

SDoH analytic insights

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 a population. Awareness of health inequities associated to social determinants increased as we observed the COVID-19 pandemic.

SDoH analytic investigations allow us to measure how social and environmental factors drive excess cost, relate to care choices and influence health outcomes. These insights help us design better care for the diverse set of needs within a population.

SDoH indices

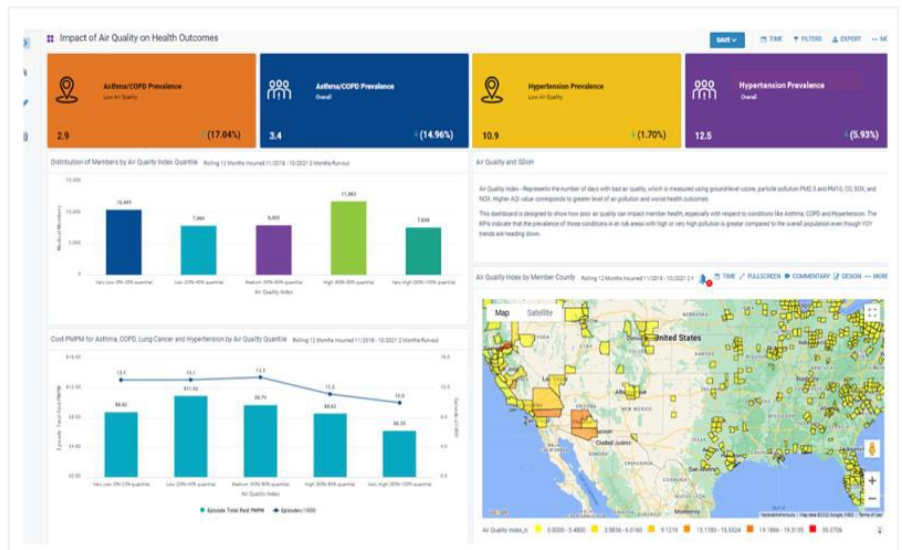
HDMS offers a proprietary methodology based on publicly available data sources. Users analyze the short-term and long-term impact of social determinants and environmental factors on member health and well-being.

Use data to understand the impact of SDoH on individuals

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 pandemic's impact on the social determinants of health, which are amplified in vulnerable member populations.

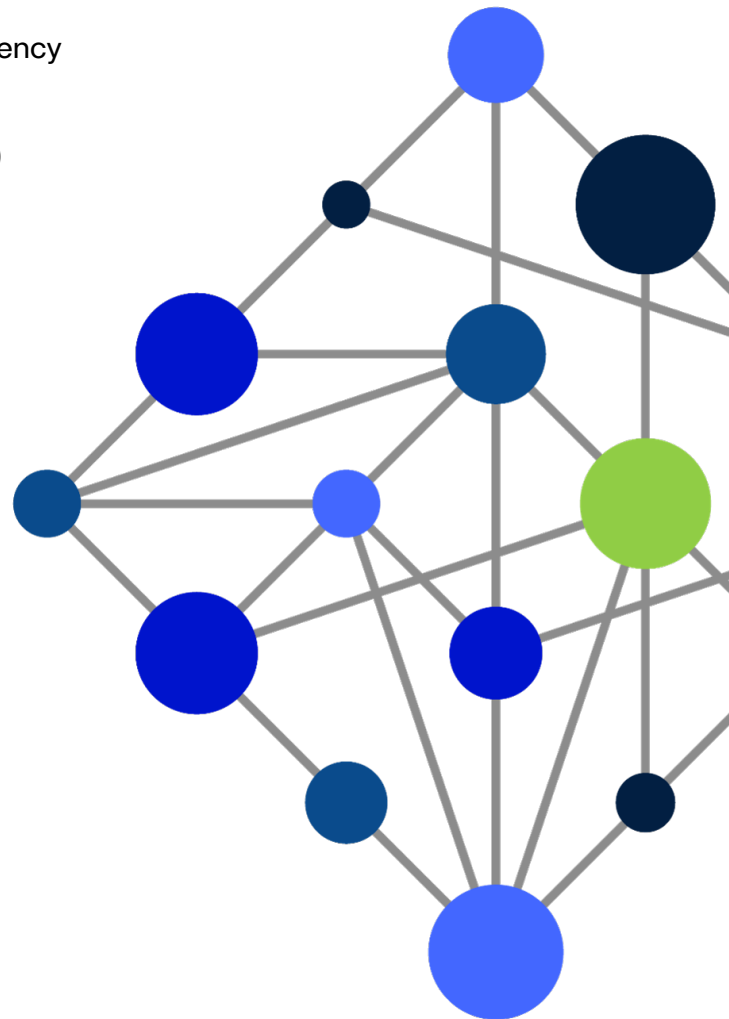


Our methodology

HDMS is excited to announce the release of our latest SDoH methodology. We leveraged Enterprise SDoH data derived from the following sources:

- Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA)
- United States Environmental Protection Agency (US EPA)
- Health Resources and Services Administration (HRSA)
- Centers for Disease Control and Prevention (CDC)
- Centers for Medicare & Medicaid Services (CMS)
- United States Department of Agriculture (USDA)
- Housing and Urban Development (HUD)
- American Community Survey (ACS)
- FBI Unified Crime Reporting

SDoH, although experienced by individuals, exist at the community level. Organizations that learn about the communities their employees, members and patients live in can customize recommendations to address their needs and barriers to their well-being.



Over 120 SDOH dimensions and measures in the HDMS methodology

23 categorical indexes can be categorized into 12 key areas:

- Social context
- Economic context
- Health care context
- Education
- Housing context
- Risk of a natural disaster
- Physical infrastructure
- Race and ethnicity
- Language
- Family structure
- Air and water quality
- Crime prevalence

SDoH analytic content

Use social determinants data for results-driven personalized strategies

Modular dashboards, personalized narrative

HDMS offers an out-of-the-box collection of SDoH dashboards. These comprehensive views give immediate insights into common areas of inequity through health care metrics such as ER utilization, cost of inpatient/outpatient visits and Rx.

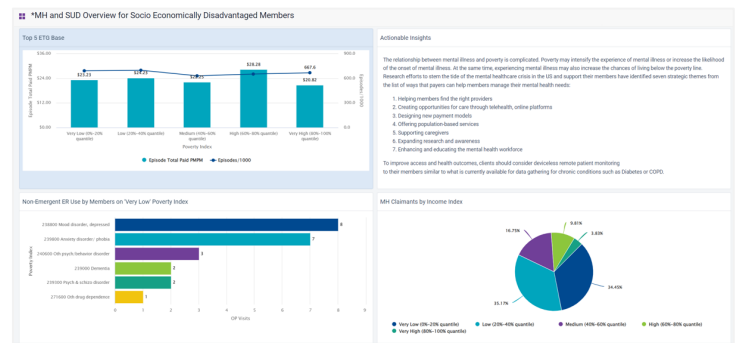
Use dashboards as is or customize. Users have direct access to the extensive suite of over 120 SDoH indices and attributes for self-service investigations.

Organizations can use SDoH analytics like all data visualizations and create custom views, pathways and homepage elements.

Understanding the indices

HDMS SDoH indexes and attributes are calculated at a census block group level. This is a highly granular and impressively precise division of a county. There are over 225,000 census block groups in the U.S., as opposed to census tracts, of which there are over 50,000 nationwide.

Each SDoH index represents a risk of a certain referenced condition or situation occurring in the census block group where a member lives. Higher values represent higher risk of a given condition occurring and a more disadvantaged situation for a member.





What can we do with this data?



Economic explorations

- Unemployment index
- Income index
- Housing quality index
- Housing desert index
- Housing ownership index



Social explorations

- Disability index
- Education index
- Food access index
- Poverty index
- Social isolation index
- Diversity index
- Social risk index



Care culture explorations

- Health infrastructure index
- Health habits index
- Health insurance access index
- Use of preventive services index
- Technology access index
- Transport availability index
- English language deficiency index



Environmental explorations

- Air quality index
- Water quality index
- Natural disaster index
- Crime index

SDoH analytics in action

SDoH insights

A team performed analysis of employees spread across the East Coast and Midwest.

By looking at ER cost/utilization and transportation availability index data, key insights revealed that ER visits/1,000 and ER visits paid per member per month (PMPM) was noticeably higher in communities facing transportation issues.

This trend was again confirmed while investigating inappropriate ER visits in high index census block groups – ER visits categorized as non-emergent, primary care appropriate or preventable/avoidable.

The team recommended and justified the deployment of mobile units offering primary care and offering low/no-cost virtual options.

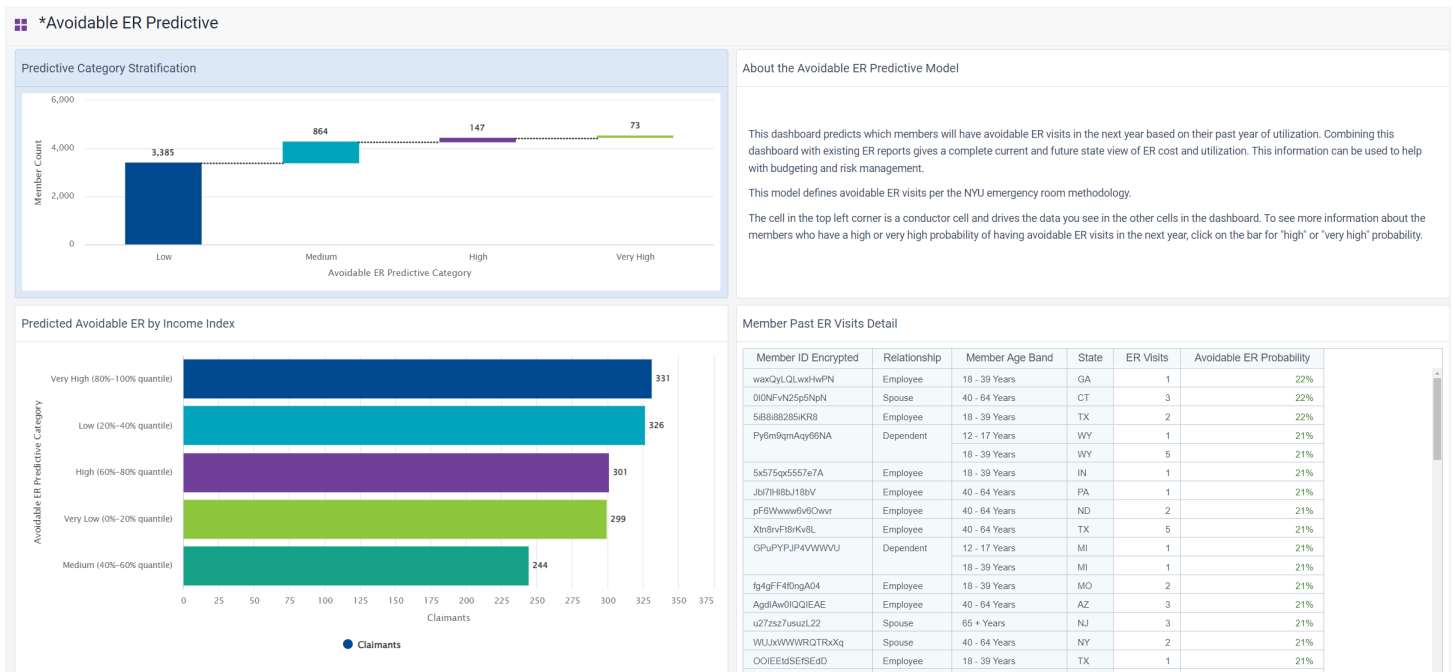


SDoH analytics in action

SDoH analytics and predictive models

Overlay SDoH analytic results with HDMS predictive model outputs like future ER visits.

From insights, drill to member details. Proactively redirect utilization at a member level. Personalize and target communications to reduce future health costs and create more positive care outcomes.



There is so much more to learn about HDMS Enlight®

Health Data & Management Solutions (HDMS) provides health data and analytics solutions to payors. Software and cloud environments are constantly changing and evolving. HDMS reserves the right to release software that differs from what is communicated in this document.

We'd love to help you transform health data into a critical resource for building better health and health opportunities. Contact us for more insights and follow us on LinkedIn.