



September 21, 2021

The Honorable Rep. Cheri Bustos
1233 Longworth House Office Building
Washington, DC 20515

The Honorable Rep. G.K. Butterfield
2080 Rayburn House Office Building
Washington, DC 20515

The Honorable Rep. Tom Cole
2207 Rayburn House Office Building
Washington, DC 20515

The Honorable Rep. Markwayne Mullin
2421 Rayburn House Office Building
Washington, DC 20515

Dear Congressional SDOH Caucus Co-chairs:

The American Medical Informatics Association (AMIA) appreciates the opportunity to provide input on the Congressional Social Determinants of Health (SDOH) Caucus' Request for Information.

AMIA is the professional home for more than 5,500 informatics professionals, representing frontline clinicians, researchers and public health experts who bring meaning to data, manage information and generate new knowledge across the health and healthcare enterprise. As the voice of the nation's biomedical and health informatics professionals, AMIA plays a leading role in advancing health and wellness by moving basic research findings from bench to bedside, and evaluating interventions, innovations and public policy across settings and patient populations.

We are thrilled at the launch of this new bipartisan caucus. The COVID-19 pandemic has indeed highlighted health disparities and the complex relationship between SDOH, the risk for contracting disease, and their impact on health outcomes. SDOH data collection for the individual person, their community setting, and the sub-populations they are a part of brings both challenges, but also opportunities to support knowledge for context of care for healthcare providers and for those leading public and community health interventions.

As informatics professionals, we stress that data issues – including but not limited to data standards, data systems, data policies, data access, data privacy, data ethics, and data analysis – must be top of mind when discussing bipartisan legislative efforts to address SDOH challenges. The nation has the technologies and growing expertise to leverage health care IT to address SDOH. AMIA and its diverse membership stand ready assist and offer its expertise in addressing these challenges.

Below are detailed comments gleaned from our membership in response to the Request for Information questions. We hope our comments are helpful as you undertake this important work.

Should you have questions about these comments or require additional information, please contact Scott Weinberg, Public Policy Specialist at scott@amia.org or (240) 479-2134. We look forward to continued partnership and dialogue.

Sincerely,

A handwritten signature in black ink that reads "Patricia C. Dykes". The signature is written in a cursive style with a large initial "P" and a long, sweeping underline.

Patricia C. Dykes, PhD, RN, FAAN, FACMI
AMIA President and Chair, AMIA Board of Directors
Program Director Research
Center for Patient Safety, Research, and Practice
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Social Determinants of Health Caucus – Request for Information

Experience with SDOH Challenges	
Questions	AMIA Response
<p>What specific SDOH challenges have you seen to have the most impact on health? What areas have changed most during the COVID-19 pandemic?</p>	<p>SDOH data exists across many silos, with many actors addressing the critical role that SDOH contribute to health outcomes of individuals, families, communities, and populations. The definition of terms related to SDOH, social risk, social needs and social needs interventions are complex and also often blurred across sectors.¹ Not only that, but definitions of terms often require great care and sensitivity to ensure that SDOH variables themselves are not perpetuating bias and health disparities. For example, gender is a SDOH, but is often defined as binary male/female, leading to a lack of data for individuals who may identify as non-binary or gender fluid. This breadth and complexity of social needs interventions certainly make it challenging for any group of stakeholders to assess not only the evidence basis, but also the impact on outcomes.</p> <p>One of the foundational challenges AMIA members cite is the lack of longitudinal SDOH data that follows the patient across time, settings, and geographies, which only reinforces an increasingly-out of date episodic care model and exacerbates the risk in the safety net needed for at risk populations. There is also a need for data linkages across the full continuum of care settings, public health, community-based organizations, local, state, and federal health sources.</p> <p>The COVID-19 pandemic has highlighted the need to move to digital health models that combine virtual (in-between-visit model), home based care, and in person care. Underserved and vulnerable populations may not have the means for frequent visits, yet could be</p>

¹ These terms are nicely defined in the set-up of the recent scoping review, Viswanathan M., Kennedy S., Eder M., et al. [Social Needs Interventions to Improve Health Outcomes: Review and Evidence Map](#). Patient-Centered Outcomes Research Institute; August 2021. Prepared by RTI under Contract No. IDIQ-TO#13-RTI-EVIDENCEMAPAMPTESP and Contract No. MSA-MDB-ENG-05-26-2020.

	<p>managed at home through these care models. The success of ACOs and other value-based programs show that flow of data between visits is critical to improving clinical outcomes.</p> <p>AMIA members have also observed the prevalence of food insecurity among their patient population. In the words of one AMIA member, “The inability to obtain Meals on Wheels during COVID has affected our seniors the most. We have also recently seen with the ramping down of COVID support, more of these types of needs that don’t get met due to the CBO [community-based organization] not having any funds. Really heartbreaking actually.”</p> <p>English language proficiency, and its impact on overall health literacy, has been an additional challenge. Before the pandemic, most health organizations made significant efforts to provide interpreter services. With the use of telemedicine during COVID-19, additional barriers were encountered, especially early on. With advancing technology, it is now possible to have interpreter services available during a telemedicine visit.</p> <p>Finally, transportation, or the lack of, is a challenge for people who do not have access to a car to pick up a prescription, attend a doctor’s appointment, get tested for COVID, or get vaccinated at places not convenient to public transportation.</p>
<p>What types of gaps in care, programs, and services serve as a main barrier in addressing SDOH in the communities you serve? What approaches have your organization, community, Tribal organization, or state taken to address such challenges?</p>	<p>Although many gaps are universal, they are not equally prioritized within the communities where they exist. For example, the SDOH factor of transportation availability may be a gap in all communities, but each community will have other competing gaps to address. Locality is key and efforts should be made to collect community-level information to then allow each community to prioritize the gaps and their impact, rather than assuming all gaps are equally relevant. Some challenges are being addressed by new, innovative care models, such</p>

	<p>as advanced care in the home^{2,3} which is needed for in home care, as well as advanced care in long term care facilities</p> <p>Other AMIA members report implementing screening across large portions of their health system’s primary care practices and specialty groups. In one such system, “Since January 2021, we have found about 8-9k individuals with needs per month. Surprisingly, only 5 percent of those with needs actually want help.” Another member representing a safety-net provider, reports nearly half of all patients face issues with food, housing, finances, legal concerns, or transportation barriers. One of the biggest gaps noted is lack of technology funding for community-based organizations (CBOs). Some groups that have long used pencil and paper to track their work and do not generally close the loop electronically and/or complete a referral to the health system’s platform once complete. There is thus a need for support that is low friction on the part of both the patient and the CBO to track services given and received.</p>
<p>Are there other federal policies that present challenges to addressing SDOH?</p>	<p>Differences in payment for telehealth and remote patient monitoring for those covered by federal Medicare and state Medicaid is inconsistent, and at risk when the pandemic emergency coverage expires. These policies require alignment.</p> <p>Health care organizations are also increasingly being asked to measure and intervene on patients’ social risks. There is a benefit to the patient for such interventions and ultimately health care providers and payers will avoid costs. However, many services to address social risks are not reimbursed by Medicare or Medicaid.</p>

² <https://homehealthcarenews.com/2020/10/after-saving-6200-per-patient-dispatchhealth-looks-to-scale-hospital-at-home-model/>

³ https://www.dispatchhealth.com/wp-content/uploads/2020/07/MC-Case-Study_Digital.pdf

We additionally call your attention to the several chapters in the Medicare Claims Processing Manual that preclude individuals with social circumstances from receiving inpatient hospital services. In Chapter 1, Inpatient Hospital Services Covered Under Part A, section 10.1.6.2, “...social conditions are ...inconsistent with the purposes of the law to assign patients to inpatient wards accommodations for the convenience of the institution...”⁴ This section is contradicted in section 20.2 that describes “...medical social services which contribute to meaningful treatment of a patient’s condition such as assessment of the social and emotional factors related to the patient’s illness, need for care, response to treatment, and adjustment to care in the facility...”⁵

Further, in the Medicare Program Integrity Manual, Chapter 6, Medicare Contractor Medical Review Guidelines, section 6.5.2 states that for claims for inpatient hospital admissions that “Medicare contractors shall continue to follow CMS longstanding instructions that Medicare Part A payment is prohibited for care rendered for social purposes...that are not medically necessary...”⁶ Again, the Medicare Claims Processing Manual in Chapter 4, Part B Hospital Tribal Hospital Inpatient Social Admissions, section 240.4 states, “...there may be situations when an American Indian / Alaskan Native beneficiary is admitted to the Tribal facility for social reasons. These social admissions are for patient convenience and not billable to Medicare...”⁷

We urge the Social Determinants of Health Caucus critically examine and reconsider the language in CMS rules for providing care to individuals with social factors precluding their access to care.

⁴ Medicare Claims Processing Manual, Chapter 1, Hospital Services Covered Under Part A, §10.1.6.2

⁵ Medicare Claims Processing Manual, Chapter 1, Hospital Services Covered Under Part A, §20.02

⁶ Medicare Program Integrity Manual, Chapter 6, Medicare Contractor Medical Review Guidelines, §6.5.2, Conducting Patient Status Review of Claims

⁷ Medicare Processing Manual, Chapter 4, Part B Hospital Inpatient Social Admissions, §240.4

<p>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?</p>	<p>Continued spread, scale and adoption of mobile health, telehealth, and digital care coordination technologies (especially across traditional and community-based care and social service settings) is essential.</p> <p>The 21st Century Cures Act, as implemented today, requires sharing of clinician notes and results with patients. However, only patients with internet access are able to take advantage of this access. Indeed, access to broadband internet undergirds the spread, scale and adoption of consumer digital health technologies and can be the technology resource to democratize access to information needed to assess and address SDOH. In fact, in 2017, AMIA identified access to broadband as a social determinant of health in and of itself.⁸ We believe a federal program to standardize broadband access across the US should be the single most important <i>technological</i> priority to address SDOH. We are thus heartened that the Senate-passed Infrastructure Investment and Jobs Act includes increased funding to deploy broadband.⁹</p> <p>One member reports that his institution has embarked on a project to extract SDOH data from notes using natural language processing (NLP). SDOH data is currently very sparse in structured fields. Once these fields have been populated, it may be feasible to tie community resource information (e.g. with discharge notes) to discrete SDOH data.</p>
Improving Alignment	
<p>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</p>	<p>SDOH data for the person and their community, are complex and interconnected. Data standards (such as advancing SDOH in USCDI and securing recommendations of the Gravity Project¹⁰) and linkages across data sources are needed to support alignment and</p>

⁸ <https://amia.org/public-policy/public-comments/amia-responds-fcc-notice-broadband-enabled-health-technology>

⁹ <https://www.congress.gov/bill/117th-congress/house-bill/3684/text>

¹⁰ <https://www.hl7.org/gravity/>

<p>such coordination so that effective social determinant interventions can be developed?</p>	<p>harmonization across health care providers, community-based organizations, public health. Simple and straightforward, data standards for race, ethnicity, preferred language, and housing status are essential.</p> <p>Further, there is significant need for more community health workers to educate individuals and to help to coordinate between the CBOs and the patients. It is not enough to have social care platform and referrals. These patients are often suspicious of calls that they do not know. If the connection to the CBO could be more real time, then the warm hand off from the health system to the patient may work more effectively.</p> <p>As to the role of Congress, we recommend building off CMS' Accountable Health Communities Model to expand and include SDOH.¹¹ Partnerships with existing Accountable Care Community organizations should be leveraged to expand and adapt federal pilot and funded programs that explicitly address SDOH in these programs.¹² Much research has been done to apply, expand, and create other practical frameworks to streamline collaboration.¹³</p>
<p>What potential do you see in pooling funding from different sources to achieve aligned goals in addressing SDOH? How could Congress and federal agencies provide state and communities with more guidance regarding how they can blend or braid funds?</p>	<p>We believe there needs to be a fundamental rethinking of pooling and funding models to promote partnerships. There are many well-resources programs that can achieve good outcomes. However, there are other programs that do not fare as well due to lack of resources. Funding to highly-resourced programs that agree to share expertise and insights with lesser resourced programs should be considered.</p>
<p>How could federal programs such as Medicaid, CHIP, SNAP, WIC, etc. better align to effectively address SDOH in a holistic way? Are there particular programmatic changes you recommend?</p>	<p>Data collection for SDOH factors that expand beyond race/ethnicity to drive data-driven research, program evaluation, and policy making must be improved. Improved alignment starts with having the most</p>

¹¹ <https://innovation.cms.gov/innovation-models/ahcm>

¹² <https://www.naco.org/sites/default/files/documents/Accountable-Care-Communities.pdf>

¹³ Gurewich D, Garg A, Kressin NR. Addressing Social Determinants of Health Within Healthcare Delivery Systems: a Framework to Ground and Inform Health Outcomes. *J Gen Intern Med.* 2020;35(5):1571-1575. doi:10.1007/s11606-020-05720-6

	<p>appropriate data to determine the alignment agenda. These federal programs should be encouraged, and if necessary, incentivized to collaborate with AHRQ¹⁴ and coordinate across the federal government to link, expand, and consolidate SDOH data standards, resources, and data governance. Specifically, policy and financial barriers that prevent these data from being readily linked to health information for care & service delivery and research purposes should be removed.</p>
<p>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? What differences should be considered between non-health partners for adults' social needs vs children's social needs?</p>	<p>School Nurses, and broad scale funding for school nurses, are essential care coordinators for a diverse set of SDOH needs and health issues for school age children¹⁵.</p> <p>Other AMIA members report that screening patients for SDOH factors is very time consuming and intensive. Health plans could be an essential partner in collecting the information and then pushing the results back to the health system through a social care platform.</p>
<p>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?</p>	<p>We recommend first focusing on the community-level – with community input – to identify, prioritize, and ethically collect SDOH that is relevant within communities seeking to improve the impact of SDOH. The federal role for funding and data governance should be explicit. However, management, execution, evaluation, and sustaining of programs should be under local control with federal guidance. However, we should nonetheless be mindful that SDOH needs and information gaps exist at the individual level, as well. Harnessing a community-level information base alongside what is known about the patient provides a far better picture than patient data alone. As examples, living in a food desert impacts quality of diet and a lack of economic investment in a neighborhood impacts individuals' job prospects.</p>

¹⁴ <https://www.ahrq.gov/sdoh/data-analytics/sdoh-data.html>

¹⁵ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6083826/>

	<p>We also recommend that the CMS-1450 form, approved by the National Uniform Billing Committee as the UB-04 claim form include a specific field for capturing ICD-10 diagnoses for SDOH, as approved by the CDC ICD-10 Coordination and Maintenance Committee in the Official Guidelines for Coding and Reporting FY 2015, Miscellaneous Z codes / categories.¹⁶</p>
<p>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?</p>	<p>We note that SDOH needs are very extensive and will vary from patient to patient. Our members observe that addressing access to food, housing, and transportation would benefit the vast majority of their patients.</p>
<p>Best Practices and Opportunities</p>	
<p>What are some programs/emergency flexibilities your organization leveraged to better address SDOH during the pandemic (i.e., emergency funding, emergency waivers, etc.)? Of the changes made, which would you like to see continued post-COVID?</p>	<p>Interventions to expand access to housing are needed. Our members note that once a family is displaced, it takes much more support to get them rehoused than it to address the housing needs before they are homeless.</p>
<p>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?</p>	<p>An AMIA member in North Carolina cites NCCARE360,¹⁷ which “has allowed us to support about 950 individuals with more than 2000 needs since Jan 2021. We are about 10 times more successful with the enterprise license approach that our peers that are paying on a per license access. Next closest group had about 92 individuals in the same time frame.” However, we note that as helpful as this, and similar platforms are, there must be concerted efforts to ensure that they are interoperable before they become too widespread.</p> <p>In Indianapolis, Indiana, Eskenazi Health used referrals to social workers, dietitians, and behavioral health professionals co-locate with primary care providers to reduce hospitalizations and save \$1.4 million annually.¹⁸</p>

¹⁶ [ICD-10-CM Official Guidelines for Coding and Reporting, FY 2015](#), Miscellaneous Z Codes, page 94

¹⁷ <https://nccare360.org/>

¹⁸ <https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2018.0075>

<p>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?</p>	<p>As mentioned above, addressing housing instability presents a promising opportunity. In one example from an AMIA member, “only 11 percent of our landlords have signed off on rent support during COVID. Stable safe housing is a need that we often times can never find [financial] support for.”</p>
Transformative Actions	
<p>Alternative payment models help to measure health care based on its outcomes, rather than its services. What opportunities exist to expand SDOH interventions in outcome-based alternative payment models and bundled payment models?</p>	<p>Alternative payment models are needed that share savings across traditional healthcare providers, payers, community-based organizations (or community trust) and individual persons themselves.^{19,20}</p>
<p>A critical element of transformation, particularly for new models of care, is measurement and evaluation. With SDOH in mind, which are the most critical elements to measure in a model, and what differences should be considered when measuring SDOH outcomes for adults vs children?</p>	<p>We point you to the University of San Francisco California’s SIREN, which is a compilation of several of the most widely used social health screening tools so that they can be easily compared.^{21,22}</p>
<p>How can Congress best address the factors related to SDOH that influence overall health outcomes in rural, tribal and/or underserved areas to improve health outcomes in these communities?</p>	<p>We believe Congress should prioritize the advancement of health IT and apply it specifically to address these issues. Consider an organizing blueprint/roadmap towards creating a technologically-enabled Learning Healthcare System that leverages advances in information technology.²³</p>
<p>What are the main barriers to programs addressing SDOH and promoting in the communities you serve? What should Congress We believe Congress should prioritize the advancement of health IT and apply it specifically to address these issues. Consider an organizing blueprint/roadmap towards creating a technologically-enabled Learning Healthcare System that leverages advances in information</p>	<p>Improved SDOH taxonomy for CBOs, referrals, and tracking/reporting of services. Social care platforms, for example, need seamless integration with the CBOs and patients, while health systems need two-way communication from the CBO to the platform and back into the EHR. In fact, much of data exchange still runs on point to point connections between systems. The current construct of each</p>

¹⁹ <https://aspe.hhs.gov/topics/health-health-care/social-risk-factors-medicares-value-based-purchasing-programs>

²⁰ <https://aspe.hhs.gov/topics/health-health-care/social-risk-factors-medicares-value-based-purchasing-programs/social-risk-factors-medicares-value-based-purchasing-programs-social-determinants-research>

²¹ <https://sirennetwork.ucsf.edu/social-needs-screening-tools-comparison-table-pediatric-settings>

²² <https://sirennetwork.ucsf.edu/tools/evidence-library>

²³ Caixia Mao, Ryu Koide, Alexander Brem, Lewis Akenji, Technology foresight for social good: Social implications of technological innovation by 2050 from a Global Expert Survey, Technological Forecasting and Social Change, Volume 153, 2020, 119914, ISSN 0040-1625, <https://doi.org/10.1016/j.techfore.2020.119914>.

technology.²⁴ consider when developing legislative solutions to address these challenges?

organization and electronic system having to sign up individually with the Carequality trust framework, as another example, slows the process.²⁵ Entities like skilled nursing facilities, home health agencies and others, are not required to adhere to current interoperability standards that are required for a certified EHR. Thus, representing a black box during care transitions.

²⁴ Caixia Mao, Ryu Koide, Alexander Brem, Lewis Akenji, Technology foresight for social good: Social implications of technological innovation by 2050 from a Global Expert Survey, *Technological Forecasting and Social Change*, Volume 153, 2020, 119914, ISSN 0040-1625, <https://doi.org/10.1016/j.techfore.2020.119914>.

²⁵ <https://carequality.org/>