HOW DOES THE HEALTH WORKFORCE PRACTICE?

Addressing Root Causes of Health Disparities

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Questions

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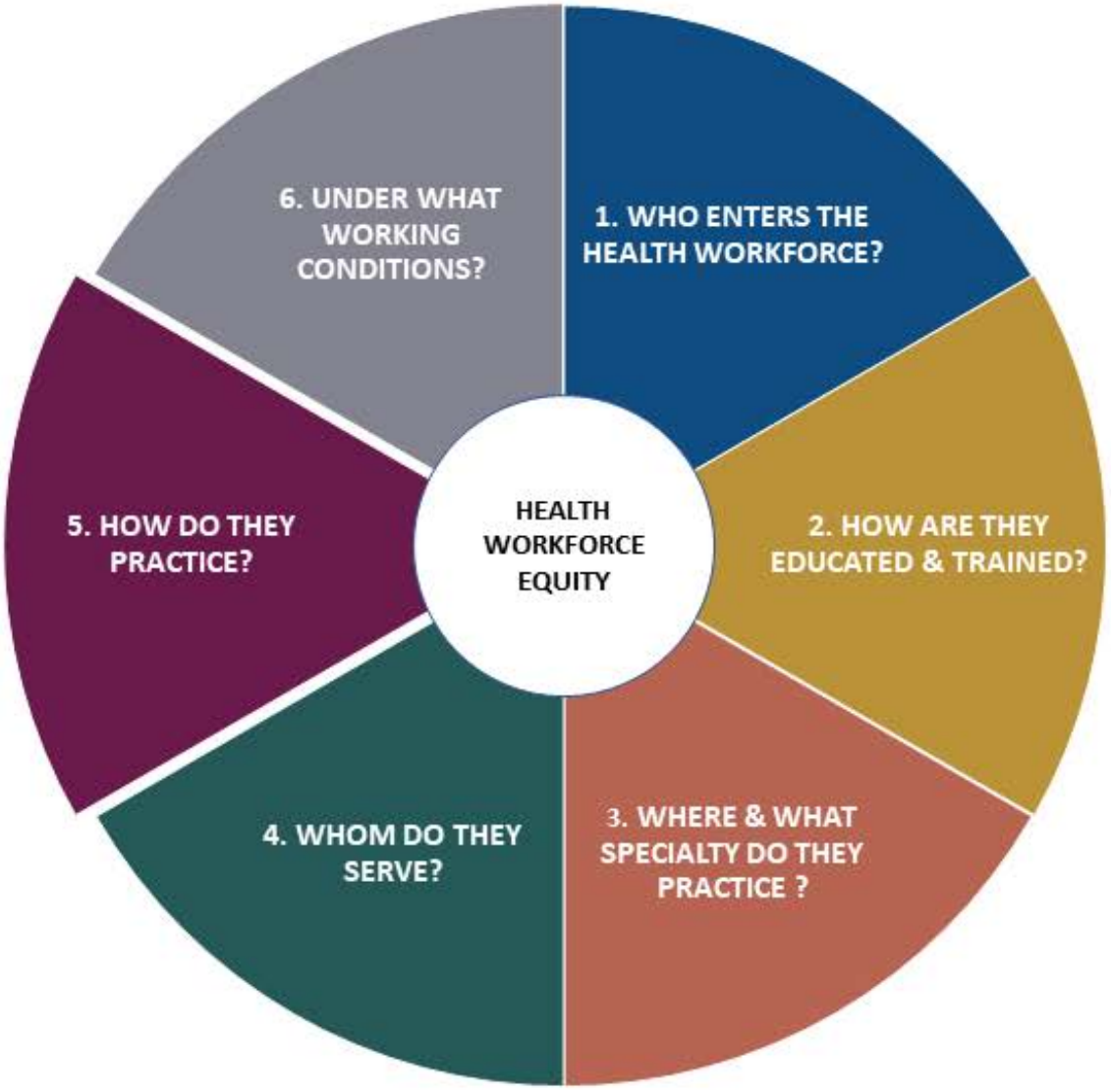
THE HEALTH WORKFORCE EQUITY EVIDENCE REVIEW SERIES

The Fitzhugh Mullan Institute for Health Workforce Equity defines health equity as *a world in which there is a diverse health workforce that has the competencies, opportunities, and courage to ensure everyone has a fair opportunity to attain their full health potential.*

At least six critically important factors drive health workforce equity, as shown in the figure below. These domains apply to workers across the health care spectrum, including home healthcare, support staff, allied health professionals, public health, physicians, nurses, and many others.

This series reviews existing literature on the nature and magnitude of each problem, the impact of this problem on health equity, and the policies and programs that affect it.

DOMAIN 5: While the healthcare system cannot address patients' social needs alone, providers can enhance care in ways that address the root causes of health disparities. This evidence review focuses on the roles of healthcare workers in addressing patients' social determinants of health.



The Problem

There is mounting evidence that the current medical services model does not produce desired health outcomes, in large part because the health workforce has limited capacity to identify and address social determinants of health (SDoH). Social, economic, environmental, and behavioral conditions are estimated to contribute to 80% of health outcomes in the United States, with a disproportionate impact on low-income populations.[1,2] Housing and food insecurity, violence, transportation barriers, low health literacy, and racism are just a few of the many social determinants with well-documented implications for health. Social causes have been cited as a major driver of increased mortality across the United States, with a magnitude so large it led to a decline in overall U.S. life expectancy from 2014 to 2017.[3,4]

Despite spending far more on healthcare, the United States has the lowest life expectancy among large, high-income peers and the health system consistently ranks poorly with respect to health equity in international comparisons.[5,6] Spending on social services in the United States is comparable to peers (as a percentage of gross domestic product). Still, less support to children, families, and working-age adults has been cited as drivers of poor health outcomes, creating an "accumulation of unmet social needs" over the life cycle that impact health and life expectancy.[7-9]

In addition, the United States has comparatively shorter hospital stays but higher readmission rates, prompting concern that the United States healthcare model incentivizes episodic care through the dominant fee-for-service (FFS) payment model.[10,11] In this model, payments are mainly dictated by the volume of medical services provided, favoring procedures and interventions with larger payments. The model poorly incentivizes lower-cost preventive or social services (e.g., home visits, patient education) to help identify important problems, such as food insecurity, poor medication adherence, and social isolation.[12] As a result, patients with unaddressed social needs may need more expensive services (hospitalization or emergency care).[13]

This evidence review focuses on the roles of healthcare workers in addressing patients' social determinants of health. While the healthcare system cannot address patients' social needs alone, providers can enhance care in ways that address the root causes of health disparities. Providers can: 1) screen for SDoH to be aware of social factors that could affect treatment plans and outcomes, 2) adjust care plans based on this knowledge, and 3) refer and coordinate with social and community-based solutions when needed. Most providers believe they should do more SDoH screening and better coordination with social services.[14,15] Studies also show that while providers are interested in screening for social needs in clinical settings, they do not feel confident in addressing them, primarily due to a lack of time and resources.[14] The burden of not being able to address patients' social needs is also a likely contributor to provider burnout[15] and moral injury.[16]

The realization that patients' social needs are often "present" in the healthcare system when they are not addressed elsewhere has led to increasing interest (particularly within the Medicare and Medicaid programs) in supporting clinicians and healthcare team members to identify and

address them. While healthcare workers cannot necessarily solve all their patients' problems within the healthcare system, they may be able to help by providing services directly (e.g., coordination of care within the health system, education, or social support)[17,18] or indirectly through advocacy or referral to outside services.[19,20] The challenge, therefore, is defining how care can be provided in ways that better address the root causes of poor health while at the same time acknowledging that the health workforce alone cannot resolve major social inequities.

Problem Statement

Evidence indicates that non-medical factors like the social determinants of health contribute to 80% of health outcomes in the United States, but the health workforce has limited capacity to identify and address many of the major determinants of poor health.

Relationship to Health Equity

How providers practice has a direct effect on health equity. Unaddressed SDoH are associated with higher healthcare utilization,[1,21,22] increased emergency room visits,[23,24] stress, anxiety, suicidal thoughts,[25] decreases in preventive screening, and higher levels of medication errors.[26] Those suffering from housing instability have reported higher rates of acute care due to postponement of needed care and medication non-adherence.[1] Intimate partner violence has been associated with negative mental and physical outcomes, including stress, anxiety, suicidal thoughts, and chronic pain.[27]

Studies have shown that participating in programs that directly address SDOH can improve patients' health outcomes and lower healthcare costs.[1] A study of meal delivery programs like Meals on Wheels showed a substantial decrease in emergency department visits and other costly services for enrollees.[24] Other studies of transportation services showed individuals were less likely to put off needed medical care and had improved medication use after discharge when they were provided with transportation services.[28]

In the United people of color are often more likely to be impacted by social needs due to longstanding differences in access to education, job opportunities, banking, and housing for people of color, contributing to lower wealth, higher stress, and other poor social and health outcomes.[29] Patients of color can also experience adverse health outcomes due to differential treatment by providers or others within the health system. Providers' implicit racial bias has been associated with poorer communication of treatment plans,[30] more negative descriptions in electronic health records,[31] and more conservative pain management for patients of color.[32] Patients of color who perceive bias are less likely to seek care altogether and are less likely to follow through with their treatment plans, leading to poor health outcomes.[33,34]

Addressing Root Causes of Health Disparities is a Health Equity Issue

Health workforce's limited capacity to identify, acknowledge or address social determinants of health leads to inappropriate care, poor health outcomes, and avoidable health disparities. While the health workforce cannot address the root causes alone, practicing in a way that meets social needs, including eliminating racial disparities in care, will help ensure everyone has a fair opportunity to attain their full health potential.

Policies & Programs Designed to Address Root Causes of Health Disparities

The FFS system incentivizes expensive services rather than low-cost solutions, including referrals to social and community-based resources. The last decade has seen a plethora of Alternative Payment Models (APM) tested by payers to try and shift the risk for outcomes to providers, creating incentives to change care models and better address the root causes of poor health. The Center for Medicare & Medicaid Innovation developed models in which healthcare organizations can elect to participate in Medicare and Medicaid reimbursement structures that reward "value"—including services like education or case management provided by non-physician staff that keep patients healthy and out of the hospital or emergency department, instead of paying only for medical services provided by physicians based on volume.[35,36] Value-based payment models, such as accountable care organizations (ACOs) and the Comprehensive Primary Care Plus (CPC+) model, have spurred healthcare organizations' investments in new workforce roles and team models.[35,37–46] States have further enabled the adoption of new workforce roles through 1,115 waivers, state plan amendments, and other Medicaid payment policy changes allowing greater flexibility in paying for social care workforce roles, such as community health workers and peer support providers.[35,43,47] Along with these new models, public and private grants also help subsidize new workforce roles, many of which are not directly reimbursed.[48–50]

New & Expanded Roles

Table 1 shows example activities, roles of healthcare workers that might perform them, and examples of payment models that have included these types of activities.

- **Screening for Social Needs.** One of the areas in which there has been most activity is the implementation of screening to identify and target the patients with the highest need/risk for higher levels of intervention and support (often involving other staff members such as community health workers, case managers, social workers, etc.). Over the past several years, a robust body of literature has emerged describing screening efforts in primary care,[51] pediatrics,[52] and perinatal care.[53] In some contexts, medical assistants have taken

on this activity as part of expanded roles, screening for health behaviors and risk factors such as domestic violence, trauma, substance use, and food or housing insecurity.[54]

- **Adjusting Care & Advocating for Patients.** In conjunction with screening, clinicians such as physicians and pharmacists may provide additional support for patients who need it by adapting care plans to account for patients' housing and logistical concerns[38,55] or lower out-of-pocket costs for low-income patients.[56] Some healthcare organizations have even created medical-legal partnerships to give their patients access to lawyers and other staff members who can provide legal advice and advocacy with landlords, schools, and other institutions whose actions can affect patients' health.[19,41,42]
- **Connecting, Supporting, & Educating Patients.** Enabling staff, such as case managers, community health workers, health coaches, and peer support workers are also increasingly used to connect patients with social services for needs, including housing, nutrition support, and health insurance[17]; support them in managing their health and interactions with clinicians[57]; provide at-home support such as identifying fall risks or food security issues[58]; and provide education and social support for patients.[17,18] While robust evidence about health workforce interventions to address social needs is limited, some interventions that have been studied using randomized controlled trials show evidence of potential positive effects. For example, a randomized controlled trial (RCT) of a community health worker intervention for accountable care organization patients showed lower hospital readmissions in the intervention group[60]. A volunteer navigator intervention also studied via RCT was associated with reduced social needs and improved health in pediatric patients.[61] A systematic review of social work interventions in primary care settings found more robust evidence of a positive impact of social work interventions on mental health symptoms (depression and anxiety) as demonstrated in randomized controlled trials. However, the effect on other indicators (overall health, utilization, and care costs) was more challenging to ascertain.[62] A review of discharge planning interventions involving case managers and pharmacists in educating and coordinating care for heart failure patients found significant associations with lower hospital readmissions, especially for interventions including multidisciplinary discharge planning teams.[63]

Table 1. Select Health Workforce Activities Addressing Social Needs

	Activities/Tasks	Example Workforce Roles	Example Payment Model(s)
Screening	Screening/documenting social needs	MA screens for domestic violence, substance use at primary care visits[54]	Accountable Health Communities[37] ACOs[38] CPC+[39] Medicaid 1115 waivers[59]
Adjusting & Advocating	Adjusting care plans for social needs	Pharmacist adjusts prescriptions to accommodate patients' health literacy & financial circumstances[56]	ACOs[38] CPC+[39] Medicaid 1115 waivers[59]
	Advocating for patients' social needs	Physician sends letter about effects of poor housing conditions to patients' landlord[19]	ACOs[40,41] Medicaid 1115 waivers[59] Other medical-legal partnership models (e.g. VA)[42]
Connecting, Supporting & Educating (Enabling Staff)	Referring/connecting with social services	Community health worker connects with housing or transportation services[17]	Accountable Health Communities[37] ACOs[38] CPC+[39] Medicaid 1115 waivers[45]
	Supporting self-management & at-home care	Health coach identifies goals & barriers with patients before visits[57]	Medicare Advantage[46]
	Providing education & social support	Peer support worker conducts recovery support meetings with patients with mental illness[18]	Medicaid 1115 waivers[35,43]

New Care Models

Other efforts to involve the healthcare workforce in addressing root causes of poor health include new care models in which interprofessional teams of clinicians and support staff collaborate to provide coordinated care for patients' health and social needs, as well as risk stratification, which uses data from claims and other sources to target care coordination efforts. These efforts are also implemented as part of new payment models such as ACOs.

- **Team-Based Care Models.** As healthcare organizations implement workforce interventions and develop team-based models of care incorporating multiple disciplines, they are generating a large amount of evidence—some descriptive and some more robust—about factors associated with the adoption and impact of team-based care models. Systematic reviews of team-based care models have found positive associations with patient satisfaction. However, the quality of the studies included was mixed, and satisfaction was not consistently associated with other relevant outcomes such as costs and utilization.[64,65] On the other hand, a descriptive study of a Medicaid ACO that implemented team-based care coordination found that it was associated with growth in

outpatient visits and a decrease in emergency department visits for ACO beneficiaries over time, although a more robust evaluation of the same ACO found higher utilization relative to other Medicaid managed care beneficiaries.[66,67] The evidence that team-based care models are associated with reduced burnout and increased satisfaction for providers is a bit more robust,[64,68] although this association has not been consistent in all studies.[69]

- **Risk Stratification.** In addition to collecting data directly from patients about their needs and risk factors as described above, health systems often use claims or utilization data to identify patients at high risk for hospital readmissions or emergency room visits who could benefit from care coordination or case management services.[38,55,70] For example, a randomized controlled trial of an intensive "hot-spotting" intervention using teams of nurses, social workers, and community health workers to coordinate care and link high-need/high-cost patients with social services found a small increase in participation in supplemental nutrition programs for the intervention group, but no difference in hospital readmission rates between intervention and usual care patients.[71] Overall, there is mixed evidence of risk stratification being associated with improved outcomes[72,73] in part due to challenges with assessing the effectiveness, including short follow-up periods, limited use of control groups, and regression to the mean (natural fluctuations in outcomes over time that can be mistakenly attributed to interventions in the absence of robust comparison groups).[70,74,75]

Policies and Programs that Impact Addressing Root Causes of Health Disparities

Studies suggest that the fee-for-service payment model represents a significant barrier to addressing social determinants of health, while alternative payment models show promise in addressing them. These models include value-based payment models such as accountable care organizations (ACOs) and the Comprehensive Primary Care Plus (CPC+) model. Other policies and programs that have some evidence in support of their use include the use of SDoH screening, community health worker interventions, and interprofessional teams of clinicians and support staff.

New Approaches to Training

Health professions training programs have responded to increased interest in addressing patients' social needs and practicing in team-based care models by incorporating these elements in training programs for future physicians, nurses, pharmacists, and other health professionals. Additionally, greater awareness of the prevalence of implicit bias among healthcare workers and

its effect on patient health outcomes has also led to various efforts to address it directly in health professions education and training programs for practicing health professionals.

- **Structural Competency & Addressing Social Needs.** Health professions education programs focused on addressing social needs in healthcare settings include courses on social determinants of health, value-based care, and "structural competency[a]"[76–78] to prepare trainees for practice that consistently integrates social needs into medical care. Efforts have been documented in undergraduate medical education, residency programs in specialties such as emergency medicine and psychiatry,[76–78], and other training programs, including nursing and dentistry.[79,80] Training methods include case-based classroom learning,[76] interactive online modules/tools,[81] and community-based rotations or outreach programs.[77] Since this is a relatively new area, some articles in the education literature offer frameworks or ideas instead of evaluations of specific interventions.[82,83] Most articles that provide data to demonstrate the impact of education programs use information such as course evaluations or other immediate self-reported outcomes.[76] While they are limited by small sample sizes and lack of control groups, initial reception by students has been promising, although the longer-term implications are less clear.[76,79]
- **Working in New Care Models.** The health professions education literature documents numerous efforts to prepare health professions trainees to work in team-based care models through interprofessional education or service programs, often emphasizing interprofessional practice for patients with complex health and social needs.[84,85] Evidence of the impact of these efforts is also limited because most studies report on outcomes such as student perceptions, course evaluations, and self-reported teamwork.[78,79,84] A few small studies have found positive impacts of interprofessional student hot-spotting programs for high-need patients on participating patients' hospitalizations and/or emergency department visits, although these were not randomized and had very small samples.[85,86] Again, despite the strong interest in the field, the long-term impact of interprofessional training programs on subsequent practice (e.g., specialty choice, teamwork, or other outcomes) is difficult to measure and attribute definitively to specific training experiences.
- **Implicit Bias Training.** Recent evaluations of implicit bias training for health professions trainees reveal that such efforts are desired and accepted among trainees, a critical factor in facilitating buy-in and overall success.[86–89] A framework of best practices for implicit bias training includes self-awareness of unconscious biases, building awareness of the impact of bias on patients, and developing self-regulation skills to overcome implicit bias.[90] Studies support the inclusion of implicit bias training throughout providers' tenure from prospective medical students through post-licensure training.[90–92] Long-term empirical evidence of the effectiveness of implicit bias training for health professionals is rare, but the evidence that has been generated so far suggests it can be helpful. A longitudinal observational study of students across[49] medical schools found that participation in formal medical school curricula addressing bias, more positive ratings of organizational "informal" or "hidden" curriculum about race, and higher amounts of

[a] Structural competency is understanding how health is influenced by structural factors such as poverty, institutional [vs. only individual] racism, housing, and immigration policy, etc.

positive interracial contact were all associated with significant decreases in bias toward African Americans among medical students.[93,94] Most evaluations of training programs are limited to measuring changes in student perception and bias immediately after completing training. Some of these findings are promising, and a systematic review of evaluations of implicit bias training among practicing medical professionals showed a pattern of increasing self-awareness about racism and implicit bias among participants, although the authors noted that most studies were descriptive/mixed methods and few included comparison groups.[91,95–97]

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