Measuring Equity in Social and Behavior Change Programming

for Family Planning and Sexual and Reproductive Health







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Acknowledgments

This guide is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of Breakthrough ACTION and do not necessarily reflect the views of USAID or the United States Government.

The authors gratefully acknowledge USAID staff and the following colleagues and partners around the globe for their technical review and valuable contributions to earlier drafts gathered through an expert consultation: Lynn Van Lith (Breakthrough ACTION, Johns Hopkins Center for Communication Programs [CCP]), Joanna Skinner (Breakthrough ACTION, CCP), Angela Brasington (USAID), Antje Becker-Benton (Breakthrough ACTION, Save the Children US), Paul Bouey (Breakthrough ACTION, Save the Children US), Jason Bremner (FP2030), Paul Bukuluki (Makerer University, Uganda), Maria Carrasco (USAID), Shiza Farid (FP2030, Public Health Institute), JC Fotso (Agency for All Project), Lenette Golding (Breakthrough ACTION, Save the Children US), Karen Hardee (Hardee Associates), Stephanie Levy (USAID), Morrisa Malkin (Research for Scalable Solutions Project, FHI360), David Rasella (Instituto de Saude Coletiva, Universidade Federal da Bahia, Brazil), and Lindsay Swisher (USAID).

Finally, the authors are indebted to Rebecca Pickard for her mindful editing of this report and to Mark Beisser for his expert customization of the figures and perceptive design.

Recommended citation: Underwood, C. R., Block, S. J., & Werwie, T. (2023). *Measuring equity in social and behavior change programming for family planning and sexual and reproductive health.* Breakthrough ACTION.

Acronyms

CCP Johns Hopkins Center for Communication programs

CSDH Commission on Social Determinants of Health

DHS Demographic and Health Surveys

FP/SRH Family planning and sexual and reproductive health

LCA Latent class analysis

RME Research, monitoring, and evaluation

SBC Social and behavior change

SDH Social determinants of health

Purpose

This guidance builds on **Expanding the** "S" in Social and Behavior Change: Addressing Social Determinants of **Health and Health Equity in SBC** Programming, which presents key considerations and illustrative actions for advancing social and structural change and improving health equity through SBC programming. Expanding the "S" encourages including indicators based on social determinants of health (SDH) in formative monitoring and evaluation research on health behaviors and outcomes. That document, however, does not provide specific suggestions on how to measure and incorporate SDH measurement in SBC programs and research. This guide offers straightforward, readily applicable guidance on how family planning (FP) and sexual and reproductive health (SRH) researchers and practitioners can more consistently measure and report equity or inequity in SBC programs related to SDH. Such measurement helps researchers and practitioners understand how program or policy benefits affect different populations and raises awareness of inequities, and thus encourages them to consider how to account for inequity in their work. Thereby, SBC practitioners can intentionally act in favor of those historically underserved or not served at all. Exploring who may be missing from health programs and policies helps practitioners understand why such individuals are missing and make recommendations to remedy this. This document is for key stakeholders, including government partners, funders,



program implementers, and research and evaluation staff who are in positions to measure and address health inequities. It aspires to place these considerations front of mind for all actors who are funding, designing, implementing, and evaluating SBC programs and policies. This guidance also builds on the previously developed The Road to Equity in Family Planning and Incorporating the Social Determinants of Health into SBC Programming for FP; both resources highlight key learnings and recommendations for shaping investments and SBC programming that directly address inequities and SDH.

Background

SDH, or the "the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life,1" (Commission on Social Determinants of Health, 2008, p. 2) are the root causes of health outcomes. These conditions, including the distribution of power and essential resources, are inequitably allocated both within and across countries due to unfair social, political, and economic policies. Individuals' health and well-being are determined, in large part, by factors beyond individuals' control, including community, institutional, and societal factors, such as socioeconomic position and access to resources. Yet, epidemiological studies typically assign these conditions to the level of the individual, resulting in social and behavior change (SBC) research and programs that often underrepresent the fundamental role of social and structural factors in the distribution of health-related behaviors and outcomes.

To date, SBC research and interventions in FP/SRH have concentrated primarily on the individual level, specifically on health behaviors and associated psychosocial factors, without adequately exploring the role of social and political

determinants of health that lie beyond the individual.² Overlooking social and political determinants too often leads to missed opportunities to contribute more fully to health equity, i.e., "the absence of unfair and avoidable or remediable differences in health among social groups."³ Health equity should be a more prominent guiding principle of SBC programming and its measurement an essential component to tackling long standing inequities across the globe.

Measuring and assessing SDH is a key gap in the field of SBC. Detailed analyses of the socially determined distribution of inequities will advance the field. These both precede and continue to influence individuals' knowledge, attitudes, agency and perceived social norms,* health program and service participation and benefits, and the adoption of protective health behaviors. Without these analyses, research will not rise to the challenge of fully informing SBC programming, which in turn will fail to redress those shortcomings. The guidelines in this document can assist governments, funders, program implementers, and researchers to intentionally incorporate considerations of SDH in SBC endeavors, thereby advancing health equity by improving the health

^{*} Social norms can function at the structural or intermediary level. Social norms that affect individuals' and groups' socioeconomic position are structural. For example, social norms that support early marriage could affect an adolescent girl's socioeconomic position, depending to a lesser or greater extent on whom she marries but also dependent on how it affects her access to resources. Perceived social norms that don't affect one's socioeconomic position are intermediary determinants. Smoking-related norms, which would not affect the degree to which social class, race, or gender shape stratification by socioeconomic position are intermediary determinants.

outcomes of groups who have too often been underserved, poorly served, or unserved. While this guidance focuses on the FP/SRH arena, much of it may apply to other health or development topics.

Development Process/ Literature Review

Breakthrough ACTION conducted a rapid literature review to identify peer-reviewed and grey literature on existing tools, indicators, and methods that measure the social and structural determinants of health and inequity as they relate to SBC programs and evaluation. The initial search resulted in over 600 articles identified from PubMed, Scopus, and Web of Science databases that the project then reviewed for relevance and potential to inform SBC practices. It gave 97 articles an indepth review. The project categorized the materials into several broad themes related to FP/SRH, wealth and its proxies, and intersectionality.

The World Health Organization (WHO) Commission on Social Determinants of Health (CSDH) conceptual framework grounds this discussion on equity considerations and allows for an intersectional approach to measuring equity.

Guiding Conceptual Framework

Since the beginning of the 21st century, the WHO CSDH led efforts to focus intentionally on inequitable social structures and their effects. The SDH, as depicted in Figure 1, comprise two distinct categories and three unique elements:

• Structural determinants:

- Social and political context:
 Governance; macroeconomic, social, and public policy; social and cultural values.
- **Socioeconomic position:** Social class; gender; ethnicity; income; education; occupation.
- Intermediary determinants:
 Material circumstances; behavior
 and biological factors; psychosocial
 factors, the health system.

According to CSDH, social and political mechanisms generate, shape, and maintain the stratification of socioeconomic position based on social class, race, gender, and the other listed factors and thereby "configure the health opportunities of social groups based on their placement within hierarchies of power, prestige, and access to resources.3" Together, these two elements constitute the structural determinants of health and are the root causes of, and have the greatest effects on, health outcomes. Indeed, research suggests that between 50% and 60% of health outcomes are caused by social and political factors.2

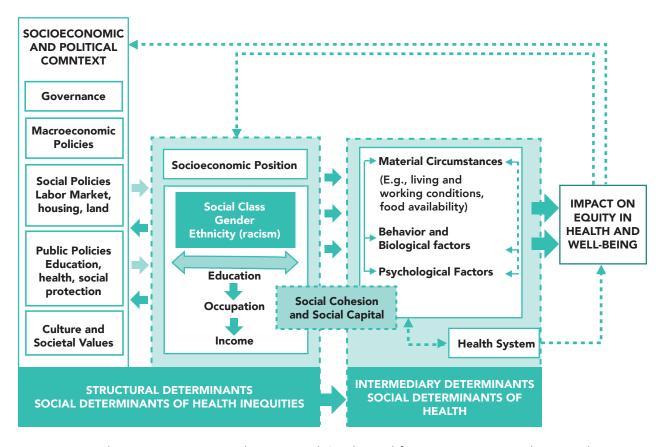


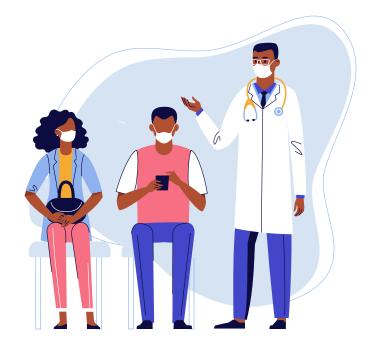
Figure 1. The CSDH Conceptual Framework.³ Adapted from WHO in accordance with **CC BY-NC-SA 3.0 IGO**.

Knowledge, attitudes, perceived social norms, culture, behaviors, biological factors, and the health system itself—the factors that constitute the core indicators typically included in SBC literature—are intermediary determinants. These link structural determinants and health outcomes but are not in themselves the underlying causes of health. Yet, the core concerns of most SBC efforts involve intermediary determinants. A singular focus on intermediary determinants, placing structural determinants in the background, rarely improves health equity and often leads to missed opportunities for SBC programs.

Given how central intermediary determinants are to SBC programming, practitioners need to consider uncomplicated and meaningful ways to incorporate structural mechanisms more intentionally into their work. By examining the effects of socioeconomic position on intermediary determinants, including FP/SRH-related behavioral outcomes, SBC actors can better understand how structural inequities lead to unhealthy behaviors, health risks, lower uptake of services, and adverse outcomes. SBC actors can then use this evidence to support new policy and program recommendations to address health inequity.

Importance of Socioeconomic and Political Context for SBC Programming

The socioeconomic and political circumstances of a given nation constitute the most upstream factors that influence health and well-being. As such, policy makers as well as SBC program funders, implementers, and researchers must take such factors into consideration. An extensive body of literature exists on macro-level assessments, measurements, and indicators, and SBC actors across the board should broadly understand these factors as they affect the context in which they design and implement programs.4-7 Social and economic policies determine the current unequal and unfair distribution of power, prestige, and necessary resources. Yet, many SBC implementers focus on the individual level because they think they are unable to change broader structural determinants. Even if this is true, they still benefit from understanding the barriers different audience segments face so they can consider them when they design and implement programs. SBC practitioners should not only explore structural determinants at the national level, but they also need to understand how policies lead to inequities regarding FP/SRH service access and use at more local levels. In short, SBC actors need to understand and acknowledge policies that hinder health equity while seeking opportunities to redress these wrongs.



The recent incorporation of "structural competency" in medical education,8 which challenges health care professionals to identify, analyze, and, when feasible, intervene upon the structural factors that create health inequities, provides an excellent precedent upon which SBC actors can build. Structural competency compels a focus on the underlying social, economic, and political forces that lie beyond individuals' control. Yet, it strongly influences their health behaviors and outcomes. Additionally, SBC actors at all levels, as well as within the health care system, can highlight the impact of structural forces and hold policymakers accountable to implement policies and provide the funds necessary to create more equitable conditions. Structural competency in SBC includes understanding the linkages between structural and intermediary determinants alongside developing the skills to contextualize, prioritize, and, to the extent feasible, address these factors with the aim of improving health equity.

Key Considerations

For SBC actors, structural competency can include, at a minimum, assessing which groups in a proposed area of implementation have limited or inadequate access to the following:

- Clean water and sanitation.
- Adequate food and clothing.
- Secure and affordable housing.
- Adequate sources of income.
- Preventive and curative medical care.
- High-quality education.
- Protection against economic insecurity associated with advanced age, sickness, accidents, and unemployment.
- Resilience in the face of climate change, violence, and conflict.

Such assessments would not necessarily require detailed analyses of these factors, unless the program has the expertise and time to do so. Regardless, broadly understanding how structural determinants affect communities' and individuals' ability to adopt or maintain health-promoting behaviors helps mitigate barriers, manage expectations, and set feasible goals.

Other questions which guide the preliminary, pre-design phase and throughout the life of a project should include:

- What causes these discrepancies?
- What social and political policies influence the unequal distribution of, and control over, essential resources?
- Which groups are most affected?

How does this influence the ability of individual members in these groups to take action to protect or maintain their health and the health of their dependents?

 What, if anything, might SBC actors do to mitigate those constraining factors?

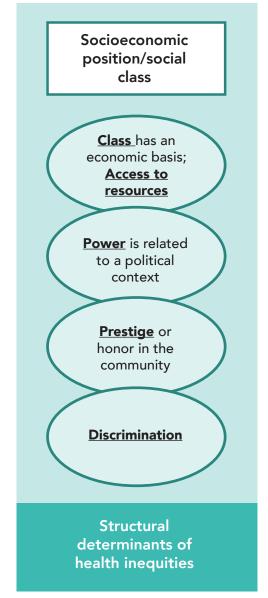


These broad considerations help inform SBC interventions, recognizing that building detailed measurements of macrolevel indicators into such interventions lies beyond the purview of most SBC practitioners. For that reason, this document does not include detailed guidance regarding such indicators. Instead, this guidance points to broad considerations for programmatic decision making. Governments should review carefully the insights derived from SBC programs and research to reflect on how their social policies may contribute to inequities in the distribution of and access to essential resources. They can use such insights to revise policy and legislation to address these discrepancies.

Socioeconomic Position

Public health studies on SBC and FP/SRH programs typically include socioeconomic position—e.g., income/wealth, education, race/ethnicity—as control variables in their analyses (Figure 2). Some studies refer to socioeconomic position as "SEP." Researchers use such variables to help assess what socioeconomic elements may associate with a desirable health behavior, including seeking health care services. While such analyses tacitly acknowledge the effects of poverty, racism, gender, and/or other factors on desired health behaviors, study authors typically treat these as individual-level factors without recognizing—or addressing—the social origin of the unequal distribution of resources. Consequently, members of relevant fields miss opportunities to address the underlying causes of poor health outcomes. Evidence consistently demonstrates, however, that socioeconomic position† accounts for substantial differences in participation in FP/SRH programs and access to and use of FP/SRH services. 9,10 Therefore, the field of SBC, particularly as it pertains to FP/SRH, can only enhance what it can accomplish by exploring which socioeconomic measures to include in their assessments, so they might better understand the root causes of the unequal distribution of health-related behavioral outcomes and whether program activities are reaching those most in need.

Figure 2. Structural determinants of health inequities



Adapted from Irwin, A., Solar, O., & Vega, J. (2008). Social Determinants of Health, the United Nations Commission on. In H. K. (Kris) Heggenhougen (Ed.), International Encyclopedia of Public Health (pp. 64–69). Academic Press. https://doi.org/10.1016/B978-012373960-5.00673-0

[†] The CSDH conceptual framework uses the term "socioeconomic position" sometimes referred to as "SEP," rather than "socioeconomic status" or "SES." As described in Krieger et al., "Social class, as a social relationship, is logically and materially prior to its expression in distributions of occupations, income, wealth, education, and social status. To refer concisely to these diverse components of economic and social well-being, as related to class position, this document uses the term 'socioeconomic position.'"¹¹

SBC practitioners and researchers can collect socioeconomic position data at the individual, household, and neighborhood levels, although not without conceptual and methodological challenges to considering the dynamic nature of socioeconomic position over time. Each of these indicators poses its own challenges regarding their formulation and derivation through survey data. Measurement can be difficult because of the complexity and nuance socioeconomic position-related results contain. Socioeconomic position highly influences health outcomes, but it is not a static state, and one's individual- or community-level socioeconomic position may change over time, subject to social and political influences. Drawing from previously published literature or analyses in conjunction with new data collection (discussed in the following section) will make assessing current socioeconomic position measures more effective and reliable.

The key components of socioeconomic position are:

Social class

- A measure of an individual's access to and control over the means of production (such as land, factories, other enterprises). Social class is the single best predictor of socioeconomic position and is a strong predictor of health, well-being, and longevity. Public health studies, however, rarely include social class, as illustrated in Krieger et al.¹¹

Income/wealth

- Data on complete income is often difficult to collect and may underrepresent material resources that individuals have in low- and middle-resourced areas where in-kind payments are common. For that reason, researchers collect information on individual or household assets, called wealth data.
- When relevant, analysts usually divide populations into five equally sized strata based on varying levels of living standards. They calculate these quintiles after collecting observable data on selected assets, such as housing materials, land and livestock ownership, and household goods. While these are often standard measures in SBC surveys, other large household surveys may not collect the same information. Selection of which data to include therefore must be performed carefully when comparing data across surveys or countries that measure equity and related health outcomes.
- Stratton et al. argue researchers should "go beyond wealth" in analysis, which is not to suggest ignoring wealth, but that measures of wealth alone are often not sufficient.¹²

Gender

 Gender disparities in health outcomes, and FP/SRH outcomes in particular, have been well documented.^{13,14} Many studies frequently use a simple male—female dichotomy, but this does not allow measurement of non-binary gender identities, which means potentially being unable to fully address gaps in equitable access to or use of FP/SRH services in many contexts.

- An additional barrier involving gender data collection is that many people who identify outside the male-female binary in many countries or communities do so at legal or physical risk. In such cases, researchers should not include non-binary measures since the research team may not be able to protect anonymity or confidentiality.
- Gender and its relationship to power in relationships (whether intimate partnerships, employer-employee dynamics, or in policy) are complex. This document focuses mainly on how different genders experience policy and program access and outcomes.

Ethnicity/race

- In certain contexts, race or ethnicity may be a highly relevant differentiating characteristic related to inequitable access to FP/SRH services and products or participation in SBC activities.
- Governments and broader society may neglect and marginalize ethnic minorities on purpose in some settings. This warrants

consideration in the initial assessment of disadvantaged groups.

Education

- Level of highest education attained—when combined with other measures of social position, such as wealth, race, or gender—can uncover salient differences in health outcomes that reflect larger structural issues. On its own, however, education may not adequately describe disproportionate distribution of health, since in many contexts, the highest education attained may be low among a large proportion of the population. Therefore, outcomes will not reflect this factor very well. In other cases, even among those who have no education, some may be wealthier than their peers and demonstrate greater access to or use of FP/SRH programs and services.

Occupation

Occupation can serve as a proxy for social stratification, is a measure of social status, and links to both education and income.
 The occupation categories provided in SBC surveys are typically quite broad, requiring a careful analysis of its added value. Moreover, surveys often do not include information for unemployed respondents, which can cause oversights.

Other sociodemographic components worth considering in an analysis include:

- Urban/rural residence
 - Urban/rural residence heavily influences access to key resources, even though it is, according to the CSDH, an intermediary determinant.
 - Within urban or rural settings, stratification by wealth will also be present.

Age

- Reproductive health programs are often interested in focusing on specific age groups, whether, for example, "women of reproductive age" or "youth" or "adolescents."
- Age often affects access to resources, including FP health services, so SBC programs need to consider it.



Intermediary Determinants: Material Conditions, Psychosocial Factors, Behaviors, and the Health Care System

The CSDH conceptual framework illustrates that different socioeconomic and political contexts can generate various social stratifications. This manifests as possible changes in socioeconomic position that, in turn, leads to different exposure to either health-enabling or health-compromising conditions.

Material Circumstances

Among the intermediary determinants of health, material conditions—including housing, neighborhood conditions, and food availability—likely have the greatest direct effect on health.³ While measurement of these factors is not within the scope of this document, a variable for neighborhood-level socioeconomic position can be created by aggregating data collected from individuals and incorporated into advanced statistical analyses.

Psychosocial Factors and Behaviors

SBC practitioners have devoted the bulk of programs and research to identifying, measuring, and addressing individual-level psychosocial variables, health-related behaviors, and health care system factors. The published literature is rich with studies that focus on FP/SRH intermediary factors including¹⁵⁻¹⁸:

- Attitudes and beliefs about contraceptive methods.
- Perceived social and gender norms related to access to contraceptive services, perceived contraceptive self-efficacy among women.
- Individual health-related behaviors, such as method adoption, method discontinuation, couple communication, FP/SRH decision-making, FP/SRH service seeking.
- Service-level indicators, e.g., community health worker home visits, whether providers described how to manage contraceptiverelated side effects or offered a full menu of methods, satisfaction with FP counseling.

Both peer-reviewed and grey literature typically include information regarding the distribution of intermediary determinants by wealth quintiles, age groups, gender, and/or urban/rural residence. Yet, this literature usually only briefly mentions the associations between SDH measures and intermediary determinants, as in "wealth quintile is negatively associated with ANC uptake," reverting the focus to psychosocial and behavioral factors. An SDH lens would refocus attention on, for instance, differences across wealth quintiles over time, or whether any evidence of improvements appear in health equity for the intermediary determinants that the program was designed to affect. For example, a comparison of program participation for

postpartum FP across wealth quintiles might demonstrate if economically disadvantaged respondents benefited as much as, or more than, their more privileged counterparts. By foregrounding SDH, SBC actors can better understand where inequities are and recommend salient policy or programmatic strategies to better reach and engage individuals and communities for whom the data suggest current programs and policy are falling short.

The Health Care System

Given the central role health care services play in FP/SRH behaviors and outcomes, the health care system is an intermediary determinant of health that warrants attention as part of the broader SDH approach. Recent publications have pointed to the need for "improved health system equity, quality and resource optimization,¹⁹" implicitly acknowledging persistent health system inequities, particularly among populations that are underserved. This necessitates including more robust measures of health care access as part of SDH measurement for FP/SRH.

Choi et al. promote the use of Demographic Health Surveys (DHS) variables to assess six aspects of FP access²⁰:

- Cognitive accessibility.
- Psychosocial accessibility.
- Geographic accessibility.
- Service quality.
- Administrative accommodation.
- Affordability.

The authors of that study maintain that all but administrative accommodation, which they note requires information from service delivery points and FP providers, can be measured in part, if not in depth, with individual-level DHS data. Again, each of these factors should be disaggregated by socioeconomic position, including wealth quintile and, as relevant for a given setting, gender, ethnicity/race, age, and/or residence. Ideally, DHS or other datasets with similar measures would be paired with clinic- and provider-level data. Details regarding specific DHS questions can be found here.

SDH and Health Equity Organizing Principles

Incorporating an equity perspective into FP/SRH research, monitoring, and evaluation (RME) is always possible and useful, even for projects with limited financial resources. Since "poverty [...] is the single largest determinant of health,²¹" three guiding questions are highlighted below. Regardless of one's resources or strategy, close reflection of the guiding principles throughout the life of an SBC program will offer governments, funders, program implementers, and RME staff a variety of opportunities to design, implement, and evaluate programs with health equity in mind. At all stages of a SBC intervention, consider these questions:

1. Is the SBC program implemented in, or accessible to, people living

- in the poorest or most socially disadvantaged areas?
- 2. Is the SBC program reaching the most underserved, marginalized, or under-resourced members within these areas?
- 3. To what degree are health outcomes improving among the most socially disadvantaged or people in the lowest wealth quintile?

One could then explore the guiding questions by other measures of socioeconomic position, such as gender or ethnicity, since looking at health risks and outcomes by single measures of socioeconomic position can mask important nuances or trends. Therefore, investigating how multiple measures of socioeconomic position intersect can produce differential distributions of either access to services or activities or risk to health status. The following section on intersectionality addresses this concept in depth.

When one interacts with the guiding questions based on an analysis of secondary or primary data, the interpretations may reveal unacknowledged structural mechanisms at play that drive health inequities that were not apparent when focusing on single measures. Users of this guidance should be able to analyze the factors that produce inequitable health outcomes so that they may better design policies and programs that remedy these inequities. Feeding the data insights back into program implementation via adaptive management can assure the implementation of SBC activities and FP/SRH services in

the most poorly resourced areas and among communities most in need and that benefits of such activities positively impact the lives of the most socially and economically disadvantaged.

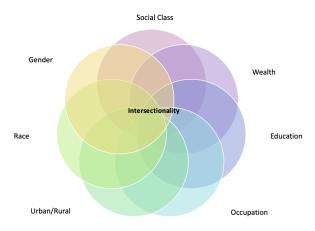


How to Use Measures of Socioeconomic Position: An Intersectional Lens

Intersectionality is defined by Alvidrez et al. as the pathways through which "Multiple marginalized or disadvantaged social statuses interact at the micro level of individuals' lived experience to reflect interlocking systems of privilege and oppression at the macro or structural level (e.g., racism, classism, colonialism, sexism, heterosexism, ableism).²²"

Members of the public health field increasingly use an intersectional lens as a theoretical framework to explore differential exposures to health risks or outcomes. Otherwise, looking at data in aggregate or by only one such social position or identity can obscure this information. Such explorations are particularly salient when addressing SDH and its influence on FP/SRH outcomes among socially disadvantaged groups and individuals. With roots in Black feminist legal scholarship in the United States, intersectionality is a way to see where power interlocks.²³ An intersectional lens acknowledges individuals can belong to multiple marginalized or disadvantaged social positions or identities simultaneously, such as race or ethnicity, gender, religion, and wealth status at the individual level that, in turn, shape one's lived experiences (Figure 3).^{22,24} These experiences reflect the inequitable structures that generate, shape, and maintain social stratification or social position.

Figure 3. Key factors of an intersectional lens



Relevant distinctions exist between social identity and social position.²⁵ One's social identity can vary in how important a given individual considers it, and it can depend on context. Therefore, social identity can change based on time and place. By contrast, social position is determined

either by objective measures, such as wealth or educational attainment, or by how an individual is perceived and treated, such as inequitable access to health services based on ethnicity. To this end, one may not identify as impoverished even if they live in poverty. Hence, this guidance focuses on social position, rather than social identities.

To illustrate how using an intersectional lens can reveal the complex roots of inequity in FP/SRH: one might be studying a health facility that is technically available to all residents living in a particular geographic location, but some groups may be unable to access it due to social, economic, or informational barriers²⁶; women may face inequitable access to family planning services not only because of inequitable gender norms but also due to lower wealth status, younger age, marginalized ethnicity, and/or preferred language. Their inequitable access might be further exacerbated by an inability to pay for the costs of services. Unequal power dynamics within their households may hinder their ability to make healthrelated decisions. Consequently, a woman's social disadvantage in this context is reinforced by health systems that operate within structures that neither adequately nor equitably meet the needs of those who are most marginalized. For another example of how different living situations intersect with gender, in a region enduring local conflict or violence,

safety concerns become a barrier to health care-seeking. *Moreover, managing reproductive health services in crisis zones relies on the ability of broader health systems to accommodate diverse needs in challenging circumstances, further underscoring the intersectional role that socioeconomic position and gender play in compounding health inequities.^{27,28} As those in the SBC field look towards structural mechanisms in the CSDH, the unequal and unfair distribution of power, prestige, and resources become clear. An intersectional lens allows all SBC actors to identify the multiple and marginalized social positions that people can hold that expose them to these unequal and unfair conditions. In doing so, programs can make decisions that ensure equity is at the center of their work.

Measurement of intersectionality and the application of an intersectional lens to SBC measurement and evaluation can be challenging, and methods and approaches for doing so are still being developed in diverse contexts, such as contending with how stigma affects health. One powerful analytic method for assessing socioeconomic position-related risk or outcomes is latent class analysis (LCA)-based audience segmentation. Audience segmentation is a technique that "divides a population or market into subgroups that have, or are perceived to have, meaningfully similar characteristics, and significant differences from other

[‡] The U.S. Centers for Disease Control and Prevention provides a useful **toolkit on Reproductive Health in Crisis Situations**.

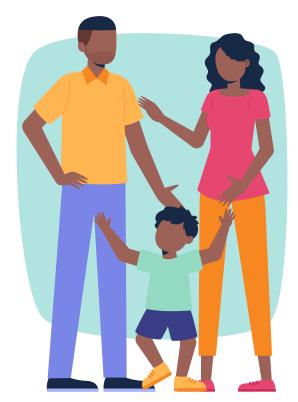
[§] The how-to-guide cited in this sentence provides in-depth guidance on audience segmentation.

subgroups."29§. In the context of SBC, segmentation based on socioeconomic position characteristics facilitates more targeted messaging and appropriate delivery of messages, products, or services based on the profiles developed via the LCA process. Using the lens of intersectionality, SBC actors can generate distinct audience profiles with respect to key socioeconomic characteristics, such as wealth, gender, education, and ethnicity. Examples of SDH-based audience segmentation using these techniques include a study to predict risk of food insecurity among mothers of young children,30 which combined socioeconomic position and some measures of material conditions. Another study explored the relationship between three measures of socioeconomic status and adolescent health and well-being.31 If SBC programs more consistently apply similar segmentation techniques—based on socioeconomic position, or by using a combination of socioeconomic position and selected psychological characteristics or traits—to their work, opportunities exist to address SRH inequities in various contexts.

Helpful Data Sources and Collection Methods

Early on in the process of designing, implementing, monitoring, and evaluating SBC programs, researchers need to decide which data sources to utilize. Broadly speaking, three types of data are available to choose from: formative research, routine program monitoring, and impact evaluations. In an ideal situation, with sufficient resources, a researcher should

collect data under each of these three primary types. In reality, SBC actors may have to prioritize funding to favor one collection method over another and do the best they can. The following guidance provides considerations at each stage of data collection that provides insights into assessing health equity in policies or programming.



Formative Research

Formative research defines intended audiences, determines what approaches are accessible and meaningful to identified audiences, and describes the audiences' attributes relevant to the program's objectives. In short, it should inform development and design processes. Formative research can include one or more of the following: direct observation, in-depth interviews, focus group discussions, and semi-structured or

structured surveys. SBC researchers may collect original data, conduct a secondary analysis of existing data, or employ both approaches. Relying on qualitative, quantitative, or mixed methods will depend upon expertise, funding, and time constraints.

Applying an SDH lens to SBC programming entails exploring the distribution of key outcomes by socioeconomic position. For example, if a program is to focus on changing social norms about FP use by adolescents, how does socioeconomic position affect current social norms relevant to the intended audience? If the goal is to improve access to FP/SRH services, how is current access affected by socioeconomic position?

Original data collection: Quantitative

Time and resources permitting, one can design survey instruments before program implementation commences to measure the key socioeconomic position indicators, including gender, wealth, education, ethnicity/race (if applicable), and residence. The DHS Program provides standard, widely-used measures, which users may adapt as needed. Original data collection will measure structural variables relevant to the program as well as intermediary variables—including psychosocial factors, health behaviors, and health care system access—integral to SBC program objectives. Moreover, survey findings can serve as the baseline against which to compare results from an impact evaluation.

Original data collection: Qualitative

If developing an SBC program either

for an underexplored health area or for an audience about whom insufficient information is available for designing the program, a carefully conceived qualitative study can provide vital insights. Since SDH are often understudied, a qualitative study could help the SBC practitioners more fully understand the factors—e.g., social, political, and cultural—that impede less privileged groups' ability to embrace supportive attitudes, norms, and intentions and/or adopt protective health behaviors. This also creates an opportunity to explore contextual factors that affect both communities and individuals. In preparation for such a study, the first step is identifying and consulting with relevant local organizations to discuss and explore contextual factors; gathering information about what has been done before, relevant to the intended audience or selected health area; and setting priorities. For example, SBC practitioners might begin by sharing simple presentations from DHS data and secondary analyses of available data. This enables leaders from the identified organizations to jointly explore equity issues and gain a fuller understanding of the health issue at hand, as well as about the intended audiences.

Given that health care services go hand-inhand with FP/SRH, and because inequities in access to health care are persistent, SBC research needs to include a formative qualitative study to uncover potential approaches to improve access equity for people living in poverty and other marginalized groups. Also vital to this inquiry is an exploration of how to enable "the effective participation or leadership of marginalized populations themselves in the development and implementation of these solutions,¹⁹" particularly at the community level.

Secondary data analysis.

In most settings, survey data directly or indirectly relevant to the intended programmatic outcomes are available. The source of such data may be a recent DHS or other health-related survey. If feasible, research should begin with secondary data analysis to inform the early phases of a project. Time and funds permitting, those findings could be augmented with additional research. Since the DHS is the most widely available source, the example of Côte d'Ivoire that follows illustrates how to apply an SDH lens in secondary data analysis, which can be conducted to inform original data collection or as a stand-alone investigation.

Secondary Analysis with the Demographic and Health Surveys

The DHS Program has collected nationally representative data on fertility, family planning, maternal, child, and neonatal health, HIV, malaria, nutrition, and gender in over 90 countries. As such, it is the most widely available resource for reliable and accessible family planning data in many low- and middle-income countries. SBC actors can expand the use of DHS

data to intentionally incorporate SDH considerations and measures to inform funding decisions, program design and implementation, and research.

Rasella et al. propose a basic, easy to apply approach to secondary analysis of DHS data, which they refer to as "double stratification"—or, using the terms applied in this guide, intersectionality that incorporates both wealth quintile and residence.³² This is a good starting point for most secondary analyses since it provides baseline data for the lowest wealth quintile by urban/rural residence, compared to other quintiles. Program planners then know where to intervene and which groups to prioritize. Midway or near the end of the activity, researchers could assess whether health equity improved over time by comparing the lowest quintile(s) with the highest quintile(s).

The following examples using data from the 2011–2012 DHS in Côte d'Ivoire reveal why employing the double stratification/intersectionality approach facilitates understanding equity in FP/SRH indicators. If the objective of a hypothetical project were to increase modern contraceptive uptake among married women in Côte d'Ivoire, a first question to ask of the DHS

TABLE 1. Current modern contraceptive use among married women, stratified by wealth, according to the 2011–12 DHS in Côte d'Ivoire³³

	WEALTH QUINTILE						
	Total	Lowest	Second	Middle	Fourth	Highest	
Modern contraceptive use	11.8%	6.2%	9.1%	10.9%	14.8%	20.1%	
among married women							

data is what is the current proportion of modern contraceptive use among married women? In this case, 11.8% of married women reported current use of a modern contraceptive method (Table 1).33 In the context of localized SBC programming, a single national statistic is not very useful to program implementers. Knowing that wealth is one of the most powerful drivers of health inequities, the actors involved need to understand how modern contraceptive use is distributed across wealth quintiles. The data expressed in Table 1 demonstrate that more than a twofold difference appears between the lowest wealth quintile and the highest wealth quintile.

If one were to approach this from an equity perspective, Table 1 would suggest that those in greatest need reside in the lowest two wealth quintiles at the national level. Better understanding how to allocate SBC resources more equitably, however, requires exploring the data from an intersectional lens, applying Rasella et al.'s double stratification approach.³² Disaggregation from the intersectional perspective will reveal who is affected or

where the affected women reside, allowing for a more tailored program or policy intervention strategy. Table 2 employs the double stratification approach to show not just how modern contraceptive use is unequally distributed by wealth, but also that differences appear between urban and rural settings.

The trend of rising wealth and increased contraceptive use is still apparent, but this table highlights differences related to the added layer of urban and rural residence. Looking at either the single measure of national modern contraceptive method use or at wealth alone masked this enlightening information (Table 1). The data show large gaps between the lowest and highest wealth quintiles in both urban and rural settings, yet the differences between urban and rural wealth levels are not proportionally the same. No married Ivorian women from urban settings who were in the second lowest wealth quintile reported using a modern contraceptive method, whereas 9% of rural married women in the second lowest wealth quintile reported their use of a modern method. Should analysts have relied on

TABLE 2. Double stratification of two FP/SRH indicators according to quintiles and residence from the 2011–12 DHS in Côte d'Ivoire³³

	WEALTH QUINTILE									
	Lowest		Second		Middle		Fourth		Highest	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Modern contraceptive use among married women	_	6.2%	0%	9.1%	9.3%	12.1%	15.7%	11.4%	19.9%	22.5%

wealth data alone, they would have missed this large difference entirely. From an equity standpoint, the data supports concentrating program efforts on low-wealth communities in urban settings in Côte d'Ivoire.

Incorporating additional socioeconomic position variables to the analysis could augment this approach. So could examining different socioeconomic position combinations based on the key factors contributing disadvantage in a given context. For example, Stratton et al. highlight the need to "go beyond wealth" to better understand barriers to FP uptake. 12 In addition to wealth, they recommend including variables such as rural residence, migration status, adolescence, little or no education, lacking autonomy in decision making, child marriage, or experience of sexual violence. An SBC practitioner in such circumstances would better understand barriers to modern contraceptive use and access by conducting qualitative formative data collection activities as a next step.

Huda et al. demonstrates a more complex approach. This study relied on DHS Bangladesh data from 2007 and 2011 to apply three-level, multi-level modeling with children (level 1) nested within mothers (level 2), who were nested within clusters (level 3).³⁴ The advantage of this approach is it augments the analysis by incorporating selected cluster-level structural determinants, such as the effects of living in an area characterized by factors such as low wealth quintiles or poor access to markets. This approach gets at "community-level" factors, albeit aggregated and measured at the cluster level.

While guidance regarding measurement of community-level health inequities lies beyond the scope of this document, SBC practitioners could aggregate socioeconomic position variables at the cluster level using DHS or other survey data as demonstrated. Note that these measures would represent a survey cluster and not an entire community. Advanced statistical analyses can include such information to determine whether living in a cluster with concentrated disadvantage or advantage contributed significantly to the results.

Routine Monitoring

The primary purpose of monitoring FP/ SRH programs throughout the course of implementation is to measure progress toward objectives and provide evidence to adapt program strategies toward enhanced equity over time. Regular SBC programmatic data collection and analysis allows programs to identify barriers and facilitators that influence whether activities are implemented as intended, whether activities are reaching the intended audiences, and whether program outputs are sufficient to address FP/SRH intermediate outcomes. In relation to SDH in SBC programs, regular monitoring helps implementers diagnose gaps in coverage that may negatively impact—or leave out completely—the poorest and most socially disadvantaged members of society. Using these insights, it is possible to adaptively manage implementation to realign activities toward equity.

After interpreting the results from formative research or secondary analyses of data (such as from DHS) and devising an implementation strategy with relevant activities, the next step for SBC practitioners is to initiate a monitoring plan. This should occur prior to implementation and align with the program's theory of change. Practitioners will want to develop monitoring tools and activities that indicate whether people who are historically underrepresented in data collection—those among the lowest wealth quintiles, women and girls, adolescents, or marginalized ethnicities, for example—are represented in programmatic data.

An essential consideration for any data collection activity, including routine monitoring, is whether the tools used are appropriate for a given context. As one example, mobile phone data collection is increasingly popular for its cost and speed, but it will yield a biased sample since it inevitably overlooks individuals who do not have access to phones. Or, FP client exit interviews might offer valuable insights on perceptions of counselor performance, but, by default, they exclude people who did not visit the service facility. Planning monitoring activities and tools in advance of program implementation ensures the inclusion of historically underrepresented people.

WHO's Inequality Monitoring in Sexual, Reproductive, Maternal, Newborn, Child and Adolescent Health provides further step-by-step guidance.

Impact Evaluations

If formative research serves the design and implementation of SBC programs that address FP/SRH equity, and routine monitoring helps teams course-correct implementation to reach the most socially disadvantaged members of a community, then an impact evaluation is a final opportunity to assess outcomes according to socioeconomic position after implementation of an SBC program or policy. Referring back to the guiding principles, impact evaluations assess whether activities reached the most socially disadvantaged and whether the positive benefits of the program improved their health and behavioral outcomes at least as well as among people in higher wealth quintiles.

Impact evaluations are typically quantitative in nature, but qualitative methods can supplement them to give more context. Throughout implementation, SBC programs will benefit from evaluating equity through the overall impact of a program (e.g., the distribution of FP/SRH service access by wealth in relation to exposure to a program activity), but to also assess change over time; that is, who experienced the greatest change from the beginning of a program or policy to the final evaluation? How was the rate of change distributed across wealth quintiles?

Conducting two cross-sectional household surveys—each of which measure exposure to or participation in program activities, as well as various psychosocial, behavioral, and health systems measures of interest at the beginning and end of program implementation—is very common. The surveys need not track the same individuals longitudinally (i.e., correlatively), although this approach may be appropriate in some cases. However, both cases will necessitate collecting measures of socioeconomic

position, so researchers either can assign subjects to asset-based wealth quintiles or otherwise determine their household income so they can stratify the results through an equity lens. Furthermore, researchers should design survey tools with intersectionality in mind to assess the nuances in access to and use of FP/SRH services and products. This includes collecting enough sociodemographic information to stratify results based on the various measures of socioeconomic position (refer to the previous section: Socioeconomic Position).

A "difference in difference" analytic approach allows one to estimate the effect of an intervention or policy by comparing the changes in outcomes over time between populations. Such populations might include treatment and control groups or, as in the cases explored in this guidance for SBC programming, those in the lowest wealth quintiles and the highest wealth quintiles. The World Bank's Impact Evaluation in Practice, Second Edition provides more information on difference in difference analyses.



Key Research, Monitoring, and Evaluation Considerations and Expectations

In practice, SBC actors can follow simple considerations that help program implementers improve more equitable coverage and impact of program activities, government partners inform national health policies in support of more equitable FP/ SRH outcomes, and donors reorient the SBC projects they fund toward equity.

Governments

 Cite evidence from national data that describes either the distribution of a health behavior such as use of FP/SRH services or the adoption or discontinuation of a contraceptive method by wealth, sex, ethnicity, or residence. Governments and Ministries of Health should reflect on the extent to which data from underrepresented voices—including women, youth, and other marginalized groups in the lowest wealth quintiles—are represented in current data collection activities, so they might better understand how (or if) reproductive health policies and services are affecting community members and where discrepancies exist. Such considerations will also help these agencies address these discrepancies based on evidence and a review of existing policies.

- Share and discuss data so that government program implementers inform SBC strategies through an intersectional lens. This may necessitate revising or developing new tools that intentionally incorporate measures of socioeconomic position for the collection and reporting and dissemination of data disaggregated by such factors as wealth, sex, age, ethnicity, and residence with respect to principles of intersectionality.
- Include diverse voices in the early stages of information gathering to guide new policies or programs.
 Without the meaningful participation of less powerful or privileged groups, new initiatives may fail to further health equity.
- Allow opportunities for communityled ideas and initiatives that may be outside the government's or funders' usual preferred strategy. One cannot address inequities among under-resourced or underserved populations if they are not included in the conversation.
- Consider that effecting lasting changes in health outcomes resulting from equity-minded SBC activities can be a long game. Governments should form or consult local technical working groups whose mission is to ensure sustainability of equitable practices.

Funders

- Define success of SBC interventions by the degree to which results demonstrate equity in coverage and impact on FP/SRH outcomes.
 Neither government partners and funders nor program implementers ought to consider an activity a success unless positive gains are favorably documented among the most disadvantaged segments of a given population. To this end, set the expectation early on that program implementers should report monitoring and evaluation data by wealth and gender at a minimum.
- Ensure funders require applicants responding to a request for proposal to elaborate further on their plans to address the needs of the most disadvantaged from among the broader population and with more concrete actions. The proposals should include plans to disaggregate by socioeconomic position to highlight baseline health inequities, as well as plans to assess change in inequities over time. Successful candidates therefore should demonstrate to governments and funders their understanding of equity gaps in each context and in their strategy to remediate these gaps.
- Dedicate sufficient funds specifically to track RME activities. Changes in equity gaps by the selected socioeconomic position indicators should be monitored and included in evaluations. Funders should be sure all stakeholders are intentionally

thinking through how RME activities relate to health equity and that they reserve sufficient funds for this purpose. Often, research and monitoring efforts are first to be scaled back when projects are confronted with budget limitations. This creates a barrier to understanding how program activities and policies are or are not reaching and impacting people who experience inequality and/or discrimination.

- When operating in the same geographical region, identify opportunities to pool resources for more robust data collection, allowing groups to collect impact data sufficient to generate insights on the equity of interventions that, independently, may be cost prohibitive.
- Advocate to governments the value of amending policies to make the provision of services more widely available and specific to subgroup needs. Sometimes socioeconomic position, power dynamics, or identities of vulnerable populations who could benefit from more equitable SBC policy and programming are at odds with resource allocation, national laws, or protections.
- Explore and plan for potential, unintended negative consequences that might arise due to allocating funds designed to mitigate underlying inequities.

Program Staff

- Recognize that an individual's social position is not defined by one single factor, such as wealth quintile/ income, but rather, one's social position may comprise multiple marginalized or disadvantaged positions simultaneously that intersect and compound inequities experienced in relation to their health care experiences and outcomes.^{22,24}
- Determine areas of concentrated poverty within which the program could address SDH through improved coverage of SBC programs. This can occur either through formative research—collecting and analyzing household assets and characteristics as wealth quintiles—or via information provided by the Ministry of Health, National Office of Statistics in the form of poverty maps. Programs could also use secondary analyses using representative data (e.g., DHS, Multiple Indicator Cluster Surveys).
- Using wealth quintiles, understand how the health outcome of interest is distributed. This serves as a baseline from which to measure coverage and potential impact of SBC programs on FP/SRH-related outcomes.
- After stratifying by wealth, further disaggregate the distribution of the FP/SRH-related outcome(s) by other relevant characteristics, such as urban or rural residence, gender or sex, race or ethnicity, or age, as relevant.

- Anticipate, using RME tools and activities, how to track coverage of activities and changes in outcomes with respect to socioeconomic position and the other relevant characteristics (e.g., residence, gender, ethnicity, age as relevant). This should happen prior to data collection so practitioners can determine, once implemented, whether activities are reaching and affecting those in most need.
- Conduct a mapping exercise to identify other current programs that may overlap in the program's geographical region so actors may pool resources for larger-scale impact evaluations. Often resources for dedicating to robust research methods are scarce, and pooling funding may allow for improved data collection efforts.
- Explore what, if any, unintended negative consequences might arise as a result of addressing underlying inequities. This is a complex matter that program planners should discuss and plan for.

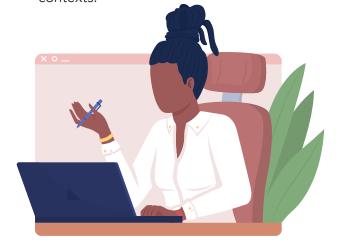
Research Staff

- Work together with program staff to create a plan that allows stakeholders to observe changes over time, either from baseline to endline or more frequently throughout a project.
 Of particular interest is the rate of change, i.e., the degree to which one group (or health outcome) is impacted by program activities between different points in time.
- Use the most readily available proxies

- for social class: measures of wealth or income. Research studies in lowand middle-income areas often include asset indices, so if research is limited to a single indicator for socioeconomic position, pulling data from such indices is typically the best choice. Such data is typically simple to measure or available via DHS, and it reflects acquired, long term wealth better than income because an individual or household may not have regular work, and their income can fluctuate from month to month, thereby providing an inaccurate picture of their normal access to wealth. Consult country-specific resources from the DHS Program on how to construct wealth quintiles using a principal components analysis.
- If resources to conduct a survey or create a wealth index are limited, measure income by asking participants about household or individual income either in the previous month or some timeframe that corresponds to the program's main outcome of interest.
- Measure relative vulnerability through a series of survey questions to assess risk to natural, environmental, socioeconomic, or epidemic factors.
 For example, questions could include whether in the past year an individual or family had lacked enough food to eat, been unable to send their children to school, couldn't afford to buy medicines, or faced a natural disaster such as flood or famine.
 Several recent studies (Derakhshan

- et al, 2022; Gaynor & Wilson, 2020; Mtintsilana et al, 2022; and Ware et al., 2021), provide further information on social vulnerability.^{35–38}
- Consider using an "other" category, at a minimum, in addition to "male" and "female" when asking study subjects their gender—bearing in mind risks according to local context. Assessments and research have well documented gender disparities in health and FP/SRH outcomes, but they most frequently use a simple male-female dichotomy. However, this does not allow one to measure non-binary gender identities, which may impact understanding access to and use of FP/SRH services in many contexts. This said, identifying as a gender outside of the malefemale binary in many countries or communities may put individuals at legal or physical risk. In such settings, do not include non-binary measures since research teams cannot guarantee they can protect anonymity and confidentiality.
- Build data collection of adequate measures into program objectives so programs can track activity equity throughout the life of a project.
 RME data should indicate with precision whether activities are reaching intended audiences. Once program activities are concluding and evaluation processes being, capturing the distribution of participation in activities or changes by socioeconomic position in health outcomes over time may no longer be possible.

- Think critically about data sharing agreements in relation to the types of sensitive data that may be collected and a program's eventual obligations to share that data beyond its immediate team. For example, will the program be legally bound to share sensitive data relating to gender identity or sexual orientation with government partners who may find it in conflict with national law or policy? Be mindful of what data are necessary, how to acquire it, and with whom it will be shared.
- Consider using implementation science methods to understand how implementation strategies achieve outcomes, or why they were unable to achieve the outcomes. The practice of public health is often preoccupied with demonstrating outcomes but not documenting the learning process of how the implementation of those programs contributed to successes or failures. Other insights to be gained include methods for translating research into programs at scale and in new contexts, when accompanied by formative research to adapt to new contexts.





Conclusion

The SBC field can contribute in multifaceted ways to enhance health equity, a central concern of this era, by embracing an explicit focus on the SDH. Expanding health equity, however, will require that SBC actors understand the SDH and their healthrelated situations. They need to express commitment to addressing or taking SDH into account, as reflected in funding, planning, and implementation. Also, SBC practitioners need tools to measure health inequities, apply those tools to evaluate SBC interventions, and hold themselves responsible for effectively reaching underserved groups, such as those living in poverty or disadvantaged by other structural or economic factors. This guidance has sought to highlight key considerations and put forward recommendations to guide the measurement and evaluation of SBC programs through a health equity lens.

Structural competency, combined with a health equity lens informed by appropriate measurement of intersectional socioeconomic position factors, constitutes a solid foundation upon which to build effective programs that meet the needs of less privileged members of society. Equipped with an expanded knowledge base and a commitment to rigorous and consistent measurement and evaluation, SBC actors will recognize where and how they can contribute to the mitigation of the negative effects of inequitably distributed SDH, appreciating that such action will often implicate sectors beyond the health sector. Redressing health inequities can become the cornerstone of SBC funding, planning, monitoring, and evaluation. This guidance will assist governments, funders, practitioners, and researchers to address social determinants and, thereby, advance health equity, in part by improving FP/SRH and other health outcomes.

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Additional Resources

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