Evaluating Medicaid's Use of Quality Measurement to Achieve Equity Goals

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Contents

🎤 Introduction

With the COVID-19 pandemic, health care stakeholders are more acutely aware of health inequities and the role that social risk factors play in shaping health care use, outcomes and health disparities. Social risk factors include socioeconomic position; race, ethnicity and cultural context; gender; social relationships; and residential and community context.[1] There is a growing body of evidence highlighting the importance of integrating health equity into quality measurement frameworks.[2-5] State Medicaid programs and Medicaid managed care organizations (MCO) serve populations with low incomes or low access to health care services, which are more likely to experience the negative effects of social risk factors or social determinants of health (SDOH). For example, over 40% of individuals enrolled in Medicaid or in the Children's Health Insurance Program (CHIP) in 2018 had family incomes below 100% of the federal poverty level, and more than half (61.1%) of the program's enrollees identify as Black, Hispanic or another non-White race or ethnicity.[6] Given the intersection of social risk and structural and interpersonal racism, Medicaid agencies and MCOs can be at the forefront of measuring and addressing health equity.

These agencies and health plans can play a unique role in connecting health and social services systems for their member populations and directly addressing disparities experienced by communities of color and other underserved communities. While states have made significant strides in integrating health and social services, there is currently no standard framework for health equity measurement for state Medicaid agencies to leverage in accountability models. Without one, outcomes of efforts to ensure that Medicaid MCOs provide high-quality care and increase health equity among their served populations remain difficult to assess.

This report describes the current state of health equity quality measure use and application among state Medicaid programs. Future work under this project will result in a recommendation for a common set of health equity quality measures and domains, as well as initial research on concepts for health equity measure composites and summary scoring. The work aims to lay the groundwork for standardized health equity measurement and reporting that state Medicaid programs and other purchasers can leverage for oversight and accountability.

With the recent increased focus on health equity and reducing health disparities, other summary reviews have contributed to the research and understanding of accountability for health equity overall and for Medicaid enrollees in particular.[7–10] For example, Manatt Health recommended strategies for improving race and ethnicity data collection to promote health equity in California.[7] The paper noted existing challenges to collecting these data, recommended ways to overcome challenges and outlined how, with access to better data, potential health equity measures could include indicators with race and ethnicity stratifications in a variety of domains. An issue brief authored by Bailit Health outlined a five-step approach for using measurement in pursuit of health equity. The brief also provided examples from states that have begun "identifying, evaluating, and reducing health disparities within their Medicaid managed care programs," per CMS 2016 final rule requirements.[8] The authors expanded on this work in 2020, describing preliminary state efforts to develop and implement a social risk factor screening measure.[9] Additionally, a recent report from the Office of the Assistant Secretary for Planning and Evaluation (ASPE) at the U.S. Department of Health and Human Services identified health equity measurement approaches and recommended those that merit consideration for inclusion in Medicare's value-based purchasing programs.[2]

This report adds to the previous work and understanding of equity in Medicaid in a variety of ways. While previous efforts focused on improving more granular data collection or provided examples of how data can be stratified to report on health disparities, this review focuses on measurement, identifying a compendium of health equity measurement approaches either in use in current programs (state or otherwise) or considered appropriate for health equity measurement. Additionally, many state Medicaid programs are actively completing requests for proposal (RFP) for updated contracts with new equity requirements. The timing of this review allowed inclusion of up-to-date information on how various states approach health equity in their Medicaid programs and the measures or measurement approaches they want to use. Finally, this review included interviews with state Medicaid agencies, whose perspectives allowed validation of findings from the literature, as well as inclusion of nuance that may not be identifiable from the literature or contracts alone, such as strategies or measurement approaches that were considered but ultimately not used, states' criteria for accountability models and approaches to their overall equity strategy. The report is structured on the following themes: state approach to overall equity strategy, priority populations, current use of measurement for equity, approaches to health plan accountability and strategies for state engagement with stakeholders and communities. Throughout, examples from interviewed states are highlighted as case studies.

Methods

The goal of this review was to evaluate the current status of health equity quality measurement and application in Medicaid managed care. Although measures and their use were the primary focus, factors that drive state decisions about equity measurement were also examined, such as how states defined their overall equity strategies, how priority populations for equity focus were identified and how different stakeholders were engaged in the process.

The work was conducted in three parts: evidence review, state Medicaid interviews and evaluation and synthesis.

Evidence Review

The evidence review was charged with two aims: First, evaluate the current state of equity measurement and accountability in Medicaid managed care; second, broadly examine measures and measure types identified as "health equity measures," how they were used in practice and existing measurement best practices or gaps. The latter aim was not restricted to applications in Medicaid but is discussed in that context. A search strategy was defined accordingly, with sources identified through:

1. Structured Pub-Med search of peer-reviewed literature.

2. Web search and targeted review of organizations and initiatives active in the area of quality measure and/or Medicaid strategy, with a focus on identifying relevant gray literature.

3. Published state Medicaid managed care contracts, RFPs or public presentation of equity and/or quality measurement strategy.

4. Assessment and collection of relevant secondary references from review of sources identified in the initial searches.

A detailed description of how this strategy was executed is provided in Appendix 1. The review of state contracts was based on a purposive sample. States previously identified as having equity measurement strategies (formal or informal) in prior literature, or that had announced recent health equity activities related to managed care contracts, were selected.[3,8,9,11] In addition, states that participated in supporting interviews were asked to provide documentation relevant to their equity measurement strategies in advance.

Interviews With State Medicaid Representatives

To better understand the perspectives and decision-making considerations behind different approaches to equity measurement and related strategy elements, qualitative interviews were conducted with state Medicaid representatives. Nine states were invited to participate, representing different geographies, populations, Medicaid expansion status and public health priorities. Seven states agreed to participate (California, Georgia, Louisiana, Michigan, North Carolina, Oregon, Pennsylvania); two states declined or did not respond. Interviews were conducted throughout August and September 2021. Each interview lasted one hour. States were asked to identify appropriate participants, with most identifying leadership representing their medical and quality functions. If a state identified multiple stakeholders for participation, interviews were conducted in a group setting. Interviews were semi-structured. One NCQA project team member led the interview, following a set of structured prompt questions, although conversation was not restricted to prespecified questions. Two NCQA project team members took notes independently and interviews were recorded for reference.

Evaluation and Synthesis

State Medicaid stakeholder interviews and contracting documents were evaluated on the following areas: overall health equity strategy goals and intent, priority populations, health equity measurement approach, methods of equity evaluation and accountability (including quantitative approaches to evaluating equity performance) and stakeholder engagement. These themes are echoed in the structure of this document. For each theme, findings from the evidence review are summarized, then contextualized by insights from state interviews, ending with a representative case study from state interviews.

During source material review, quality measures identified explicitly for use in evaluating health equity (either through direct intent or stratification) were extracted and inventoried. Results are presented in Appendix 2 and discussed in the relevant sections below.

State Medicaid Approaches to Overall Equity Strategy

States take different approaches to addressing existing inequities and achieving equity. This section provides a high-level summary of approaches gleaned from review of state contracts and literature, and from interviews conducted with state representatives. Both similarities and differences are highlighted. While the Medicaid Managed Care contracts and published literature provided useful information, the interviews were especially informative and allowed deeper insight into states' rationale and motivation for focusing on specific resources and efforts.

In a summary report by Bailit Health, the authors identified five steps for using measurement to pursue equity: (1) assess landscape through stratification of existing measures; (2) ongoing monitoring and reporting of disparities; (3) identify reduction targets and select interventions; (4) determine/implement measurement approaches; and (5) examine performance and reassess program design.[8] A case study provided an example of step 1, using a California health system. The study illustrated how a health system using the 1115 waiver could stratify eight key quality measures to address disparities, using electronic health records.[12] Many interviewees reported using one or more steps noted in the Bailit report; several reported stratifying measures to examine disparities. The most common stratification was by race and/or ethnicity, but gender, language and geography (rural vs. urban) were also mentioned. States that already stratify measures include Louisiana, North Carolina, Pennsylvania, Michigan and Georgia. The expansion of states that require stratification may be influenced by external standardization efforts. For example, in February 2021, Florida communicated a new strategy to its Medicaid managed care plans, requiring five select Healthcare Effectiveness Data and Information Set (HEDIS®) quality measures to be stratified and reported by race and ethnicity.[13]

A recent review of state efforts to address equity highlights additional similarities across different Medicaid programs. In addition to stratification, common themes include integrating financial incentives tied to quality measures and risk.[3] In interviews, several states discussed accountability models that were under consideration or already implemented. Oregon, which emphasizes the upstream causes of disparities, is working to incentivize upstream metrics for Coordinated Care

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1 HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

Organizations, such as measures of language access and social/emotional health of children. Pennsylvania requires a penalty payment from plans below the NCQA 50th percentile benchmark on a subset of 12 HEDIS measures and pays an incentive if they meet the benchmark. Additional accountability approaches are discussed in detail below.

SDOH and social needs are increasingly incorporated into equity efforts.[14] Two summary reports highlighted current state efforts to address social needs.[11,15] Examples of strategies include partnering with community-based organizations and social services and MCO payment initiatives. Some states explicitly require reimbursement for SDOH-related services, such as reimbursement for ICD-10 Z codes and for network providers, if it is confirmed that the member received services.[16] Common domains of SDOH mentioned in the reports were food insecurity, housing, employment, education and violence/abuse. Most states interviewed were able to articulate an existing or planned approach to address SDOH. Examples include requiring MCOs to screen for social needs for every Medicaid recipient and reevaluating existing health risk assessments to ensure inclusion of SDOH.

Interviews solicited additional strategies employed by states to address equity, including the formation of health equity action teams, or HEATs, as exemplified by the Louisiana Department of Health. The three primary objectives of the HEAT are to review Medicaid policies with a health equity lens, understand the enrollees' experience and influence MCOs' work on health equity by including stronger language in contracts. The HEAT developed a policy review checklist to ensure that language in Medicaid documents reflects the agency's commitment to health equity. A California interviewee emphasized a renewed emphasis and improved coordination on three focus areas across the state—children's preventive care, maternity care (especially postpartum) and integrated behavioral health—chosen largely because of known disparities in those areas and replacing the more localized approach of previous years. In a further effort toward improved coordination, California is also working to align Medicaid managed care efforts with other public payers (CalPERS and Covered California) to maximize influence across the state and build on current momentum. Other examples from different states include developing regional accountable care organizations, to acknowledge that disparities need to be tackled locally (Pennsylvania); addressing large gaps in data collection and improving the quality of the data, particularly on race and ethnicity (Georgia); focusing on implementing what states describe as "anti-racist" practices and principles as a necessary first step (Oregon, Michigan); and continuing investment in an existing program to help providers connect patients to community resources (North Carolina).

Some states could share only limited details because they were in their procurement cycle. Additional components of a state's equity strategy, such as identified priority populations and use of quality measures and accountability, are explored in the sections below.

Louisiana Medicaid's health equity strategy is a strong example of an approach that heavily weights both internal assessment and health plan performance measurement. **See the case study below for details**.

CASE STUDY: Louisiana

The Louisiana Department of Health's (LDH) overall health equity strategy is two-pronged. The LDH Medicaid's Health Equity Action Team (HEAT) began by looking internally to update policies and contracting and consumer engagement approaches through an equity lens. Louisiana Medicaid also works toward health equity through a traditional measurement and accountability approach: The state measures managed care plan performance and holds plans accountable for reducing identified disparities.

Internal Assessment and Equity-focused Structural Changes

In its internal assessment, the Medicaid HEAT identified three areas of improvement:
(1) Medicaid managed care contracts; (2) Medicaid policies; and (3) Medicaid enrollee experience surveys. Through a combination of technical assistance, research and stakeholder advisory groups, the HEAT identified gaps and developed recommendations to improve contracts (e.g., comprehensive application of cultural and linguistically appropriate [CLAS] standards). The HEAT reviewed Medicaid policies in a standardized way to find gaps and make equity-focused improvements. It also updated an existing enrollee experience survey to make it a more useful source of enrollee experience information that can inform state action on reducing disparities.

Performance Measurement and Quality Improvement

LDH identified race and ethnicity, maternal health, child health and rurality as focus areas for reducing disparities. Through its managed care contracts, the state requires MCOs to report on disparities. LDH measures performance within and across plans, over time. It also benchmarks itself against other states. When Medicaid MCOs perform below expectations, the state may withhold 1% of the reimbursement for care provided to Medicaid enrollees.

Priority Populations and Focus Areas

Identifying priority populations and focus areas that are more likely to experience health disparities and inequities helps target groups that would most benefit from interventions, strategies and programs. Such identification is an integral component of health equity strategies. Organizations and entities may differ in their definitions and identification of focus areas; however, these groups are have often been negatively impacted by inequitable policies and treated unfairly by the health care system, and may be considered "less advantaged" or "at greater social risk."[2,17] Focus areas are identified by multiple characteristics, including sociodemographic and geographic factors, as well as illness or disease-specific factors. Although using measurement to improve health equity can apply across the general population, targeting focus areas can promote equity and prevent unintentional exacerbation of disparities.[8] Different groups and populations vary in their health outcomes and care experiences. Delving deeper into these variances could inform development of measures, strategies, approaches and areas of focus and accountability for achieving health equity. For this report, "focus areas" includes priority populations.

Literature supports the importance of incorporating identification of focus areas into health equity strategies aimed at eliminating disparities and measuring health equity performance. The National Quality Forum (NQF) outlined a roadmap for promoting health equity and eliminating disparities, and reiterates the significance of focusing on populations with social risk factors in the first step, "Identify and Prioritize Reducing Health Disparities."[18] The Agency for Healthcare Research and Quality's (AHRQ) annual National Healthcare Quality and Disparities Report, which tracks approximately 250 health care process, outcome and access measures, was revised in 2014 to include measures of key populations including women, children, older adults, rural and inner cities, people with disabilities and people at the end of life.[19]

States' emphases on the significance of identifying focus areas are demonstrated through frequent inclusion of these areas in contracting documents. Some state Medicaid Managed Care contracts include expectations for addressing health equity in specific focus areas. The Ohio Department of Medicaid outlines requirements for population health and quality improvement strategies for specific groups, including children, woman, infants and people with behavioral health and chronic conditions, with particular intention to improving health equity.[16] A report on Washington Medicaid's Transformation Project, evaluating equity and disparities performance in 10 measurement domains, identified specific racial and ethnic groups, people in rural areas and people with chronic conditions as priority populations.[20]

During interviews, all seven states shared that they identified focus areas for accountability, intervention or program focus as part of their equity strategies. Responses are summarized in the figure below. States adopted different approaches to identify subpopulations; in some cases, their approach was related to their overall health equity strategies. All states reported that they identified race and ethnicity as focus areas. Oregon and Michigan stakeholders described their strategies in terms of "anti-racism," with a focus on implementing approaches that recognized the historic and current impact of systemic racism and taking action to address health equity through targeted approaches for racial and ethnic groups that have been historically disadvantaged by health systems and policy. Pennsylvania's health equity strategy is aligned with health quality measurement and outcomes, and its focus areas are identified according to population performance on quality domains such as HEDIS measures of well-child visits, diabetes and hypertension. Subpopulations of focus are then identified by examining statewide and regional data.

Maternal and child health were frequently a focus of state equity strategies, with six of the seven interviewed states identifying one or both or both as a priority (Figure 1). This included many aspects of maternal and child health, such as maternal prenatal and postpartum care, maternal mortality, low birth weight, well-child visits and social and emotional health. Some states specified subpopulations for their maternal and child health efforts, driven by identified disparities such as maternal mortality for African American woman (Georgia) and child health for African American and Latinx children (North Carolina). Other focus areas for equity strategy included chronic conditions (diabetes and high blood pressure), behavioral health (substance use disorder and mental health), disability, COVID-19 disparities, rurality and urbanicity, geography, language, incarceration, utilization, home and community-based services, sexual orientation and gender identity. The graph below displays the frequency of focus areas identified during interviews with state Medicaid representatives.

Figure 1: Frequency of Priority Populations and Focus Areas Identified by Interviewed States
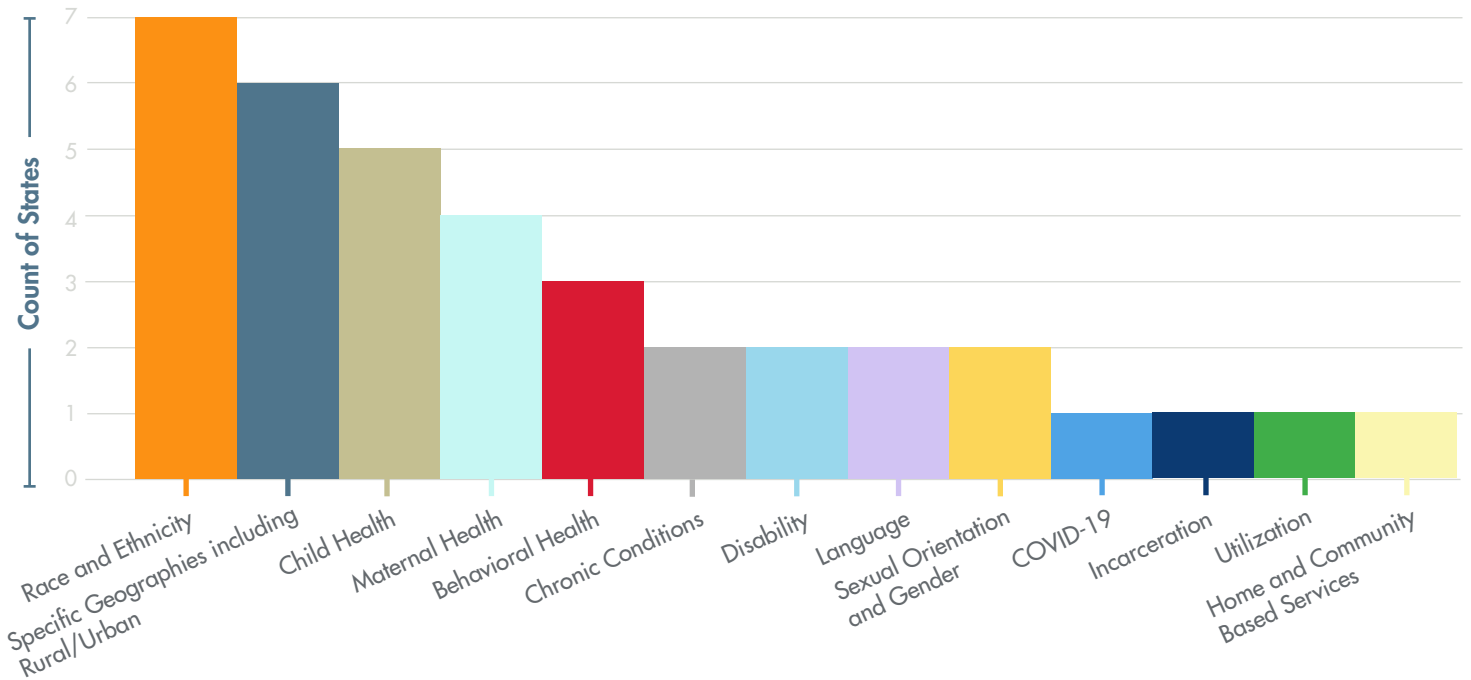
Georgia's Medicaid equity strategy has a strong emphasis on targeting actions to the needs of priority populations, with a focus on African American mothers. **See the case study below for details.**

CASE STUDY: Georgia

Approach to Measuring Health Equity

Georgia Medicaid's approach to measuring health equity begins by recognizing that there are inequities, identifying where inequities exist and determining which populations are most affected. Interventions and efforts then focus on addressing identified inequities in target populations.

Addressing Maternal Mortality

Georgia Medicaid followed this approach to address high maternal mortality rates and realized that health outcomes may be different depending on race, ethnicity and location. African American mothers were prioritized, given the high occurrence of disparities in this population. Within the African American mothers, Georgia Medicaid explored differences in rural Georgia, compared to urban areas of the state. Once focus areas were identified, Georgia Medicaid targeted more controlled settings to identify root causes and examine factors such as social risk and social determinants of health. Intervention strategies were based on these causes and factors.

Importance of Identifying Priority Populations and Focus Areas

Georgia Medicaid recognized identifying priority populations and focus areas as integral to measuring health equity and to its overall health equity strategy, which was applied to address disparities in maternal mortality. This allowed development of a concerted effort to positively impact results.

Use of Measurement

Equity and quality measurement are intrinsically connected. A recent perspective by the National Academies of Medicine presented an agenda for equity in health care quality improvement, highlighting that "what's measured gets improved."[4] Measurement-related recommendations include implementing stratification as the norm, rather than the exception, using an equity lens during selection of accountability measures and considering new index approaches to summarizing multiple domains of equity. A definition of "health equity measures" has been proposed to build consistency in discussion and application: "an approach to illustrating or summarizing the extent to which the quality of health care provided by an organization contributes to reducing disparities in health and health care at the population level for those patients with greater social risk factor burden by improving the care and health of those patients."[2]

To evaluate the current state of health equity measurement, an inventory was performed of measures and performance metrics identified for use in evaluating health equity and health disparities. An extensive, but not exhaustive, list is presented in Appendix 2. Of 130 measures identified, 59 had documented use in at least one state Medicaid managed care contract. Measurement approaches generally fell into four categories, described below with representative examples.

Stratification of existing process, outcome and experience measures

Most stratified measures focus on clinical and utilization domains with evidence of disparities, such as maternal and child health, asthma, cardiovascular disease and access to care. The NQF framework for disparities-sensitive quality measures was frequently cited as a best practice for identifying measures to be stratified for equity application.[2,18] Criteria comprise measure denominators that include a large number of patients affected by social risk factors, denominators focused on ambulatory care settings and outcome measures with a clear link between measurement and action. As of 2017, NQF had identified 67 of these measures (flagged in Appendix 2), and the list is expected to lengthen as criteria are applied to additional measures over time.[18]

REPRESENTATIVE MEASURES

- **Colorectal Cancer Screening**
- **Acute Myocardial Infarction Mortality Rate**
- **Childhood Immunization Status**
- **Hemoglobin A1C Poor Control**

A growing number of states now (or will soon) evaluate performance on quality measures by equity-targeted stratifications (e.g., race, ethnicity, gender, rurality).[8,13] The choice of measures generally corresponds to Medicaid priority populations, with selection of a focused set for equity evaluation. Among measures identified as used in state Medicaid programs for equity purposes (Appendix 2), Comprehensive Diabetes Care, Child and Adolescent Well-Care Visits and Prenatal and Postpartum Care were most frequently used for stratification. Some states have taken a broader approach, stratifying across their entire measure portfolio and using results to identify areas for further focus.[21] While some measures identified by NQF as disparities-sensitive are used in current state Medicaid efforts, neither review of state documentation nor state interviews identified evidence of direct application of the NQF criteria for selecting Medicaid equity measures. Successful stratification relies on complete and accurate underlying data, such as member race and ethnicity. These data remain challenging to collect and questions have been raised about accuracy of current Medicaid data sources, noting substantial variation.[10] The Transformed Medicaid Statistical Information System (T-MSIS) is a national aggregation of state Medicaid and CHIP claims and enrollment files. An evaluation of 2019 T-MSIS data identified race and ethnicity data quality as of medium concern for 26% of states, of high concern for 32% of states and unusable for 9% of states.[22]

REPRESENTATIVE MEASURES

- **Social Needs Screening and Referral**

- **Access to Community Health Workers or Other Community Services**[23]

- **Meaningful Access for Members with Limited English Proficiency**[24]

Direct measures of social needs and SDOH

Although clinical measures achieved some consistency in implementation, social needs measures varied substantially in specification, target population and data source. Variations may be driven by the diversity of screening tools available, the desire to tailor tools to specific populations and the lack of standards for capturing and storing screening results.[25,26] Recent efforts such as the Gravity Project may support more standardized approaches.[27] There has been a slow but marked growth in state Medicaid use of quality measures purposely designed to address equity or SDOH, including multiple states that have developed de novo measures. In 2018, only two states were noted to have SDOH-specific measures.[11] Michigan has implemented measures of screening for SDOH and New Mexico has a metric of "at least 3% of enrollees served by a Community Health Worker (or similar)." Since 2018, more states have implemented, or plan to implement, such measures, including Massachusetts, North Carolina, Rhode Island, Oregon, Michigan, Tennessee and Pennsylvania.[9,26,28–30] Some implementation strategies focus generally on screening for unmet social needs, while others are more specific, such as Oregon's measure of "Meaningful Access to Health Care Services for Persons With Limited English Proficiency."[24] Of note, Pennsylvania's SDOH screening measure specifies use of ICD-10 Z codes submitted via administrative claims, the first to explicitly do so.[29,31]

Summary indices

Index approaches seek to integrate performance on multiple quality targets; some add the layer incorporating multiple domains of social risk. The Health Equity Metric compares outcomes of individuals in groups that experience sustained, substantial exclusion because of their social identity to the average outcomes of a defined privileged group.[32] The QUIDS has both 7 and 61-item variants, with the 7-item scale integrating measures of chronic illness (diabetes, blood pressure, lipids), prevention (mammography, colonoscopy, immunization) and infant health.[34] Differences in gaps between groups are analyzed over time. The Health Equity Summary Score (HESS), developed through the CMS Office of Minority Health, integrates performance on multiple clinical and patient-experience quality measures in terms of performance against benchmark and performance improvement over time across both race/ethnicity and socioeconomic status. A technical expert panel identified the HESS as a preferred summary index approach, particularly for value-based payment.[2] This review did not identify states that calculate equity summary indices as a standard part of their Medicaid equity strategy.

REPRESENTATIVE MEASURES

- **Health Equity Metric**[32]

- **Health Equity Summary Score (HESS)**[33]

- **Quality Indicator Disparity Scale (QUIDS)**[34]

REPRESENTATIVE MEASURES

- Area Deprivation Index[35]
- Hispanic Health Risk Index (HHRI)[36]
- Urban Health Index— Cause of Mortality[37]

Measures of community well-being or deprivation

Many measures of broader community well-being come from public and global health literature. These metrics integrate and summarize the broader environmental, socioeconomic, health and social indicators at levels above the individual level. This approach aligns with the underlying principles of SDOH.[38] This measure category is least represented in current quality measurement for accountability space, but some states and agencies have begun applying these metrics on public health dashboards.[37] For example, the Healthy Places Index was used in California during the COVID-19 pandemic to focus public health interventions and evaluate intervention effectiveness between groups.[41,42] These use cases may provide a model of how community indices can be leveraged to evaluate the effectiveness of Medicaid managed care equity strategies.

The international literature identified a number of health equity measures that did not have corresponding measures in the United States literature.[34,43–45] This suggests an opportunity to learn from global health equity efforts in implementation of health equity measures in the United States and in state Medicaid efforts.

State interviews presented a contrast in measurement approaches. One state expressed the need to postpone measurement to focus on structural questions of equity and data (Oregon). Differences also emerged among states that had begun implementing health equity measures. Some selected specific subsets based on priority areas (California), while others opted to globally stratify all performance measures to evaluate for gaps (North Carolina). Pennsylvania combined approaches by identifying gaps across multiple measures stratified by region and then focusing on improving performance statewide for identified measures. Differences were also identified in categories selected for stratification. Some approaches were targeted and selected a single area of focus such as race/ethnicity (Michigan). Others applied multiple stratification criteria, including race/ethnicity, gender, primary language, LTSS needs, disability, geography and service region (North Carolina). These differences reflect conceptual questions about the role, value and use of measurement. Selection of multiple criteria aligned with the identified need to consider how different identities intersect (Oregon). Completeness and quality of data were identified as primary barriers to measurement. Two states described efforts to improve race and ethnicity data (Louisiana, Georgia). Framing and assumptions behind data used for equity were also questioned, with one state highlighting the intersection with efforts on data decolonization (Oregon).[46,47]

State representatives expressed a desire for more evolved equity measures. Topics include the potential expansion of clinical outcome measures and use of biometrics (Pennsylvania, Massachusetts), member and community-reported measures (California, Pennsylvania, Oregon) and structural measures (California). One state highlighted the importance of developing and selecting measures that matter to populations at risk of or experiencing disparities (Georgia).

Michigan began evaluating equity in quality measure performance in 2005, and in recent years, its strategy has evolved to incorporate additional measures and methods of comparing performance, with a focus on anti-racist approaches. **See the case study below for details.**

📝 CASE STUDY: Michigan

Michigan Medicaid's goal is to reduce racial and ethnic disparities in services provided by the health system, noting both strong ideologic and financial motivations for action.[48]

Implementing an anti-racist approach to measurement

Michigan focuses on racism as a root cause of disparities and has developed its measurement strategy within that frame. Data on member race and ethnicity is collected via Medicaid enrollment forms and shared with plans, although the state recognizes that plans may supplement these data using electronic health records or other sources. Disparities are evaluated by comparing performance estimates from non-White populations to reference estimates from White populations. The state is also exploring options to display racial and ethnic disparities by geographic region, to motivate greater collaboration between health plans and communities in addressing gaps.

Measurement domains

Michigan routinely evaluates racial and ethnic disparities in quality measures, with continuous collection of such data since 2011. Preliminary work focused on disparities in diabetes care; however, efforts have since expanded to 14 measures across five domains: Adult Care and Pregnancy, Child and Adolescent Care, Access to Care, Living With Illness and Health Plan Diversity.[48] State representatives noted that selection of quality measures for evaluation of disparities prioritized established measurement domains with which health plans had experience. Results from equity analyses were suppressed if minimum numerator (n = 5) and denominator (n = 30) sample sizes were not achieved. In recent years, statewide measures of social determinants of health and cause-specific morbidity and mortality have also been evaluated.[49] Findings are presented as a change in disparity between groups (e.g., White American vs. African American) over time.

Looking ahead

State representatives highlighted the benefits of measuring along a "continuum of care" framework, from structure, to process, to outcomes. Such an approach, it was noted, would allow the state to target resources to the greatest areas of need, to act upstream, where possible, and to foster partnerships between Medicaid and other state public agencies. The need for a more robust portfolio of disparity-sensitive outcome measures was also highlighted.

Health Plan Accountability and Evaluating Equity Performance

Accountability for health equity and related goals in Medicaid Managed Care takes a variety of forms. A 2018 report on SDOH-related activities in state Medicaid contracts found substantial variation both in activities and their focus.[11] Some states may require MCOs to link members to specific community services or community-based organizations (e.g., Michigan, New Mexico). Others have integrated required reporting of equity and disparity activities in the context of quality assessment and performance improvement activities.[16,50] Specific accreditation on equity standards may be required.[29,51] Public reporting of MCO performance using quality rating systems can leverage transparency for accountability, but states do not appear to be employing this strategy for equity goals.[52]

In a growing number of cases, financial incentives may be tied to equity-focused quality measure performance targets.[8,29,53,54] This reflects a larger evolution in accountability expectations for Medicaid MCOs, demonstrated in current state RFPs or requests for information.[30,55] Recent recommendations highlight the importance of building stratified health equity measurement into pay-for-performance programs to achieve progress on equity goals.[3,4] NQF suggested prioritizing measures in the domains of Equitable Access and Equitable High-Quality Care for accountability purposes.[5] Implementing these recommendations is complicated by the presence of diversity in managed care models between states, differences in priority populations and the frequent presence of multiple value-based payment models or contracting structures within a single state (e.g., physical health, behavioral health, condition or population-specific bundled payments).

Equity accountability may be addressed globally or may be specific to certain program or contract elements. For example, Pennsylvania's SDOH screening measure is scored in the maternal health bundle contract.[29] To evaluate this question more broadly, a learning collaborative was convened in 2019 as part of the Robert Wood Johnson Foundation-funded Advancing Health Equity: Leading Care, Payment, and Systems Transformation program to identify the most effective strategies for advancing health equity through integrated payment and delivery system reforms at the state level.[56] The collaborative has convened teams across seven states (Delaware, Illinois, Massachusetts, New Jersey, Pennsylvania, Tennessee, Washington), with each team comprising the state's Medicaid agency, one state Medicaid MCO and at least one MCO-contracted provider organization. In a growing number of cases, financial incentives may be tied to equity-focused quality measure performance targets.[8,29,53,54]

In addition to structural and program decisions, variation was also observed in the methods states use to compare and evaluate performance. This included different approaches to identifying the reference population and the unit of comparison and measuring difference. Michigan and Minnesota calculate disparities in reference to White members.[48,57] An alternative is to focus on improvement within groups experiencing disparities. Pennsylvania's Equity Incentive Program takes this path, focusing on improvement quality among African American and Black members.[58]

Comparisons may be made between a group of interest (e.g., a particular race or ethnicity) and the overall population, and also between plans, within plans, over time or a combination of the three.[2] Many national initiatives tracking disparities in quality performance, such as AHRQ's National Healthcare Quality Disparities Report, evaluate change over time; this is also reflected in a number of state initiatives.[2,21,49,57] Measuring differences in performance can be calculated in a variety of ways, on both absolute and relative scales, with and without statistical significance testing.[2,21,48] In some cases, a fixed target for achievement may be set; for example, in New Mexico's measure of connection to community health workers and in Tennessee's proposal for social needs screening and referral.[23,30] Evaluation against a standard performance benchmark (e.g., 90th percentile, 50th percentile) is rare and may be a result of a lack of reference benchmarks for stratified performance for equity priority populations such as different racial and ethnic groups.

In a review of health equity measurement approaches for value-based payment, ASPE identified three types of equity measurement: approaches focused on measure identification, approaches focused on measure-by-measure comparison and summary indices of health equity. Regarding measure identification for performance accountability, explicit references to frameworks such as NQF's Disparities-Sensitive Measures were not found in Medicaid equity materials, but many measures selected by states align with those identified as disparity sensitive (Appendix 2).[18] The latter two types of measurement reflect quantitative approaches that have potential for use in performance accountability. The highest-rated approach by ASPE's expert panel for use in Medicare value-based reporting was the HESS, a summary index of performance across multiple measures and domains of social risk.[2] However, the HESS has not been implemented in any accountability programs to date and may face challenges to implementation for use in Medicaid such as insufficient state performance data, resource limitations, and perceived complexity.

State interviews highlighted accountability through required reporting of equity and SDOH-focused initiatives and outcomes by plans, as well as quality assessment and performance improvement requirements. Reporting on quality measures may be required as part of these activities, without explicitly scoring performance. When achievement on performance measures was scored with corresponding financial implications, one state (California) highlighted the benefit of focusing on incentives as opposed to penalties, noting that penalties may create over-focus on targeted populations while leaving other groups behind. This aligns with recent recommendations to reward and financially support providers, health systems and community organizations for achieving optimal equity outcomes.[4] Another state (Louisiana) structured financial incentives for equity as a reimbursement withhold. Quality of race, ethnicity and social risk data was identified as a barrier to implementing accountability for disparities by Louisiana, California and Georgia. Also, Pennsylvania noted that alignment through health plan accreditation (for Pennsylvania, NCQA Multicultural Health Care Distinction) has been one effective method to ensure accountability for equity focus across the entire MCO.

Multiple states highlighted the importance of routine monitoring, with a focus on collaboration and regular communication between states and health plans (Georgia, Pennsylvania, Michigan). In Pennsylvania, this took the form of quarterly meetings with individual plans and with all plans simultaneously, to evaluate progress toward goals and lessons learned. States noted that engagement with plans early in the development of accountability requirements increased buy-in with implementation.

States were asked to provide feedback on a set of approaches for quantitative evaluation of measure performance, adapted from ASPE's 2021 report.[2] Responses are summarized in Appendix 3. Between-plan and within-plan comparisons were most common, both in terms of current applied approaches and intended future approaches. Few states had implemented statistical significance testing or summary indices, although some expressed cautious interest in them as tools for future programs. Multiple states noted that they make statistical inferences about performance for evaluating Medicaid waivers, but not as part of their state's managed care accountability strategy. Concerns about seasonal fluctuation in trends were raised when considering cross-sectional comparison between points in time. Only one state expressed a positive reaction to the use of summary indices (Pennsylvania), noting the utility of evaluating different social needs in combination. Four states raised concerns about the use of summary approaches (Louisiana, California, North Carolina, Michigan), including the lack of transparency and specificity and that index approaches might mask the intersectional nature of disparities. The comment about transparency of indices was also linked to concerns about the ability to communicate the methods and meaning of results to less-technical audiences. States also raised novel approaches not currently listed, including the utility of between-state comparison (Louisiana) and the benefits of comparing subpopulations between plans (Michigan).

North Carolina has built a multi-pronged accountability strategy for its equity goals that incorporates structural, reporting and measurement requirements. **See the case study below for details.**

📝 CASE STUDY: North Carolina

Promoting heath equity is integrated into North Carolina's Quality Vision. The state is leveraging different types of managed care requirements to ensure accountability for achieving this goal.

Structural Requirements

North Carolina monitors plans performance and has plan requirements in place to improve health equity. Plans are required to have a diversity, equity and inclusion council to strengthen requirements for cultural competency, implicit bias training, screening for social determinants of health and access to translation services. They are responsible for reporting on the use of member advisory committees and councils and must ensure that 50% of these members represent communities of interest. Incentives are received for referring patients with unmet social needs to social services organizations.

Reporting Requirements

In addition to structural requirements, North Carolina has also implemented reporting requirements to promote health equity accountability. Plans are required to submit deliverables focused on equity performance, including disparity identification and analysis, network access and adequacy, provider support and training plans, opioid use and prevention, value-added services and member engagement and member advisory committees. Focused equity intervention and impact assessments are required in quality assessment and performance improvement plans, which the state reviews against other health equity analyses to ensure that plans actively engage with opportunities to reduce health disparities.

Measuring Performance

North Carolina uses quality measures to evaluate progress for achieving health equity by identifying and using disparities as a target for plan improvement. In the future, plans will be required to report on a variety of administrative and quality measures stratified by age, race and ethnicity, gender, primary language, long-term services and supports needs status, disability status, geography and service region.[21,59] North Carolina has proposed evaluating plan measure performance during the first two program years against a benchmark of 5% relative year-over-year improvement compared to 2019 baseline statewide average performance. In the third program year, plans will be evaluated on disparities in performance, defined as 10% gap between the group of interest and the reference group, with a withhold for financial accountability. The following potential withheld measures have been identified (subject to change): Prenatal and Postpartum Care, Low Birth Weight, Well-Child Visits in the First 30 Months of Life and HBA1C Poor Control (>9%).[28]

Stakeholder and Community Engagement

Working to address inequalities and achieve equity requires the engagement and input of various stakeholder groups. As states continue to develop and implement equity strategies, it is important to understand who contributed during the process, and when. This is especially relevant when priority populations are identified. This section provides a summary of the approaches states took to engage stakeholders, including the community. When implementing new policies or programs (e.g., quality improvement), it is important to get input and buy-in from the affected community. In this context, "community" is used loosely and includes any group affected by the states' strategy (e.g., persons of a particular race/ethnicity, geographic area, enrolled in a Medicaid plan). Community input can also come from patient and community advocates, patient organizations and community-based organizations. Additional stakeholder groups include providers and plan representatives. State interviews and associated documents (e.g., Health Equity Impact Assessment) provided information on their efforts to engage stakeholders. A summary of engagement strategies is provided below.

Some states appeared to have established procedures and mechanisms in place to solicit stakeholder feedback, while others expressed a desire to develop a more formal process for stakeholder engagement. Most states interviewed articulated activities they had undertaken to engage with community members and other stakeholders. Michigan discussed a standing quality improvement meeting with 14 plans to attain buy-in for new strategies. It also engaged a clinical advisory committee and a medical care advisory committee that was more public facing. North Carolina described a multi-pronged approach to engage providers, including a committee of approximately 20 community members and physicians from various subspecialties. This group advises the state on guidance to disseminate to providers and convenes meetings that are open to the public.

Pennsylvania emphasized its Medicaid advisory committee, which includes consumers and separate consumer subcommittees. In developing its maternity strategy, the state engaged a perinatal quality collaborative that includes physicians, community health workers and social workers. Pennsylvania also utilizes Regional Accountable Health Councils, which operate at a regional level to identify disparities and propose solutions. California noted that it contracted consultants to meet with stakeholder groups such as Federally Qualified Health Centers, hospitals and consumer advocacy groups. Louisiana spoke about the importance of engaging sister agencies to ensure alignment and collaboration, including the Office of Public Health and the Bureau of Family Health.

Other methods to solicit feedback on state equity approaches include working with beneficiary advisory committees, convening public comment periods and holding town hall meetings that are open to the public. Many town halls are designed to be accessible to the targeted community.

It is also noteworthy that different states engaged the community at different points in their program implementation timeline; some were deliberate about engaging stakeholders earlier in the development process (e.g., strategies, documents) (Louisiana, Georgia), others engaged the community at later stages, such as when information is disseminated and in applied quality improvement initiatives (Pennsylvania).[60]

Oregon has made a concerted effort to center community voices in its equity and measurement strategies. **See the case study below for details.**

CASE STUDY: Oregon

In May 2021, Oregon published Metrics & Scoring Committee Equity Impact Assessment, a report that describes findings from work to select measures for the state's Quality Incentive Program.[61] The report emphasizes the importance of ensuring that the populations most likely to be affected by the measures are meaningfully engaged. It notes the need to "include anti-colonial, anti-racist, indigenous knowledge" to identify the root causes of problems that lead to disparities. Based on the report's findings, one recommendation is to solicit increased input from priority populations on measure framing, selection, implementation and evaluation. Possible mechanisms include a paid Medicaid member consultation panel or including Medicaid members on the Metrics & Scoring Committee. State representatives emphasized the importance of amplifying the community voice and noted in their (Equity and Inclusion Division) internal philosophy that they should follow the community, not attempt to lead it. In developing its current 10-year measurement goals, Oregon held more than 20 forums around the state to solicit feedback on the work plan.

Importance of Approach

Oregon's approach to community engagement stands apart because the state is intentional and deliberate in soliciting and integrating the voice of the community into its equity strategy, with appreciation of historical mistreatment. The Oregon Health Authority is beginning to invest more resources into this area.

Summary of Findings

Main Themes

Equity is a clear priority for health care quality and measurement. State Medicaid agencies have been leaders in incorporating elements of equity and SDOH in managed care contracts.[3] An increasing number of states are moving to explicit equity measurement and accountability in their managed care programs. As efforts proceed, a common language around intent, goals, methods and expectations may help move the needle.

States have sent a strong signal on the importance of maternal and child health and communities of color as priority areas. Many current equity measurement approaches, both generally and as implemented by states, focus on evaluating disparities in care. A growing number of states are developing or implementing measures that focus on social needs and SDOH, although specifics vary. Alongside these efforts, some states have begun work to evaluate and improve the equity of the structure and processes that underly Medicaid policy. Many states have mechanisms to engage with stakeholders and members of the community in developing and implementing equity strategies; however, approaches are highly variable. There is growing interest in integrating equity-targeted quality measurement into value-based payment, with an increasing number of states formally implementing such strategies.

Opportunities

Multiple states highlighted the importance of building momentum through stakeholder engagement. Engagement should begin early and should include bringing plans to the table if their performance will be measured, to proactively identify and address roadblocks, adapt to the needs of specific populations and get buy-in for accountability. There is also opportunity to engage the community and plan members earlier in the process; this was the exception, but is important for including the voices of those being served by the plans and state Medicaid agencies. States highlighted areas to further advance equity measurement, including patient-reported outcome and experience measures and clinical outcomes measures.

The use of summary scoring approaches that integrate multiple measures, demographic characteristics and social risk may also provide a path forward. However, state stakeholders expressed some hesitation to leverage these approaches, primarily related to transparency. While component measures of the index may be available for evaluation, their accessibility and use may be limited for end users presented with an overall summary. Some stakeholders expressed concern that a summary score could mask health equity information or experiences at the component level. This challenge could be mitigated with an interactive presentation, where users could select to drill down to individual components, but it may require additional technical resources to compile and would rely on users to use this function.

As policymakers look to expand the portfolio of equity-focused measures, international efforts that focus more on population health and well-being may provide insight on a broader range of potential measure concepts. Review of current practices and state interviews reinforced the concept of local solutions informed by local communities, and the importance of engaging with diverse voices in the process. These approaches, frequently used in quality improvement efforts, could be further applied in designing measurement strategies. This aligns with the recommendation that health equity measures be selected based on their meaning and importance to affected communities. There is also an opportunity to bring community outcomes directly into measurement by incorporating more community-level metrics.

Gaps & Barriers

Measurement for accountability remains the exception, not the rule. There remain fundamental questions about the data used to calculate health equity measures, with regard to completeness, accuracy and assumptions about underlying categories (e.g., risk of labels for race and ethnicity perpetuating racist structures). Data collection approaches that only focus on health and insurance systems may fail to solve the problem, as enrollees, particularly enrollees of color, may be reluctant to provide the data, fearing discrimination and not understanding the benefits of providing this information (assuming a clear benefit can be defined and communicated). A credible, enrollee-focused campaign is needed in addition to technical and infrastructure solutions.

Collection, storage and sharing of sociodemographic and social needs-related data elements is also challenging, with no clear standards or best practices—and where best practices have been identified, such as in selection of disparity-sensitive measures, application is inconsistent. This suggests that such approaches have untapped potential for implementation in Medicaid accountability, that they may be suited for specific audiences only or that they do not fully meet the needs of Medicaid decision makers. Inconsistency may be compounded by the diversity of policy, program and legal structures in place across states. Conversations with state stakeholders highlighted the necessity to create flexible and tailored solutions and emphasized the need for systematic approaches. A focus only on disparities may miss measure concepts targeting unmet social risks and needs, and patient experience and patient report outcomes data which are critical for addressing underlying concerns affecting members' health and health care.

Conclusion

State Medicaid approaches to addressing health equity—specifically, approaches leveraged in Medicaid managed care—have made substantial progress in recent years. This is encouraging and demonstrates what can be achieved with collaboration and commitment across stakeholder groups. But as health equity measurement efforts move forward, strategies will need to balance a focus on equity goals with ongoing concerns about data quality and increasing measurement burden. Success will require building on current momentum, as well as learning from the experiences of states, MCOs and communities already engaged in this work. As more states look to implement health equity measures, there is an opportunity to leverage best practices, reduce burden and create meaningful change to eliminate health disparities and ensure that every person can attain their full health potential.

Appendices

APPENDIX 1: Search Strategy

The following search criteria were executed in Pub-Med on July 6, 2021 and returned 1,861 results.

(("Health Equity"[MeSH Major Topic]) OR ("Social Determinants of Health"[MeSH Major Topic]) OR ("Healthcare Disparities"[MeSH Major Topic]) OR ("Health Status Disparities"[MeSH Major Topic]) OR ("Minority Health"[MeSH Major Topic])) AND ((2015:3000/12/12[pdat]) AND (english[Filter])) AND (("Quality Indicators, Health Care"[MeSH Major Topic]) OR ("Quality Assurance, Health Care"[MeSH Major Topic]) OR ("Quality of Health Care"[MeSH Major Topic]) OR ("Value-Based Purchasing"[MeSH Major Topic]) OR ("Reimbursement, Incentive"[MeSH Major Topic])) AND ((2015:3000/12/12[pdat]) AND (english[Filter]))

Results were reviewed against prespecified research questions for relevance and were prioritized for full-text review, as described in Appendix Table A.

Appendix Table A: PubMed Search Strategy Attrition Table

FORMAL PUBMED SEARCH ATTRITION	
Search String	1,861
Step 1: De-duplication of titles	1,855
Step 2: Abstract review for relevance	150
Step 3: Full text review for relevance	35
Step 4: Articles identified as priority for evaluation	27

Results of the Pub-Med search were then combined with web search results and other gray literature (briefing reports, white papers, policy documents), along with reference materials provided by state interviewees, as described in Appendix Table B. Some additional references were identified from citations of sources under review and were incorporated into the full review after evaluation by the project lead.

Appendix Table B: Summary Table of Search Strategy Results

RESULTS			
Breakdown by Search/Source	**Full Text Reviewed**	**Excluded for Lack of Relevance**	**Final Priority Articles**
Pub-Med Search	35	8	27
Other Web Searches/Sources	61	5	56
State Materials From Interviewees	23	0	23
Breakdown by Literature Type			
Peer-Reviewed	54	11	43
Gray Literature	24	2	22
State Contracting	41	0	41
Total	**119**	**13**	**106**

APPENDIX 2: Inventory of Equity Measures and Use in State Programs

The list below was derived by extracting quality measures either explicitly defined as equity measures in the literature or identified as used in state Medicaid or other programs to measure and achieve equity aims. One hundred and thirty unique measures were identified. Measures identified as disparity-sensitive according to NQF's framework are marked accordingly.[18] NQF disparities-sensitive measures were not restricted to those specified only for Medicaid, or for measurement at the health plan level. Measures identified as used for equity purposes in state Medicaid programs, either through interviews or review of contracting expectations, are marked under "State Use."

Several larger frameworks include high numbers of measures and/or indicators across a variety of domains to measure and track equity aims. For example, AHRQ's National Healthcare Quality and Disparities Report tracks performance and disparities experienced by different racial and socioeconomic groups on more than 250 quality measures.[19] Healthy People 2030 identified a subset of high-priority objectives in 23 leading health indicators to drive efforts to improve population health.[62] Development of the Disability and Well-Being Monitoring framework in Australia included 19 indicators to identify and track inequity between people with and without disability.[63] A proposed framework for SDOH specific to maternal health identified 33 indicators across 6 domains (e.g., general health, reproductive health and behavioral health environments) to contextualize differences in maternal mortality between different populations.[64] Many measure concepts overlap with those listed below. For space considerations, all measures from each framework are not listed in this report.

Measure Name	Population/Domain	NQF Disparities-Sensitive Measure[18]	State Use	Reference
Access to medical care	Access/Availability of Care			65
Adults' Access to Preventive/Ambulatory Health Services	Access/Availability of Care		✘	48,66
Annual Dental Visit	Access/Availability of Care		✘	66
Children and Adolescents' Access to Primary Care Practitioners	Access/Availability of Care		✘	48,67
Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	Access/Availability of Care		✘	66
Adherence to Antipsychotic Medications for Individuals With Schizophrenia	Behavioral Health	✘	✘	18,66
Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder	Behavioral Health	✘		18
Adult Smoking Cessation Advice/Counseling	Behavioral Health	✘		18
Alcohol and Drug Misuse	Behavioral Health			12
Alcohol Screening and Follow-Up for People with Serious Mental Illness	Behavioral Health	✘		18
Alcohol Use Screening	Behavioral Health	✘		18
Antidepressant Medication Management	Behavioral Health		✘	57,66
Child and Adolescent Major Depressive Disorder	Behavioral Health	✘		18
Depression Remission	Behavioral Health	✘		18
Depression Response—Progress Towards Remission	Behavioral Health	✘		18

Measure Name	Population/Domain	NQF Disparities-Sensitive Measure[18]	State Use	Reference
Emergency Department Utilization for Individuals Experiencing Mental Illness	Behavioral Health		✖	8
Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence	Behavioral Health		✖	66
Follow-Up After Emergency Department Visit for Mental Illness	Behavioral Health		✖	66
Follow-Up After High-Intensity Care for Substance Use Disorder	Behavioral Health		✖	66
Follow-Up After Hospitalization for Mental Illness	Behavioral Health		✖	57,66,68
Follow-Up Care for Children Prescribed ADHD Medication	Behavioral Health		✖	66,67
Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment	Behavioral Health		✖	57,66,68
Medical Assistance With Smoking and Tobacco Use Cessation	Behavioral Health		✖	68
Metabolic Monitoring for Children and Adolescents on Antipsychotics	Behavioral Health		✖	66
Pharmacotherapy for Opioid Use Disorder	Behavioral Health		✖	66
Screening for Depression and Follow-Up Plan	Behavioral Health	✖		12,18
Tobacco Assessment and Counseling	Behavioral Health			12
30-Day All-Cause Risk-Standardized Mortality Rate Following Percutaneous Coronary Intervention	Chronic Illness	✖		18
30-Day Post-Hospital Discharge Care Transition Composite Measure	Chronic Illness	✖		18
Absence of Multiple Chronic Conditions	Chronic Illness			65
Acute Myocardial Infarction Mortality Rate	Chronic Illness	✖		18
Adherence to ACEIs/ARBs for Individuals with Diabetes Mellitus	Chronic Illness	✖		18
Adherence to Oral Diabetes Agents for Individuals with Diabetes Mellitus	Chronic Illness	✖		18
Adherence to Statins	Chronic Illness	✖		18
Appropriate Testing for Pharyngitis	Chronic Illness		✖	66,67
Appropriate Treatment for Upper Respiratory Infection	Chronic Illness		✖	66
Asthma Medication Ratio	Chronic Illness		✖	57,66,68
Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia	Chronic Illness		✖	66
Comprehensive Diabetes Care	Chronic Illness	✖	✖	12,18, 48, 57, 58, 66, 68
Congestive Heart Failure Rate (PQI 08)	Chronic Illness	✖		18
Controlling High Blood Pressure	Chronic Illness	✖	✖	18,56,66

Measure Name	Population/Domain	NQF Disparities-Sensitive Measure[18]	State Use	Reference
Controlling High Blood Pressure for People with Serious Mental Illness	Chronic Illness	✗		18
Diabetes Long-Term Complications Admission Rate (PQI 03)	Chronic Illness	✗		18
Diabetes Monitoring for People With Diabetes and Schizophrenia	Chronic Illness		✗	66
Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications	Chronic Illness		✗	66
Heart Failure Mortality Rate (IQI 16)	Chronic Illness	✗		18
Heart Failure Symptoms Assessed and Addressed	Chronic Illness	✗		18
Hypertension Plan of Care	Chronic Illness	✗		18
In-Center Hemodialysis Survey	Chronic Illness	✗		18
Ischemic Vascular Disease: Use of Aspirin or Another Antiplatelet	Chronic Illness			12
Kidney Health Evaluation for Patients With Diabetes	Chronic Illness		✗	66
Median Time to ECG	Chronic Illness	✗		18
Median Time to Transfer to Another Facility for Acute Coronary Intervention	Chronic Illness	✗		18
Monitoring Hemoglobin Levels Below Target Minimum	Chronic Illness	✗		18
Optimal Diabetes Care Composite	Chronic Illness	✗		18
Optimal Vascular Care	Chronic Illness	✗		18
Patient Education Awareness (Facility Level, Physician Level)	Chronic Illness	✗		18
Persistence of Beta-Blocker Treatment After a Heart Attack	Chronic Illness		✗	66
Pharmacotherapy Management of COPD Exacerbation	Chronic Illness		✗	66
Shared Decision Making Process	Chronic Illness	✗		18
Statin Therapy for Patients With Cardiovascular Disease	Chronic Illness		✗	66
Statin Therapy for Patients With Diabetes	Chronic Illness		✗	66
Uncontrolled Diabetes Admission Rate (PQI 14)	Chronic Illness	✗		18
Use of Spirometry Testing in the Assessment and Diagnosis of COPD	Chronic Illness		✗	66
Adverse Outcome Index	Index/Summary Score	✗		18
Average annual percent change (AAPC)	Index/Summary Score			69
Concentration Index (CIX)	Index/Summary Score			45
Health Equity Summary Score (HESS)	Index/Summary Score			33

Measure Name	Population/Domain	NQF Disparities-Sensitive Measure[18]	State Use	Reference
Heath Equity Metric (HEM)	Index/Summary Score			32
Hispanic Health Risk Index (HHRI)	Index/Summary Score			36
HOUSES Index	Index/Summary Score			70
Prevention of Quality Overall Composite (PQI 90)	Index/Summary Score			12
Quality Indicator Disparity Scale (QIDS)	Index/Summary Score			34
Slope Index of Inequality (SII)	Index/Summary Score			45
Urban health index—"Cause of Mortality"	Index/Summary Score			37
Birth Trauma	Infant/Child Health	✗		18
Child and Adolescent Well-Care Visits (Well-Child Visits)	Infant/Child Health		✗	29,48,57,66–68
Childhood Immunization Status	Infant/Child Health		✗	48,57,66,71
Gastroenteritis Admission Rate (PDI 16)	Infant/Child Health	✗		18
Immunizations for Adolescents	Infant/Child Health		✗	48,66
Lead Screening in Children	Infant/Child Health		✗	48,66
Live Births Weighing Less than 2,500 Grams	Infant/Child Health		✗	48,68
Measles Immunization Coverage Among 1-Year-Olds	Infant/Child Health			43
Neonatal Intensive Care All-Condition Readmissions	Infant/Child Health	✗		18
Non-Recommended Cervical Cancer Screening in Adolescent Females	Infant/Child Health		✗	66
No-Show Appointments	Infant/Child Health			71
PICU Standardized Mortality Ratio	Infant/Child Health	✗		18
PICU Unplanned Readmission Rate	Infant/Child Health	✗		18
Procedure-Related Pain Control	Infant/Child Health			71
Unexpected Complications in Term Newborns	Infant/Child Health	✗		18
Unplanned Maternal Admission to the ICU	Infant/Child Health	✗		18
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents	Infant/Child Health		✗	66
Well-Controlled Asthma	Infant/Child Health			71
Antenatal Care (at Least 1 Visit With Skilled Provider)	Maternal Health			43
Births Attended by Skilled Health Personnel	Maternal Health			43
Demand for Family Planning Satisfied	Maternal Health			43
Elective Delivery Prior to 39 Weeks gestation	Maternal Health			69

Measure Name	Population/Domain	NQF Disparities-Sensitive Measure[18]	State Use	Reference
Incidence of Episiotomy	Maternal Health			69
Low-Risk Cesarean Delivery	Maternal Health			69
Postpartum Depression Screening and Follow-Up	Maternal Health		✕	66
Prenatal and Postpartum Care	Maternal Health		✕	29,48,66,68
Prenatal Immunization Status	Maternal Health		✕	66
Proportion of Women Who Had at Least Six Antenatal Care Visits	Maternal Health			45
Proportion of Women Who Presented Adequate Quality of Antenatal Care	Maternal Health			45
Screening for Pregnancy Risk	Maternal Health		✕	68
Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis	Overuse/Appropriateness		✕	66
Use of Imaging Studies for Low Back Pain	Overuse/Appropriateness	✕	✕	18,66
Use of Opioids at High Dosage	Overuse/Appropriateness		✕	66
Use of Opioids from Multiple Providers	Overuse/Appropriateness		✕	66
Gains in Patient Activation Scores at 12 Months	Patient Reported Outcome	✕		18
General Physical Health Status and Mental Health	Patient Reported Outcome			65
Adult Immunization Status	Prevention/Screening		✕	66
Breast Cancer Screening	Prevention/Screening	✕	✕	18,57,66
Cervical Cancer Screening	Prevention/Screening	✕	✕	18,48,66,68
Chlamydia Screening in Women	Prevention/Screening		✕	48,66
Colorectal Cancer Screening	Prevention/Screening	✕	✕	12,18,57,66
Health Behaviors (Smoking, Alcohol Use, Physical Activity)	Prevention/Screening			65
Physical Activity in Older Adults	Prevention/Screening		✕	66
A Minimum of 3% of Total Enrollment Shall Be Served by Community Health Workers or Similar Support Workers	SDOH/Social Needs		✕	23
Meaningful Access to Health Care Services for Persons With Limited English Proficiency	SDOH/Social Needs		✕	24
Percent Free of Milder Disability	SDOH/Social Needs			72
Percent Free of More Severe Disability	SDOH/Social Needs			72
Race/Ethnicity Diversity of Membership	SDOH/Social Needs		✕	48
Rate of Social Needs Screening in the Total Member Population Using Any Qualifying Data Source	SDOH/Social Needs		✕	26
Screening for Unmet Resource Needs	SDOH/Social Needs		✕	68

Measure Name	Population/Domain	NQF Disparities-Sensitive Measure[18]	State Use	Reference
Social Determinants of Health Screening	SDOH/Social Needs		✕	29
Ambulatory Care	Utilization		✕	57
Hospital-Wide All-Cause Unplanned Readmission Measure	Utilization	✕		18
Pediatric All-Condition Readmission Measure	Utilization	✕		18
Plan All-Cause Readmissions	Utilization		✕	57

APPENDIX 3: Summary of Quantitative Accountability Approaches Discussed in State Medicaid Interviews

Quantitative Equity Measurement Approach*	California	Georgia	Pennsylvania	Louisiana	Oregon	North Carolina	Michigan
1 Making between-plan comparison	C	P	P	P	P	P	P
2 Making within-plan comparisons	P	P	P	C	P	P	P
3 Examining cross-sectional performance at a specific point in time	N	N	N	N	N	P	C
4 Examining improvement in performance over time	P	P	P	P	N	P	P
5 Making comparisons using statistical tests to identify differences between groups	C	N	P	N	N	N	P
6 Making comparisons by calculating the magnitude of differences between groups	N	N	P	N	N	P	P
7 Using a summary index of health equity, combining information from multiple measures	N	N	P	N	N	N	N
8 Using a summary index of health equity, combining information across multiple social risk factors	N	N	P	N	N	C	N
9 Using a summary index of health equity, combining information from multiple types of comparisons	N	N	N	N	N	N	N

*Adapted from Developing Health Equity Measures, ASPE, May 2021[2]

Key:

P	Positive reaction or method currently in use
C	Cautious reaction
N	Negative reaction

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