# AHRQ's Safety Program for Nursing Homes: On-Time Pressure Ulcer Prevention

## Functional Specifications

### *1. General Information*

#### 1.1. Background

The Agency for Health Care Research and Quality (AHRQ) developed evidence-based tools for nursing home clinical staff in facilities that have an electronic medical record (EMR). These tools are used as part of the On-Time Quality Improvement Program for Long Term Care (On-Time), a facilitator-directed quality improvement program. On-Time provides EMR reports for improving clinical decisionmaking for pressure ulcer prevention, pressure ulcer healing, falls prevention, and prevention of inappropriate hospitalizations. Each of these efforts was developed independently as separate modules for long-term care EMRs.

On-Time reports are designed to be added to the existing reporting feature of EMR products and to use existing EMR data elements as data sources for reports. This eliminates the need for EMR vendors to develop new software features, modify existing software, or make any changes to system design in order to add the On-Time modules to their system. An On-Time module, once added to the EMR product, does not interfere with routine use of the product by end users.

Data elements and data sources are described for each report and the vendor or facility representative determines the availability of data elements required for each report by conducting a brief gap analysis. The vendor will add data elements as needed or make recommendations to the nursing home clinical representative for EMR development if substitute data elements are available and appropriate to accomplish the same report results and maintain the integrity of report design and meaning.

#### 1.2. EMR Vendor Prerequisites

The following EMR capabilities are necessary to provide the required data elements for On-Time reports:

- Certified nursing assistant (CNA) daily documentation of meal intake, bowel and bladder habits, and activities of daily living (ADLs) such as bed mobility, transfer, locomotion, dressing, personal hygiene, toileting, and bathing.
- Documentation of resident weights and vital signs such as temperature, pulse, respirations, and blood pressure.
- Physician order entry.
- Nurse weekly documentation of wound assessments (preferred).

If any data are not available, then reports will be missing some data.

#### 1.3. Report Users

Users of all On-Time reports in all four modules include any licensed staff with permission to access data stored in the resident medical record for care planning and decisionmaking. This may

include licensed clinical staff from multiple disciplines: all nursing positions, including managers, supervisors, charge nurses, other staff nurses, MDS nurses,[i] wound nurses, and staff educators; quality improvement staff; dietitians; rehabilitation staff; and social workers. Physicians, nurse practitioners, and physician assistants may also access the reports.

## *2. AHRQ On-Time Pressure Ulcer Prevention Module*

This document describes the functional and high-level system requirements for each clinical report included in the On-Time Pressure Ulcer Prevention Module. It is intended to provide enough information for EMR vendor programmers to produce technical specifications, develop the reports as designed, and incorporate reports into the vendor's EMR product. Data sources and rules specific to each report are included.

The reports included in the On-Time Pressure Ulcer Prevention Module and described in this document are listed in the table below.

**On-Time Pressure Ulcer Prevention Reports**

| | |
|---|---|
| 1a | Nutrition Risk Report: High Risk |
| 1b | Nutrition Risk Report: Medium Risk |
| 2a | Intervention History for Nutrition High Risk Report |
| 2b | Intervention History for Nutrition Medium Risk Report |
| 3 | Weight Summary Report |
| 4a | Trigger Summary Reports: Resident Level |
| 4b | Trigger Summary Report: Unit Level |
| 5 | Risk Change Report (Priority Report) |
| 6 | Resident Clinical, Functional, and Intervention Profile Report |
| 7 | Completeness Report |

### 2.1. Report Titles

The functional specifications for all On-Time modules are available to any long-term care EMR vendors wanting to incorporate On-Time reports into their product; however, all reports must be labeled "On-Time" and developed as specified, to maintain the integrity of the reports for facilities participating in the On-Time Pressure Ulcer Prevention Program.

Nursing home facilities adopting any of the modules work with an On-Time facilitator who adheres to a structured implementation plan using detailed implementation and guidance materials that are also provided to nursing home participants. It is important for successful implementation of the program and end user adoption of the module that users have easy access to the appropriate report when needed, the report is labeled and developed as described in the implementation materials and during facilitation, and the report can be used as intended in day-to-day work.

[i] Nurses who coordinate data collection required as part of the Minimum Data Set overseen by the Centers for Medicare & Medicaid Services.

### 2.2. Report Headers

For all On-Time Reports, display the following information:

- Include "On-Time" in the name of the report.
- Include in the top left margin:
    - Nursing unit
    - Report ending date
- Include "**Source:** Agency for Healthcare Research and Quality; 2014" in the bottom left margin.

### 2.3. General Report Rules

The following rules apply to all reports.

#### 2.3.1. Exclusions

Exclude from report calculations and displays residents who do not have a minimum of 75 percent documentation completed for the following components of CNA documentation:

- Meal intake
- Bowel
- Bladder
- ADL assistance needed and support provided for bed mobility, transfer, locomotion, dressing, personal hygiene, toileting, and bathing

Display a dash (-) in report sections with insufficient documentation to compute values.

**Note:** If a resident has the required amount of documentation for meal intake and bowel but lacks the required 75 percent documentation for bladder and ADL documentation on a report that displays these categories, the report will display a dash (-) in the report sections with insufficient documentation to compute values. The dash (-) will alert the user that insufficient data were available for calculations and therefore improvement or decline in these areas from the prior week is unknown.

Additional exclusions follow:

- Residents no longer being treated at the facility, which includes residents with discharge dates within 7 days prior to the report date.
- Physician orders with discontinuation dates or expiration dates within 7 days prior to the report date and during calculation periods; includes medication profiles.
- Resident diagnosis codes that are inactive or discontinued within 7 days prior to the report date and during calculation periods.

### 2.3.2. Reports With Data for Multiple Weeks

For reports that display data for multiple weeks, use a static week for 4 weeks prior to report date, 3 weeks prior to report date, and 2 weeks prior to report date for report calculations. The EMR vendor must use the static week parameters set forth by the facility (e.g., Sunday through Saturday, Monday through Sunday). Examples of static week parameters used in report definitions or calculations are illustrative and do not represent a requirement for the range of days to be used for the static report week.

It is important to use static weeks to maintain consistency in the values that display in prior report weeks. A static week uses fixed date ranges. Clinicians who reviewed the report 2 or 3 weeks prior likely acted on values that displayed. If dynamic weeks were used in trended reports, the values for prior weeks would change each time the report was generated, causing confusion for users.

In addition to the column title, display the **last date** of the static week in the column heading. For example, if the end user chooses to generate a Nutrition High Risk report with an end date of 3/22/14 (a Saturday), the column headings will display these dates:

| Avg. Meal Intake % 3/1/14 | Avg Meal Intake % 3/8/14 | Avg Meal Intake % 3/15/14 | Avg Meal Intake % 3/22/14 |
|---|---|---|---|
| | | | |

If the end user chooses to generate a Nutrition High-Risk Report with an end date of 3/19/14 (a Wednesday), instead of 3/22/14 (a Saturday), the column headings will display the same dates because the *last date of the static week* displays in the column heading regardless of the report generation date within the report week.

### 2.3.3. Filters

End users must be able to filter reports by nursing unit.

### 2.3.4. End Dates

End users must be able to specify a report "end date" to generate reports for specified periods.

### 2.3.5. Pressure Ulcer Identifiers

In some cases, an On-Time report will display information about a resident's pressure ulcers, which is captured from nursing documentation of a weekly wound assessment. For example, if a single resident has six pressure ulcers, then the system must assign a unique identifier to each one.

### 2.3.6. Documentation Completion Calculations

The following table describes a process that may be used to determine documentation completion percentages for specific documentation sections. The EMR vendor can use an existing mechanism to determine documentation completion by section, if available, and the rule meets the minimum requirement for 75 percent completion.

| Any Report Column That Includes | Determine Documentation Completeness |
|---|---|
| Resident Meal Intake Documentation (for breakfast, lunch, and dinner) | 1. For each resident, count the number of times a meal intake entry was made for the current week.<br>2. Divide the count by the total number of meals possible for the current week (i.e., if a resident was not on unit for specific days during the week, the possible number of meals should be reduced).<br>3. Report the value as a percentage (allow one decimal point).<br>4. If the completeness for a resident is ≥75%, *set a meal intake completeness flag to true*. (This will be used to identify which residents appear on subsequent reports.) |
| Resident Bowel Documentation | 1. For each resident, count the number of shifts a bowel entry was made for the current week. (Example: a week is defined as a static week starting every Monday through Sunday.)<br>2. Divide the count by the total number of shifts possible for the current week (i.e., if a resident was not on unit for specific days during the week, the possible number of shifts should be reduced).<br>3. Report the value as a percentage (allow one decimal point).<br>4. If the completeness for a resident is ≥75%, *set a bowel completeness flag to true*. (This will be used to identify which residents appear on subsequent reports.) |
| Resident Bladder Documentation | 1. For each resident, count the number of shifts a bladder entry was made for the current week. (Example: a week is defined as a static week starting every Monday through Sunday.)<br>2. Divide the count by the total number of shifts possible for the current week (i.e., if a resident was not on unit for specific days during the week, the possible number of shifts should be reduced).<br>3. Report the value as a percentage (allow one decimal point).<br>4. If the completeness for a resident is ≥75%, *set a bladder completeness flag to true*. (This will be used to identify which residents appear on subsequent reports.) |
| ADLs: assistance needed and support provided | For each ADL component, repeat steps 1-4 for the following:<br>• Bed mobility<br>• Transfer<br>• Locomotion<br>• Dressing<br>• Personal hygiene<br>• Toileting<br>• Bathing |

## *3. Specifications for Each Pressure Ulcer Prevention Report*

### 3.1. Nutrition Risk Reports: High Risk and Medium Risk

#### 3.1.1. Report Description

The weekly reports display resident-level nutrition information for a single nursing unit: average weekly meal intake for 4 consecutive weeks, diet, tube feeding status, average supplement intake for the report week, and recent weight change. The reports sort residents into high and medium nutritional risk; two separate reports are generated.

The reports use two criteria to determine level of nutritional risk; residents meeting one or both criteria will display on either the high or medium risk report, never both.

Risk criteria follow:

- If meal consumption is 50 percent or less for two meals in *one day at least one time during the report week.*
- If there is *any* weight loss during the report week, determined by subtracting current week's weight from most recent weight.

**Criteria and Level of Risk for Nutrition Risk Reports**

| Nutrition Risk Report | Nutrition Risk Criteria | |
|---|---|---|
| | Decreased Meal Intake | Weight Loss |
| Medium Risk Report* | ✓ | |
| Medium Risk Report | | ✓ |
| High Risk Report | ✓ | ✓ |

* Residents at high and medium risk display on separate reports.

### 3.1.2. Dependencies and Clinical Assumptions

**3.1.2.1.** Electronic daily documentation by CNA staff is required for the following:

- Meal intake
- Bowel
- Bladder
- ADL assistance needed and support provided for bed mobility, transfer, locomotion, dressing, personal hygiene, toileting, and bathing.

**3.1.2.2.** Meal intake is recorded for 3 meals each day for each resident; thus, documentation of 21 meals is required for each resident each week.

**3.1.2.3.** Physician order entry is required for the following:

- Diet order
- Supplement order
- Tube feeding order

**3.1.2.4.** A resident may have a diet order and an order for tube feeding.

**3.1.2.5.** Percentages of supplement intake are recorded in the system.

**3.1.2.6.** Notes regarding resident weights:

- Resident weights may be obtained monthly, weekly, daily, or more often, such as dialysis weights, which may be pre- and postdialysis treatments; the frequencies to obtain resident weights vary by facility.
- All weight values for a resident are associated with a weight date.
- The system stores a weekly weight for each resident. If multiple weights are taken in one static week, then use the lowest weight as the "weekly weight."
- A resident must have a weight date within the report week to compute a weight change; if no weight value is stored for the report week, then weight change fields are BLANK.

### 3.1.3. Report Example: Nutrition High-Risk Report

#### 3.1.3.1. Report Inclusion Criteria

In the sample Nutrition Risk Report below, residents are at high risk because they met both risk criteria:

- If meal consumption is 50 percent or less for two meals in *one day at least one time during the report week* as evidenced by a date value in the "Decreased Intake: first date" column for each resident; and
- If there is *any* weight loss during the report week, determined by subtracting current week's weight from most recent prior weight as evidenced by a negative value in the "Weight Change lbs" column for each resident.
- In addition, if the resident is tube fed and has weight loss during the report week, the resident will display on the Nutrition Report: High Risk.

| Resident | Room | Decreased Intake: First Date | Avg. Meal Intake % 3/1/14 | Avg Meal Intake % 3/8/14 | Avg Meal Intake % 3/15/14 | Avg Meal Intake % 3/22/14 | Diet/Order Date | Tube Feed | Avg Supplement Intake %* | Weight Change lbs | Most Recent Ulcer Assess Date | # Pr Ulcers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 001 | 03/22/2014 | 50 | 41 | 36 | 29 | Pureed 2/28/14 | X | | -1.5 | 3/20/14 | 2 |
| B | 002 | 03/16/2014 | 64 | 52 | 47 | 45 | Mech 1/22/14 | | 50% | -3.3 | 3/20/14 | 1 |
| C | 003 | 03/19/2014 | 74 | 62 | 58 | 42 | Reg 3/22/14 | | | -1.5 | | |
| D | 004 | 03/17/2014 | 86 | 89 | 71 | 59 | Reg 12/3/13 | | | -2.5 | | |

### 3.1.4. Report Example: Nutrition Medium Risk Report

#### 3.1.4.1. Report Inclusion Criteria

In the sample Nutrition Risk Report below, residents are at medium risk because they met one of the two risk criteria:

- If meal consumption is 50 percent or less for two meals in *one day at least one time during the report week* as evidenced by a date value in the "Decreased Intake: first date" column for residents E and G;
- If there is *any* weight loss during the report week, determined by subtracting current week's weight from most recent prior weight as evidenced by a negative value in the "Weight Change lbs" column for residents F and H.
- In addition, if a resident is tube fed (no weight loss) during the report week, the resident will display on the Nutrition Report: Medium Risk.

| Resident | Room | Decreased Intake: First Date | Avg. Meal Intake % 3/1/14 | Avg Meal Intake % 3/8/14 | Avg Meal Intake % 3/15/14 | Avg Meal Intake % 3/22/14 | Diet/ Order Date | Tube Feed | Avg Supplement Intake %* | Weight Change lbs | Most Recent Ulcer Assess Date | # Pr Ulcers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E | 008 | 03/16/2014 | 85 | 83 | 75 | 66 | Pureed 2/28/14 | X | | | | |
| F | 009 | | 85 | 85 | 86 | 88 | Mech 1/22/14 | X | 50% | -3.1 | | |
| G | 011 | 03/19/2014 | 55 | 37 | 61 | 35 | Reg 3/22/14 | X | | | 3/20/14 | 1 |
| H | 016 | | 51 | 61 | 71 | 64 | Reg 12/3/13 | X | | -2.5 | | |

### 3.1.5. Valid Input, Calculations, and Displays

**3.1.5.1.** Resident risk for high or medium risk should be determined for all residents for the report week and the appropriate nutrition risk flag set to TRUE (either high or medium nutrition risk) if criteria are met. Residents at nutrition risk display on other On-Time reports where data are displayed for the current and prior 3 weeks. Assigning nutrition risk flags to residents who meet high or medium risk criteria eliminates the need to recalculate nutrition risk levels for each resident for reports where these values display.

**3.1.5.2.** The system must have the ability to assign a unique ID to each pressure ulcer for a single resident.

**Nutrition Risk Reports Specifications**

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| Decreased Meal Intake | CNA documentation of meal intake | Dates of the current week the resident had meal intake of 50% or less for two meals in one day.<br><br>Note: A week is defined as a static week, for example, starting every Sunday through Saturday or Monday through Sunday. Use the facility's preferred static week parameters.<br><br>The facility or vendor may choose to display all dates when decreased meal intake occurred during a given week; if so, separate multiple decreased intake dates with semicolons. |
| Average Meal Intake % Week | CNA documentation of meal intake | Calculate meal averages for residents having at least 75% meal intake documentation completed.<br><br>Numerator: The meal intake (includes breakfast, lunch, dinner) percentage for each meal (sum of meal % for the week) for each week of the 4 weeks prior to report ending date.<br><br>Denominator: The total possible meals in one week. If a resident is available for each meal, then the denominator = 21.<br><br>Average Meal Intake:<br><br>3 Prior Weeks (Weeks 4, 3, and 2):<br>• Report uses a static week, Monday through Sunday (confirm facility parameters for static week) for 3 prior weeks.<br><br>Current Week (Week1)<br><br>Average meal intake for current week is computed using information available up to report generation date. Display meal average percentage using total possible meals as denominator. E.g., if assessment due day = Thursday, then total possible meals through Wednesday = 9.<br><br>Meal Intake documentation options:<br>• Meal intake percentage: If meal intake is documented in ranges, then the middle of the range should be the value used in the average calculation. For example, if a range is 51-75%, the percent value used would be 63%.<br>• Refused meal: If an option of Refused Meal is entered, the value used in the average calculation is zero.<br>• If meal is tube fed, the value used in the average calculation is zero.<br>• NPO: If an option of NPO is entered, the value used in the average calculation is zero. NPO is an order to withhold oral food and fluids.<br>• Unavailable for meal: if the resident is not present for a meal, |

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| | | value to the average meal intake (numerator), and the denominator is reduced by one for each occurrence during the report week.<br>• Missing meal intake value: if there is no entry in the breakfast, lunch, or dinner meal intake field, then no value contributes to the average meal calculation. |
| Diet/Order Date | Physician Orders | If there is a physician order for a diet, then display the Diet name and the date that it was ordered. If there is no physician order for a diet, then leave the cell BLANK.<br>If the resident has an order for NPO and the NPO order date is more recent than the diet order, then display NPO and the date of the NPO order instead of the diet name and diet order date.<br>Note: A physician order for NPO should cancel out or discontinue the prior diet order; likewise, when the physician orders a diet after the NPO order date, then the NPO status is discontinued. |
| Tube Feeding (TF) | Physician Orders | If there is a physician order for tube feeding, then display an X. If there is no physician order for tube feeding, then leave the cell BLANK.<br>If the EMR system does not capture physician orders, then the vendor must determine the best source for determining the presence or absence of tube feeding for a resident, which could be nurse/nursing assistant documentation. |
| Average Supplement Intake % | Nurse documentation of supplement intake percentages | If there is a physician order for supplements, then calculate average supplement intake. If there is no physician order, then leave the cell BLANK.<br>Numerator: Average of all supplement intakes for the report week.<br>Denominator: Use supplement order frequency for denominator. If order frequency is once daily, then denominator = 7; twice daily, then denominator = 14; etc. If supplement frequency is PRN, then do not calculate average supplement intake percentage and leave cell BLANK.<br>Display as percentage. |
| Weight Change (lbs) | Vital Signs or Weight documentation | If the resident does not have a weight value stored in the system for the current report week, then do not calculate a weight change and leave cell BLANK.<br>If multiple weights are taken in one week, the lowest weight is used as the Weekly Weight.<br>Weight change (lbs) calculation:<br>(Most Recent Weight − Previous Weight).<br>Display weight change as + for weight gain and − for weight loss.<br>Most Recent Weight must occur during the current week.<br>The Previous Weight is the next most recent lowest weekly weight within the last 200 days. The Previous Weight does not need to occur in the week just prior to the current week. Often residents are on monthly weights, so the Previous Weight may be 4 weeks prior to the Current Weight. |
| Most Recent Ulcer Assessment Date | Nurse documentation of pressure ulcer assessment | If nurses are not documenting pressure ulcer assessments in the EMR, then leave cell BLANK. The EMR vendor has the option to remove the column from the report display.<br>If nurses are documenting pressure ulcer assessments in the EMR, then display the date of most recent pressure ulcer assessment. If there are two assessments in the prior week, then use the assessment having a date closest and prior to the report date. |

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| # Pressure Ulcers | Nurse documentation of pressure ulcer assessment | Count the number of unique ulcers for the resident and display the count.<br>Do not count ulcers that are considered inactive or healed. |

## 3.2. Intervention History for Nutrition Risk Reports: High Risk and Medium Risk

### 3.2.1. Report Description

The On-Time Intervention History for Nutrition Risk Reports are companion reports to the two Nutrition Risk Reports. The report displays the same residents who are at high or medium nutritional risk that display on the Nutrition Risk Reports. The reports display dates of physician orders for interventions relevant to nutrition risk.

### 3.2.2. Dependencies and Clinical Assumptions

**3.2.2.1.** Physician order entry is required for this report.

### 3.2.3. Report Example

| | High-Risk Residents | Room | Diet | Diet Changes | Supplements | PT | OT | Speech | Social Services | Psych | Gastro-enterology | Hospice | Seen by: MD/PA or NP | Chemistry | Microbiology | Hematology |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Brown, M | 201 | Regular | 1/3/14 | 10/4/13 | | 1/2/14 | 1/2/14 | | | | | 1/2/14 | 11/27/13 | 7/3/13 | 7/3/13 |
| 2 | White, D | 209 | Regular | 10/20/13 | 9/2/13 | | | 10/18/13 | 11/2/13 | 12/27/13 | 11/13/13 | | 11/13/13 | 11/13/13 | 11/13/13 | 11/13/13 |
| 3 | Green, D | 212 | Pureed | 12/23/13 | | | | | | | | 12/30/13 | 1/2/14 | 1/2/14 | 12/18/13 | 12/18/13 |
| 4 | Orange, L | 221 | NPO | 1/5/14 | | 12/15/13 | | | | | | | 1/3/14 | 1/3/14 | 6/2/13 | 6/2/13 |
| 5 | Pink, S | 222 | Diabetic | 7/22/13 | 12/31/13 | | | | | | | | | 7/25/13 | 2/18/13 | 2/18/13 |
| 6 | Silver, C | 237 | Low NA | 12/18/13 | | | | 11/29/13 | | | | | | 5/12/13 | 5/12/13 | 5/12/13 |
| 7 | Reddish, R | 238 | Regular | 9/6/13 | | | | | | 12/4/13 | | | | 9/6/13 | 12/4/13 | 12/4/13 |
| 8 | Black, B | 240 | Pureed | 10/3/13 | | | 1/2/14 | | | | | | | 2/18/13 | 12/4/13 | 12/4/13 |

**Note:** The Intervention History for Nutrition Risk Report is a new report that was added to the module in 2014. Only the report for high-risk residents is shown. Separate Intervention History for Nutrition Risk Reports are produced for residents at high and medium nutritional risk.

### 3.2.4. Valid Input, Calculations, and Displays

- The Intervention History for Nutrition High Risk Report displays the same residents who trigger for and display on the Nutrition High Risk Report.
- The Intervention History for Nutrition Medium Risk Report displays the same residents who trigger for and display on the Nutrition Medium Risk Report.

**3.2.4.1.** Display residents in the same order displayed on the Nutrition Risk Reports.

**3.2.4.2.** For all physician orders, display the order with the most recent order date that is closest and prior to the report date.

- If there is no physician order, then leave the cell BLANK.
- Review all physician orders, current to oldest, to resident admission date and display date closest and prior to report date.

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| Resident Name | Registration | Display the resident last name, first name or initial; use EMR vendor name format for reports. |
| Room Number | Registration | Display the resident room number; use EMR vendor format. |
| Diet | Physician Orders | Display the name of the resident's current diet. |
| Diet Order Date | Physician Orders | Display the date the diet was ordered. |
| Supplement | Physician Orders | Display the date the supplement was ordered. |
| PT | Physician Orders | Display the date physical therapy (PT) was ordered or a PT consult was ordered. |
| OT | Physician Orders | Display the date that occupational therapy (OT) was ordered or an OT consult was ordered. |
| Speech | Physician Orders | Display the date that speech therapy (ST) or a speech consult was ordered. |
| Social Services | Physician Orders | Display the date that a social service consult was ordered. |
| Psych | Physician Orders | Display the date that a psychiatric consult was ordered. |
| Gastroenterology | Physician Orders | Display the date that a gastroenterology consult was ordered. |
| Hospice | Physician Orders | Display the date that hospice services or consult was ordered. |
| Seen by MD/NP/PA | EMR vendor identifies source. | Display the date when the resident was last seen by a physician (MD) or nurse practitioner (NP) or physician assistant (PA). If multiple dates, display date closest and prior to report date. |
| Chemistry | Physician Orders | Display the date of the most recent Chemistry order. If the system stores lab values, display asterisk (*) if lab value is abnormal or out of normal range. |
| Microbiology | Physician Orders | Display the date of the most recent Microbiology order. If the system stores lab values, display asterisk (*) if lab value is abnormal or out of normal range. |
| Hematology | Physician Orders | Display the date of the most recent Hematology order. If the system stores lab values, display asterisk (*) if lab value is abnormal or out of normal range. |

## 3.3. Weight Summary Report

### 3.3.1. Report Description

The Weight Summary Report displays 4 weeks of trended weight information for each resident, calculates weight changes, and displays whether there have been measurable weight loss percentages (more than 2 percent, 5 percent, 7.5 percent, and 10 percent) for the past 7, 30, 90, and 180 days).

### 3.3.2. Dependencies and Clinical Assumptions

**3.3.2.1.** Resident weights are stored in the EMR.

**3.3.2.2.** Active residents only display for a single nursing unit.

### 3.3.3. Report Example

| Resident Name | Resident ID | Weight 180 Days Prior | Weight 90 Days Prior | Weight 30 Days Prior | Weight for Week 5/8/14 Week4 | Weight for Week 5/15/14 Week3 | Weight for Week 5/22/14 Week2 | Weight for Week 5/29/14 Week1 | Weight Change lbs/Date | ≥2% Wt. Loss (From Previous Week) | ≥5 lb Wt Loss in Prior 30 Days | ≥5% Wt Loss in Prior 30 Days (Point-to-Point) | ≥5% Wt Loss in Prior 30 Days (Any) | ≥7.5% Wt Loss in Prior 90 Days | ≥10% Wt Loss in Prior 180 Days |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | #####1 | 285.3 | 275.0 | 254.5 | 252.4 | 256.1 | 251.7 | 253.8 | 2.1, 5/27/14 | | | | | 7.7% | 11.0% |
| B | #####2 | 172.1 | 175.3 | 180.0 | 180.0 | 170.0 | 181.0 | 171.0 | −10.0, 5/27/14 | 5.5%, | 9.0 | 5.0% | 5.6%, 5/12/14; 5.0%, 5/27/14 5.5%, 5/27/14 | | |

### 3.3.4. Valid Input, Calculations, and Displays

**3.3.4.1.** Weights are calculated in two ways:

- Point-to-Point: using two data points to determine if weight loss occurred.
- Any Weight Loss: using multiple weight comparisons within a specified period to identify "Any" weight loss within the period.

**3.3.4.2.** Display weight to one decimal point, e.g., 101.5.

**3.3.4.3.** A date next to a weight loss value indicates the date the weight change occurred.

**3.3.4.4.** If a weekly weight value is not stored, then a weekly weight cell will be BLANK.

**3.3.4.5.** If a resident was not weighed during the current week:

- Weight values that display for 180 days prior, 90 days prior, and 30 days prior are computed using the most recent weight value that is stored in the system.
- The following cells must be BLANK:
    - Weight for current week
    - Weight change in pounds/date
    - ≥2% Wt Loss (From Previous Week)
    - ≥5 lb Wt Loss in Prior 30 Days
    - ≥5% Wt Loss in Prior 30 Days (Point-to-Point)
    - ≥5% Wt Loss in Prior 30 Days (Any)
    - ≥7.5% Weight Loss in Prior 90 Days
    - ≥10% Weight Loss in Prior 180 Days

**3.3.4.6.** Display in the report footer:

*All weight loss calculations are point-to-point unless "Any" is indicated.*

*Weight 30 Days Prior value may not be the same as Weight for Week 4 because the 30 Days Prior value date may fall outside of Week 4.*

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| Weight 180 Days Prior | Vital Signs or Weight documentation | The weight of the resident approximately 180 days prior to the most recent resident weight.<br>**Static Week Calculation:**<br>• Identify all weights that occur in the range of 170-190 days from the most recent weight date; multiple weights may be selected.<br>• Select the weight that is closest to 180 days from the most recent weight date.<br>• If two weights are the same distance from 180 (−10 days or +10 days), select the lower weight.<br>• Display weight in pounds rounded to one decimal place. |

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| Weight 90 Days Prior | Vital Signs or Weight documentation | The weight of the resident approximately 90 days prior to the most recent resident weight.<br>**Static Week Calculation:**<br>• Identify all weights that occur in the range of 85-95 days from the most recent weight date; multiple weights may be selected.<br>• Select the weight that is closest to 90 days from the most recent weight date.<br>• If two weights are the same distance from 90 (−5 days or +5 days), select the lower weight.<br>• Display weight in pounds rounded to one decimal place. |
| Weight 30 Days Prior | Vital Signs or Weight documentation | The weight of the resident approximately 30 days prior to the most recent resident weight.<br>**Static Week Calculation:**<br>• Identify all weights that occur in the range of 25-35 days from the most recent weight date; multiple weights may be selected.<br>• Select the weight that is closest to 30 days from the most recent weight date.<br>• If two weights are the same distance from 30 (−5 days or +5 days), select the lower weight.<br>• Display weight in pounds rounded to one decimal place. |
| Weight for Week | Vital Signs or Weight documentation | Lowest weight for each week in a 4-week period trended view. **Week Ending Date** should be displayed in the four column headers.<br>• If a resident is weighed monthly, some of the weekly weights will be blank.<br>• If multiple weights are taken in one week, the lowest weight is used as the weekly weight.<br>Note: Weight 30 Days Prior value may not be the same as Weight for Week (Week4) because 30 Days Prior value may fall in Week 5. It depends on weight date. Display weight in pounds rounded to one decimal. |
| Weight Change (lbs) | Vital Signs or Weight documentation | Change in weight (lbs) from the previous weight to the most recent weight (Most Recent Weight − Previous Weight).<br>• Display weight change as + for weight gain; − for weight loss.<br>• Display weight change date (weight date used to calculate change).<br>• If multiple weights are taken in one week, use the lowest weight as the weekly weight.<br>**Static Week Calculation:**<br>• The Previous Weight is the next most recent lowest weekly weight within the last 200 days. The Previous Weight does not need to occur in the week just prior to the most recent week. Often residents are on monthly weight schedules, so the Previous Weight may be 4 weeks prior to the Most Recent Weight. |
| ≥2% Weight Loss (From Previous Week) | Vital Signs or Weight documentation | Displays the weight loss value of a resident with weight loss ≥2% from the previous week to the most recent week (where the 2 weeks are adjacent to one another).<br>**Static Week Calculation:**<br>Take the weight change in lbs from the previous week to the most recent week (most recent − previous)<br>If weight change is positive, disregard; if negative, take absolute value, and divide by the previous week's weight. Multiply by 100. Indicate with % sign. Show rounded to one decimal place.<br>Display value if ≥2%. |

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| ≥5 lb Weight Loss in Prior 30 Days | Vital Signs or Weight documentation | Displays the value of a resident weight loss of ≥5 lbs approximately 30 days prior to the most recent weight.<br>**Static Week Calculation:**<br>• Take weight change in lbs from Weight 30 Days Prior to most recent weight (most recent − 30 day).<br>• If weight change is positive, disregard; if negative, take absolute value.<br>• If weight loss ≥5lb, display the weight loss value in lbs. |
| ≥5% Wt Loss in Prior 30 Days (Point-to-Point) | Vital Signs or Weight documentation | Note: The calculations below will identify **weight loss closest to 30 days** from most recent weight.<br>Displays the occurrence of a resident weight loss of ≥5% compared to weight closest to 30 days prior.<br>**Static Week Calculation:**<br>• Take the value calculated above in ≥5lb Weight Loss in Prior 30 Days, and divide by Weight 30 Days Prior. Multiply by 100. Round to one decimal place.<br>• Display the value if ≥5%. Display value as percentage. |
| ≥5% Wt Loss in Prior 30 Days (ANY) | Vital Signs or Weight documentation | Note: The calculations below will identify **ANY weight loss** within the last 30 days.<br>Displays **all occurrences** of a resident weight loss of ≥5% in the last 30 days.<br>**Static Week Calculation:**<br>• Take weights/dates identified in Weight for Week columns (one weight/date per week, with up to four per resident).<br>• Week 1 is most recent week; week 2 is second most recent; etc.<br>• Iteration one: Take week 4 weight and subtract from week 3 through 1 weights (week 3 − week 4, week 2 − week 4, week 1 − week 4); if value is positive, disregard; if negative, take absolute value and divide by week 4 weight. Multiply by 100. Round to one decimal place.<br>• Iteration two: Take week 3 weight and subtract from week 2 and 1 weights (week 2 − week 3, week 1 − week 3); if value is positive, disregard; if negative, take absolute value and divide by week 3 weight. Multiply by 100. Round to one decimal place.<br>• Iteration three: Take week 2 weight and subtract from week 1 weight (week 1 − week 2); if value is positive, disregard; if negative, take absolute value and divide by week 2 weight. Multiply by 100. Round to one decimal place.<br>*Example:*<br>• Four weights are taken for a resident: 180.0 on 5/4/14; 170.0 on 5/12/14; 181.0 on 5/19/14; and 171.0 on 5/27/14 (where 5/25- 5/31 is the most recent static week).<br>• First iteration yields −10.0, 1.0, and −9.0; take absolute value of −10.0 and −9.0, and divide each by 180.0, yielding .056 x100= 5.6% and.050 x100= 5.0%.<br>• Second iteration yields 11.0, 1.0; disregard both values.<br>• Third iteration yields −10.0; take absolute value, and divide by 181.0, .055x100= 5.5%.<br>• Column output: 5.6%, 5/12/14; 5.0%, 5/27/14; 5.5%, 5/27/14 (displayed above in sample table). |
| ≥7.5% Wt Loss in Prior 90 Days | Vital Signs or Weight documentation | Displays weight loss ≥7.5% in 90 days.<br>**Static Week Calculation:**<br>• Take Weight 90 Days Prior value, and subtract from most recent weight (most recent − 90 day).<br>• If value is positive, disregard; if negative, take absolute value and divide by Weight 90 Days Prior value. Multiply by 100. Round to one decimal place. Display value if ≥7.5%. Indicate with % sign. |

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| ≥10% Wt Loss in Prior180 Days | Vital Signs or Weight documentation | Displays resident weight loss ≥10% in the last 180 days.<br>**Static Week Calculation:**<br>• Take Weight 180 Days Prior value, and subtract from most recent weight (most recent − 180 day).<br>• If value is positive, disregard; if negative, take absolute value and divide by Weight 180 Days Prior value. Multiply by 100. Round to one decimal place.<br>• Display value if ≥10%. Indicate with % sign. |
| * | Physician Orders | Indicates resident has active dialysis order. |

## 3.4. Trigger Summary Report: Resident Level

### 3.4.1. Report Description

There are two Trigger Summary Reports. Each report uses the same risk variables; the Resident Level report displays resident-specific data for a specified nursing unit and the Unit Level report displays risk for the entire census of a single nursing unit.

Each report displays residents who have at least one trigger activated during the report week presented in descending order of total number of pressure ulcer triggers for the report week. The report displays the prior week trigger totals and the current total, and provides a weekly snapshot of a resident's risk for pressure ulcer development. These triggers are derived primarily from electronic CNA documentation.

### 3.4.2. Dependencies and Clinical Assumptions

**3.4.2.1.** Resident weights are recorded in the EMR.

**3.4.2.2.** Electronic daily documentation by CNA staff is required for the following:

- Meal Intake
- Bowel
- Bladder

**3.4.2.3.** Weekly wound assessments are recorded in the EMR.

**3.4.2.4.** Physician order entry or nurse documentation is required for the following:

- Foley Catheter

### 3.4.3. Report Example

| Name | Room | Wt Loss ≥5% in Prior 30 Days (Any) | Wt Loss ≥7.5% in Prior 90 Days (Point-to-Point) | Wt Loss ≥10% in Prior 180 Days (Point-to-Point) | 2 Meals ≤50% in 1 Day | Weekly Meal Intake Average <50% | Daily Urinary Incont | >3 Days Bowel Incont | Foley Catheter | Current Pressure Ulcer | # of Triggers Last Week | # of Triggers This Week |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Res1 | 330 | | | | X | X | X | X | | | 3 | 4 |
| Res2 | 311 | X | | | X | - | | X | X | | 2 | 4 |
| Res3 | 321 | X | X | | X | X | | X | | | 5 | 5 |
| Res4 | 309 | | | X | | X | X | X | | | 0 | 4 |
| Res5 | 312 | | | X | - | X | X | X | | | 2 | 4 |
| Res6 | 320 | | X | | X | - | - | X | | | 0 | 3 |
| Res7 | 342 | X | | | X | X | | | | | 3 | 3 |
| Res8 | 337 | | | | X | | X | X | | | 2 | 3 |
| Res9 | 301 | | | | X | X | X | | | | 1 | 3 |
| Res10 | 316 | | | | X | | X | - | | X | 2 | 3 |
| Total | | 3 | 2 | 2 | 8 | 6 | 6 | 7 | 1 | 1 | | |

### 3.4.4. Valid Input, Calculations, and Displays

**3.4.4.1.** Completeness of main categories for each resident must be >75% in order to calculate the triggers.

**3.4.4.2.** There are nine criteria for pressure ulcer risk. Only residents having at least one of the nine criteria during the report week will display on this report.

**3.4.4.3.** Sort the residents in descending order of the number of triggers for the current report week and then alphabetically by resident last name.

**3.4.4.4.** Display a dash (-) in cells when there is insufficient documentation to compute values.

**3.4.4.5.** For calculations in sample report, assume 35 residents on the nursing unit (denominator = 35) and 10 residents meet criteria for risk and display on the report.

**3.4.4.6.** Use the same rules, calculations, and displays for weights as described for the Weight Summary Report in 3.3.4 for the following cells:

- Wt Loss ≥5% in Prior 30 Days (Any)
- Wt Loss ≥7.5% in Prior 90 days (Point-to-Point)
- Wt Loss ≥10% in Prior 180 Days (Point-to-Point)

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| Wt Loss ≥5% Prior 30 Days (Any) | Vital Signs or Weight documentation | Use same calculations as used in Weight Summary Report.<br>The calculations below will identify **ANY weight loss** within the last 30 days.<br>**Static Week Calculation:**<br>• Take weights/dates identified in Weight for Week columns (found in Weight Summary Report; one weight/date per week, with up to four per resident).<br>• Week 1 is most recent week; week 2 is second most recent; etc. |

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| | | • Iteration one: Take week 4 weight and subtract from week 3 through 1 weights (week 3 − week 4, week 2 − week 4, week 1 − week 4); if value is positive, disregard; if negative, take absolute value and divide by week 4 weight. Multiply by 100. Round to the nearest one decimal place.<br>• Iteration two: Take week 3 weight and subtract from week 2 and 1 weights (week 2 − week 3, week 1 − week 3); if value is positive, disregard; if negative, take absolute value and divide by week 3 weight. Multiply by 100. Round to the nearest one decimal place.<br>• Iteration three: Take week 2 weight and subtract from week 1 weight (week 1 − week 2); if value is positive, disregard; if negative, take absolute value and divide by week 2 weight. Multiply by 100. Round to the nearest one decimal place.<br>• Display X if any iteration calculation ≥5%.<br>*Example:*<br>• Four weights are taken for a resident: 180.0 on 5/4/14; 170.0 on 5/12/14; 181.0 on 5/19/14; and 171.0 on 5/27/14 (where 5/25-5/31 is the most recent static week).<br>• First iteration yields −10.0, 1.0, and −9.0; take absolute value of −10.0 and −9.0 and divide each by 180.0, yielding .056x100=5.6% and .050x100=5.0%.<br>• Second iteration yields 11.0, 1.0; disregard both values.<br>• Third iteration yields −10.0; take absolute value and divide by 181.0, yielding .055x100=5.5%. Display with X. |
| Wt Loss ≥7.5% in Prior 90 days (Point-to-Point) | Vital Signs or Weight documentation | Note: Use same calculations as used in Weight Summary Report.<br>Displays weight loss ≥7.5% in 90 days.<br>**Static Week Calculation:**<br>• Identify all weights that occur in the range of 85-95 days from the most recent weight date; multiple weights may be selected.<br>• Select the weight that is closest to 90 days from the most recent weight date.<br>• If two weights are the same distance from 90 (−5 days or +5 days), select the lower weight.<br>• Take Weight 90 Days Prior value (calculated above), and subtract from most recent weight (most recent − 90 day).<br>• If value is positive, disregard; if negative, take absolute value and divide by Weight 90 Days Prior value. Multiply by 100.<br>• Display X if ≥7.5% |
| Wt Loss ≥10% in prior 180 Days (Point-to-Point) | Vital Signs or Weight documentation | Note: Use same calculations as used in Weight Summary Report.<br>Displays resident weight loss ≥10% in the last 180 days.<br>**Static Week Calculation:**<br>• Identify all weights that occur in the range of 170-190 days from the most recent weight date; multiple weights may be selected.<br>• Select the weight that is closest to 180 days from the most recent weight date.<br>• If two weights are the same distance from 180 (−10 days or +10 days), select the lower weight. Take Weight 180 Days Prior value (calculated above), and subtract most recent weight (most recent − 180 day).<br>• If value is positive, disregard; if negative, take absolute value and divide by Weight 180 Days Prior value. Multiply by 100.<br>• Display X if ≥10% |

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| 2 Meals ≤50% in 1 Day | CNA documentation of meal intake | Display X if meal intake is ≤50% for two meals in one day. Do not display X if:<br>• Resident refused meal or has NPO status.<br>• Resident is on tube feeding.<br>• Meal intake value is missing, i.e., if dietitian tech did not document.<br>• In the Meal Intake field, there should be an option of Unavailable, LOA, etc., that can be selected when the resident is not present during mealtime. This option should be counted as complete documentation for the meal but should not be used toward the 2 meals ≤50% count. |
| Weekly Meal Intake Average <50% | CNA documentation of meal intake | If meal intake completeness is <75% for the current week, then display a dash, -, for the resident.<br>Use calculation from the Nutrition Report.<br>• Average meal intake (includes breakfast, lunch, dinner) for each week of the 4 most recent weeks displayed in trended view.<br>• If meal intake is documented in ranges, then the middle of the range should be the value used in the average calculation. For example, if a range is 51-75%, the percent value used would be 63%.<br>• If an option of Refused Meal or NPO is selected, the value used in the average calculation should be zero.<br>• Tube Feed should be set as an indicator (yes/no) and NOT contribute to meal intake calculations.<br>• Missing meal intake value, i.e., if dietitian tech did not document, no value should contribute to the average calculation.<br>• In the Meal Intake field, there should be an option of Unavailable, LOA, etc., that can be selected when the resident is not present during mealtime. This option should be counted as complete documentation for the meal but should not contribute a zero to the average meal intake.<br>• If the weekly meal intake average is <50%, then display an X. |
| Daily Urine Incontinence | CNA documentation of resident bladder habits | If resident has ≥1 episodes of urinary incontinence each day for the current week, then display an X. |
| >3 Days Bowel Incontinence | CNA documentation of resident bowel habits | If resident has ≥1 episode of bowel incontinence for >3 days during the current week, then display an X. |
| Foley Catheter | Physician Orders or nurse documentation | 1. Capture from daily documentation: If "Foley catheter" is entered at least once during current week, then display an X.<br>2. Capture from orders: if active order for catheter, then display X (details of each system vary; may be from physician or nurse orders). |
| Current Pressure Ulcer | Nurse Wound Assessment | If the resident has at least one pressure ulcer for the current week, then display an X. |
| # of Triggers Last Week | Prior Week Total from Trigger Summary Report: Resident Level | Carry forward the total number of triggers (columns listed above) that the resident had for the previous week and display count in the column.<br>Note: If unable to store previous count, then recalculate using same rules. |
| # of Triggers This Week | | For each resident on the report, count the number of X's and display count. |

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| Total | | For each column on the report (i.e., Wt Loss ≥5% in Prior 30 Days (Any), Wt Loss ≥10% in Prior180 Days, 2 Meals ≤50% in 1 Day, Weekly Meal Intake Average <50%, Daily Urine Incontinence, >3 Days Bowel Incontinence, Foley Catheter, and Current Pressure Ulcer), count the number of X's and display count. |

## 3.5. Trigger Summary Report: Unit Level

### 3.5.1. Report Description

The unit-level view displays the number of residents (and percentage of the total nursing unit census) who have met each pressure ulcer risk criteria for 4 consecutive weeks. The report displays an indicator or color-coding to show improvement (green) or decline (red) in values from the prior report week. The type of indicator to use for improvement/decline depends on the EMR vendor. The vendor may offer table results in a graphic display as well.

### 3.5.2. Dependencies and Clinical Assumptions

See above for Resident Level.

### 3.5.3. Report Example

| Pressure Ulcer Triggers | Week 4 5/10/14 | Week 3 5/17/14 | Week 2 5/24/14 | Week 1 5/31/14 |
|---|---|---|---|---|
| Wt Loss ≥ 5% in Prior 30 Days (ANY) | 1 (3%) | 2 (6%) | 1 (3%) | 1 (3%) |
| Wt Loss ≥ 7.5% in Prior 90 Days (Point-to-Point) | 1 (3%) | 1 (3%) | 1 (3%) | 1 (3%) |
| Wt Loss ≥ 10% in Prior 180 Days (Point-to-Point) | 1 (3%) | 2 (6%) | 1 (3%) | 2 (3%) |
| 2 Meals ≤50% in 1 Day | 5 (14%) | 4 (11%) | 4 (11%) | 7 (20%) |
| Weekly Meal Intake Average <50% | 3 (9%) | 3 (9%) | 2 (6%) | 3 (9%) |
| Daily Urine Incontinence | 2 (6%) | 3 (9%) | 3 (9%) | 5 (14%) |
| >3 Days Bowel Incontinence | 5 (14%) | 4 (11%) | 3 (9%) | 7 (20%) |
| Foley Catheter | 8 (23%) | 7 (20%) | 5 (14%) | 8 (23%) |
| Current Pressure Ulcer | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |

### 3.5.4. Valid Input, Calculations, and Displays

**3.5.4.1.** Completeness of main categories for each resident must be >75% in order to calculate the triggers.

**3.5.4.2.** The report uses static week calculations for all 4 weeks, unlike the Nutrition Risk Report, which uses a dynamic week for the first or current report week.

**3.5.4.3.** The current week is the most recent full week (e.g., if the report is generated on a Tuesday, then use the week ending date for the prior Saturday or Sunday, depending on which days the facility uses for its static week parameters).

| Report Rows | Data Source | Valid Input & Display |
|---|---|---|
| Wt Loss ≥5% in Prior 30 Days (Any) | Vital Signs or Weight documentation | For each static week:<br>• Count the number of residents on the nursing unit with the specified trigger.<br>• Divide the number of residents on the nursing unit with specified trigger by the total census on the unit during that week and display the value as a percentage in parentheses.<br>• Display both the count and percentage in the same column. |

| Report Rows | Data Source | Valid Input & Display |
|---|---|---|
| Wt Loss ≥7.5% in Prior 90 Days (Point-to-Point) | Vital Signs or Weight documentation | For each static week:<br>• Count the number of residents on the nursing unit with the specified trigger.<br>• Divide the number of residents on the nursing unit with specified trigger by the total census on the unit during that week and display the value as a percentage in parentheses.<br>• Display both the count and percentage in the same column. |
| Wt Loss ≥10% in Prior 180 Days (Point-to-Point) | Vital Signs or Weight documentation | For each static week:<br>• Count the number of residents on the nursing unit with the specified trigger.<br>• Divide the number of residents on the nursing unit with specified trigger by the total census on the unit during that week and display the value as a percentage in parentheses.<br>• Display both the count and percentage in the same column. |
| 2 Meals ≤50% in 1 Day | CNA documentation of meal intake | For each static week:<br>• Count the number of residents on the nursing unit with the specified trigger.<br>• Divide the number of residents on the nursing unit with specified trigger by the total census on the unit during that week and display the value as a percentage in parentheses.<br>• Display both the count and percentage in the same column. |
| Weekly Meal Intake Average <50% | CNA documentation of meal intake | For each static week:<br>• Count the number of residents on the nursing unit with the specified trigger.<br>• Divide the number of residents on the nursing unit with specified trigger by the total census on the unit during that week and display the value as a percentage in parentheses.<br>• Display both the count and percentage in the same column. |
| Daily Urine Incontinence | CNA documentation of resident bladder habits | For each static week:<br>• Count the number of residents on the nursing unit with the specified trigger.<br>• Divide the number of residents on the nursing unit with specified trigger by the total census on the unit during that week and display the value as a percentage in parentheses.<br>• Display both the count and percentage in the same column. |
| >3 Days Bowel Incontinence | CNA documentation of resident bowel habits | For each static week:<br>• Count the number of residents on the nursing unit with the specified trigger.<br>• Divide the number of residents on the nursing unit with specified trigger by the total census on the unit during that week and display the value as a percentage in parentheses.<br>• Display both the count and percentage in the same column. |
| Foley Catheter | Physician Orders or nurse documentation | For each static week:<br>• Count the number of residents on the nursing unit with the specified trigger.<br>• Divide the number of residents on the nursing unit with specified trigger by the total census on the unit during that week and display the value as a percentage in parentheses.<br>• Display both the count and percentage in the same column. |
| Current Pressure Ulcer | Nurse Wound Assessment | For each static week:<br>• Count the number of residents on the nursing unit with the specified trigger.<br>• Divide the number of residents on the nursing unit with specified trigger by the total census on the unit during that week and display the value as a percentage in parentheses.<br>• Display both the count and percentage in the same column. |

## 3.6. Risk Change Report (formerly Priority Report)

### 3.6.1. Report Description

The On-Time Risk Change Report (formerly Priority Report) uses 6 criteria: decrease in meal intake, loss of weight, increase in bladder incontinence, increase in number of behaviors or change in behaviors from prior week, new or worsening pressure ulcer, and new pressure ulcer. Residents with a change in one or more of these criteria from the previous week will display on the report.

### 3.6.2. Dependencies and Clinical Assumptions

**3.6.2.1.** Use calculations for Nutrition Risk Report for the following cells:

- Decreased Meal Intake + Weight Loss
- Decreased Meal Intake

**3.6.2.2.** Use the same rules, calculations, and displays for weights as described for the Weight Summary Report in 3.3.4 for the following cells:

- Weight Loss ≥5% in Prior 30 Days

### 3.6.3. Report Example

| | | Nutrition Risk | | | Change Within 7 Days | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Increase in Incontinence | | ADL Decline | | | ≥3 Behaviors | Pressure Ulcer | | Health Status# |
| Name | Room Number | Decreased Meal Intake + Weight Loss | Decreased Meal Intake | Weight Loss ≥5% in Prior 30 Days | Urine | Bowel# | Bed Mobility | Transfer | Toileting | Change in Behavior Types From Prior Week (*) | Worsening Ulcer | New Ulcer | Acute Change in Status |
| Resident 1 | 202 | | | X | | | | | | 7* | | | |
| Resident 2 | 212 | | X | | X | | | X | X | | | | X |
| Resident 3 | 217 | X | | | X | X | | | | 3 | | | |
| Resident 4 | 229 | | | X | | | X | | | | | | |
| Resident 5 | 231 | X | | X | | | | | | | | X | |
| Resident 6 | 242 | | | X | | | | | | | | | |
| Resident 7 | 243 | | | | | | | | | 4 | X | | |

**Note:**
If three or more behaviors for a resident were documented during the current week then the number of behaviors will display;
* An asterisk will display next to the number of behaviors if the behaviors recorded during the current report week are different from behaviors recorded during the prior week.

# indicates column added in 2014.

### 3.6.4. Valid Input, Calculations, and Displays

**3.6.4.1.** Completeness of CNA documentation of meal intake for each resident for the report week must be >75% in order to calculate the triggers for Decreased Meal Intake + Weight Loss and Decreased Meal Intake.

**3.6.4.2.** Completeness of CNA documentation of resident bladder and bowel habits for each resident for the report week must be >75% in order to calculate the triggers for Increase in Incontinence: Bladder and Increase in Incontinence: Bowel.

**3.6.4.3.** Decreased Meal Intake + Weight Loss are two risk criteria used to determine nutrition risk on the Nutrition Risk Reports.

- Residents who meet both criteria will display on the Nutrition High Risk Report and on this report; an X will display in the column "Decreased Meal Intake + Weight Loss."
- Residents who meet the nutrition risk criteria for decreased meal intake will display on the Nutrition Medium Risk Report and on this report; an X will display in the "Decreased Meal Intake Column."

**3.6.4.4.** Calculations to determine increase in urinary and bowel incontinence are provided in two ways to support the ways CNAs may record incontinence at their facility (see details in the table below):

- Number of *shifts* incontinent episodes occurred.
- Number of *times* the resident was incontinent *per shift*.

**3.6.4.5.** Sort the residents in descending order of the number of triggers for the current report week and then alphabetically by resident last name.

**3.6.4.6.** Display in the report footer:

** An asterisk will display next to the number of behaviors in the column "Change in Behavior Types From Prior Week" if the behaviors recorded during the current report week are different from behaviors recorded during the prior week.*

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| Decreased Meal Intake + Weight Loss | Vital Signs or Weight documentation and CNA documentation of meal intake or use Nutrition High Risk Flag | If Nutrition High Risk is TRUE then display an X.<br>If there is incomplete CNA documentation of meal intake, then display a dash). |
| Decreased Meal Intake | CNA documentation of meal intake or use Nutrition Medium Risk Flag for decreased meal intake | If Nutrition Medium Risk is TRUE for decreased meal intake, then display an X.<br>If there is incomplete CNA documentation of meal intake, then display a dash. |

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| Wt Loss ≥5% in Prior 30 Days | Vital Signs or Weight documentation or use Weight Loss Flag | If resident Weight Loss flag is TRUE, then display an X or use the same calculation used in Weight Summary Report. |
| Increase in Incontinence: Urine | | If bladder completeness is <75% for the current and/or prior week, then display a dash for the resident.<br><br>To calculate an increase in urinary incontinence by shift (yes/no):<br>• For the current week, count the number of shifts a resident had at least one episode of urinary incontinence documented by the CNA.<br>• For the prior week, count the number of shifts a resident had at least one episode of urinary incontinence documented by the CNA.<br>• If the number of shifts with urinary incontinence increased by three or more (Current − Previous≥3), then display an X for the resident.<br><br>To calculate an increase in urinary incontinence by the number of times per shift:<br>• For the current week, sum the number of urinary incontinence episodes documented by the CNA.<br>• For the prior week, sum the number of urinary incontinence episodes documented by the CNA.<br>• If the number of urinary incontinence episodes increases by 12 or more (Current − Previous≥12), then display an X for the resident. |
| Increase in Incontinence: Bowel | | If bowel completeness is <75% for the current and/or prior week, then display a dash for the resident.<br>To calculate an increase in bowel incontinence by shift (yes/no):<br>• For the current week, count the number of shifts a resident had at least one episode of bowel incontinence documented by the CNA.<br>• For the prior week, count the number of shifts a resident had at least one episode of bowel incontinence documented by the CNA.<br>• If the number of shifts with bowel incontinence increased by one or more (Current − Previous≥1), then display an X for the resident.<br><br>To calculate an increase in bowel incontinence by the number of times per shift:<br>• For the current week, sum the number of bowel incontinence episodes documented by the CNA.<br>• For the prior week, sum the number of bowel incontinence episodes documented by the CNA.<br>• If the number of bowel incontinence episodes increases by 2 or more (Current − Previous≥2), then display an X for the resident. |

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| ADL Decline: Bed Mobility | CNA documentation of ADLs | If ADL completeness is <75% for the current and/or prior week, then display a dash for the resident.<br>CNA documentation options/abbreviations:<br>Use self-performance responses.<br>• Independent (IN)<br>• Supervision (SU)<br>• Limited Assistance (LA)<br>• Extensive Assistance (EA)<br>• Total Dependence (Total)<br>• Activity Did Not Occur (NO)<br><br>Using above options, determine the PRIOR WEEKLY value by taking the highest (or worst) value recorded for that week to identify PRIOR WEEK VALUE. DO NOT USE Activity Did Not Occur (NO) to calculate weekly value. If values are only NO, then a value cannot be determined. Leave ADL Decline: Bed Mobility blank.<br>Repeat as above to determine value for the CURRENT WEEK.<br>Compare PRIOR WEEK VALUE to CURRENT WEEK VALUE to determine ADL Decline: Bed Mobility as TRUE or FALSE. IF the current week value is higher than the prior week value, then ADL Decline: Bed Mobility = TRUE.<br>For example:<br>IF PRIOR WEEK = IN and CURRENT WEEK = SU or LA or EA or Total, then ADL Decline: Bed Mobility is TRUE and an X displays.<br>IF PRIOR WEEK = EA and CURRENT WEEK = IN or SU or LA, then ADL Decline: Bed Mobility is FALSE and the cell is BLANK.<br>IF PRIOR WEEK or CURRENT WEEK = NO, then do not compare values and leave the cell BLANK. |
| ADL Decline: Transfer | CNA documentation of ADLs | Repeat steps as above for Bed Mobility. |
| ADL Decline: Toileting | CNA documentation of ADLs | Repeat steps as above for Bed Mobility. |
| Behaviors ≥3 | CNA documentation of resident behaviors | If behavior completeness is <75% for the current and/or prior week, then display a dash for the resident.<br><br>• For the current week, count the number of unique behavior types documented. The behavior only has to be documented once during a shift to be included in the count of unique behavior types.<br>• Store the different behavior types.<br>• Count the number of behaviors recorded and if more than 3 behaviors, then display count value.<br>• For the prior week, store each behavior type documented for the resident.<br>• Compare the behavior types from the current week to the prior week.<br>• If the current week has any behavior types documented that were not documented in the prior week, place an asterisk by the number of different behaviors documented for the resident. |
| Worsening Ulcer | Wound Assessment | If wound assessment occurred in last 7 days and prior to report date and data field "Ulcer Status" = worsened, then display X.<br><br>Note: Data source depends on the EMR vendor's wound assessment; refer to the EMR vendor for exact data source. |
| New Ulcer | Wound Assessment | If ulcer onset date within 7 days and prior to report date, then display an X. |

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| Acute Change in Status | May differ by EMR vendor. | Refer to the EMR vendor for best source to determine an acute change in resident clinical condition within 7 days and prior to report date.<br><br>Example sources: nurse change in condition documentation or 24 hour report. |
| Risk Factors: Total | | Count the number of X's in a row for a single resident and display count. |

## 3.7. Resident Clinical, Functional, and Intervention Profile Report

### 3.7.1. Report Description

This report displays 4 weeks of clinical data for a single resident that is captured from electronic CNA daily charting, physician orders, and lab result values.

### 3.7.2. Dependencies and Clinical Assumptions

**3.7.2.1.** This report assumes the EMR vendor can display data for multiple weeks using multiple data sources.

### 3.7.3. Report Example

| | | Week Ending | | | |
|---|---|---|---|---|---|
| | | 4/6/14 | 4/13/14 | 4/20/14 | 4/27/14 |
| Vital Signs | Number of pressure ulcers | 0 | 1 | 2 | 2 |
| | Temperature | | 99.2 | | |
| | Pulse | 82 | 88 | 90 | 100 |
| | Respirations | 20 | 20 | 20 | 20 |
| | Blood pressure | 102/58 | 110/60 | 102/58 | 120/88 |
| | O2 saturation | 96 | 97 | 98 | 88 |
| Weight | Weight in pounds | 149.2 | | | 144 |
| | Weight date | 3/26/14 | | | 4/23/14 |
| Nutrition/Vitamins & Supplements | Diet | Pureed | Pureed | Pureed | Clear liquids |
| | Tube feeding | No | No | No | No |
| | Supplements | No | Ensure | Ensure | Ensure |
| | Multivitamin | No | No | No | Yes |
| | Vitamin C | No | Yes | Yes | Yes |
| | Arginaid | No | No | No | No |
| | Zinc | No | No | No | No |
| | Protein | No | No | Yes | Yes |
| | Weekly average meal intake - percent | | | | |
| | Breakfast | 88 | 78 | 62 | 75 |
| | Lunch | 79 | 74 | 25 | 25 |
| | Dinner | 65 | 55 | 45 | 35 |
| | Nutritional supplement – percent | | | | |
| | Breakfast | 25 | 50 | 25 | 25 |
| | Lunch | 25 | 25 | 25 | 25 |
| | Dinner | 0 | 25 | 0 | 0 |

| | | Week Ending | | | |
|---|---|---|---|---|---|
| | | 4/6/14 | 4/13/14 | 4/20/14 | 4/27/14 |
| Bowel | Habits | Continent | Continent | Incontinent | Incontinent |
| | Loose stool | No | No | Yes | Yes |
| | Incontinence | | | | |
| | # shifts/week | 0 | 0 | 12 | 18 |
| | Daily incontinence | | | | X |
| | 3 days without BM | | X | | X |
| Bladder | Habits | Incontinent | Incontinent | Incontinent | Incontinent |
| | Catheter | Condom | No | No | Foley |
| | Ostomy | No | No | No | No |
| | Incontinence | | | | |
| | # shifts/week | 9 | 12 | 12 | 14 |
| | Daily incontinence | No | No | Yes | Yes |
| | Did not void # shifts/week | 0 | 0 | 0 | 1 |
| Restorative | Bowel | No | No | No | No |
| | Bladder | No | No | Yes | Yes |
| | Eating | No | No | No | No |
| | Mobility | No | No | No | No |
| Self-Performance/ Support Provided[2] | Bed mobility | EA/1 | EA/1 | EA/1 | EA/2 |
| | Transfer | EA/1 | EA/1 | EA/1 | EA/2 |
| | Locomotion | EA/1 | EA/1 | EA/1 | EA/2 |
| | Dressing | LA/set up | EA/1 | EA/1 | EA/1 |
| | Eating | LA/set up | EA/1 | EA/1 | EA/1 |
| | Personal hygiene | LA/set up | EA/1 | EA/1 | EA/1 |
| | Toileting | EA/1 | EA/1 | EA/1 | EA/2 |
| Labs[1] | Pre-Albumin (19.5-35.8 mg/dL) | 33.0 | | 21.6 | |
| | Albumin (3.4-5.4 g/dL) | 3.4 | 3.6 | 5.8* | 6.2* |
| | Sodium (135-145 mEq/L) | 128* | 122* | 114* | 120* |
| | Potassium (3.5-5.2 mEq/L) | 4.0 | 4.3 | 4.4 | 4.3 |
| | Creatinine (0.7-1.3 mg/dL) | 0.6* | 0.7 | 1.0 | 1.8* |
| | BUN (6.0-20.0 mg/dL) | 6.0 | 6.2 | 6.0 | 6.1 |
| | Transferrin (20-50%) | 20 | 25 | 35 | 35 |
| Bed Surfaces | Air fluidized surface | X | X | X | X |
| | Dynamic/alternating pressure | | | | |
| | Low air loss | | | | |
| | Replacement mattress | | | | |
| Chair Surfaces | Fluid filled or gel cushions | X | X | X | X |
| | Foam cushions | | | | |
| | Combination cushions | | | | |
| Other | Heel boots | X | X | X | X |

### 3.7.4. Valid Input, Calculations, and Displays

**3.7.4.1.** If multiple data sources are listed, then the facility determines the best source to use for their organization.

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| Vital Signs | | |
| Number of pressure ulcers | Wound Assessment | Count number of unique pressure ulcers and display count. |
| Temperature | Vital Signs | Display temperature in Fahrenheit or Celsius, per facility standard. Display xxx.x or xx.x. No leading zeroes. |
| Pulse | Vital Signs | Display pulse value as xx or xxx. No leading zeroes. |
| Respirations | Vital Signs | Display respiration value as xx. |
| Blood pressure | Vital Signs | Display blood pressure value as systolic blood pressure/ diastolic blood pressure xxx/xxx, no leading zeroes. |
| O2 saturation | EMR vendor determines source, if available | Display oxygen saturation as percentage value as xx. |
| Weight | | |
| Weekly weight in pounds | Vital Signs or Weight documentation | Display weight value in pounds unless facility uses other metric and display pounds as xxx.x. No leading zeroes. |
| Weight date | Vital Signs or Weight Documentation | Display weight date of lowest weekly weight value. See Weight Summary Report for description and instructions to determine weekly weights. |
| Nutrition/Vitamins & Supplements | | |
| Diet | Physician Orders | Display diet name. |
| Tube feeding | Physician Orders | If there is a physician order for tube feeding, then display as yes or no. |
| Supplements | Physician Orders | If there is a physician order for a nutritional supplement, then display the name of the supplement ordered; if no order, then display "no." |
| Multivitamin | Physician Orders | If there is a physician order for Multivitamins, then display "yes"; if no order, then display "no." |
| Vitamin C | Physician Orders | If there is a physician order for Vitamin C, then display "yes"; if no order, then display "no." |
| Arginaid | Physician Orders | If there is a physician order for Arginaid, then display "yes"; if no order, then display "no." |
| Zinc | Physician Orders | If there is a physician order for Zinc, then display "yes"; if no order, then display "no." |
| Protein | Physician Orders or Dietitian Referral | If there is a physician order or if the dietitian prescribes Protein to supplement the diet order, then display "yes"; if not prescribed, then display "no." |
| Weekly average meal intake – percent Breakfast | Use calculations in Nutrition Report for computing average meal intake values | Display average meal intake percentage as xx. |
| Lunch | | Display average meal intake percentage as xx. |
| Dinner | | Display average meal intake percentage as xx. |
| Nutritional supplement – percent Breakfast | Use calculations in Nutrition Report for computing average meal intake values | Display average supplement intake percentage as xx. |
| Lunch | | Display average supplement intake percentage as xx. |
| Dinner | | Display average supplement intake percentage as xx. |
| Bowel | | |
| Habits | CNA documentation of bowel habits | If any bowel incontinence documented during the report week, then display "incontinent"; otherwise, display "continent." |
| Loose stool | CNA documentation of bowel habits or nurse documentation | If any loose stool documented during the report week, then display "yes"; otherwise, display "no." |

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| Incontinence | CNA documentation of bowel habits | |
| # shifts/week | CNA documentation of bowel habits | Count the number of shifts bowel incontinence recorded during the report week and display count as xx; maximum value = 21 if 8 hour shifts or 3 shifts per day; maximum value = 14 if 12 hour shifts or 2 shifts per day. Refer to facility schedule. |
| Daily incontinence | CNA documentation of bowel habits | If bowel incontinence documented at least one shift each day during the report week, then display "yes"; otherwise, display "no." |
| 3 days without BM | CNA documentation of bowel habits | If "no bowel movement" selected for 9 consecutive shifts during report week and facility shifts = 8 hours, then display X. If 6 consecutive shifts during report week and facility shifts = 12 hours, then display X. |
| Bladder | | |
| Habits | CNA documentation of bladder habits | If any bladder incontinence documented during the report week, then display "incontinent"; otherwise, display "continent." |
| Catheter | Physician Orders or CNA documentation of bladder habits | If Foley or external catheter used during the report week, then display X. |
| Ostomy | Physician orders or CNA documentation of bladder habits | If Ostomy used during the report week, then display X. |
| Incontinence | CNA documentation of bladder habits | |
| # shifts/week | CNA documentation of bladder habits | Count the number of shifts bladder incontinence recorded during the report week and display count as xx; maximum value = 21 if 8 hour shifts or 3 shifts per day; maximum value = 14 if 12 hour shifts or 2 shifts per day. Refer to facility schedule. |
| Daily incontinence | CNA documentation of bladder habits | If bladder incontinence documented at least one shift each day during the report week then display "yes"; otherwise, display "no." |
| Did not void # shifts/week | CNA documentation of bladder habits | Count the number of shifts "did not void" selected and display count; display as xx. |
| Restorative | | |
| Bowel | Physician Orders or Nurse Orders or nurse notes or restorative notes | If restorative program for bowel in place during the report week, then display. "yes"; otherwise, display "no." |
| Bladder | Physician Orders or Nurse Orders or nurse notes or restorative notes | If restorative program for bladder in place during the report week, then display "yes"; otherwise, display "no." |
| Eating | Physician Orders or Nurse Orders or nurse notes or restorative notes | If restorative program for eating in place during the report week, then display "yes"; otherwise, display "no." |
| Mobility | Physician Orders or Nurse Orders or nurse notes or restorative notes | If restorative program for mobility in place during the report week, then display "yes"; otherwise, display "no." |

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| Self Performance/Support Provided | | |
| Bed Mobility | CNA documentation of ADL | Use the following responses for self-performance and support provided for bed mobility, transfer, locomotion, dressing, eating, personal hygiene, and toileting:<br><br>• Independent (IN)<br>• Supervision (SU)<br>• Limited Assistance (LA)<br>• Extensive Assistance (EA)<br>• Total Dependence (Total)<br>• Activity Did Not Occur (NO)<br><br>Self Performance Value:<br>• Check documentation entries for the report week and display the highest level or most dependent value recorded for the report week. Total dependence = highest level, independent = lowest level. List of documentation options and abbreviations are below.<br>• Use the following support provided responses:<br>o No setup (None)<br>o Set up only (Set up)<br>o One person (1)<br>o Two person (2)<br>o Activity Did Not Occur (NO)<br><br>Support Provided Value:<br>• Check documentation entries for the report week and display the highest level or most dependent value recorded for the report week. "Two person (2)" is highest value and No setup (None) is the lowest value.<br>• Display self-performance responses first, divided by slash (/). For example, a resident requiring extensive assistance with the help of two people would display as EA/2. |
| Transfer | CNA documentation of ADL | See instructions for Bed Mobility. |
| Locomotion | CNA documentation of ADL | See instructions for Bed Mobility. |
| Dressing | CNA documentation of ADL | See instructions for Bed Mobility. |
| Eating | CNA documentation of ADL | See instructions for Bed Mobility. |
| Personal Hygiene | CNA documentation of ADL | See instructions for Bed Mobility. |
| Toileting | CNA documentation of ADL | See instructions for Bed Mobility. |
| Labs | | |
| Pre-Albumin (19.5-35.8 mg/dL | Lab Results | If the EMR vendor stores lab values, then display value closest and prior to report ending date for the report week. Provide indicator for out-of-range values; above average and below average indicator.<br>Display Pre-Albumin value as xx.x mg/dL. |
| Albumin (3.4-5.4 g/dL) | Lab Results | Display Albumin value as x.x. |
| Sodium (135-145 mEq/L) | Lab Results | Display Sodium value as xxx. |
| Potassium (3.5-5.2 MEq/L) | Lab Results | Display Potassium value as x.x. |
| Creatinine (0.7-1.3 mg/dL) | Lab Results | Display Creatinine value as x.x. |
| BUN (6-20 mg/dL) | Lab Results | Display BUN value as x.x. |

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| Transferrin (20-50%) | Lab Results | Display Transferrin percentage value as xx. |
| Bed Surfaces | | |
| Air fluidized surface | Physician Orders | If there is a physician order for air fluidized surface, then display "X"; otherwise, leave blank. If physician order not required, then facility determines source. |
| Dynamic/alternating pressure | Physician Orders | If there is a physician order for dynamic/alternating pressure surface, then display "X"; otherwise, leave blank. If physician order is not required, then facility determines source. |
| Low air loss | Physician Orders | If there is a physician order for low air loss bed surface, then display "X"; otherwise, leave blank. If physician order is not required, then facility determines source. |
| Replacement mattress | Physician Orders | If there is a physician order for replacement mattress, then display "X"; otherwise, leave blank. If physician order is not required, then facility determines source. |
| Chair Surfaces | | |
| Fluid filled or gel cushions | Physician Orders | If there is a physician order for fluid filled or gel cushions then display "X"; otherwise, leave blank. If physician order is not required, then facility determines source. |
| Foam cushions | Physician Orders | If there is a physician order for foam cushions, then display "X"; otherwise, leave blank. If physician order is not required, then facility determines source. |
| Combination cushions | Physician Orders | If there is a physician order for combination cushions, then display "X"; otherwise, leave blank. If physician order is not required, then facility determines source. |
| Other | | |
| Heel boots | Physician Orders | If there is a physician order for heel boots, then display "X"; otherwise, leave blank. If physician order is not required, then facility determines source. |

## 3.8. Completeness Report

### 3.8.1. Report Description

The Completeness Report is a check of CNA documentation to determine how much of the data needed for report calculations may be missing. It is not included as a required report for this module because of the advances long-term care/postacute care (LTPAC) EMR vendors have made in the last decade in providing a mechanism for users to monitor CNA documentation completion; Therefore, the report is now an optional report for implementers of this module.

On-Time Reports are generated from four sections of CNA documentation: Meal Intake, Bowels, Bladder, and Behaviors.

### 3.8.2. Dependencies and Clinical Assumptions

**3.8.2.1.** CNAs are charting daily notes in electronic format for meal intake, bowel, bladder, and behavior documentation.

### 3.8.3. Report Example

| Documentation Section | 5/29/13 | 6/5/13 | 6/12/13 | 6/19/13 |
|---|---|---|---|---|
| Meal Intake | 90.7 | 86.1 | 85.3 | 85.3 |
| Bowels | 67.7 | 74.9 | 66.2 | 68.3 |
| Bowels | 67.6 | 74.9 | 66.2 | 58.3 |
| Bladder | 54.8 | 61.7 | 78.2 | 86.9 |
| Behaviors | 53.1 | 69.9 | 87.1 | 91.0 |

### 3.8.4. Valid Input, Calculations, and Displays

| Report Column | Data Source | Valid Input & Display |
|---|---|---|
| Meal Intake | CNA documentation of meal intake | Includes: All residents on a unit during each week.<br>• For each resident, count the number of times a meal intake entry was made for the current week. (Note: A week is defined as static week starting every Monday through Sunday.)<br>• Divide the count by the total number of meals possible for the current week (i.e., if a resident was not on unit for specific days during the week, the possible number of meals should be reduced).<br>• Report the value as a percentage (allow one decimal point).<br>• If the completeness for a resident is ≥75%, set meal intake completeness flag to true. (This will be used to identify which residents appear on subsequent reports.)<br>• Compute an overall meal intake completeness average for the unit. |
| Bowels | CNA documentation of bowel habits | Includes: All residents on a unit during each week.<br>• For each resident, count the number of shifts a bowel entry was made for the current week. (Note: A week is defined as static week starting every Monday through Sunday.)<br>• Divide the count by the total number of shifts possible for the current week (i.e., if a resident was not on unit for specific days during the week, the possible number of shifts should be reduced).<br>• Report the value as a percentage (allow one decimal point).<br>• If the completeness for a resident is ≥75%, set bowel completeness flag to true. (This will be used to identify which residents appear on subsequent reports.)<br>• Compute an overall bowel completeness average for the unit. |
| Bladder | CNA documentation of bladder habits | Includes: All residents on a unit during each week.<br>• For each resident, count the number of shifts a bladder entry was made for the current week. (Note: A week is defined as static week starting every Monday through Sunday.)<br>• Divide the count by the total number of shifts possible for the current week (i.e., if a resident was not on unit for specific days during the week, the possible number of shifts should be reduced).<br>• Report the value as a percentage (allow one decimal point).<br>• If the completeness for a resident is ≥75%, set bladder completeness flag to true. (This will be used to identify which residents appear on subsequent reports.)<br>• Compute an overall bladder completeness average for the unit. |
| Behaviors | CNA documentation of behaviors | Includes: All residents on a unit during each week.<br>• For each resident, count the number of shifts a behaviors entry was made for the current week. (Note: a week is defined as static week starting every Monday through Sunday.)<br>• Divide the count by the total number of shifts possible for the current week (i.e., if a resident was not on unit for specific days during the week, the possible number of shifts should be reduced).<br>• Report the value as a percentage (allow one decimal point).<br>• If the completeness for a resident is ≥75%, set behaviors completeness flag to true. (This will be used to identify which residents appear on subsequent reports.)<br>• Compute an overall behaviors completeness average for the unit. |