



A Single Patient Identifier: > Winning the Social Determinants of Health Battle

The social determinants of health (SDOH), which include housing, education, transportation, income, and food insecurity, have quickly become the most critical influences in care outcomes. Since social determinants now make up the majority of factors contributing to population health, plans and providers are seeking to build a total picture of patients' health to offer intervention and support. However, exerting control over social determinants isn't the end goal of providers, but the hope is to offer interventions outside of clinical care to improve population health. Screening and intervention are logical steps in assessing social determinants, but knowing how to put this data into effective use remains a challenge. Now, emerging technology tools such as a single patient identifier could bring a more comprehensive view of a patient and offer insight into their ability to benefit from specific care plans.

DEFINING THE PROBLEM

Evidence is quickly mounting that the social determinants of health (SDOH) are the most important factors in an individual's health, far outweighing clinical factors. Stakeholders are increasingly recognizing the importance of these influences, but social needs are now taking on greater significance because of how they impact outcomes.

While the impact of non-clinical risk factors outside the health system is significant, they have been relatively difficult to assess and measure. Addressing these social needs is increasingly necessary in the hospital or emergency care setting given their relative importance to on-going access to care. However, embracing social needs as a key component to improving outcomes still comes with its own set of challenges such as how to define the problem, collect and share data and form community partnerships with like-minded goals.

The primary reason why social factors are considered to be so impactful is because only about 20 percent of health outcomes are determined by clinical care.¹ The remaining 80 percent is determined by non-clinical factors, most of which are influenced by geography and socio-economic conditions. This explains why communities with poor overall health status can actually overshadow a thriving health care system that surrounds it.

The extent of social determinants can be particularly far-reaching and typically include the following categories, according to the American Hospital Association²:

- housing instability
- utility needs
- food insecurity
- interpersonal violence
- lack of transportation
- lack of adequate family and social support
- low levels of education
- lack of employment/low income
- risky or harmful health behaviors

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POLICY & PROCESS SOLUTIONS

Among potential solutions at the provider level, policy and process approaches have been first to develop in hospitals to address the breadth of social needs. For instance, one of the initial steps to assessing social determinants is through screening and information gathering. Without this knowledge of populations who might be most vulnerable, it is difficult to leverage any potential services or assistance for those individuals.

Hospitals and other providers who want to address the SDOH have been encouraged to utilize the Center for Medicare and Medicaid's 10 question screening tool designed to identify unmet needs in five core areas— housing instability, food insecurity, transportation needs, utility needs and interpersonal safety. ³ Studies are showing that many hospitals do screen for social needs, but the data collected isn't always shared easily among departments or made available to everyone involved with patients. ⁴

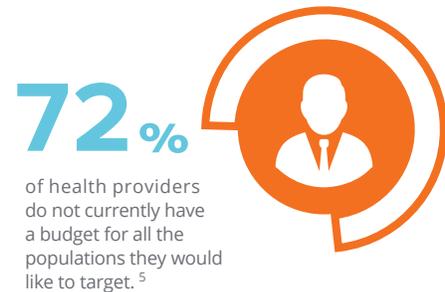
A second method providers can implement to address underlying social conditions is through navigation services that assist patients in accessing community services. Similarly, providers might also engage with community stakeholders to align their services more closely with the needs of local patients.

Investing in health-related social needs remains challenging since providers aren't guaranteed a return on investment. In addition, at many hospitals, initiatives are often unconnected, which can dilute their effectiveness. Consistent measurement of these initiatives is often even more important since overall activities should be tied to health outcomes, cost outcomes and patient experience.

What makes social determinants difficult to address is providers expect some return on investment from programs and many solutions have difficulty offering concrete results. In addition, the lack of adequate or dedicated funding in many cases makes addressing social needs even more challenging. Last July, Deloitte published a report that found 72 percent of participants do not currently have budget for all the populations they would like to target. ⁵



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PATIENT MATCHING TOOLS BRIDGE THE GAP

Deploying analytics tools to social needs data is showing signs of promise, particularly as providers seek to reduce the likelihood of readmissions. When screening for social needs is combined with an electronic medical record (EMR), this important data can be more readily collected, stored, accessed and put to use and maintained across many facilities.

A single or unique patient identifier made possible by an Enterprise Master Patient Index (EMPI) offers simplified patient ID matching and record management with the added benefit of greater cost efficiency. The ability to track and correlate patient IDs across systems and settings such as EMRs, IDNs and ACOs enables a more comprehensive view of a given patient and promotes a more consistent patient experience. This important step in meeting social needs gives providers the opportunity to find potential gaps in care by seeing the entirety of a patient's history.

Access to complete and accurate patient data records allow for enhanced clinical care coordination, reductions in duplicate diagnostic and lab procedures, support for patient portals, improved billing accuracy, and saves patients and providers time. Ultimately, the ability to achieve cross-platform interoperability means that a single patient identifier follows a patient across disparate systems and providers, making it easier to offer solutions to potential non-clinical factors.



REDUCE READMISSIONS



IDENTIFY GAPS IN CARE WITH
ENTIRE PATIENT HISTORY



CROSS-PLATFORM, MULTI-SITE
INTEROPERABILITY TO INCLUDE
NON-CLINICAL FACTORS

SINGLE PATIENT IDENTIFIER HELPS SAN MATEO COUNTY HEALTH SYSTEM LEVERAGE SOCIAL DETERMINANTS OF HEALTH

Surrounded by the tech titans and wealthy billionaires of Silicon Valley, San Mateo County Health System functions as a safety-net provider to the approximately 10 percent of county residents who are covered by Medicaid or entirely uninsured.

According to Eric Raffin, chief information officer, San Mateo Health was operating four different EHR solutions with limited interoperability. Laying the groundwork for a robust Health Information Exchange or HIE platform required the ability to manage the identities of patients.

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So in addition to cleansing duplicate records in each of the four EHRs, San Mateo Health also needed to unify identities that were common across these systems as many patients had records in multiple EHRs.

To do so, Raffin implemented NextGate's Enterprise Master Patient Index (EMPI), which is designed to create a single patient identifier for a comprehensive patient view. With the EMPI in place, San Mateo has reduced duplicate records from 6 percent down to less than 1 percent, said Raffin.

"The first tangible benefit the EMPI provided was the identification of the co-managed clients we

have across multiple operating divisions," Raffin said. "For example, for the first time we could understand who receives services from both our medical center and our behavioral health programs. This is important because many people that have a chronic disease diagnosis also have a serious mental health diagnosis."

Not only does the new system mean San Mateo can more effectively manage patients across diverse facilities, but incorporating social determinants and patient-generated health data into medical records has allowed caregivers to access and apply the data into its care services.

"The data we gather across these programs complements the extensive clinical data in our EHR systems," Raffin said. "The richer the content our providers see, the more informed their decisions become."

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Eric Raffin
Chief Information Officer,
San Mateo County Health
System

CONCLUSION

While there are many variables contributing to the success of overall health, social determinants easily make up the vast majority. As a result, providers and plans are seeking ways to bring more solutions to growing non-clinical issues. So far, solutions have been mainly focused on screening, intervention and engagement with limited to moderate success and no guarantee of a return on investment. Understanding how social determinants drive health costs will likely become increasingly important given their overall impact on population health. Until more innovative solutions or partnership opportunities emerge, technology applications might offer the best solution in the form of a single patient identifier. Building social needs into the data collection process and electronic health records allows providers to track individuals across the care continuum, increasing the likelihood of care plan success.



REFERENCES

1. Remington PL, Catlin BB, & Gennuso KP. (2016) The County Health Ranking: rationale and methods. *Population Health Metrics* 13(11). doi: 10.1186/s12963-015-0044-2.

2. American Hospital Association. Task force on ensuring access in vulnerable communities, Chicago (IL): American Hospital Association; 2016.

<https://www.aha.org/system/files/content/16/ensuring-access-taskforce-report.pdf> Accessed January 25, 2018.

3. Centers for Disease Control and Prevention. Health impact in 5 Years. Atlanta (GA): Centers for Disease Control and Prevention; 2016. <http://www.cdc.gov/policy/hst/hi5/index.html> Accessed January 21, 2018.

4. Lee J, Korba C. Social determinants of health: How are hospitals and health systems investing in and addressing social needs? Deloitte Center for Health Solutions; 2017. www.deloitte.com/us/social-determinants-of-health Accessed January 21, 2018.

5. Lee J, Korba C. Social determinants of health: How are hospitals and health systems investing in and addressing social needs? Deloitte Center for Health Solutions; 2017. www.deloitte.com/us/social-determinants-of-health Accessed January 21, 2018.

NextGate uses its expertise in patient and provider identification to connect the healthcare ecosystem for a complete and accurate record of care across the enterprise. We help organizations overcome the clinical, operational and financial challenges that result from duplicate records and fragmented information in healthcare. NextGate's market-leading EMPI technology now available as a cloud-based, SaaS solution, manages 250 million lives around the globe and is deployed by the nation's most successful healthcare systems and HIEs.

Find out more at NextGate.com

