December 20, 2019

U.S. Department of Health and Human Services Ed Simcox, Chief Technology Officer Hubert H. Humphrey Building, Room 509F 200 Independence Avenue SW Washington, DC 20201

Re: PreventionX RFI Comment

Dear Mr. Simcox:

On behalf of the National Alliance to Impact the Social Determinants of Health (NASDOH), we commend the Office of the Chief Technology Officer (CTO) for his efforts to catalyze the shift towards a value-based health care system focused on rewarding and improving patient outcomes. We appreciate the opportunity to provide comments on the scaling and deployment of effective prevention strategies in the social and economic environment. In this letter, we provide a multi-sectoral perspective on the importance of addressing social determinants of health as part of chronic disease prevention strategy, and to support transformation to value-based care. We underscore the importance of addressing the social and environmental context in which people live, supporting public-private partnerships, and strengthening the public health system as a means of creating healthier communities and delaying the progression of chronic conditions in the US.

NASDOH is a group of stakeholders working to systematically and pragmatically build a common understanding of the importance of addressing social needs as part of an overall approach to health improvement. We seek to make a material improvement in the health of individuals and communities and, through multi-sector partnerships within the national system of health, advance holistic, value-based, person-centered health care that can successfully impact the social determinants of health. NASDOH brings together health care, public health and social services expertise, local community experience, community-convening competence, business and financial insight, technology innovation, data and analytics competencies, and policy and advocacy acumen to assess and address current regulatory frameworks, funding environments and opportunities, and practical challenges to implementing and sustaining social determinants of health efforts.

Overall, NASDOH is encouraged by the inclusion of the CDC Three Buckets of Prevention framework and the specific solicitation of information regarding innovative clinical prevention and community-wide prevention strategies (Buckets 2 & 3) in the PreventionX RFI. The CTO's interest in population-oriented interventions that protect the health of individuals and the community, the impact of behavior, and social and economic environment is important. Driving toward health and wellbeing must involve addressing the conditions in which people are born, grow, live, work and age (social determinants of health), at the individual-level and community-level, and understanding how social determinants impact health behaviors.

NASDOH members respond to several of the questions outlined the PreventionX RFI and identify an additional consideration that the CTO may weigh as PreventionX develops.

Barriers and Opportunities to Effective Preventative Health

We provide comments relevant to questions 1, 2, 4 and 6.

1. In your estimation, what have been the most significant barriers to more effective prevention and delayed progression of chronic health conditions in the US?

Health begins long before illness or injury strikes—in our homes, schools, neighborhoods, and places of work. The ability of individuals and families to lead healthy and productive lives is influenced by our genetics, health behaviors, health care, as well as our experiences and the conditions in the communities where we live: the social determinants of health (SDOH). Research suggests that SDOH accounts for between 80-90 percent of the modifiable contributors to health outcomes.¹ While the US spends significantly more on health care, Americans have shorter lifespans and fare worse in many health indicators, including obesity and diabetes, infant mortality, vaccination rates, and life expectancy than our industrialized peers.² A major reason for this inconsistency is that spending on social services is more closely related to positive outcomes across many basic health indicators than is spending on medical care.³ The US continues to concentrate funding and reform efforts on high-cost treatment efforts within the traditional health care delivery system, rather than investing in supporting the social and environmental infrastructure that prevents negative health outcomes.⁴ This is a significant barrier to reducing the prevalence and delaying the progression of chronic health conditions in the US. We can generate far greater value for our investment on health by increasing our investment in social and public health interventions. For example, states with a higher ratio of social to health spending have significantly better health outcomes in many areas, including adult obesity, diabetes, lung cancer, asthma, and heart disease.⁵

Inequity and the **persistence of healthcare access and quality disparities are other significant barriers to effective prevention and delayed progression of chronic health conditions** in the US. Evidence has long indicated that discrepant access and quality of care - including bias in health systems and the underlying evidence that informs decision - impacts health outcomes, and these disproportionately affect some based-on factors like race, income, place of residence, education, gender identity, and sexual orientation.⁶ Making needed investment in social and public health interventions and addressing SDOH can mitigate the uneven distribution of risk for chronic disease, and support the scaling and effectiveness of preventive strategies which can improve health among those most vulnerable.⁷

¹ Hood, C. M., K. P. Gennuso, G. R. Swain, and B. B. Catlin. 2016. County health rankings: Relationships between determinant factors and health outcomes. American Journal of Preventive Medicine 50(2):129-135.

² Squires, D. "U.S. Health Care from a Global Perspective." The Commonwealth Fund, 8 October 2015. Available at

https://www.commonwealthfund.org/publications/issue-briefs/2015/oct/us-health-care-global-perspective.

³ Bradley EH, Elkins BR, Herrin J, Elbel B, "Health and social services expenditures: associations with health outcomes." BMJ Qual Saf 20(826-831), 2011.

⁴ Bradley, E. H., B. R. Elkins, J. Herrin, and B. Elbel. 2011. Health and social services expenditures: Associations with health outcomes. BMJ Quality and Safety in Health Care 20(10):826-831.

⁵ Taylor LA, Tan AX, Coyle CE, Ndumele C, Rogan E, Canavan M, et al., "Leveraging the Social Determinants of Health: What Works?" PLoS ONE 11(8), 2016.

⁶ Nelson, Alan. "Unequal treatment: confronting racial and ethnic disparities in health care." Journal of the National Medical Association 94.8 (2002): 666.

⁷ Adler, Nancy E., et al. "Addressing social determinants of health and health disparities." National Academy of Medicine (2016): 1-16.

Further, the fragmented communication and coordination among consumers and their service providers , such as health care entities, government agencies, public programs, and community-based organizations (CBOs), is a significant barrier to addressing SDOH and the effectiveness of preventive strategies, and both impact the prevalence of chronic conditions. This fragmentation has many consequences including limiting the effectiveness of resource availability and allocation. It can also be a source of frustration and confusion for individuals needing services and support. Improving the efficiency of capturing and transmitting information about an individual's social needs and the provision of services across the ecosystem can lead to more effective and less burdensome approaches to health. Better data availability can also inform public and population health policy actions that impact community health upstream. Recognizing that this data collection and sharing is critical to positively impact health, provide for individuals' and caregivers' needs, and track outcomes, NASDOH believes there is an opportunity to develop an open, interoperable data ecosystem and exchange framework, which facilitates the timely and effective communication and coordination necessary to achieve optimal health and well-being.

2. How can insights from human-centered design, behavioral science, and systems engineering be better incorporated into design, testing, and validation of Bucket 2 and Bucket 3 interventions?

Insights from human-centered design, behavioral science, and systems engineering disciplines have the potential to improve preventive health approaches. However, effective innovative clinical prevention and community-wide prevention (Buckets 2 and 3) interventions exist already. For example, the PreventionX RFI notes those interventions promoted under CDC's 6\18 and HI-5 initiatives, other approaches of note include the <u>CityHealth</u> initiative of de Beaumont Foundation and Kaiser Permanente, and the Trust for America's Health's <u>Promoting</u> <u>Health and Cost Control in States</u>. Although evidence demonstrates these are effective preventive approaches and reduce the prevalence of chronic conditions, they remain under or unimplemented. There is an opportunity to leverage these existing interventions, and impact health, by using existing funds to improve dissemination and incentivize uptake of them.

4. Despite extensive evidence suggesting the health benefits of diet and behavior change in preventing chronic health conditions such as obesity and type 2 diabetes, many populations continue to see steady increases in the prevalence of these conditions. Why are more Americans not adopting diet and behavioral changes?

Research suggests that personal behaviors and SDOH are strong drivers of health outcomes, and that SDOH impact personal behaviors.⁸ For example, experiencing poor SDOH as a child or adult can impact adult risk behaviors, and pre-dispose individuals, and potentially future generations, to disease.^{9,10,11} Therefore, **addressing** SDOH can impact the health behaviors targeted by prevention strategies, like smoking, diet, and exercise; addressing SDOH can mitigate whether children will engage in the poor health behaviors that lead to chronic disease in adulthood, and whether adults practice poor health behaviors. Health-promoting environments influence behaviors consistent with healthy and productive lifestyles and enable us to actively improve our own health and well-being and prevent costly and unnecessary care. When social needs and environmental stressors are appropriately addressed, it can make the difference between an acute health episode and a chronic condition

⁸ Artiga, Samantha, and Elizabeth Hinton. "Beyond health care: the role of social determinants in promoting health and health equity." Kaiser Family Foundation, 2019. Available at <u>https://www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/</u>

⁹Felitti, Vincent J., et al. "Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study." American journal of preventive medicine 56.6 (2019): 774-786.

¹⁰ Zhong J, Agha G, Baccarelli AA. The role of DNA methylation in cardiovascular risk and disease methodological aspects, study design, and data analysis for epidemiological studies. Circ Res. 2016;118:119–131. Crossref, Medline, Google Scholar

¹¹ Gluckman PD, Hanson MA, Low FM. The role of developmental plasticity and epigenetics in human health. Birth Defects Res C Embryo Today. 2011;93:12–18. Crossref, Medline, Google Scholar

exacerbated by non-medical factors, and result in recurring medical needs and chronic productivity loss. Improving America's health requires us to address how health care dollars can be invested in efforts to address social determinants of health.

6. What are the key barriers to commercialization of effective prevention products, services, and other strategies with clear public health benefit?

There is an opportunity for private investment in effective prevention products, services, and other strategies with clear public health benefit. However, the lack of clarity in public policy around allowable costs for interventions beyond direct patient care inhibits commercial development and deployment of innovative products and services because the ability to predict market size and scope is limited, and sometimes impossible. This is true of federal funds and extends beyond them. There is an opportunity to offer greater clarity on the preventive care that is allowable, and how funding can be used (see comments below on public-private partnerships). NASDOH has expressed support for the work of HHS and its agencies and highlighted further action – e.g. allowing <u>SDOH interventions to be counted as incurred claim</u> in the Medicaid Medical Loss Ratio, and allowing eligibility for supplemental benefits in <u>Medicare Advantage</u> if it would mitigate progression of any underlying/ existing disease or condition. We believe that greater clarity on what services are allowed would increase demand in the market and induce commercial development for innovative products and services which have a clear public health benefit.

PreventionX Theory of Change

We provide comments relevant to questions 2 and 5.

2. How can entrepreneurs and/or technology help drive the development and scaling of prevention strategies that address common chronic conditions?

As we previously discussed, the difficulty of establishing the market for investment and innovative products and services limits commercial innovation in this space. This is exacerbated by the difficulty of establishing returns on investment because, particularly community-based prevention strategies, the value is not limited to the payer alone.¹² By way of example, the community-wide benefits of spending on interventions in housing, transportation, or food availability exceed the benefits to any one sector, and the cost to any one investor may exceed the benefits that they may realize. This undermines investment in innovation and implementation because the provider does not reap the value or return on investment. There are promising financing approaches – e.g. social impact bonds, and federal efforts under the Social Impact Partnerships to Pay for Results Act (SIPPRA) – which can overcome these disincentives, and encourage entrepreneurs to pursue new models for Buckets 2 and 3 interventions or scaling interventions that have evidence of effectiveness.

5. What available metrics and indicators would best measure the efficacy of prevention strategies specific to Buckets 2 and 3?

In addition to deploying important individual and community interventions, there is a pressing need to determine the impact of these initiatives. To understand the most effective interventions and establish best practices for addressing SDOH and deploying prevention strategies, it would be helpful to agree to common measurement

¹² Butler S, Cabello M. "An antidote to the "wrong pockets" problem?" Urban Institute Blog. 2018. Available at: <u>https://pfs.urban.org/pay-success/pfs-perspectives/antidote-wrong-pockets-problem.</u>

approaches, and metrics and indicators.¹³ Consistency and harmonization of measurement and availability of resulting data enables comparisons across settings, promotes the development and scaling of best practices, creates a supportive environment for identifying sustainable financing models, and produces compelling evidence to support the business case for this work. Deploying community-wide prevention innovations will require multi-sector alliances, which work toward a common goal and have actionable evidence to support this work.

Without a shared set of principles to prospectively guide measurement and the impact of efforts to address social needs, like those NASDOH developed, the field may face familiar pitfalls to those faced in the assessment of health care quality and safety and community health.¹⁴ Examples of those challenges include an over-abundance of measures or a lack of comparable data. Prospectively aligning the national approach to assessing interventions now will accelerate our understanding of opportunities to improve health and well-being. It will also help us avoid needing to retrospectively align measures, as is recently required by Executive Order 13877 directing the US Department of Health and Human Services to align measures used in federal programs.^{15, 16}

Public-private Partnerships

We jointly respond to the 3 questions proposed.

- 1. Are you aware of examples of effective public-private partnerships at any scale?
- 2. How can/should public-private partnership models be used to address some of the underlying barriers to scalable prevention strategies?
- 3. What sectors or stakeholders should HHS prioritize for engagement as part of this effort?

The success and sustainability of value-based care and payment models **requires national, collaborative partnership from the public and private sectors to be successful. These partnerships must include the public health, social care and other sectors to create, deploy, and scale solutions that address all the drivers of health, and support preventive care approaches to overall wellbeing.** Communities across the nation are taking steps to collaborate and implement community-level interventions to this end. These efforts require multi-sectoral cooperation between and partnership with the public and private sectors at the local, state and federal level. Several successful and effective public-private partnerships funded by foundations and CMS. We note several successful efforts, including those in Utah, New Jersey, Texas, and Michigan:

• Utah Alliance for the Determinants of Health¹⁷: Intermountain Healthcare and community partners implemented a demonstration project to focus on the social determinants of health which impact vulnerable individuals in 2 Utah cities. This collaborative deploys innovative clinical prevention approaches to address individual social need including screening and deploying community health workers to help individuals navigate needed services. The Alliance developed shared goals with community partners, focuses on identifying and addressing gaps in community resources, and sharing data across organizations. Alliance members hope to impact community health concerns and reduce climbing healthcare costs by creating supports to improve SDOH.

¹³ NASDOH – Shared Principles for Measuring Social Determinants of Health Interventions, at http://www.nasdoh.org/wp-

content/uploads/2019/06/NASDOH-Shared-Principles-for-Measurement-White-Paper-June-2019_Final.pdf, accessed November 2019. ¹⁴ NASDOH – Shared Principles for Measuring Social Determinants of Health Interventions, at http://www.nasdoh.org/wp-

content/uploads/2019/06/NASDOH-Shared-Principles-for-Measurement-White-Paper-June-2019_Final.pdf, accessed November 2019. ¹⁵ US Department of Health and Human Services – Quality Summit, at https://www.hhs.gov/about/leadership/eric-d-hargan/quality-summit/index.html, accessed November 2019.

¹⁶ Trump, D. J. "Executive order on improving price and quality transparency in American healthcare to put patients first." White House (2019).

¹⁷ Heath, S. "Intermountain Alliance to Address Social Determinants of Health." Patient Engagement HIT. 05 July 2018. Available at: <u>https://patientengagementhit.com/news/intermountain-alliance-to-address-social-determinants-of-health</u>

- Alliance for a Healthier New Brunswick¹⁸: Convened by Rutgers Robert Wood Johnson Medical School, this Alliance seeks to strengthen health services and develop community health strategies to support a healthier New Brunswick. The Alliance is a collective effort which engages leadership from the community and from health organizations to identify the needs of community residents, the resources available to address those needs, and mobilizing partners to address those needs.
- *Health Collaborative, Bexar County, Texas*¹⁹: The Health Collaborative is an organized network of citizens, community organizations and businesses in Bexar County, Texas. The mission of the Health Collaborative is to improve the health status of the community through collaborative means, including the appropriate use of resources to enhance community health, and developing and deploying community health initiatives. The Collaborative was established in 1997 and its programs address literacy, exercise and activity, nutrition, mental health, immunization and others.
- Michigan Health Improvement Alliance (MiHIA)²⁰: The MiHIA is a non-profit organization comprised of a diverse group of stakeholders collaborating to improve health and health delivery in central Michigan. The MiHIA's mission is to improve the health of people in the region through effective use of information and collaboration, and to establish the region as a community of health excellence through a comprehensive focus on population health, patient experience, cost of care, and provider well-being. MiHIA has been involved in leading complex change since it was founded in 2007.
- Accountable Communities²¹: Accountable Communities for Health (ACHs) are community-based, multisectoral partnerships with a focus on a shared vision and responsibility for the health of the community. ACHs often include representatives from the health care, housing, social services, public health, employment training and economic development sectors and jointly develop and deploy communitybased strategies for integrating the health care and social needs of individuals. There are more than 120 ACHs operating across the country.

These efforts are successful because they promote inclusion of traditional and non-traditional stakeholders and partners, including the business community, and highlight the opportunity costs of inaction. They are successful in scaling community-wide prevention strategies because they are regionally specific and involve relevant stakeholders given the needs and priorities of the communities and rely on multi-sectoral skills and competencies across the public and private sectors.

However, **barriers to build these collaborations exist**, which inhibit innovative clinical and community wideprevention interventions (Buckets 2 & 3). In addition to working together to build common strategies and frameworks, these sectors must also share resources and redirect funding to support implementation of SDOH interventions. The availability of resources and ability to redirect funds has been a specific barrier to SDOH interventions identified by thought leaders and experts.²²

Silos in federal health and social services programs, replicated at the federal, state, and local level, and restrict opportunities for states to innovate in the delivery of federally funded programs, including Medicaid, even if they could have community-wide preventive benefit. For example, the organization of federal and state programs are compartmentalized, making it difficult to collaborate across the departments that impact SDOH and could jointly

¹⁸ Alliance for Healthier New Brunswick – Overview. Available at: <u>https://rwjms.rutgers.edu/community_health/other/healthier-new-brunswick/overview</u>, accessed November 2019.

¹⁹ Health Collaborative – Bexar County, Texas. Available at: <u>http://healthcollaborative.net/about/</u>, accessed November 2019

²⁰ Michigan Health Improvement Alliance (MiHIA). Available at: https://mihia.org/

²¹ Accountable Communities for Health. Available here: accountablehealth.gwu.edu

²² Butler S, Cabello M. "An antidote to the "wrong pockets" problem?" Urban Institute Blog. 2018. Available at: <u>https://pfs.urban.org/pay-success/pfs-perspectives/antidote-wrong-pockets-problem.</u>

support community-wide interventions.²³ Next, public funding for significant upfront and sustained investment can be difficult for Congress to appropriate.²⁴ Finally, there are legislative restrictions or requirements on how and for what purpose public and foundation funds can be used. As an example, the Medicare program is authorized by statute to make financing available to pay for the health care needs of individual Medicare beneficiaries. While research demonstrating the importance of community-level SDOH interventions is emerging, there is still the need to administer the Medicare program as was intended by Congress. There is concern by some that using federal dollars for individual beneficiaries to fund community-wide interventions is too attenuated congressional intention of Medicare. However, **HHS can leverage their current authority and resources across programs to decrease the prevalence of chronic disease by supporting multi-sectoral approaches to overcome the barriers which inhibit community-level preventive interventions. This would include allowing the pooling of federal funds (either braiding or blending) to public-private approaches to spread, scale, and sustain community-level preventive interventions to address SDOH.**

Further, HHS can take steps to strengthen public sector stakeholders which are essential to serving a "backbone" and leadership function for this work, but do not always have the resources needed to be effective partners.²⁵ For example, public health departments are well-positioned to develop and contribute to private-public partnerships and help address the policies and factors which inhibit health, but "lack funding and tools to support these cross-sector efforts and are limited in doing so by disease-specific federal funding."²⁶ There is a need to strengthen the public health system, and to provide resources and funding of services to address the social and economic needs. For example, provide local and state health departments the funding, tools and flexibility they need to participate in and drive community-level interventions, which can slow the progression of chronic disease and reduce high healthcare costs and health care outcome disparities.²⁷

Additional considerations

While slowing the progression of chronic disease requires innovative and collaborative approaches to preventive care, we must avoid medicalizing SDOH. The Office of the CTO notes: "Providers, insurers, and policymakers are focusing on value-based care and outcomes, placing particular emphasis on lowering the incidence of high-cost episodes of care and preventing the progression of highly prevalent chronic conditions where possible." ²⁸ This engagement by the health care system is welcomed and demonstrates a broadening view on what factors drive and improve health. However, this work cannot be cannot and should not be the responsibility of the health care sector alone. Instead, it should be done in partnership with individuals, their communities, and multi-sectoral partners, e.g. public health and social care sectors, which offer complementary strengths. Multi-sectoral, public and private partnerships are crucial to develop, deploy, and scale community-wide interventions that will benefit whole populations.

²³ Butler S. "How private sector tools can enhance governmental cooperation" Real Clear Markets Blog. 2019. Available at: https://www.realclearmarkets.com/articles/2019/07/12/how_private_sector_tools_can_enhance_governmental_cooperation_103816.ht ml.

²⁴ Butler S. "How private sector tools can enhance governmental cooperation" Real Clear Markets Blog. 2019. Available at: https://www.realclearmarkets.com/articles/2019/07/12/how_private_sector_tools_can_enhance_governmental_cooperation_103816.ht ml.

²⁵ Trust for America's Health. Proposal: CDC Capacity-Building Support of Local Partnerships to Address Social Determinants of Health. Available at: <u>https://www.tfah.org/wp-content/uploads/2019/09/SDOHProposalFactSheet.pdf</u>

²⁶ Trust for America's Health. Proposal: CDC Capacity-Building Support of Local Partnerships to Address Social Determinants of Health. Available at: https://www.tfah.org/wp-content/uploads/2019/09/SDOHProposalFactSheet.pdf

²⁷ Trust for America's Health. Proposal: CDC Capacity-Building Support of Local Partnerships to Address Social Determinants of Health. Available at: https://www.tfah.org/wp-content/uploads/2019/09/SDOHProposalFactSheet.pdf

²⁸ Office of the Chief Technology Officer – Request for Information – PreventionX, available at: https://www.hhs.gov/cto/initiatives/request-for-information-preventionx/index.html

We encourage the Office of the Chief Technology Officer to take these factors into consideration to inform how HHS could catalyze the scaling and deployment of effective prevention strategies into today's social and economic environment.

We look forward to the opportunity this effort affords to address the needs of individuals and communities and the potential to incentivize the public health sector to become more involved in collaborative efforts with the health care sector.

On behalf of NASDOH,

Vince Ventimiglia President, Leavitt Partners Collaborative Advocates and Advisor to NASDOH

