

## Nursing Homes Improve Clinical Composite Scores through Real-time Data Tracking

The AQIN-NY Clinical Calculator Helps Identify Strategies for Improvement

More than 60% of AQIN-NY Nursing Home Quality Initiative participants met or exceeded the national performance target set by CMS.

### The Problem

Nursing homes often struggle with how to use quality improvement data to avoid negative clinical outcomes amongst their residents. Monitoring and analyzing real-time long-term stay quality measurement data from the Minimum Data Set (MDS) can be used to ensure resident safety and improve outcomes.

### The Approach

The Atlantic Quality Innovation Network of New York (AQIN-NY) has developed nursing home data quality improvement tracking tools that

1. Offer a better understanding of the clinical information used from quality reporting; and
2. Help staff appropriately use the quality reporting data to influence clinical decision making and improve outcomes related to topics such as staff stability, and reducing pressure ulcers and falls.

The AQIN-NY self-calculating Clinical Composite Calculator provides real-time monitoring of 11 long-stay quality measures used to calculate the Nursing Home Composite Score.<sup>1</sup> The Composite Score is a product of the Minimum Data Set (MDS) quality measure data and is used to monitor National Nursing Home Quality Care Collaborative (NNHQCC) progress at the national, QIN-QIO, and nursing home levels. The Clinical Composite Score Calculator offers an easy way to connect MDS coding with quality measure calculations and clearly illustrates opportunities for improvement, based on the results. The Calculator includes a separate resource tab for each of the 11 clinical quality measures, with up-to-date individual technical specifications and strategy recommendations for improvement based on the Resident Assessment Instrument Manual.<sup>2</sup> AQIN-NY uses the Clinical Composite Calculator data to educate nursing home staff and to increase their understanding of the connection between nursing home MDS submissions and the officially calculated quality measures.

CLINICAL COMPOSITE SCORE WORKSHEET		ACTUAL STATISTICS from CASPER Facility-Level Quality Measure Report			"TEST" STATISTICS to view impact on "Clinical Composite Score"		
		Num	Den	Observ. %	Num	Den	Observ. %
Composite Score "Clinical" Measures	CMS ID						
SR Mod/Severe Pain (L)	N014.01						
Hi-Risk Pres Ulcer (L)	N015.01						
Phys Restraints (L)	N027.01						
Falls w/ Maj Injury (L)	N013.01						
Antipsych Med (L)	N031.02						
Depress Sx (L)	N030.01						
UTI (L)	N024.01						
Cath Insert/Left Bladder (L)	N026.01						
Lo-Risk Lose B/B Con (L)	N025.01						
Excess Wt Loss (L)	N029.01						
Inr ADL Help (L)	N028.01						
TOTALS		0	0		0	0	
Date Range of Data-				Actual			Test
Calculation Date from CASPER Report-							Clear ALL Data
<p>After entering appropriate data from your CASPER Facility-Level Quality Measure Report, "click" on button to the right to populate current statistics into "test" area. Changing test statistics will calculate a "test" clinical composite score to illustrate impact of "test" changes. "Click" on button to right at any time to restore original statistics to test area.</p>							<p><a href="#">Click Here to Restore Original Statistics to "Test" Area</a></p>

Above: Screenshot: of Clinical Composite Calculator

## Results/Clinical Outcomes

Use of the Clinical Composite Calculator has contributed to 63% of AQIN-NY's Nursing Home Quality Initiative participants meeting or exceeding the national composite measure performance target set by CMS.

This initiative illustrates how AQIN-NY develops and facilitates the adoption of innovative clinical tools and strategies to impact quality improvement and resident outcomes.

MDS 3.0 Measure: Percent of Residents Who Self-Report Moderate to Severe Pain (Long Stay) <sup>1</sup>		
MEASURE DESCRIPTION	MEASURE SPECIFICATIONS	COVARIATES
<p>CMS: N014.02 NQF: 0677</p> <p>This measure captures the percent of long-stay residents who report either (1) almost constant or frequent moderate to severe pain in the last 5 days or (2) any very severe/horrible in the last 5 days.</p>	<p><b>Numerator</b> Long-stay residents with a selected target assessment where the target assessment meets <b>either or both</b> of the following two conditions:</p> <ol style="list-style-type: none"> <li>Condition #1: resident report almost constant or frequent moderate to severe pain in the last 5 days. <b>Both</b> of the following conditions must be met:               <ol style="list-style-type: none"> <li>1.1. Almost constant or frequent pain (J0400 = [1, 2]), <b>and</b></li> <li>1.2. At least one episode of moderate to severe pain: (J0600A = [05, 06, 07, 08, 09] or J0600B = [2, 3]).</li> </ol> </li> <li>Condition #2: resident reports very severe/horrible pain of any frequency (J0600A = [10] or J0600B = [4]).</li> </ol> <p><b>Denominator</b> All long-stay residents with a selected target assessment, except those with exclusions.</p> <p><b>Exclusions</b></p> <ol style="list-style-type: none"> <li>The target assessment is an admission assessment, a PPS 5-day assessment, or a PPS readmission/return assessment (A0310A = [01] or A0310B = [01, 06]).</li> <li>The resident is not included in the numerator (the resident did not meet the pain symptom conditions for the numerator) <b>and</b> any of the following conditions are true:               <ol style="list-style-type: none"> <li>2.1. The pain assessment interview was not completed (J0200 = [0, -, *]).</li> <li>2.2. The pain presence item was not completed (J0300 = [9, -, *]).</li> <li>2.3. For residents with pain or hurting at any time in the last 5 days (J0300 = [1]), <b>any</b> of the following are true:                   <ol style="list-style-type: none"> <li>2.3.1. The pain frequency item was not completed (J0400 = [9, -, *]).</li> <li>2.3.2. Neither of the pain intensity items was completed (J0600A = [99, -, *] <b>and</b> J0600B = [9, -, *]).</li> <li>2.3.3. The numeric pain intensity item indicates no pain (J0600A = [00]).</li> </ol> </li> </ol> </li> </ol>	<p>Independence or modified independence in daily decision making on the prior assessment</p> <p>Covariate = 1 if (C1000 = [0, 1] or if C0500 ≥ [13] and C0500 ≤ [15]).</p> <p>Covariate = 0 if <b>any</b> of the following is true:</p> <ol style="list-style-type: none"> <li>(C1000 = [2, 3]) or</li> <li>(C0500 ≥ [00] <b>and</b> C0500 ≤ [12]) or</li> <li>(C0500 = [99, -, *] <b>and</b> C1000 = [1, *]).</li> </ol> <p>All covariates are missing if no prior assessment is available.</p>

NOTE:  
<sup>1</sup> This measure is used in the Five-Star Quality Rating System.

Considerations:
> Use the "Numeric Pain Scale" option as opposed to the verbal descriptor scale. Offer a consistent combination of the numeric/faces pain scale on a full-size laminated cue card. (Sample available on <a href="http://www.nursinghomes.ipro.org">www.nursinghomes.ipro.org</a> )
> Assist the resident to make sure that the reported pain actually occurred within the 5-day look-back period.
> Complete the pain interview as close to the Assessment Reference Date (ARD), but no later.
> Encourage the pain interview as opposed to the "staff assessment" for pain. Otherwise, the resident <b>WILL NOT</b> be included in the calculation of this QM.
> Regularly review your pain quality measure data to ensure that ALL triggered residents are on a regularly scheduled pain medication.
> Residents reporting levels of pain less than "moderate"/5 may be prescribed a PRN dose of pain medication.
> View the narrated QM PowerPoint presentation located on <a href="http://www.nursinghomes.ipro.org">www.nursinghomes.ipro.org</a> .

Always refer to the appropriate coding guidelines in the current RAI Manual.

LS Moderate-Severe Pain

Above: Sample Resource Page of Calculator Tool

- The CASPER/QIES data is the main data source for the quality measures. Currently, the download of the CASPER/QIES data is available for 11 of the 13 long stay quality measures included in the Composite Score calculator. Data provided for the remaining 2 vaccination measures is not timely when received, and was therefore deemed less valuable to assess timely intervention and improvement of long term measures using the Composite Score Calculator.
- Resident Assessment Instrument Manual: The Manual offers guidance on how to use the Resident Assessment Instrument (RAI), commonly known as the Minimum Data Set (MDS), correctly and effectively to help provide appropriate care. The RAI helps nursing home staff in gathering definitive information on a resident's strengths and needs, which must be addressed in an individualized care plan. It also assists staff with evaluating goal achievement and revising care plans accordingly by enabling the nursing home to track changes in the resident's status. As the process of problem identification is integrated with sound clinical interventions, the care plan becomes each resident's unique path toward achieving or maintaining his or her highest practical level of well-being.

### For information about the program, contact

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