

## **Section 3**

# **UNDERSTANDING THE REPORTS**

## Key Concepts And Terms

The following are important terms and concepts that are helpful in understanding the QI/QM reports.

**ADJUSTED PERCENT:** Risk-adjusted percentages are presented on the *Facility Quality Measure/Indicator Report* and the *Quality Measure/Indicator Monthly Trend report* for 5 measures:

- 5.2 Residents who have/had a catheter inserted and left in their bladder
- 8.1 Residents who have moderate to severe pain
- 9.3 Residents whose ability to move in and around their room got worse
- 13.1 Short-stay residents with delirium
- 13.3 Short-stay residents with pressure ulcers

The facility-level risk-adjusted percentage is calculated by applying a mathematical model that takes other health characteristics of the resident (covariates) and the national percent for the measure into account to adjust the observed percent for the facility.

**DENOMINATOR:** The number of facility residents who could have the QI/QM.

**GENERAL INDICATORS:** There are Quality Indicators/Measures with some occurrence usually expected in the facility. Examples are Prevalence of Bladder or Bowel Incontinence or Prevalence of Pressure Ulcers that occur in a High Risk population.

**INCIDENCE:** The type of QI/QM that provides a description of what new conditions have developed over the course of two assessments. Note that residents who do not have a pair of qualifying assessments (a target and a prior assessment) will be excluded from incidence QIs/QMs. Incidence measures may have special exclusion criteria. For example, Measure 9.1 (residents whose need for help with daily activities has increased) and Measure 9.4 (incidence of decline in ROM) exclude residents whose previous assessment indicates that no further decline is possible.

**NUMERATOR:** The number of residents who actually triggered a QI/QM. These are the residents who “have” the QI/QM.

**OBSERVED PERCENT:** The numerator divided by the denominator multiplied by 100. This value is the percent of residents in the facility who **could** have triggered the QI/QM and **actually did** trigger the QI/QM.

**PERCENTILE:** A facility’s state rank, expressed as a percentage, on a given QI/QM. If a facility’s state percentile is 85, for example, it means that 85% of the facilities in the state had a QI/QM score that was less than or equal to the facility’s score. Stated another way, it means that the facility’s score is in the top 15% within its state. For QI/QMs that are not risk adjusted, facilities are ranked on their observed percentages. For QI/QMs that are risk adjusted, rankings are based upon adjusted percentages.

**PREVALENCE:** The type of QI/QM that is based upon a single assessment (rather than on change across a pair of assessments). Most of the QIs/QMs are prevalence

measures. They provide the facility with the percentage of residents who triggered a QI/QM, on the basis of their “current” (target) assessment.

**RISK GROUPS:** Subgroups of residents that are based upon the likelihood that a resident will trigger a QI/QM. Residents in a low-risk group are less likely to trigger a QI/QM than those in a high-risk group. Five of the QI/QMs include risk groups:

- 2.2 Prevalence of behavior symptoms affecting others
- 5.1 Low-risk residents who lost control of their bowels or bladder
- 10.1 Prevalence of antipsychotic use, in the absence of psychotic or related conditions
- 12.1 High-risk residents with pressure ulcers
- 12.2 Low-risk residents with pressure ulcers

**SENTINEL HEALTH EVENTS:** Quality indicators/measures that should occur very infrequently, if at all, in a facility. The nature of these indicators is serious enough to warrant investigation if it occurs only once or twice. There are three sentinel event measures:

- 5.4 Prevalence of Fecal Impaction
- 7.3 Prevalence of Dehydration
- 12.2 Prevalence of Pressure Ulcers occurring in a Low Risk population.

**THRESHOLDS:** A set point for each QI/QM at which the likelihood of a problem is sufficient to warrant emphasis or at least further investigation by the facility or by a survey team. Measures that exceed these thresholds are “flagged” on the Facility Quality Measure/Indicator Report, as indicated by an asterisk in the last column of the report. The flagging logic is as follows:

- Sentinel health events are flagged if the numerator is greater than zero.
- All other indicators/measures are flagged if their state percentile is greater than or equal to 90.

## **A Quick Guide to the QIs/QMs**

The following is intended for use as a quick guide to the QIs/QMs. This quick guide is intended as a ready reference only and does not offer the complete definitions and descriptions for each QI/QM. For detailed information about each QI/QM, please refer to Appendix A.

### **Chronic Care Measures**

For the chronic care measures, the data for all Prevalence QIs/QMs comes from the most recent OBRA assessment, the **target assessment**. For the Incidence QIs/QMs, the data come from both the target assessment and the assessment preceding the target assessment, the **prior assessment**. See Table 3-1 at the end of Section 3 for a description of the chronic care assessments selected and the criteria used.

#### **1.1 Incidence of new fractures**

Residents who have a hip fracture or other fracture that is new (present on the target assessment but not the prior assessment). The denominator includes all residents with a valid target and prior assessment who did not have a fracture on their prior assessment. This measure is not risk adjusted.

#### **1.2 Prevalence of falls**

Residents who had falls within the past 30 days on the target assessment. The denominator includes all residents with a valid target assessment. This measure is not risk adjusted.

#### **2.1 Residents who have become more depressed or anxious**

Residents whose Mood Scale scores (defined below) indicate greater depression or anxiety on their target assessment than on their prior assessment. The denominator includes all residents with valid target and prior assessments, except those with a maximum Mood Score on the prior assessment. This measure is not risk adjusted.

The Mood Scale Score is a count of the number of the following symptoms that are exhibited by the resident: (1) any verbal expression of distress, (2) signs of crying or tearfulness, (3) motor agitation, (4) leaving food uneaten, (5) repetitive health complaints, (6) repetitive or recurrent verbalizations, (7) negative statements, and (8) mood symptoms not easily altered.

#### **2.2 Prevalence of behavioral symptoms affecting others**

Residents with behavioral symptoms affecting others on the target assessment. Behavioral symptoms affecting others include verbal abuse, physical abuse, or socially inappropriate/disruptive behavior. The denominator includes all residents with a valid target assessment. There are two risk groups defined for this measure:

**2.2-HI High Risk** – Presence of cognitive impairment on the target assessment **or** psychotic disorders on the target assessment (or on the most recent full assessment) **or** manic depression on the target assessment (or most recent full assessment).

Residents are considered to be cognitively impaired if they have any impairment in daily decision making ability and short-term memory problems.

**2.2-LO Low Risk** – All other residents that are not high risk.

**2.3 Prevalence of symptoms of depression without antidepressant therapy**

Residents with symptoms of depression (defined below) and no antidepressant therapy on the target assessment. The denominator includes all residents with a valid target assessment. This measure is not risk adjusted.

Residents are considered to be depressed if they have a sad mood and exhibit **any two** of the following five symptoms on the target assessment: (1) distress, (2) agitation or withdrawal, (3) waking with unpleasant mood or awake one period of the day or less and not comatose, (4) suicidal thoughts or recurrent thoughts of death, and (5) weight loss.

**3.1 Use of 9 or more different medications**

Residents who received 9 or more different medications on the target assessment. The denominator includes all residents with a valid target assessment. This measure is not risk adjusted.

**4.1 Incidence of cognitive impairment**

Residents who were cognitively impaired (defined below) on the target assessment and who were not cognitively impaired on the prior assessment. The denominator includes all residents with a valid target and prior assessment, except those who were cognitively impaired on the prior assessment. This measure is not risk adjusted.

Residents are considered to be cognitively impaired if they have any impairment in daily decision making ability and short-term memory problems.

**5.1 Low-risk residents who lost control of their bowels or bladder**

Residents who were frequently incontinent or fully incontinent on the target assessment. The denominator includes all residents with a valid target assessment and who do not qualify as high risk. Residents are considered high risk if they have severe cognitive impairment or are totally dependent in the self performance mobility ADLs. The mobility ADLs are bed mobility, transfer, and locomotion on unit.

**5.2 Residents who have/had a catheter inserted and left in their bladder**

Residents with indwelling catheters on the target assessment. The denominator includes all residents with a valid target assessment. Bowel incontinence and the presence of pressure sores on the prior assessment are used to risk adjust this measure.

**5.3 Prevalence of occasional or frequent bladder or bowel incontinence without a toileting plan**

Residents with occasional or frequent bladder incontinence **or** bowel incontinence on the target assessment **and** who have no scheduled toileting plan **and** no bladder-retraining program. The denominator includes residents with frequent or occasional incontinence in either bladder or bowel on the target assessment. This measure is not risk adjusted.

**5.4 Prevalence of Fecal Impaction**

Residents with fecal impaction on the target assessment. The denominator includes all residents with a valid target assessment. This measure is a sentinel health event. This measure is not risk adjusted.

### **6.1 Residents with a urinary tract infection**

Residents with urinary tract infection on the target assessment. The denominator includes all residents with a valid target assessment. This measure is not risk adjusted.

### **7.1 Residents who lose too much weight**

Residents who have experienced a weight loss of 5 percent or more in the last 30 days or 10 percent or more in the last 6 months. The denominator includes all residents with a valid target assessment. This measure is not risk adjusted.

### **7.2 Prevalence of tube feeding**

Residents with tube feeding on the target assessment. The denominator includes all residents with a valid target assessment. This measure is not risk adjusted.

### **7.3 Prevalence of dehydration**

Residents with dehydration on the target assessment. The denominator includes all residents with a valid target assessment. This measure is a sentinel health event. This measure is not risk adjusted.

### **8.1 Residents who have moderate to severe pain**

Residents with moderate pain at least daily *or* horrible/excruciating pain at any frequency on the target assessment. The denominator includes all residents with a valid target assessment. The resident's level of independence in daily decision making on the prior assessment is used to risk adjust this measure.

### **9.1 Residents whose need for help with daily activities has increased**

Residents exhibiting an increase in Late-Loss ADL dependence (defined below) on the target assessment relative to the prior assessment. The denominator includes all residents with a valid target and prior assessment, except those with maximum Late-Loss ADL dependence on the prior assessment. This measure is not risk adjusted.

Late-Loss ADL dependence is defined as increasing when there is a specified increase in dependence from the prior to the target assessment on the following self-performance ADLs: bed mobility, transferring, eating, or toileting. The measure is triggered when *at least two* of these items exhibit an increase of one point or more, or *at least one* item exhibits an increase of two points or more.

### **9.2 Residents who spend most of their time in a bed or in a chair**

Residents who are bedfast on the target assessment. The denominator includes all residents with a valid target assessment. This measure is not risk adjusted.

### **9.3 Residents whose ability to move in and around their room got worse**

Residents whose locomotion self performance is worse on the target assessment than on the prior assessment. The denominator includes all residents with a valid target assessment and a valid prior assessment, except those with minimum self-performance locomotion on the prior assessment. Prior assessment indicators of recent falls, extensive support in eating, and extensive support in toileting are used to risk adjust this measure.

### **9.4 Incidence of decline in range of motion (ROM)**

Residents with increases in functional limitation in ROM (defined below) between the prior and target assessments. The denominator includes all residents with a valid target and prior assessment, except those with minimum ROM on the prior assessment. This measure is not risk adjusted.

Functional limitation in ROM is based on items indicating limitations for the neck, arm, hand, leg, foot, and other limitations. These items are summed on the prior and target assessments. If the sum increases on the target assessment (indicating an increase in ROM limitation), the measure is triggered.

### **10.1 Prevalence of antipsychotic use, in the absence of psychotic or related conditions**

Residents receiving antipsychotics on the target assessment. The denominator includes all residents with a valid target assessment, except those with psychotic or related conditions on that assessment. The measure is calculated for high- and low-risk residents.

**10.1-HI High risk:** All residents (excluding those with psychotic or related conditions) with cognitive impairment (see measure 4.1) and behavior symptoms affecting others (see measure 2.2) on the target assessment.

**10.1-LO Low risk:** All residents (excluding those with psychotic or related conditions) who do not qualify as high risk.

### **10.2 Prevalence of antianxiety/hypnotic use**

Residents who received antianxiety or hypnotics on the target assessment. The denominator includes all residents with a valid target assessment, except those with psychotic or related conditions on that assessment. This measure is not risk adjusted.

### **10.3 Prevalence of hypnotic use more than two times in last week**

Residents who received hypnotics more than 2 times in last week on the target assessment. The denominator includes all residents with a valid target assessment. This measure is not risk adjusted.

### **11.1 Residents who were physically restrained**

Residents who were physically restrained daily on the target assessment. The denominator includes all residents with a valid target assessment. This measure is not risk adjusted.

The restraints considered are a trunk restraint, a limb restraint, or a chair that prevents rising.

### **11.2 Prevalence of little or no activity**

Residents with little or no activity on the target assessment. The denominator includes all residents with a valid target assessment. This measure is not risk adjusted.

### **12.1 High-risk residents with pressure ulcers**

Residents with Stage 1 through 4 pressure sores on the target assessment who are defined as high risk. The denominator includes all residents with a valid target assessment and any one of the following high-risk conditions: impaired in bed mobility or transferring, comatose, or suffering malnutrition.

## **12.2 Low-risk residents with pressure ulcers**

Residents with Stage 1 through 4 pressure sores on target assessment who are defined as low risk. The denominator includes all residents with a valid target assessment who are defined as low risk. “Low risk” residents are those who do not qualify as high risk as defined in denominator definition for measure 12.1 above. This measure is a sentinel health event.

## **Post-Acute Care (PAC) Measures**

For the post-acute care measures, the data for all Prevalence QIs/QMs comes from the SNF PPS 14-day assessment, the **target assessment**. For the Incidence QIs/QMs, the data come from both the target assessment and the preceding SNF PPS 5-day assessment (or SNF PPS readmission/return assessment), the **prior assessment**. See Table 3-2 at the end of Section 3 for a description of the post-acute care assessments selected and the criteria used.

## **13.1 Short-stay residents with delirium**

Short-stay residents with a SNF PPS 14-day assessment which indicates at least one symptom of delirium that represents a departure from usual cognitive functioning. The denominator includes all patients with a valid SNF PPS 14-day assessment. This measure is risk adjusted based on prior residential history.

## **13.2 Short-stay residents who had moderate to severe pain**

Short-stay residents with a SNF PPS 14-day assessment which indicates moderate pain at least daily **or** horrible/excruciating pain at any frequency. The denominator includes all patients with valid SNF PPS 14-day assessment. This measure is not risk adjusted.

## **13.3 Short-stay residents with pressure ulcers**

Short-stay residents who either (a) had no pressure sores on the SNF PPS 5-day assessment and had at least one Stage 1 pressure sore on the SNF PPS 14-day assessment, **or** (b) had a pressure ulcer on the 5-day assessment that failed to improve or worsened on the 14-day assessment. The denominator includes all residents with a valid 5-day and 14-day assessment. This measure is risk adjusted based on the following five conditions on the SNF PPS 5-day assessment: a history of resolved pressure sores, self performance assistance in bed mobility, bowel incontinence at least once per week, diabetes or peripheral vascular disease, and a low Body Mass Index (BMI).

## Comparison of Old and New Record Selection Methods For Chronic Care Measures

The old QI reports and the new QI/QM reports both make use of three MDS records for chronic care measures for each resident. First, an OBRA **target assessment**<sup>1</sup> is selected. The target assessment is used as the basis for calculating all measures. The target assessment is supplemented by a **prior assessment** and a **most recent full assessment**, if these are available. The prior assessment is used as a baseline and is compared to the target assessment for calculating incidence measures. For the old reports, the most recent full assessment is used to "carry-forward" MDS items not included on the target assessment, when the target assessment is a quarterly assessment with a partial set of MDS items. For the new reports, the most recent full assessment is used to "carry-forward" MDS items to both a quarterly target assessment with partial items and a quarterly prior assessment with partial items.

The new QI/QM reports contain a mixture of chronic care measures including both old CHSRA measures (QIs) and new publicly reported measures (QMs) measures. Where a QM measure existed that was similar to a QI measure, the QI has been replaced with the QM. QIs that have no equivalent among the QM measures have been retained.

The MDS assessment record selection methods that were developed for chronic care measures in the old QI and new QM systems are somewhat different. To make the new reports easier to understand and interpret, the two record selection methodologies were made compatible by applying the QM record selection approach to all measures. As a result, the QI measures that have been retained from the old reports now have a different record selection methodology.

Table 3-1 summarizes the chronic care record selection methods used on the old QI and the new QI/QM reports. This table shows the time period and type of assessments that are used as target, prior, and most recent full assessments for the old reports and for the new reports. In both cases, the most recent qualifying OBRA assessment within the used-defined target period is selected as the target assessment. For example, in the old QI reports, the target assessment is the most recent OBRA assessment that has an assessment reference date (A3a) in the user-defined target period.

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<sup>1</sup> Admission, quarterly, annual, significant change, or significant correction assessment.

**Table 3-1. Chronic Care MDS Assessment Selection for the Old QI Reports and the New QI/QM Reports**

Type of Measure	Record Characteristics	Type of Record		
		Target Assessment	Prior Assessment	Most Recent Full Assessment (for Carry-Forward) <sup>4</sup>
<b>QIs (old reports)</b>	<i>Time period</i>	User defined (6 month default).	Any time before the target assessment.	Any time before the target assessment.
	<i>RFA</i> <sup>1</sup>	OBRA assessment <sup>2</sup> , except that admission assessments (AA8a = 01) are never used.	OBRA assessment <sup>2</sup> .	OBRA full assessment <sup>3</sup> .
<b>Chronic care QI/QMs (new reports)</b>	<i>Time period</i>	User defined (6 month default).	Between 46 and 165 days before the target assessment.	No more than 13 months before the target asmt. for carry-forward to the target or 13 months before the prior asmt. for carry-forward to the prior.
	<i>RFA</i> <sup>1</sup>	OBRA assessment <sup>2</sup> . Admission assessments (AA8a = 01) are used on Incidence but not Prevalence QMs.	OBRA assessment <sup>2</sup> .	OBRA full assessment <sup>3</sup> .

Table 3-1 Notes:

<sup>1</sup> Reason for assessment (values of AA8a primary reason for assessment and AA8b additional reason for assessment).

<sup>2</sup> OBRA assessment: AA8a = 01, 02, 03, 04, 05, or 10 with any value for AA8b. Note that some residents are excluded from some measures if the target assessment is an admission assessment (AA8a=01).

<sup>3</sup> OBRA full assessment: AA8a = 01, 02, 03, or 04 with any value for AA8b.

<sup>4</sup> For the old reports, carry-forward is only used for a quarterly target assessment. For the new reports, carry-forward can be used for both a quarterly target assessment and a quarterly prior assessment.

## New Post-Acute Care Record Selection Methods

Post-acute care measures have been added to the new QI/QM reports. Post-acute QI/QMs make use of three assessments for each resident. First, a SNF PPS 14-day **target assessment** is selected. The target assessment is used as the basis for calculating all post-acute measures. The target assessment is supplemented by a 5-day SNF PPS **prior assessment** and a **recent admission assessment**. The prior assessment is used as a baseline and is compared to the target assessment for calculating incidence measures. The recent admission assessment is used to determine prior residential history for risk adjusting the delirium QI/QM. Record selection for post-acute measures is summarized in Table 3-2.

**Table 3-2. Post-Acute Care MDS Assessment Selection for the New QI/QM Reports**

Type of Measure	Record Characteristics	Type of Record		
		Target Assessment	Prior Assessment	Recent Admission Assessment
Post-Acute Care QI/QMs (new reports)	<i>Time period</i>	User defined (6 month default).	Between 3 and 18 days before the target assessment.	50 day period before the target assessment.
	<i>RFA</i> <sup>1</sup>	14-day SNF PPS assessment <sup>2</sup> .	5-day SNF PPS assessment <sup>3</sup> .	Admission assessment <sup>4</sup> .

Table 3-2 Notes:

<sup>1</sup> Reason for assessment (values of AA8a primary reason for assessment and AA8b additional reason for assessment).

<sup>2</sup> 14-day assessment: AA8b = 7 with any value for AA8a.

<sup>3</sup> 5-day assessment: AA8b = 1 with any value for AA8a.

<sup>4</sup> Admission assessment: AA8a = 01 with any value for AA8b.