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HEALTH SYSTEMS STRENGTHENING
PRACTICE SPOTLIGHT

APPLYING A SOCIAL DETERMINANTS OF HEALTH LENS TO IMPROVE OUTCOMES

Making Social Determinants of Health an Integral Part of Health System Strengthening

ABOUT THIS BRIEF

This brief introduces the social determinants of health (SDOH) concept and terminology, and discusses approaches to addressing SDOH. Understanding these root causes of health inequities and their impact on health care access, quality, and equity is crucial to strengthening health systems. Applying an SDOH lens enables decision makers to implement policies and strategies to minimize the harmful effects of SDOH. Using an SDOH lens can also shift the focus towards more holistic, people-centered, and life-course-oriented approaches. The brief includes examples of how SDOH-related interventions successfully improved maternal and child health services, and discusses the importance of paying close attention to SDOH in developing equitable climate-resilient health systems.

INTRODUCTION

Policymakers and health leaders are increasingly aware that addressing social determinants of health (SDOH)—the social, economic, and environmental circumstances in which people are born, grow, live, work, and age, and the forces driving them—is vital to improving health equity and health outcomes. Studies indicate that SDOH can explain between 45 and 60 percent of why some groups of people are healthier than others.[1] They shape health risks, health-related behaviors, access to care, and treatment outcomes, and affect people's trust and acceptance of public health guidance, policies, providers, and treatments.[2]

Actions on individual SDOH, such as improving access to clean water, sanitation, living and working conditions as well as health education are not new. However, despite solid evidence on the impact of SDOH and numerous global agreements and reports calling for action, factors related to SDOH are not adequately integrated at the policy, service delivery, education, and community levels..[3] [4] [5] [6] [7]

Without interventions that address SDOH, health systems are unlikely to produce equitable outcomes.[8] Even if everyone has equal access and can afford care, results will differ if service delivery systems do not reflect real needs. If care providers don't understand a patient's circumstances, needs, and potential barriers to treatment adherence, it can result in mistreatment and unequal quality of care.[9] Moreover, structural discrimination—such as when an individual or population group is systematically disadvantaged because of their age, gender, ethnicity, religion, sexuality, or a combination of these or other characteristics (known as *intersectionality*)—can also affect equity and quality.[10] [11] Applying an SDOH lens to designing health system policies, programs, and interventions, while providing direct interventions like housing support and cash transfers to low-income families (for example), can improve health outcomes and reduce health-related expenses.[12] [13]

In 2023 the USAID Local Health System Sustainability Project (LHSS) conducted a literature review focusing on the relationship between SDOH and health system strengthening. The project specifically examined maternal and child health

(MCH)-related interventions, a frequent country and USAID priority. This brief captures findings from the literature review, and outlines ways that policymakers, health system practitioners, and development partners in low- and middle-income countries (LMICs) can apply an SDOH lens when planning, designing, implementing, monitoring, and evaluating health systems strengthening efforts. The brief also includes three examples where SDOH-related interventions successfully improved MCH services.

WHAT ARE SOCIAL DETERMINANTS OF HEALTH?

A previous 2021 LHSS literature review noted that terms associated with SDOH are sometimes interpreted and applied differently, and that SDOH-related interventions are often not labeled as such. As a result, there is a lack of clarity around evidence, effective approaches, and who should intervene to address SDOH-related factors.[14]

To ensure the use of clear and consistent terminology, this brief uses language from the World Health Organization's (WHO's) Special Initiative for Action on the Social Determinants of Health for Advancing Health Equity. The initiative, launched in 2021, aims to identify evidence-based models, policies, and practices for SDOH. It divides SDOH into two components that lead to patterns of health inequities.

1. Structural determinants of health equity: The WHO Initiative describes structural determinants of SDOH as, "…societal factors giving rise to social position and the association of social position—and access to the power, money, and resources—with health impacts. Their domains can be characterized as formal and informal norms and rules of public and private sector institutions, policies, culture and values including structural discrimination in the form of, for example, classism, racism, sexism, able-ism, xenophobia, and homophobia. They are influenced by historical context and operate over the life span." For example, pregnant Dalit women in the lowest caste in India may face multiple forms of discrimination and violence based on their caste, gender, and class that affect their and their baby's health. These structural determinants can result in stigma, discrimination, and violence, barriers or harassment when accessing health facilities, or inferior or abusive treatment from health providers.[15] These determinants require action to foster change in institutions, culture, norms, policies, and values.[16]
2. Intermediary determinants: These determinants are factors and mechanisms constituting the conditions of people's daily lives, impacted by structural determinants. Pregnant Dalit women are also affected by intermediary determinants such as lack of income, poor education, unsanitary housing, and lack of access to health services. While these determinants can be addressed at different levels, they require action focusing on individuals.

Intermediary determinants affecting the health and well-being of individuals include:

- *Material circumstances* such as education; quality and safety of housing, neighborhoods, and workplaces; access to resources; and the ability to purchase warm clothing.
- *Psychosocial circumstances*, for example stressors linked to relationships and life circumstances; the availability of support; and the ability to cope.
- *Behavioral and biological factors* that vary among groups, including physical activity, nutrition, and substance abuse. Evidence is emerging that gene expression is influenced by material and psychosocial circumstances. For example, children who live in difficult socioeconomic circumstances early in life have an increased incidence of respiratory and cardiovascular disease, even if their status changes later in life. [17] [18]

Structural determinants (how individuals and groups are treated in society) influence how intermediary determinants (the circumstances and factors that directly affect people's health) are distributed across segments of society. Structural determinants influence individuals' health over the course of their life, with advantages and disadvantages accumulating over time. How people are treated often depends on different aspects of their identity such as class, race, and gender. The combined effect of the two types of determinants affects individuals' behaviors and access to and quality of care, resulting in exposure to conditions that negatively impact health and creating vulnerability to health-harming effects. [19] These individuals are often members of marginalized and underserved groups, such as women,

youth, people with disabilities, refugees, migrants, and gender, ethnic, or religious minorities.

The COVID-19 pandemic exacerbated these issues. Certain groups were more exposed to the virus because of their financial circumstances or jobs, limited access to protective equipment, or crowded living conditions. Members of marginalized groups were more vulnerable as they suffered from un- or under-treated chronic health conditions that increased their risk for severe disease.[20]

More recently, researchers have added new and interrelated terms such as environmental (e.g., climate change) and commercial (e.g., private sector activities) determinants of health. These additional determinants fall under one or both categories (i.e., structural and intermediary), and require action at the broadest level through regulations and policymaking, and at the individual level through social and behavior change (SBC) approaches. For example, commercial determinants of health such as the cost and presence of unhealthy products can be addressed by regulating the marketing, pricing, and availability of these products. Incentives and subsidies for healthy alternatives at the production level can have a positive effect, as can education and programs (e.g., tobacco cessation programs) at the individual level.

INTEGRATING SDOH INTO HEALTH SYSTEM STRENGTHENING

Understanding the root causes of inequities and their impact on health care access, quality, and equity is crucial to strengthening health systems. This enables decision makers to implement policies and strategies to minimize the harmful effects of SDOH. [21] Reducing health inequities in specific populations requires interventions at all health system levels and across sectors. It calls for interventions that improve the circumstances that directly affect the health of marginalized and underserved populations, such as polices that address poverty, housing and working conditions. [22]

With the acceleration of global warming, applying an SDOH lens to health system strengthening is more important than ever. Climate change increases the adverse effects of many SDOH such as air and water quality, housing, food production, migration status and multiplies pressures on health systems. [23] Those most affected by the climate crisis—people in low-income countries and communities—often have the fewest resources to combat it. As a result, developing climate-resilient health systems requires applying both an SDOH and a climate lens with a focus on the most vulnerable and marginalized. [24]

The Health System as Social Determinant of Health

The WHO considers the health system itself an SDOH. Its direct role in ensuring health equity centers on:

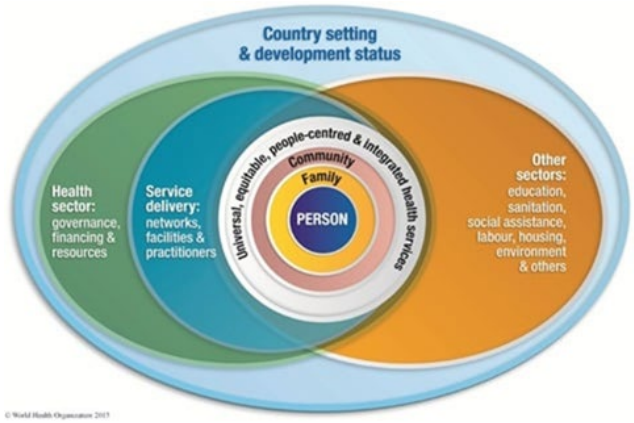
- Availability and physical accessibility to needed, quality services for everyone.
- Affordability of services and associated costs.
- Acceptability of services—providing services free of bias and discrimination and treating patients with dignity, autonomy, confidentiality, and privacy. [25]

While many factors are outside health system actors' control, these actors can still advocate with other sectors and engage with communities negatively affected by SDOH to co-create solutions. Using an SDOH lens in health interventions also helps shift the focus toward more holistic, people-centered, and life-course-oriented approaches [26] but should avoid intervention-generated inequalities. For instance, an education intervention to prevent infections in pregnancy that only reaches urban-based pregnant women with the means to travel to a clinic can widen inequities by excluding poorer pregnant women.

Levels of Interventions

This brief uses the WHO's Framework for Integrated People-Centered Health Services, which integrates SDOH considerations, [27] to illustrate the levels at which health system practitioners can apply an SDOH lens and related interventions (Figure 1).

FIGURE 1: WHO FRAMEWORK FOR INTEGRATED PEOPLE CENTERED HEALTH SERVICES



The framework prioritizes people-centered and integrated social and health service delivery, calling on policymakers to establish an enabling policy environment that fosters equity-oriented and health-promoting public policies. [28] For instance, SDOH-related interventions might focus on changing how the health system and providers engage with **individuals, families, and communities**, or make changes to service delivery and the way networks, facilities, and care providers operate. They might also be policy interventions and investments at **health sector** levels or in **other sectors**. *Health in All Policies* approaches (Box 1) are an example of SDOH-related cross-sector policies at the **country/national level**. [29]

BOX 1: HEALTH IN ALL POLICIES

Health in All Policies (HiAP) approaches were created to tackle social determinants of health by systematically incorporating health and equity into decision-making across different sectors. HiAP approaches emphasize:

- Formalized governance structures and mechanisms to tackle new problems and incomplete health services;
- Collaboration between health and other sectors to identify problems and solutions and facilitate action;
- Co-benefits for health and other sectors, while also acknowledging conflicts of interest;
- Developing trusting relationships for collaboration over time and issues;
- Focus on upstream SDOH and broad range of equity issues, particularly on inequities in power, money and resources.

Community-level interventions can include employing community health workers (CHWs) to identify and monitor the health of marginalized individuals and provide health promotion, prevention, and other services that address SDOH, such as vector control or access to clean water. It could also be a municipal health officer or another project designer engaging with stakeholders across sectors at community level to tackle SDOH-related challenges in a particular geographic area.

At **service delivery** levels, interventions often aim to identify and mitigate social risk factors and meet health-related social needs. They can include offering social services or health education interventions at health facilities. Efforts can also involve equipping care providers with SDOH-related competencies and tools to screen for SDOH, and partnering with patients, families, and external organizations and agencies to reduce or eliminate any harmful effects. [30] At a facility, this could include actively countering discrimination through recruiting members of marginalized groups as health workers; training and supervision; bringing services closer to where people live and work; or developing supportive organizational structures such as expanded opening hours and policies and processes that consider patients' unique SDOH-related challenges.[31]

At **the health sector** level, interventions can focus on governance, financing, data collection, analysis and decision-making, and resource allocation to address SDOH. For example, governments can integrate social accountability processes like creating a forum for engagement with underserved and marginalized communities to understand their needs and involve them in policy development. Further, to develop effective policies that address inequities, health systems need to collect, integrate, analyze, and act on community-level SDOH data, disaggregated by relevant factors such as gender, ethnicity, and geographic location to ensure services benefit everyone. [32] Incorporating gender equality and social inclusion into policies and strategies ensures that the health sector meets the needs of different people, such as women, youth, the disabled, refugees, migrants, and gender, ethnic, and religious minorities, and other underserved and marginalized groups. [33]

Additionally, incorporating SDOH-related competencies into education and training, establishing accreditation and performance standards through an SDOH-lens, and ensuring that care providers are supported with tools and an enabling working environment to identify and mitigate

the negative effects of SDOH could also improve the equity and quality of care. [34]

Policies to reduce inequities and mitigate the effects of social stratification often require action at **the country** and **non-health sector** levels. Examples include policies that provide free or subsidized education, health coverage, or a minimum wage. Policies aimed at reducing exposure and vulnerability to health-harming effects also require action beyond the health sector. Subsidizing housing, including refugees and migrants in health insurance schemes, providing access to clean water, and addressing environmental hazards such as toxic waste or air pollution are examples of such policies. Policies to reduce the unequal effects of ill health might include financial support and additional care for low-income patients affected by a disease, disability, or injury.

Embedding SDOH in Health Systems

Many health systems are already addressing SDOH through public health functions like health promotion and disease prevention, and activities related to ensuring air, food, and water quality. However, the effectiveness of health system outputs and individual population group responses to such interventions also influences SDOH. As an example, a history of colonization and racism affect whether and how Indigenous women access and experience health care in Canada. [35] SDOH also impact the system's capacity to meet the needs and expectations of the population, equity within the system, and what the system can accomplish with the resources allocated. [36]

Policymakers need to apply an SDOH lens into governance, strategies, programs, and data collection to improve equity.[37] [38] At the global level, the WHO is developing an Operational Framework on Social Determinants of Health Equity and an Operational Framework for Monitoring Social Determinants of Health Equity that could provide guidance on monitoring SDOH and applying data for action to reduce health inequities.[39]

At the national level, several countries have made progress on embedding SDOH in their health system. Colombia, a pathfinder country of the WHO's Special Initiative for Action on the Social Determinants of Health for Advancing Health Equity efforts to develop and replicate models for action, is one of those countries. In 2013, the Colombian Government initiated a Decennial Public Health Plan 2012–2021 to address health inequalities. The plan sought to achieve three key goals: (1) ensure access to the right to health, (2) enhance living conditions impacting health and reduce the burden of disease, and (3) maintain a zero tolerance for avoidable mortality, morbidity, and disability. In 2015 it created the Colombian Inter-sectorial Commission of Social Determinants of Health.

Colombia currently implements various policies targeting five SDOH. They include investment in early childhood development, providing educational and employment opportunities for youth, improving housing conditions, offering social protection such as income transfers for families, and supporting vulnerable populations like older adults with a universal basic income. These initiatives also concentrate on critical life stages such as pregnancy, birth, early childhood, entry to higher education, initial employment, family formation, and elderly years.[40]

KEY CHALLENGES

Research suggests that action on structural determinants (i.e., the root causes of inequities) can have a significant and longer-term impact on health equity than only addressing intermediate determinants. [41]

There are several political, technical, and operational challenges to addressing SDOH: [42]

- Addressing SDOH often requires multi-sector, multi-agency action in contexts where there are limited fora and incentives for policy integration. Important sectors include education, social welfare, housing, transportation, agriculture, energy, justice, and human rights.
- The health effects of SDOH-related interventions, such as policies to reduce income inequality and improve education and housing, may not be observable or quantifiable for a long time and therefore face resistance from politicians and stakeholders operating on much shorter cycles of election and organizational goals.
- The complex nature of SDOH makes it challenging to establish clear cause-and-effect relationships and therefore harder to obtain political support for interventions.
- There is limited evidence on what works and potential co-benefits across different policy goals, such as how interventions to slow the effects of climate change can simultaneously improve health equity.

- There is a lack of systematic integration of SDOH-related interventions or considerations into routine health system functions.
- There is a lack of social accountability and community engagement in the development of policies and programs in the health sector.

Health care providers and health system leaders often lack an understanding of how SDOH influence health and health-related behaviors, and competencies to mitigate their effects. Even when care providers understand a patient's social circumstances, if their work environment prioritizes biomedical and transactional (rather than holistic and relational) approaches to service delivery, implementing SDOH interventions can be challenging. For some practitioners, viewing their work through an SDOH lens may mean living with the moral discomfort of knowing what is needed but being unable to act. [43]

Other barriers to considering or acting on SDOH-related challenges include excessive workloads, limited access to resources, management support, training, and unfair treatment of health workers, including by patients and family members.[44] Addressing SDOH, therefore, requires leaders at every health system level to understand the causes and effects of SDOH, work with key stakeholders (including potential beneficiaries of interventions) to clarify what is meant by SDOH-related terms in their context, and apply an SDOH lens when designing, implementing, and evaluating interventions, programs, and systems.

MATERNAL AND CHILD HEALTH CASE STUDIES

Improving maternal and child health is a persistent challenge but applying a holistic, SDOH lens can boost progress. Research shows a robust relationship between poor maternal and child outcomes and SDOH. [45] Applying an SDOH lens helps find solutions for infant and maternal mortality and morbidity both within the health system and across sectors by using development, SBC, and human rights strategies. This also includes applying women's, adolescent, and sexual and reproductive rights approaches.[46] This brief uses MCH-related case studies to illustrate how SDOH approaches can be applied at different levels and at country, service delivery, and community levels in different contexts.

Reducing Poverty to Improve Maternal and Child Health in Brazil

Poverty can directly impact maternal and infant mortality, for example, by limiting access to public services and infrastructure, generating unsanitary living conditions, driving lower literacy among pregnant women and mothers, creating social exclusion, and exacerbating food insecurity. [47] Increasing access to care and reducing poverty are vital strategies to improve MCH, [48] requiring action in both health and related sectors.

Brazil's conditional cash transfer (CCT) program, *Bolsa Família*, is the largest in the world. Its goals are to increase access to care and decrease poverty. Established in 2003, the program addresses three SDOH: access to care, education, and economic status. [49] The program's key objectives are to:

1. Rapidly reduce poverty through income transfers.
2. Sustain poverty reduction by boosting household demand for education and healthcare services.
3. Enhance employment opportunities for adult members of recipient households through job training, microcredit, and other efforts to prevent harmful dependence.

Operationally, *Bolsa Familia* seeks to reduce the fragmentation of social protection programs; optimize resource utilization; [50] enhance mechanisms used to identify families in need; strengthen data collection, monitoring, and evaluation; and harmonize the social safety net between federal and subnational programs. [51] The program targets low-income families across Brazil, offering two levels of benefits depending on family composition and income: basic and variable. All families living in extreme poverty receive a basic benefit regardless of their demographic status, while moderately low-income families do not. Both extremely and moderately low-income families receive variable benefits based on the number of children in the family and the mother's pregnancy or breastfeeding status. Each family receives a debit card, with funds added monthly when the recipient has met the required conditions. These conditions include pre- and postnatal checkups for pregnant or lactating women, participation in health and nutrition seminars, health checkups and growth monitoring of children until age seven, enrollment in school, and at least 85 percent school attendance. [52]

The Ministry of Social Development of Brazil manages *Bolsa*

Familia at the central level, while at the municipal level it is managed by Brazil's 5,570 municipalities.[53] Beneficiaries are identified through a household assessment at the federal and municipal levels and data is fed into the *Cadastro Único* (CadÚnico), a national registry of low-income families in Brazil. The Government uses CadÚnico to determine eligibility for more than 30 publicly funded social service programs.[54] Nationally, the *Bolsa Familia* Secretariat works with agencies across different sectors and the Secretariat for Institutional Articulation and Partnerships, which manages collaboration between different levels of government and ministries, as well as civil society engagement on social initiatives.

The CadÚnico collects information on:

- The housing situation of each family.
- Family composition, including the age of all children and adults in the family as well as pregnancy status.
- Each family member's education level.
- Each family member's employment status.
- Each family member's income.
- Family expenses, including food, housing costs, and transportation.

Health services are provided by Brazil's National Health System, usually through the Family Health Strategy Program (FHS). Each FHS team is responsible for registering participants, monitoring SDOH and health status, and providing services to 3,000-4,000 people. The team includes four to six CHWs who collect data, monitor health status, and provide preventive and other essential services at the household level. The team also includes a family care physician/general practitioner, a nurse, and a nurse auxiliary. [55]

Brazil's Constitution includes a commitment to "eradicate poverty" and "reduce social inequality." These commitments have contributed to the success of *Bolsa Familia*. The CCTs were developed locally, leading to an innovative intersectoral and decentralized governance structure that proved effective in addressing implementation challenges. [56]

The *Bolsa Familia* program has remained in place despite government changes. The country placed career civil servants in key positions, ensuring transparency and coordination between government agencies and system levels. This consistency and decentralized approach encouraged high-quality implementation, resulting in measurable positive policy outcomes.[57]

A 2023 study of 6.7 million women suggests that participation in the *Bolsa Familia* program reduced the risk of maternal death by an average of 18 percent.[58] Benefits increased the longer the women received programmatic support. Other studies show that long term participation in CCT programs increases utilization of health services. The program's effects were highest among the most marginalized women, including Black, mixed race, and rural populations, and those living in less developed municipalities.

Adapting Service Delivery for Marginalized Populations in Urban Australia

Applying an SDOH lens at **service delivery** levels may call for changes in governance and operations, including ensuring that staff and care providers possess SDOH-related competencies. An example from Australia demonstrates how SDOH can be integrated into service delivery for **underserved Indigenous communities**. In Australia, Aboriginal women are five times more likely to die in childbirth, and they are at higher risk of delivering a low-birthweight baby or their child dying than other populations.[59]

To address this, the Institute for Urban Indigenous Health, the Aboriginal and Torres Strait Islander Community Health Service, and the Mater Mothers' Teaching Hospital in Brisbane co-developed a service delivery framework to better address the needs of Indigenous women and children based on principles of *Birthing in Our Community* (BIOC).[60]

Unlike the standard care model, BIOC services are **co-designed with the local community** as relationship-based integrated interventions rooted in Aboriginal worldviews and cultural safety. Culturally safe maternity care encompasses all aspects of a woman's wellbeing, including her physical, spiritual, psychosocial, emotional, and cultural needs. Practitioners who prioritize cultural safety treat women with the utmost respect and honor their dignity. These practitioners intentionally work to **diminish power imbalances** between themselves and the women under their care. [61] Box 2 highlights examples of core SDOH-related competencies for health providers identified by a 2022 LHSS project. [62]

BOX 2: SDOH- RELATED COMPETENCIES (LHSS)

Equity lens Domain (5 competencies)
Competency I: Evaluates multiple factors, including social, religious, environmental, economic, political, and cultural factors that influence individuals' health and health behaviors.

Communication (4 competencies)
Competency 2: Communicates effectively in simple, clear language; actively listen and ensure the patient, family, or colleague feels understood and valued.

People-centered care (3 competencies)
Competency 7: Distinguishes the concepts of people-centered care and holistic approaches to individual and community health and well-being.

Collaboration (6 competencies)
Competency 9: Identifies relevant social and community services that patients and families could benefit from in relation to social determinants of health, such as social work services.

Self-awareness and personal growth (3 competencies)
Competency 12: Demonstrates respect, empathy, and is critically self-reflective and applies communication skills to equalize power relations and self-care skills to maintain own psycho-social health.

Evidence-informed practice (4 competencies)
Competency 8: Demonstrates the principles and approaches of critical and systems thinking.

The model prioritizes First Nations' **control, engagement, and governance**, formalized through a multi-agency partnership and a memorandum of understanding. A community partner employs a manager who oversees service coordination and day-to-day management of the BIOC team. Managers from all partner organizations convene monthly to assess and troubleshoot issues that arise. [63]

This service delivery framework ensures **continuity of care** from pregnancy to six weeks post-birth through a community-based midwifery group. Providers are on call 24 hours a day, seven days a week for a small caseload of Indigenous women. Pregnant women receive care in their homes, in a community-based hub, and at a hospital. Women and their family members are referred to community support agencies as needed. The partnership invests in training and employing a First Nations workforce, and staff receive regular **cultural training and clinical and cultural supervision** by Aboriginal community-controlled organizations.

Women receive transport to a community-based hub that fosters connections, peer support, and learning from Aboriginal Elders. The hub offers community drop-in days, cookouts, and cultural events. It emphasizes enhancing **social and emotional well-being** and offers readily available services such as social work, perinatal psychology, parenting support, and education. Additionally, the hub provides access to hospital medical staff and child safety resources.

A study comparing Aboriginal women who received the BIOC service to those who received standard service found that those who got BIOC had a higher chance of attending five or more antenatal visits (54 percent), a lower likelihood of having a preterm baby (38 percent), and a greater chance of exclusively breastfeeding when leaving the hospital (34 percent). [64]

From Education to Practice: Community Interventions in Rural Philippines

Health professionals trained in the principles of **community engagement and cross-sector collaboration** and who possess other SDOH-related competencies can lead the integration of SDOH approaches into service delivery and engagement with patients, families, and populations in community settings (Box 3).

When Ateneo de Zamboanga University School of Medicine (AdZU-SOM) was established in 1994, it was the only medical school in a region comprising the 14 poorest communities in the Philippines. AdZU-SOM's curriculum, developed through a region-wide consultative process with key stakeholders, is guided by social accountability principles and focuses on community health concerns and local and national health priorities. [65] Designing and implementing community-based SDOH interventions is at the core of the school's learning experience and is a competency requirement.

In groups of ten, medical students spend two months in designated underserved communities during the first year, two months in the second year, one month in the third, and ten months in the fourth year. They initially conduct comprehensive community surveys to understand health-related challenges and their determinants in the community. Once priority needs have been identified, medical students, local health authorities, and the community work together to create and implement culturally sensitive interventions

that address health-related priorities. The community-led interventions have ranged from creating waste management systems, nutritional community gardens, and disaster warning systems, to providing vaccinations and improving cardiovascular health. Box 3 shows the stepwise approach that all learners at AdZU-SOM use to design and plan community interventions.

BOX 2: ADZU-SOM'S APPROACH TO DESIGNING COMMUNITY-BASED INTERVENTIONS

1. Work with community members to collect health- and SDOH-related community data through surveys, existing records and stakeholder engagement.
2. Analyze data and present their findings to community members and key stakeholders.
3. Conduct a workshop with community stakeholders to identify and prioritize key health-related problems that the community wants to address.
4. Work with community members and local stakeholders to develop and implement a Comprehensive Community Health Plan that includes identifying interventions and mobilizing the resources needed to implement them.
5. Evaluate interventions and design and implement a public health research project in the community.

One small poor community where medical students worked was Barangay New Barili. The medical students identified poor access to quality antenatal care as a primary health concern in the community. Only 50 percent of pregnant women received the minimum of four prenatal visits, 73 percent of couples needed family planning services, and 19.2 percent of children younger than five were underweight.

To address these issues, the students worked with local community leaders, governmental, and non-governmental partners to co-create solutions that drew upon the community's inherent strengths and available resources. To enhance the accessibility of high-quality antenatal care for pregnant women, for example, the medical students taught the local health team how to conduct a series of prenatal educational sessions for mothers, taking into account their limited education and health literacy. They also worked with the local team to provide free, high-quality antenatal services by establishing a localized pregnancy monitoring scheme. This included training CHWs to conduct regular home visits to provide information on prenatal care, monitor health status, and measure pregnancy progress. Results of the visits were updated on a community map in the health center.

The local team also developed a cooperative referral system to provide timely emergency obstetric care and childbirth access. Students trained CHWs to identify common obstetric emergencies and when and where to refer the patient. CHWs also counseled couples on birth planning to ensure that barriers to facility-based delivery were addressed. The system included local community leaders who organized transportation to health facilities and renovated the pregnancy center to better address the needs of pregnant women during emergencies.[66]

To effectively address the existing gaps in family planning services, culturally sensitive interventions were conducted to promote the use of various family planning approaches. The program offered couples counseling, focusing on the husband or male partner's involvement in family planning. Interventions also included sustainable backyard gardening, preparing nutritious meals using locally sourced foods, health education, and a collaborative feeding program to address malnutrition.

Since the conclusion of the four-year program, there was significant improvement in the number of women and babies accessing high-quality antenatal care, increasing from 50% to 71.3 percent. Interventions also reduced the prevalence of unmet needs for family planning from 73 to 34 percent, and the incidence of malnutrition declined from 19.2 to 6.4 percent. [67]

AdZU-SOM education programs have a knock-on effect on communities served by the institution's graduates. An impact study found that, after adjusting for socioeconomic status, mothers in communities recently served by graduates from AdZU-SOM were more likely than mothers in communities served by conventional medical graduates to report receiving all USAID-recommended prenatal, newborn, and postnatal examinations; measurements; and injections. Mothers from communities served by AdZU-SOM graduates were also significantly more likely to report better care during delivery, postnatal care, and the first postnatal checkup. [68]

IMPLEMENTATION CONSIDERATIONS

There is still much to learn about designing and implementing SDOH interventions, particularly in LMIC contexts. Yet, these case studies reveal promising approaches and impactful interventions that health system practitioners can learn from. Based on the results of the literature review, LHSS has identified some key implementation considerations, described below.

Collaborate and Integrate Across Sectors

As highlighted in USAID's Health System Strengthening Vision 2030, maximizing positive health outcomes in a health system requires collaboration with stakeholders within and outside the health sector, including local actors and communities. Creating transparent and effective governing structures and processes to address such challenges is critical. Enablers for successful multi-stakeholder collaboration in general include to: [69] [70]

- Foster trust and intentionally reducing power imbalances when engaging stakeholders, especially community members, through inclusive decision-making, transparent communication, and by creating mechanisms for individuals to raise concerns without fear of reprisal.
- Build on stakeholder and community assets, including existing skills and knowledge, relationships, networks, and other existing resources, and promote a long-term commitment to addressing the root causes of inequities.
- Engage with stakeholders to develop a shared vision of the challenges to be addressed and desired outcomes.
- Foster adequate individual and institutional capacities, through information sharing, mentoring, and training.
- Ensure leadership and political buy-in, both in advancing shared goals and sustaining collaboration, through strategic communication and understanding what a "win" would look like for each stakeholder.
- Ensure adequate, sustainable, and flexible resources.

Take Time to Adapt Policies and Actions to the Local Context

To optimize the effectiveness of interventions (whether on a national or local scale), policymakers and those who develop policies, service delivery models, and interventions need to engage with key stakeholders to identify and understand the causes and effects of SDOH-related challenges in the targeted region or community context before designing interventions.[71] For instance, resources and stakeholders that need or can be mobilized in rural areas are different than those in urban areas, and specific communities may respond differently to the same interventions due to differences in culture or priorities, access to resources, education, or lack of trust.

For example, a study in India on why SDOH-related interventions were effective for some populations but not the most marginalized castes and tribes in certain regions suggests a need to appreciate diverse worldviews, beliefs, and practices and engage with prospective beneficiaries to design appropriate interventions. [72] Instead of pushing for the widespread adoption of standardized healthcare system models, the study indicated a need to develop strategies that can be adapted to local contexts. These differences may require revising existing policies and prioritizing culturally sensitive and context-specific care provision, such as in the design of the service delivery framework in Australia.

Engage Communities and Encourage Local Ownership, Management, and Innovation

The literature review and case studies demonstrate the benefits of applying an SDOH lens and co-creating interventions with local stakeholders (including potential beneficiaries). This includes stakeholder engagement that:

- Identifies priority local challenges, their causes, and effects.
- Ensures shared understanding of SDOH-related terms, challenges, and expectations to identify realistic goals.
- Develops local governance structures to ensure transparency, local adaptation, and accountability.
- Co-creates solutions to allow for innovative approaches and the development of a sense of ownership among local stakeholders.

- Evaluates outcomes and impact and evolves strategies and approaches based on findings.

Across all case studies, local stakeholders were highly involved in decision-making. In the Australia study, First Nations' control, engagement, and governance was critical to the program's success. In Brazil, while *Bolsa Familia* was a federal program, it emerged out of interventions at the municipal level. By encouraging flexibility at local levels, the governance structure became more intersectoral and decentralized, increasing its innovation and effectiveness in addressing implementation challenges.

Collecting SDOH Data and Evaluating Impact

Collecting relevant and disaggregated SDOH-related data, mapping out priority areas and populations, and applying it to decision-making for health is critical.[73] [74] As mentioned earlier in the brief, the WHO has developed an Operational Framework for Monitoring Social Determinants of Health Equity that could guide country efforts.[75] The Rockefeller Foundation-funded 3-D Commission[76] recommends that national governments develop transparent systems that collect data about SDOH and explicitly use these data in decision-making processes. It also recommends that relevant international, regional, national, and local entities (including funders) should:

- "…systematically gather and share quality data with decision makers and communities locally and nationally reflecting the broad range of determinants of health."
- "… embed follow-through monitoring processes to ensure accountability for data-informed decision-making around health."
- "…center community engagement in the acquisition and interpretation of data and make such data widely available to relevant communities." [77]

Develop Workforce Capacity

Investing in improving the SDOH-related competencies and capacities of the health workforce and in other sectors is critical. To ensure health workers can apply SDOH-related competencies in their workplace, it is important to integrate efforts to address SDOH into routine health system functions, including adapting protocols, processes, and performance standards in the health sector. It is also important to develop the capacity of leaders in non-health sectors to consider the health implications of their actions and policies. [78] To address the lack of consensus on core SDOH-related competencies for providers, identified in a 2021 LHSS literature review, LHSS worked with LMIC experts to identify and prioritize such competencies (See Box 2). [79]

WHO recently published guidance on integrating SDOH into education and training, including suggestions related to specific health challenges around maternal and child health.[80] It provides recommendations for instructional reform encouraging education and training institutions to:

- Align health workforce education curricula and standards with community health needs and SDOH.
- Tackle structural determinants of health inequities.
- Increase community engagement in designing and implementing curricula and focus on community-based and community-engaged learning.
- Strengthen faculty development related to SDOH.
- Embed social accountability principles in institutional and professional values.

WHO also recommends capacity development at different health system levels:

1. Train leaders and champions at the global, regional, and national levels on SDOH, multisectoral collaboration, and Health in All Policies.
2. Train administrators and managers, the health workforce, and workers in non-health sectors at the district and community levels to work with and act on needs identified during community engagement.
3. Train clinicians, other members of the healthcare workforce, and workers in non-health sectors to assess and address or mitigate negative effects of intermediary determinants of health and provide integrated people-centered health services.

Applying Social and Behavioral Change Approaches

Reducing the harmful effects of SDOH often requires patients, communities, care providers, policymakers, and stakeholders in non-health sectors to change their perspectives and behaviors. SBC approaches employ a systematic understanding of human behavior drivers and

behavioral change dynamics to improve outcomes through interventions that target behaviors, societal norms, and the obstacles that shape them. [81] Applying SBC approaches are important tools to change behaviors and therefore mitigate the negative effects of SDOH. SBC methods could also be useful to change the perspectives of the broad range of stakeholders that need to be engaged and invested to plan and design SDOH-related interventions.

Providing care providers with SDOH-related competencies can improve the quality and equity of care, as demonstrated in the AdZU-SOM case study.[82] The USAID-funded SBC project *Breakthrough ACTION* also offers new guidance on changing provider behavior,[83] identifying the need for SBC approaches to intentionally incorporate SDOH considerations.[84]

CONCLUSION

A review of relevant literature and discussions among members of WHO's Special Initiative for Action on the Social Determinants of Health for Advancing Health Equity (the Initiative), revealed limited action on SDOH at global levels, especially around structural determinants of health. The Initiative identified carrying out multisectoral activities by the health sector as a key barrier. Members of the Initiative also theorized that the lack of a clear and consistent theory of change explaining how specific actions—or a set of actions—around SDOH result in improved health outcomes and greater health equity makes it challenging for advocates to convince policymakers to invest in such interventions.

While additional research is needed to ensure that health system practitioners and policymakers have more evidence-based guidance on addressing SDOH, the current lack of evidence on specific interventions should not impede action, but instead foster innovation and co-creation of policies and interventions at local and national levels. Documenting success stories, assessing the impact of applying an SDOH lens in health system strengthening, and evaluating direct SDOH interventions is critical to persuading stakeholders to act. Mobilizing potential allies, including communities and social justice and health equity advocates, and partnering with other stakeholders like professional bodies and the private sector can also promote action on SDOH. [85]

Climate and One Health advocates (who focus on the interrelated issues of animal, human, and environmental health, are also potential allies. Climate change exacerbates the harmful health effects of SDOH such as poverty, migration, and conflict—all of which affect the ability to access health care and can affect health-seeking behavior. Health system leaders and practitioners need to anticipate and factor in the likely effects of climate change on evolving health system needs, focusing especially on at-risk populations.

Developing equitable climate-resilient health systems requires health system leaders to apply an SDOH lens, greater community engagement, and working across sectors at local, national, and global levels to co-create solutions that achieve better health for all.

REFERENCES

[1] Donkin, Angela, Peter Goldblatt, Jessica Allen, Vivienne Nathanson, Michael Marmot. 2018. "Global action on the social determinants of health." *BMJ Global Health* 2018;3: e000603. https://doi.org/10.1136/bmjgh-2017-000603

[2] World Health Organization. 2018. "Health in All Policies as part of the primary health care agenda on multisectoral action." https://iris.who.int/bitstream/handle/10665/326463/WHO-HIS-SDS-2018.59-eng.pdf?sequence=1

[3] Solar, Orielle Nicole Valentine, Antia Castedo, Gonzalo Soto Brandt, Jaitra Sathyandran, Zahra Ahmed, Paul Cheh, Emma Callon, Felicity Porritt, Isabel Espinosa et al. 2022. "Action on the social determinants for advancing health equity in the time of COVID-19: perspectives of actors engaged in a WHO Special Initiative." *Int J Equity Health* **21** (Suppl 3), 193 (2022). https://doi.org/10.1186/s12939-022-01798-y

[4] World Health Assembly. 2012. "Social determinants of health: outcome of the World Conference on Social Determinants of Health". *Resolution WHA65.16*. https://apps.who.int/gb/ebwha/pdf_files/WHA65/A65_16-en.pdf

[5] World Health Assembly. 2018." Social determinants of health." *Resolution WHA74.16*. https://apps.who.int/gb/ebwha/pdf_files/WHA74/A74_R16-en.pdf

[6] World Health Organization. 2018. "Health in All Policies as part of the primary health care agenda on multisectoral action." https://iris.who.int/bitstream/handle/10665/326463/WHO-HIS-SDS-2018.59-eng.pdf?sequence=1

[7] Donkin, Angela, Peter Goldblatt, Jessica Allen, Vivienne Nathanson, Michael Marmot. 2018. "Global action on the social determinants of health." *BMJ Global Health* 3: e000603. https://doi.org/10.1136/bmjgh-2017-000603

[8] Stevens, Amy, Matthew Neilson, Kumanan Rasanathan, Shamsuzzoha Babar Syed,Theadora Swift Koller . 2023. "Quality and equity : a shared agenda for universal health coverage." *BMJ Glob Health* 8: e012561. https://doi.org/10.1136%2Fbmjgh-2023-012561

[9] Ibid.

[10]Ibid.

[11] The Lancet. "Rural health inequities: data and decisions". 2015. *Lancet* 9;385(9980):1803. https://doi.org/10.1016/S0140-6736(15)60910-2

[12] Taylor, Lauren A., Annabel Xulin Tan, Caitlin E. Coyle,Chima Ndumele, Erika Rogan, Maureen Canavan, Leslie A. Curry, Elizabeth H. Bradley. 2016. "Leveraging the Social Determinants of Health: What Works?". *PLOS ONE*, 11(8), e0160217. https://doi.org/10.1371/journal.pone.0160217

[13] Bhatia, M., L. K Dwivedi, K. Banerjee, A. Bansal, M. Ranjan, P. Dixit. 2021." Pro-poor policies and improvements in maternal health outcomes in India." *BMC Pregnancy Childbirth* 21, 389. https://doi.org/10.1186/s12884-021-03839-w

[14] The Local Health System Sustainability Project (LHSS). June 2021. *Literature review of the integration of the social determinants of health in human resources for health approaches*. Rockville, MD : Abt Associates.

[15] Sabharwal, Nidhi Sadana, Wandana Sonalkar. 2015. "Dalit women in India: At the crossroads of gender, class, and caste." *Global Justice: Theory Practice Rhetoric 8 (1).* https://doi.org/10.21248/gjn.8.1.54

[16] Solar, Orielle Nicole Valentine, Antia Castedo, Gonzalo Soto Brandt, Jaitra Sathyandran, Zahra Ahmed, Paul Cheh, Emma Callon, Felicity Porritt, Isabel Espinosa et al. 2022. "Action on the social determinants for advancing health equity in the time of COVID-19: perspectives of actors engaged in a WHO Special Initiative." *Int J Equity Health* 21 (Suppl 3), 193 (2022). https://doi.org/10.1186/s12939-022-01798-y

[17] Braveman, Paula, Laura Gottlieb. 2014. "The social determinants of health: it's time to consider the causes of the causes." *Public Health Rep.* 129 Suppl 2(Suppl 2):19-31. doi: 10.1177/00333549141291S206

[18] Miller, Gregory, Edith Chen. 2007. "Unfavorable socioeconomic conditions in early life presage expression of proinflammatory phenotype in adolescence." *Psychosom Med.*69(5):402-9. doi: 10.1097/PSY.0b013e318068fcf9

[19]World Health Organization. 2010. "A conceptual framework for action on the social determinants of health." https://iris.who.int/bitstream/handle/10665/44489/9789241500852_eng.pdf?sequence=1 .

[20] Patel, Jenil R., Clare C. Brown, T. Elaine Prewitt, Zain Alfanek, and M. Kathryn Stewart. 2023. "Social determinants of health and COVID-19: An evaluation of racial and ethnic disparities in attitudes, practices, and mental health." *PLOS Glob Public Health 3*(1), e0000558. https://doi.org/10.1371/journal.pgph.0000558

[21] World Health Organization. 2010. "A conceptual framework for action on the social determinants of health." https://iris.who.int/bitstream/handle/10665/44489/9789241500852_eng.pdf?sequence=1 .

[22] Ibid.

[23] World Health Organization. 2023. "Climate change and health." https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health#:~:text=Key%20facts,malaria%2C%20diarrhoea%20and%20heat%20stress

[24] Ibid.

[25] World Health Organization Commission on Social Determinants of Health. 2007. "Knowledge Network on Health Systems of the Commission on Social Determinants of Health, Final Report. " https://cdn.who.int/media/docs/default-source/documents/social-determinants-of-health/health-systems-knowledge-network-final-report-2007.pdf?sfvrsn=b019e789_3

[26] Berghs, Maria, Bola Ola, Anna Cronin De Chavez, Bassey Ebenso. 2020. "Time to apply a social determinants of health lens to addressing sickle cell disorders in sub-Saharan Africa." *BMJ Global Health* 5:e002601. https://doi.org/10.1136/bmjgh-2020-002601

[27] World Health Organization. 2015. "WHO Global Strategy on People-centred and Integrated Health Services: Interim Report." https://www.afro.who.int/sites/default/files/2017-07/who-global-strategy-on-pcihs-main-document_final.pdf

[28] Tiirinki, H, J. Sulander, T. Sinervo, S. Halme, I. Keskimäki. 2022. "Integrating Health and Social Services in Finland: Regional Approaches and Governance Models." *International journal of integrated care 22*(3), 18. https://doi.org/10.5334/ijic.5982

[29] World Health Organization. 2023. "Working together for equity and healthier populations: sustainable multisectoral collaboration based on Health in All Policies approaches." https://iris.who.int/bitstream/handle/10665/372714/9789240067530-eng.pdf?sequence=1

[30] The Local Health System Sustainability Project (LHSS). 2022. *Social Determinants of Health-related Competencies for the Health Workforce.* Rockville, MD: Abt Associates.

[31] The Local Health System Sustainability Project (LHSS). 2021. *Literature review of integrating the social determinants of health in human resources for health approaches*. Rockville, MD: Abt Associates.

[32] Biermann, Olivia, Meggie Mwoka, Catherine K Ettman, Salma M Abdalla, Sherine Shawky, Jane Ambuko, Mark Pearson, Zahra Zeinali, Sandro Galea, Blessing Mberu, Laura Magaña Valladares. 2021. "Data, Social Determinants, and Better Decision-making for Health: the 3-D Commission." *J Urban Health* 98 (Suppl 1):4-14. doi: https://doi.org/10.1007/s11524-021-00556-9

[33] The Local Health System Sustainability Project (LHSS). 2019. *Local Health System Sustainability (LHSS) Gender Equality and Social Inclusion Strategy*. Rockville, MD: Abt Associates

[34] The Local Health System Sustainability Project (LHSS). 2021. *Literature review of the integration of the social determinants of health in human resources for health approaches*. Rockville, MD: Abt Associates.

[35] Horrill, Tara, Diana E McMillan, Annette S H Schultz, Genevieve Thompson. 2018. "Understanding access to healthcare among Indigenous peoples: A comparative analysis of biomedical and postcolonial perspectives." *Nursing inquiry*, *25*(3), e12237. https://doi.org/10.1111/nin.12237

[36] Canadian Institute for Health Information. 2013. "A performance measurement framework for the Canadian health system." https://secure.cihi.ca/free_products/HSP_Framework_Technical_Report_EN.pdf

[37] World Health Organization. 2008. "Closing the gap in a generation: health equity through action on the social determinants of health." https://iris.who.int/bitstream/handle/10665/69832/WHO_IER_CSDH_08.1_eng.pdf?sequence=1

[38] Biermann, Olivia, Meggie Mwoka, Catherine K Ettman, Salma M Abdalla, Sherine Shawky, Jane Ambuko, Mark Pearson, Zahra Zeinali, Sandro Galea, Blessing Mberu, Laura Magaña Valladares. 2021. "Data, Social Determinants, and Better Decision-making for Health: the 3-D Commission." *J Urban Health* 98 (Suppl 1):4-14. doi: https://doi.org/10.1007/s11524-021-00556-9

[39] WHO. 2022. *Action on the Social Determinants of Health for Advancing Equity*. https://www.who.int/initiatives/action-on-the-social-determinants-of-health-for-advancing-equity/operational-framework

[40] Juan Carlos Rivillas, Fabian Dario Colonia. 2017. "Reducing causes of inequity: policies focused on social determinants of health during generational transitions in Colombia." *Global health action*, *10*(1), 1349238. https://doi.org/10.1080/16549716.2017.1349238

[41] Solar, Orielle Nicole Valentine, Antia Castedo, Gonzalo Soto Brandt, Jaitra Sathyandran, Zahra Ahmed, Paul Cheh, Emma Callon, Felicity Porritt, Isabel Espinosa et al. 2022. "Action on the social determinants for advancing health equity in the time of COVID-

19: perspectives of actors engaged in a WHO Special Initiative." *Int J Equity Health* **21** (Suppl 3), 193 (2022). https://doi.org/10.1186/s12939-022-01798-y

[42] Exworthy, Mark. 2008. "Policy to tackle the social determinants of health: using conceptual models to understand the policy process." *Health Policy and Planning 23*(5), 318–327. https://doi.org/10.1093/heapol/czn022

[43] Bernie, Pauly, Tina Revai, Lenora Marcellus, Wanda Martin, Kathy Easton, Marjorie MacDonald. 2021. "The health equity curse": ethical tensions in promoting health equity." *BMC Public Health* 21, 1567. https://doi.org/10.1186/s12889-021-11594-y

[44] Dynes, M.M., E. Twentyman, L. Kelly, G. Maro, A. A. Msuya, S. Dominico, P. Chaote, R. Rusibamayila & F. Serbanescu. 2016. "Patient and provider determinants for receipt of three dimensions of respectful maternity care in Kigoma Region, Tanzania-April-July, 2016." *Reprod Health* 15, 41. https://doi.org/10.1186/s12978-018-0486-7

[45] Dahab, Rana, and Dikaios Sakellariou. 2020. "Barriers to Accessing Maternal Care in Low Income Countries in Africa: A Systematic Review" *International Journal of Environmental Research and Public Health* 17, no. 12: 4292. https://doi.org/10.3390/ijerph17124292

[46] The United Nations Development Programme. 2015. "A Social Determinants Approach to Maternal Health." https://www.undp.org/publications/social-determinants-approach-maternal-health

[47] World Health Organization. 2008. "Closing the gap in a generation: health equity through action on the social determinants of health." https://iris.who.int/bitstream/handle/10665/69832/WHO_IER_CSDH_08.1_eng.pdf?sequence=1

[48] Rasella, Davide, Flávia Jôse Oliveira Alves, Poliana Rebouças, Gabriela Santos de Jesus, Maurício L. Barreto, Tereza Campello & Enny S. Paixao. 2021. "Long-term impact of a conditional cash transfer programme on maternal mortality: a nationwide analysis of Brazilian longitudinal data." *BMC Med* 19, 127. https://doi.org/10.1186/s12916-021-01994-7

[49] Ibid.

[50] Paiva, Luis Henriqe, Tereza Cristina Cotta, Armando Barrientos. 2019. "Brazil's Bolsa Família Programme." In *Great Policy Successes,* edited by Paul 't Hart and Mallory Compton, 21-41. Oxford: Oxford University Press.

https://doi.org/10.1093/oso/9780198843719.003.0002

[51] Lindert, Kathy, Anja Linder, Hobbs Jason Hobbs, Bénédicte De La Brière. 2007. "The Nuts and Bolts of Brazil's Bolsa Família Program: Implementing Conditional Cash Transfers in a Decentralized Context, Social Protection." https://documents1.worldbank.org/curated/en/972261468231296002/pdf/398530SP1709.pdf

[52] Ibid.

[53] Wong, Joseph, Ariel Sim, Nicoli Dos Santos, Alexa Waud, Nina Da Nobrega Garcia, Sarah Ray. 2021. "Reaching the Hard to Reach: A Case Study of Brazil's Bolsa Família Program." https://reachalliance.org/wp-content/uploads/2021/04/BolsaFamilia-CaseStudy-FINAL-pages.pdf

[54] Lindert, Kathy, Anja Linder, Hobbs Jason Hobbs, Bénédicte De La Brière. 2007. "The Nuts and Bolts of Brazil's Bolsa Família Program: Implementing Conditional Cash Transfers in a Decentralized Context, Social Protection." https://documents1.worldbank.org/curated/en/972261468231296002/pdf/398530SP1709.pdf

[55] Macinko, James, Matthew J Harris, Marcia Gomes Rocha. 2017. "Brazil's National Program for Improving Primary Care Access and Quality (PMAQ): Fulfilling the Potential of the World's Largest Payment for Performance System in Primary Care." *J Ambul Care Manage*. 2017;40 Suppl 2 Supplement. https://doi:10.1097/JAC.0000000000000189

[56] Paiva, Luis Henriqe, Tereza Cristina Cotta, Armando Barrientos. 2019. "Brazil's Bolsa Família Programme." In *Great Policy Successes,* edited by Paul 't Hart and Mallory Compton, 21-41. Oxford: Oxford University Press. https://doi.org/10.1093/oso/9780198843719.003.0002

[57] Ibid.

[58] Alves, Flávia Jôse O., Dandara Ramos, Enny S. Paixão, Ila R. Falcão, Rita de Cássia Ribeiro-Silva, Rosemeire Fiaccone, Davide Rasella, Camila Teixeira, Daiane Borges Machado, Aline Rocha, et al. 2023. "Association of Conditional Cash Transfers With Maternal Mortality Using the 100 Million Brazilian Cohort." *JAMA Netw Open* 6(2):e230070. https://doi:10.1001/jamanetworkopen.2023.0070

[59] Kildea, Sue, Helen Stapleton, Rebecca Murphy, Natalie Billy Low, Kristen Gibbons. 2012. "The Murri clinic: a comparative retrospective study of an antenatal clinic developed for Aboriginal and Torres Strait Islander women." *BMC Pregnancy Childbirth* 12, 15. https://doi.org/10.1186/1471-2393-12-159

[60] Kildea, Sue, Yu Gao, Sophie Hickey, Carmel Nelson, Sue Kruske, Adrian Carson, Jody Currie, Maree Reynolds, Kay Wilson, Kristie Watego, Jo Costello, Yvette Roe. 2021. "Effect of a Birthing on Country service redesign on maternal and neonatal health outcomes for First Nations Australians: a prospective, non-randomized, interventional trial." *Lancet Glob Health* 9(5):e651-e659. https://doi.org/10.1016/s2214-109x(21)00061-9

[61] Ramsden, Irihapeti. 1993. "Cultural Safety in Nursing Education Aotearoa (NZ)". *Nursing Praxis in New Zealand 8*(3), 4-10. https://doi.org/10.36951/NgPxNZ.1993.009

[62] Pálsdóttir, Bjorg, Lyn Middleton, Kate Greene. 2022. "Social Determinants of Health-related Competencies for the Health Workforce." https://www.lhssproject.org/sites/default/files/resource/2022-11/LHSS%20Core%20Activity%2017_SDOH%20Competencies%20Brief_Y3_Final_Approved.pdf

[63] Kildea, Sue, Yu Gao, Sophie Hickey, Carmel Nelson, Sue Kruske, Adrian Carson, Jody Currie, Maree Reynolds, Kay Wilson, Kristie Watego, Jo Costello, Yvette Roe. 2021. "Effect of a Birthing on Country service redesign on maternal and neonatal health outcomes for First Nations Australians: a prospective, non-randomized, interventional trial." *Lancet Glob Health* 9(5):e651-e659. https://doi.org/10.1016/s2214-109x(21)00061-9

[64] Ibid.

[65] Guignona, Monserrat, Servando Halili, Fortunato Cristobal, Torres Woolley, Carole Reeve, Simone Jacquelyn Ross, Andre Jaques Neusy. (2021). "A Curriculum for Achieving Universal Health Care: A Case Study of Ateneo de Zamboanga University School of Medicine." *Frontiers in Public Health* 9, 612035. https://doi.org/10.3389/fpubh.2021.612035

[66] Ateneo de Zamboanga University School of Medicine. 2023. Unpublished case study based on student report and evaluation.

[67] Ateneo de Zamboanga School of Medicine. n.d. Report from medical student group placed in New Barili community.

[68] Woolley, Torres, Servando D Halili Jr, Jusie-Lydia Siega-Sur, Fortunato L Cristobal, Carole Reeve, Simone J Ross, Andre-Jacques Neusy. 2018. "Socially accountable medical education strengthens community health services." *Medical Educatio*n 52(4), 391-403. https://doi.org/10.1111/medu.13489

[69] World Health Organization. 2023. "Working together for equity and healthier populations: sustainable multisectoral collaboration based on Health in All Policies approaches." https://iris.who.int/bitstream/handle/10665/372714/9789240067530-eng.pdf?sequence=1

[70] National Collaborating Centre for Determinants of Health, St. Francis Xavier University. 2013. "A Guide to Community Engagement Frameworks for Action on the Social Determinants of Health and Health Equity." https://nccdh.ca/images/uploads/Community_Engagement_EN_web.pdf

[71] World Health Organization. 2008. "Closing the gap in a generation: health equity through action on the social determinants of health." https://iris.who.int/bitstream/handle/10665/69832/WHO_IER_CSDH_08.1_eng.pdf

[72] Nallala, Srinivas, Upasona Ghosh, Shyama Sundari Desaraju, Shridhar Kadam, Rahul Reddy Kadarpeta, Sara Van Belle. 2023. "Why are they "unreached"? Macro and Meso determinants of health care access in hard-to-reach areas of Odisha, India." *Int J Equity Health* 22, 2. https://doi.org/10.1186/s12939-022-01817-y

[73] Biermann, Olivia, Meggie Mwoka, Catherine K Ettman, Salma M Abdalla, Sherine Shawky, Jane Ambuko, Mark Pearson, Zahra Zeinali, Sandro Galea, Blessing Mberu, Laura Magaña Valladares. 2021. "Data, Social Determinants, and Better Decision-making for Health: the 3-D Commission." *J Urban Health* 98 (Suppl 1):4-14. https://doi.org/10.1007/s11524-021-00556-9

[74] Valentine, Nicole B., Theadora Swift Koller, Ahmad Reza Hosseinpoor. 2016. "Monitoring health determinants with an equity focus: a key role in addressing social determinants, universal health coverage, and advancing the 2030 sustainable development agenda." *Global Health Action* 9:1, 34247. https://doi.org/10.3402/gha.v9.34247

[75] World Health Organization. 2023. "Operational Framework for Monitoring Social Determinants of Health Equity (draft)." https://cdn.who.int/media/docs/default-source/documents/social-determinants-of-health/who_operational-framework-for-monitoring-social-determinants-of-health-equity_16052023.pdf?sfvrsn=1dd8a53b_3

[76] Biermann, Olivia, Meggie Mwoka, Catherine K Ettman, Salma M Abdalla, Sherine Shawky, Jane Ambuko, Mark Pearson, Zahra Zeinali, Sandro Galea, Blessing Mberu, Laura Magaña Valladares. 2021. "Data, Social Determinants, and Better Decision-making for Health: the 3-D Commission." *J Urban Health* 98 (Suppl 1):4-14. doi: https://doi.org/10.1007/s11524-021-00556-9

[77] Ibid.

[78] World Health Organization. 2023. "Integrating the social determinants of health into health workforce education and training." https://iris.who.int/bitstream/handle/10665/373710/9789240064256-eng.pdf?sequence=1

[79] Pálsdóttir, Bjorg, Lyn Middleton, Kate Greene. 2022. "Social Determinants of Health-related Competencies for the Health Workforce." https://www.lhssproject.org/sites/default/files/resource/2022-11/LHSS%20Core%20Activity%2017_SDOH%20Competencies%20Brief_Y3_Final_Approved.pdf

[80] World Health Organization. 2023. "Integrating the social determinants of health into health workforce education and training." https://www.who.int/publications/i/item/9789240064256

[81] United States Agency for International Development. 2022. "Digital Social and Behavior Change in HSS: Strengthening Health Systems Through Social and Behavior Change Interventions That Use Digital Technologies." https://www.usaid.gov/sites/default/files/2023-09/HSS_Practice_Spotlight_Digital_SBC_Final.pdf

[82] Guignona, Monserrat, Servando Halili, Fortunato Cristobal, Torres Woolley, Carole Reeve, Simone Jacquelyn Ross, Andre Jaques Neusy. (2021). "A Curriculum for Achieving Universal Health Care: A Case Study of Ateneo de Zamboanga University School of Medicine." *Frontiers in Public Health* 9, 612035. https://doi.org/10.3389/fpubh.2021.612035

[83] Hancock, Heather, Olivia Carlson, Hope Hempstone, Bethany Arnold, Kamden Hoffmann, Xaher Gul and Kathryn Spielman. 2023. "Six recommendations for provider behavior change in family planning." *Global Health: Science and Practice* 11(Supplement 1):e2200495. https://doi.org/10.9745/GHSP-D-22-00495

[84] Johns Hopkins Center for Communication Programs. 2022. "Intentionally incorporating the social determinants of health into social and behavior change programming for family planning: A technical report." https://breakthroughactionandresearch.org/wp-content/uploads/2022/01/Intentionally-Incorporating-SDOH-into-SBC-Programming-for-FP.pdf

[85] World Health Organization. Special Initiative for Action on the Social Determinants of Health for Advancing Health Equity. https://www.who.int/initiatives/action-on-the-social-determinants-of-health-for-advancing-equity

FURTHER READING AND TOOLS

DeVoe, Jennifer E., Andrew W. Bazemore, Erika K. Cottrell, Sonja Likumahuwa-Ackman, Jené Grandmont, Natalie Spach, Rachel Gold. 2016. "Perspectives in Primary Care: A Conceptual Framework and Path for Integrating Social Determinants of Health into Primary Care Practice."

Egli-Gany, D., Aftab, W., Hawkes, S., Abu-Raddad, L., Buse, K., Rabbani, F., Low, N., Onarheim, K. 2021. "The social and structural determinants of sexual and reproductive health and rights in migrants and refugees: A systematic review of reviews." Eastern Mediterranean Health Journal, 27(12), 1203–1213. https://doi.org/10.26719/emhj.20.101.

Hamal, M., Dieleman, M., De Brouwere, V., De Cock Buning, T. 2020. "Social determinants of maternal health: A scoping review of factors influencing maternal mortality and maternal health service use in India." Public Health Reviews, 41(1), 13. https://doi.org/10.1186/s40985-020-00125-6.

Health Systems Strengthening Practice Spotlight. June 2023. *Social Accountability and Social Behavior Change: Applying a Behavioral Lens to Social Accountability Approaches.* Washington, DC. https://www.lhssproject.org/; https://www.usaid.gov/global-health/health-systems-innovation/health-systems/resources/practice-spotlight-series.

Krzyzanowski, M. C., Ives, C. L., Jones, N. L., Entwisle, B., Fernandez, A., Cullen, T. A., Darity, W. A., Fossett, M., Remington, P. L., Taualii, M., Wilkins, C. H., Pérez-Stable, E. J., Rajapakse, N., Breen, N., Zhang, X., Maiese, D. R., Hendershot, T. P., Mandal, M., Hwang, S. Y., Hamilton, C. M. 2023. "The PhenX Toolkit: Measurement Protocols for Assessment of Social Determinants of Health." American Journal of Preventive Medicine

Local Health System Sustainability Project (LHSS). 2021. *Theory of Change for Integrating Social Determinants of Health into Education, Training and Service Delivery*. Rockville, MD: Abt Associates.

World Health Organization. n.d. *Social determinants of health. Healthy People 2030*. Office of Disease Prevention and Health Promotion.

World Health Organization. 2023. *Special Initiative for Action on the Social Determinants of Health for Advancing Health Equity.*

OpenWHO. 2023. Inequality monitoring in sexual, reproductive, maternal, newborn, child and adolescent health.

https://openwho.org/courses/inequality-monitoring-srmncah

WHO. 2023. African Health Action Toolkit. Regional Office for Africa.

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