

Improving Social Determinants of Health Data Collection for Patient-Centered Care

Introduction

Social determinants of health (SDOH) affect health outcomes and the quality of care provided to an individual or population by up to 80 percent. However, many providers and organizations do not know or understand the specific drivers outside the hospital that influence the health outcomes of the population they manage. Understanding these socioeconomic drivers is critical in helping providers and health organizations improve care for the populations they serve.

Although the general practice of data collection in health care has improved in recent years, a standardized method of collecting data, specifically for SDOH, across providers has not been identified and organizations have struggled to find meaningful use for the data gathered to drive patient-centered care. Additionally, the health systems and providers that do collect useful data often gather the information in an unstructured and unusable formats.

A focus on improving the data collection methods precisely for SDOH and targeted patient intervention must become a priority for health care organizations moving forward. The data collected provides actionable insight and valuable information required for patient stratification and innovative initiative design. These initiatives can address not only the issues occurring within the hospital walls but also, drivers outside the hospital that contribute to the patient's overall health outcome.

Improving uniformity in the data collection process, effective collaboration and aligned incentives among key stakeholders on the method SDOH data should be gathered, shared and used as these are important to driving initiative development and deployment. This approach, will in turn, lead to healthier outcomes from targeted patient-centered care. This article examines the current state of SDOH data collection and provides recommendations on how to improve the process for SDOH data collection.

Current State of SDOH Data Collection

The accurate capture of SDOH information is challenging due to a lack of agreement on the standard assessment tools, data sources, measurable inputs and best practices on tool implementation. Progress in data collection is further hindered by a lack of knowledge and consensus for sharing best practices, struggles, successes or failures and a lack of effective collaboration between providers, social services and health organizations.

As a result, providers do not adequately understand the factors that influence roughly 80 percent of their population's health outcome.

The table on the next page shows the current state of data sources, along with the pros and cons:



Paul Amajor
Intern



Yomi Ajao
Senior Vice
President

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Table 1: Pros and Cons of Current SDOH Data Sources

DATA SOURCE	DATA TYPE	PROS	CONS
Electronic Medical Records (EMR)	<ul style="list-style-type: none">• Health Records• Behavioral Data• Claims Data	<ul style="list-style-type: none">• Ability to gather point of care information or infer from other data sources	<ul style="list-style-type: none">• Lack of standard collection method across industry• Limited availability of member data when they go out of network
Public Open Source	<ul style="list-style-type: none">• Government Data• Community-level Data• Public Records	<ul style="list-style-type: none">• Contains information such as geo-zone, housing, education, employment, transportation	<ul style="list-style-type: none">• Data accuracy for targeted and specific member population
Z Codes	<ul style="list-style-type: none">• Coding system developed by United Healthcare and AMA	<ul style="list-style-type: none">• Organized SDOH codes• Identifies persons with potential health hazards related to socioeconomic and psychosocial circumstances	<ul style="list-style-type: none">• Structure of data is not comprehensive enough and currently, is not widely adopted

Improving Data Collection for the Right initiative

The following recommendations will help improve data collection for SDOH and initiative for patient-centered care

1. Build effective collaboration between multiple sector stakeholders

a. Multi-stakeholder collaboration to improve SDOH data collection

Stakeholders across multiple platforms and industries must work together to develop the right process and protocol to collect, share and handle data. This includes the private health and technology sectors working together with the state and federal government among others to develop and streamline the most effective data collection process, framework and methodology for SDOH.

b. Address and involve health in non-health sectors

Focusing and involving health in non-health areas integrates and factors health issues into decision-making across different sectors and policy approach. This in turn fosters better collaboration among multiple stakeholders with the aim of improving data collection accuracy. A focus on education, transport, housing, agriculture, etc. should be highly considered as it not only improves the data available for collection, but also improves the overall health outcome in the end.

c. Community engagement

An important and effective way to improve the accuracy of data collection and patient-centered care is to engage the community. Health organizations should strategically collaborate with local stakeholders and obtain their input, participation and insights to further understand their social needs. This approach improves the collaborative partnership between local communities and their respective health organization and also helps providers understand the data points necessary for creating the most optimal framework.

2. Standardize data source and tools for impactful use

a. Improve data collection standards and develop the right tool

The number of sub-optimal software currently available and the general standards presently used to gather SDOH data has contributed to the level of non-standardized data collection process. An easy-to-use tool should be developed to improve the collection standards and process. Additionally, the tool must meet the regulatory standards across the health care industry. Furthermore, stakeholders must reach a consensus on standard terminology for easy industrywide utilization (medical and non-medical terminology that can be used across multiple settings and platforms).

b. Data validation for impactful use

Validating the data collected from patients is important to improve the overall data collection process and should be conducted at every point of care, similar to the medication reconciliation process. Once the initial SDOH information is received, the data gathering process should transition from obtaining patient social and welfare information to validating the information collected.

c. Improve the adoption of standard available codes

Currently, Z codes are the standard SDOH codes available for financial reimbursement. These codes also capture individuals with potential health hazards related to socioeconomic and psychosocial circumstances. Unfortunately, these codes are not widely adopted as they are mostly utilized for reimbursement purposes. The already existing codes should be improved to help capture SDOH data accurately, improve reimbursement methods and help in patient-centered initiative design industrywide.

3. Develop and adopt appropriate metrics and dashboards for valuable insights

a. Key research investment in appropriate metrics

Investing appropriately in research is vital to developing key metrics that will provide valuable insights into societal conditions that are relevant to health services utilization and outcomes. Channeling the appropriate resources into appropriate dashboards and performance indicators helps improve the overall coordination of patient-centered care and positively affects the overall health outcome.

b. Use metrics to track quality and outcome

As the right performance indicators and metrics are developed, they should be used to track the quality and outcome of the care provided. In fact, the success of a patient-centered initiative can only be determined when the right performance indicators and metrics are tracked.

c. Designing the right dashboards for patient-centered care

The ability to translate data into a format that is understandable and visually appealing is essential in the grand approach to patient-centered care. The format and dashboard should capture the relationship between different SDOH categories and chronic diseases/hospital services utilization. These dashboards will help providers approach patient care with valuable insights because of the data-driven approach behind these builds. Dashboard designs should ensure the patient care approach is all-encompassing, factoring issues that affect patients both inside and outside of the hospital walls.

The recommendations stated above contribute to the standardization of the data collection process and help in patient-centered care initiative design. However, continued conflicts and challenges among stakeholders on how to approach these recommendations will still exist. The issues regarding patient privacy will continue to

be a challenge in all parts of the data collection process and a thorough/well-thought plan to protect patient privacy must be outlined.

Regardless of all the potential challenges, providers, health care organizations and other key stakeholders must constantly push for improvements in the method data is collected as the improvement and standardization of data collection will enhance targeted interventions for patients and improve outcomes.

Sources

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For more information, please contact Yomi Ajao, COPE Health Solutions at yajao@copehealthsolutions.com or call 646-793-1873.