MANAGING A POPULATION'S HEALTH

Leveraging social determinants of health can yield positive results

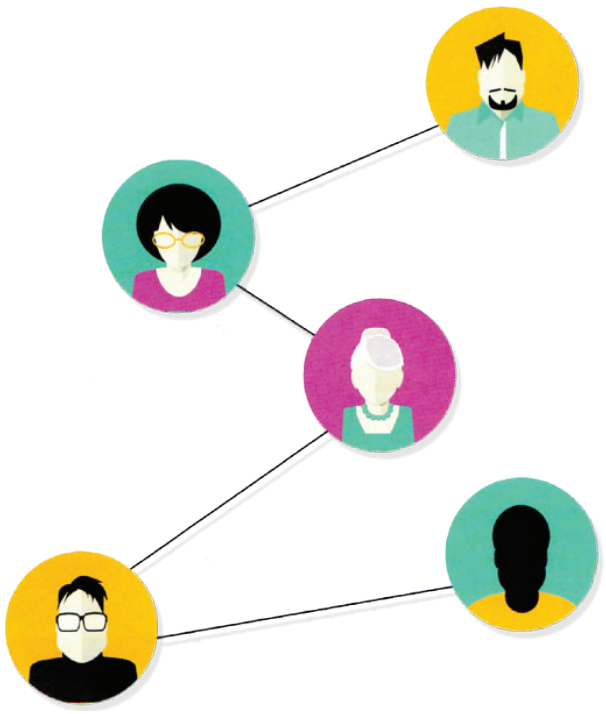
BY JUSTIN NEECE

The United States spends $3 trillion on health care annually, yet the nation lags many developed countries in health outcomes.

Based on a meta-analysis of nearly 50 studies, researchers found that social factors—including education, racial disparities, social support and poverty—accounted for more than a third of total deaths in the United States in a year, according to a U.S. Health Care from a Global Perspective piece by David Squires and Chloe Anderson.

In addition, we often treat illnesses but do not address the conditions that contribute to them. And doing so is futile.

As the country, propelled by the Affordable Care Act and other changes in the health care landscape, moves toward value-based care, the time has come to find new ways to lower costs and boost positive outcomes. Pulling social determinants of health (SDH) data into population health management (PHM) platforms is a step in the right direction. To accomplish this task, we first need to define our terms. What are SDI-l? Social determinants of health are the factors and environments that a given population is born and grows into. They include economic stability, education, social and community context, health and health care and the built environment (whether country roads in a rural setting, sidewalks in a city or something in between).



While economic instability has an obviously negative impact on health care, social networks can reinforce unhealthy behaviors such as smoking and drinking. Similarly, a patient's social and community context is also vital to combatting depression or social isolation. In a more practical respect, SDH also include addressing language differences and transportation, which are directly connected to the impact a health care provider can offer.

For clinicians who acknowledge the impact of social determinants on health, it's difficult to know where to begin. Emergency medical records generate a great deal of raw data, but making that data accessible, user friendly and actionable can be a challenge. Very few EMRS incorporate space for social data, and the vast majority of primary care practices lack processes for capturing and integrating such data, according to an American Academy of Family Physicians article by Michael Laff.

Claims data is helpful, but not timely. Clinical information is better but may be missing critical information The combination of these information sources is critical. to transforming data into actionable insights.

Population health management tools must go beyond the individual patient record to help providers visualize the general performance of the organization. A strong platform also should allow each staff member to customize the data to suit her or his workflow needs. Finally, bringing in geographic and demographic data creates the most robust PHM experience for both providers and patients.

Data aggregation is a key challenge for organizations of all sizes. EMRS were not designed for the type of analytics that guide improvement, patient satisfaction and cost reduction.

Practical strategies to take action

• *Getting better prepared for patients via huddle report*

With a data warehouse and proper analytics tools, the PHM platform gets down to the nitty-gritty of patient care and coordination. Daily huddle reports are generated for providers and case managers to easily access important information such as the patient's homeless status or prior incidences of domestic violence. Clinicians can use the information prepping for a visit and also act accordingly when following up on missed visits.

• *Education and communication for a diverse patient population*

Social determinants also have a direct impact on patient education and communication. La Maestra, a large community health clinic located in Southern California, leverages its PHM platform to improve health literacy and bridge communication gaps. The clinic serves a community where 74 percent of the population speaks a language other than English. Staff—from physicians to the receptionist—speak more than 20 languages and dialects. When someone from this multilingual population arrives for an appointment, a coordination effort is put in place that goes far beyond a basic scheduling system.

• *Going outside the clinic walls to improve health*

Knowing your patient is homeless or having multi-lingual physicians may not be enough. The health care system is beginning to develop extra-clinical solutions that go beyond the doctor's office to influence social determinants and create a more positive feedback loop. Examples include the following:

- In New York City, a medical/legal partnership helped resolve legal issues involving housing, resulting in a 91 percent decrease in hospitalizations and ER visits;
- A coalition and care management program addressing patient complexity in Camden, New Jersey, has seen monthly hospital charges drop by 56 percent;
- Seattle saw a $334 monthly drop in urgent care costs per child when it brought community health workers to asthmatic children living below the poverty line. Instead of the children and their families having to wrestle with transportation barriers, and clinicians coping with no-show appointments, the community health workers came to them.

The promise of data science for effective PHM

Social determinants of health are critical in terms of the retrospective analysis necessary to better prepare for patient visits or the launch of meaningful outreach to address gaps in care or maintain care plans.

But there is increasing value in leveraging true predictive insights that harness the power of SDH to achieve additional benefit to an end-to-end PHM program. Deploying data science is vital to achieve broader improvements in health and greater health equity. It can help gauge the impact of social determinants on patient risk factors and outcomes and further strengthen population health management tools.

Data science allows PHM tools to use pre-clinical data to build a social determinants profile that would, for example, help predict who is more or less likely to end up in the emergency room, who is at risk for a negative cardiac or diabetic event and/or who is likely to be a readmissions risk.

The value is clear and—with large data sets coming together from a variety of sources in a manner that is accessible for analysis—we are on the cusp of tremendous opportunity.

In terms of how the industry will evolve to leverage the deep insights related to this information, the possibilities are truly endless. It is time to apply what we know to get aggressive about population health management.

Justin Neece is president and COO of i2i Population Health. The company's i2iTRACKS system of population health management tools serves more than 2,000 organizations across 35 states.