



FOUNDATION FOR Health Care Quality

Improving health outcomes through collaboration, data, and finding common ground

Social Determinants of Health and Health Equity

2021

Table of Contents

Executive Summary	1
Background	2
<i>Social Determinants of Health</i>	2
<i>Health Equity</i>	3
Methods	5
<i>Monthly Workgroup Discussions</i>	5
<i>Evidence Review</i>	5
<i>Key Stakeholder Interviews</i>	6
Recommendation Framework	7
Stakeholder Checklists	12
<i>Delivery Organizations</i>	12
<i>Patients and Family Members</i>	14
<i>Providers</i>	14
<i>Healthcare-Based Case Managers and Care Coordinators</i>	14
<i>Health Plans</i>	15
<i>Employers/Benefits</i>	16
<i>Community Information Exchange Vendors</i>	16
<i>Community Based Organizations</i>	16
<i>Health Professional Associations</i>	16
<i>Washington State Legislature</i>	17
Evidence Review: Social Determinants of Health	18
<i>Planning</i>	18
<i>Identification</i>	20
<i>Tracking and Measurement</i>	23
<i>Follow-Up</i>	26
<i>Incentives and Investments</i>	28
Evidence Review: Health Equity and Disparities	31
<i>Planning</i>	31
<i>Identification</i>	34
<i>Tracking and Measurement</i>	38
<i>Follow-Up</i>	39
<i>Incentives and Investments</i>	39
Appendix A: Charter and Roster	42
Appendix B: SDOH Bree Collaborative Meetings and Discussion	45
Appendix C: SDOH Literature Review Summary	46
Appendix D: Health Equity Literature Review Summary	47
Appendix E: SDOH Interview Guides	48
Appendix F: Key Stakeholders for SDOH Interview List	51
Appendix G: Health Equity Interview Guide	53
Appendix H: Key Stakeholders For Health Equity Interviews	54
Appendix I: Further SDOH Resources	55
References	56

Executive Summary

Addressing the multiple determinants of health and closing the gap on health equity will require cross-sector collaboration within our health ecosystem. The [Foundation for Health Care Quality](#), through [Bree Collaborative](#) processes, recommends five focus areas for health care organizations to address social determinants of health and health equity:

- **Planning:** Embed equity into organizational principles, provide bias training for staff and board members, engage with patients and staff to collaborate on a pilot plan for SDOH screening.
- **Identification:** Develop universal patient screening for race, ethnicity, and language data (REaL) and SDOH screening using validated measures that address housing security, food security, transportation need, and one other high priority domain.
- **Tracking and Measurement:** Develop a site-specific SDOH registry that can communicate with authorized partners, use standard HIT vocabulary codes for SDOH data including FHIR-defined resources and z-codes. Stratify patient by social need into 2+ tiers and stratify process and outcome measures by REaL data categories.
- **Follow-Up:** Provide resource lists for low-risk patients, provide one-on-one case management for high-risk patients. Implement Plan-Do-Study-Act cycles to intervene on measures where any racial disparity is identified.
- **Incentives and Investments:** Employ innovative reimbursement mechanisms aligned with the move to value-based payments, invest in interoperable community information exchanges and learning collaboratives for social care integration. Fund an organizing body to align state-wide healthcare stakeholders.

The health sector's response to social determinants of health and health equity is new and rapidly evolving, with emerging best practices and developing resources. Assessing population health disparities and closing the gap for health equity will require aligning data systems, targeting interventions to identified disparities, and a commitment to a culture of equity. Identifying and intervening on social determinants of health will require workflow amendments, cross-sector collaboration, and investments in public health, social service capacity, and emerging technology. Further coordination and investment in both realms is essential to coordinate integration of health and social services and ensure equitable care for all.

This report was prepared by the Foundation for Health Care Quality for the Washington Healthcare Forum. This report covers recommendations and best practices for screening and intervening on the social determinants of health as well as a strategy for assessing and addressing population health disparities, especially from racism.

“Not everything that is faced can be changed. But nothing can be changed until it is faced.”

-James Baldwin

Background

Health care accounts for almost 18% of the United States' gross domestic product and has been growing year over year.¹ Further, health care and social assistance is the industry with the largest number of employees in the United States.² Health care has potential to move beyond "mere repair shops"³ and address true whole-person health. This system, based in the Hippocratic oath, with an infrastructure build around interpersonal, trusted, interactions, can both optimize a person's length and quality of life and work to close health disparities. The ability to standardize workflows based on evidence and to collect meaningful data can address modifiable social determinants and preventable health disparities.

Additionally, health care delivery has been demonstrated to exacerbate disparities stemming from the social determinants of health. Implicit bias, nonconscious assumptions based on incomplete information such as a person's appearance and racism, within health care has been shown to lead to worse outcomes for Black and Indigenous people, among other groups.^{4,5} Pervasive racism, ableism, homophobia, transphobia, nationalism intersecting with anti-immigrant sentiment lead to and inform health disparities between white Americans those who are Black, indigenous, people of color, those with disabilities, LGBTQ+, and immigrants and refugees today.

Social Determinants of Health

A person's overall quality of life and length of life are determined by a multitude of factors starting before a person is born. While clinical care can certainly be impactful in preventing, diagnosing, managing, and treating diseases, only about 20% of a person's overall health is determined by clinical care.⁶ The majority of a person and a population's health are determined by their social environment, the conditions in which people are "*born, grow, live, work and age.*"⁷ These factors include a person's education, employment, the experience of racism, the safety of our community, and many other environmental exposures. Obesity, depression, hypertension, diabetes, and SARS-COV-2 mortality are linked to these social determinants.^{8,9,10} In addition to driving health outcomes, SDOH contribute to preventable health disparities ranging from asthma to diabetes.^{11,12} The health care system also demonstrably falls short in addressing chronic care and behavioral health needs of populations.

In recent decades, the healthcare delivery landscape transformed in response to a growing body of evidence linking behavioral and physical health outcomes.¹³ Although not yet complete, behavioral health integration required novel healthcare models, cross-sector collaboration, and payment reform. The behavioral health integration shift is reminiscent of current opportunities to integrate social care into health care to address upstream drivers of health outcomes. While this process is still in the early stages, Washington state has the opportunity to lay the groundwork for alignment to ensure the healthcare system improves health and well-being for our community.¹⁴

Addressing SDOH in clinical care is a rapidly evolving field with best practices and national standards still in development. The diversity of early SDOH ecosystem presents exciting opportunities for health and social service integration and has the potential to be stymied by lack of standards and inconsistent communication. Developing strong expectations for SDOH screening, data interoperability, and cross-

sector coordination can provide a foundation for future efforts. Healthcare stakeholders must work together to share best practices on SDOH screening and intervention in a clinical setting to build a statewide culture that recognizes the impact of SDOH on health outcomes. Data collected from screening and intervention activities must be stored in a common and interoperable registry to evaluate existing interventions while building the case for future investment. Finally, healthcare organizations must commit to partnerships with community-based organizations and invest in public health infrastructure to address upstream SDOH before they are encountered in clinical care.

Health Equity

Race, while a social construct, has very real impacts on a person's health. Notably, black newborns have twice the mortality rate of white newborns; which is halved when they are cared for by a black clinician.¹⁵ Structural racism is integrated into American culture, including within clinical care.¹⁶ Institutionalized racism and other -isms, societal allocation of access to or failure to provide access to resources or services, is pervasive through social structures and impacts health and health needs.¹⁷ While the history and legacy of slavery, Jim Crow laws, non-consensual medical experiments including forced sterilizations, have contributed to health disparity, the everyday encounters of black, indigenous, and people of color with and within the medical system contribute to individual-level distrust.^{18,19}

At an individual level, implicit and explicit bias (i.e., unconscious or conscious preference for or aversion to a group) has been shown to lead to worse outcomes for Black and Indigenous people, women, people with disabilities, and other minoritized groups.^{20,21} Bias, especially implicit bias, is highly prevalent. Health care providers have been shown to have rates of implicit bias equal to the general population.²² Differences in how a provider interacts with a patient based on perceived physical and/or racial differences contributes to differences in processes of care and downstream health outcomes.²³

Some aspects of implicit bias in medical care have been well-documented, such as white medical students and residents reporting a belief that Black people feel less pain than white people.²⁴ The type of contraception recommended by providers, especially long-acting reversible contraception, has been shown to vary depending on a patient's race/ethnicity and their socioeconomic status (i.e., that long-acting reversible contraception is more likely to be recommended for low socioeconomic status Black and Latina patients than low socioeconomic white patients.)²⁵ Racial bias can take many forms including, "limited time given...to patients of color, inequity in how that time is spent, inequity in conversational pace and tone, dismissive clinician body language, inequity in information sharing, inequity in resource use, inequity in decision sharing."²⁶

Washington state is home to approximately 7.6 million people, of whom:

- 78.9% identify as white;
- 4.3% as Black or African American, alone;
- 1.9% as American Indian or Alaska Native,
- 9.6% as Asian, alone,
- 0.8% as Native Hawaiian or other Pacific Islander, alone;
- 4.8% as two or more races;
- 12.9% as Hispanic or Latino; and
- 68% as white, alone (not Hispanic or Latino).²⁷

Improving health equity will require individual, organization, and structural commitments that go beyond performative activism. Healthcare stakeholders must embed equity into their organizational mission, culture, and programming based on established equity guidelines. Organizations must leverage existing predictive modeling and self-reported demographic data (such as race, ethnicity, sexual orientation, gender identity, and disability status) to stratify key health outcome and process measures to identify disparities. Providers and plans should also collaborate on state-wide registries to assess population-wide disparities, especially due to racism and develop interventions to close the gap. Finally, all stages of the process should involve partnerships with community organizations who represent the communities most affected by health disparities.

Methods

This guideline addresses standardized tools for assessing SDOH at an individual level and a statewide strategy for measuring health disparities on a population basis, including at a minimum, disparities that are the result of racism. These best practices and standards for screening are based on credible evidence through workgroup collaboration (expert opinion and discussion), literature review, and structured interviews.

Monthly Workgroup Discussions

Foundation for Health Care Quality staff convened a workgroup focused on developing a community standard for addressing the social determinants of health within a clinical context that met monthly from September 2020 through May 2021. Workgroup members and attendees include a diverse array of people and organizations including those with lived experience, community-based organizations, large integrated health care systems, health plans, in and out-patient delivery organizations, medical groups, the state medical and hospital associations, and others.

The workgroup charter and roster are presented in **Appendix A**.

Each workgroup meeting focused on a different aspect of SDOH screening and intervention activities, ranging from screening workflows to closed loop referral platforms. The workgroup also provided feedback on draft recommendations and helped shape the SDOH recommendation framework and checklist. A list of agendas, meeting minutes, and materials reviewed in the workgroup is available on the Bree website here: www.qualityhealth.org/bree/topic-areas/current-topics/social-determinants-of-health/.

A table of workgroup meetings and discussion topics is available in **Appendix B**.

Evidence Review

Staff compiled research and evidence on social determinants of health screening and assessment and health equity. The research on social determinants of health focused on screening tools and domains, data collection and interoperability, and referral pathways. Over 100 articles, reports, resources, and published editorials have been reviewed. Materials were split into five topics: the effects of social determinants, identification and screening, tracking and measurement, follow-up and intervention, and incentives and investments.

A brief summary of the literature review themes and findings is available in **Appendix C**.

Research on health disparities and health equity, including background information on health disparities, anti-racism, REaL data collection, implicit bias and cultural competency training, and other interventions to address equity. Around 60 articles, systematic reviews, data resources, implementation guides, and published editorials were reviewed.

A brief summary of the literature review themes and findings is available in **Appendix D**.

Key Stakeholder Interviews

Bree Collaborative staff conducted key stakeholder interviews with organizations working on health disparities and social determinants of health. Staff developed two interview guides for social determinants of health conversations, one for healthcare professionals and one for community organizations. Staff conducted 31 interviews with key stakeholders about social determinants of health. Most interviews have been with healthcare professionals, including plans, providers, benefit managers, community information exchanges, and accountable communities of health. Several additional interviews engaged non-clinical community-based organizations to better understand their capacity and perspective on integrating social services with health care.

Interview questions for social determinants conversations can be found in **Appendix E**.

A full list of key stakeholder interviewees is available in **Appendix F**.

Bree Collaborative staff developed a separate interview guide for structured key stakeholder interviews for partners experienced in diverse data sources, plans, providers, and health equity organizations. Staff conducted 10 interviews with key stakeholders about strategies to assess and address health disparities. About half of the conversations involved data conveners and the other half involved stakeholders directly involved in collecting data on their patient populations or community.

Interview questions for health equity and data strategies can be found in **Appendix G**.

A full list of key stakeholder interviewees is available in **Appendix H**.

Recommendation Framework

After reviewing available literature and key stakeholder interviews, the Foundation for Health Care Quality workgroup settled on five focus areas for a community standard on social determinants and health equity work. The five focus areas cover planning, identification, tracking, follow-up, and investments. While the broad framework areas are most applicable to clinical care delivery sites, employers, plans, professional associations, state agencies, and other healthcare stakeholders all have a role in addressing social determinants and health equity. This framework will help all health stakeholders align efforts to improve health and well-being in our community.

Focus Area	Action Steps: Social Determinants	Action Steps: Health Equity
Planning	<ul style="list-style-type: none"> • Develop buy-in and educate staff about upstream factors, trauma-informed care, being mindful of stigma and bias, and the importance of screening to support whole-person health independent of ability to meet that need. • Adopt existing or develop communication tools to discuss social determinants of health screening and intervention with patients (e.g., do not use jargon, explain how life situation impacts health) <ul style="list-style-type: none"> ○ Clarify that screening for social needs does not necessarily mean that the provider, health, or site will be able to meet that need. • Identify how patient demographics, your location, and/or other assessments done in your region may inform the social needs of your patients. • Prioritize a subset of your population (e.g., pediatrics, diabetes management) prior to rolling out universal screening • Develop a data collection strategy that will protect patient safety and inform best care for patients. • Identify roles and responsibilities for staff in the SDoH workflow including how to keep the person’s provider and care team informed of social risk. 	<ul style="list-style-type: none"> • Embed equity principles into organizational mission, vision, values and programming. Follow guidelines from the Institute for Healthcare Improvement or the American Hospital Association for achieving health equity. • Educate staff about health equity, health disparities, and the legacy of historical trauma on a person’s health. • Facilitate organizational culture of destigmatizing talking about bias including from race through level-setting and fostering staff buy-in; uncomfortable conversations that reduce barriers to empathy and understanding • Provide implicit bias training and/or cultural competence training for all staff and board members • Provide training on data collection best practices to staff who will collect demographic data • Understand the stages of change when designing health equity interventions that address provider bias

<p>Identification</p>	<ul style="list-style-type: none"> • Solicit informed consent and emphasize relationship-building with patients prior to screening. • Screen for social determinants of health using a tool adopted from the <u>SIREN and KP Systematic Review of Social Risk Screening Tools</u>, prioritizing at least four domains: housing security, food security, transportation need, and one other high priority/common need identified by the community. <ul style="list-style-type: none"> ○ Make sure the tool is reliable and valid when possible. ○ Screening can be integrated in both inpatient and outpatient settings to inform care plans, discharge planning, and follow-up care. ○ Follow-up screening should occur every time a person interacts with the health system, with a minimum of annual screening updates. • Develop predictive analytics to help gauge social need, especially for those enrolled in health plans and benefits programs but do not access health care services. • Communicate patient screening results across their care spectrum, including behavioral and physical health settings. • Ensure that screening for social determinants of health is free of liability for providers and clinicians • Integrate SDoH questions into pre-screen workflows (e.g. depression, alcohol use) if using written forms. Train staff on handling sensitive conversations (e.g. trauma-informed discussions, motivational interviewing, or “empathic inquiry”) if using a verbal screener. 	<ul style="list-style-type: none"> • Collect patient demographic information that includes race, ethnicity and language (REaL). When possible, use the 1997 Office of Management and Budget (OMB) standard categories. • Encourage collection of granular race, ethnicity, and nationality data that roll up into the OMB categories • Allow people to select more than one race category, but avoid the category “multiracial” which is not possible to disaggregate and leads to vanishing data • Develop data collection strategies for demographic data on other underserved communities, including sexual orientation and gender identity (SOGI) as well as disability status. • Collect demographic data using self-report best practices to ensure data completeness. Update demographic data at least annually, as personal identities may change. • Ensure that predictive modeling and data analytics processes are free of racial bias.
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<p>Tracking and Measurement</p>	<ul style="list-style-type: none"> • Develop and implement best practices for data privacy, patient perceived stigma, patient safety, and information autonomy when collecting, using and interacting with SDOH data. • Integrate screening questions and referral workflows into the electronic health record to facilitate active communication • Develop a queryable registry of attributable patient SDOH data and consider using SDOH to stratify other health registries to identify disparities. • Collect and store local SDOH data with reporting capabilities to facilitate referrals and build the case for the return on investment of social determinants work. • Link SDOH data to health information technology standard codes, both content codes (e.g. existing ICD-10 z-codes) and exchanged using nationally accepted standards (e.g FHIR). • Commit to including all authorized healthcare and community partners in the design and use of SDOH data collection. • If possible, consult with communities where disparities are identified to determine the appropriate manner to communicate and address disparities. • Follow the Gravity Project for future interoperable coded data sets for social risk. • Develop a site-specific workflow for stratifying patient social need using at least a two-tiered system (i.e. high/low risk) which includes social risk, other physical and behavioral health needs, utilization rates, and urgency of concern. 	<ul style="list-style-type: none"> • Develop best practices for patient perceived stigma, patient safety, and data autonomy/sovereignty when collecting, using, and interacting with demographic data. • Self-reported race, ethnicity, and language data data is captured using interoperable codes that can be linked to relevant measures. • Collect data on patient-reported experience of discrimination or racism. • Stratify process, patient-reported outcomes, and health outcomes by race categories for internal and external reporting. • Use stratified measures to identify preventable gaps and disparities. • Participate in a state-wide coalition to report on health disparities, especially stratified by REaL data categories. • Partner with communities who are most impacted by identified disparities before sharing their health information or developing interventions.
<p>Follow-Up</p>	<ul style="list-style-type: none"> • For patients with relatively lower risks or barriers: Provide a resource list that is clinic-specific or region-specific. In absence of such a list, partner with an existing community information exchange (CIE) or social service resource locator (SSRL) that is patient-friendly, timely, and updated frequently. • For patients with relatively high risks or barriers: If available, 	<ul style="list-style-type: none"> • Perform the four-stage iterative process Plan-Do-Study-Act (PDSA) to intervene where racial disparities are identified. • Build relationships and engage with communities that are affected by health disparities to develop interventions to close the gap.

	<p>documentation of identified need and notification of relevant team members occurs that same day or within 7 days of positive screen by a community health worker, social worker, or patient navigator who can provide care coordination, case management, or warm handoffs to known services.</p> <ul style="list-style-type: none"> • Integrate intervention workflows into the EHR, through auto-populated referral lists or flagging patients with identified social risk for follow-up. • Participate/invest in a CIE or SSRL that follows Human Services Data Specifications standards and is inclusive of referral management across key stakeholders to facilitate communication and closed loop referrals • Build relationships with local community-based organizations and understand capacity and eligibility requirements. • In the absence of a closed-loop referral system, follow-up with patients who screened positive for social need at least annually. • Co-locate social and healthcare services to ensure closed loop referrals and integrated health/social service delivery. 	
<p>Incentives and Investments</p>	<ul style="list-style-type: none"> • Incent screening for and collecting data on SDOH along the continuum from fee-for-service (FFS) to value-based reimbursement models, aligning with community movement toward VBP <ul style="list-style-type: none"> ○ Reimburse directly for SDOH activities like screening and EHR-data collection ○ Use “pay for success” or provide risk-adjusted capitation and quality payments to free up funds for SDOH interventions. ○ Reimburse for social determinant conversations and case management/community health workers in clinical care. ○ Federal programs like the Health Homes model can provide a framework for reimbursing care coordination as a social determinant intervention ○ Include SDOH reporting requirements in contracts but do NOT include cost- or gain-sharing reimbursements for sites based on ability to meet social need. 	<ul style="list-style-type: none"> • Enforce collection and reporting of race and ethnicity by providing resources, training, and incentives • Incorporate REaL, SOGI, and disability status demographic data collection requirements in purchasing contracts. • Require stratification of key measures by race, ethnicity, and language categories for accreditation and reporting on state-wide measures. • Invest in data convening collaboratives that publicly report out health disparities on a state-wide level • Invest in antiracism training and education for health care professionals • Provide funding for community-based organizations that are working toward health equity.

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| | <ul style="list-style-type: none">• Invest in CIEs/SSRLs that use Human Services Data Specifications standards and that are inclusive of referral management across key stakeholders• Invest in SDOH pilot projects or learning collaboratives across Washington state that include evaluation and reporting on lessons learned.• Invest in social service capacity, including community-based organization capacity and workforce. Include investments in public health infrastructure, upstream prevention, and integrated care.• Align health care and social care activities that address SDOH at a state-wide level. These systems should be developed from the ground up and work with trusted community partners.• Provide funding for an organizing body that can align state-wide healthcare stakeholders, disseminate best practices and standards as they develop, and drive collaboration for social determinants work. | |
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Stakeholder Checklists

Delivery Organizations

- Embed equity principles into organization mission, vision, values, and programming.
- Facilitate an organizational culture of destigmatizing talking about bias including from race through level-setting and fostering staff buy-in
 - Uncomfortable conversations can reduce barriers to empathy and understanding
 - Include resources and education about health equity, health disparities, and the legacy of historical trauma on a health
 - Center diversity, equity, and inclusion
 - Acknowledge potential for unintentionally hostile reactions from staff and prioritize individual-level understanding
- Train providers or provide access to training on:
 - Providing trauma-informed, culturally humble care
 - The effects of social determinants on health outcomes and the importance of care coordination/care planning.
 - Communication between interdisciplinary team members.
- Develop plan to pilot social determinants of health screening and intervention process beginning with a specific sub-set of the patient population (e.g. diabetes management, in-patient surgical care), with an eventual plan to scale-up to the entire patient population.
- Screen using validated (when available) tool for
 - Race
 - Ethnicity
 - Language
 - Housing insecurity
 - Food insecurity
 - Transportation need
 - A high-priority need identified by the community. Other possible SDOH domains include (but are not limited to):
 - Social Isolation
 - Financial Insecurity
 - Education
 - Broadband
 - Utility Needs
 - Experience of racism
- Solicit informed consent prior to screening.
- Use a standardized workflow for SDOH screening based on internal staff and technical capacity.
 - If screening is conducted by staff, there is an identified staff member/team responsible for screening (medical assistant, administrative assistant, etc.) who receives trauma-informed training for verbal screening.
 - If screening is self-reported, there is either a paper or electronic screener that is easy for patients to access and integrated into similar workflows for other screening tools (PSQ-9, alcohol use, etc).

- ❑ Collect FHIR defined data on
 - Race, Ethnicity, and Language (REaL) for all patients
 - Sexual orientation and gender identity data (SOGI)
 - Disability status
 - REaL data categories are linked to process, patient-reported outcomes, and health outcome measures to identify areas with disparities in care
- ❑ EHR captures SDOH information in a way that is visible to providers to help inform care planning and those with high-risk needs are flagged for care coordination and resource referral activities.
- ❑ Social risk information is linked to HIT vocabulary codes, both content codes (i.e. existing ICD-10 z-codes) and exchanged using nationally accepted HIT standards (i.e. CCDA or FHIR). New standard coded data sets are being developed by the Gravity Project.
- ❑ Stratify patients with unmet social need into at least two categories: (i.e. high-risk needs and low-risk needs) based on number of unmet social needs, other physical/behavioral health needs, and urgency of need.
 - Those with low-risk needs are provided either a clinic-specific or region-specific resource list or referred to 2-1-1 which is available across Washington state.
 - Those with high-risk needs are given one-on-one assistance by a community health worker, social worker, or patient navigator who can provide care coordination and warm hand-offs to services.
- ❑ Prioritize outreach to populations with historical or demonstrated social risk
 - Use patient-identified Race, Ethnicity, and Language (REaL) demographic data and demonstrated historic need to help prioritize high-risk patients.
- ❑ Designate staff member/team, as resources allow to:
 - Develop partnerships with community-based organizations.
 - Analyze stratified health outcomes to identify areas of care with identified disparities
 - Understand local social service capacity and eligibility requirements.
 - Work with a social service resource locator (SSRL) or community information exchange (CIE) to streamline closed-loop referrals and cross-sector communication.
 - Lead plan-do-study-act cycles to address identified disparities
- ❑ Consider co-locating some social services, such as food banks or housing case management, to integrate services.
- ❑ Patient educational and communication material is available:
 - In multiple languages and formats
 - To inform patients about the relationship between health care and other needs
 - Avoid jargon (like “social determinants of health”) and clarify that even though social need information is important for care planning, the delivery system may not be able to solve all their identified social needs.
- ❑ Coordinate with health plans, benefits programs, state agencies, and community-based organizations to align goals on social determinants of health.
- ❑ Participate in a state-wide convening body to share data on health disparities and coordinate quality improvement efforts.

These recommendations not intended to be used in lieu of medical advice.

Patients and Family Members

- Talk to your doctor or care team if you have non-medical concerns that make it difficult to access quality medical care, adhere to your care plan, or negatively impact your health.
- Consider reaching out to your health plan to ask about care coordination services if you have multiple health and social care needs.

Providers

- Understand the effects of structural racism, implicit bias, and historical trauma on the medical field and health outcomes
- Take training on implicit bias, cultural competency, and/or cultural humility, and trauma-informed care.
- Understand the importance of social risk screening independent of your ability to provide resources for that identified social need.
- Understand your practice's social risk screening tool and where you access data about your patient population's social risk.
- Work with your practice's interdisciplinary team for social risk screening, including staff responsible for administering screening and staff responsible for referrals to services (if any).
- Acknowledge a person's individual social risk during a visit with the patient and develop an individual care plan to take these factors into account.
 - E.g. medication storage plans for people who are experiencing homelessness or follow-up visit plans for those without adequate transportation.

Healthcare-Based Case Managers and Care Coordinators

- Follow professional standards (such as Case Management Society of America or Commission for Case Management Certification) which include principles such as cultural competency, cultural and linguistic sensitivity, advocacy, anti-racism, and justice.
- Provide navigation and case management services for patients who are deemed high-risk for unmet social needs including referrals, motivational interviewing, and care planning.
- Develop policies to provide necessary accommodations for patients with mobility, hearing, cognitive, and other impairments, as well as patients with varying linguistic and cultural needs.
- When possible, develop ties with local community-based organizations and try to keep up with eligibility requirements, capacity, and referral processes for social service agencies.

Health Plans

- Embed equity principles into organization mission, vision, values, and programming.
- Collect Race, Ethnicity, and Language (REaL) Data for all patients
- Develop a plan to collect sexual orientation and gender identity data (SOGI) and disability data for patient demographics.
- Stratify HEDIS measures by REaL data categories to identify disparities
- Designate a process to analyze identified disparities
- Develop a process to communicate disparities to relevant stakeholders
- Communication material for patients is available in multiple languages and formats to be accessible for all patients with language barriers or audio/visual disabilities.
- Participate in a state-wide convening body to share data on health disparities and coordinate quality improvement efforts.
- Collect data on social determinants of health screening participation, including demographics such as patient race and ethnicity.
- Develop reimbursement mechanisms that encourage social determinants interventions and align with the community movement toward value-based payments:
 - Fee-for-service might look like reimbursement for every social risk screening a practice completes or reimbursement for tracking HIT content codes (e.g. z-codes)
 - Value-based payments like “pay for success” or risk-adjusted capitation models can encourage social determinants interventions as a cost-effective approach to addressing complex care needs.
 - Existing reimbursement models like the Health Homes federal program could provide a framework for reimbursing care coordination activities.
 - While you may include SDOH reporting requirements in contracts, do NOT develop cost-sharing or gain-sharing reimbursements based on the ability to meet social need.
- Consider investments in technologies that would improve closed loop referrals (CIEs or SSRs) or in social service capacity at your hospitals. Co-located health and social services are the most efficient way to encourage cross-referrals.
- Coordinate with benefits programs, delivery systems, state agencies, and community-based organizations to align goals on social determinants of health.

Employers/Benefits

- Embed equity principles into organization mission, vision, values, and programming.
- Collect Race, Ethnicity, and Language (REaL) Data for all employees and develop a plan to collect sexual orientation and gender identity data (SOGI) and disability data for patient demographics.
- Review your benefits plan and vendors with equity in mind.
- Communication material for employees is available in multiple languages and formats to be accessible for employees with language barriers or audio/visual impairments.
- Incorporate social determinant of health screening and intervention targets into value-based contracts.
- Review your benefits plan and vendors to ensure employees have access to benefits that address their social needs
- Include educational material about the relationship between health and social services in your benefits packages.
- Coordinate with health plans, delivery systems, state agencies, and community-based organizations to align goals on social determinants of health.

Community Information Exchange Vendors

- Follow Human Services Data Specification standards to support the open and interoperable exchange of community resource directory data.
- Ensure interoperability inclusive of all referral sources and destinations.
- Update the resource directory information at least annually.
- Coordinate with health plans, delivery systems, benefits programs, state agencies, and community-based organizations to align goals on social determinants of health.

Community Based Organizations

- Understand the relationship between health outcomes and social needs and the relationship between social justice and health inequities.
- Participate in community information exchanges and social service resource locators that offer referral management.

Health Professional Associations

- Provide resources and trainings for members to understand the impact of social determinants of health, SDOH screening tools and workflow resources, and how to partner with community-based organizations.
- Coordinate with health plans, delivery systems, state agencies, and community-based organizations to align goals on social determinants of health.

Washington State Health Care Authority

- Require Medicaid Managed Care plans to
 - Collect FHIR-defined race, ethnicity, and language data
 - Report on percentage of eligible adults screened for social determinants of health and by race and ethnicity.
 - Offer care coordination aligned with NCQA accreditation.
- Include metrics in value-based payment models that incent practice-level screening and intervention around social determinants of health while NOT including cost-sharing or gain-sharing reimbursements for sites based on ability to meet social need
- Continue to support development of regional community information exchange hubs for care coordination that are interoperable
 - Develop a sustainable plan for these regional hubs to continue beyond the state's Medicaid Transformation project.
- Stratify measures in the state-wide common measures set by race and ethnicity data categories.

Washington State Department of Health

- Use FHIR-defined standards for race and ethnicity data categories for local public health
- Develop training and resources for a community-based workforce that can screen for social risk and connect patients to resources.

Washington State Legislature

- Mandate health plan reporting on available race and ethnicity data for all quality performance metrics.
- Increase funding for provider social determinant of health projects, interoperable community information exchanges for care coordination, public health infrastructure, and social service capacity.
- Ensure alignment across state agencies for social determinants of health activities to avoid duplication, share data, and provide investment in needed services.
- Follow the federal "Improving Social Determinants of Health Act" ([H.R. 6561/S. 4440](#)) this legislative cycle as an example of possible social determinant legislation that could be adapted for Washington state.

Evidence Review: Social Determinants of Health

Social and economic factors account for much more of a person's health than do clinical interventions.²⁸ In addition, implicit bias and structural racism have led to disproportionately poor outcomes for black, indigenous, and people of color (BIPOC) and other underserved communities.²⁹ Including these factors in clinical care delivery involves navigating complex cross-sector partnerships, aligning incentives, and transforming the current health care delivery system. This guideline includes five focus areas around which to frame this transformation.

Additional resources can be found in Appendix I

Planning

Commit to Social Integration in Health Care

Consistent evidence on how social determinants shape health is driving a shift in the health care sector toward interventions that address upstream drivers of health outcomes. Mitigating adverse social determinants in order to achieve more equitable healthcare outcomes is one piece of the larger trend toward the integration of social care in healthcare. In 2019, the National Academies developed a framework of complementary activities to support integration of social care in health care, the five "A's:"³⁰

- **Awareness:** Activities that identify the social risks and assets of patients and populations
- **Adjustment:** Activities that focus on altering clinical care to accommodate identified social barriers
- **Assistance:** Activities that reduce social risk by providing assistance in connecting patients with relevant social care resources
- **Alignment:** Activities by health care systems to understand, collaborate with, and invest in existing social care assets in the community
- **Advocacy:** Activities by health care organizations, partnering with social care organizations, to promote policies that facilitate the creation and redeployment of assets or resources

Each of these five activities will require systems-level changes toward more integrated healthcare including a trained and staffed workforce, HIT innovations, and new financing models.

Population Profile

To be most effective, screening should be tailored to address the characteristics and needs, and foster resilience identified by the community served.³¹ Community needs vary based on environment, cultural background, local history, and other factors. Community knowledge should be integrated into planning for accurate, equitable population profiling. This process could draw from hospital community health needs assessments, health plan risk modeling, patient focus groups, or partnerships with community-based organizations.

Communication and Buy-In

While there is widespread acceptance of the influence of SDOH on health outcomes, there may be reluctance from clinical staff to engage in screening. If employees are not engaged in this process, there is the risk of resentment and resistance to these initiatives.³²

Common themes in staff reticence for social determinant interventions include concerns about workflow burden, the limited scope of clinical care, and feeling incapable of meeting a patient's identified social need.³³ Growing evidence from screening pilot projects demonstrates that staff and clinicians adapt to screening workflows and see the benefits for care planning but encounter barriers to providing services.^{34,35,36} Starting with a small pilot project and working with clinical champions can alleviate concerns about workflow and demonstrate value. Emphasizing the importance of screening regardless in care planning and collecting data to make the case for future investment can address staff concerns about lack of capacity.

In addition to working with staff members, any SDOH screening project must develop buy-in from patients to avoid the potential for harm.³⁷ The term "social determinants of health" is medical jargon that may not be familiar to patients. Any SDOH screening project must include communication tools that explain the reasoning for screening and are transparent about the potential lack of social support. Increased screening for social risk also has the increased risk of legal consequences, including deportation or loss of child custody when screening in pediatric settings.³⁸ During the planning phase, institutions must develop a plan for how to deal with mandated reporting when screening for social needs and how to communicate this plan with patients.

SDOH Pilot Project

Choosing a small population for a pilot project prior to rolling out universal screening can help demonstrate value and develop staff buy-in.³⁹ One way to choose a pilot population is to identify an area of care where social determinants play an important role in health outcomes. For example, studies have linked social determinants to prevention and control of hypertension,⁴⁰ diabetes management,⁴¹ and asthma.⁴² A potential SDOH pilot project could target screening and intervention for patients with diabetes as a subset of the entire population. Other pilot projects could target inpatient departments at the time of discharge so identified social need can play a role in discharge planning.

Design Workflow

The last step of planning is to develop a workflow that identifies staff roles and responsibilities. Important details include the location and frequency of screening, a designated staff member responsible for facilitating screening, a data collection and measurement strategy, and a designated staff member responsible for follow-up with those who screen positive. Clear communication is key throughout every step of the screening and intervention process.⁴³ Workflows should be developed based on the organization's resources, needs, and goals.⁴⁴ While this can lead to much workflow

variability, it is clear that screening should never be conducted at the top of the licensure. Physicians should be notified of positive screens but should not conduct screening activities.⁴⁵

Several tools are available to assist in workflow development, including a workflow mapper from the Oregon Primary Care Association, and a checklist for clinical readiness to implement screening from the American Academy of Family Physicians.

Organizations should provide as many mechanisms as possible to conduct screening, whether self-report or through staff-mediated conversations. Practices should integrate SDOH screening into existing workflows through either paper or electronic self-reported screening questionnaires for efficient workflows.⁴⁶ This mechanism can save time for staff and clinicians and may reduce patient perceived stigma when talking about their social. Barriers to self-reported SDOH screening could include low participation rates (especially when conducted through online patient portals) and a lack of trust.

When implementing self-reported SDOH screening, organizations should integrate SDOH screening with other workflows, such as screening for depression with the PHQ-9 or screening for alcohol use disorder.

Washington State Example



The Washington Association of Community Health Centers runs a learning collaborative for community health centers to develop pilot projects for social determinant screening. This space allows CHCs to brainstorm clinical workflows and identify solutions to common concerns about interoperability and referral pathways.

Identification

Screening Tool

There are many social determinants of health, ranging from community-level factors (i.e., neighborhood safety) to individual risk factors (i.e. housing insecurity).⁴⁷ The Foundation for Health Care Quality is agnostic when it comes to screening tools, as capacity, infrastructure, and community context varies across delivery systems and sites. Any SDOH screening tool adopted by a health care institution in Washington state should be reliable or valid (when possible) and include at least four domains: housing, food security, transportation, and a fourth domain identified as high priority by the community.

Individual screening for social risk is essential to target social services, inform care and discharge planning, and address the complex needs of patients. While many organizations use predictive modeling or Census-level data to target populations based on social risk, studies have shown that community-level data is only 48% accurate in predicting social need.⁴⁸ Instead, practices should implement a screening tool to identify individual social risk, as encouraged by the American Academy of Family Physicians, the National Association of Community Health Centers, and the American Academy of Pediatrics.⁴⁹ Despite this emphasis on screening, a 2017 national survey of providers reported that only 25% of hospitals screened for five common social determinants of health.⁵⁰

Many tools are available for free, including the National Association for Community Health Center’s PRAPARE tool and the Center for Medicaid and Medicare Services’ AHC-HRSN tool.⁵¹ At the same time, organizations have adapted existing tools to create individual tools that integrates with local capacity and need.⁵² Screening tools often free to use or available with permission, while some offer training and EHR integration options for separate fees.⁵³ Many of the screening tools have been adopted from existing single-domain validated questionnaires, but there is not an evidence-based tool that is more valid than others at this point.^{54,55} Given the lack of clear evidence for a single SDOH screening tool, the Foundation for Health Care Quality has elected to not recommend a single standard tool. Rather, healthcare institutions should adopt or adapt an existing tool that meets the needs of their clinical capacity and community context.

Kaiser Permanent and the SIREN research institute maintain a database of social risk screening tools that can be filtered by domain and length to help institutions find what works for them.⁵⁶ While these guidelines do endorse a single tool, any screening tool adopted should meet standards for included domains and interoperable data exchange.

Table 1: Common SDOH Screening Tools⁵⁷

SDOH Screening Tool	# of Questions	Resources
AAFP EveryOne Tool	15	www.aafp.org/family-physician/patient-care/the-everyone-project/toolkit/assessment.html
AHC Health Related Social Needs	10	https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf
Health Leads USA	7	https://healthleadsusa.org/resources/the-health-leads-screening-toolkit/
PRAPARE	21	www.nachc.org/research-and-data/prapare/toolkit/
WE CARE	10	https://www.bmc.org/pediatrics-primary-care/we-care/we-care-model
Your Current Life Situation	32	https://sirenetwork.ucsf.edu/sites/default/files/Your%20Current%20Life%20Situation%20Questionnaire%20v2-0%20%28Core%20and%20supplemental%29%20no%20highlights.pdf

Trauma-Informed Care

Staff-mediated screening conversations are time-consuming and have the potential to underreport social need due to perceived stigma. On the other hand, staff-mediated conversations can build trust between patients and providers and better communicate the importance of screening.

When implementing staff-mediated SDOH screening, staff should be trained on trauma-informed care and motivational interviewing to treat patients with dignity and respect.⁵⁸ The Centers for Disease Control and Prevention lists six principles to a trauma-informed approach:⁵⁹

- **Safety:** Staff and people receiving care feel physically and psychologically safe
- **Trustworthiness and transparency**
- **Peer support:** Those with lived experience of trauma as allies in recovery or using stories
- **Collaboration and mutuality:** Decision making is shared, power differentials among staff or between providers and people receiving care is reduced
- **Choice:** Empowerment and self-advocacy
- **Cultural, historical and gender issues:** Recognizing and addressing historical trauma, removing provider bias, care that is responsive to cultural background

Moving to a trauma-informed approach in a clinical setting starts with being trauma-aware, as the Substance Abuse and Mental Health Services Association (SAMHSA) does through their four Rs:⁶⁰

- **Realization** that anyone may have experienced trauma and their behavior can be understood as a coping strategy to address past trauma
- **Recognize** the signs of trauma
- **Respond** to the above through using a universal precautions approach (e.g., all people are approached as though they have experienced trauma)
- **Resist Re-traumatization** by seeking to not create toxic or stressful environments

Organizations like the Oregon Primary Care Association provide training on trauma-informed conversations and “empathic inquiry” as a way of building trust and compassion into social determinants screening.⁶¹

Washington State Example



Kaiser Permanent of Washington developed an organization-specific social determinants of health screening tool, called Your Current Life Situation (YCLS). The YCLS screening tool will be rolled out in the entire patient population after targeted piloting and will be integrated with the electronic health record to facilitate communication among the care team.

Tracking and Measurement

Data Autonomy

Collecting data on social determinants of health is essential for understanding the health of communities and justifying future investments in screening and intervention activities as well as upstream interventions. However, patients who are most at risk for unmet social needs are often justifiably concerned about having their SDOH information collected and shared, possibly due to receiving biased health care, or concerns about how personal information is being used.⁶² These concerns must be met with clear and communicated best practices for data privacy, patient perceived stigma, and information autonomy. This includes the importance of soliciting dynamic consent and providing transparent communication throughout the process.⁶³

Data and Workflows in the Electronic Health Record

Multiple case studies have demonstrated the feasibility and benefits of integrating SDOH data collection and visibility in the EHR.^{64,65,66,67} This could include collecting SDOH screening data in the EHR,⁶⁸ dashboards with SDOH information visible to providers,⁶⁹ auto-populating referral lists for those with identified social need⁷⁰ and may eventually facilitate closed-loop referrals. Integrating SDOH screening in the EHR could also facilitate collection of HIT content and exchange codes for interoperability.⁷¹

EHR vendors are also developing resources to integrate SDOH screening tools. NACHC's PRAPARE screening tool has worked with several vendors to develop free EHR templates to integrate screening.⁷² Other web-based patient questionnaire software can be integrated to various HER vendors as modules and facilitate SDOH screening.^{73,74}

Interoperability

To ensure interoperability, SDOH data should be linked to HIT vocabulary codes, both content codes (e.g. existing ICD-10 z-codes) and exchange codes (e.g. FHIR). Currently, most SDOH data is represented in unstructured formats, as free text and clinical notes.^{75,76} This data is difficult to extract and does not facilitate interoperability. Instead, SDOH data should be collected in structured formats and exchanged using Fast Healthcare Interoperable Resources (FHIR).

Currently, the most common content codes for SDOH data are ICD-10 z-codes, a subset of diagnostic codes used for social conditions. ICD-10 Z-codes between Z55 – Z65 are meant to identify “persons with potential health hazards related to socioeconomic and psychosocial circumstances.”⁷⁷ Despite the availability of these z-codes, only 1.4% of Medicare FFS beneficiaries have claims with associated z-codes, suggesting that z-codes are continually underutilized.⁷⁸ Current barriers include lack of billing incentives and lack of a single standard for connecting z-codes to SDOH domains. The Gravity Project, a project out of UCSF's SIREN Center, is working to develop standard coded data sets ranging from FHIR to ICD-10 and will develop implementation guides as they propose codes.⁷⁹ Practices should crosswalk their SDOH screening questionnaire with current ICD-10 codes and follow the Gravity Project for future interoperable coded data sets and implementation material.

Table 2: Sample ICD-10 Z-Code Crosswalk with Common SDOH Domains*

SDOH Risk Factor	Related ICD-10 Code
Lack of Housing	Z59.0 Homelessness Z59.1 Inadequate Housing
Food Insecurity	Z59.4 Lack of adequate food and safe drinking water
Transportation Insecurity	Z59.8 Other problems related to housing and economic circumstances
Utility Concerns	Z59.8 Other problems related to housing and economic circumstances
Education/Literacy Concerns	Z55.0 Illiteracy and low-level literacy Z55.8 Other problems related to education and literacy
Unemployment	Z56.0 Unemployment, unspecified
Financial Hardship	Z59.5 Extreme Poverty Z59.6 Low Income
Personal Safety Concerns	Z63.9 Problem related to primary support group, unspecified
Interpersonal Violence	Z63.0 Problem in relationship with a spouse or partner
Social Isolation	Z60.2 Problems related to living alone Z60.4 Social exclusion and rejection

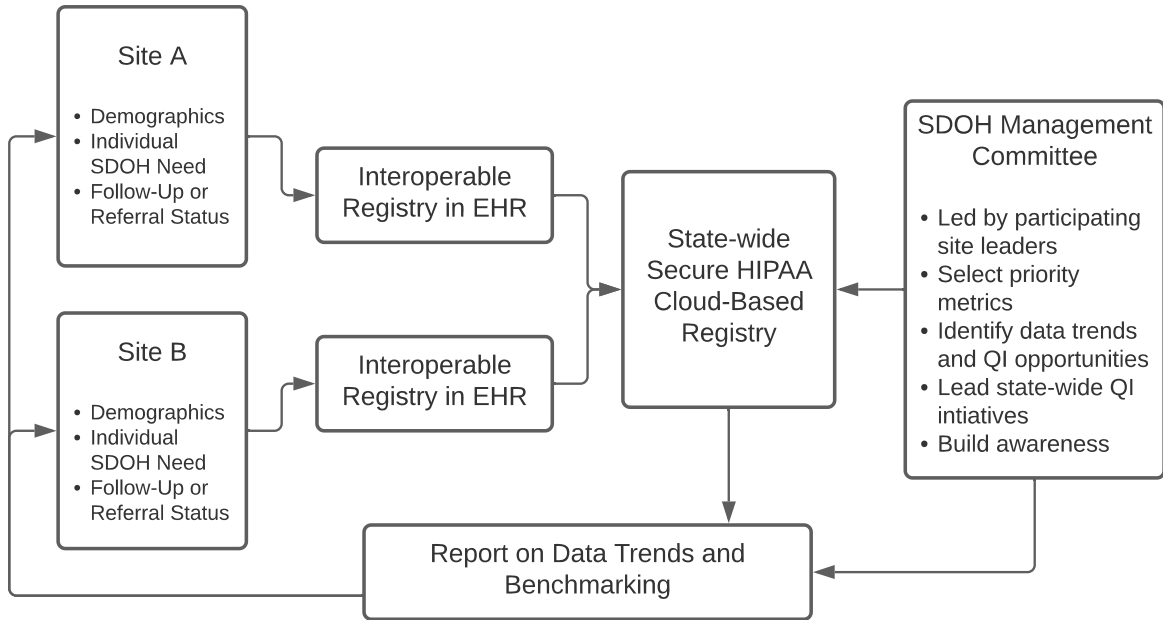
*Pediatric practices should also review codes under Z62 – problems related to upbringing.

Registry

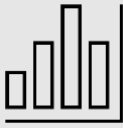
Registries internal to a delivery site can be beneficial to managing a particular disease for a particular population.⁸⁰ Registries tracking chronic conditions over time, such as for patients with diabetes or depression, have been shown to improve quality of care for learning-oriented health systems and individual outcomes.^{81,82} However, registries are helpful when they track intervenable characteristics of a defined and reachable population and may not be a good fit for a lower-resourced population.⁸³

While SDOH tracking and measurement is at an early phase, collecting that data in a shared format can aid quality improvement processes and make the case for future investments. Washington state maintains state-wide dashboards on disparities that draw from a community-level and individual-level data sources.⁸⁴ At the same time, emerging referral management platforms may collect information on referrals through their platform to demonstrate social service need.⁸⁵ While these data sources collect information on population and community-level social determinants, they lack the individual specificity and clinical relevance of similar registries for clinical outcomes.⁸⁶ Washington state stakeholders should develop the framework for a registry that can collect individual-level SDOH data that can be shared with authorized partners for quality improvement purposes.

Figure 3: Sample SDOH Registry:



Washington State Example



Virginia Mason Franciscan Health (VMFH) adapted the existing “Core 5” screening tool from the Ohio Action Coalition⁸⁷ to create their “Core 7” screening tool, a short questionnaire that includes housing, food, utilities, and transportation need. Each question is cross-walked with ICD-10 z-codes and SNOMED codes to facilitate interoperable coding of SDOH data.

VMFH Core 7 Questions:

1. Has a lack of transportation kept you from work, attending medical appointments, or from getting things you need for your daily living?
2. Do you have concerns about your ability to care for yourself at home or are you worried you won’t have anyone to help you when you get home?
3. Are you currently having concerns at home with your utilities such as your heat, electric, natural gas, or water?
4. Have you ever skipped medications to save money?
5. Are you worried about losing your housing or are you homeless?
6. Do you or your family worry about whether your food will run out and you won’t be able to get more?
7. Are you worried that someone may hurt you or your family?

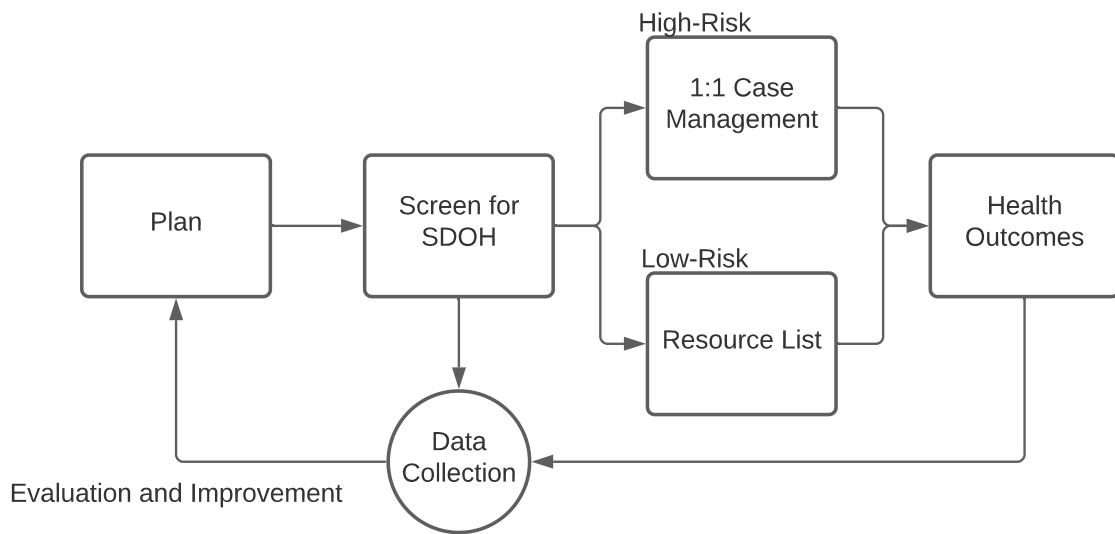
Follow-Up

Stratification

Although in-person follow-up with patients who screen positive for social risk is the gold standard for providing referrals to services, staff capacity makes this goal difficult. To target limited resources, practices should at least stratify those who screen positive for social need into two groups – high-risk and low-risk. Those at low-risk can be given hands-off resource lists for referral, and those at high-risk can be targeted for in-person warm hand-offs to services.

One option is to stratify patients based on a risk stratification model that incorporates clinical, mental health/substance abuse, SDOH, demographic, and utilization data.⁸⁸ Another way to quickly identify patients for hand-offs to services is to ask patients if they would like to receive referrals to services as part of the SDOH screening questionnaire.⁸⁹

Figure 4: Sample SDOH Screening and Intervention Workflow



Resource Lists

At a minimum, practices should offer resources lists to patients who screen positive for social risk. This brief intervention can follow similar screening – brief intervention – referral to treatment (SBIRT) workflows as for alcohol use or depression.⁹⁰ If using a clinic-specific resource list, identify a staff member or team who is responsible for maintaining the resources as up to date. A clinic-specific resource list can be used like a specialist preference list for clinical services. In the absence of resources to develop a clinic-specific list, practices can refer to an available social service resource locator, including 2-1-1, Aunt Bertha, or Unite Us when available.⁹¹

Care Coordination or Case Management

When resources allow, patients considered high-risk should be given in-person assistance. This in-person assistance should come from a community health worker, case manager, or care coordinator. In-person assistance could include motivational interviewing, warm hand-offs to services, and advocacy.⁹² When possible, the care coordination team can also maintain positive relationships with local community-based organizations and stay up to date with eligibility requirements.⁹³ Team members providing the SDOH referral services should be trained in principles such as cultural competency, cultural and linguistic sensitivity, advocacy, anti-racism, and justice.⁹⁴

Follow-Up Activities in the EHR

Follow-up activities can be viewed or auto populated into the EHR to streamline workflow and improve communication. Some practices have developed SDOH data visualizations for patient social risk factors that are viewable as dynamic modules in the EHR.⁹⁵ Other practices auto populate z-codes based on

screening responses,⁹⁶ or referral lists based on a patient’s social need. A different approach involves EHR flags and documentation of referrals for patients who need in-person follow-up based on their SDOH screening results.⁹⁷ Given clinical technical capacity, integrating follow-up activities in the EHR can reduce workflow burden and improve referrals to services by keeping all team members informed.

Community Information Exchanges/Social Service Resource Locators

Community Information Exchanges (CIEs) and Social Service Resource Locators (SSRLs) can help facilitate closed loop referrals by facilitating communication across sectors and coordinating outreach opportunities. CIEs and SSRLs connects health care, human, and social service partners together to improve the health and well-being of communities.⁹⁸ Emerging vendors are providing bi-directional platforms that can combine resource directories, referral management, privacy protection, systems integration, and social needs screening.⁹⁹

While these platforms can improve care coordination activities and integrate SDOH in health care, this space is rapidly expanding without strong standards for interoperability. The Department of Health and Human Services recommends that all community information exchanges follow Human Services Data Specification standards to support the open and interoperable exchange of community resource directory data, establish closed-loop referral functionalities that are inclusive of referral partner, and adopt Gravity Project identified terminology for SDOH data.¹⁰⁰

Co-Location

While emerging technology has improved technical capabilities for closed loop resource referrals, co-locating health and social services can better reduce barriers for patients and increase follow-through. Growing studies have shown that co-locating social services can improve coordinated care, improve efficiency of services, and improve quality of care.¹⁰¹ While co-locating services brings many benefits, co-location is not a single strategy, but rather a complex set of relationships, structures, and features that must be considered.

Washington State Example



The Child and Adolescent Clinic of Longview identifies patient SDOH need through a questionnaire given to all patients at every office visit. Patients with identified social need are connected to a care coordinator for one-on-one services that could include case management, referral management, and motivational interviewing.

Incentives and Investments

Reimbursement Along the Value Continuum

SDOH screening reimbursement has been incentivized by Medicaid programs, which frequently require social supports to be integrated with care models.¹⁰² Business leaders and insurance providers are

increasingly addressing SDOH in the benefits and plans as well.^{103,104} Growing evidence suggests that SDOH investments can provide a return on investment,^{105,106} which will continue to encourage health care stakeholders to adopt SDOH reimbursement models.

Fee-for-service reimbursements could provide direct payments for screening or data collection activities. For example, a health plan could reimburse their practitioners for claims that include ICD-10 z-codes. Value-based payment models could learn from existing CMS payment reform programs that address social need.¹⁰⁷ Some states have used Medicaid 1115 waivers to support either direct services or local capacity building. Other states have written SDOH risk factors into their risk-adjusted capitation models for managed care organizations, opening up funds for interventions to address social determinants and improve equity.^{108,109}

Standard Community Information Exchange

The emerging focus on CIEs and SSRLs for referral management can improve cross-sector care coordination, but there is room for standardization and interoperability.^{110,111} Further work is needed to standardize resource referral and care coordination technologies, possibly building off of Human Service Data Specifications for resource locators and past work in the EHR interoperability sector.

Successful SDOH screening and intervention projects start small and scale up.¹¹² Initial pilot funding could kick start clinic projects, demonstrate value, and develop buy-in from staff and patients. Starting pilot SDOH projects with a maturity mindset, participatory approach, and evaluation plan can help projects scale up in the future.¹¹³

Public Health Infrastructure and Social Service Capacity

While investing in screening and intervention in the clinical setting can help launch pilot projects and increase awareness of social determinants, public health and community-based organizations continue to address social determinants and upstream factors. In the past five years, health systems have invested at least \$2.5 billion dollars in public health infrastructure and in community-based organizations addressing social determinants of health.¹¹⁴ In addition to investments in infrastructure and capacity, change will require an appropriately staffed and trained workforce.¹¹⁵ These investments are essential to increase social service capacity to respond to referrals and address upstream factors before they can negatively impact health.

Ongoing Collaborative for Setting SDOH Standards

The social determinants of health are gaining importance in the health ecosystem. More institutions are developing programs to address social determinants, and more social risks are being identified every year. With the onset of COVID-19, more providers view access to internet and social isolation as social determinants, preventing people from accessing quality health services.¹¹⁶ Many national organizations are continuing their work to develop SDOH standards and best practices, including the Gravity Project and the National Alliance to Impact the Social Determinants of Health.^{117,118} In order to keep up with

rapid developments, these guidelines recommend developing a convening body to discuss and disseminate emerging best practices and set standards for Washington state.

Washington State Example



The Washington state Department of Health invests in regional care coordination hubs to facilitate cross-sector collaboration and communication. Washington state Accountable Communities of Health are developing a social investment model to coordinate and provide funding for social interventions, modeled after North Carolina’s 2019 Medicaid 1115 waiver.¹¹⁹ Both agencies are working toward a vision of integrated health care and social care that addresses upstream social determinants of health.

Social and economic factors account for much more of a person's health than do clinical interventions.¹²⁰ In addition, implicit bias and structural racism have led to disproportionately poor outcomes for black, indigenous, and people of color (BIPOC) and other underserved communities.¹²¹ Including these factors in clinical care delivery involves navigating complex cross-sector partnerships, aligning incentives, and transforming the current health care delivery system. This guideline includes five focus areas around which to frame this transformation.

Additional resources can be found in Appendix I

Planning

Embed Equity Principles into Organizational Mission, Vision, and Programming

Embedding a culture of equity at an organizational level facilitates integration of equity into clinical care. In 2020, COVID-19 exposed persistent health and health care inequities. Black communities faced disproportionate rates of COVID-19 infection and fatality.¹²² Job layoffs, evictions, and food insecurity related to the pandemic pressured vulnerable people to take health risks to make ends meet.¹²³ Going forward, health institutions must make an organization-wide commitment to equity and a corresponding plan for action.

The Institute for Healthcare Improvement offers guidance for delivery sites under the following framework [here](#), summarized below:¹²⁴

- Make equity a strategic priority
- Build infrastructure to support health equity
- Address the multiple determinants of health
- Eliminate racism and other forms of oppression
- Partner with the community to improve health equity

The American Academy of Family Physicians EveryONE project, [here](#), advocates for and includes tools to:¹²⁵

- Provide education and information about health equity
- Identify and developing clinical tools and resources to address patients' social needs
- Support research and policy development
- Advocate for policies that encourage health equity
- Encourage workforce diversity

Level-Setting and Staff Buy-In

Diversity, equity, and inclusion initiatives can have the unintended effect of causing anger, frustration, and feel threatening to those identifying as part of a majority group (e.g., those who are white; men).¹²⁶ This has been demonstrated in research and through case study. In one example, an organizational

diversity policy had the effect of staff discounting documented cases of biased treatment rather than leading to greater equity.¹²⁷ Thus, prior to education or training about bias including from race, organizational leadership must look to create durable organization-wide culture change and consensus through having potentially uncomfortable conversations. Conversations must be individualized to the people and organizational history to foster individual level empathy for minoritized groups (e.g., those who are black). If employees are not engaged in this process, there is the risk of resentment and resistance to racial equity initiatives.¹²⁸

The Implicit Association Test has shown mixed results in having a long-term impact on reducing individual-level bias and stereotyping.^{129,130} The test has not been shown to create increased levels of bias, however, and therefore can be recommended as an option to show the existence of bias to those who would otherwise be unaware. The test can be found [here](#).

As in previous Bree Collaborative guidelines, a stages of change framework is useful to realize organizational change, especially when considering resistance to anti-racist initiatives. The stages of change framework, also known as the Transtheoretical Model includes five key stages:

- Precontemplation: In this stage, people do not intend to take action to change, and may not be aware that their behavior is problematic. The Harvard Implicit Association test is most often recommended as a tool through which to measure racialized bias and to show an individual that their bias may be impacting the delivery of care.
- Contemplation: In this stage, people recognize that their behavior may be problematic, and are starting to consider behavior change.
- Determination: In this stage, people are ready to take action and start taking small steps toward behavior change.
- Action: In this stage, people change their behavior and intend to keep moving forward with their behavior change.
- Maintenance: In this stage, people have sustained their behavior change for a while and intend to maintain the behavior going forward.

Applying a stages of change framework to staff and patients can help organizations understand the disparate perceptions of racism and health equity and develop sustainable interventions that engage everyone. Beyond raising awareness, effective organization-wide interventions must involve many stages. One model for considering equity interventions put forth by the Harvard Business Review is the PRESS model:¹³¹

- Problem Awareness: While the existence of systemic and interpersonal racism and bias into the present day has been well documented, many people who are white are either unaware of or deny the presence of racism (Norton, Sommers). Raising a person's awareness of racism and racial bias starts with engagement and education along the stages of change framework.
- Root-Cause Analysis: After level-setting about the existence of and effects of racism, organizations should examine structures and policies. Unintentional that perpetuate a culture of discrimination, rather than focusing on individual action.

- **Empathy:** Once people are aware of the problem and causes, increase empathy through exposure and education. Empathy can engender solidarity and is more likely to lead to action.
- **Strategy:** Now that the foundation has been laid, organizations can plan interventions that address personal attitudes, informal cultural norms, and formal institutional policies.
- **Sacrifice:** The assumptions of sacrifice have enormous implications for diversity, equity, and inclusion, including the ways we think about “equal” vs. “equity.” When it comes to equity initiatives, make the case to staff and patients that “sacrifice” will involve giving up very little.

Recommending a variety of approachable sources about race, racism, and organizational change may be helpful in fostering buy-in:

- Harvard Business Review [Diversity Policies Rarely Make Companies Fairer, and They Feel Threatening to White Men](#)
- Harvard Business Review [Why So Many Organizations Stay White](#)
- Scientific American [The Problem with Implicit Bias Training](#)
- Baldwin, J. The Fire Next Time.
- Kendi, I. Stamped from the Beginning: The Definitive History of Racist Ideas in America.
- Kendi, I. How to be an Antiracist and How to be an Antiracist Baby.
- Wilkerson, I. Caste: The Origins of our Discontents.
- Oluo, I. So You Want to Talk About Race.
- Coates, T. Between the World and Me.
- DiAngelo, R. White Fragility: Why It's So Hard for White People to Talk About Racism

Diversity, Equity, and Inclusion Training

Literature suggests that many physicians have an implicit bias for white people over people of color.^{132,133} This implicit bias leads to lower quality communication¹³⁴ and influences diagnoses and health outcomes.¹³⁵ One way to address disparities is to train clinicians to be aware of their implicit bias.¹³⁶ Implicit bias trainings can train clinicians and other staff members to recognize bias thinking and avoid making biased decisions that lead to disparate health outcomes. In 2019, California passed a bill that mandated implicit bias training for healthcare providers, likely influencing other hospitals and medical schools to follow suit.¹³⁷ In order to have the intended effect, implicit bias trainings must focus on relevant biased behavior in order to generate change¹³⁸ and measure relevant patient outcomes as a result of training.¹³⁹

While implicit bias trainings have the potential to improve health equity, organizations must commit to level-setting and building consensus with employees prior to enacting implicit bias training. Without level-setting, members of dominant groups tend to discount claims of unfair treatment when the organization has a diversity policy in place.¹⁴⁰ In some cases, the rhetoric of diversity can result in inaccurate and counterproductive beliefs.¹⁴¹ Of course, organizations should not avoid discussion about diversity in order to spare the feelings of members of the dominant culture. Instead, organizations

should spend more time researching and assessing existing policies and trainings, design the intervention with care, and incorporate accountability into their programming.¹⁴²

Cultural Humility and Trauma-Informed Care

In addition to implicit bias training, the concepts of cultural competence, cultural humility, and trauma-informed care can improve clinician interactions with patients with diverse identities.

Evidence has linked cultural competence training to patient satisfaction and improved health outcomes.¹⁴³ Cultural competence and cultural humility frameworks can be complementary frameworks to work across cultures. Cultural competence suggests effectively working in diverse interactions, while cultural humility suggests a lifelong commitment to redressing power imbalances.¹⁴⁴ Both frameworks train staff to pursue racial, social, and health equity.¹⁴⁵ Staff should be trained on cultural competency using the Substance Abuse and Mental Health Services Association (SAMHSA) guidelines on cultural competence training competencies.¹⁴⁶

Staff should be trained on trauma-informed care and motivational interviewing to treat patients with dignity and respect.¹⁴⁷ The Centers for Disease Control and Prevention lists six principles to a trauma-informed approach:¹⁴⁸

- **Safety:** Staff and people receiving care feel physically and psychologically safe
- **Trustworthiness and transparency**
- **Peer support:** Those with lived experience of trauma as allies in recovery or using stories
- **Collaboration and mutuality:** Decision making is shared, power differentials among staff or between providers and people receiving care is reduced
- **Choice:** Empowerment and self-advocacy
- **Cultural, historical and gender issues:** Recognizing and addressing historical trauma, removing provider bias, care that is responsive to cultural background

Moving to a trauma-informed approach in a clinical setting starts with being trauma-aware, as the Substance Abuse and Mental Health Services Association (SAMHSA) does through their four Rs:¹⁴⁹

- **Realization** that anyone may have experienced trauma and their behavior can be understood as a coping strategy to address past trauma
- **Recognize** the signs of trauma
- **Respond** to the above through using a universal precautions approach (e.g., all people are approached as though they have experienced trauma)
- **Resist Re-traumatization** by seeking to not create toxic or stressful environments

Washington State Example



The Washington chapter of the Academy of Family Physicians created an Anti-Racism Task Force in order to address inequality through training, targeted quality improvement, and advocacy work. They draw on resources from the American Academy of Family Physician's EveryONE project, which includes implementation tools for social determinants of health screening and health equity resources.

Identification

Data Autonomy and Sovereignty

Collecting demographic data on personal identity will involve sensitive conversations about data transparency, autonomy, and sovereignty. Starting from data collection, people should be informed about how their data will be used and given the option to refuse to respond. However, data matters to individuals and talking to people about the possibility of using data to improve personal health and the health of communities can improve transparency and data completeness.

As data is identified, transparency is key throughout the entire process. For example, when the Centers for Disease Control first began reporting on COVID-19 outcomes by race and ethnicity categories, the Urban Indian Health Institute found that data completeness errors obscured the disproportionate impact of COVID-19 for American Indian/Alaska Natives.¹⁵⁰ Transparent data will allow communities to review methodology and data collection techniques to ensure the data collection is accurate and free from institutional bias. In addition to transparency, respecting data autonomy and sovereignty are essential while partnering with communities to address health equity. Data sovereignty is especially important for tribal entities, which have the ability to govern and protect the health, safety, and welfare of tribal citizens within tribal territory.¹⁵¹ Ensuring data autonomy and sovereignty goes beyond data sharing and public reporting to partnerships with organizations that represent communities of color prior to reporting on disparities and consulting with tribal agencies about data that concerns their citizens.

Collecting Demographic Data

The first step toward assessing and addressing health disparities is to collect relevant and accurate demographic data. Important data categories include Race, Ethnicity, and Language (REaL), sexual orientation and gender identity (SOGI), and disability status. Many of these personal identities are not visible to outside observers. Because of this, these fields should be self-reported by patients.

The Robert Wood Johnson Foundation developed a *Data for Health* guide that explores how data can be collected, shared, protected, and translated to improve individual and community health. Their five themes can apply to health equity data collection and use cases.¹⁵²

- Using Data: Use information technology and data to address health, both inside and outside the health care setting.
- Exchanging Data: Health data is dynamic, it needs to be available at the right time and place to support individual and community health.
- Protecting Data: Digital services are needed to ensure that the data are securely stored and analyzed, that data can be drawn from multiple sources, and that it is possible to be shared.
- What Individuals Want and Need: Individuals want access to their data to make personal health information.
- What Communities Want and Need: Community context is important. Data can support community activism and help communities make decisions to advance the health and wellness of their members.

The American Hospital Association provides a white paper for using data to reduce health disparities and improve health equity that includes four key steps:¹⁵³

- Identify Health Disparities: Branch out from usual data sets to identify health disparities, including demographic data, social needs data, and utilization data.
- Investigate Patterns in Health Disparities: Break down process and outcome measures by relevant demographic categories to identify disparities.
- Intervene Using Data to Address Health Disparities: Intervene with education and by setting goals and measuring progress to close the gaps on health disparities.
- Align Priorities with Identified Community Needs: In addition to reviewing the community health needs assessment, partner with community organizations to address health inequities.

Race, Ethnicity, and Language Data Considerations

Choosing data fields for race, ethnicity, and language is an important consideration with implications for reporting on disparities. The most common classification system is the 1997 US Office of Management and Budget (OMB) standard categories for race and ethnicity.¹⁵⁴ The US Department of Health and Human Services (DHHS), the Centers for Medicaid and Medicare Services, and the WA Department of Health's Comprehensive Hospital Abstract Reporting (CHARS) standards require OMB race/ethnicity categories. CMS provides an [inventory of resources](#) for standardized demographic and language data collection that can guide organizations through developing data collection strategies for the OMB race and ethnicity categories.¹⁵⁵

Some classification systems include additional options for "Unknown," "Other Race," or "Two or More Races."¹⁵⁶ These extra categories are often counterproductive. Categories for "unknown" or "other race" may arise due to misunderstandings of the OMB categories, which are intended to roll-up from granular nationality categories. In addition, it is difficult to disaggregate the categories "Two or More Races" or "multiracial," which can distort other race and ethnicity categories. This phenomenon impacts American Indian and Alaskan Natives, who disproportionately identify as "two or more races" which leads to erasure of their population health data.¹⁵⁷


OMB Race and Ethnicity Categories*	
Ethnicity Categories	Race Categories
Hispanic or Latino	American Indian or Alaskan Native
	Asian
Not Hispanic or Latino	Black or African American
	Native Hawaiian or Other Pacific Islander
	White

*In addition to the above race and ethnicity categories, OMB encourages the collection of more granular nationality categories that can roll-up to the base categories.

Demographic Data Collection Training

Lack of quality data on race and ethnicity fields can perpetuate inequities by misrepresenting and obscuring the burden of disease.¹⁵⁸ As demographic data is self-reported; data quality is dependent on how patients are asked about their identities. Staff members responsible for collecting demographic data should be trained on how to ask uncomfortable questions, including race and ethnicity. In addition, demographic data should be updated at least annually, as personal identities may change over time.

Washington State Example



The Urban Indian Health Institute is a tribal epidemiology agency that decolonizes data to ensure that Native communities have access to accurate data that reflects their unique culture, traditions, and health needs. They work to improve race and ethnicity data accuracy across public health agencies and ensure data sovereignty.

Tracking and Measurement

Stratify Key Measures

After collecting demographic data begin stratifying patient-reported outcomes, process, and outcome, process by at least race and ethnicity categories. To begin, organizations can start stratifying currently standard measures such as NCQA HEDIS measures or the measures from the Washington State Common Measures set.^{159,160} While many hospitals stratify outcome and process measures, organizations should collect data on patient-reported discrimination. Studies on discrimination show that about 1 in 5 patients report discrimination while accessing health services¹⁶¹ with an association between self-reported experience of racism and health outcomes.¹⁶² Collecting measures on self-reported discrimination and racism can further identify disparities in care and areas for quality improvement.

In addition to established performance measures, organizations should identify areas for pilot projects on race/ethnicity data stratification and intervention. Two areas of care for stratification include maternal care and cancer care. Both maternal care and cancer care have documented disparities. Racial/ethnic disparities in cancer survival are well documented through state and national registries.¹⁶³ (Racial/ethnic disparities persist in multiple adverse obstetric outcomes and types of obstetric care¹⁶⁴ with almost 25% of women reporting discrimination in prenatal care.¹⁶⁵ In both cases, disparities are well documented, but root causes are more difficult to distinguish. Both topics can serve as candidates for pilot projects to stratify outcome measures and develop interventions to close the gap in health inequities.

Registries

Race, ethnicity, and other demographic data information should be incorporated in site-specific disease registries and databases to improve quality improvement and reporting capacity. This demographic data should come from self-reported categories and be linked to health outcomes. These site-specific databases have the potential to incorporate SDOH and demographic data to reduce identify and reduce disparities.^{166,167} Once site-specific databases are well-established for internal reporting, multistakeholder groups should collaborate by sharing data and developing innovative approaches to closing health inequity gaps.¹⁶⁸ The Bree Collaborative recommends three possible processes for stakeholders to collaborate on identifying health disparities: provider-driven clinical data repositories, plan-driven collaboratives, and state-wide reporting requirements.

Provider-Driven Health Equity Registry:

Providers should collaborate to reduce health disparities by sharing clinical data and demographic data for quality improvement. The Foundation for Health Care Quality (FHCQ) currently administers several of these registries as Clinical Outcomes Assessment Programs (COAPs). The COAP programs administer clinical data repositories that are (in general) 50% automatically abstracted, 25% structured data, and 25% text mining.¹⁶⁹ Provider-driven registries, containing a mix of administrative and clinical data, can help providers identify shared concerns, disseminate best practices, and target gaps in care. The FHCQ Obstetric COAP program has begun to stratify their key maternal and child health measures by race and ethnicity categories.

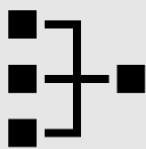
Plan-Driven Health Equity Reporting:

Plans should collaborate to reduce health disparities by sharing their stratified health outcomes data and developing initiatives to address common gaps. Washington state health plans that provide Medicaid managed care contracts (known as managed care organizations, or MCOs) currently share data on key measures through the Washington Health Alliance. The multi-MCO collaborative could stratify key measures by race and ethnicity to improve available data on disparities and target gaps for quality improvement purposes.

State-wide Reporting Amendments:

The Washington state Health Care Authority manages the state-wide Common Measures Set, a list of measures required healthcare organization contracting with the Health Care Authority and meant to trickle out to other state-wide stakeholders. The Common Measures Set should require all measures to be stratified by race and ethnicity categories in order to improve reporting of health disparities.

Washington State Example



The Foundation for Health Care Quality's Obstetric Outcomes Assessment Program (OB COAP) stratifies several key maternal outcome measures by race and ethnicity data categories. OB COAP is a clinical data repository overseen by a management committee of clinicians who analyze data for quality improvement purposes.

Follow-Up

Data-Driven Quality Improvement

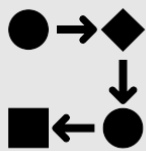
Once health disparities are identified, organizations should develop interventions to address the disparity through a Plan-Do-Study-Act (PDSA) Cycle.¹⁷⁰ The PDSA cycle involves planning an intervention, trying it out, observing the results, and acting on what is learned, which is best suited for action-oriented learning:

- Plan: state the objective of the intervention and develop a plan to test the change, including a plan for collecting data.
- Do: Try out the intervention on a small scale. Document problems and successes and begin data analysis
- Study: Complete data analysis. Summarize and reflect on what was learned.
- Act: Refine the intervention based on what was learned from the test. Begin to plan for the next iteration.

Engage Impacted Communities

Health inequities almost always disproportionately impact communities of color or disadvantaged populations. Instead of trying to address all disparities internally, organizations should partner with community leaders and community-based organizations to identify community-led solutions to health disparities. Even with a well-thought out PDSA to address health equity, many interventions are unable to create sustainable change.¹⁷¹ Instead, new diversity is needed to address structural racism and health disparities, which must include sustainable engagement with communities.^{172,173}

Washington State Example



Amerigroup in Washington state stratifies all HEDIS measures by race and ethnicity data categories. Every year Amerigroup chooses several areas of clinical care with measurable disparities and develops interventions to close the gaps. Amerigroup also partners with the state-wide MCO collaborative to share data and develop shared interventions for health equity.

Incentives and Investments

Incentivizing Demographic Data Collection

Organizations should encourage demographic data collection by providing resources and incentives. Resources for data collection could include staff training and health information technology support. Incentives could include reimbursements for data collection in alignment with the move to value-based payments.

Amend Current Reporting Requirements

In addition to resources and incentives, more organizations should require reporting requirements and reducing disparities as part of accreditation or ranking variables.¹⁷⁴ This could include amendments to the state-wide common measures set, additions to NCQA plan requirements, or association-specific measures.

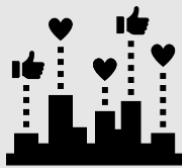
Anti-Racism

The root of most health inequities is structural racism. In order to uproot racism, healthcare stakeholders should take an antiracist approach to dismantling structural oppression. An antiracist approach could include investments in steering committees for antiracist training or interventions,¹⁷⁵ tracking and reporting on organization leadership and staffing diversity,¹⁷⁶ and transferring institutional wealth and resources.¹⁷⁷

Invest in Communities

Interventions to close the gap should partner with communities experiencing health inequities and learn from community leadership. Pairing data from the healthcare sector with community-engaged interventions leads can lead to health equity approaches that are data-driven and community grounded.¹⁷⁸ The health care sector has historically perpetuated harm and structural inequities.^{179,180,181} Investing in community-led organizations and health equity interventions will improve health outcomes and is one step toward transferring power back to the community.

Washington State Example



The Group Health Foundation supports community-led organizations that are working to improve health equity through their Community Learning Grants. The grants provide funding to community-powered organizations that are challenging structures that lead to health inequities.

The Bree Collaborative Social Determinants of Health Charter and Roster

Problem Statement

The social determinants of health are conditions in which people are “*born, grow, live, work and age.*” These determinants are key drivers of the quality and the length of a human life and contribute to disparities in health to a greater degree than clinical care. The inclusion of social determinants of health within clinical care and development of workflows to address unmet need and connect with external resources has the potential to contribute to better health outcomes.

Aim

To increase evidence-informed screening and intervention around the social determinants of health within clinical care to improve health outcomes.

Purpose

To propose evidence-informed recommendations to the full Bree Collaborative on:

- Defining social determinants of health
- Prioritizing social determinant domains for screening, further assessment, and/or social risk stratification
- Best practices for screening and assessment
- Mechanisms for data collection to track and share results of screening including coding and HIT interoperability
- Workflows after positive screen to meet social need(s) with internal and external community resources including closed-loop referrals and tracking health outcomes

Duties & Functions

The workgroup will:

- Research evidence-informed and expert-opinion informed guidelines and best practices (emerging and established) for all health care stakeholders.
- Identify barriers and strategies for overcoming these barriers to meeting social need.
- Consult relevant professional associations and other stakeholder organizations and subject matter experts for feedback, as appropriate.
- Meet for approximately nine months, as needed.
- Provide updates at Bree Collaborative meetings.
- Post draft report(s) on the Bree Collaborative website for public comment prior to sending report to the Bree Collaborative for approval and adoption.
- Present findings and recommendations in a report.

- Recommend data-driven and practical implementation strategies including metrics or a process for measurement.
- Create and oversee subsequent subgroups to help carry out the work, as needed.
- Revise this charter as necessary based on scope of work.

Structure

The workgroup will consist of individuals confirmed by Bree Collaborative members. Bree Collaborative staff will provide management and support services for the workgroup. Less than the full workgroup may convene to: gather and discuss information; conduct research; analyze relevant issues and facts; or draft recommendations for the deliberation of the full workgroup. A quorum shall be a simple majority and shall be required to accept and approve recommendations to send to the Bree Collaborative.

Meetings

The workgroup will hold meetings as necessary. Staff will conduct meetings, arrange for the recording of each meeting, and distribute meeting agendas and other materials prior to each meeting. Additional workgroup members may be added.

Name	Title	Organization
Abigail Berube	Director, Safety and Quality	Washington State Hospital Association
Alison Bradywood	Senior Director, Clinical Quality and Practice	Virginia Mason
Angela Chien	OBGYN	
Becky Fraynt	Manager, Health Improvement Programs	SEIU
Christopher Chen	Associate Medical Director	WA Health Care Authority
James Manuel	Project Lead	WA Health Benefit Exchange
Janice Tufte	Patient Advocate	
Jessica Martinson	Director, Continuing Professional Education	Washington State Medical Association
Jon Ehrenfeld	Mobile Integrated Health Program Manager	Seattle Fire Department
Julie Stroud	Medical Director for Quality and Clinical Services	Optum
Karen Curtis	Senior Director, National Health and Life Sciences	PointB

Karie Nicholas Ashley Lile	Data Analyst; Director of Training and Technical Assistance	WA Association for Community Health
Kevin Conefrey	Vice President, Human Resources	First Choice Health
Laurel Lee Yogini Kulkarni-Sharma	VP Member and Community Engagement, Interim President; AVP of Health Plan Quality Improvement	Molina Healthcare
Laurie Bergman	Vice President, Care Transition	Confluence Health
Maria Courogen	Special Assistant, Systems Transformation	WA Department of Health
Meg Jones Layne Croney	Director of Government Relations; Product Development Strategist	PacificSource Health Plans
Michael Garret	Principle	Mercer
Phyllis Cavens	Pediatrician, Medical Director	Child and Adolescent Clinic, Longview and Vancouver Washington Chapter of the American Academy of Pediatrics
Thomas Green	Orthopedic Surgeon	
Wes Luckey	Deputy Director	Greater Columbia ACH
Yolanda Evans	Adolescent Medicine, Pediatric and Adolescent Gynecology	Seattle Children's
Zandrea "Zandy" Harlan	Quality Manager	Kaiser Permanente

Appendix B: SDOH Bree Collaborative Meetings and Discussion

Date	Summary of Discussion
September 17, 2020	<ul style="list-style-type: none"> • Review of Bree Collaborative and scope of work. • Preliminary discussion of pilots in Washington state • ACH contribution to standard making • Best- and worst-case outcomes for community standard
October 15, 2020	<ul style="list-style-type: none"> • Gravity project scope, outcomes, and ability to inform WA process • Deciding on a suite of tools or on domains to be screened • Role for health plans
November 19, 2020	<ul style="list-style-type: none"> • Presentation from Greater Columbia ACH • Workflows from Intermountain Health and Kaiser Permanente • Finalizing scope as outlined in charter • Tracking with Z-Codes
December 17, 2020	<ul style="list-style-type: none"> • Discussion of possible SDOH workflows • Member presentations from Kaiser Permanente, Virginia Mason, and the WA Association of Community Health Centers. • Screening details including who, what, when, and how.
January 21, 2021	<ul style="list-style-type: none"> • Discussion of SDOH data and interoperability • Presentation from Mark Savage of the Gravity Project • Concerns about data barriers, data ownership, and transparency. • Encouraging utilization of existing coded elements
February 18, 2021	<ul style="list-style-type: none"> • Discussion of interventions for identified SDOH need – care coordination, case managers, closed loop referrals. • Member spotlights on Child and Adolescent Clinic and Mobile Integrated Health. • Presentation from Unite Us • Concerns about funding mechanisms, level of support given to CBOs who are at capacity
March 18, 2021	<ul style="list-style-type: none"> • Presentation from Molina about the role of health plans in SDOH interventions. • Discussion of investments and incentives for SDOH work. • Review of the Bree SDOH recommendation framework and outline.
April 15, 2021	<ul style="list-style-type: none"> • In-depth review of the Bree SDOH recommendation framework and checklist by the Bree workgroup. • Discussion of public comment survey being sent out prior to the next SDOH workgroup meeting.
May 13, 2021	<ul style="list-style-type: none"> • Review of public comment on Bree SDOH recommendation framework and checklist for final report edits.

Appendix C: SDOH Literature Review Summary

Focus Area	# of Resources	Notes
Planning	25	<ul style="list-style-type: none"> • Research articles dating back to the early 2000s about the effects of SDOH on health outcomes. • Research articles and commentary on equity and social determinants • Case studies and presentations on successful SDOH pilot projects • Resources for workflow mapping and organization planning for SDOH
Identification	19	<ul style="list-style-type: none"> • Existing SDOH tools and implementation guides • Research on clinician and patient perspectives of screening workflows • Surveys on prevalence of screening and common SDOH domains • Resources for EHR integration
Tracking and Measurement	18	<ul style="list-style-type: none"> • Case studies on integrating SDOH activities in EHRs • Research on existing SDOH data in the EHR, usually in unstructured formats • Resources for SDOH coded data sets, especially for z-codes • Research and resources on developing site-specific and state-wide registries
Follow-Up	19	<ul style="list-style-type: none"> • Implementation guides for various SDOH screening tools and workflows • Case studies of successful SDOH intervention programs. • Guidelines for care coordinators, case managers, and community health workers • Resources comparing CIEs, SSRLs, and resource referral platforms
Incentives and Investments	19	<ul style="list-style-type: none"> • Research on the return on investment for social interventions • Case studies on innovative reimbursement mechanisms, especially through Medicare/Medicaid • Industry-specific resources (plans, benefits, policy) on addressing SDOH

Appendix D: Health Equity Literature Review Summary

Focus Area	# of Resources	Notes
Planning	30	<ul style="list-style-type: none"> • Embed equity principles into program’s mission, vision, and values that dig into structural change. • Communicate level-setting with staff prior to implementing diversity initiatives to prevent backlash • Train staff and board on implicit bias and cultural competence.
Identification	7	<ul style="list-style-type: none"> • Best practices for REaL data collection are self-report using the 1997 OMB race and ethnicity categories. • Collect demographic data for other underserved populations, including sexual orientation and gender identity (SOGI) and disability status. • Self-report is a best practice for identity data collection, and staff collecting data should be trained on how to ask sensitive questions.
Tracking and Measurements	22	<ul style="list-style-type: none"> • Admin and clinical data sets can contain race/ethnicity data and key outcome measures, but it can be difficult to extract this data without algorithms. • Patient-reported experience of racism and discrimination is linked to poor health outcomes. • Algorithms and other measurements should be examined to remove any racial bias.
Follow-Up	12	<ul style="list-style-type: none"> • Once racial disparities are identified, it is possible to develop targeted interventions to close the gap. • Interventions should involve partnerships with communities most affected by disparities.
Incentives and Investments	5	<ul style="list-style-type: none"> • An antiracist approach will require changes in training, incentive structures, and community partnerships. • Incentivize and encourage stratification in reporting key measures.

Appendix E: SDOH Interview Guides

Questions for Healthcare Organizations

1. Tell me about your organization. Where is it located? How large is it?
 - a. Please describe your organization's patient population.
2. Does your organization currently screen patients/clients for Social Determinants of Health (SDoH)?
 - a. If yes:
 - i. How long has your organization screened patients?
 - ii. Can you describe the screening tool that your organization is using?
 - iii. What determinants/domains do you screen for?
 - iv. How frequently are patients screened?
 - v. Where is screening administered? (i.e. pediatrics, primary care, surgery, telehealth)
 - vi. How is screening administered (i.e. self-administered, staff)
 - vii. Who conducts the screening? (i.e. MA, RN)
 - viii. How do you distinguish between positive and negative screens?
 - ix. How often does follow-up occur? What % of patients follow up?
 - b. If no:
 - i. Has your organization thought about screening for SDoH?
 - ii. What barriers have prevented your organization from screening?
3. How is SDoH Data Integrated into your EHR (if at all)?
 - a. If data is collected:
 - i. How is data collected? (i.e. free-text, Z-codes, HL7 codes)
 - ii. How does your organization track this data?
 - iii. Is this information connected to Collective Medical or other data sharing/collaboration vendor?
 - iv. What does your organization do with SDoH data?
 - b. If data is not collected
 - i. Has your organization considered SDoH Data collection techniques?
 - ii. What barriers have prevented your organization from collecting data?
4. How (if at all) does your organization respond to patients/clients who screen positive for social needs?
 - a. If there is a workflow:
 - i. Describe your response workflow. Does your organization follow any standard models for referral to treatment? (ie SBIRT)
 - ii. Who is responsible for assisting patients with social needs? (i.e. patient navigator, community health worker, RNs)
 - iii. Do you believe your organization has a good sense of what community services are available in your area?
 - iv. Does your organization have any formal partnerships with community-based organizations?

- b. If there is not a workflow:
 - i. How does your organization respond to patient/client's social needs?
 - ii. What barriers exist to implementing a response workflow?
5. Tell me about the decision process at the organizational level to implement or not implement SDoH screening.
 - a. What convinced your organization that SDoH screening and intervention was important?
 - b. What were your perceived barriers to implementing a screening and intervention process?
 - c. What were the practical barriers your organization experienced to implementation?
 - d. What kinds of facilitators or barriers has your organization experienced in asking patients questions about SDoH?
1. Do you believe that SDoH screening and intervention has an impact on your patient population?
2. Is there a particular determinant of SDOH that you see more often than others?
3. What are your future hopes for SDOH screening and intervention and what is preventing us from getting there?

Questions for Community Based Organizations

1. Describe the community your organization works with.
 - a. What are the major challenges facing your community?
 - b. Where does your community find out what health services are available in your area?
 - c. Where does your community find out what community services are available in your area?
2. Describe your organization.
 - a. How large is your organization?
 - b. What services do you provide? Who is eligible for these services?
 - c. How does your organization handle referrals to services?
 - d. What are your organization's barriers to providing services to your participants/clients.
3. Have you heard of social determinants of health?
 - a. If yes:
 - i. Does your organization currently screen for any SDoH?
 - ii. What domains/areas of SDoH do you screen for?
 - iii. How does your organization respond to those with high need?
 - b. If no:
 - i. Does your organization currently screen for or ask about participant/client's social needs?
 - ii. What types of social needs do you ask about?
 - iii. How does your organization respond to those with high need?
4. How does your organization track data?
 - a. What does your organization do with participant/client social need data?
 - b. Does your organization collect any health data from participant's/clients?

- c. Does your organization share any aggregate participant data with other organizations to coordinate service delivery?
5. How does your organization view the relationship between social and healthcare services?
- d. Have you entered into any partnerships with local healthcare institutions?
 - e. What would help remove barriers that may be affecting the use of local health services by the community as a whole?

Appendix F: Key Stakeholders for SDOH Interview List

Organization/ Project	Sector	Date
2-1-1	CIE	2/11/21
ACH Social Investment Fund Model	ACH	4/28/21
American Indian Health Commission	Policy, Advocacy, Equity	1/19/21
Child and Adolescent Clinic of Longview	Provider	2/9/21
Community Health Plan of Washington	Plan	2/17/21
DOH	State Agency	2/26/21
First Choice Health Network	Benefits	1/12/21
Gravity Project	Data, Interoperability	12/22/20
Greater Columbia ACH	ACH	11/19/20
HCA	State Agency	11/23
Health Care for the Homeless Network	CBO / Provider	2/25/21
Healthier Here ACH	ACH	8/30/20
Highline Public Schools	CBO	2/3/21
Kaiser Permanente, Unite Us	Health System	12/10/20
KP/OCHIN	Research	2/10/21
Mercer	Benefits	3/5/21
Molina	Plan	2/16/21
North Central ACH	ACH	1/11/21
Oregon Primary Care Association	Policy / Advocacy	12/18/20
Premera	Plan	2/8/21
Refugee Women's Alliance	CBO	1/19/21
SEIU 775	Benefits	3/30/21
SFD, Mobile Integrated Health	CBO	2/5/21
Veteran's Affairs Health	Health System	1/26/21
Virginia Mason	Provider	11/9/20 and 3/25/21
Washington Association for Community Health	Policy / Advocacy	8/4/20

Washington State Hospital Association	Policy / Advocacy	1/12/21
West Side Baby	CBO	11/16/20
YMCA of Greater Seattle	CBO	5/4/21
Unite Us	CIE	12/10/20

Appendix G: Health Equity Interview Guide

Organization:

- 1) What organization do you represent? What is your organization's role in the healthcare system?

Data and Equity:

- 1) What are your organization's disparity data sources?
 - a. Do you standardize collection of race, ethnicity, and language (ReaL) data? Do you use any proxy measures for race/ethnicity?
 - b. Do you collect any other data about identities (gender identity, disability status, etc.)?
- 2) What are the barriers to collecting data on health disparities?
- 3) What are your goals for disparity data collection and analysis?
 - a. Do you stratify outcome measures based on this data? If so, which ones?
- 4) Do you have any current interventions to address health disparities?
 - a. Are your projects specific to certain health outcomes (maternal care)?
- 5) How do you share your disparity data?
 - a. For providers/plans: do you report on disparity data to any data convener? (DOH, OneHealthPort, etc.)
 - b. For data conveners (COAP/OneHealthPort): do you report on your data to a broad audience outside of healthcare?
 - c. Are you interested in sharing data on health disparities to a broader audience for quality improvement purposes?

Addressing Health Equity Initiatives

- 1) Does your organization have any initiatives to address implicit bias or anti-racism?
 - a. Trainings at the provider level?
 - b. Culture or leadership transformation strategies?
 - c. Patient engagement for marginalized groups?
- 2) What are your biggest barriers to conducted health equity work?
- 3) What are some of your organizations successes in addressing health equity?
- 4) What gives you hope for the future of health equity work?

Appendix H: Key Stakeholders For Health Equity Interviews

Organization/ Project	Sector	Date
Amerigroup	Plan	5/11/21
Boeing	Employer, Benefits	5/6/21
Foundation for Health Care Quality	Data Convener	1/26/21
Health Care Authority	Public Health	2/23/21
One Health Port	Data Convener	2/26/21
Seattle Children's Hospital Center for Diversity and Health Equity	Provider	4/6/21
United Health	Plan	5/4/21
Urban Indian Health Institute	CBO/Public Health	5/12/21
VA of Puget Sound	Provider	5/4/21
Washington Academy of Family Physicians	Association	4/29/21

Appendix I: Further SDOH Resources

Planning

[American Academy of Family Physicians: The EveryONE Project](#)

[American Hospital Association: Health Equity Snapshot – A Toolkit for Action](#)

[Institute for Healthcare Improvement: Advancing Equity Guidelines](#)

[National Academies Press: Integrating Social Care into the Delivery of Healthcare](#)

Identification

[American Hospital Association: Equity, Diversity & Inclusion Measures for Hospitals and Health Systems](#)

[Robert Wood Johnson Foundation: Data for Health – Learning What Works](#)

[CMS: Inventory of Resources for Standardized Demographic and Language Data Collection](#)

[Kaiser Permanente and SIREN: Systematic Review of Social Risk Screening Tools](#)

[Boston Medical Center: The WE CARE Model](#)

[CMS: Accountable Community of Health – Health Related Social Needs Screening Tool](#)

[Health Leads USA: Screening Toolkit](#)

[Kaiser Permanente: Your Current Life Situation Tool](#)

[PRAPARE: Implementation and Action Toolkit](#)

Tracking and Measurement

[The Gravity Project](#)

[NASDOH: Social Determinants of Health Data Interoperability White Paper](#)

[AHRQ: Computerized Disease Registries and Selected Disease Registry Resources](#)

Follow-Up

[Intermountain Healthcare: Social Determinants of Health SBIRT Model](#)

[Kaiser Permanente: COVID-19 Social Health Playbook](#)

[PRAPARE: Risk Stratification Model Overview](#)

[SIREN: Community Resource Referral Platforms: A Guide for Health Care Organizations](#)

Incentives and Investments

[Commonwealth Fund: Review of Evidence for Health-Related Social Needs Interventions](#)

[The Improving Social Determinants of Health Act of 2010 \(H.R. 6561/S. 4440\)](#)

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