HDNS[™] Health Data & Management Solutions



SDoH Analytic Content

SDoH Indices Using HDMS methodologies to analyze

both short-term and longterm impact of social determinants on member health and wellbeing

Social determinants of health (SDOH) – the conditions in which people are born, grow, work, live, and age and their access to power, money, and resources – have important impacts on health differences across population groups. Social determinants have exacerbated health inequities within and across communities especially during the COVID-19 pandemic ⁽¹⁾

(1) WHO - COVID-19 and the social determinants of health and health equity: evidence brief

Helping clients understand the impact of SDoH on members

The Challenge

The vast majority of health care leaders' attention is rightly focused on the coronavirus pandemic and the ensuing unprecedented demands on the health care system.

However, employers, payors, and provider organizations risk long-term damage to community health if leaders don't also attempt to mitigate the epidemic's impact on the social determinants of health, which are amplified in vulnerable member populations.



Our Methodology

The HDMS SDoH methodology and indices leverage data from the following sources:

- US News Healthiest Communities & World Report
- Aetna Foundation
- American Community Survey (ACS)
- Behavioral Risk Factors Surveillance Survey (BRFSS)
- FEMA Disaster Declaration Summaries

SDoH, although experienced by individuals, exist at the community level. Organizations that learn about the communities their employees, members, and patients live in and the barriers they can face to becoming and staying healthy can better adapt their recommendations to people's lives. SDoH can be categorized into five key areas:

- Social context
- Economic context
- Healthcare context
- Education
- Physical infrastructure

Our methodology focuses on indices that cover the first three categories, and a combined socioeconomic index that encompasses all five collectively.

Modular dashboards, personalized narrative

Using the seven SDoH indices detailed on the next page, we have created six SDoH dashboards that collectively provide a comprehensive view of healthcare metrics such as ER utilization, cost of IP/OP visits and Rx, as well as the prevalence of certain chronic conditions impacting members in at-risk quantiles. The dashboards in this module can be used as-is or customized to investigate specific challenges or risks faced by the client.

SDoH Analytic Content

Using SDoH data for results-driven employee and member engagement

Understanding the indices

The following diagram shows how to interpret each of the seven SDOH indices. As you can see, for four of the SDOH indices, including socioeconomic index, higher tiers represent a more advantageous situation. For the other three indices, higher tiers represent a more disadvantageous situation. Below, you can find the definition for each index.

	Most Disadvantageous	Least Disadvantageous
Socioeconomic Index ★ Employment Index Household Income Index ★ Household Income Index Adjusted for COLI	Very Low Index	Very High Index
Disability Index Food Stamp Index Physical Inactivity Index	Very High Index	Very Low Index



Employment Index measures the population employment status within the census tract where a member lives. Higher values represent a more advantageous employment situation.



Household Income Index measures the quantile in which a member falls based on their income level within the Census Tract. Higher values indicate a more advantageous income situation.



Physical Inactivity Index measures the level of physical inactivity within the census tract where a member lives. Higher index values indicates more physically inactive people in the Census Tract.



Food Stamp Index measures the population that is receiving food stamps within the census tract where a member lives. Higher values represent a greater dependency on food stamps.



Socioeconomic index measures the quantile in which a member falls in terms of socioeconomic disadvantage and differing dimensions of poverty within their Census Tract. Higher values represent a more advantageous situation.



Household Income Adjusted for COLI Index measures the population' household income level, adjusted for the cost of living (COLI) within the census tract where a member lives. Higher values represent a more advantageous situation.



Disability Index measures the occurrence of disability within the census tract where a member lives. Higher index values indicate a higher occurrence of disability.



>> Out-of-the-box Dashboards

The SDoH module includes six different out-of-the-box dashboards that are designed to explore how social factors influence health care and health outcomes.

Here is a list of the dashboards that are included:

- 1. SDoH Summary A call to action
- 2. How does chronic condition prevalence vary across socioeconomic tiers?
- 3. Do certain chronic conditions disproportionately impact communities with disadvantageous socioeconomic indices?
- 4. How does ER use vary across members in different socioeconomic tiers?
- 5. Are there any pharmacy trends across communities in different socioeconomic tiers?
- 6. SDoH Map Communities with greatest opportunity

