![NASDOH — National Alliance to Impact the Social Determinants of Health logo]

June 16, 2025

Dr. Mehmet Oz
Administrator
Centers for Medicare & Medicaid Services
Department of Health and Human Services
7500 Security Boulevard
Baltimore, Maryland 21244

Re: CMS-2025-0050-0031, Request for Information; Health Technology Ecosystem

Dear Administrator Oz,

On behalf of NASDOH, we appreciate the opportunity to provide comments in response to the health technology ecosystem RFI issued by CMS in partnership with the Assistant Secretary for Technology Policy (ASTP)/Office of the National Coordinator for Health Information Technology (ONC) and the Department of Health and Human Services.

Founded in 2018 by Governor Mike Leavitt and Dr. Karen DeSalvo, NASDOH is a multi-sector coalition of stakeholders seeking to make a material improvement in the health of individuals and communities by advancing the adoption of effective policies and programs to address health-related social needs (HRSNs) – such as food insecurity, housing instability, and transportation insecurity – as well as the underlying social and economic conditions in which people live that are often the root causes of poor health outcomes (non-medical drivers). NASDOH brings together stakeholders from different geographic regions with expertise in health care, public health, social services, patient and consumer perspectives, information technology, and business to share learnings, develop policy recommendations, and build consensus on solutions to support health. Our website lists all the NASDOH members.

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 personal choices, as well as our experiences and the choices available to individuals, such as the conditions in the communities where we live. Instead of a singular view of health as an output of health care and medicine, health is understood to be a combination of the impact of social and environmental conditions and personal choices, which can be influenced and improved through a combination of high-value medical care, illness prevention efforts, and social services. The sharing and analysis of data on HRSNs and non-medical drivers is critical to advancing the health and wellbeing of individuals and facilitates a more holistic approach to improving health involving health care entities and community-based organizations (CBOs). Robust HRSN data is a game-changing tool for identifying and targeting drivers of poor health outcomes at the individual and community or population level. For example:

(1) Providers can use HRSN data to implement social prescribing plans, where medical providers use clinical interactions to "prescribe" social services provided by CBOs.
(2) Providers can connect patients to non-medical resources in their community such as CBOs that provide services that promote health, such as food assistance, housing assistance, literacy support, and more.

(3) CBOs providing social services can use HRSN data to receive and make referrals, make decisions on eligibility, and interact with physicians as part of a social prescribing plan.

(4) Payers can use HRSN data to keep health care costs down by identifying and addressing a community's health-related social needs to prevent downstream need for medical care.

(5) Medical researchers can use HRSN data to better understand the non-medical factors that are associated with the development of disease.

However, when HRNS data is not gathered in a consistent format, smaller datasets from different sources cannot be merged into a larger – and more useful – dataset. It is vital that this data is standardized to make it usable in population-level analyses. For health care entities using electronic health records (EHRs), data standards like the United States Core Data for Interoperability (USCDI) can be incorporated into the EHR to ensure compatibility between multiple datasets. For entities that do not use EHRs, such as a food bank or a housing assistance organization, the use of standardized, structured HRSN data aligned with non-proprietary, national data standards can support broader integration opportunities with health care systems and community settings.

In addition to utilizing health technology in collecting and sharing HRSN data, health management apps and digital assistants could be leveraged to connect patients to non-medical resources in their community or even help address non-medical drivers of health. By integrating HRSN data elements, digital health products can support connections to social services that lead to healthier patient outcomes, higher quality of care, and improved patient satisfaction.

Therefore, the health technology ecosystem is a critical component of addressing the root causes of poor health outcomes, or non-medical drivers of health, in order to Make America Healthy Again. Below, NASDOH provides responses to the specific questions in the RFI.

PC-8. *In your experience, what health data is readily available and valuable to patients or their caregivers or both?*

a. *What data is valuable, but hard for patients and caregivers, or app developers and other technical vendors, to access for appropriate and valuable use (for example, claims data, clinical data, encounter notes, operative reports, appointment schedules, prices)?*

b. *What are specific sources, other than claims and clinical data, that would be of highest value, and why?*

Data on non-medical drivers of health can be extremely valuable in understanding how to improve health outcomes. NASDOH believes direct data, reported by individuals using a standardized tool and process, about social risk factors and demographic data is a useful approach for assessing social risks and health-related social needs (HRSNs). Over the past several years, screening for HRSNs within physician offices and hospitals has increased, in part due to federal policies promoting expanded screening. As health care providers are increasingly screening for and collecting data on social risk factors and HRSNs, data should be collected and stored using technical standards that allow for the exporting and use of that data across different technologies and platforms.

Additionally, bridging the digital divide between record systems used by health care organizations and community-based organizations providing non-medical services would allow for access to significantly

more high value patient data, such as information on whether a patient is receiving food or housing assistance, the patient's educational attainment, employment status, and more. While data sharing between health systems and community organizations could have a seismic impact on improving patient health and well-being, most community-based organizations do not have the technology infrastructure to manage PHI data, and do not use EHR systems. NASDOH encourages CMS to explore platforms that would allow for bidirectional data exchange between health care providers and community-based services, which would create better provider visibility into patient supports and would allow providers to refer out to non-medical services directly.

> c. *What specific opportunities and challenges exist to improve accessibility, interoperability and integration of clinical data from different sources to enable more meaningful clinical research and generation of actionable evidence?*

Despite the potential benefits of improving HRSN information sharing, there are technical and non-technical challenges that could potentially prohibit an interoperable HRSN ecosystem and must therefore be addressed. HRSN data are crucial components of an approach to addressing individual needs, but entities covered by HIPAA may be hesitant about or restricted from sharing and exchanging this information with other providers (although not all HRSN data is subject to HIPAA). Defining parameters for the use and management of individuals' consent – consistent with HIPAA requirements and with individuals' expectations – is necessary. Accounting for dynamic consent management, which accommodates evolving individual preferences, can help alleviate individuals' concerns about having HRSN data automatically shared with new health care providers with whom they do not have an existing relationship, and entities hesitancy to share this data. Dynamic consent management can also allay individuals' legitimate fears of bias or discrimination in subsequent interactions.

Another critical step is to adopt a set of transparent, responsible principles describing when and how an individual's personal information will be shared with entities that are not covered by HIPAA, and how these transactions will be communicated to and approved by individuals. NASDOH proposes a set of core principles that we believe can help instill trust and build the capacity needed for all stakeholders to be effective partners in improving national health.

- Collaborative approaches: Successful projects will involve key stakeholders across the ecosystem (plans, providers, proprietary digital platforms, CBOs, and potentially governmental human services agencies, working in close concert with patients, consumers and advocates), which can identify local needs and engage community partners effectively.
- Individual-centric and purpose-specific: Data sharing will be in service of meeting an individual's clinical and social needs. Only the minimum amount of information necessary to fulfill that purpose should be captured or shared, and the entire process should occur only with the individual's knowledge and permission.
- Transparent: The collection, use, sharing, and security of HRSN data should be known to individuals. This information should be understandable and easily accessible to individuals.
- Open standards-based: Technical standards should be based on open standards. Open standards are publicly available and the right to use is unrestricted, which allows for interoperability and easier implementation.
- Flexible architecture and operational structure: The data architecture and governance structures should be inclusive and capable of advancing as technology, service models, and needs evolve.

- Interoperable, federated exchange model: The model should support hosting of consumer data at the location of an individual's choice.
- Multi-directional exchange approach: Multi-directional exchange allows for better data accuracy and ensures that data is consistent across the ecosystem. It also promotes sharing and use of consumer-generated data.
- Strict privacy and security practices: SDOH information should be protected from risk using reasonable safeguards, and confidentiality should be maintained.

Just as with sharing of medical information, for HRSN data, interoperability means seamless, bidirectional data exchange between two entities in a format usable by each system. If interoperability is achieved, it should be simple to identify an individual's social needs information, the programs for which they qualify, when they received an HRSN intervention, and what the outcome of that intervention was. The benefit of interoperability in this case is that HRSN risk can be incorporated into the care plan at the point of service, and interventions can be coordinated seamlessly. However, achieving and sustaining interoperability between health care entities and CBOs – in addition to including other social services (e.g. eligibility and enrollment systems for federal and state benefit programs) – requires technical architecture to describe how data and software relate. Additionally, there is a need to ensure that while information can be shared, it is done judiciously to maintain privacy. Access to data should be functionally limited to users for whom the information is relevant to provide or receive care or be role-based. This may help foster adoption of interoperable solutions among service providers, who will be concerned about data security. Several granular issues that inhibit data sharing within the ecosystem include:
- Verifying individuals uniquely: Verifying a person's identity and identifying that person across an HRSN ecosystem is a crucial component of sharing data and facilitating consumers' access to their own data. To enable seamless sharing, accurate identification of individuals is needed. At this time, there is no standard approach for identifying unique users across the health, public health, and social care electronic systems. Related, health care institutions are focused on individual records, while community-based service providers often have familial records. Their infrastructures are often engineered specifically to these purposes and create incompatibility. Verifying individuals uniquely is a challenge in these instances.
- Proprietary technical infrastructure: Currently, the tasks of sharing social need information between health and social care service providers, and then connecting individuals to services, are largely facilitated by vendor-developed digital platforms and, in some communities, by health information exchanges (HIEs) and community information exchanges (CIEs).[1] These solutions are serving the important role of connecting health care and social care providers, but they they proprietary approach precludes a standardized process for data transportation across

[1] TAV Health, available at https://www.tavhealth.com/solution, accessed June 2019.
  Modern Healthcare, "Addressing the Social Determinants of Health," available at https://www.modernhealthcare.com/article/20170622/TRANSFORMATION03/170629956/addressing-the-social-determinants-of-health, accessed June 2019; Healthify, available at https://www.healthify.us/, accessed June 2019.
  HealthIT.gov, "What is HIE?," available at https://www.healthit.gov/topic/health-it-and-health-information-exchange-basics/what-hie, accessed June 2019.
  EHR Intelligence, "Texas HIE to Link Social Determinants of Health to Patient EHRs," available at https://ehrintelligence.com/news/texas-hie-to-link-social-determinants-of-health-to-patient-ehrs, accessed June 2019.
  San Diego Health Connect, "The Story of San Diego's Health Information Exchange," available at https://www.healthit.gov/sites/default/files/data_sharing_care_coordination_and_population_health.pdf, accessed June 2019.

the ecosystem. This requires local social care providers, who are often limited in capacity to begin with, to maintain connections with various platforms using individualized or proprietary technical infrastructures, or to limit with whom they work. An unintended consequence could be pushing critical CBOs with less technical capacity out of the community at the expense of individuals who require those services. Further, the lack of standardized data transportation solutions burdens proprietary platforms and HIEs/CIEs which experience barriers to entry in new communities because of the difficulty of building networks and connecting with public health and social care service organizations.

- <u>Lack of technical infrastructure</u>: Core to addressing social need is connecting with human services programs, like housing or childcare assistance, to assess individual eligibility and enrollment in existing human service programs. Seamlessly connecting people to these resources requires access to human services administrative data, but to our knowledge, eligibility and enrollment information is not stored or shared outside of government agencies, and there is not existing modern technical infrastructure to support it.

The social safety net that stretches to support local communities' needs has persisted despite basic infrastructure and insufficient resources, and – in many cases – has adapted successfully through valuable, informal networks. Solutions should address both the strengths and the limitations of the very organizations that will be partners in meeting individual needs. The challenges go beyond technology gaps and include adequate resource availability, including workforce. The capacity of the social care workforce must be considered. Training, funding, and other supports should be considered in order for HRSN data collection and sharing efforts to be implemented successfully.

In coordination with the CARIN Alliance, NASDOH identified five opportunities to address these challenges and advance the development of the kind of open, interoperable data ecosystem that is critical to addressing individuals' needs, improving outcomes, and positively impacting HRSNs.

OPPORTUNITY 1. Enable consumer-directed permission of HRSN information sharing	OPPORTUNITY 2. Ease collection of data on social needs	OPPORTUNITY 3. Support efforts to verify identity	OPPORTUNITY 4. Facilitate interoperability between service providers in the HRSN ecosystem	OPPORTUNITY 5. Facilitate access to eligibility and enrollment in human service programs

OPPORTUNITY 1. ENABLE CONSUMER-DIRECTED PERMISSION OF SDOH INFORMATION SHARING
As discussed earlier, there is a need to secure individual consent (permission) while addressing privacy concerns in order to successfully share data across the ecosystem. Developing or driving the adoption of existing principles and tools for managing individual permission to share HRSN information, and for governing the responsible management and sharing of HRSN data within and between service providers, as well as with consumers, can address this requirement. In some cases, approaches exist already, and we believe there are opportunities to adapt solutions in the field for transparent management of HRSN-

related data, like the CARIN Code of Conduct.[2] Any solutions that are adopted should account for diversity in consumer preferences and the likely evolution of those preferences over time. Further, technical solutions which enable information sharing should preserve privacy and security of the data so that it is consistent with individuals' preferences and so that it is not inappropriately or irresponsibly used and would harm individuals.

OPPORTUNITY 2. EASE COLLECTION OF DATA ON SOCIAL NEEDS
Simplifying the gathering and storage of an individual's social needs information could improve collection and reduce respondent burden. A set of technical standards for collecting social needs information data using federated models could be scaled for national use. Efforts should be coordinated and standardized across sectors (e.g., housing and transportation) and should also be responsive to the individuals who may not want or be comfortable with their social need and risk information being collected and stored.

OPPORTUNITY 3. SUPPORT EFFORTS TO VERIFY INDENTITY
The lack of a standardized approach for verifying unique users across electronic systems can be addressed through industry-wide framework for digital identity solutions. This would advance the ability to exchange data across systems electronically, including HRSN data.

OPPORTUNITY 4. FACILITATE INTEROPERABILITY BETWEEN SERVICE PROVIDERS IN SDOH ECOSYSTEM
There is also an opportunity to facilitate bidirectional HRSN data sharing between consumers, social, health, and other service providers by building open standards to support a single digital infrastructure for accessing and exchanging this information. One approach could be developing and utilizing a FHIR-based application programming interface (API) to support interoperability between the various service providers in the HRSN ecosystem, and with consumers and caregivers. The development of an API allows for connection and exchange through an HIE, or another proprietary platform, based on their needs and preferences, and eliminates the restrictive and individualized interface common now. This approach would also enable individuals to access their own information, facilitate information access at the point of service (which is essential for high quality and safe care), reduce the burden on service providers to connect to multiple digital infrastructures, and provide each stakeholder in the ecosystem with equal market access. However, open-source, FHIR-based API present unanswered questions about necessary privacy safeguards and consumer protections, and may still present barriers for CBOs, depending on their technical capacity. Thus, privacy and security preservation must be prioritized, and digital infrastructure capacity of CBOs must be better understood.

OPPORTUNITY 5. FACILITATE ACCESS TO ELIGIBILITY AND ENROLLMENT IN HUMAN SERVICE PROGRAMS
Real-time eligibility and enrollment information for state-administered social and human service programs would support efforts to address social needs. There is an opportunity to build open standards for accessing and exchanging information with states. One approach is developing a FHIR-based API to support interoperability between the various actors in the HRSN ecosystem and state governments to access real-time eligibility and enrollment data. This facilitates the sharing of information about an individual's social needs and eligibility/enrollment in human service programs, which can positively

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[2] CARIN Alliance, "The CARIN Alliance Code of Conduct," available at https://www.carinalliance.com/our-work/trust-framework-and-code-of-conduct/.

impact their health and wellbeing. A technical architecture to guide verification of eligibility and enrollment in government programs may already exist. [3]

Because of the sensitivity of eligibility and enrollment data, any approach must adequately account for granular permission and consent, so that information is shared only when and with whom consumers approve, and data privacy and security to prohibit irresponsible and unethical data use. The FHIR standard adopted in health care may be less common across the human services.[4] Finally, states take diverse approaches to implementing programs, including reliance on contractors and community organizations, which can make implementation more complex.

Technology Vendors/Data Providers

TD-7. *To what degree has USCDI improved interoperability and exchange and what are its limitations?*
   a. *Does it contain the full extent of data elements you need?*
   b. *If not, is it because of limitations in the definition of the USCDI format or the way it is utilized?*
   c. *If so, would adding more data elements to USCDI add value or create scoping challenges? How could such challenges be addressed?*

NASDOH encourages ASTP/ONC to continue including HRSN data elements in new versions of USCDI. In particular, USCDI should encourage the collection of data in the following areas:
- Individuals' social needs information: An accounting of an individual's self-reported social needs or SDOH that impact them. For example, this report should include information on whether an individual experiences food insecurity. Note that in the aggregate, individual-level needs can be used to inform population-level opportunities for health improvement.
- Eligibility and enrollment administrative data: The health and social services programs for which an individual is eligible and enrolled, e.g. whether an individual is eligible and enrolled to receive home-delivered meals.
- Care planning and experience: Whether an interaction between the individual and CBOs occurred, and whether an intervention was delivered. This information category would include, for example, data on whether the individual was connected with a food bank and received meals.

   d. *Given improvements in language models, would you prefer a non-proprietary but less structured format that might improve data coverage even if it requires more processing by the receiver?*

NASDOH supports the use of a structured data format to facilitate the collection and exchange of SDOH data. The use of a standardized format allows organizations that do not use EHRs, such as food banks or

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[3] Section 1561 of the Patient Protection and Affordable Care Act (ACA) required the federal government to develop interoperable and secure standards for "providing individuals and third parties authorized by such individuals and their designee's notification of eligibility and verification of eligibility required under such programs." Currently, ACA Section 1561 is not operationalized. Given the Administration's recent emphasis on interoperability, there is an opportunity to develop a public-private partnership with government agencies that seek to provide beneficiaries with more direct access to information about social programs. Source: Protection, P., & Act, A. C. (2010), Patient Protection and Affordable Care Act, Public Law, 111(148), 1.

[4] Stewards of Change – Let's Get Technical Workgroup (2019), "Reconciling NIEM and FHIR for Data Sharing," video available at https://www.youtube.com/watch?v=UCeiRhiETNQ.

housing assistance organizations, to align with national data standards for broader integration between health care systems and community settings.

Value-based Care

VB-3. *What are essential health IT capabilities for value-based care arrangements?*
   a. *Examples (not comprehensive) may include: care planning, patient event notification, data extraction/normalization, quality performance measurement, access to claims data, attribution and patient ID matching, remote device interoperability, or other patient empowerment tools.*
   b. *What other health IT capabilities have proven valuable to succeeding in value-based care arrangements?*

SDOH data can provide valuable insights for value-based care arrangements. Not only can HRSN data analysis help pinpoint disparities in care, but it is also vital for risk stratification and care coordination. Using HRSN data in these contexts help value-based care organizations develop a holistic understanding of the cost of care a patient may incur and helps to reduce redundancies in care by identifying where patients may already be receiving non-medical services to address their social needs.

VB-4. *What are the essential data types needed for successful participation in value-based care arrangements?*

As discussed in TD-7, collection and use of data on social needs information, eligibility and enrollment administrative data, and care planning and experience would all provide valuable data to value-based care arrangements. Through this data, value-based care organizations can better understand which interventions are improving outcomes, and whether non-medical interventions are generating strong return on investment.

NASDOH appreciates the opportunity to comment on these important questions. For more information on NASDOH and our members, please visit our website at www.nasdoh.org. Should you have any questions or wish to discuss our comments further, please contact Laura Pence at Laura.Pence@LeavittPartners.com.

Sincerely,

Laura Pence

Laura Pence
Advisor to NASDOH