

# All-Cause Admissions and Readmissions 2015-2017

*Consensus Standards Approval Committee  
Review and Recommendations*

*December 8, 2016*

*Co-Chairs:*

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# 17 measures undergoing new or maintenance endorsement review

- Recommended measures:
  - **Home Health– 2 measures**
    - » Acute care hospitalizations and ED use without hospitalizations
  - **Hospital Condition-Specific– 6 measures**
    - » Readmissions for heart failure, pneumonia, COPD
    - » Excess days in acute care for AMI, HF, and pneumonia
  - **Hospital-Wide Readmissions– 2 measure**
    - » Claims-based and hybrid measures
  - **Skilled Nursing Facilities– 2 measures**
    - » Hospitalizations and discharge to the community
  - **Inpatient Psychiatric Facilities-1 measure**
    - » All-cause, unplanned readmissions
  - **Accountable Care Organizations-3 measures**
    - » Admission rates for AMI, HF, and pneumonia
- Not Recommended Measure:
  - **Cancer Hospitals– 1 measure**
    - » Unplanned readmissions

# All-Cause Admissions and Readmissions 2015-2017

## - Endorsement Process Measures

	Maintenance	New	Total
Measures under consideration	6	11	17
Measures recommended for endorsement	6	10	16
Measures not recommended for endorsement	0	1	1
Reasons for not recommending	Importance – 0 Scientific Acceptability – 0 Overall – 0 Competing Measure – 0	Importance – 0 Scientific Acceptability – 1 Overall – 0 Competing Measure – 0	

# Summary of Public Comments

- Adjustment for SDS
- Potential negative unintended consequences
  - Readmissions/Mortality Rates
  - Readmissions/Admission Rates
- Level of Analysis
  - Use of #1789 for clinician level of analysis

# Brief Overview of the CMS/Yale SDS Adjustment Methodology (8 out of 17 measures)

- CMS/Yale found a modest relationship between patient-level socioeconomic status and readmission:
  - Used SDS data based on the American Community Survey linked to 9-digit zip codes to obtain data at the census block group level
- CMS/Yale CORE reported that the addition of SDS factors **did not** improve the risk adjustment models or meaningfully change hospital scores or rankings based on those scores.
- CMS/Yale found that when compared to clinical factors a greater proportion of the risk of readmission for SDS factors could be attributed to the hospital-level effects compared to patient-level effects
- Based on these findings, CMS/Yale did not include SDS variables in their measure specifications

# Committee Response to Adjustment for SDS

## Comments

- The Committee acknowledges the high risk of unintended consequences and recommends reevaluation as the field moves forward
- Facilities serving vulnerable populations are not penalized unfairly while at the same time we need to balance concerns about worsening healthcare disparities
- The Committee was charged with evaluating the specifications and testing submitted by the developer
- Given currently available data , the Committee did not recommend SDS adjustment for these measures at this time. Recognizing the need to better:
  - Appreciate the effects of social risk
  - Understand the most relevant patient and community level risk factors
  - Collect data on these factors

# Committee Response to Adjustment for SDS Comments

- Reiterated the need for more precise data about SDS factors and to continue developing ways to assess the impact of these factors
  - Assess factors such as homelessness, community resources, available home supports, and other social risk factors
  - Additional analyses to better understand how hospital characteristics such as disproportionate share could impact the results of the measures.
  - Understand how community-level variables should be considered
- Review of new SES data availability will be required as part of the annual update process

# Disparities Standing Committee

- The Disparities Standing Committee has been supporting the trial period and is a resource for input on key questions.
  - Highlighted the ongoing challenges to risk adjustment for SDS factors.
  - Reviewed recent work from the NAM examining the availability of data on social risk factors



# Summary of Data Availability for Social Risk Factor Indicators

SOCIAL RISK FACTOR		DATA AVAILABILITY			
	Indicator	1	2	3	4
<b>SEP</b>					
	Income		■		
	Education		■		
	Dual Eligibility	■			
	Wealth			■	
<b>Race, Ethnicity, and Cultural Context</b>					
	Race and Ethnicity		■		
	Language		■		
	Nativity	■			
	Acculturation				■
<b>Gender</b>					
	Gender identity				■
	Sexual orientation				■
<b>Social Relationships</b>					
	Marital/partnership status		■		
	Living alone			■	
	Social Support			■	
<b>Residential and Community context</b>					
	Neighborhood deprivation		■		
	Urbanicity/Rurality	■			
	Housing		■		
	Other environmental measures				■

**1.** Available for use now

**2.** Available for use now for some outcomes, but research needed for improved, future use

**3.** Not sufficiently available now; research needed for improved, future use

**4.** Research needed to better understand relationship with health care outcomes and on how to best collect data

# Committee Response to Unintended Consequences

## Comments

- Standing Committee emphasized the need to ensure that admissions and readmissions measures are used appropriately
- Need to consider potential unintended consequences:
  - Access to necessary care
  - Relationship between mortality and readmission rates for heart failure
  - Increased use of observation status and the Emergency Department
  - Relationship between admissions and readmissions

# Committee Response to Level of Analysis Comments

- The Committee stressed that NQF endorses measures specifically for the level of analysis indicated in the measure specifications.
- The level of analysis must be supported by reliability and validity testing.
- Measures should not be used for additional levels of analysis unless updated testing and specifications are provided to support endorsement for that use case.
- The Committee encouraged the measure developers to bring additional testing results for alternative use cases to NQF for multistakeholder review

# Project's Timeline and Next Steps

- Executive Committee Review
  - December 8, 2016
- Appeals
  - December 12, 2016 – January 10, 2017
- Final Report
  - February 23, 2017

# Questions?



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## Review of Measures Previously Endorsed with Conditions



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# Background

- In December 2014, the Board Executive Committee ratified CSAC's approval to endorse 17 measures with the condition they be considered for inclusion in the SDS trial period.
- NQF agreed to consider potential unintended consequences related to use of the measures.
  - The Standing Committee has discussed potential analyses for ongoing surveillance for unintended consequences, including mortality and other adverse outcomes.
  - NQF will review and synthesize feedback from end-users and share the findings with relevant Committees

# Measures Endorsed with Conditions

- #0505: Hospital 30-day all-cause risk-standardized readmission rate (RSRR) following acute myocardial infarction (AMI) hospitalization
- #0695: Hospital 30-Day Risk-Standardized Readmission Rates following Percutaneous Coronary Intervention (PCI)
- #2375: PointRight OnPoint-30 SNF Rehospitalizations
- #2380: Rehospitalization During the First 30 Days of Home Health
- #2393: Pediatric All-Condition Readmission Measure
- #2414: Pediatric Lower Respiratory Infection Readmission Measure
- #2496: Standardized Readmission Ratio (SRR) for dialysis facilities
- #2502: All-Cause Unplanned Readmission Measure for 30 Days Post Discharge from Inpatient Rehabilitation Facilities (IRFs)
- #2503: Hospitalizations per 1000 Medicare fee-for-service (FFS) Beneficiaries
- #2504: 30-day Rehospitalizations per 1000 Medicare fee-for-service (FFS) Beneficiaries
- #2505: Emergency Department Use without Hospital Readmission During the First 30 Days of Home Health
- #2510 Skilled Nursing Facility 30-Day All-Cause Readmission Measure (SNFRM)
- #2512: All-Cause Unplanned Readmission Measure for 30 Days Post Discharge from Long-Term Care Hospitals (LTCHs)
- #2513: Hospital 30-Day All-Cause Risk-Standardized Readmission Rate (RSRR) following Vascular Procedures
- #2514: Risk-Adjusted Coronary Artery Bypass Graft (CABG) Readmission Rate
- #2515: Hospital 30-day, all-cause, unplanned, risk-standardized readmission rate (RSRR) following coronary artery bypass graft (CABG) surgery
- #2539: Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy



# Review of Consideration for Inclusion in the SDS Trial Period

- Trial period began in April 2015:
  - Prior to this NQF policy prohibited the inclusion of SDS factors in risk adjustment models
  - Previous Admissions and Readmissions project began and ended prior to the start of the trial; Standing Committee did not consider SDS factors during their initial evaluation
- The Standing Committee met through a series of webinars to review the potential need for risk adjustment for SDS factors:
  - Webinar #1: Examine the conceptual relationship between SDS factors and the outcome
  - Webinar # 2: Review the SDS factors developers plan to test
  - Webinar #3 and #4: Examine the empirical relationship between SDS factors and the outcome

# Review of Conceptual Analysis

- Standing Committee reviewed the conceptual analysis of selected SDS variables to determine if the measures should be included in the trial period
- The Committee determined empiric analysis was warranted for 16 of the 17 measures endorsed with conditions
  - #2539: Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy was not recommended for inclusion

# Review of Empirical Analyses

- Standing Committee reviewed the developers' decisions to include or not include SDS adjustment in the risk adjustment model based on the empirical analysis provided.
  - Due to implementation issues for one measure (#2513), empirical analyses were not provided during this phase of work
- All measures were submitted without additional SDS variables in their risk adjustment models.
- The Committee noted:
  - Measures were highly correlated with and without adjustment for SDS factors
  - Facility performance was not significantly changed by the addition of SDS factors
  - C-statistics were not improved by adding SDS factors.
  - Race was tested for comparison purposes only

# Committee Recommendations

## **The Committee recommended the following measures be endorsed without conditions:**

- #0505: Hospital 30-day all-cause risk-standardized readmission rate (RSRR) following acute myocardial infarction (AMI) hospitalization
- #0695: Hospital 30-Day Risk-Standardized Readmission Rates following Percutaneous Coronary Intervention (PCI)
- #2375: PointRight OnPoint-30 SNF Rehospitalizations
- #2380: Rehospitalization During the First 30 Days of Home Health
- #2393: Pediatric All-Condition Readmission Measure
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- #2496: Standardized Readmission Ratio (SRR) for dialysis facilities
- #2502: All-Cause Unplanned Readmission Measure for 30 Days Post Discharge from Inpatient Rehabilitation Facilities (IRFs)
- #2503: Hospitalizations per 1000 Medicare fee-for-service (FFS) Beneficiaries
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# Public Comments Received

- Commenters raised concerns that the measures did not include SDS factors in their risk adjustment models
  - Potentially insufficient adjustments made for sociodemographic status (SDS) factors.
  - Asked the Committee to take a more in-depth look at the need for SDS adjustment, given the potentially negative impact these measures could have on providers practicing in low-resource regions
  - Noted that the findings presented by measure developers who did not include these factors in their measure contradict common knowledge and findings from other research

# Committee Response

- The Committee reiterated that their recommendations on SDS adjustment relate to the analyses put forward at this time given the data currently available
  - Based on available data did not recommend adjustment at this time
- The Committee reiterated that their recommendations on SDS adjustment relate to the analyses put forward at this time given the data currently available
  - Recognized the need to better appreciate the effects of social risk, understand the most relevant patient, and community level risk factors, and collect data on these factors

# Committee Response

- Stressed the high risk of unintended consequences related to adjustment of these measures for SDS factors
- Need to reevaluate these measures as the field continues to move forward.
- Need to ensure facilities serving vulnerable populations are not penalized unfairly while at the same time balancing concerns about worsening healthcare disparities.
- Recommends a reassessment of the availability of SDS variables and a reexamination of these measures through the NQF annual update process.

# Questions?



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