NATIONAL QUALITY FORUM

Health Equity Update: Guidance on the Social Risk Trial

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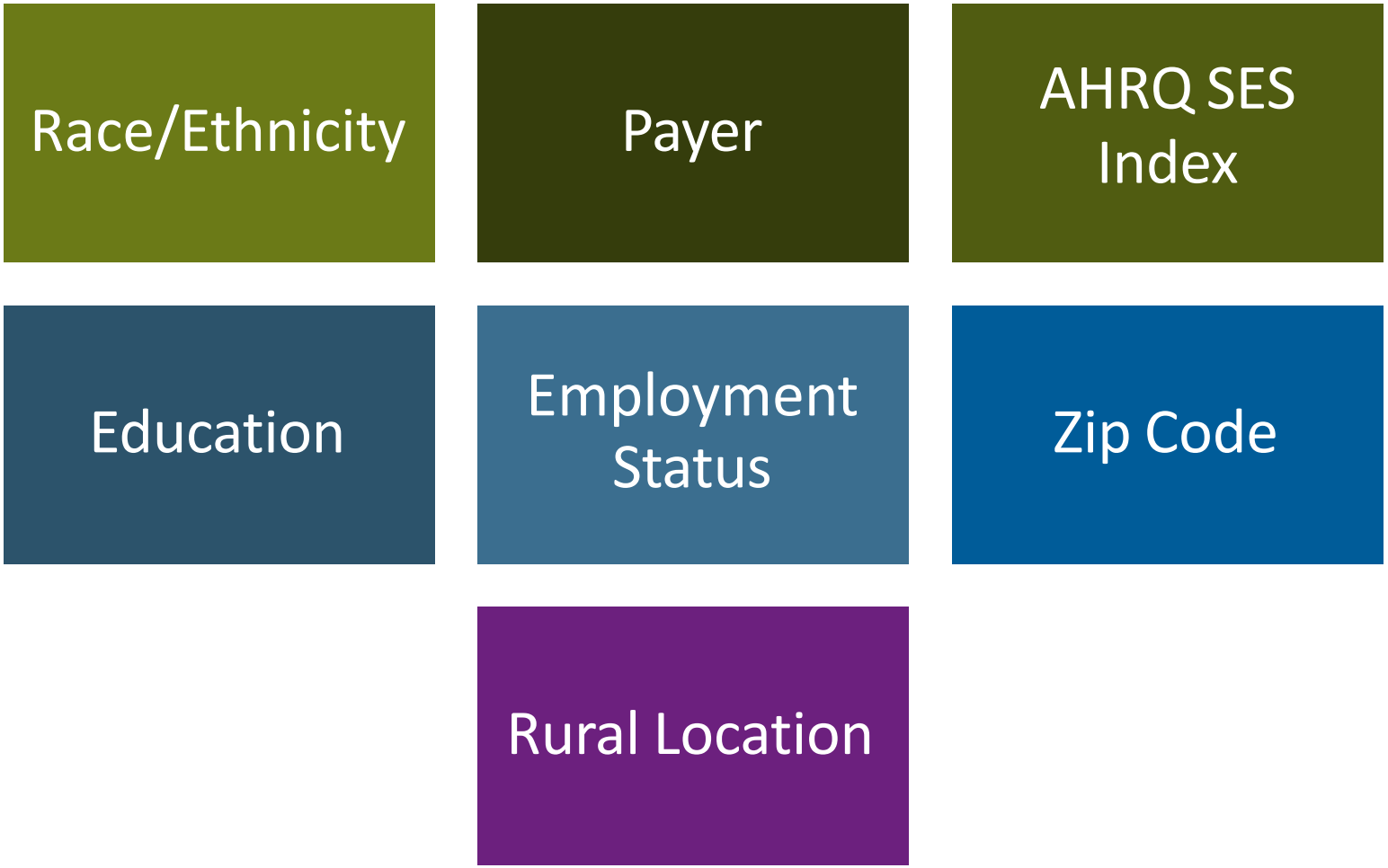
Summary of Submissions for Fall 2017-Spring 2019

Total Number of Measures Submitted	223
Measures Using Risk Adjustment	88
Measures with a Conceptual Model Outlining Impact of Social Risk*	80
Used published literature to develop rationale	62
Used "Expert Group Consensus" to develop rationale	15
Used "Internal Data Analysis" to develop rationale	38
Measures with a Social Risk Factor included in Model	18

*methods were not mutually exclusive

Findings on Variables Explored



Findings on Modeling Approaches Used

- Statistical models and stratification were the most common techniques used in measures submitted for endorsement.
- Developers who used statistical models used various forms of regression analysis:
  - *Hierarchical logistic regression*
  - *Poisson regression*
  - *Ordinary least squares regression (generally the same of linear regression)*
  - *Negative binomial regression*

Findings on Model Interpretation

There was greater variation in how developers interpreted results and made decisions about which factors to include:

- Rationales for not including:
  - *Lack of available data*
  - *Unable to differentiate patient level or hospital level effect*
  - *Concerns about masking disparities*
  - *Factor was significant but small effect size*
  - *Factor was significant but clinical variables capture the majority of risk*
  - *Factor was significant but no improvement to model (e.g., c-statistic is unchanged)*
- Rationales for including:
  - *Factor was significant*
  - *Hospital level effects not entirely driving results*

Interpretation Example

Measure	3188 30-Day Unplanned Readmissions for Cancer Patients	1789 Hospital-Wide All-Cause Unplanned Readmission Measure
Description	Rate at which adult cancer patients covered as FFS Medicare beneficiaries have an unplanned readmission within 30 days of discharge	Hospital-level risk-standardized readmission rate (RSRR) of unplanned, all-cause readmission after admission for any eligible condition within 30 days
Risk Model Used	Logistic regression	Hierarchical logistic regression
Conceptual model development	Literature review, multidisciplinary workgroup	Literature review
Empirical analysis	Dual eligible status: estimate 0.069, p<.0001	Decomposition analysis found stronger hospital level effect, little impact on hospital distribution
Social risk factor included	Yes, dual eligible status	No, dual eligible status, race, AHRQ SES index tested
Rationale	Fit for model, considered out of hospital's control, WG did not think would mask disparities	Decomposition analysis results indicated adjustments could mask quality concerns; complex pathways between SES and readmissions

CSAC Feedback from the April Meeting

- Current limitations:
  - *Role of risk adjustment vs. role of program payment methodology*
  - *CDP can only review measures submitted*
  - *Needs may very by use: needs for reporting may be different than payment*

- Desired future state:
  - *Desire to move beyond the use of proxy data*
  - *Better understanding of successful methodologies*
    - » Need to identify examples of successful adjustment for social risk
    - » Improved guidance for measure developers on developing conceptual models and factors to examine
  - *Measurement is meaningful; driving to reductions in disparities*

May 2019 Disparities Standing Committee (DSC) Meeting

- DSC Goals for the Trial:
  - *Advance the science of adjustment for social risk factors*
  - *Inform NQF's decision on Social Risk Trial at conclusion of 5 years*
- Desire to see more innovative methods and data used but recognition that this is an emerging area of measurement science
- Need to take a more active role in sharing learnings and best practices with measure developers
  - *Committee would like to create a toolkit with guidance on available data, potential methodologies to use, and factors to examine.*

Areas for Further Examination

- Exploring the potential use of ICD-10 z codes
- Understanding what is a property of a measure and what is the property of a measurement system
  - *How should measure use impact endorsement decisions?*
  - *How to consider the limited role of NQF on influencing program level adjustments?*
- Clarifying the goal of adjusting measures for social risk:
  - *Isolate quality signals*
  - *Level the playing field for providers in VBP arrangements*
- Recognition of the need for data to address disparities
  - *How to consider needs of reporting programs versus challenges of VBP?*

CSAC Discussion

- What disparities could adjusting for social risk factors potentially mask?
- What role could NQF have in monitoring for worsening of disparities?
- How should NQF consider measure use and properties of a measurement system?
- What information would CSAC like to see included in a toolkit for measure developers?