



HSCRC Measure Gap Analysis and Measurement Strategy

**Performance
Measurement
Workgroup**
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Tom Valuck, MD, JD

Discern Health
1120 North Charles Street
Suite 200
Baltimore, MD 21201
(410) 542-4470
www.discernhealth.com

Overview

- ◆ Dimensions of the measurement strategy framework
- ◆ Compilation of measures that HSCRC currently uses
- ◆ Analysis of the adequacy of measures currently in use and identification of priority measure gaps
- ◆ Scan of available measures for gap-filling
- ◆ Recommendations of the best available measures to fill gaps
- ◆ Next steps

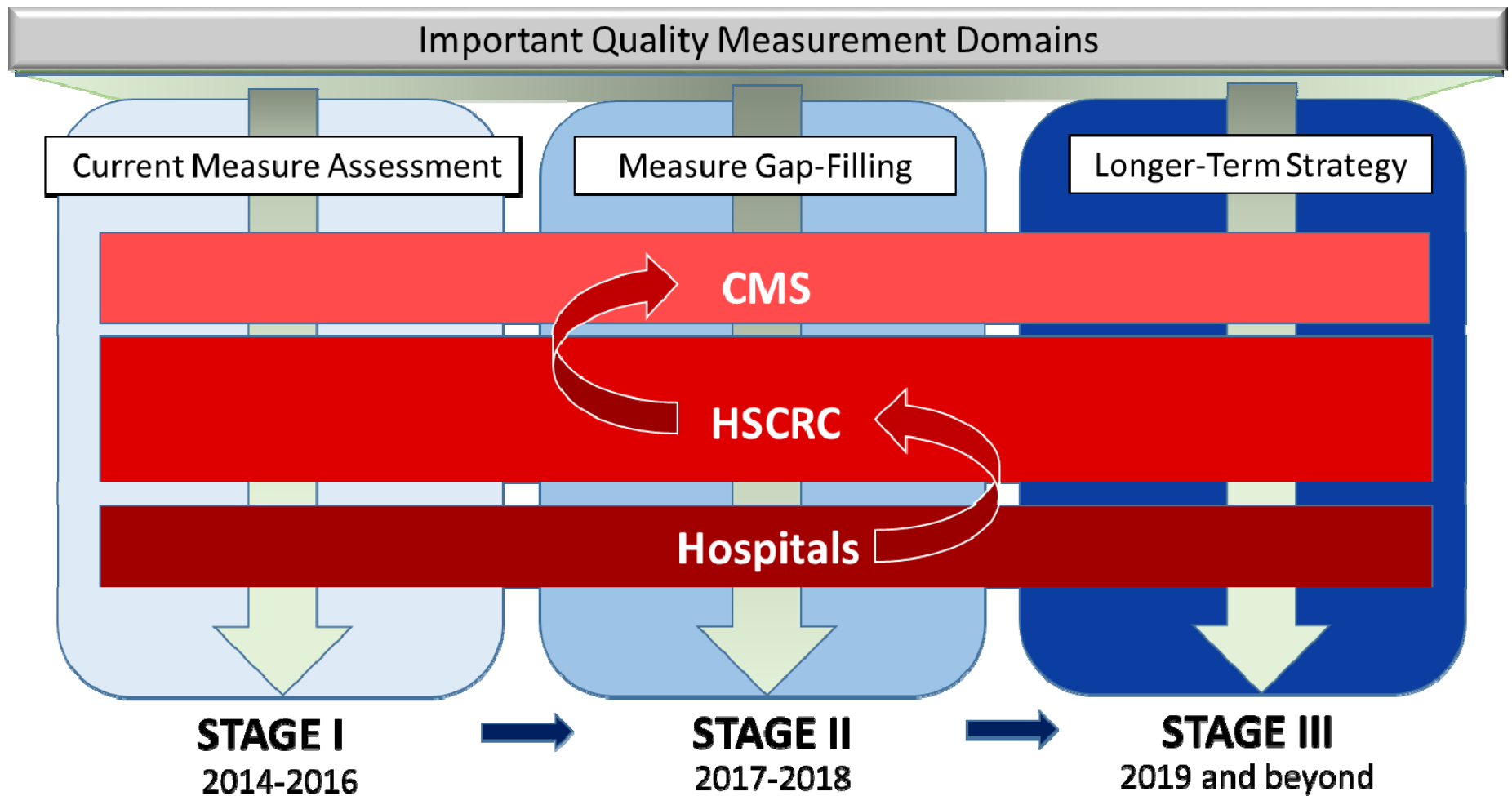


Dimensions of the Measurement Strategy Framework

- ◆ Alignment with important measurement domains
 - National Quality Strategy aims and priorities
 - Focus areas requested by HSCRC (i.e., end of life, outpatient)
- ◆ Levels of accountability
 - Reported by hospitals
 - Used internally by HSCRC
 - Reported to CMS
- ◆ Phasing
 - Stage I: 2014-2016 (current period)
 - Stage II: 2017-2018 (shorter-term implementation)
 - Stage III: 2019 and beyond (longer-term implementation)



Measurement Strategy Dimensions



Measure Compilation

- ◆ Spreadsheet workbook containing measures from all steps of the analysis
- ◆ Measures in use in current HSCRC programs
 - MHAC, PAU, QBR, Readmissions
 - Maryland SHIP
 - CMS hospital: IQR, OQR
 - AHRQ PQIs
 - HSCRC Dashboard
 - CMS contract
- ◆ Potential Measures for use in future HSCRC programs
 - CMS system-level: CMMI Core, MSSP ACO, MU
 - CMS setting-specific: LTAC, Psych, Rehab, ASC
 - AHRQ MONAHRQ Core



Gap Identification, Prioritization, and Filling Processes

- ◆ Assigned all measures currently in use to NQS domains and subdomains
- ◆ Counted and compared measures within domains and subdomains to determine relative adequacy
- ◆ For subdomains not adequately addressed, reviewed currently available measures to fill gaps



Measure Domain Assignment

- ❖ **Patient Safety-** Rates of adverse events or prevention of injury. Also avoidable medical care, readmissions.
- ❖ **Patient-Centered/Engagement-** Patient experience of care, patient-centered care planning, shared decision-making, communication with the patient and family.
- ❖ **Population Health/Prevention/Wellness-** Processes or outcomes related to promoting healthy behaviors, screenings, immunizations, or that measure at a geographic level.
- ❖ **Effectiveness-** Care processes or outcomes for specific clinical conditions or classes of conditions, or processes that occur within a single entity.
- ❖ **Lower Cost-** Use financial data, or address overuse of costly diagnostics or treatments.



Measure Counts by Domain

NQS Priorities	Primary Designation	Secondary Designation	Totals
Patient-Centered/Engagement	16	3	19
Care Coordination	20	42	62
Patient Safety	151	5	156
Population Health/ Prevention/Wellness	38	0	38
Effectiveness	31	4	35
Lower cost	27	2	29
Other	3	2	5



Adequacy Analysis: Patient-Centeredness/Engagement

Subdomain	Current Pertinent Measures	Adequate?
Experience of Care	CAHPS surveys (aspects of hospital, home health, and clinician/group CAHPS); ED left without being seen;	Yes
Health-Related Quality of Life		No
Burden of Illness	CAHPS pain management; median time to pain management for long bone fracture	No
Shared Decision-Making	CAHPS doctor/nurse communication	No
Patient Navigation and Self-Management	CAHPS discharge information; CAHPS communication about medicines; CAHPS 3-item care transition; stroke education; ED and hospital admission and readmission rates	No



Adequacy Analysis: Population Health/Prevention/Wellness

Subdomain	Current Pertinent Measures	Adequate?
Community Health Outcomes	Life expectancy; infant death rate; low birth weight; sudden unexpected infant death rate; suicide rate; ED visits (e.g., asthma, diabetes, hypertension, mental health, addictions, dental care); hospitalization for dementia; age-adjusted mortality rates from heart disease and cancer	Yes
Access	Adolescent wellness check-up; children receiving dental care; persons with usual primary care provider; ED visits for uninsured	Yes
Healthy Behaviors	Substance abuse (e.g., drug-induced death rate, adults who smoke, youth using any kind of tobacco product); safer sexual activity (e.g., reduced new HIV infections, chlamydia infection rate); weight management (e.g., adults and children who are healthy weight or obese, increased physical activity)	Yes
Prevention	Vaccinations (e.g., childhood, influenza); early prenatal care; lead screening and levels; fall-related death rate	Yes
Social Environment	Teen birth rate; domestic violence, including child maltreatment rate; students entering kindergarten ready to learn; high school graduation rate	Yes
Physical Environment	Affordable housing;; pedestrian injury rate on public roads	Yes



Adequacy Analysis: Lower Cost

Subdomain	Current Pertinent Measures	Adequate?
Total Cost	Medicare spending per beneficiary; total revenue (e.g., inpatient, outpatient, resident, Medicare resident, per capita, per beneficiary); all-payer per capita tests; Medicare beneficiary total payments, shared savings amounts from Medicare programs; per capita hospital and health expenditure growth	Yes
Condition Specific Resource Use	AMI payment per episode of care (2016), HF payment (2017), PN payment (2017)	No
Appropriate Use	Imaging (e.g., MRI lumbar spine for low back pain, abdomen or thorax CT use of contrast, cardiac imaging for preoperative risk assessment, brain and Sinus CT, brain CT in the ED for atraumatic headache)	No



Adequacy Analysis: Outpatient Care

Subdomain	Current Pertinent Measures	Adequate?
Emergency Room Care	Median time to fibrinolysis; fibrinolytic therapy within 30 minutes; aspirin at arrival; median time to ECG; median time ED arrival to ED departure for discharged ED patients; door to diagnostic evaluation by a qualified medical professional; median time to pain management for bone fracture; ED patient left without being seen; ED-related IQR measures	Yes
Outpatient Surgery	Timing of antibiotic prophylaxis; prophylactic antibiotic selection; safe surgery checklist; volume data on selected procedures; cataract surgery visual function improvement within 90 days; surgery-related MHAC patient safety measures	Yes
Diagnostic Services	MRI lumbar spine for low back pain; mammography follow-up rates; abdomen and thorax CT-use of contrast; cardiac imaging for preoperative risk assessment for non-cardiac low risk surgery; simultaneous use of brain and sinus CT; brain CT in the ED for atraumatic headache; head CT or MRI for stroke who received interpretation within 45 minutes of arrival; appropriate follow-up interval for colonoscopy; appropriate colonoscopy interval for patients with history of adenomatous polyps	Yes for imaging and colonoscopy, but narrowly focused
Care Coordination	Median time to transfer to another facility for acute coronary event; ability to receive lab data in EHR as discrete searchable data; tracking clinical results between visits; transition record with specified elements received by discharged patients	Yes, in combination with inpatient measures



Scan for Measures to Fill Gaps

- ◆ For each subdomain determined to be inadequately addressed, searched for measures to fill gaps using two primary sources:
 - List of Potential Measures from the Measure Compendium
 - Measures from credible warehouses, specifically the NQF's Quality Positioning System (QPS) and AHRQ's National Quality Measures Clearinghouse (NQMC)
- ◆ Developed a list of Candidate Measures for gap-filling



Measure Scan Search Terms

Subdomain	Search Terms
Health-Related Quality of Life	quality of life; functional status; whole person; well-being
Burden of Illness	burden; pain; nausea; vomiting; nutrition; numbness; dyspnea; fatigue
Shared Decision-Making	shared decision-making; care planning; engagement; communication; cultural competency; end of life; palliative; hospice
Patient Navigation and Self-Management	education; literacy; navigation; self-management; caregiver; activation
Condition-Specific Resource Use	resource use; cost
Appropriate Use	appropriate; overuse; underuse



Selection of Recommended Measures

- ◆ Each recommended measure was evaluated against three primary attributes:
 - **Importance-** To what extent does the measure address a priority quality gap in hospital care?
 - **Feasibility-** What are the technical considerations that determine data availability and the ease of implementation for the measure?
 - **Use and Alignment-** Is the measure in use by other programs or complementary to other related measures already in use by HSCRC or other programs?
- ◆ Also considered: NQF-endorsement status, measure type, level of analysis, and parsimony in measurement



Summary of Recommended Measures

- ◆ 13 measures for Stage II
 - 2017-2018
 - Easier to implement

- ◆ 7 measures for Stage III
 - 2019 and beyond
 - Harder to implement

Summary of Recommended Measures by Subdomain

Subdomain	Measures
Patient-Centeredness/Engagement	
Health-Related Quality of Life	<ul style="list-style-type: none"> • Migraine: Improvement in Functional Status • Low Back Pain: Functional Status Assessment
Burden of Illness	<ul style="list-style-type: none"> • Cancer: Burden of Illness Measure Cluster
Shared Decision-Making	<ul style="list-style-type: none"> • Total Knee Replacement: Shared Decision-Making • Cultural Competency Implementation
Shared Decision-Making/End of Life	<ul style="list-style-type: none"> • Advance Care Plan • Palliative Care Measure Cluster
Patient Navigation and Self-Management	<ul style="list-style-type: none"> • Patient-Centered Communication Measure Cluster
<ul style="list-style-type: none"> • Lower Cost 	
Condition-Specific Resource Use	<ul style="list-style-type: none"> • Hip/Knee Replacement Episode Resource Use
Appropriate Use	<ul style="list-style-type: none"> • Cesarean Section • Antipsychotic Use in Dementia



Summary of Recommended Measures by Stage

Stage II

- Cancer: Burden of Illness Measure Cluster
- Total Knee Replacement: Shared Decision-Making
- Advance Care Plan
- Palliative Care Measure Cluster
- Hip/Knee Replacement Episode Resource Use
- Cesarean Section

Stage III

- Migraine: Improvement in Functional Status
- Low Back Pain: Functional Status Assessment
- Cultural Competency Implementation
- Patient-Centered Communication Measure Cluster
- Antipsychotic Use in Dementia



Next Steps

- ◆ Using Measures for Increased Accountability
 - Need a phasing strategy for transitioning some measures from monitoring to payment
 - For example, using SHIP population health measures for payment incentives
- ◆ Measure Removal
 - When topped-out, changed evidence, better measure endorsed
 - Most measures required under contract with CMS
- ◆ Measure Development
 - Electronic data sources
 - Patient-reported information
- ◆ Measure Piloting
 - Adding clinical data
 - Testing new measures

