NQF Social Risk Trial Web Meeting

Disparities Standing Committee

May 6, 2019

Welcome and Roll Call

NQF Project Team

- Elisa Munthali, MPH, Senior Vice President, Quality Measurement
- Erin O'Rourke, Senior Director
- Jermane Bond, PhD, Senior Director
- Nicolette Mehas, PharmD, Director
- Shaconna Gorham, MS, PMP, Senior Project Manager
- Whitney Noël, MPH, Project Manager
- Taroon Amin, PhD, Consultant

Disparities Standing Committee

Disparities Standing Committee Members	
(co-chair) Marshall Chin, MD, MPH, FACP, University of Chicago	**Nancy Garrett**, PhD, Hennepin County Medical Center
(co-chair) Ninez Ponce, MPP, PhD, UCLA Center for Health Policy Research	**Romana Hasnain-Wynia**, PhD, Denver Health
Philip Alberti, PhD, Association of American Medical Colleges	**Lisa Iezzoni,** MD, MSc, Harvard Medical School
Susannah Bernheim, MD, MHS, Yale New Haven Health System Center for Outcomes Research and Evaluation	**David Nerenz**, PhD, Henry Ford Health System
Michelle Cabrera, SEIU California	**Yolanda Ogbolu**, PhD, CRNP-Neonatal, University of Maryland Baltimore, School of Nursing
Juan Emilio Carrillo, MD, MPH, Massachusetts General Hospital	**Bob Rauner,** MD, MPH, FAAFP, Partnership for a Healthy Lincoln
Lisa Cooper, MD, MPH, FACP, Johns Hopkins University School of Medicine	**Eduardo Sanchez**, MD, MPH, FAAFP, American Heart Association
Ronald Copeland, MD, FACS, Kaiser Permanente	**Sarah Hudson Scholle**, MPH, DrPH, National Committee for Quality Assurance
José Escarce, MD, PhD, UCLA David Geffen School of Medicine	**Thomas Sequist**, MD, MPH, Partners Healthcare System
Traci Ferguson, MD, MBA, CPE, WellCare Health Plans, Inc.	**Christie Teigland**, PhD, Inovalon, Inc.
Kevin Fiscella, MD, University of Rochester	**Mara Youdelman**, JD, LLM, National Health Law Program

Meeting Objectives

Meeting Agenda

Trial period update

- Review risk-adjusted measures submitted since fall 2018

Review risk models in use

- Discuss pros and cons of different models
- Consider interpretation of model results

Social Risk Trial Update

Background and Context

- In 2014, NQF convened an Expert Panel to review the NQF policy prohibiting the inclusion of social risk factors.
- The Panel recommended allowing the inclusion of social risk factors when there was a conceptual and empirical basis for doing so
- NQF Board approved a two-year trial period when social risk factors could be included
- The first trial demonstrated that adjusting measures for social risk factors is feasible but challenging
  - *Challenging to access data*
  - *Differing approaches to conceptual rationales and empirical analyses*
- NQF has recently launched a new three-year initiative to continue examining the impact of social risk factors

Overview of Spring 2019 Cycle Submissions

Measures Reviewed

- 72 measures submitted
- 27 were outcome (including PRO-PM)

Risk-Adjusted Measures

- 27 utilized some form of risk adjustment
- 21 provided a conceptual rationale for potential impact of social risk factors. 17 used literature to support, 9 used data (not mutually exclusive)

Measures with Conceptual Relationship

- 12 limited/no impact on model performance; social risk factors not included
- 1 submitted with adjustment for social risk factors

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

Common Social Risk Factors Considered Fall 2017- Spring 2019

- Race/Ethnicity
- Payer
- AHRQ SES Index
- Education
- Employment Status
- Zip Code
- Rural Location

Standing Committee Discussions

Continued use of race as a potential variable

- Example: Surgery Standing Committee review of measures submitted by the Society of Thoracic Surgeons included race as a risk factor
  - *Questioned the developer's approach for including race and ethnicity in the risk-adjustment model.*
  - *Per the developer, race was included as a "genetic factor"*
    - » Relates to effects of medication efficacy and prevalence of certain diseases like diabetes and hypertension, rather than being considered a social factor.
  - *The Committee agreed that race and ethnicity should not be included in the risk-adjustment model*
    - » Preferred performance results to be stratified by race, gender, and other nonmodifiable factors.
    - » Cautioned that race is often an unreliable data source in medical records.

Standing Committee Discussions

- Growing evidence in the literature about the impact on access if measures are not adjusted
- Example: 3366 review by the Admissions/Readmissions Standing Committee
  - Developer conducted preliminary testing to determine whether patient-level social risk factors are associated with measure outcome.
  - The adjusted odds ratio output (1.3) suggested a strong association between dual-eligible status and the outcome.
  - The developer then conducted a comparative analysis of two measures – one including dual status and one omitting dual status and results suggested dual status did not significantly affect facility performance.
  - Dual eligible status was not included.
  - The Committee cautioned lack of adjustment could lead to selection bias

Standing Committee Discussions

- Concerns that social risk factors may be held to a different standard for inclusion
  - *Social risk factor may be statistically significant but does not improve model performance (e.g. C statistic is not improved)*
  - *Concerns that social risk factors are being tested for impact after clinical factors*
- Access to data on social risk continues to be a challenge for developers

Discussion

- Does the Disparities Standing Committee have any guidance for the standing committees as they evaluate measures for appropriate adjustment for social risk?
- Does the Committee have any guidance on how the standing committees should consider concerns about masking disparities?
- Does the Committee have any guidance on the emerging concerns about potentially causing access challenges?

Guidance on Risk-Adjustment Methodologies

Background

What is risk adjustment?

Risk adjustment is a statistical approach that allows patient-related factors (e.g., comorbidity and illness severity) to be taken into account when computing performance measure scores, thereby improving the ability to make fair and correct conclusions about quality. Although there are various ways to risk adjust, the most common method is use of multivariable statistical models.

Background: Why risk adjust?

- Patients are not randomly assigned to healthcare units, and the characteristics of the patients treated varies across healthcare unit
- Avoid incorrect inferences
- In the context of comparative performance assessment, the general question being addressed is:
  - *How would the performance of measured entities compare if, hypothetically, they had the same mix of patients?*

Recommendations Related to NQF Criteria and Processes Related to SDS Adjustment

Recommendation 1: When there is a conceptual relationship (i.e., logical rationale or theory) between sociodemographic factors and outcomes or processes of care and empirical evidence (e.g., statistical analysis) that sociodemographic factors affect an outcome or process of care reflected in a performance measure:

- those sociodemographic factors should be included in risk adjustment of the performance score (using accepted guidelines for selecting risk factors) unless there are conceptual reasons or empirical evidence indicating that adjustment is unnecessary or inappropriate;

AND

- the performance measure specifications must also include specifications for stratification of a clinically adjusted version of the measure based on the sociodemographic factors used in risk adjustment.

Recommendations Related to NQF Criteria and Processes Related to SDS Adjustment

Recommendation 2: NQF should define a transition period for implementation of the recommendations related to sociodemographic adjustment. During the transition period, if a performance measure is adjusted for sociodemographic status, then it also will include specifications for a clinically adjusted version of the measure only for purposes of comparison to the SDS-adjusted measure.

Recommendations Related to NQF Criteria and Processes Related to SDS Adjustment

Recommendation 3: A new NQF standing committee focused on disparities should be established.

- Review implementation
- Assess trends in disparities
- Monitor for unintended consequences
- Review and provide guidance on methodologies for adjustment and stratification

Recommendations Related to NQF Criteria and Processes Related to SDS Adjustment

Recommendation 4: The NQF criteria for endorsing performance measures used in **accountability applications** (e.g., public reporting, pay-for-performance) should be revised as follows to indicate that patient factors for risk adjustment include both clinical and sociodemographic factors:

2b4. *For outcome measures and other measures when indicated (e.g., resource use, some process):*
*an evidence-based risk-adjustment strategy ~~(e.g., risk models, risk stratification)~~ is specified; is based on patient factors (including clinical and sociodemographic factors) that influence the measured outcome ~~(but not factors related to disparities in care or the quality of care)~~ and are present at start of care;[14,~~15~~] and has demonstrated adequate discrimination and calibration **OR** rationale/data support no risk adjustment~~/ stratification~~.*
14. Risk factors that influence outcomes should not be specified as exclusions.
~~15. Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care, such as race, socioeconomic status, or gender (e.g., poorer treatment outcomes of African American men with prostate cancer or inequalities in treatment for CVD risk factors between men and women). It is preferable to stratify measures by race and socioeconomic status rather than to adjust out the differences.~~

Recommendations Related to NQF Criteria and Processes Related to SDS Adjustment

Recommendation 5: The same guidelines for selecting clinical and health status risk factors for adjustment of performance measures may be applied to sociodemographic factors, and include the following:

- Clinical/conceptual relationship with the outcome of interest
- Empirical association with the outcome of interest
- Variation in prevalence of the factor across the measured entities
- Present at the start of care
- Is not an indicator or characteristic of the care provided (e.g., treatments, expertise of staff)
- Resistant to manipulation or gaming
- Accurate data that can be reliably and feasibly captured
- Contribution of unique variation in the outcome (i.e., not redundant)
- Potentially, improvement of the risk model (e.g., risk model metrics of discrimination, calibration)
- Potentially, face validity and acceptability

Recommendations Related to NQF Criteria and Processes Related to SDS Adjustment

Recommendation 6: When there is a conceptual relationship and evidence that sociodemographic factors affect an outcome or process of care reflected in a performance measure submitted to NQF for endorsement, the following information should be included in the submission:

- A detailed discussion of the rationale and decisions for selecting or not selecting sociodemographic risk factors and methods of adjustment (including a conceptual description of the relationship to the outcome or process; empirical analyses; and limitations of available sociodemographic data and/or potential proxy data) should be submitted to demonstrate that adjustment incorporates relevant sociodemographic factors unless there are conceptual reasons or empirical evidence indicating that adjustment is unnecessary or inappropriate.
- In addition to identifying current and planned use of the performance measure, a discussion of the limitations and risks for misuse of the specified performance measure.

Recommendations Relevant to NQF Policy

Recommendation 7: NQF should consider expanding its role to include guidance on implementation of performance measures. Possibilities to explore include:

- guidance for each measure as part of the endorsement process;
- guidance for different accountability applications (e.g., use in pay-for-performance versus pay-for-improvement; innovative approaches to quality measurement explicitly designed to reduce disparities).

Recommendation 8: NQF should make explicit the existing policy that endorsement of a performance measure is for a specific context as specified and tested for a specific patient population (e.g., diagnosis, age), data source (e.g., claims, chart abstraction), care setting (e.g., hospital, ambulatory care), and level of analysis (e.g., health plan, facility, individual clinician). Endorsement should not be extended to expanded specifications without review and usually additional testing.

Recommendations about Broader Related Policy Issues

Recommendation 9: When performance measures are used for accountability applications such as public reporting and pay-for-performance, then purchasers, policymakers and other users of performance measures should assess the potential impact on disadvantaged patient populations and the providers/health plans serving them to identify unintended consequences and to ensure alignment with program and policy goals. Additional actions such as creating peer groups for comparison purposes could be applied.

Recommendation 10: NQF and others such as CMS, Office of the National Coordinator (ONC) for Health Information Technology, and the Agency for Healthcare Research and Quality (AHRQ) should develop strategies to identify a standard set of sociodemographic variables (patient- and community-level) to be collected and made available for performance measurement and identifying disparities.

Guidance on Methodologies for Adjustment and Stratification

- 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*

Guidance on Methodologies for Adjustment and Stratification

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*

Case Study

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

Discussion

- What guidance does the Disparities Standing Committee have for developers when developing risk adjustment models?
- What guidance does the Committee have for how developers should interpret risk model results?
- How should NQF standing committees consider varying interpretations when evaluating measures for endorsement?

Health Equity Program Update

NATIONAL QUALITY FORUM

Aetna Social Determinants of Health Payment Summit

August 5, 2019
8:30am - 4:00 pm
First Amendment Lounge
The National Press Club

Hashtag: #SDOHPaymentSummit

Project Purpose

Together, NQF and the Aetna Foundation will host a SDOH Payment Summit including payers, providers, community leaders, medical economists, policy leaders and others to deliver a **National Call to Action** outlining a set of 3-5 best, promising, and emerging recommendations for advancing payment's role in supporting successful innovations in SDOH to promote health equity.

Project Overview

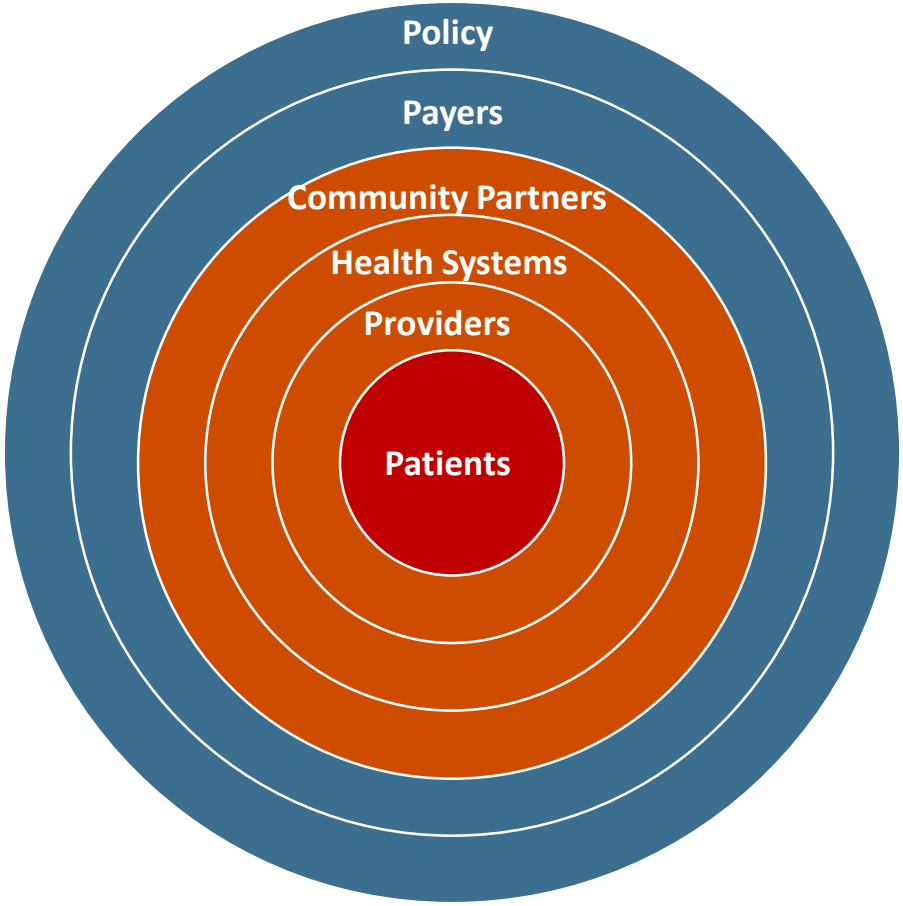
Environmental Scan

Multistakeholder Workgroups

In-Person Summit

Guiding Frameworks

Socio-Ecological Model and Implementation Science



Implementation Outcomes

- Acceptability
- Costs
- Fidelity
- Scalability
- Reach
- Uptake
- Workforce

Service Outcomes

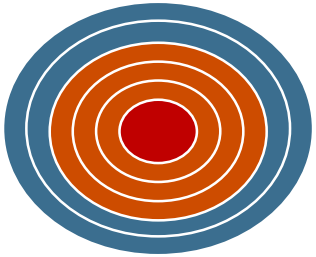
- Efficiency
- Safety
- Effectiveness
- Equity
- Patient-Centeredness
- Timeliness

Patient Outcomes

- Symptoms
- Functioning
- Satisfaction
- Quality of Life

Socio-Ecological Model

Overview



- Each stakeholder group has a set of responsibilities to ensure the success of addressing SDOH through payment.
  - *Conversely, each agent in the health ecosystem can intentionally or inadvertently support or hinder this process.*
- **Patients** are a key stakeholder and are at the core of the health ecosystem.
- **Community Partners** include agents in the built environment beyond the traditional healthcare system that can also influence the health and well-being of individuals and populations.
- **Policy** transcends the different layers of influence.

Can **payers** also play a transcending role by investing in SDOH interventions that deliver meaningful impact on health outcomes, and contribute to broader economic benefits?

Implementation Science
Overview

- An implementation science approach will facilitate the development of actionable recommendations that answer the overarching questions of, “Who benefits?” and “Who’s responsible for what?” (accountability/division of labor)

SDOH Payment Summit Workgroup Members

Eva Powell, Senior Manager, Quality Programs, Alliance Community Health Plans (ACHP)

Karen DeSalvo, MD, MPH, MSc, Senior Advisor, Leavitt Partners, National Alliance to Impact SDOH

Shira Hollander, JD/MPP, Senior Associate Director, Policy Development, American Hospital Association

U. Michael Currie, MPH, MBA, SVP & Chief Health Equity Officer, UnitedHealth Group

Ernest Moy, MD, MPH, Executive Director, Office of Health Equity, Veterans Health Administration

Cory Bradley, MSW/MPH, ABD, Co-founder, Black Men Loving Black Men

Loren Robinson, MD, MSHP, FAAP, Deputy Secretary for Health Promotion and Disease Prevention, Pennsylvania Department of Health, Commonwealth of PA

***David Nerenz**, **Ph.D.,** Director, Center for Health Policy and Health Services Research, Henry Ford Health System

Amy Fahrenkopf, MD, MPH, Chief Medical Officer & SVP Value Based Strategy, Socially Determined

Andrew Renda, MD, MPH, Corporate Strategy Director, Population Health -Bold Goal, Humana, Inc.

Brock Slabach, MPH, FACHE, Senior Vice President, National Rural Health Association

Caprice Knapp, Ph.D., Federal Policy Director, Molina Healthcare

Griffin Myers, MD, MBA, FACEP, Co-Founder and Chief Clinical Officer, Oakstreet Health

Kate Shamszad, MS, MPH, Senior Program Officer, New Jersey Health Care Quality Institute

Shannon Phillips, **MD, MPH, FAAP**, Chief Patient Safety and Experience Officer, Intermountain Healthcare

Joan Brennan, DNP, Chief of Quality and Safety, Geisinger Health System

Von Nguyen, **MD, MPH**, Deputy Associate Director for Policy and Strategy, Centers for Disease Control and Prevention (CDC)

Damon Francis, **MD**, Chief Clinical Officer, Health Leads

Deborah Donovan, Director, Social Determinants of Health, (BlueCross BlueShield) Highmark Health

Dolores Acevedo-Garcia, Ph.D., MPA-URP, Professor of Human Development and Social Policy; Director, Institute for Child Youth and Family Policy, Brandeis

***Disparities Standing Committee Member**

SDOH Payment Summit Workgroup Members
(continued)

Anthony Shih, MD, MPH, President, United Hospital Fund

Cara James, **Ph.D**., Director for the Office of Minority Health, Centers for Medicare & Medicaid Services.

Bruce Sherman, **MD, FCCP, FACOEM**, Medical Director for the Employers Health Purchasing Corporation, National Alliance of Healthcare Purchaser Coalitions

Danielle Lloyd, MPH, SVP, Private Market Innovations & Quality Initiatives, America's Health Insurance Plans (AHIP)

Vivek Garg, MD, MBA, Chief Medical Officer, New Markets, CareMore Health System

Brienne Colston, Executive Director, Brown Girl Recovery

DeDe Davis, Vice President, Dental Management and QI, MCNA Insurance Company

Haleta Belai, Director, Social Determinants of Health, Centene Corporation

Katherine Hobbs Knutson, MD, MPH, Director of Behavioral Health, BlueCross BlueShield of North Carolina

Laura Gottlieb, **MD, MPH**, Associate Professor of Family and Community Medicine, UCSF SIREN

***Traci Thompson Ferguson, MD, MBA, CPE,** Chief Medical Director, Medical Management, WellCare Health Plans, Inc.

Amy Liebman, **MPA, MA**, Director of Environmental Health and Occupational Health, Director, Eastern Region Office, Migrant Clinicians Network

Andrea Gelzer, MD, MS, FACP, Sr. Vice President, AmeriHealth Caritas

Deborah Paone, **DrPH**, Policy Consultant and Performance Lead, Special Needs Plan Alliance

Edo Banach, **JD**, President and CEO, National Hospice and Palliative Care Organization

***Thomas Sequist**, **MD, MPH**, Chief Quality and Safety Officer, Partners HealthCare

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***Marshall Chin, MD, MPH**, Professor of Healthcare Ethics, University Chicago Medicine

Mary Ann Christopher, MD, Vice President, Clinical Operations and Transformation, Horizon BCBSNJ

Sarita Mohanty, MD, MPH, MBA, Executive Director, Community-Clinical Care Integration, Kaiser

***Disparities Standing Committee Member**

SDOH Payment Summit Co-Moderators

Rishi Manchanda, MD, MPH
Founder and President
Health Begins

Joan Reede, MD, MS, MPH, MBA
Dean for Diversity and Community Partnership
Harvard Medical School

SDOH Payment Summit

Meeting Objectives

- Identify the critical success factors of SDOH interventions, including which interventions to invest in;
- Examine alternative payment (APMs) used to deliver meaningful impact on health outcomes in a budget neutral or positive return;
- Formulate a set of 3-5 best, promising, and emerging recommendations for advancing payment's role in supporting successful innovation in SDOH to advance health equity.

Multistakeholder Workgroup

Over three conference calls, multistakeholder workgroups are building on the current environmental scan and aim to address questions related to payment's role in addressing SDOH such as:

- **Payer Leadership:** Why should public and private payers account for SDOH in setting payments and measuring quality?
- **Quality Improvement:** What methods can public and private payer programs use to examine SDOH and account for them in their payment and/or quality improvement policies?
- **Stakeholder Engagement:** What is the **current** vs. **ideal** role of the different stakeholders (e.g., Policy, Community, Health systems, Providers, Patients) in advancing payment's role in addressing SDOH?
  - *What are the barriers to addressing SDOH through payment at these different levels of the health ecosystem?*

Multistakeholder Workgroup (continued)

- **Implementation Outcomes**
  - ***Acceptability:*** *How are current SDOH innovations and APMs perceived by health systems and providers?*
  - ***Costs/Scalability:*** *What initial investments (e.g., time, resources, workforce training) are needed to implement, sustain, and bring payment models that address SDOH to scale?*
- **Service Outcomes**
  - ***Efficiency:*** *What are the cost-savings and avoidable waste in healthcare spending achieved as a result of addressing SDOH through payment?*
  - ***Effectiveness:*** *To what extent have existing payment models been successful in addressing SDOH?*
  - ***Equity:*** *How does investments in SDOH address/rectify persistent historical and institutional disparities in healthcare quality, access, and outcomes?*
- **Patient Outcomes**
  - ***Symptoms and Functioning****: Based on the evidence, what patient outcomes are prime targets for measuring the success of payment in addressing SDOH?*
  - ***Satisfaction:*** *To what extent can incentivizing the integration of SDOH into clinical workflow enhance the patient-provider relationship?*

NQF Staff

- **Shantanu Agrawal, MD, MPhil**, President and CEO
- **Kathleen Giblin**, Senior Vice President, Quality Innovation
- **Jermane Bond, PhD**, Senior Director, Quality Measurement
- **Shannon Berry**, Project Manager, Quality Innovation
- **Tatiana Munoz**, Project Associate, Quality Innovation

NQF Member and Public Comment

Next Steps

Adjourn