

- $7.0 million is directed new opioid research grants that improve health equity and patient experience. In total, the FY 2022 President's Budget provides $10.0 million in funding to support the Secretary's initiative to combat opioid abuse, misuse, and overdose - $3.0 million in continuing research grants and contracts and $7.0 million in new grant support. The new research grants will:
  - Disseminate and implement evidence-based interventions, including behavioral interventions that treat opioids and multiple substance use in ambulatory care and primary care settings.
  - Develop and test models of primary care and ambulatory care delivery to address substance use disorder that consider the social, environmental, economic and psychological factors that contribute to substance use disorder. Examples include care coordination, integration of substance use services in ambulatory care settings, or integration of population health approaches with primary care.
  - Understand and address the effect of substance use disorder on whole person health and the development and/or management of other chronic conditions, especially multiple chronic conditions (MCC).
  - Develop and test optimal opioid tapering approaches, effective technologies to support tapering, strategies to mitigate potential harms of tapering, and methods to identify patients most likely to benefit from tapering. AHRQ is especially interested in research to better understanding tapering in older adults and other interventions to address opioid misuse, mitigate harms, and manage pain in this high-risk population.
  - AHRQ will encourage applications that take advantage of the natural experiment caused by the COVID-19 pandemic to examine how changes in service delivery (such as expanded use of telehealth) affect access to care, quality of care, and health inequities.

- $8.5 million is directed to new research grants related to primary care. Primary care research is critical to AHRQ's mission to make health care safer, higher quality, more accessible, equitable, and affordable. AHRQ is the only PHS agency that supports clinical, primary care research which includes translating science into patient care and better organizing health care to meet patient and population needs. The COVID-19 pandemic has intensified this priority for AHRQ as delayed primary care has resulted in foregone care among people with common chronic conditions including diabetes, hypertension, and hyperlipidemia, as well over 22 million missed cancer screening tests, and over 80,000 delayed cancer diagnoses, as well as potential for increased rates of uncontrolled diabetes and other chronic diseases. The FY 2022 President's Budget includes two primary care grant components:

  - AHRQ will invest $5.0 million in new research grants to answer critical questions on how to revitalize primary care to improve individual and population health while increasing access to care, reducing burden on patients and improving equity. Critical questions will focus on topics such as how to:
    - address the increased need to increase access, quality, and equity of behavioral health services, including management of mental health and substance abuse in primary care, and improve the integration of behavioral health and primary care.

        - support the primary care workforce to increase resilience and reduce burnout.
        - increase the use and effectiveness of different forms of virtual care/telehealth for different conditions and populations.
        - create functional relationships between primary care practices and state and local health departments to support ongoing COVID vaccination, dissemination of public health recommendations, and develop partnerships for chronic disease prevention and management.
        - improve equitable receipt of clinical preventive services and chronic disease management
        - develop, implement, evaluate and scale innovative models of integrated whole person care based in primary care to prevent and manage multiple chronic conditions.

    - Building on its investments in the development of primary care practice-based research networks (PBRNs), AHRQ will invest $3.5 million in new FY 2022 in research grants to PBRNs to find actionable solutions to the challenges confronting primary care that can be scaled and spread across the health system. A priority of this research will focus on improving linkages between primary care, the larger health system, behavioral health and public health. AHRQ will encourage innovative approaches including rapid cycle research, partnership research, and adaptive designs that address the complexity of care delivery to accelerate evidence development to support primary care transformation and post-COVID revitalization.

- $3.0 million is directed to new grants for a re-competition of one of AHRQ's flagship programs -- the Consumer Assessment of Healthcare Providers and Systems (CAHPS). CAHPS supports and promotes the assessment of consumers' experiences with health care. The goals of the CAHPS program are twofold: develop standardized patient questionnaires that can be used to compare results across sponsors and over time; and generate tools and resources that sponsors can use to produce understandable and usable comparative information for both consumers and health care providers.

- $1.0 million is directed to grant supplements focused on ensuring diversity within the health services research community. This funding will allow current grantees to request funds to enhance the diversity of the research workforce by recruiting and supporting students, postdoctorates, and eligible investigators from underrepresented backgrounds, including those from groups that have been shown to be nationally underrepresented in health services research. This supplement opportunity would also be available to grantees who are or become disabled and need additional support to accommodate their disability in order to continue to work on the research. Supplement projects would focus on addressing equity and agency priorities including maternal and child health, opioids, primary care, and rural health.

Health Services Contracts/IAA Research: Similar to funding research grants, AHRQ funds health services contracts and IAAs to support health services research activities to improve the quality, effectiveness and efficiency of health care. AHRQ will continue to invest in systematic evidence reviews, delivery system research activities, and other contracts to extramural recipients. This budget activity also funds a variety of contracts that support administrative activities that are related to research including support for grant peer review, ethics reviews,

data management, data security, evaluation, inter-agency agreements with Federal partners, and events management support.

One contract mechanism AHRQ uses is ACTION 4. This is the fourth generation of an AHRQ-wide contracting mechanism that supports field-based delivery system research. ACTION projects develop and test interventions designed to improve care delivery and explore methods to disseminate and implement successful care delivery models in diverse care settings. Another example of an HSR contract is support for the Evidence-Based Practice Center (EPC) program. The EPCs review all relevant scientific literature on a wide spectrum of clinical and health services topics to produce evidence reports that are widely used by public and private health care organizations. These reports are used for informing and developing coverage decisions, quality measures, educational materials and tools, clinical practice guidelines, and research agendas.

FY 2021 funding for Health Services Contracts/IAAs was $12.2 million.

FY 2022 President's Budget Policy: The FY 2022 Request provides $21.7 million for this activity, an increase of $9.3 million from the FY 2021 Enacted level. The increased funding at the FY 2022 President's Budget level supports:

- $1.5 million in new contract support for AHRQ's primary care research initiative. AHRQ will invest these funds in a learning community to support national, state and local organizations that provide direct assistance to primary care practices. AHRQ will disseminate learnings and shared resources from the community via a website, and will capture, track and disseminate findings from the primary care initiative to the community and larger primary care research field. Together with the request for grants discussed earlier, the FY 2022 President's Budget provides $10.0 million for primary care.

- $3.8 million in new contracts within the ACTION contract network to advance new models of care in a post-COVID-19 learning health system. Following the intense period of innovation caused by the COVID-19 pandemic, U.S. healthcare delivery systems will enter an intense phase of recovery in which they consolidate new innovations, such as the expanded use of virtual care, and invest in resiliency and preparation to ensure they are prepared for future surges in demand. This period will coincide with a focus on expanding equitable access to healthcare and addressing systemic barriers to equity. AHRQ will invest $3.8 million to develop experience-based guidance and resources to support healthcare systems in advancing quality, safety, equity, and value in the post-COVID-19 environment. This work may include the development and spread of resources on the use of integrated data systems to drive improvement and learning and the integration of healthcare and human services to address social needs.

- $1.0 million in new contract funding to support HHS and AHRQ's focus on advancing equity within the workplace. This funding will be used for a multi-year contract to support AHRQ in the development and implementation of a plan to ensure a culture of diversity, equity, and inclusion (DEI) at AHRQ. The plan will include assessment of barriers to equity and recommendations building capacities and skills to contribute to a workplace culture that promote DEI, including a commitment to systemic change.

- $0.8 million increase in inter-agency agreements with our Federal partners to support health services research.

- $0.8 million in new contracts to focus on telehealth safety. A critical issue that has emerged with the rapid expansion of the use of virtual healthcare visits is maintaining high levels of patient safety and quality. One important solution in creating safe telehealth applications is the involvement of patients. AHRQ has developed a patient experience of care survey for use with telehealth visits. In FY 2022, AHRQ will invest $0.8 million to user test and validate the tool in real-world clinical settings. This effort will expand the Agency's suite of practical, evidence-based resources for improving the safety, quality, equity, and person-centeredness of telehealth.

- $0.3 million for a series of stakeholder round tables to learn from previous and ongoing efforts to link Emergency Departments with effective follow-up treatment in primary care in order to identify the next steps for developing and implementing effective models of care for initiating medication-assisted treatment for opioid use disorder in emergency departments and effectively assure ongoing treatment in primary care or other settings. This work is part of AHRQ's $10.0 million investment to combat opioid epidemic.

- $0.3 million increase to fund additional evidence reviews conducted by AHRQ's Evidence-based Practice Centers.

- $1.1 million in increased contract costs related to data management, data security, and peer review costs for proposed new grants and contracts.

Measurement and Data Collection: Monitoring the health of the American people is an essential step in making sound health policy and setting research and program priorities. Data collection and measurement activities allow us to document the quality and cost of health care, track changes in quality or cost at the national, state, or community level; identify disparities in health status and use of health care by race or ethnicity, socioeconomic status, region, and other population characteristics; describe our experiences with the health care system; monitor trends in health status and health care delivery; identify health problems; support health services research; and provide information for making changes in public policies and programs. AHRQ's Measurement and Data Collection Activity coordinates AHRQ data collection, measurement and analysis activities across the Agency. In FY 2021 AHRQ provided $14.6 million to support measurement and data collection activities including the following flagship projects: Healthcare Cost and Utilization Project (HCUP), Consumer Assessment of Healthcare Providers and Systems (CAHPS), AHRQ Quality Indicators (AHRQ QIs), the National Healthcare Disparities and Quality Reports (QDRs), and data harmonization expenses. For more information about HCUP please see the program portrait on page 43.

FY 2022 President's Budget Policy: The FY 2022 President's Budget provides $14.6 million for Measurement and Data Collection activities, the same level of support as the prior year. This funding level will fully support for all of AHRQ's data and measurement activities, including Healthcare Cost and Utilization Project (HCUP), Consumer Assessment of Healthcare Providers and Systems (CAHPS), AHRQ Quality Indicators (AHRQ QIs), the National Healthcare Disparities and Quality Reports (QDRs), and data harmonization expenses for these projects. In FY 2022, AHRQ will recompete the support contract associated with AHRQ's CAHPS program. A total of $1.5

million in included for the re-competition of this contract.

Dissemination and Implementation: AHRQ's dissemination and implementation activities are designed to raise awareness about and foster the use of Agency-funded research, products, and tools to achieve measurable improvements in the health care patients receive. AHRQ research, products, and tools are used by a wide range of audiences, including individual clinicians; hospitals, health systems, and other providers; patients and families; payers, purchasers, and health plans; and Federal, state, and local policymakers. AHRQ's dissemination and implementation activities are based on research about these audiences' needs and how best to foster use of Agency products and tools, plus sustained work with key stakeholders to develop ongoing dissemination partnerships. In addition, AHRQ sponsors the dissemination of research findings and tools through tailored, hands-on technical assistance. Support for Dissemination and Implementation activities is $8.8 million at the FY 2021 Enacted level.

FY 2022 President's Budget Policy: The FY 2022 President's Budget provides $9.0 million for dissemination and implementation activities, an increase of $0.2 million from the FY 2021 Enacted level. The FY 2022 President's Budget level will allow AHRQ to promote the Agency's investments in data products and tools from the Medical Expenditure Panel Survey (MEPS) and the Healthcare Cost and Utilization Project (HCUP). In addition, these funds will help expand promotion of AHRQ resources to improve access, affordability, and equity of healthcare. The Agency will also support outreach to stakeholders to promote adoption of new findings by end users; support vital toolkits used by front-line clinicians; and share evidence with health care industry leaders through virtual and in-person professional meetings.

Mechanism Table:

Health Services Research, Data and Dissemination

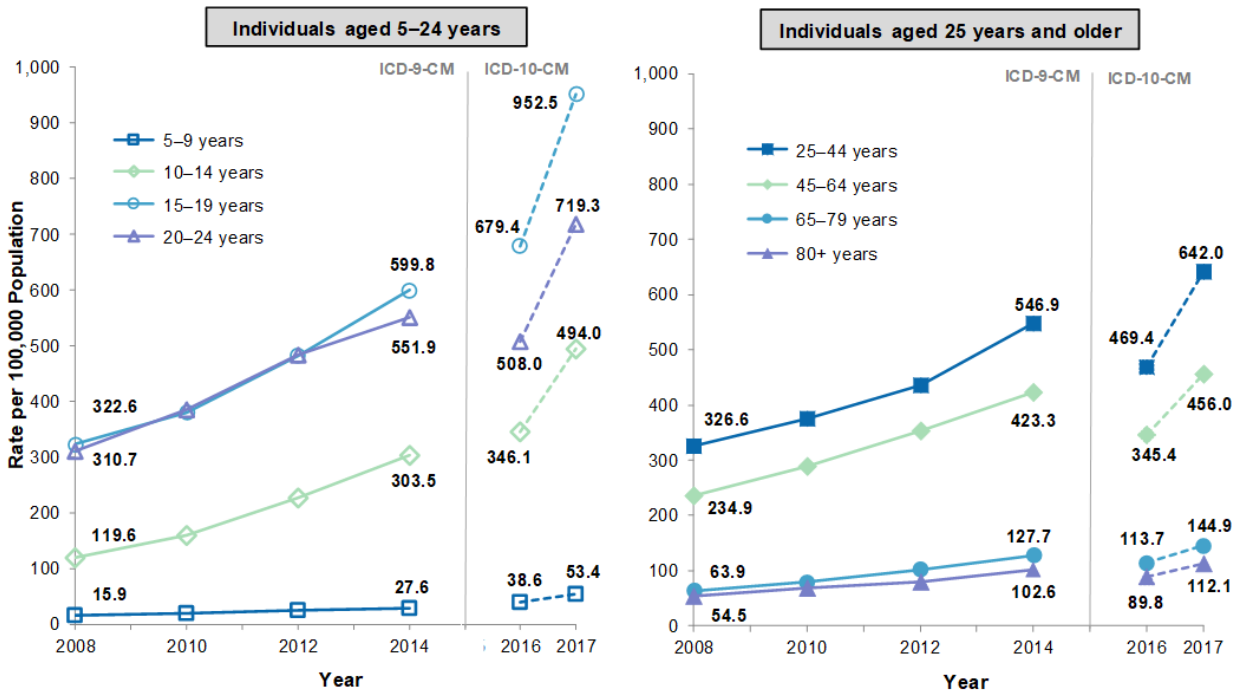
(Dollars in Thousands)

	AHRQ FY 2020 Final		AHRQ FY 2021 Enacted		AHRQ FY 2022 President's Budget	
RESEARCH GRANTS	**No.**	**Dollars**	**No.**	**Dollars**	**No.**	**Dollars**
Non-Competing……	157	45,304	147	44,045	74	39,455
New & Competing…….	64	13,859	42	15,662	144	43,195
Supplemental……	0	0	0	0	0	0
TOTAL, RESEARCH GRANTS…..	**221**	**59,164**	**219**	**59,707**	**218**	**82,650**
TOTAL CONTRACTS/IAAs…..		**37,120**		**35,696**		**45,403**
TOTAL……		**$96, 284**		**$95,403**		**$ 128,053**

5-Year Funding Table:

FY 2018:	$94,284,000
FY 2019:	$96,284,000
FY 2020 Final:	$96,284,000
FY 2001 Enacted:	$95,403,000
FY 2022 President's Budget	$128,053,000

HCUP Data: Trends in Emergency Department Visits for Suicidal Ideation or Suicide Attempt



Abbreviations: ED, emergency department; ICD-9-CM, International Classification of Diseases, Ninth Revision, Clinical Modification; ICD-10-CM, International Classification of Diseases, Tenth Revision, Clinical Modification

Note: The solid trend line between 2008 and 2014 are cases identified using ICD-9-CM coding. The grey vertical line reflects the shift in diagnosis coding in 2015 to the updated ICD-10-CM system. New baseline estimates account for known differences between the coding systems. The dashed trend line between 2016 and 2017 highlights an initial transition period in the uptake of the new system.

Source: AHRQ HCUP, Nationwide Emergency Department Sample (NEDS), 2008, 2010, 2012, 2014, 2016, and 2017.

HCUP is the Nation's most comprehensive source of hospital care data, including all-payer information on inpatient stays, ambulatory surgery and services visits, and emergency department encounters. HCUP enables researchers, insurers, policymakers and others to study health care delivery and patient outcomes over time, and at the national, regional, State, and community levels. This program develops statistical briefs that present engaging, descriptive statistics on a variety of topics including specific medical conditions as well as hospital characteristics, utilization, quality, and cost.

HCUP data illustrate the recent dramatic increases and geographic variation in Emergency Department (ED) visits for suicidal ideation or suicide attempt, particularly for the younger age groups. Between 2008 and 2017, the rate of ED visits related to suicidal ideation or suicide attempt increased for all age groups. In 2017, the rate of ED visits related to suicidal ideation or suicide attempt was highest among those aged 15–19 (952.5 per 100,000 population), 20–24 (719.3), and 25–44 (642.0) years. The rates of ED visits related to suicidal ideation or suicide attempt varied by State and by urban/rural area within the State. Nearly half of States had the highest rate in small / medium metropolitan areas.

Additional detail on emergency department stays for suicidal ideation or suicide attempt can be found at: https://hcup-us.ahrq.gov/reports/statbriefs/statbriefs.jsp

Key Outputs and Outcomes Tables with Performance Narrative: Health Services Research, Data and Dissemination (HSR)

Measure	Year and Most Recent Result / Target for Recent Result / (Summary of Result)	FY 2021 Target	FY 2022 Target	FY 2022 Target +/-FY 2021 Target
2.3.8 Increase the availability of electronic clinical decision support tools related to safe pain management and opioid prescribing (Output)	FY 2020: Through two contracts, began designing and developing new patient-facing and clinician-facing clinical decision support (CDS) applications for chronic pain management. (Target Met)	Evaluate electronic clinical decision support tools related to chronic pain management and disseminate results of the evaluation	Retire	N/A

2.3.8: Increase the availability of electronic clinical decision support tools related to safe pain management and opioid prescribing

Addressing the nation's opioid epidemic is an ongoing focus of AHRQ's Health Services Research, Data, and Dissemination portfolio. In FY 2017, AHRQ contributed to all five pillars of the Department of Health and Human Services comprehensive opioids strategy. Our work included practical health services research, data explorations, and public dissemination. Our dissemination activates included producing systematic evidence reviews on non-opioid pain management and the use of naloxone by emergency medical service personnel and publishing a collection of over 250 field-tested tools to support the delivery of Medication Assisted Treatment (MAT) in primary care settings. Using AHRQ data platforms, AHRQ produced a series of analysis documenting trends in health care utilization fueled by the opioid epidemic at state and national levels and which uncovered the diverse ways in which the crisis is manifesting itself across the country. In FY 2017, AHRQ also continued to support both investigator-initiated health services research on the prevention and treatment of opioid addiction by health care delivery organizations and targeted health services research expanding access to MAT in rural communities through primary care.

In FY 2017, AHRQ initiated a new initiative to ensure that health care professionals have access to evidence supporting safe pain management and opioid prescribing at the point of care through electronic clinical decision support (CDS). This effort is part of AHRQ's overall CDS initiative, funded by resources from the Patient-Centered Outcomes Research Trust Fund, to advance evidence into practice through CDS and to make CDS more shareable, standards-based, and publicly-available. The infrastructure for developing and sharing these CDS tools is called CDS Connect (https://cds.ahrq.gov).

In FY 2018, AHRQ developed a dashboard that aggregates pain-related information from the EHR into one consolidated view for clinicians. The information includes data such as pain medications,

pain assessments, relevant diagnoses, and lab test results. The dashboard was tested in partnership with OCHIN, a network of community health centers, and uses the HL7 FHIR standard, which allows for interoperability and implementation in different EHRs.

In FY 2019, AHRQ disseminated safe pain management and opioid-related CDS through CDS Connect. This includes the pain management dashboard developed in FY 2018. AHRQ continues to present its work in CDS at national meetings of key organizations, such as the American Medical Informatics Association and the Healthcare Information and Management Systems Society. In addition, AHRQ will continue to work with its federal partners to disseminate safe pain management and opioid CDS tools. For example, the CDC uses AHRQ's CDS Connect web platform as a dissemination mechanism for two opioid CDS tools that were developed by CDC and ONC.

In FY 2020, the two new contracts began designing and developing the CDS for chronic pain management, including meeting with end-users (e.g., patients, clinicians) and planning for integration with their pilot sites' electronic health records. One contract built on the pain management dashboard developed by the AHRQ CDS Connect project in 2018, and the other contract built brand new applications to help with opioid tapering. Each contract has been developing both clinician- and patient-facing CDS applications. Information about the contracts has been disseminated through project profiles at https://digital.ahrq.gov, and abstracts have been submitted for presentation at research conferences. One project's evaluation approach has received OMB approval for compliance with the Paperwork Reduction Act.

In FY 2021, both contracts will complete the design of the CDS applications, followed by testing and deployment at their pilot sites. Each of the contracts will perform a self-evaluation of their CDS and will disseminate resources and lessons learned through AHRQ's CDS Connect platform. This will include implementation guides and other materials for re-use by other healthcare systems. Each project's self-evaluation is in addition to a separate evaluation of AHRQ's overall CDS initiative, which began in FY 2020.

The project that is providing safe pain management and opioid prescribing data is ending in FY 2021 and this measure will be retired in FY 2022.

HCQO: Digital Healthcare Research (Formerly Health Information Technology)				
	FY 2020 Final	FY 2021 Enacted	FY 2022 President's Budget	FY 2022 +/- FY 2021
Budget Authority	$16,500,000	$16,349,000	$16,349,000	$0
PHS Evaluation Fund	$0	$0	$0	$0

Authorizing Legislation: Title III and IX and Section 947(c) of the Public Health Service Act
FY 2022 Authorization……Expired.
Allocation Method…… Contracts, and Other.

Digital Healthcare Research: AHRQ proposes re-naming this portfolio from Health Information Technology to Digital Healthcare Research. This new name better reflects the ever-evolving digital healthcare ecosystem that continues to expand beyond traditional health information technology. Traditional "health information technology" in the form of electronic health records can be augmented with various forms of patient-generated, contextual, and environmental data to yield new insights for healthcare delivery via advanced analytics. The Digital Healthcare Research portfolio conducts rigorous research to determine how the various components of the digital healthcare ecosystem can best come together to positively affect healthcare delivery and create value for patients and their families. By identifying and disseminating what works and developing evidence-based resources and tools, the portfolio has played a key role in the Nation's drive to accelerate the use of safe, effective, and patient-centered digital healthcare innovations.

The portfolio operates in coordination with other Federal health IT programs, particularly the Office of the National Coordinator for Health IT (ONC). AHRQ's legislatively authorized role is to fund research on whether and how digital healthcare innovations improve healthcare quality. For the past decade, AHRQ-funded research has consistently informed and shaped the programs and policy of ONC, CMS, the Veteran's Administration, and other Federal entities. AHRQ's Digital Healthcare Research portfolio will continue to produce field-leading research and summarized evidence synthesis to inform future decisions about digital healthcare by healthcare stakeholders and policymakers.

FY 2020 Accomplishments

Since 2004, the Digital Healthcare Research portfolio has invested in a series of groundbreaking research grants to increase understanding of the ways digital healthcare can improve health care quality. Early efforts evaluated the facilitators and barriers to health IT adoption in rural America and the value of health IT implementation. In 2014 and 2015, Congress directed AHRQ to fund new research to fill the gaps in our knowledge of health IT safety. Stories about these pioneering health IT safety research projects were captured as "research spotlights" in the portfolio's *Year in Review* report published in 2019. In 2020, the portfolio published a new *Year in Review* report containing more recent research findings and impact. For example, researchers at Columbia University found that human papillomavirus vaccine series completion rates in a low-income, Latino adolescent population were high for patients receiving text messages reminders. Also, researchers at Northwestern University showed that a smartphone app that uses location data to notify primary care providers when their patients arrive in the hospital or ER is a simple, potentially scalable approach to improve care coordination after a hospital visit. These and additional research exemplars are discussed in more detail in the report, which contains an executive summary.

As interest and investments in digital healthcare have grown, so has the need for evidence and best practices. In addition to developing field-defining evidence reports, AHRQ has provided comprehensive and ready access to the research and experts funded by the portfolio at digital.ahrq.gov.

FY 2022 President's Budget Policy: The FY 2022 President's Budget provides $16.3 million for Digital Healthcare Research, the same level of support as the prior year. The portfolio will provide $14.3 million in research grant funding: $9.9 million in continuation grant funding and $4.4 million in new research grants. The new grants will focus on rigorously testing promising digital healthcare interventions aimed at improving the quality and value of care. Interventions will be investigator-initiated. In addition, a total of $2.0 million in contract funding will support synthesizing and disseminating evidence generated by the portfolio.

Program Portrait: **Telemedicine Helps Close the Disparity Gap for Alaska Native Rheumatoid Arthritis Patients**

AHRQ's research findings are important contributions to our Nation's efforts to ensure the quality of care via telemedicine in rural areas. For example, rheumatoid arthritis (RA), a chronic autoimmune disease requiring frequent visits with a rheumatologist, disproportionately affects American Indian/Alaskan Native (AI/AN) populations. Access to rheumatologists can be challenging for these and other rural, minority populations. To improve patient access, telemedicine has been used for clinical care by rheumatologists at the Alaska Native Tribal Health Consortium since 2015. However, its impact on patient outcomes and quality of care had not been systematically evaluated.

To address this gap in telemedicine research, Dr. Elizabeth Ferucci and her team at the Alaska Native Tribal Health Consortium designed an observational study to evaluate disease activity and quality of care. There was no difference in RA disease activity over 1 year, and no difference in quality of care for patients who receive rheumatology care through telemedicine versus patients receiving only in-person rheumatology care, indicating that telemedicine is an acceptable method of follow-up.

"As disparity in the health of rural versus urban populations becomes larger, the ability to see rural patients more often may improve long-term disease outcomes and help to close this disparity gap."

– Dr. Ferucci

Mechanism Table:

Digital Healthcare Research
(Dollars in Thousands)

	AHRQ FY 2019 Final		AHRQ FY 2020 Enacted		AHRQ FY 2022 President's Budget	
RESEARCH GRANTS	**No.**	**Dollars**	**No.**	**Dollars**	**No.**	**Dollars**
Non-Competing……	38	11,949	24	7,862	28	9,899
New & Competing…….	8	2,573	19	6,491	14	4,454
Supplemental……	0	0	0	0	0	0
TOTAL, RESEARCH GRANTS…..	**46**	**14,522**	**43**	**14,353**	**43**	**14,353**
TOTAL CONTRACTS/IAAs…..		**1,978**		**1,996**		**1,996**
TOTAL……		**16,500**		**16,349**		**16,349**

5-Year Funding Table:

FY 2018:	$16,500,000
FY 2019:	$16,500,000
FY 2020 Final:	$16,500,000
FY 2021 Enacted:	$16,349,000
FY 2022 President's Budget:	$ 16,349,000

HCQO: Improving Maternal Health				
	FY 2020 Final	FY 2021 Enacted	FY 2022 President's Budget	FY 2022 +/- FY 2021
Budget Authority	$0	$0	$7,350,000	+$7,350,000
PHS Evaluation Funds	$0	$0	$0	$0

Authorizing Legislation: Title III and IX and Section 947(c) of the Public Health Service Act
FY 2022 Authorization……..……..……..……Expired. Allocation Method……..... Contracts, and Other.

Improving Maternal Health: HHS is preparing to address the complex challenge of ensuring safe and healthy pregnancies and childbirth. Today 700 or more American women die each year as a result of pregnancy and childbirth and over 50,000 experience severe complications. These outcomes are not evenly distributed, with underserved women, including African American, being at substantially higher risk of complication and death. The root causes of this crisis in American health and health care are multifaceted and so must the solutions be. HHS will need to lead the nation in addressing problems in prenatal, intrapartum, and postpartum care. It will also require focusing on helping women thrive before pregnancy and manage conditions unveiled during pregnancy.

To make informed, evidence-based decisions to improve maternal health, policymakers, healthcare system leaders, researchers, clinicians, and patients need better data and information about the health care system across multiple healthcare settings. They need a 360° view of U.S. healthcare system. Together, the three components of this initiative build the foundation for that view.

FY 2022 President's Budget Policy: The FY 2022 President's Budget provides an increase of $7.4 million for the first year of a 5-year initiative. The goal of the proposed initiative is to ensure that Federal, State, and local policymakers have timely and accurate data and useful analytic resources about maternal health and the healthcare system with which to make informed policy decisions.

Specifically, this initiative has four components:

1. Expanding the Capacity of States to Link Healthcare, Vital Statistics, and Social Service Data to Improve Evidence-based Policy Making: AHRQ has experience partnering with states to improve data collection and analysis capabilities as exemplified by the HCUP project. Aligned with the HHS maternal health framework, AHRQ will partner with two to three states and provide customized technical assistance and financial support to catalyze the development of state-level data infrastructure and analytics capability that links healthcare data, vital statistics, and social service data to provide a 360 degree view of the pregnancy, delivery, and early childhood support system in the state. This project will target states in the lower quartile of maternal health outcomes.

2. An Analytic Strike Team To Provide Rapid Response Information Using Predictive Analytics to Address Emerging Policy Issues: AHRQ will create a predictive analytic program with internal capacity to address rapid-cycle requests for HHS and other priority audiences. Initially, AHRQ will develop a proof of concept to then develop "stand-ready" capacity to conduct rapid-cycle analyses. Initial use cases will focus on issues surrounding maternal health, including morbidity and mortality prevention. As the program matures, AHRQ

will make methods and algorithms publicly available for States and other stakeholders to deploy using their own data to address unique concerns.

3. Expanded Capacity of the MEPS for State Estimates: By augmenting the MEPS sample by an additional 1,000 completed households with women of childbearing age (2,300 persons) each year, MEPS will improve its national estimates and increase AHRQ's capacity for examining issues related to maternal health. MEPS will use information from CDC state-based surveillance surveys related to pregnancy to identify sample households. An additional 1,000 completed interviews in each MEPS panel will produce improvements in precision of estimates for this population. This augmentation will improve the ability of MEPS to support analyses of maternal health as well as for other conditions of interest and for key population subgroups, including analyses by insurance status. The MEPS program cannot accomplish this sample expansion for women of childbearing age within base funding

4. Expanded Capacity to Measure Maternal Health: AHRQ will expand the Consumer Assessment of Healthcare Providers and Systems (CAHPS) initiative to develop a maternity focused CAHPS survey. In addition, AHRQ will leverage its AHRQ Quality Indicators program to develop and refine AHRQ measures focused on maternal health. These measure initiatives will allow for national and state level understanding of the quality, safety, cost and utilization of maternal-related health services.

Mechanism Table:

Improving Maternal Health

(Dollars in Thousands)

	AHRQ FY 2020 Final		AHRQ FY 2021 Enacted		AHRQ FY 2022 President's Budget	
RESEARCH GRANTS	**No.**	**Dollars**	**No.**	**Dollars**	**No.**	**Dollars**
Non-Competing……	0	0	0	0	0	0
New & Competing…….	0	0	0	0	0	0
Supplemental……	0	0	0	0	0	0
TOTAL, RESEARCH GRANTS…..	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL CONTRACTS/IAAs…..		**0**		**0**		**7,350**
TOTAL……		**0**		**0**		**7,350**

5-Year Funding Table:

FY 2018:	$ 0
FY 2019:	$ 0
FY 2020 Final:	$ 0
FY 2021 Enacted:	$ 0
FY 2022 President's Budget:	$ 7,350,000

HCQO: U.S. Preventive Services Task Force				
	FY 2020 Final	FY 2021 Enacted	FY 2022 President's Budget	FY 2022 +/- FY 2021
Budget Authority	$11,649,000	$11,542,000	$11,542,000	$0
PHS Evaluation Funds	$0	$0	$0	$0

Authorizing Legislation: Title III and IX and Section 947(c) of the Public Health Service Act FY 2022 Authorization……..……...……..……Expired.
Allocation Method……..... Contracts, and Other.

U.S. Preventive Services Task Force (USPSTF): The U.S. Preventive Services Task Force (USPSTF) is an independent, volunteer panel of nationally recognized experts in prevention and evidence-based medicine. The Task Force makes evidence-based recommendations about clinical preventive services to improve the health of all Americans (e.g., by improving quality of life and prolonging life). Since 1998, AHRQ has been authorized by Congress to provide ongoing scientific, administrative and dissemination support to assist the USPSTF in meeting its mission. AHRQ is the sole funding source of the USPSTF. AHRQ supports the USPSTF by ensuring that it has: the evidence it needs in order to make its recommendations; the ability to operate in an open, transparent, and efficient manner; and the ability to clearly and effectively share its recommendations with the health care community and general public.

Major FY 2020 accomplishments for the USPSTF include:

- Maintained recommendation statements for 85 preventive service topics with 136 specific recommendation grades. Many recommendation statements include multiple recommendation grades for different populations.
- Received 12 nominations for new topics and 1 nomination to reconsider or update existing topics.
- Posted 10 draft research plans for public comments.
- Posted 12 draft recommendation statements for public comments.
- Posted 13 draft evidence reports for public comments.
- Published 8 final recommendation statements with 14 recommendation grades in a peer-reviewed journal.

To do its work, the Task Force uses a four-step process:

1. **Step 1: Topic Nomination.** Anyone can nominate a new topic or an update to an existing topic at any time, via the Task Force Web site.
2. **Step 2: Draft and Final Research Plans.** The Task Force develops a draft research plan for the topic, which is posted on the Task Force Web site for a 4-week public comment period. The Task Force reviews and considers all comments as it finalizes the research plan.
3. **Step 3: Draft Evidence Review and Draft Recommendation Statement.** The Task Force reviews all available evidence on the topic from studies published in peer-reviewed scientific journals. The evidence is summarized in the draft evidence review and used to develop the draft recommendation statement. These draft materials are posted on the Task Force Web site for a 4-week public comment period.
4. **Step 4: Final Evidence Review and Final Recommendation Statement.** The Task Force considers all comments on the draft evidence review and recommendation statement as it finalizes the recommendation statement.

FY 2022 Budget Policy: The FY 2022 President's Budget level for the USPSTF is $11.5 million, the same level of support as the FY 2021 Enacted. With these funds AHRQ will continue to provide scientific, administrative, and dissemination support for the Task Force by investing in systematic evidence reviews and decision analysis studies; methods development; stakeholder engagement; transparency; communication; dissemination; and logistics support. These funds will allow the USPSTF to conduct evidence reviews and make recommendations on 10-12 topics depending on the complexity of the topic.

Program Portrait: Screening for Lung Cancer

Lung cancer is the leading cause of cancer death in the United States. More than 200,000 people are diagnosed with this disease each year. Smoking and older age are the two most important risk factors for lung cancer. Black people have a higher risk of lung cancer compared to people who are White, possibly related to differences in smoking exposure and social factors. When lung cancer is detected early, treatment has the best chance of being beneficial.

Given the importance, prevalence, and negative health effects of lung cancer, the USPSTF commissioned a systematic review of the scientific evidence to update its recommendation on screening for lung cancer. Based on this evidence, the USPSTF recommends annual screening for people who are between the ages of 50 and 80 and who are at high risk of lung cancer because of their smoking history. This new final recommendation, which lowers the criteria with respect to age and amount of smoking, means more people are eligible to get screened. It includes specific changes in who should get screened that will be especially helpful to Black people and women who are now more represented among those eligible for screening.

The USPSTF is committed to transparency when developing its recommendations. Therefore, it also sought input on its draft recommendation from the public, topic experts and clinical specialists, patients and other stakeholders. The USPSTF also worked closely with other Federal agencies, as well as professional organizations that deliver care. The USPSTF reviewed and considered all of this input when finalizing its recommendations.

The final recommendation was published in the *Journal of the American Medical Association* in March 2021. It received coverage from media outlets including *Associated Press, Washington Post, Wall Street Journal, New York Times,* and *CNN.*

Key Outputs and Outcomes Table with Performance Narrative: United States Preventive Services Task Force (USPSTF):

Measure	Year and Most Recent Result / Target for Recent Result / (Summary of Result)	FY 2021 Target	FY 2022 Target	FY 2022 Target +/-FY 2021 Target
2.3.7 Increase the percentage of older adults who receive appropriate clinical preventive services (Output)	FY2020: Continued data analysis of the FY2018/2019 data (In Progress)	FY 2021: PSAQ 2018/2019 data analysis continues. Complete administration of another round (2020/2021) of the PSAQ.	Complete analysis of FY 2018/2019 data New data from FY 2020/2021 will be available Begin collecting FY 2022/2023 data	N/A

2.3.7: Increase the percentage of adults who receive appropriate clinical preventive services
In FY 2020, AHRQ continued to provide ongoing scientific, administrative and dissemination support to the U.S. Preventive Services Task Force (USPSTF). The Task Force makes evidence-based recommendations about clinical preventive services to improve the health of all Americans (e.g., by improving quality of life and prolonging life). By supporting the work of the USPSTF, AHRQ helps to identify appropriate clinical preventive services for adults, disseminate clinical preventive services recommendations, and develop methods for understanding prevention in adults.

For several years, AHRQ has invested in creating a national measure of the receipt of appropriate clinical preventive services by adults (measure 2.3.7). A necessary first step in creating quality improvement within health care is measurement and reporting. Without the ability to know where we are and the direction we are heading, it is difficult to improve quality. This measure will allow AHRQ to assess where improvements are needed most in the uptake of clinical preventive services. It will help AHRQ support the USPSTF by targeting its recommendations and dissemination efforts to the populations and preventive services of greatest need. Thus, making sure the right people get the right clinical preventive services, in the right interval. The data from this measure can also identify gaps in the receipt of preventive services and therefore inform the Department's and the public health sector's prevention strategies.

AHRQ now has a validated final survey to collect data on the receipt of appropriate clinical preventive services among adults (the Preventive Services Self-Administered Questionnaire (PSAQ) in the AHRQ Medical Expenditure Panel Survey (MEPS)). The survey was fielded in a pilot test in 2015. It is a self-administered questionnaire that will be included as part of the standard MEPS starting in 2018. In FY 2020/2021, AHRQ will continue to analyze the FY2018/2019 data. It will also begin collecting the FY2020/2021 data.

The panel design of the survey, which features several rounds of interviewing covering two full calendar years, makes it possible to determine how changes in respondents' health status, income, employment, eligibility for public and private insurance coverage, use of services, and payment for care are related. Once data is collected, it is reviewed for accuracy and prepared to release to the public. AHRQ expects the FY 2020/2021 data to be available in FY 2022 and analysis can begin thereafter. Additional years of data will allow for AHRQ to track and compare receipt of high priority, appropriate clinical preventive services over time.

In FY 2020, AHRQ received the FY2018-2019 data and began preliminary data exploration and analyses. In FY 2021, AHRQ is continuing analyses.

In FY 2022, AHRQ anticipates completing analysis of the FY 2018/2019 data. It also anticipates the FY 2020/2021 preventive items data will become available, and data collection for the FY 2022/2023 will begin.

Mechanism Table:

U.S. Preventive Services Task Force

(Dollars in Thousands)

	AHRQ FY 2020 Final		AHRQ FY 2021 Enacted		AHRQ FY 2022 President's Budget	
RESEARCH GRANTS	**No.**	**Dollars**	**No.**	**Dollars**	**No.**	**Dollars**
Non-Competing……	0	0	0	0	0	0
New & Competing…….	0	0	0	0	0	0
Supplemental……	0	0	0	0	0	0
TOTAL, RESEARCH GRANTS…..	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL CONTRACTS/IAAs…..		**11,649**		**11,542**		**11,542**
TOTAL……		**11,649**		**11,542**		**11,542**

5-Year Funding Table:

FY 2018:	$11,649,000
FY 2019:	$11,649,000
FY 2020 Final:	$11,649,000
FY 2021 Enacted:	$11,542,000
FY 2022 President's Budget:	$ 11,542,000

Medical Expenditure Panel Survey				
	FY 2020 Final	FY 2021 Enacted	FY 2022 President's Budget	FY 2022 +/- FY 2021
Budget Authority	$69,991,000	$71,791,000	$71,791,000	$0
PHS Evaluation Funds	$0	$0	$0	$0

Authorizing Legislation: Title III and IX and Section 947(c) of the Public Health Service Act
FY 2022 Authorization……..……..……..……Expired.
Allocation Method……..…….... Contracts and Other.

Medical Expenditure Panel Survey (MEPS): MEPS, first funded in 1995, is the only national source for comprehensive annual data on how Americans use and pay for medical care. The MEPS is designed to provide annual estimates at the national level of the health care utilization, expenditures, and sources of payment and health insurance coverage of the U.S. civilian non-institutionalized population. The funding requested primarily supports data collection and analytical file production for the MEPS family of interrelated surveys, which include a Household Component (HC), a Medical Provider Component (MPC), and an Insurance Component (IC). In addition to collecting data that support annual estimates for a variety of measures related to health insurance coverage, healthcare use and expenditures, MEPS provides estimates of measures related to health status, demographic characteristics, employment, access to health care and health care quality. The survey also supports estimates for individuals, families and population subgroups of interest. The data collected in this ongoing longitudinal study also permit studies of the determinants of insurance take-up, use of services and expenditures as well as changes in the provision of health care in relation to social and demographic factors such as employment and income; the health status and satisfaction with care of individuals and families; and the health needs of specific population groups such as racial and ethnic minorities, the elderly and children.

MEPS data continue to be essential for the evaluation of health policies and analysis of the effects of tax code changes on health expenditures and tax revenue. Key data uses include:

- MEPS IC data are used by the Bureau of Economic Analysis in computing the nation's GDP
- MEPS HC and MPC data are used by the Congressional Budget Office, Congressional Research Service, the Treasury and others to inform high level inquiries related to healthcare expenditures, insurance coverage and sources of payment
- MEPS is used extensively to inform policymakers with respect to the Children's Health Insurance Program and its reauthorization
- MEPS is used extensively by the GAO in its studies of the U.S. healthcare system and subsequent reports as requested by the Senate Committee on Health, Education, Labor and Pensions
- MEPS is used by CMS to inform the National Health Expenditure Accounts
- MEPS is used extensively by the health services research community as the primary source of high-quality national data for studies related to healthcare expenditures and out-of-pocket costs and examinations of expenditures related to specific types of health conditions.
- MEPS data have been used recently to analyze social factors associated with the disproportionate impact of COVID-19 on minority populations.

- MEPS data have been used to produce the national weights for the "Synthetic Healthcare Data for Research" (SyH-DR), AHRQ's newest nationally representative insurance claims database containing synthesized and de-identified medical claims, prescription drug claims, and payment data for Medicare, Medicaid, and commercial payers. While MEPS data proved valuable for the creation of SyH-DR, SyH-DR may also be useful to MEPS. The detailed payment information in SyH-DR may validate and improve the expenditure information in MEPS, making MEPS an even more powerful data resource for policy analysis.

Please see the Program Portrait on page 58 for key findings from FY 2020.

FY 2022 President's Budget Policy: The FY 2022 President's Budget level for the MEPS is $71.8 million, the same level of support as the FY 2021 Enacted level. The FY 2022 President's Budget level will allow AHRQ to continue to provide ongoing support to the MEPS, allowing the survey to maintain the precision levels of survey estimates, maximize survey response rates, and the timeliness, quality and utility of data products specified for the survey in prior years.

The FY 2022 President's Budget includes $1.2 million for the second-year costs associated with expanding the capacity of the MEPS to address HHS priorities. By both augmenting the sample by 1,000 completed households (2,300 persons) and by redistributing sample across states, MEPS will improve its national estimates and increase our capacity for making estimates of individual states and groups of states, particularly rural states and those with relatively small populations. An additional 1,000 completed household interviews could be used to produce improvements in the precision of State level estimates for about 36 States and D.C. (i.e. all except the 7 largest and 7 smallest States). This augmentation will also enhance the ability of MEPS to support analyses of key population subgroups, such as persons with specific conditions and those at particular income levels or age groups, as well as analyses by insurance status. In the implementation of this investment, MEPS will engage with organizations with interest and expertise in state health matters, such as the State Health Access Data Assistance Center (SHADAC), the National Governors Association (NGA), the National Council of State Legislators (NCSL), and National Association of Counties (NACo) to assist with dissemination activities. The enhanced data will also be disseminated through the program's existing extensive network of users, which includes numerous universities, research organizations, and national, state, and local agencies and organizations. This sample expansion is separate from the sample expansion of childbearing women requested in the Improving Maternal Health program request.

This initiative will provide increased capacity to examine medical care access, use, spending and health outcomes both across states and for population subgroups, which will enhance researchers' and policymakers' ability to bring comprehensive data to bear on policy questions related HHS priority issues. This enhancement to the MEPS will make it an even more powerful tool for state and federal policy and decision makers. For example, it will improve the utility of the MEPS for examinations of medical care utilization and expenditures across states, allowing more precise comparisons across more states and regions, and provide a more solid basis for predicting the impact of state level policy changes on programs such as Medicaid and CHIP. Improvements to these programs will have a positive impact on system efficiency and outcomes, which can improve the value of care provided and increase the quality of care for patients.

Program Portrait: Medical Expenditure Panel Survey (MEPS)

FY 2020 Enacted Level:	$71.791 million
FY 2022 President's Budget:	$ 7 1.791 million
Change:	$ 0 million

The MEPS Household Component (HC) collects nationally representative information from household respondents on demographic characteristics, socioeconomic status, health insurance status, access to care, health status, chronic conditions and use of health care services that can be used to examine a broad range of important health issues. The MEPS Insurance Component (IC) collects nationally representative information from private employers and State and local governments that can be used to examine a broad range of issues related to the provision of employer-sponsored health insurance coverage. Following are key findings from recent research that used the MEPS HC and the MEPS IC to address topics relevant to Secretarial priorities regarding COVID-19, opioids, and health insurance reform.

Key Findings:

COVID-19 and Racial/Ethnic Disparities in Health Risk, Employment, and Household Composition (using data from the MEPS HC):

- Black adults in every age group were more likely than whites to have health risks associated with severe COVID-19 illness, but whites were older on average than blacks.
- When all factors were considered, whites tended to be at higher overall risk compared to blacks, with Asians and Hispanics having much lower overall levels of risk compared to either whites or blacks.
- Blacks at high risk of severe illness were 1.6 times as likely as whites to live in households containing health-sector workers.
- Among Hispanic adults at high risk of severe illness, 64.5 percent lived in households with at least one worker who was unable to work at home, versus 56.5 percent among blacks and only 46.6 percent among whites.
- These results can inform efforts to understand and address racial-ethnic disparities in COVID-19 hospitalizations and mortality.

Utilization, Sources of Payment and Expenses for Opioids (using data from the MEPS HC):

- In 2017, total outpatient prescription opioid fills for adults totaled 110.4 million with hydrocodone, oxycodone and tramadol accounting for over 85 percent of these fills.
- For adults during 2017, Medicare paid 40.9 percent of total expenses for outpatient prescription opioids, private insurance (including TRICARE) paid 28.6 percent, individuals and family members paid 15.5 percent, Medicaid paid 10.5 percent and other sources paid 4.5 percent.
- The average annual total and out-of-pocket expense per person for all outpatient prescriptions among adults with one or more prescription opioid fills were $3,696 and $385, respectively.
- These results can contribute to efforts to make appropriate use of outpatient prescription opioids which can be effective in relieving pain, but also carry serious risks of opioid use disorder and overdose.

Trends in Employer-Sponsored Insurance (using MEPS IC data on private sector workers):

- In 2019, average health insurance premiums were $6,972 for single coverage (a 3.8 percent increase from 2018), $13,989 for employee-plus-one coverage (a 4.2 percent increase), and $20,486 for family coverage (a 4.7 percent increase).
- Between 2018 and 2019, the percentage of private sector employees working at establishments that offered insurance increased for all employees (from 84.6 to 85.3 percent) and for employees working in firms with fewer than 50 employees (from 47.3 to 50.7 percent).
- Average individual deductibles were higher in firms with fewer than 50 employees ($2,386) and firms with 50 to 99 employees ($2,441) than in firms with 100 or more employees ($1,778) in 2019.
- These results can inform efforts to improve availability and affordability of employment-based insurance.

Key Outputs and Outcomes Table and Performance Narrative: Medical Expenditure Panel Survey (MEPS)

Measure	Year and Most Recent Result / Target for Recent Result / (Summary of Result)	FY 2021 Target	FY 2022 Target	FY 2022 Target +/-FY 2021 Target
1.3.16 Maintain the number of months to produce the Insurance Component tables following data collection (MEPS-IC) (Output)	FY 2020: 6 months Target: 6 months (Target Met)	6 months	6 months	0 months
1.3.19 Increase the number of tables per year added to the MEPS table series (Output)	FY 2020: 10,457 total tables in MEPS table series (Target Exceeded)	10,707 total tables in MEPS table series	10,957 tables in MEPS table series	+250 tables in MEPS table series
1.3.21 Maintain no more than a 9 month data lag between completion of data collection and dissemination of the MEPS data public use files (MEPS-HC) (Output)	FY 2020: 6 months (Target Exceeded)	Retire	N/A	N/A

The Medical Expenditure Panel Survey (MEPS) data have become the linchpin for economic models of health care use and expenditures. The data are key to estimating the impact of changes in financing, coverage and reimbursement policy on the U.S. healthcare system. No other surveys provide the foundation for estimating the impact of changes in national policy on various segments of the US population. These data continue to be key for the evaluation of health reform policies and analyzing the effect of tax code changes on health expenditures and tax revenue.

1.3.16: Maintain the number of months to produce the Insurance Component tables following data collection (MEPS-IC)

The MEPS-IC measures the extent, cost, and coverage of employer-sponsored health insurance on an annual basis. These statistics are produced at the National, State, and sub-State (metropolitan area) level for private industry. Statistics are also produced for State and Local governments. Special request data runs, for estimates not available in the published tables, are made for Federal and State agencies as requested.

The MEPS-IC provides annual National and State estimates of aggregate spending on employer-sponsored health insurance for the National Health Expenditure Accounts (NHEA) that are maintained by CMS and for the Gross Domestic Product (GDP) produced by Bureau of Economic Analysis (BEA). MEPS-IC State-level premium estimates are the basis for determining the average premium limits for the federal tax credit available to small businesses that provide health insurance

to their employees. MEPS-IC estimates are used extensively for analyses by federal agencies including:

- Congressional Budget Office (CBO);
- Congressional Research Service (CRS);
- Department of Treasury;
- The U.S. Congress Joint Committee on Taxation (JCT);
- The Council of Economic Advisors, White House;
- Department of Health and Human Services (HHS), including
- Assistant Secretary for Planning and Evaluation (ASPE)
- Centers for Medicare & Medicaid Services (CMS)

Schedules for data release will be maintained for FY 2021 through FY 2022. Further reducing the target time is not feasible because the proration and post-stratification processes are dependent upon the timing and availability of key IRS data that are appended to the survey frame. Data trends from 1996 through 2019 are mapped using the MEPSnet/IC interactive search tool. In addition, special runs are often made for federal and state agencies that track data trends of interest across years.

1.3.19: Increase the number of tables included in the MEPS Tables Compendia.

The MEPS HC Tables Compendia has recently been updated moving to a more user friendly and versatile format (https://meps.ahrq.gov/mepstrends/home/index.html). Interactive tables are provided for the following: use, expenditures and population; health insurance, accessibility and quality of care; medical conditions and prescribed drugs. The new format greatly expands the number of tables generated dependent on the parameters entered by the user.

The MEPS Tables Compendia is scheduled to be expanded a minimum of 250 tables per year. For the Insurance Component there are a total of 3,277 national level tables and 6,123 state and metro area tables. Additionally, there are 1,296 tables available for the MEPS Household Component. The total number of tables available to the user population is currently 10,696.

The MEPS Tables Compendia is a source of important data that is easily accessed by users. Expanding the content and coverage of these tables furthers the utility of the data for conducting research and informing policy. Currently data are available in tabular format for the years 1996 – 2019. This represents over twenty years of data for both the Household and Insurance Components, enabling the user to follow trends on a variety of topics.

1.3.21: MEPS-HC: Maintain no more than a 9 month data lag between completion of data collection and dissemination of the MEPS data public use files

In coordination with the MEPS Household Component contractor the Center for Financing, Access and Cost Trends (CFACT) senior leadership have met on a continuing basis to establish a strategy to address the delivery schedule. The following steps have and will continue to be taken in an effort to release public use files as early as possible: 1) data editing now takes place in waves (batch processing) rather than data processing taking place all at once at the completion of date collection; 2) processing of multiple data sets now takes place concurrently rather than consecutively, thus multiple processes take place at any given point in time; 3) duplicative processes have either been

eliminated or combined with similar processes; 4) review time of intermediate steps was reduced; 5) the contractor has eliminated a number of edits or streamlined such processes where they were determined to provide minimal benefit in relation to the resources utilized; and 6) contractor editing staff have been cross-trained in order to more efficiently distribute work assignments.

We have achieved the data release schedule for all the targeted MEPS public release files scheduled for release during FY 2020. We are on target to also meet the data release schedule for the MEPS public use files scheduled for release during FY 2021. The release date for public use files (jobs, home health, other medical expense, dental visits, medical provider visits, outpatient department visits, emergency room visits, hospital stays, prescribed drugs, and full year consolidated) will be maintained through the end of FY 2021. The data delivery schedule increases the timeliness of the data and thus maximizes the public good through the use of the most current medical care utilization and expenditure data possible. Such data are used for policy and legislative analyses at the Federal, state and local levels as well as the private health care industry and the health services research community in an effort to improve the health and well-being of the American people.

This measure is being retired at the end of FY 2020. While the release of the point in time file is the most recent data as part of the MEPS Household Component data collection effort, it represents limited utility and has been underutilized by the health services research community over a period of years; greater utility can be gained by focusing resources elsewhere. This refocus is particularly acute given the current data collection and editing challenges during the current pandemic. The changes to the MEPS have been unprecedented given the current circumstances presented by COVID-19. All face-to-face field work was suspended mid-March of 2020 with data collection being moved to phone interviews. Additionally, reference periods have been elongated to afford greater opportunity for data collection thus making the distinction of a point in time file less meaningful.

Mechanism Table:

Medical Expenditure Panel Survey

(Dollars in Thousands)

	AHRQ FY 2020 Final		AHRQ FY 2021 Enacted		AHRQ FY 2022 President's Budget	
RESEARCH GRANTS	**No.**	**Dollars**	**No.**	**Dollars**	**No.**	**Dollars**
Non-Competing……	0	0	0	0	0	0
New & Competing…….	0	0	0	0	0	0
Supplemental……	0	0	0	0	0	0
TOTAL, RESEARCH GRANTS…..	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL CONTRACTS/IAAs…..		**69,991**		**71,791**		**71,791**
TOTAL……		**69,991**		**71,791**		**71,791**

5-Year Funding Table:

FY 2018:	$69,991,000
FY 2019:	$69,755,000
FY 2020 Final:	$69,991,000
FY 2021 Enacted:	$71,791,000
FY 2022 President's Budget:	$71,791,000

Program Support				
	FY 2020 Final	FY 2021 Enacted	FY 2022 President's Budget	FY 2022 +/- FY 2021
Budget Authority	$71,300,000	$71,300,000	$71,300,000	$0
PHS Evaluation Funds	$0	$0	$2,000,000	+$2,000,000
FTEs	249	270	276	+6

Authorizing Legislation: Title III and IX and Section 947(c) of the Public Health Service Act
FY 2022 Authorization……..……..……..……Expired.
Allocation Method……..…..…..... Other.

Program Support: This budget activity supports the strategic direction and overall management of AHRQ, including funds for salaries and benefits for AHRQ's staff. Program Support activities provide administrative, budgetary, logistical, and scientific support in the review, award, and monitoring of research grants, training awards, and research and development contracts.

FY 2022 President's Budget Policy: The FY 2022 President's Budget level for Program Support is $73.3 million, an increase of $2.0 million in PHS Evaluation Funds from the FY 2021 Enacted level. The increase in funding will allow AHRQ to support a 2.7% pay raise for AHRQ staff, benefits increases for AHRQ staff, fund increases related to operational expenses, and fund the addition of +6 FTEs to support HHS- and AHRQ-funded initiatives. The proposed six new FTEs include:

- Health Scientist Administrator to support the release and review of innovative funding opportunity announcements.
- Grants Management Specialist to support the efficient awarding of an increased number of competitive grant awards.
- Social or Health Science Analyst to advance and coordinate new activities to advance health equity through grant and contact initiatives.
- Health Science Analyst to coordinate increased grant and contract activities in the fields of primary care and substance abuse disorders.
- Epidemiologist to support expanded efforts to conduct data analysis to inform policy making, especially in the area of maternal health.
- Management and Program Analyst to advance and coordinate AHRQ's efforts to address COVID-19 and other emerging priority issues.

As shown in the table on the following page, AHRQ does have additional FTEs supported with other funding sources, including an estimated 1 FTE from other reimbursable funding and an estimated 20 FTEs supported by the Patient-Centered Outcomes Research Trust Fund. FY 2021 and FY 2022 figures are estimates for the PCORTF.

	FY 2020 Final	FY 2021 Enacted	FY 2022 President's Budget
FTEs – Budget Authority	249	270	276
FTEs – PCORTF	5	12	20
FTEs – Other Reimbursable	2	1	1

Mechanism Table:

Program Support

(Dollars in Thousands)

	AHRQ FY 2020 Final		AHRQ FY 2021 Enacted		AHRQ FY 2022 President's Budget	
RESEARCH GRANTS	**No.**	**Dollars**	**No.**	**Dollars**	**No.**	**Dollars**
Non-Competing……	0	0	0	0	0	0
New & Competing…….	0	0	0	0	0	0
Supplemental……	0	0	0	0	0	0
TOTAL, RESEARCH GRANTS…..	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL CONTRACTS/IAAs…..		**71,300**		**71,300**		**73,300**
TOTAL……		**71,300**		**71,300**		**73,300**

5-Year Funding Table:

FY 2018:	$71,300,000
FY 2019:	$71,300,000
FY 2020 Final:	$71,300,000
FY 2021 Enacted:	$71,300,000
FY 2022 President's Budget:	$73,300,000

SUPPLEMENTARY TABLES

Agency for Healthcare Research and Quality

Budget Authority by Object [1/]

Personnel compensation:	FY 2020 Final	FY 2021 Enacted	FY 2022 President's Budget	FY 2022 +/- FY 2021
Full-time permanent (11.1)	30,078,428	30,379,212	31,315,068	935,856
Other than full-time permanent (11.3)	4,123,318	4,164,551	4,377,850	213,299
Other personnel compensation (11.5)	1,145,233	1,156,685	1,215,928	59,243
Military personnel (11.7)	651,513	671,058	705,429	34,370
Special personnel services payments (11.8)				
Subtotal personnel compensation	**35,998,492**	**36,371,507**	**37,614,275**	**1,242,768**
Civilian benefits (12.1)	11,409,011	11,523,101	11,878,079	354,978
Military benefits (12.2)	35,237	36,294	38,153	1,859
Benefits to former personnel (13.0)	13,104	13,235	13,643	408
Total Pay Costs	**47,455,844**	**47,944,137**	**49,544,151**	**1,600,013**
Travel and transportation of persons (21.0)	72,691	74,145	75,628	1,483
Transportation of things (22.0)	5,000	5,100	5,202	102
Rental payments to GSA (23.1)	3,058,620	3,119,792	3,182,188	62,296
Rental payments to Others (23.2)				
Communication, utilities, and misc. charges (23.3)	259,693	264,887	270,185	5,298
Printing and reproduction (24.0)	10,100	10,302	10,508	206
Other Contractual Services:				
Advisory and assistance services (25.1)				
Other services (25.2)	9,641,080	9, 833,902	10,030,580	196,678
Purchase of goods and services from government accounts (25.3)	24,526,431	19,258,581	19,576,622	318,041
Operation and maintenance of facilities (25.4)				
Research and Development Contracts (25.5)	135,383,285	139,614,460	155,523,217	15,908,757
Medical care (25.6)				
Operation and maintenance of equipment (25.7)	247,351	252,298	257,344	5,046
Subsistence and support of persons (25.8)				
Subtotal Other Contractual Services	**169,798,147**	**168,959,241**	**185,387,763**	**16,428,522**
Supplies and materials (26.0)	96,900	98,838	100,815	1,977
Equipment (31.0)	266,588	271,920	277,358	5,438
Investments and Loans (33.0)				
Grants, subsidies, and contributions (41.0)	116,803,178	117,251,638	141,146,203	23,894,565
Insurance Claims and Indemnities (42.0)				
Refunds (44.0)				
Total Non-Pay Costs	**290,370,917**	**290,055,863**	**330,455,849**	**40,399,986**
Total Budget Authority by Object Class	**337,826,761**	**338,000,000**	**380,000,000**	**42,000,000**

[1/] Does not include mandatory financing from the PCORTF.

[2/] Includes PHS Evaluation Funding.

Agency for Healthcare Research and Quality

Salaries and Expenses [1/]

Personnel compensation:	FY 2020 Final	FY 2021 Enacted	FY 2022 President's Budget	FY 2022 +/- FY 2021
Full-time permanent (11.1)	30,078,428	30,379,212	31,315,068	935,856
Other than full-time permanent (11.3)	4,123,318	4,164,551	4,377,850	213,299
Other personnel compensation (11.5)	1,145,233	1,156,685	1,215,928	59,243
Military personnel (11.7)	651,513	671,058	705,429	34,370
Subtotal personnel compensation	**35,998,492**	**36,371,507**	**37,614,275**	**1,242,768**
Civilian benefits (12.1)	11,409,011	11,523,101	11,878,079	354,978
Military benefits (12.2)	35,237	36,294	38,153	1,859
Benefits to former personnel (13.0)	13,104	13,235	13,643	408
Total Pay Costs	**47,455,844**	**47,944,137**	**49,544,151**	**1,600,013**
Travel and transportation of persons (21.0)	72,691	74,145	75,628	1,483
Transportation of things (22.0)	5,000	5,100	5,202	102
Communication, utilities, and misc. charges (23.3)	259,693	264,887	270,185	5,298
Printing and reproduction (24.0)	10,100	10,302	10,508	206
Other Contractual Services:				
Other services (25.2)	9,641,080	9,833,902	10,030,580	196,678
Purchase of goods and services from govt accounts (25.3)	3,879,616	3,046,342	3,096,650	50, 308
Research and Development Contracts (25.5)	6,144,597	6,378,337	6,449,392	71,055
Operation and maintenance of equipment (25.7)	247,351	252,298	257,344	5,046
Subtotal Other Contractual Services	**19,912,644**	**19,510,879**	**19,833,966**	**323,087**
Supplies and materials (26.0)	96,900	98,838	100,815	1,977
Total Non-Pay Costs	**20,357,028**	**19,964,150**	**20,296,303**	**332,152**
Total Salary and Expense	**67,812,872**	**67,908,288**	**69,840,453**	**1,932,166**
Direct FTE	**251**	**271**	**277**	**+6**

[1/] Does not include mandatory financing from the PCORTF. Includes reimbursable FTEs.

Agency for Healthcare Research and Quality

Detail of Full Time Equivalents (FTE) [1/]

	2020 Actual Civilian	2020 Actual Military	2020 Actual Total	2021 Est. Civilian	2021 Est. Military	2021 Est. Total	2022 Est. Civilian	2022 Est. Military	2022 Est. Total
Office of the Director (OD)									
Direct:	9	0	9	9	0	9	9	0	9
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	9	0	9	9	0	9	9	0	9
Office of Management Services (OMS)									
Direct:	58	0	58	60	0	60	61	0	61
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	58	0	58	60	0	60	61	0	61
Office of Extramural Research, Education, and Priority Populations (OEREP)									
Direct:	28	2	30	30	2	32	32	2	34
Reimbursable:	2	0	2	1	0	1	0	1	1
Total:	30	2	32	31	2	33	32	3	35
Center for Evidence and Practice Improvement (CEPI)									
Direct:	43	1	44	49	3	52	51	3	54
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	43	1	44	49	3	52	51	3	54
Center for Financing, Access, and Cost Trends (CFACT)									
Direct:	51	0	51	54	0	54	55	0	55
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	51	0	51	54	0	54	55	0	55
Center for Quality Improvement and Patient Safety (CQuIPS)									
Direct:	31	1	32	37	1	38	37	1	38
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	31	1	32	37	1	38	37	1	38
Office of Communications (OC)									
Direct:	25	0	25	25	0	25	25	0	25
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	25	0	25	25	0	25	25	0	25
AHRQ FTE Total	247	4	251	265	6	271	270	7	277

Average GS Grade	
FY 2017	14.8
FY 2018	14.8
FY 2019	14.8
FY 2020	14.8
FY 2021	14.8

[1/] Excludes mandatory PCORTF FTEs. Includes reimbursable FTEs.

Agency for Healthcare Research and Quality

Detail of Positions [1/]

	FY 2020 Final	FY 2021 Enacted	FY 2022 President's Budget
Executive level I	2	2	2
Executive level II	5	5	5
Executive level III			
Executive level IV			
Executive level V			
Subtotal Executive Level Positions	7	7	7
Total - Exec. Level Salaries			
Total SES, AHRQ	3	4	4
Total - ES Salary, AHRQ			
GS-15	61	61	61
GS-14	75	77	80
GS-13	60	62	65
GS-12	11	14	14
GS-11	8	10	17
GS-10			
GS-9	6	7	4
GS-8	1		
GS-7	5	4	2
GS-6	0	1	2
GS-5	3	2	
GS-4			
GS-3			
GS-2			
GS-1			
Subtotal	230	238	244
Total – GS Salary	$35,971,299	$37,221,274	$38,946,675
Average GS grade, AHRQ	14.8	14.8	14.8
Average GS salary, AHRQ	$156,397	$156,392	$156,618

[1/] Excludes Special Experts, Services Fellows and Commissioned Officer positions. Also excludes positions financed using mandatory financing from the PCORTF.

Agency for Healthcare Research and Quality
FTEs Funded by the Affordable Care Act
(Dollars in Thousands)

Program	Section	FY 2012			FY 2013			FY 2014			FY 2015			FY 2016			FY 2017		
		Total	FTEs	CEs	Total	FTEs	CEs	Total	FTEs	CEs	Total	FTEs	CEs	Total	FTEs	CEs	Total	FTEs	CEs
Prevention and Public Health Fund AHRQ Mandatory AHRQ Mandatory	4002	$0	0	0	$ -	0	0	$ -	0	0	$ -	0	0	$ -	0	0	$ -	0	0
Patient-Centered Outcomes Research Trust Fund AHRQ Mandatory AHRQ Mandatory	6301	$ 366	4	0	$633	6	0	$1,505	13	0	$1,644	10	0	$1,430	10	0	$1,387	8	0

Program	Section	FY 2018			FY 2019			FY 2020			FY 2021			FY 2022		
		Total	FTEs	CEs	Total	FTEs	CEs	Total	FTEs	CEs	Total	FTEs	CEs	Total	FTEs	CEs
Prevention and Public Health Fund AHRQ Mandatory AHRQ Mandatory	4002	$ -	0	0	$ -	0	0	$ -	0	0	$ -	0	0	$ -	0	0
Patient-Centered Outcomes Research Trust Fund AHRQ Mandatory AHRQ Mandatory	6301	$1,129	8	0	$1096	7	0	$947	5	0	$2,500	8	0	$3,800	20	0

Physicians' Comparability Allowance (PCA) Worksheet

1) Department and component:

Agency for Healthcare Research and Quality (AHRQ)

2) Explain the recruitment and retention problem(s) justifying the need for the PCA pay authority.

Most, if not all, of the research positions at AHRQ are in occupations that are in great demand, commanding competitive salaries in an extremely competitive hiring environment. This includes the 602 (Physician) series which is critical to advancing AHRQ's mission to produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable. Since the Agency has not utilized other mechanisms for the 602 series (for example, Title 38), it is imperative that the Agency offers PCAs to recruit and retain physicians at AHRQ. In the absence of PCA, the Agency would be unable to compete with other Federal entities within HHS and other sectors of the Federal government which offer supplemental compensation (in addition to base pay) to individuals in the 602 series.

3-4) Please complete the table below with details of the PCA agreement for the following years:

	PY 2020 (Actual)	**CY 2021 (Estimates)**	**BY* 2022 (Estimates)**
3a) Number of Physicians Receiving PCAs	19	24	26
3b) Number of Physicians with One-Year PCA Agreements	0	0	0
3c) Number of Physicians with Multi-Year PCA Agreements$	19	24	26
4a) Average Annual PCA Physician Pay (without PCA payment)	$161,039	$164,577	166,222
4b) Average Annual PCA Payment	$24,263	$21,583	21,461

* FY 2021 data will be approved during the FY 2022 Budget cycle

5) Explain the degree to which recruitment and retention problems were alleviated in your agency through the use of PCAs in the prior fiscal year.

(*Please include any staffing data to support your explanation, such as number and duration of unfilled positions and number of accessions and separations per fiscal year.)*

PCA contracts are used as a tool to alleviate recruitment problems and attract top private sector physicians into public sector positions. These recruitments give AHRQ a well-rounded and highly knowledgeable staff.

6) Provide any additional information that may be useful in planning PCA staffing levels and amounts in your agency.

Modernization of the Public-Facing Digital Services – 21st Century Integrated Digital Experience Act

The 21st Century Integrated Digital Experience Act (IDEA) was signed into law on December 20, 2018. It requires data-driven, user-centric website and digital services modernization, website consolidation, and website design consistency in all Executive Agencies. Departments across the federal landscape are working to implement innovative digital communications approaches to increase efficiency and create more effective relationships with their intended audiences. The American public expects instant and impactful communications – desired, trusted content available when they want it, where they want it, and in the format they want it. If the consumer is not satisfied they move on and our opportunity for impact is lost.

Modernization Efforts

In FY 2019 HHS engaged Department leadership and developed a Digital Communications Strategy that aligns with the requirements of IDEA. In FY 20, HHS Digital Communications Leaders began implementation of the Strategy in alignment with IDEA, beginning to align budgets to modernization requirements.

As the result of a comprehensive review of costs associated with website development, maintenance, and their measures of effectiveness, HHS will prioritize:

- modernization needs of websites, including providing unique digital communications services, and
- continue developing estimated costs and impact measures for achieving IDEA.

Over the next four years HHS will continue to implement IDEA by focusing extensively on a user-centric, Digital First approach to both external and internal communications and developing performance standards. HHS will focus on training, hiring, and tools that drive the communication culture change necessary to successfully implement IDEA.

Over the next year, HHS Agencies and Offices will work together to continue to implement IDEA and the HHS Digital Communications Strategy across all communications products and platforms.

SIGNIFICANT ITEMS

SIGNIFICANT ITEMS FOR AHRQ IN THE HOUSE, SENATE, AND CONFERENCE REPORTS

FY 2021 SENATE Explanatory Statement

Center for Primary Care Research

1. SENATE (Explanatory Statement, p. 137)

The Committee supports primary care clinical research and dissemination as a core function of AHRQ, which includes translating science into patient care, better organizing healthcare to meet patient and population needs, evaluating innovations to provide the best healthcare to patients, and engaging patients, communities, and practices to improve health. The Committee supports the Center for Primary Care Research and encourages AHRQ to prioritize the work of the Center.

Action Taken or to be Taken:
The National Center for Excellence in Primary Care Research (NCEPCR) is the intellectual home for primary care research at AHRQ. The NCEPCR is focused on the Nation's primary care system, providing evidence, practical tools, and other resources for researchers and evaluators, clinicians and clinical teams, quality improvement experts, and healthcare decision makers to improve the quality and safety of care. The NCEPCR is committed to engaging with and learning from all members of the primary care community, including patients and families.

Currently, there is no direct appropriation for primary care research at AHRQ. From existing funds the Agency convened a series of meetings with stakeholders to identify high priority primary care research topics and incorporated a focus on primary care into several special emphasis funding notices. Additionally, the Agency convened primary care stakeholders that support quality improvement in primary care practices to understand the emerging needs of primary care practices in the recovery phase from the COVID-19 pandemic. As a result of these activities, AHRQ is well-prepared to execute the proposed FY 2022 primary care initiative outlined in this budget.

Diagnostic Outcomes Research

2. SENATE (Explanatory Statement, p. 137)
The Committee supports AHRQ's continued work in diagnostics outcomes studies for infectious diseases, including those assessing patient outcomes, lengths of stay, changes in antibiotic use, rates of antibiotic use for certain patient populations, and costs of care. The Committee encourages AHRQ to develop metrics to measure and track the effectiveness and outcomes of diagnostic interventions to improve clinical uptake, enhance stewardship efforts, and reduce the healthcare and economic burden of antimicrobial resistance in the United States as recommended by the Presidential Advisory Council on Combating Antibiotic-Resistant Bacteria.

Action Taken or to be Taken:
In the updated Funding Opportunity Announcements for research on combating antibiotic-resistant bacteria (CARB), which will be reissued this year, AHRQ will broaden a research objective focused on diagnostics. The expanded objective will invite research grant applicants to address the role of

new and existing diagnostics, including rapid diagnostics, in improving antibiotic use, including how diagnostics should be integrated into clinicians' decision making about antibiotic use. This objective will provide the necessary scope to enable grant applicants to investigate, among other aspects of CARB diagnostic outcomes studies, the development of metrics to measure the effectiveness of diagnostic interventions.

Heart Disease Research

3. SENATE (Explanatory Statement, p. 137)

Heart disease is the leading cause of death for Americans. Understanding how to reduce the rate of cardiac events and to control the metabolic processes that lead to such events is needed. The Committee supports AHRQ studying and assessing the current evidence for lipid control and cardiovascular event reduction, quality measures for the improvement of clinical outcomes, and to develop and disseminate education resources and materials about improving cardiovascular clinical outcomes for coronary heart disease death, myocardial infarction, ischemic stroke, and urgent coronary revascularization procedure.

Action Taken or to be Taken:

AHRQ funded a 2016 systematic review on Statin Use for the Primary Prevention of Cardiovascular Disease in Adults and has recently commissioned an update this report with the current evidence for lipid control with statins and primary cardiovascular event prevention. The update review is in process and will be completed in late 2021. In addition, AHRQ has worked closely with HHS' Million Hearts initiative to improve the delivery of high-quality heart health care. AHRQ's EvidenceNOW: Advancing Heart Health in Primary Care project has led efforts to increase the uptake of heart health evidence into practice. In 2021, AHRQ launched its second generation of its EvidenceNOW initiative targeting states with the highest prevalence of cardiovascular disease. Also, in collaboration with HHS' Million Hearts, AHRQ's TAKEHeart project is partnering with and training hospitals and health systems across the country to increase referrals to and enrollment and retention in cardiac rehabilitation services by eligible patients.

Opioid Prescribing Research

4. SENATE (Explanatory Statement, p. 138)

The Committee encourages AHRQ to conduct a systematic review of the literature to assess the impact of evidence-based clinical practice opioid prescribing guidelines (not limited to CDC's Guideline for Prescribing Opioids for Chronic Pain) on the quantity and duration of opioid prescriptions

Action Taken or to be Taken:

In support of the CDC and CMS, AHRQ's Evidence-based Practice Center Program has conducted a series of systematic reviews which assess the effectiveness of non-opioid treatments for acute and chronic pain for reducing opioid use at the patient level. Currently no dedicated appropriation exists to conduct a systematic review of the literature to assess the impact of evidence-based clinical practice opioid prescribing guidelines within AHRQ and the FY 2022 President's Budget does not include funding for these activities.

Organ Availability

5. SENATE (Explanatory Statement, p. 138)
The Committee has provided $600,000 for AHRQ to evaluate innovative approaches to enhance the availability of organs, otherwise encourage donation, and further improve the organ transplantation process, including through consultation with other Federal agencies.

Action Taken or to be Taken:
Currently no dedicated appropriation exists to evaluate innovative approaches to enhance the availability of organs within AHRQ and the FY 2022 President's Budget does not include funding for these activities.

Patient Safety

6. SENATE (Explanatory Statement, p. 138)
The Committee continues to support improving diagnosis in medicine, including a multiyear competitive grant program to address diagnostic errors, which may include the establishment of Research Centers of Diagnostic Excellence to develop systems, measures, and new technology solutions to improve diagnostic safety and quality.

Action Taken or to be Taken:
AHRQ agrees with and appreciates the Committee's continued support of research to improve diagnostic safety and quality. In FY 2021, AHRQ is committing $2.0 million in funding to further this goal the FY 2022 President's Budget does not include new funding for these activities.

Psychosocial Best Safety Practices

7. SENATE (Explanatory Statement, p. 138)
The Committee is encouraged by the progress made by HHS and AHRQ in implementing section 203 of the STAR Act (Public Law 115–180). The Committee encourages AHRQ to include consideration of best practices for psychosocial care in addition to biomedical care in developing recommendations to meet the requirements of section 203.

Action Taken or to be Taken:
AHRQ appreciates the Committee's support for the Agency's work related to the STAR Act. AHRQ's Evidence-based Practice Center Program is currently in the process of developing three evidence reports: Disparities and Barriers for Pediatric Cancer Survivorship Care on strategies to address disparities and barriers to survivorship care for pediatric cancer survivors; Transitions of care from Pediatric to Adult Services for Children with Special Healthcare Needs on the effectiveness of interventions to improve transition from pediatric to adult services; and Models of Care for Survivors of Childhood Cancer on models of care used for adult survivors of childhood cancer. All three reports are examining psychosocial outcomes and will be publicly posted in 2021.

Rural and Underserved Populations

8. SENATE (Explanatory Statement, p. 138)

The Committee supports the work of AHRQ to better serve the health needs of rural and underserved minorities through such programs as the ''Evidence Now'' network. The Committee encourages the agency to expand its efforts to include additional health extension program sites connected to public academic health centers in States with high populations of underserved minorities, rural communities, and tribal populations.

Action Taken or to be Taken:

AHRQ appreciates the Committee's support for AHRQ's work with rural and underserved communities through programs such as EvidenceNow. AHRQ's EvidenceNOW initiative was built upon years of research on how to develop and expand primary care health extension programs. AHRQ's first expansion is its current initiative to help primary care practices improve the management of unhealthy alcohol use. In FY 2021 AHRQ launched its next initiative to expand the EvidenceNOW model by awarding grants to four states with the highest burden of cardiovascular disease. This new initiative is specifically designed to serve the needs of rural and underserved populations. Beyond EvidenceNOW, AHRQ is committed in all its research to understanding and addressing those needs of underserved populations including residents of rural areas and tribal populations. Some examples from the past year include AHRQ's funding opportunities on COVID-19 research that prioritized research in rural, underserved, and socially vulnerable communities, and also a challenge competition AHRQ held that focused on improving postpartum mental health care for rural families. AHRQ will work to continue bringing evidence from our disparities knowledge and work to the EvidenceNow program and other programs and initiatives including AHRQ's Annual National Healthcare Quality and Disparities Report to identify the needs of rural, underserved, and tribal populations as we move forward.

SIGNIFICANT ITEMS IN THE HOUSE, SENATE, AND CONFERENCE REPORTS

FY 2021 HOUSE REPORT 116-450

Antimicrobial Resistance

1. HOUSE (Rept. 116-450, p.155)
The Committee continues to provide no less than $10,000,000 for combating antibiotic-resistant bacteria.

Action Taken or to be Taken
In FY 2021, AHRQ continued supporting a major CARB-related project to prevent methicillin-resistant Staphylococcus aureus (MRSA) infections and will fund new and continuing CARB-related grants. These investments will total at least $10,000,000. AHRQ has achieved this level of CARB funding for a number of years.

Cardiovascular Clinical Outcomes

2. HOUSE (Rept. 116-450, p. 155)
Heart disease is the leading cause of death for Americans. Understanding how to reduce the rate of cardiac events and to control the metabolic processes that lead to such events is needed. The Committee encourages AHRQ to conduct a study that assesses the current evidence for lipid control and cardiovascular event reduction and quality measures for the improvement of clinical outcomes (e.g. coronary heart disease death, myocardial infarction, ischemic stroke, or urgent coronary revascularization procedure) and to report findings back to the Committee no later than 180 days after the enactment of this Act. AHRQ is also encouraged to develop and disseminate education resources and materials about improving cardiovascular clinical outcomes.

Action Taken or to be Taken
AHRQ funded a 2016 systematic review on Statin Use for the Primary Prevention of Cardiovascular Disease in Adults and has recently commissioned an update of this report with the current evidence for lipid control with statins and primary cardiovascular event prevention. The update review is in process and will be completed in late 2021. In addition, AHRQ has worked closely with HHS' Million Hearts initiative to improve the delivery of high-quality heart health care. AHRQ's EvidenceNOW: Advancing Heart Health in Primary Care project has led efforts to increase the uptake of heart health evidence into practice. In 2021, AHRQ launched its second generation of its EvidenceNOW initiative targeting states with the highest prevalence of cardiovascular disease. Also, in collaboration with HHS' Million Hearts, AHRQ's TAKEHeart project is partnering with and training hospitals and health systems across the country to increase referrals to and enrollment and retention in cardiac rehabilitation services by eligible patients.

Center for Primary Care Research

3. HOUSE (Rept. 116-450, p. 156)
The Committee encourages AHRQ to consider establishing a Center for Primary Care Research to support clinical primary care research. The areas of focus could include strategies to improve primary care delivery, including through the use of clinical pharmacists and interprofessional; team

based care; advancing the development of primary care researchers; expanding research on persons with multiple co-morbid conditions; and improving primary care in rural and underserved areas, especially in remote and non-contiguous States.

Action Taken or to be Taken

In 2014, AHRQ established the National Center for Excellence in Primary Care Research (NCEPCR), which is the intellectual home for primary care research at AHRQ. The NCEPCR is focused on the Nation's primary care system, providing evidence, practical tools, and other resources for researchers and evaluators, clinicians and clinical teams, quality improvement experts, and healthcare decision makers to improve the quality and safety of care. The NCEPCR is committed to engaging with and learning from all members of the primary care community, including patients and families. In FY 2021, AHRQ is updating its primary care research agenda and identifying high priority primary care research for the Agency. No dedicated appropriation for primary care research currently exists. AHRQ is well prepared to execute the proposed primary care initiative in FY 2022 as outlined in this budget.

Infectious Disease Research

5. HOUSE (Rept. 116-450, p. 156)

The Committee encourages AHRQ to fund diagnostics outcomes studies for infectious diseases, including those assessing patient outcomes, lengths of stay, changes in antibiotic use, rates of antibiotic use for certain patient populations, and costs of care. The Committee encourages AHRQ to develop metrics to measure and track the effectiveness and outcomes of diagnostic interventions to improve clinical uptake, enhance stewardship efforts, and reduce the healthcare and economic burden of antimicrobial resistance in the U.S. as recommended by the Presidential Advisory Council on Combating Antibiotic-Resistant Bacteria.

Action Taken or to be Taken

In the updated Funding Opportunity Announcements for research on combating antibiotic-resistant bacteria (CARB), which will be reissued in 2021, AHRQ will broaden a research objective focused on diagnostics. The expanded objective will invite research grant applicants to address the role of new and existing diagnostics, including rapid diagnostics, in improving antibiotic use, including how diagnostics should be integrated into clinicians' decision making about antibiotic use. This objective will provide the necessary scope to enable grant applicants to investigate, among other aspects of CARB diagnostic outcomes studies, the development of metrics to measure the effectiveness of diagnostic interventions.

Minimizing Racial Bias in Health Technology

6. HOUSE (Rept. 116-450, p.156)

The Committee is concerned that recent studies have demonstrated health technologies exacerbated inequitable delivery of health services. Accordingly, the Committee encourages ARHQ to examine how racism and bias is built into algorithms, machine learning, and clinical decision support tools that impact patient outcomes and lead to disparities. The Committee requests a report within 120 days of the date of enactment of this Act from ARHQ that covers the extent of such bias in public health systems, as well as best practices health systems and public health stakeholders can take to

address and minimize these biases in the use of algorithms, machine learning, and clinical decision support tools.

Action Taken or to be Taken
AHRQ shares the Committee's concerns about inequities in the delivery of health services. AHRQ published a request for information on this topic in the spring of 2021. AHRQ's Evidence-based Practice Center Program is commissioning a systematic review on the effect of potential bias, particularly racial bias, in health-related algorithms used for clinical decision-making on healthcare outcomes and disparities. This review will include reviewing guidance and standards for the rigorous development of algorithms to mitigate bias. The systematic review will begin in spring 2021 and a draft report will be available in summer 2022.

Partners Enabling Diagnostic Excellence

7. HOUSE (Rept. 116-450, p.156)
Within the Patient Safety portfolio, the Committee includes no less than $3,000,000, an increase of $1,000,000 above the fiscal year 2020 enacted level, to support improving diagnosis in medicine. The Committee encourages AHRQ to include a multiyear competitive grant program to address diagnostic errors, which may include the establishment of Research Centers of Diagnostic Excellence to develop systems, measures, and new technology solutions to improve diagnostic safety and quality.

Action Taken or to be Taken
AHRQ agrees with and appreciates the Committee's continued support of research to improve diagnostic safety and quality. In FY 2021, AHRQ is committing $2.0 million in funding to further this goal and the FY 2022 President's Budget does not include new funding for these activities.

Prenatal Care for Pregnant Individuals

8. HOUSE (Rept. 116-450, p. 156)
The Committee recognizes the Department's ongoing efforts to address the pressing public health issue of rising maternal mortality. Research shows prenatal care is a critical component of preventative care for pregnant individuals. The Committee includes no less than $500,000 for research that examines the potential cost-savings to the public health system of providing a special enrollment period for pregnant individuals, as well as the impact of a special enrollment period on the private insurance market.

Action Taken or to be Taken
AHRQ has a long history of conducting and supporting research on the impacts of insurance coverage on access to and the utilization and cost of care. The Agency's substantive expertise in both public and private health insurance, technical expertise in economics and microsimulation modeling, and unique data resources, including both the Medical Expenditure Panel Survey (MEPS) and the Healthcare Cost and Utilization Project (HCUP), have been instrumental in examining the impacts of insurance reform (e.g. the Affordable Care Act) on the use and costs of care and the distribution of care among population subgroups, as well as research on rates and reasons for hospital readmissions related to Severe Maternal Morbidity. Staff have also frequently collaborated with researchers outside the Agency, including at the CBO, at many respected non-profit research

organizations, and at highly regarded Academic institutions, on analyses of the impacts of insurance coverage on healthcare use and costs. To address this issue, AHRQ is using Agency staff and data to conduct research on the impacts of insurance coverage expansions on the use and costs of pre and post-natal care, as well as contract with outside organizations and individuals to procure supplemental data and develop research collaborations with external researchers who have expertise in this area.

Kratom

9. HOUSE (Rept. 116-450, pp. 156-157)

The Committee notes that little research has been done to date on natural products that are used by many to treat pain in place of opioids. These natural plants and substances include kratom and cannabidiol (CBD). Given the wide availability and increased use of these substances, it is imperative to know more about potential risks or benefits, and whether or not they can have a role in finding new and effective non-opioid methods to treat pain. The Committee recommends $1,000,000 for this research, an increase of $500,000 above the fiscal year 2020 enacted level, and encourages AHRQ to make center-based grants to address research which will lead to clinical trials in geographic regions which are among the hardest hit by the opioid crisis.

Action Taken or to be Taken

AHRQ is conducting a five-year living systematic review on the effectiveness and harms of plant-based treatments (including kratom and cannabidiol) for chronic pain. This project will produce quarterly reports of available trials and annual assessments of the state of the evidence. The first report was posted in early spring 2021. While AHRQ does not fund usually fund clinical trials of the effectiveness of individual therapies, we are coordinating with the National Center on Complementary and Integrative Medicine (NCCIH) to accelerate the development of the evidence base by highlighting evidence gaps and key patient centered outcomes based on our evidence review.

Trafficking Awareness Training for Health Care

10. HOUSE (Rept. 116-450, p.157)

The Committee encourages AHRQ to support activities authorized in the *Trafficking Awareness Training for Health Care Act*, including a pilot program for the creation, distribution, and evaluation of best practices for medical professionals to identify and respond to victims of human trafficking

Action Taken or to be Taken

AHRQ shares the Committee's concern about human trafficking. Currently no dedicated appropriation exists to address trafficking within AHRQ and the FY 2022 President's Budget does not include funding for these activities.

Kratom *-The* agreement includes $500,000 for research related to kratom as described in House Report 116-450.

Action Taken or to be Taken

AHRQ is conducting a five-year living systematic review on the effectiveness and harms of plant-based treatments (including kratom and cannabidiol) for chronic pain. This project will produce quarterly reports of available trials and annual assessments of the state of the evidence. The first report was posted in early spring of 2021. While AHRQ does not usually fund clinical trials of this type, we are coordinating with the National Center on Complementary and Integrative Medicine (NCCIH) to accelerate the development of the evidence base by highlighting evidence gaps and key patient centered outcomes based on our evidence review.

Organ Availability *-The* agreement urges AHRQ to evaluate innovative approaches to enhance the availability of organs, otherwise encourage donation, and further improve the organ transplantation process, including through consultation with other Federal agencies.

Action Taken or to be Taken

AHRQ agrees with and appreciates the Committee's continued support of research to address organ availability. Currently no dedicated appropriation exists for this activity and the FY 2022 President's Budget does not include funding for this activity.

Partners Enabling Diagnostic Excellence *-The* agreement includes $2,000,000 to support improving diagnosis in medicine as described in House Report 116-450.

Action Taken or to be Taken

AHRQ agrees with and appreciates the Committee's continued support of research to improve diagnostic safety and quality. In FY 2021, AHRQ is committing $2.0 million in funding to further this goal and the FY 2022 President's Budget does not include new funding for these activities.

Prenatal Care for Pregnant Individuals *-The* agreement encourages support for research into efforts to encourage access to prenatal care for expectant mothers.

Action Taken or to be Taken

AHRQ has a long history of conducting and supporting research on the impacts of insurance coverage on access to and the utilization and cost of care. The Agency's substantive expertise in both public and private health insurance, technical expertise in economics and microsimulation modeling, and unique data resources, including both the Medical Expenditure Panel Survey (MEPS) and the Healthcare Cost and Utilization Project (HCUP), have been instrumental in examining the impacts of insurance reform (e.g. the Affordable Care Act) on the use and costs of care and the distribution of care among population subgroups, as well as research on rates and reasons for hospital readmissions related to Severe Maternal Morbidity. Staff have also frequently collaborated with researchers outside the Agency, including at the CBO, at many respected non-profit research organizations, and at highly regarded Academic institutions, on analyses of the impacts of insurance

coverage on healthcare use and costs. To address this issue, AHRQ is using Agency staff and data to conduct research on the impacts of insurance coverage expansions on the use and costs of pre and post-natal care, as well as contract with outside organizations and individuals to procure supplemental data and develop research collaborations with external researchers who have expertise in this area.