

OVERVIEW | Europe

Data, social determinants, and better decision-making for health: The report of the 3-D Commission

In April 2020, The Rockefeller Foundation and Boston University School of Public Health launched the Commission on Health Determinants, Data, and Decision-Making (3-D Commission) with the aim of creating a common language among health determinants, data science, and decision-making—both health and non-health related—toward the end of improving the health of populations. The report—an output of more than a year of discussion and research among a multisectoral group of distinguished experts representing academe, the private sector, civil society, and government—explores the key social and economic drivers that influence health outcomes and illustrates how data on social determinants of health (SDoH) can be integrated into decision-making processes. The report argues for a holistic definition of SDoH to drive cross-sectoral collaboration, address health inequities, and promote accountability and offers a set of principles and recommendations designed to support the development of a SDoH-based, data-driven approach to decision-making and foster demand for public and private investment in SDoH.

The recent proliferation of big data presents tremendous potential and opportunity both to understand SDoH better and to guide decision-making to improve the health of individuals and populations. However, a lack of leadership, priority setting, and investment has impeded progress in effective translation of such progress into data-driven action on SDoH. There are multiple challenges to achieving such goals—including data availability, data hierarchy, nonuniform definitions and measurements of SDoH, public mistrust in the use of big data, and lack of engagement of marginalized populations—that are experienced across high-income, middle-income, and low-income countries.

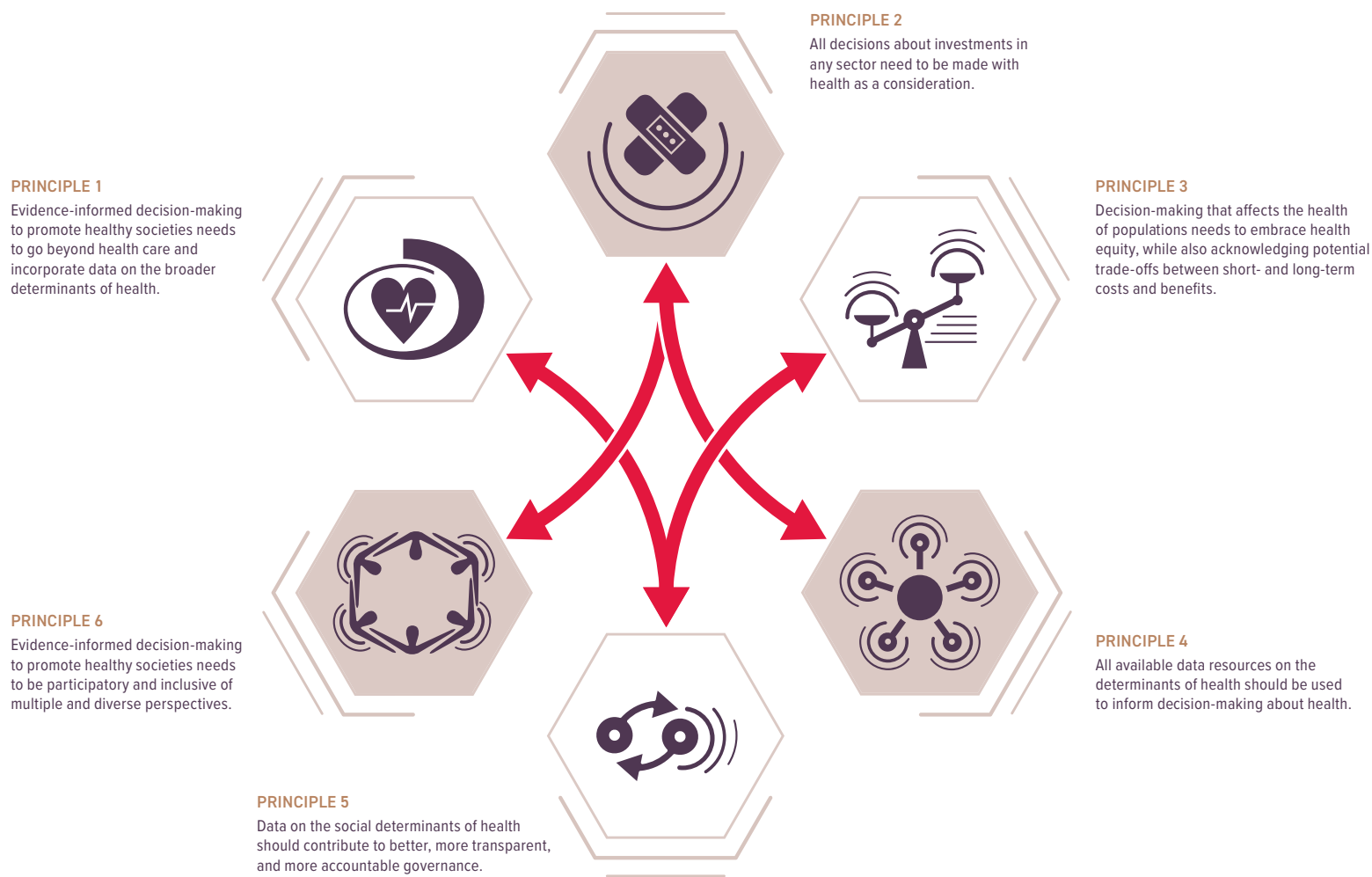
Despite increasing awareness of the need to incorporate SDoH into decision-making by academe and civil society, the uptake of evidence-informed policies and programs that tackle SDoH or build on the growing availability of data to improve health outcomes has been slow. Catalyzing action for health across different sectors requires a common language and an understanding that improved health should translate to returns on financial investment and gains in productivity as well as overall population well-being. Political will among decision-makers is also a critical challenge to enacting SDoH-focused policy. As the impact of policies addressing SDoH will likely be difficult to discern in the near term, promoting population health is a choice that the decision-maker must make consciously, sometimes irrespective of short-term political exigencies.

There are three interconnected, pragmatic areas needed for the vision of the 3-D Commission to translate into actionable policies and programs: political will, technical capacity, and community engagement. First, creating political will requires developing a common language with decision-makers in different sectors, highlighting the potential returns on investment for other sectors, and nuancing and broadening metrics of societal advancement beyond economic indicators. Second, technical capacity is needed to translate a new appreciation for data and SDoH into actionable directives that can be used to improve policy decisions and population health outcomes. Third, engaging communities in decision-making processes can then lead to better decisions being made. Inclusion in the decision-making process means that decision-makers listen to a wide range of stakeholders while formulating decisions: this diversity of thought and perspective helps to compensate for the lack of perfect data. The three areas also require a basic level of trust from the population, which, in turn, can lead to greater levels of trust that will inform, support, and reinforce better decision-making for health.

To improve the health of populations and address health disparities caused by social structural inequities—and exacerbated by COVID-19—a whole-of-society approach is needed. This will require a concerted effort to reframe key issues and adopt common understandings of cross-sector challenges that

affect health. All relevant actors must understand the role that SDoH plays in shaping health outcomes; therefore, critical questions on data collection and use will need to be addressed. This report—and its principles and associated recommendations—offers a roadmap for making these goals a reality.

3-D Commission principles



3-D Commission recommendations

- ◉ Relevant international, regional, national, and local entities, including funders, should **systematically collect and make available, in real time, quality data characterizing the full range of determinants of health—including for example, education, housing, economics—to decision-makers and communities locally and nationally.**
- ◉ National governments should **develop transparent systems that collect data about the social determinants of health, and explicitly use these data in decision-making processes.**
- ◉ Relevant international, regional, national, and local entities, including funders, should **embed follow-through monitoring processes to ensure accountability for data-informed decision-making around health.**
- ◉ Relevant international, regional, national, and local entities, including funders, should **center community engagement in acquisition and interpretation of data and make such data widely available to relevant communities.**

Case study: The complex drivers of the food insecurity “gender gap” in Europe

Food insecurity is the limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire foods in socially acceptable ways.¹ The study of gender-related differences in food insecurity is particularly important as more women experience food insecurity as compared to men. In the developed countries of the European Union, women are 4.7 percentage points more likely than men to experience some form of food insecurity.² Gender differences in household income, educational attainment, and social networks explain a majority of the food insecurity gender gap.³ As such, decisions about investments to address food insecurity—and address poor nutrition and its associated negative health outcomes—must take into account these key drivers, which originate from a number of areas not usually considered to be within the purview of a health intervention aimed at improving nutrition. But a more holistic view is necessary to ensure that decision makers adopt policy solutions that address the interrelations of the social determinants of health and nutrition.

If limited employment and educational opportunities result in women being more likely to experience food insecurity, then policies aimed at employment and education for women and girls may have long-run consequences for food insecurity.⁴ Increasing education and higher earnings can have enormous social benefits including improved food security. Higher earnings among more educated individuals means more resources to buy food, better access to nutritious foods and more options to cope with price shocks and food shortages.⁵

When addressing food insecurity, decision-makers must consider all of these social determinants of food insecurity and, in turn, nutrition and health outcomes. The 3-D Commission recommends that all decisions about investments in any sector need to be made with health as a consideration, given the interconnected nature of these issues. Increasing responsible investments in agriculture and food systems to foster inclusive and equitable economic transformations can assure jobs and growth, particularly for younger generations.⁶ Additionally, investments in early education, urban development and housing, or transportation, confer critical ancillary health and non-health benefits that serve to help decrease food insecurity over time. As such, investing in and implementing policies throughout the European Union that address gender inequality in employment opportunities and educational attainment may have important implications for trends in food insecurity and nutrition—and, consequently, population health outcomes—across the region.⁷

- 1 Grimaccia, Elena, and Naccarato, Alessia. Food Insecurity in Europe: A Gender Perspective. Social indicators research, 1-19. 21 May. 2020, doi:10.1007/s11205-020-02387-8. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7250274/>
- 2 Nizinga H. Broussard. What explains gender differences in food insecurity? ScienceDirect. Vol 83, 2019, 180-194. February. 2019, doi:10.1016. <https://www.sciencedirect.com/science/article/abs/pii/S0306919218300824>
- 3 Ibid.
- 4 Ibid.
- 5 Cuesta, Jose. Education and Food Security: One Success, Two Warnings and Three Paradoxes. Qatar Foundation; 2015. <https://www.wise-qatar.org/education-food-security-success-warnings-paradox-es-jose-cuesta/#:~:text=Higher%20earnings%20among%20more%20educated.in%20schools%20and%20labor%20markets>
- 6 EU Achievements in Food and Nutrition Security and Sustainability Agriculture. European Commission; 2018. https://ec.europa.eu/international-partnerships/system/files/p3293-euachievements-brochure-web_en.pdf
- 7 Nizinga H. Broussard. What explains gender differences in food insecurity? ScienceDirect. Vol 83, 2019, 180-194. February. 2019, doi:10.1016. <https://www.sciencedirect.com/science/article/abs/pii/S0306919218300824>