



9/16/15

## Care Coordination/Patient Safety Measures/Preventable Hospital Admissions

The State Innovation Model (SIM) Program Management Office (PMO) convened a Quality Council to propose a core set of multi-payer statewide quality measures in the context of shared savings payment arrangements. The core measure set is comprised of several domains of measurement including care experience, care coordination/patient safety, prevention, acute and chronic illness management, behavioral health, and obstetrics. This issue brief examines issues associated with measures of care coordination, and specifically, hospital admission measures for adults with acute and chronic conditions.

### Background

Care Coordination is identified by the Institute of Medicine as key to improving the effectiveness, safety and efficiency of the American health care system.<sup>i</sup> The Agency for Healthcare Research and Quality notes that care coordination in primary care practice can achieve safer and more effective care.<sup>ii</sup>

Connecticut's own application to CMMI Application for Round 2 funding stated that the "CT Model tests prioritizes five core elements to move toward advanced primary care practice; 1) whole person centered care 2) enhanced access without disparity 3) population health management, 4) dynamic, team-based coordinated care and 5) evidenced-informed clinical decision making."<sup>iii</sup>

Care Coordination is a key factor in the effectiveness of accountable care organizations and the basis for shared savings. CMS highlighted measures in this domain because they reflect performance in this important aspect of care.<sup>iv</sup> The National Quality Foundation Report "Getting Measures that Matter" that reported on multi-stakeholder input on priority setting for health care performance measures highlighted the importance of care coordination.<sup>v</sup>

Care Coordination is important to the all those seeking health care but particularly important for those with multiple chronic conditions whose complex health care needs can result in falling through the cracks.<sup>vi</sup>

### Measurement Issues

The Quality Council recognizes the importance of measuring, monitoring, and promoting care coordination & patient safety measures across healthcare organizations in the state. The Council is considering several measures in the domain, "Care Coordination/Patient Safety." In particular, the council is interested in measures for preventable hospital admissions also known as ambulatory care sensitive condition (ASC) admission measures. These intermediate outcome measures reflect the

effectiveness of efforts to effectively manage acute and chronic conditions in ambulatory care setting, thus avoiding the emergence of clinical issues that require unplanned hospital admissions. They reflect whether all aspects of ambulatory care are effective, including but extending well beyond care coordination. Those measures selected for the core measure set would be intended for use by commercial health plans and Medicaid in value based payment contracts.

Currently, there are six condition specific measures under consideration for adults:

**Table 1**

Measure Name	Steward	NQF	ACO
All-cause Unplanned Admission for Patients with DM (diabetes mellitus)	CMS		36
All-cause Unplanned Admission for Patients with heart failure	CMS		37
All-cause Unplanned Admission for Patients with Multiple Chronic Conditions	CMS		38
Ambulatory Care Sensitive Conditions Admissions: Chronic Obstructive Pulmonary disease (COPD) or asthma in older adults (PQI-5)	AHRQ	0275	9
Ambulatory Care Sensitive Conditions Admissions: Congestive Heart Failure Admission Rate (PQI-?)	AHRQ	0277	10
Asthma in younger adults, admission rate (PQI-?)	AHRQ	0283	

Of the above measures, only the “Asthma in Younger Adults” measure and the “All-cause Unplanned Admission for Patients with DM” measure are likely to have base rates sufficient for inclusion in a payer administered quality scorecards for smaller ACO type organizations.

The Medicare SSP measures are risk standardized. In contrast, all of the Prevention Quality Indicator (PQI) measures are age and sex adjusted only, and per 100,000 population 18+, which is to say not specific to people with the relevant condition. As CMS has adapted them for use, e.g. in the Medicare SSP, they have narrowed the cohort (population comprising the denominator). For example, the heart failure measure only applies to heart failure patients, but is still only age/sex adjusted.

There is another important distinction between the newer MSSP measures and those based on the PQI methodology. The PQI indicators only count admissions for treatment of the target condition, e.g., COPD, asthma, DM, etc. The newer “All-cause Unplanned” measures count all admissions without regard to admission diagnosis. The rationale is that chronic illness patients are often vulnerable to an array of adverse events and complications. Effective management of the primary condition (e.g, COPD) and the “whole person” can thus reduce the likelihood of admissions due to a secondary condition (e.g., pneumonia).

The Council is also considering Composite measures. Composite measures are comprised of a combination of acute and/or chronic conditions. Composites are helpful when individual condition

indicators do not have enough cases in the numerator for valid comparisons. As a result, Composites can include conditions that are relatively rare, but still important. The table below includes several promising composite options:

**Table 2**

Measure Name	Steward	NQF	ACO
Prevention Quality Overall Composite (PQI-90)	AHRQ	-	-
Prevention Quality Acute Composite (PQI-91)	AHRQ	-	-
Prevention Quality Chronic Composite (PQI-92)	AHRQ	-	-
Preventable Hospital Admissions measure*	NCQA	-	-

\*Note: This measure includes three reportable sub-categories, overall, acute and chronic.

Information regarding the development of the PQI composites by the Agency for Healthcare Research and Quality (AHRQ) is available in the final report of the composite measures workgroup.<sup>vii</sup>

NCQA’s new Prevention Hospital Admissions “composite” measure is too new to be endorsed (it was just introduced in February 2015) and it was developed for use with older adult populations. Thus the selection of conditions and the risk standardization is not applicable to younger commercial and Medicaid populations.

### Additional Considerations

#### Use of Hospital Admission Measures in Other States

For this brief, the PMO re-examined available information about the use of hospital admission measures in other states and determined that states are using measures in several different ways:

1. **Payment** in value-based payment programs such as shared savings programs;
2. Mandatory or voluntary **reporting**, either in value-based payment programs or in state-wide standard quality measure set initiatives;
3. **Monitoring** for the purposes of grant (such as the State Innovation Model grant) metric evaluation, or state-wide public reporting.

States employing health care delivery and payment reform are in different stages of implementing preventable hospital admission measures. The following was learned from an analysis of approximately 6 states, 4 of which are round 1 SIM states:

- No states are using the new MSSP hospital admission measures in their value-based payment initiatives, whether for payment or reporting:
  - All-cause Unplanned Admission for Patients with DM
  - All-cause Unplanned Admission for Patients with heart failure
  - All-cause Unplanned Admission for Patients with MCC
- Two states are using the AHRQ PQI based MSSP measures. Oregon requires that they be reported (not for payment) and New Jersey has them as part of a list of 25 voluntary measures.

Vermont uses one of the two measures (COPD admissions), and only for reporting. No states are using these measures for payment purposes:

- Ambulatory Care Sensitive Conditions Admissions: Chronic Obstructive Pulmonary disease (COPD) or asthma in older adults (NQF 0275)
- Ambulatory Care Sensitive Conditions Admissions: Congestive Heart Failure Admission Rate (NQF 0277)
- Two states are using composite measures. Maine is using a prevention quality chronic composite for adults (PQI #92) for payment and Vermont is using an ambulatory care-sensitive conditions composite measure for reporting.

In summary, there is little or no alignment among states and many states have foregone the use of hospital admission measures entirely in the design of their value-based payment programs. Exhibit A provides a brief summary.

#### Use of Composites

The PMO consulted with a variety of experts at NCQA and Yale CORE, which are the organizations responsible for developing the most widely used performance measures for commercial health plans and admissions measures for MSSP, respectively. The PMO also obtained input from individuals with a long history of involvement in the development of the AHRQ PQI composite measures.

Our primary interest in these consultations was in better understanding the merits of using a composite measure in lieu of condition specific measures and the steps that might be required to develop a suitable risk-standardized composite measure for commercial and Medicaid. AHRQ has already commented on the benefits and potential disadvantages of composites.<sup>viii</sup>

The absence of NQF endorsement does not appear to signal an inherent weakness in the existing composite measures. The reason for the lack of NQF endorsement has to do with the fact that, until recently, there has not been great interest in composite measures combined with the burden of getting endorsement, which is much greater for a composite measure. The steward must submit all the paperwork for each individual measure, plus all the paperwork for the composite as a whole, which would require consider time and resources.

The experts felt that the benefits of a composite likely outweigh any disadvantages and that technical methods could be used to minimize the disadvantages. A detailing of these technical methods is beyond the expertise of the PMO staff and also beyond the scope of this brief.

#### Condition-Specific Measures: Overcoming Base Rate Limitations

Measuring provider performance across attributed lives, without regard to payer, is one option for overcoming the base rate limitations characteristic of condition-specific hospital admission measures. This approach is sometimes referred to as “cross-payer pooling” or “payer agnostic” measure performance. The PMO has not undertaken an extensive examination of the issues and considerations in implementing cross-payer pooling. However, in our work over the past six-months, several concerns have emerged as follows:

- Health plans have reported that providers often have slight variations in their SSP contracted networks with different health plans. In other words, there may be differences in which practices comprise the accountable network such that it is not possible to establish a measure of ACO performance that is valid for all of its SSP contracts.
- Health plans have also cited differences in attribution methodology, which would limit the state's ability to implement a standardized attribution methodology valid across all health plans. In theory, health plans could be required to customize their attribution methodology to meet a Connecticut standard, however, this would disrupt health plans' efforts to standardize these methods nationwide. Efforts at the national level, such as through the Health Care Payment Learning and Action Network may lead to national attribution standards, however, this is likely a longer term prospect.
- Payer agnostic performance measurement requires that one accept cross-payer performance as a proxy for health plan or employer specific performance. Self-funded employers are reportedly reluctant to accept this proxy, especially for measures where improvement is generally associated with cost-savings and shared savings distributions.
- There is uncertainty today whether the APCD will be sufficiently complete to serve as a platform for the calculation of payer-agnostic provider performance, given the uncertainty as to whether all self-funded employers will participate.<sup>1</sup> SIM has proposed an alternative technology referred to as "edge-server" technology that offers the prospect of direct indexing to health plan claims data, which could potentially circumvent this barrier.

### The National Landscape

One important consideration in charting a course for Connecticut is what if anything is happening in this area of performance measurement on the national stage, and especially through the newly established Health Care Payment Learning and Action Network (HCPLAN...add informational reference). I spoke with CMMI and they agreed that there may be work happening through the HCPLAN that may have implications for our efforts in the next couple of years. CMMI is willing to help with further inquiry.

CMMI also noted that they have dedicated funding to do work on under the Medicaid Innovation Accelerator Program specifically in the area of performance measurement. They noted that the development of risk-standardized admission measures is of particular interest and that they will begin with a focus on readmission. While acknowledging that most states have adopted the NCQA Plan All-Cause Readmission measure, CMMI expressed concern about this measure's lack of risk-standardization for Medicaid. They noted that the cost of risk-standardization would be significant. Moreover, the Plan All-Cause Readmission measure is not their only option. CMMI will support with CMS to develop measures for Medicaid.<sup>2</sup> This work will begin soon, however, it depends on the continued development of national datasets and may take some time to bear fruit.

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<sup>1</sup> Statutory authority would be required to for the use of identifiable data.

<sup>2</sup> One might speculate that harmonization with Medicare will be a prime consideration.

Finally, I asked whether CMMI would be willing to facilitate a multi-state conversation to explore options for better aligning work in this area among SIM states. CMMI is eager to provide this assistance, which we initiated with a technical assistance request on September 11<sup>th</sup>.

## Options

There are five options for the core measure set:

### Option 1

Implement the hospital admission measures for DM and asthma (young adults) for which base rates are likely to be sufficient for all or nearly all ACOs.

### Option 2

Implement all of the condition specific hospital admission measures listed in Table 1. Suppress measures on a provider-by-provider basis when base rates are insufficient.

### Option 3

Implement the PQI Overall Composite, or adaptation thereof, at the payer's discretion. Reward improvement over baseline rather than against benchmark due to lack of risk standardization.

### Option 4

In combination with 1, 2 or 3 above, establish a design group to further explore the following options:<sup>3</sup>

- a) Steward a risk-standardized Preventable Hospital Admissions (NCQA) composite for commercial and Medicaid populations. This option would require approximately one year for measure development, and then time for payers to program and run. Target date for implementation as payment measure would likely be no earlier than 2018.
- b) Steward a risk-standardized composite of the MSSP condition specific measures,
- c) Test implementation of selected condition specific measures with the APCD,
- d) Test implementation of selected condition specific measures using edge-server technology.

### Option 5

Acknowledging the formative status of hospital admission measurement in commercial and Medicaid populations, recommend that health plans implement at least one hospital admission measure, whether composite or condition specific, for pediatric and adult populations, while working with the SIM PMO and a design group of the Quality Council to explore the strategies outlined in Option 4.

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<sup>3</sup> Methods c and d would be examined in conjunction with the HIT Council.

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**Exhibit A: State Analysis of use of Preventable Hospital Admission Measures**

State	Using any preventable hospital admission measures for <i>payment</i> ?	Using any preventable hospital admission measures for <i>reporting</i> ?
Maine – Accountable Communities	Yes: Prevention quality chronic composite for adults (PQI #92)	
Minnesota – Integrated Health Partnerships	No, as a matter of principle as such measures are redundant with total cost accountability	
Oregon – Coordinated Care Organizations	No	Yes: Adult asthma admission rate; COPD admission; CHF admission rate
New Jersey – Medicaid ACO Demonstration Project	<p>Yes, but part of a “voluntary” set, must choose 5 of 25 measures which include: COPD admission rate; CHF admission rate; adult asthma admission rate</p> <p>Also has “preventable hospitalizations” in their core set, but it is unclear which measure this is</p>	
Vermont – Medicaid ACO Shared Savings Program	No	Yes: Ambulatory care-sensitive conditions composite; COPD admissions
Delaware – Common scorecard to be adopted by all payers for payment	No	No



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<sup>i</sup> Institute of Medicine – Priority Areas for National Action: Transforming Health Care Quality January 2003

<sup>ii</sup> Agency For Healthcare Research and Quality 2015 website <http://www.ahrq.gov/professionals/prevention-chronic-care/improve/coordination>

<sup>iii</sup> [http://www.healthreform.ct.gov/ohri/lib/ohri/sim/test\\_grant\\_documents/application/ct\\_sim\\_test\\_program\\_narrative\\_final.pdf](http://www.healthreform.ct.gov/ohri/lib/ohri/sim/test_grant_documents/application/ct_sim_test_program_narrative_final.pdf)

<sup>iv</sup> <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/ACO-NarrativeMeasures-Specs.pdf>

<sup>v</sup> [http://www.qualityforum.org/Publications/2014/08/Priority\\_Setting\\_for\\_Healthcare\\_Performance\\_Measuremen Addressing\\_Performance\\_Measure\\_Gaps\\_in\\_Care\\_Coordination.aspx](http://www.qualityforum.org/Publications/2014/08/Priority_Setting_for_Healthcare_Performance_Measuremen Addressing_Performance_Measure_Gaps_in_Care_Coordination.aspx)

<sup>vi</sup> Coordinating Care of Adults with Complex Care Needs in PCMH: Challenges and Solutions, <https://pcmh.ahrq.gov>

<sup>vii</sup> [http://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/PSI\\_Composite\\_Development.pdf](http://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/PSI_Composite_Development.pdf).

<sup>viii</sup> Ibid.

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