Accounting for Social Risk factors in Healthcare Performance Measurement:
*What it means for the Future of Healthcare Delivery*

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*12-1pm ET*
Objectives

1. Discuss how adjusting for social risk factors impacts providers and key issues in the debate on whether to adjust for social risk factors.
2. Discuss the history and outcomes of NQF’s Social Risk Factor Adjustment Trial Period.
3. Discuss the potential future of adjustment for social risk and NQF’s role.
What are social risk factors?

Why adjust for social risk factors?

- Growing body of evidence shows that sociodemographic factors affect health outcomes

- Performance measures that assess health outcomes are increasingly used in accountability programs such as public reporting and pay-for-performance

- Measures are also being used to determine:
  - which providers to include in networks
  - how to determine financial rewards and penalties
  - where to go to for healthcare services
  - where to focus improvement efforts

- Providers, policymakers, payers, and patients all want performance measures to provide fair comparisons across those being measured
Controversy

OPPOSE
- Some providers may deliver worse quality care to disadvantaged patients
- Adjustment could make meaningful differences in quality disappear
- Worse outcomes could be expected
  - No expectation to improve
  - Implies or sets a different standard
- Lack of adequate data for SDS adjustment
- Prefer payment approach to help safety net

SUPPORT
- Risk adjustment allows for comparative performance
- A performance score alone (whether or not adjusted for SDS factors) cannot identify disparities.
- Hospitals caring for the disadvantaged are already being penalized.
- No evidence that disparities would be reduced through further negative financial incentives.
- Lack of adjustment would continue to create a disincentive to care for the poor.
<table>
<thead>
<tr>
<th>Social Risk Indicators</th>
<th>Data Availability</th>
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<tr>
<td></td>
<td>Data available for use now</td>
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<tr>
<td>Socioeconomic position</td>
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<tr>
<td>Income</td>
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<td>Education level</td>
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<td>Dual eligibility for Medicare and Medicaid</td>
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<td>Wealth</td>
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<td>Race, ethnic group, and cultural context</td>
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<td>Race or ethnic group</td>
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<td>Language spoken</td>
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<td>Country of origin</td>
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<td>Extent of acculturation</td>
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<td>Gender and sexual orientation</td>
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<td>Gender identity</td>
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<td>Sexual orientation</td>
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<td>Social relationships</td>
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<td>Marital or partnership status</td>
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<td>Living with others vs. alone</td>
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<td>Amount of social support</td>
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<td>Residential and community context</td>
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<td>Extent of neighborhood deprivation</td>
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<td>Urban vs. rural residence</td>
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<td>Adequacy of housing</td>
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<td>Other environmental factors</td>
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Best Practices

- NQF’s guidance for adjusting measures for social risk factors:
  - *Each measure should be assessed individually to determine if adjustment is appropriate*
  - *There must be a conceptual basis (logic model, rationale, theory) and empirical evidence supporting adjustment for social risk*
  - *Both the adjusted and non-adjusted (clinically adjusted only where appropriate) measure score should be reported*
  - *Measures should be stratified to reduce the likelihood of masking disparities*
NQF’s Social Risk Factor Adjustment Trial Period
Background

- In April 2015, NQF began a two-year trial of a policy change that allows risk-adjustment of performance measures for social risk factors.
- Prior to this, NQF criteria and policy prohibited the inclusion of such factors in its risk adjustment approach and only allowed for inclusion of a patient’s clinical factors present at the start of care.
- During the trial period, NQF policy restricting the use of social risk factors in statistical risk models was suspended and NQF implemented the Risk Adjustment Expert Panel’s recommendations related to the appropriate use of social risk factors.
NQF’s Disparities-Related Work

- Cultural competency framework and practices
- Social Risk Factor Adjustment Expert Panel and Trial Period
- Reducing Health & Healthcare Disparities Related to Social Risk

- Approach to Disparities-Sensitive Measures
- Endorsed disparities and cultural competency measures

Disparities Standing Committee
Implementation of the Trial Period

- From April 2015-April 2017, any measure submitted for endorsement was included in the trial period
- The trial period focused on risk-adjusted outcome measures
- Measure developers were required to provide information on the **conceptual relationship** between social risk factors and the outcome of interest
- If a conceptual relationship existed, developers were also required to conduct **empirical analyses** to evaluate the strength of the relationship between social risk factors and the outcome of interest
- Risk adjustment models were evaluated by the relevant Standing Committees under the validity criterion
Trial Period Evaluation Plan

- To evaluate the trial period NQF staff tracked:
  - Which measures had a conceptual rationale for inclusion of social risk factors?
  - What approach was used to establish a conceptual basis (e.g., literature vs. data driven)?
  - What variables and social risk data were available and analyzed?
  - If social risk factors were included in the risk model, were specifications for stratification also included?

- NQF staff also solicited qualitative feedback from committee members and measure developers and reviewed public comments
Overview of Measures in the Trial

Measures Reviewed
- 303 measures reviewed in the trial
- 126 were outcome or intermediate outcome measures

Risk-Adjusted Measures
- 93 utilized some form of risk adjustment
- 65 had a conceptual basis for adjusting for social risk factors

Measures with Conceptual Relationship
- 43 small effect, social risk factors not included
- 21 submitted with adjustment for social risk factors
- 17 endorsed with adjustment for social risk factors
Example Endorsed Measures

- NQF 2651 CAHPS Hospice Survey (experience with care)
  - *The survey is intended to measure the experiences of hospice patients and their primary caregivers.*
  - Social Risk Factors:
    - Payer
    - Respondent education
    - Language

- AHRQ PQI#15 Asthma in Younger Adults Admission Rate
  - *Admissions for a principal diagnosis of asthma per 100,000 population, ages 18 to 39 years. Excludes admissions with an indication of cystic fibrosis or anomalies of the respiratory system, obstetric admissions, and transfers from other institutions.*
  - Social Risk Factor:
    - Percent of households under the federal poverty level
Key Challenges

- Data Availability
  - Limited availability of patient-level data
  - Variables examined empirically did not align with factors in the conceptual models
  - Need to consider impact of community-level factors

- Consideration of Race
  - Concerns arose that race may have been used as a proxy for SES
  - Guidance from the Disparities Standing Committee stressed that race should not be used as a proxy for SES; however there may be certain biological reasons when race could be an appropriate clinical factor to include in a risk adjustment model
NQF’s Decision to Continue the Trial

- NQF’s Board of Directors approved a new 3-year initiative where NQF will continue to allow the inclusion of social risk factors in outcomes measures submitted for endorsement consideration.

- The new initiative will allow NQF to better assess:
  - Conceptual basis
  - Empirical analysis
  - Social risk factor availability and selection
  - Implementation and impact
  - Disparities reduction strategies tied to measurement
Future of Social Risk Adjustment: States Accounting for Social Risk in Medicaid Payment
Accounting for Social Risk Factors in State Medicaid Programs

- States are already beginning to develop and implement risk adjustment models for Medicaid payment.
- Accounting for social risk in Medicaid payment models create better alignment between the risk of the population and the payment amount.
- More accurate systems provide Medicaid health plans and Accountable Care Organizations (ACOs) with the right incentives.
- Payment accuracy in Medicaid leads to more effective use of tax payer dollars.
Massachusetts Enhanced Medicaid Risk Adjustment Model

- State policy makers worked with researchers at the University of Massachusetts Medical School to build on Massachusetts’ existing risk adjustment model by evaluating the statistical associations between various factors.

- In 2016, Massachusetts announced the development of its “Social Determinant of Health” model, an enhanced risk adjustment model.

- Uses richer methodology that uses factors such as homelessness and neighborhood stress to adjust payment to ACOs.

- New risk-adjustment model is highly predictive.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
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<tbody>
<tr>
<td>Diagnostic Risk Scores</td>
<td>DxCG v 4.2</td>
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<tr>
<td>Age</td>
<td>0-1, 2-5, 6-12, 13-17, 18-24, 25-34, 35-44, 45-54, 55-59, 60+, male and female</td>
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<tr>
<td>Additional Diagnostic Variables</td>
<td>Mental illness, substance use disorders</td>
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<tr>
<td>State Agency Affiliation</td>
<td>Department of Mental Health, Department of Developmental Services</td>
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<tr>
<td>Disability</td>
<td>Entitled to Medicaid due to disability</td>
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<tr>
<td>Unstable Housing</td>
<td>Three or more addresses in single year or ICD-code for homeless on claim</td>
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**Neighborhood Stress Score**

Composite measure from seven census data variables:
- % families with incomes < 100% FPL
- % < 200% FPL
- % adults unemployed
- % households receiving public assistance
- % households with no cars
- % single parent households
- % adults 25+ with no high school degree
Minnesota Identifying Populations with Greatest Health Disparities

- In 2015, the Minnesota legislature directed the Medicaid program to develop a new payment methodology to account for social risk.

- The work addresses:
  - Which social risk factors best identify the populations with poor health outcomes?
    - low educational attainment, poverty, homelessness, mental illness, substance use disorder, and diminished parental functioning.
  - What are the interventions and payment methodologies which best target these populations to meet their needs and reduce health disparities?

- Minnesota Medicaid has built a large data set for running cross tabulations and regressions.
- The state will begin researching and developing interventions.
Potential Next Steps for States

- Identify and work with partners
  - Collaboration with other state agencies and institutions within states

- Use literature and qualitative data to identify leading social risk factors and their impact

- Assess existing sources of data on social risk factors

- Analyze risk factors predictive of costs of health outcomes

- Establish goals and use social risk factors in payment models and initiatives linked to measurement
Questions

Disparities Team Inbox: disparities@qualityforum.org