

Social determinants: COMPLETING THE HEALTH DATA PICTURE

There's a scene in the classic movie "The Wizard of Oz" that shows Dorothy's house tossed around in the air by the force of a twister. From the start of the movie until that point, the film is shot in dull, black-and-white tones — a monotone wash of gray.

Then the house crash lands in Oz. When she opens the door of her home for the first time, Dorothy is greeted by a spectacular vista of color and layers of marvelous detail. She's opened the door to an entirely new world.

While there's certainly no fantasy involved in data analytics, there's a similarity to be found in trying to improve population health with only traditional health care data — it's often a wash of gray. But add the data gleaned from analyzing non-clinical factors and it can produce insights that are rich, multidimensional and impactful.

Analyzing data related to social and behavioral health factors, known as social determinants of health (SDOH), can help your organization avoid making decisions based

solely on partial data. SDOH data analysis adds color and clarity. It offers a thorough picture that helps you know where and how to invest your resources so you can keep your populations — and your enterprise — healthier and sustainable.

SDOH data play a critical role

There's increasing evidence about the ways socioeconomic factors and lifestyle choices affect a person's well-being. In fact, they may have a greater impact on overall health than health care services themselves. These social determinants of health include:

- ZIP code
- Education level
- Access to food
- Physical safety
- Quality child care
- Nutrition choices
- Employment
- Housing stability
- Reliable transportation support

Health plans, providers and employers have traditionally relied on data from within their organizations, rather than SDOH data outside their walls. Depending only on clinical data often delivers an incomplete picture of the patient or employee. It's not uncommon for organizations to have population data disconnects and gaps.

Today, capturing data outside the walls is more critical than ever

DATA OUTSIDE OF WALLS

HOUSING



FOOD ACCESS



TRANSPORTATION



ZIP CODE



DATA INSIDE OF WALLS





Gaps and other data limitations can lead to shortcomings in information about health status, well-being and social concerns. Insights and improvements across the entire health care system may be bogged down or even thwarted when limited to traditional data sources for health plan, provider and employer populations.

Access is another challenge that requires a better understanding of SDOH. Many uninsured or underinsured people can't afford health plan costs, or they live in areas that don't offer qualified health care providers. These are people who may present to emergency departments (EDs) for care that could have been prevented or may not even be needed. Along with concerns about how to address the safety and well-being of these individuals, this ED-as-a-first-resort approach drives up the cost of care and places health care organizations and patients at major financial risk.

A closer look at SDOH analysis: Super-utilizers

It's not unusual in some areas for people to go to an emergency department dozens of times a year. These "super-utilizers" have complex health problems and often go to EDs for health issues that could be handled by primary care physicians and social workers. While they make up just 5% of the U.S. population, super-utilizers account for 50% of health care spending.¹

Super-utilizers exist in subgroups. SDOH data analysis plays a key role in learning utilization patterns among super-utilizers as compared to national benchmarks. For instance, one study related to SDOH and super-utilizers found that mental health problems are linked to more frequent ED visits:

- Mental health ED visits were more common for super-utilizers than for other patients, no matter who the health plan was.²
- Super-utilizers visited the ED on average four to five times more often than other patients.³
- The study revealed that super-utilizers accounted for an outsized percentage of ED costs.⁴

Addressing costly challenges, whether presented by super-utilizers or other people in your organization's communities, starts with moving beyond a generic, population-level understanding. It extends to an individual, specific understanding of the social determinants of health.

SDOH data analytics improve care, costs and accuracy

Studies show that SDOH and behavioral propensities account for 60% to 80% of health outcomes and utilization. Using analytic models allows providers and health plans to prioritize and drill down to "need" and "want" levels. The result? A more efficient use of care management and quality resources.

Leveraging analytics is the first step in learning more about your population and developing a care coordination model around their needs. The right intelligence engine can help you:

- **Identify the right people.** Predictive algorithms find the individuals who are most willing to engage, along with those who live with serious medical conditions. Impacting this population is a major key to improving outcomes and learning whether or not the population takes ownership of their own health.
- **Understand the willingness to close gaps.** A health ownership rating and social isolation index allows the inclination index to learn an individual's propensity to engage. These data sets may also pinpoint the individuals or patients who are most likely to respond. This lets you focus your efforts and investments where they'll make a difference.

Prevention is one way to make a difference. Research shows that preventing early chronic diseases can cut spending by 34%. Prevention also reduces unnecessary services, cuts 14% of health care costs and provides better care at home instead of a hospital — a savings of 30%.⁵



Another recent study assessed how social services among Medicaid and Medicare Advantage members impact health care costs such as physician office visits and ED use. Research participants were successfully connected to social services and compared to a control group of members who were not.

The results showed a 10% cut in health care costs, which adds up to more than \$2,400 in annual savings per person. SDOH data can help gather information that allows organizations like yours to link individuals to needed services.⁶

Understanding the impact of social determinants is one of the major ways health care is changing for the better. Incorporating SDOH data into health plans and systems can positively affect a number of areas, including:

- Strategic planning
- Community outreach
- Quality measures
- Value-based contracting

How SDOH data can help serve communities and lower expenditures

As careful attention is paid to food, transportation, housing and other socioeconomic needs, costs can be brought into line. This requires often-siloed health care and social services systems to come together to serve their communities fully, contain costs and improve health outcomes. Picture these very possible scenarios for your organization:

- **Meeting nutritional needs.** Data on food insecurity reveal that poor nutrition and lack of quality food increase your population's chances for diabetes, hypertension and heart failure. Armed with this knowledge, you decide to combine healthy food and education and offer them to your community through a food pantry.

- **Meeting transportation needs.** Transportation support is desperately needed in a community you serve. You set up a fund so doctors can send reliable transportation services to pick up patients who can't make it to the office on their own.
- **Meeting housing needs.** A woman visits your emergency department dozens of times in a year. She's found to be homeless. Based on what you've learned, your organization teams with a social service organization to give her a permanent place to live. After that, the trips to the ED dwindle dramatically.
- **SDOH data analysis: a worthy investment for quality care and positive returns.** Lastly, a real-life scenario: One state's Medicaid program created housing support for more than 10,000 of its highest-cost and highest-need beneficiaries. After just one year, there was a 40% reduction in the program's patient hospital stays and a 26% cut in ED visits.

Social determinants of health drive positive health outcomes

When SDOH data isn't incorporated into your analytics, your choices and investment strategies may be influenced by an incomplete understanding of your patients, employees or constituents. Knowing how social determinants and barriers to health affect these groups can save you a lot of time, effort and resources. There's no wizardry to it. But you'll find that SDOH data open the door to a richer, clearer picture of the people and communities you serve.



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