

## **PAA/APC Response to RFI from SDOH Congressional Caucus**

### **Are there other federal policies that present challenges to addressing SDOH?**

The Population Association of America/Association of Population Centers are two affiliated organizations that together represent over 3,000 behavioral and social scientists, including demographers, sociologists, and economists, who conduct research on the causes and consequences of population change. Population scientists understand that social factors such as race, ethnicity, gender, socioeconomic status, neighborhoods, educational attainment, employment, and family dynamics influence individual health and well-being outcomes. Moreover, population scientists have made major contributions to understanding how social determinants of health (SDOH) have created very large health disparities in our country, including those by race, ethnicity, gender, sexual orientation, socioeconomic status, and geography of residence. Studying how SDOH behave independently and in concert with one another is a major feature of research conducted by population scientists. Further, population scientists rely on federally funded longitudinal and cross-sectional surveys, such as the National Longitudinal Survey of Youth, the Health and Retirement Study, the National Longitudinal Study of Adolescent to Adult Health, and the National Health Interview Survey, to inform their research and research training.

Federal underinvestment in research on SDOH and the most effective ways to address them is a serious barrier. Although rigorous interdisciplinary science has already provided knowledge about which social determinants are most closely associated with health, how specific determinants combine with others needs far more study, along with studies that examine why and how some determinants are more important than others. Moreover, federal investments in research are needed to better understand which policy changes may be most effective in ameliorating SDOH. Moreover, it will be important that future research efforts be geared toward better understanding how SDOH specifically influence bodily systems to affect health outcomes; work in that area, while progressing, is still needed to best understand how SDOH “get under the skin.”

NIH funding for this area of research should be increased with significant investment in social science research, not just behavioral and medical research. Social institutions, organizations, and relations are fundamental components of the SDOH, and the expertise of social scientists is necessary. Such an investment is well within the NIH mission to “seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.” Fundamentally, social scientists are in the best position to conduct research about SDOH affect health outcomes. Population scientists are crucial contributors towards advancing science in this realm through their expertise in population-level data collection, measurement of population characteristics, and modeling of population dynamics.

In addition, more funding is needed to support surveys, such as the Panel Study of Income Dynamics, supported by the National Science Foundation, as well as surveys conducted by federal statistical agencies. For example, the Census Bureau’s Household Pulse Survey has

emerged as an innovative, important resource that has provided insight into the impacts of the COVID-19 pandemic across populations. The National Health Interview Survey conducted by the National Center for Health Statistics is another example of an existing, federally conducted study that could be expanded to more fully understand SDOH. Funding could also be enhanced to improve the efforts by the National Center for Health Statistics to upgrade and improve the standardized collection of vital statistics across all relevant federal and state agencies; this would be a crucial component for increasing our understanding of SDOH as it relates to all vital events (such as births and deaths). Even modest increases in funding for federal statistical agencies could enable them to enhance current data collection efforts and provide improved insights into SDOH.

**Is there a unique role technology can play to alleviate specific challenges (e.g. referrals to community resources, telehealth consultations with community resource partners, etc.)? What are the barriers to using technology in this way?**

More research is needed to not only develop the tools and technology to measure SDOH, but also to translate its use by vulnerable populations. The NIH SBIR and STTR research mechanisms and the proposed ARPA-H agency could be appropriate avenues for spurring more accurate, accessible technology to measure, gather, and report data related to SDOH.

**Where do you see opportunities for better coordination and alignment between community organizations, public health entities, and health organizations? What role can Congress play in facilitating such coordination so that effective social determinant interventions can be developed?**

The need for better coordination and alignment between scientists and universities with community, public health, and health organizations is discussed in the next response.

**Are there any non-traditional partners that are critical to addressing SDOH that should be better aligned with the health sector to address SDOH across the continuum from birth through adulthood?**

Interdisciplinary scientists and universities should be on the ground and working with multiple sectors in the development, implementation, and evaluation of policies, programs, and practices. Interdisciplinary population scientists are particularly equipped for this task given their broad understanding of the relevant science, their experience in working across disciplines and often sectors, and their understanding of health from a life course perspective. Federal grants sometimes provide designated funds to encourage this time-intensive collaboration or encourage scientists to pursue opportunities to work with non-traditional partners. PAA and APC encourage the Caucus to explore federally supported incentives that could promote sustained partnerships between scientists, practitioners, policymakers, and community leaders at the local, state, and national levels.

**What opportunities exist to better collect, understand, leverage, and report SDOH data to link individuals to services to address their health and social needs and to empower communities to improve outcomes?**

One of the most important opportunities, and challenges, in SDOH research is learning how to capture and use “naturally occurring data” – data generated as individuals go about their lives, buying food, using their cell phones, interacting with the legal system, and accessing medical services. Scientists have found novel ways to access these data and combine them with conventional population-level data (i.e., from the Census or other federal surveys) to answer questions about SDOH. Such an integrative approach provides data to inform how health and well-being outcomes can be improved through SDOH interventions. Administrative records (including health records) may provide outstanding measures of key variables and outcomes – e.g., use of prescriptions, use of housing vouchers, income and food security programs, and diagnoses. Data from electronic payments at grocery stores can provide information about dietary practices. Data from cell phones can show movement patterns, including how far one travels for jobs, grocery shopping, and schools. Twitter feeds have been analyzed to measure shifts in public opinion. More research is needed to ensure these data can be collected and used effectively while simultaneously protecting individuals’ privacy. Overall, social media and other private sector efforts that collect information about individual behavior and preferences, while used for commercial purpose, might also be re-purposed and made more readily available for scientists to investigate the SDOH in effective and comprehensive ways. This will require some policy and research infrastructure that not only protects individuals’ privacy, but also the interests of stakeholders.

**What are the key challenges related to the exchange of SDOH data between health care and public health organizations and social service organizations? How do these challenges vary across social needs (i.e., housing, food, etc.)? What tools, resources, or policies might assist in addressing such challenges?**

Population health scientists have extensive expertise in issues of data sharing. Scientists have developed a wide range of methods for sharing data while protecting individual privacy, including data redaction, statistical procedures, binding contractual agreements, and secure infrastructure for accessing data. These methods are in use at the Census Bureau, other federal programs, universities, and private data collection firms all over the country.

Although individuals using social services may not have the same legal privacy protections as those accessing health care, the same principles should apply. Individual consent should be required before releasing *identifiable* information to another organization.

Once information has been appropriately collected, policymakers need to consider what tools or platforms will be needed to make these data broadly accessible and useful. Again, population scientists have spearheaded the development of various methods and can help inform and craft

strategies for encouraging the exchange of SDOH data among different organizations and individual users.

**Which innovative state, local, and/or private sector programs or practices addressing SDOH should Congress look into further that could potentially be leveraged more widely across other settings? Are there particular models or pilots that seek to address SDOH that could be successful in other areas, particularly rural, tribal or underserved communities?**

We call for investment in an extensive and innovative program of research to better answer this question. We are not suggesting that SDOH intervention wait on the outcome of research; rather that research be integrated into ongoing strategies and efforts. We envision a research program that combines randomized trials of interventions with a much broader program of robust and well-designed observational research that studies the ongoing efforts of communities to address social determinants. Such a research program would entail:

- A focus not only on evaluating program outcomes but improving understanding of why and how those outcomes were achieved. This implies that traditional evaluation research expands to address questions and methods that get at mechanisms (that is, basic research).
- Community and cross-sectoral engagement in the joint planning of programs and the research that accompanies them. Done effectively, this means actively seeking out and prioritizing diverse community perspectives throughout all stages of research as well as throughout the development of policy and practice.
- Engagement of interdisciplinary teams with scientific expertise in the diverse elements of the social, economic and health systems targeted for intervention and an understanding of the communities under study.
- Novel approaches to identifying causal effects. Application of experimental methods to SDOH interventions is problematic in many cases because they occur in a complex and changing environment, not in a lab under well-controlled conditions. In many cases these methods are infeasible, ethically questionable, and even inappropriate. New advances in methods for causal research using observational data create wide opportunities for building knowledge about what works, and under what circumstances, to improve health.
- Research that compares policy differences across states and local areas. Some states and local areas in the country achieve relatively favorable population health, with smaller social disparities in health across groups. At the same time, some states and local areas exhibit population health profiles that are on par with those in developing countries. What are the policy contexts of these different places? How might social determinants of health be ameliorated in places where, at present, they are very influential?
- Finally, a program of “meta-research” that synthesizes the knowledge emerging from research studies in specific communities to generate a state-of-the-art understanding of the elements of successful SDOH programs and policies across time, place, and populations.

At present, isolated elements of this research program may receive funding from NIH, CDC, private foundations, or other sources. A central effort, similar to the [PCORI](#) model, may be needed to ensure appropriate funding and coordination.

**Given the evidence base about the importance of the early years in influencing lifelong health trajectories, what are the most promising opportunities for addressing SDOH and promoting equity for children and families? What could Congress do to accelerate progress in addressing SDOH for the pediatric population?**

Clearly, a robust program of research is needed on how SDOH operate intergenerationally, and across the life course, to influence the health of individuals as they age. The United States does not currently have a nationally representative data collection effort focused on birth cohorts of children as they move through the life course. This is a major omission in our nation's data infrastructure. Such data would best be able to inform policymakers about the policy needs for reducing the SDOH among children and creating health equity.