Empirical Analysis: The Relationship between SDS Factors and Cost/Payment Outcomes

*October 27, 2015* 





- Welcome & Roll Call
- Background
  - How did we get here?
  - Goals and purpose of this call
- Review of Empirical Analysis
  - Developer overview and summary of memo
  - Committee Discussion
- Public and Member Comment
- Next Steps
- Adjourn

#### **Cost & Resource Use Standing Committee**

- Brent Asplin, MD, MPH (Co-Chair)
- Lisa Latts, MD, MSPH, MBA, FACP (Co-Chair)
- Ariel Bayewitz, MPH
- Lawrence Becker
- Mary Ann Clark, MHA
- Cheryl Damberg, PhD
- Jennifer Eames-Huff, MPH
- Nancy Garrett, PhD
- Andrea Gelzer, MD, MS, FACP
- Stanley Hochberg, MD
- Matthew McHugh, PhD, JD, MPH, RN
- Carolyn Pare

- Martin Marciniak, MPP, PhD
- James Naessens, ScD, MPH
- Jack Needleman, PhD
- Janis Orlowski, MD, MACP
- John Ratliff, MD, FACS, FAANS
- Andrew Ryan, PhD
- Joseph Stephansky, PhD
- Lina Walker, PhD
- William Weintraub, MD, FACC
- Herbert Wong, PhD
- Dolores Yanagihara, MPH

# **Overview of Sociodemographic Status** (SDS) Adjustment Trial Period

- The 2-year SDS trial period began in January 2015
- During this time period:
  - SDS factors should be considered as potential factors in the risk model, if there is a conceptual reason for doing so (i.e., conceptual analysis);
  - Empirical analysis should be done on those SDS factors that have a conceptual relationship to determine their contribution to the model
  - SDS-adjusted AND SDS risk stratified measures will be accepted for evaluation with the appropriate conceptual and empirical analyses
  - Committees will evaluate the risk strategy as part of the assessment of validity

#### **SDS and the Cost Measures**

- The NQF Board of Directors ratified the CSAC's recommendations to endorse these cost measures:
  - #2431: Hospital-level, risk-standardized payment associated with a 30day episode-of-care for Acute Myocardial Infarction (AMI) (CMS/Yale);
  - #2436: Hospital-level, risk-standardized payment associated with a 30day episode-of-care for Heart Failure (HF) (CMS/Yale);
  - #2579: Hospital-level, risk-standardized payment associated with a 30day episode of care pneumonia (CMS/Yale).
- Only with the following conditions:
  - One-year look-back assessment of unintended consequences;
  - Consideration for the SDS trial period; and
  - Further examination of attribution issue (Project Launch 10/26/15).

# Reviewing the Cost Measures during the Trial Period

- The (3) endorsed CMS/Yale measures will be considered under the new SDS guidance during the trial period.
- Developers will be asked to submit additional analysis in a two-phased approach:
  - Webinar #1: Conceptual Analysis
  - Webinar #2: Empirical Analysis (to be discussed on today's webinar)
- Followed by:
  - Public and member commenting period (14 calendar days)
  - CSAC Review
  - Executive Committee review
  - Appeals (30 calendar days)

### **Summary of Conceptual Analysis**

- Review of conceptual analysis of selected variables
  - Educational attainment or income (from census data using patient zip code)
  - Medicaid status (proxy for low income and insurance coverage)
  - Black or white race
- Determine whether further empirical analysis is warranted
- Identify the variables to be pursued in empirical analysis
- Provide input on the plan or approach to empirical analysis

# Summary of Committee Recommendations for Conceptual Analysis

- 1. Broaden the conceptual model
- 2. Additional literature review (within and between hospital effects of race on hospital performance)
- 3. Determination of conceptual relationship

#### **Committee Discussion**

- Does the committee believe the developer has adequately supplemented their conceptual analysis based on previous Committee recommendations?
- Does the conceptual model adequately reflect the impact of SDS factors in the episode of care that is captured in these measures?

### **Empirical Analysis: Committee Guidance**

#### **Empirical Analysis Review**

- Review and discuss the empirical analysis of the risk adjustment approach
  - Review and discuss the developer's decision to include or not include SDS adjustment in the measure based on the empirical analysis provided; and
  - Vote on Validity Criterion
  - Make an endorsement recommendation:
    - Recommend [continued] endorsement of the measure (as specified by the developer)
    - Recommend to de-endorse the measure

# NQF Guidance for Submission of Empirical Analyses

- Analyses and interpretation resulting in decision to include or not include SDS factors in section.
- Performance scores and risk model performance of the model with and without SDS factors included (including method and results).
- An interpretation of their results in terms of the differences in performance scores for the same entities.
- Submission of updated reliability and validity testing and specifications for a stratified version of the measure using these factors, if SDS factors are included in the riskadjustment approach.

#### Summary of Committee Recommendations on Variables and Empirical Analysis

- Race: Review the data and consider including other race variables beyond black.
- Income and educational attainment: Do not use 5digit zip code data; analyze 9-digit zip code data once it is available
- Medicaid/dual eligibility status: Empirical analysis on Medicaid status variable, but only in combination with the Low Income Subsidy (LIS) data as proxy for insurance status and income

# **Empirical Analysis Review: Committee Discussion**

- Does the committee believe the developer has adequately demonstrated validity of their risk adjustment approach?
- Has the developer adequately supported their decision to not include the SDS variables in the risk model?

## **Committee Voting Guidance**

#### Validity (Appendix A of NQF memo)

- Your vote on the validity criterion should include consideration of:
  - Consistency of specifications with measure intent
  - Validity testing
  - ➢ Exclusions
  - Risk Adjustment
  - Identification of statistically significant and meaningful differences
  - Disparities
- Review the Committee's prior discussion and recommendations on validity (Appendix B of NQF memo)



# **Public and Member Comment**

### **Remaining Milestones: SDS Review**

- Public and Member Commenting (14 calendar days): Nov 16-Nov 30
- CSAC Review: November 17-18 & December 8
- BOD Executive Committee Review: Jan 2016 TBD
- Appeals (30 calendar days): Jan-Feb 2016 TBD

# Next Steps: Resource Use Standing Committee

- Submit your vote on validity and continued endorsement by COB, Friday, October 30.
- Standing Committee term roll-over
- Upcoming Cost/resource use measure review and Standing Committee activities
  - Maintenance activities

## Adjourn



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