Recommendations for Determinant Capture

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The Electronic Health Record (EHR) Association's Social Determinant of Health and Health Equity Task Force was created to identify, prioritize, and address the barriers to delivering more equitable, socially informed care, focusing primarily on those barriers that an EHR is best positioned to address. The EHR Association and its members are committed to exploring the ways in which technology can be used to address disparities in the healthcare system more effectively.

Social Determinants of Health Overview and Terminology

Social determinants of health, as defined by the U.S. Department of Health and Human Services, are environmental conditions impacting a person's health, functioning, and quality of life. These determinants are situational and encompass where people are born, live, learn, work, play, worship, and age. They are distinct from physical, biological, or demographic factors.

Examples that are not social determinants of health:

- The higher risk of breast cancer in cisgender women is due to their greater volume of breast tissue. However, being assigned female at birth is not considered a social determinant.

- In 2021, non-Hispanic Black pregnant individuals in the U.S. faced a significantly higher risk of pregnancy-related deaths than their white counterparts, regardless of income or education level. This disparity highlights a health equity issue, but being Black is not a social determinant of health.

Examples that are social determinants:

- Lack of access to reliable transportation for basic health needs results in 41% more unnecessary or avoidable days in the hospital.

- Low literacy is linked to poor health outcomes and less frequent use of prevention and wellness services, leading to more frequent and longer hospital stays.

Social determinants are categorized into risk areas or domains, such as nutrition insecurity, food insecurity, or housing insecurity. In keeping with the work of the Gravity Project, this document refers to these areas as *domains*. The World Health Organization's (WHO's) Commission on the Social Determinants of Health refers to these areas as *structural* and *intermediary determinants*.

Evaluating a patient's risk within the social determinant domains typically involves collaboration with social care or healthcare professionals. This assessment may be conducted informally through a conversation, using standard screeners—questionnaires tailored to evaluate social risk within a specific domain, or through validated testing instruments consisting of standardized questions based on research, to determine domain-level risk.

The Landscape of Social Determinant Domains

While it is generally accepted that assessing risk in the different social determinant domains is the first step to addressing those risks, there remains a lack of consensus on which specific domains should be assessed for patients.

- Healthy People 2030 lists five broad domains of risk. There may be some confusion in determining how more granular risks can be classified into these large areas - for example, housing stability might fall under Economic Stability or Neighborhood and Built Environment

- The Future of Nursing 2020-2030 lists 11 domains of risk, including structural determinants (such as race or gender) and intermediary determinants.

- The Gravity Project, in an attempt to classify and encode a broad list of domains, currently sits at 20 Social Risk Terminology Value Sets.

- In its 2023 IPPS Rule, CMS's Quality ID #487: Screening for Social Drivers of Health recommends the screening of five domains. These screenings will become required in 2024.

The Barrier

As illustrated above, the lack of uniformity in prioritizing and defining social risk domains by different stakeholders results in the absence of a consistent, universally agreed-upon, and prioritized list of domains appropriate for assessment by providers. This inconsistency often leads to overlapping domains, complicating the exchange and interpretation of this data.

The absence of clear guidelines for risk assessment and standardized representation of risks in EHRs hinders effective data exchange to inform interactions at the point of care. When data from one EHR is transferred to another, the receiving EHR may not be able to interpret the data in a way that is helpful to the user. Without a clear, standardized way to represent risk, there is no path to aggregate data across multiple systems to gain insights into social risks at a broader geographical or environmental scale.

This complexity is further exacerbated by regulatory agencies not operating in sync, and the growing proliferation of terminology only adds to the confusion. To effectively respond to evolving policy-making, the industry must align on a standardized approach for representing risk and agree on which risks are prioritized for collection and analysis.

Characteristics of an Effective Solution

The EHR Association has outlined key criteria for effective recommendations:

- **Feasibility Across EHR Systems**: The proposed solution must be feasible for implementation by the majority of our member EHRs, regardless of size or whether the system is a general-use or specialty EHR. Solutions that impose excessive costs or burdens are less likely to be adopted, especially by EHRs with limited resources, and would therefore not be effective.

- **Adaptability to Diverse Healthcare Settings**: Our clientele encompasses a broad spectrum of healthcare delivery organizations, including inpatient hospitals, outpatient clinics, integrated delivery networks, academic institutions, Federally Qualified Health Centers (FQHCs), specialty clinics, post-acute facilities, and behavioral health facilities. These organizations operate in both rural and urban environments, with varying economic models, including for-profit and grant-funded, but the majority are struggling to regain their economic footing after the devastating effects of the COVID-19 pandemic. The technology we provide must be scalable to suit the diverse needs, capacities, and time constraints of their users.

- **Interoperability for Social Risk Data**: An effective approach must facilitate the sharing and exchange of social risk data. Information captured in one system should be seamlessly exchangeable with another, enhancing value at the point of care.

- **Support for Research and Data Utilization**: Beyond care-focused interoperability, a robust solution should enable the use of social determinant risk data for research purposes. It is essential that data gathered across multiple systems can be combined and aggregated for higher-level analysis to aid researchers, social scientists, and public health professionals in understanding the broader scope of social risk within communities.

Recommendations

With that context in mind, the EHR Association's Social Determinant of Health and Health Equity Task Force issues the following recommendations:

❖ EHRs should standardize how they represent domain risk.

As EHR developers, we believe that we, in deep collaboration with our users, are best positioned to determine how risk should be captured in our users' workflows to meet specific user and patient needs. As such, we do not prescribe a uniform workflow for member companies, nor do we endorse specific screeners. However, at a minimum, an EHR should be able to indicate whether a patient was assessed for a domain risk, whether that risk is present, and the method of assessment if a standardized instrument or questionnaire was used.

EXAMPLE
Under this recommendation, any of the following models for evaluating housing insecurity would be appropriate:

Use of a standardized instrument (in this case, PRAPARE) to evaluate a risk

HOUSING
1. What is your housing situation today?[1]
   - ☐ I do not have housing (I am staying with others, in a hotel, in a shelter, living outside on the street, on a beach, in a car, abandoned building, bus or train station, or in a park)
   - ☐ I have housing today, but I am worried about losing housing in the future
   - ☐ I have housing

2. Think about the place you live. Do you have problems with any of the following? (check all that apply)[2]
   - ☐ Bug infestation
   - ☐ Mold
   - ☐ Lead paint or pipes
   - ☐ Inadequate heat
   - ☐ Oven or stove not working
   - ☐ No or not working smoke detectors
   - ☐ Water leaks
   - ☐ None of the above

Use of an accepted screener (the Housing Vital Sign from Children's Healthwatch) to evaluate a risk

In the past 12 months, was there a time when you were not able to pay the mortgage or rent on time? [Yes] [No]

In the past 12 months, how many times have you moved where you were living? [ ]

At any time in the past 12 months, were you homeless or living in shelter, including now? [Yes] [No]

Use of a nonstandard evaluation to evaluate a risk

Possible risk areas
- ☑ Housing insecurity
- ☒ Transportation insecurity
- ☒ Financial insecurity

A user might also evaluate risk through informal methods such as a conversation or a paper form, subsequently coding the identified risk using Z codes. Similarly, a patient's existing problem or visit diagnosis may indicate an elevated domain-level risk. For example, if the patient's problem list includes a code related to depression, a screener question for depression is not necessary.

These methods align with the recommendation because the EHR can indicate if housing insecurity was evaluated, if the patient is at risk of

housing insecurity, and if standard tools like PRAPARE or the Housing Vital Sign are utilized. While an EHR developer has the option to incorporate multiple approaches to offer a broader range of workflow choices to its users, doing so is not mandatory.

❖ The standards industry should determine how domain risk is represented in data exchange.

With a unified approach to risk representation, the standards industry is tasked with establishing how these elements are communicated. The representation of a social risk domain might contain:

- **The Domain**: Represented by a standard code (e.g., housing insecurity).

- **Risk Presence or Absence**: Clearly indicating whether a risk was identified.

- **Optional Coded Value**: Corresponding to the instrument or question used for risk assessment.

This structured representation simplifies the process for EHRs transmitting data to other systems by focusing on the essential elements of a risk assessment. EHRs receiving this data can easily determine and represent whether social risk exists across assessed domains. Furthermore, if additional rigor in risk assessment is required, receiving organizations can opt to disregard assessments not conducted with standardized instruments.

While a more detailed representation of risk factors would be valuable (e.g., Did the patient indicate a current lack of access to permanent housing? Time spent unhoused in the past year? Is the patient in an unsafe housing environment?), simply knowing that the patient has challenges in obtaining a stable housing situation is sufficient for clinicians and social workers to provide more informed care. An indication of the presence or absence of risk, as determined by the last caregiver, would represent a significant advancement over current practices in information exchange.

❖ The healthcare community should list and prioritize which domains should be assessed.

Throughout this whitepaper, housing insecurity has been frequently cited as an example of a social determinant domain where risk assessment is applicable. However, there are many domains in which risk can be assessed, some overlapping.

The EHR Association recognizes the work of the HL7 Gravity Project in establishing a comprehensive list of standardized domains. We endorse this list as a foundational guide for healthcare organizations and regulatory agencies in determining essential domains for regular assessment. Should the industry determine that new domains should be assessed, we urge collaboration with the Gravity Project for inclusion in their master list.

We recognize the importance of thorough screening across various domains but also advise caution. Mandating such extensive screening for every organization could place an excessive burden on clinicians, particularly in settings where resources like case workers and social workers are limited. We also recognize organizations must have the flexibility to assess the domains most relevant to their patient population and their treatment capabilities. Therefore, we strongly recommend that regulators limit the number of mandatory assessment domains, and we further recommend that healthcare delivery organizations support this parsimonious approach to reduce the regulatory burden on their users.

In line with the 2023 IPPS rule, which recommends the assessment of food insecurity, housing instability, transportation needs, utility difficulties, and interpersonal safety, we urge that EHRs be equipped to support the documentation of the corresponding Gravity Project domains: food insecurity, housing instability, transportation insecurity, inadequate housing, and intimate partner violence.

❖ **Risk assessment methods should remain flexible for now.**

Currently, there is no one-size-fits-all approach to assessing social risk, necessitating a flexible approach. Different organizations, along with their EHR systems, vary in their preference for risk assessment methods. Some opt for standardized instruments, while others lean towards shorter screeners or more informal methods. Although standardized instruments for assessing risk can offer more reliability, mandating their exclusive use in EHRs is not advisable. Such a requirement could inadvertently limit the flexibility necessary for EHR systems to meet the diverse needs and capabilities of their users. Therefore, it is critical to avoid regulation that prescribes the use of specific screeners and assessments at this time.

The suggested approach is designed to accommodate a gradual transition toward more widespread adoption of standardized screeners, in sync with the industry's evolution and readiness to adopt these tools.

Assessing the Recommendation

Using the established criteria above, current recommendations provide a reasonable path forward for EHR developers and the healthcare industry at large.

- **Feasibility Across EHR Systems**: The proposed flexibility in risk assessment methods imposes the lowest technical implementation burden for all EHR developers, short of not offering any recommendations at all.

- **Adaptability to Diverse Healthcare Settings**: EHR developers are free to design solutions that can scale to meet their target users, regardless of their sophistication and familiarity with assessing social risk.

- **Interoperability for Social Risk Data**: Our recommendations, coupled with the development of accompanying standards, support the exchange of usable information on broad areas of social risk. Care settings that require a more rigorous assessment of risk can understand how risk was assessed at the originating organization and accept or reevaluate it accordingly.

- **Support for Research and Data Utilization**: While not as reliable as more granular risk assessment data, our recommendation supports aggregation at the population level to better identify and understand at-risk populations.

Moving Forward

As inpatient organizations prepare to start reporting on patient screenings for the aforementioned social determinants in 2024, we advise CMS to consider postponing the advancement of this requirement. This delay would allow for sufficient time to gather insights and learn from industry practices.

As the industry matures, we encourage careful consideration of new domains or more prescriptive guidance around screeners. Any such expansion must be backed by a comprehensive understanding of how to implement these changes effectively, without increasing clinician burden.