PRECISION (PERSONALIZED) MEDICINE:

Leveraging Social Determinants of Health

Social determinants of health (SDOH) refer to the non-medical factors that influence health outcomes. These factors are shaped by the environments in which people live, grow, work, play, and age, as well as the broader societal systems that impact daily life. SDOH encompasses a wide range of conditions and influences that can either promote or hinder health, well-being, and quality of life.

The main categories of SDOH include:

ECONOMIC STABILITY

Refers to factors such as income, employment, and access to financial resources. Economic stability is linked to the ability to afford essentials like food, housing, and healthcare, and affects the overall health of individuals and communities.

EDUCATION ACCESS & QUALITY

This includes access to high-quality education, from early childhood through higher education, as well as the ability to perform well academically. Education is closely tied to future employment opportunities and health outcomes, with higher education levels generally leading to better health.

HEALTH CARE ACCESS & QUALITY

Ensures that individuals have access to necessary health services, including preventive care, treatment for illnesses, and management of chronic conditions. Adequate health care access can significantly reduce health disparities and improve overall health outcomes.

NEIGHBORHOOD & BUILT ENVIRONMENT

The physical environment in which people live, including the availability of safe housing, clean air and water, transportation, and access to recreational spaces, all affect health. People living in unsafe or poorly maintained neighborhoods may face higher health risks.

SOCIAL & COMMUNITY CONTEXT

This includes the social networks and support systems that individuals have, as well as factors like community engagement, social cohesion, and the impact of social issues such as discrimination or violence. Positive social connections can enhance health, while isolation or discrimination can harm it.

These determinants often contribute to health disparities, where certain groups experience poorer health due to unfavorable social or economic conditions. Addressing SDOH is critical for improving health equity and reducing health

disparities across populations. Programs and policies aimed at improving SDOH, such as increasing access to education, healthcare, and economic resources are essential for fostering better health outcomes for all.

Payers, such as health insurance companies, use Social Determinants of Health (SDOH) data to enhance care delivery by addressing the broader social factors that affect health outcomes. By integrating SDOH into their practices, payers can more effectively identify high-risk populations, improve care coordination, and reduce health disparities, ultimately leading to better overall health outcomes.

Here are some key ways payers leverage SDOH information:

Identifying High-Risk Populations

Payers can analyze SDOH data to identify individuals who are at higher risk of poor health outcomes due to social factors. For example, people experiencing housing instability, food insecurity, or low income may be more likely to have chronic health conditions or require more frequent medical care. By recognizing these risks, payers can target interventions to support these individuals before health issues escalate.

Tailored Care Plans

SDOH data allows payers to create personalized care plans that address not only medical conditions but also the social challenges that contribute to poor health. For instance:

- **Transportation assistance** to help patients attend medical appointments.
- **Connecting patients to community resources** for food security, housing, or mental health services.
- Providing **job training programs** or educational resources to help individuals improve their socioeconomic status.

These personalized interventions help improve patient outcomes by addressing the full scope of factors impacting their health.

Care Coordination

By integrating SDOH data, payers can enhance care coordination between healthcare providers and community organizations. This might include referring patients to housing assistance programs, social services, or community-based health initiatives. Coordinated care ensures that patients receive the right support, both medical and social, to improve their health and quality of life.

Value-Based Payment Models

In value-based payment models, payers may incorporate SDOH data to incentivize healthcare providers to address social needs alongside clinical care. For example, providers might be reimbursed based on their success in addressing a patient's housing instability or food insecurity, not just clinical outcomes like reduced hospital readmissions. This approach encourages a holistic view of care and emphasizes the importance of social factors in achieving positive health outcomes.

Data-Driven Insights

By collecting and analyzing SDOH data, payers gain valuable insights into the social conditions affecting their member population. These insights allow for the development of targeted strategies and programs designed to address specific needs, such as increasing access to nutritious food, improving neighborhood safety, or helping individuals find stable employment. Data-driven insights enable payers to proactively address the root causes of poor health rather than just treating symptoms.

Examples of SDOH Payers Might Consider					
Income Level Low-income individuals may face challenges in affording healthcare, housing, and nutritious food, impacting their overall health.	Housing Stability People experiencing homelessness or unstable housing conditions are at greater risk for chronic health conditions and poor mental health.	Food Security Lack of access to healthy, affordable food contributes to issues like obesity, malnutrition, and chronic diseases such as diabetes and hypertension.	Education Level Lower education levels are often linked to poorer health outcomes, limited access to quality employment, and higher rates of chronic diseases.	Access to Transportation Limited access to reliable transportation can prevent individuals from attending medical appointments, accessing healthy food, or engaging in physical activity, all of which affect health.	Neighborhood Safety Living in a high-crime or unsafe neighborhood can lead to increased stress, mental health issues, and a reduced ability to engage in physical activity or seek medical care.

By addressing these and other SDOH factors, payers can improve health outcomes, reduce healthcare costs, and promote health equity. The integration of SDOH into healthcare systems not only improves patient experience but also fosters a more comprehensive and sustainable approach to healthcare delivery.

Our Expertise and Experience

The Well Solutions Group brings deep and broad knowledge of how to acquire and leverage consumer data and social determinants of health for enriched analytics. This expertise begins with understanding the vendor dynamics (who can provide the data, and what their capabilities are. For example, does vendor have the ability and willingness to customize with "value added" exclusive data elements, and/or groupings suitable for client's analytic purposes.

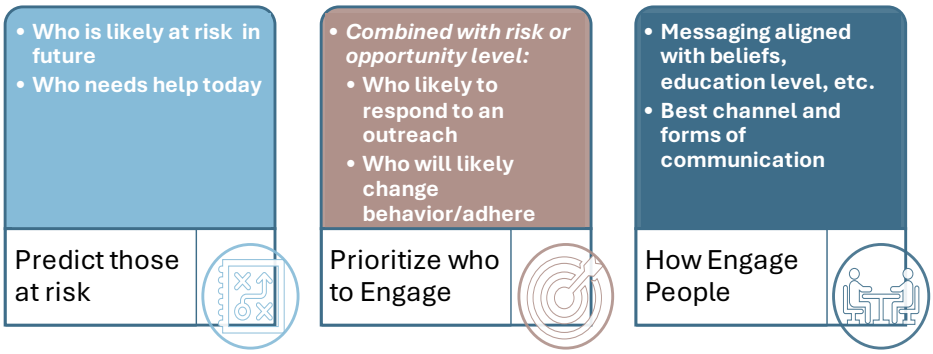
SDOH Purchase Option Types:

Option Type	Example	Pros	Cons
Data Elements – Select your own mix to enrich your insights and models.	Element Category Examples: • Lifestyle • Education • Financial • Channels and Media • Ailments	Customized to your specific focus. Ease to see patterns at the specific variable level Reduced risk for vendor retiring a model relying upon.	Each element has a fee and can add up quickly Must understand how gathered and determined, the more elements the more "homework" A lot of extra analysis to build custom
Data Bases – Key elements for a target group	Example Databases: • Mature Market • Consumers • Family & Children	Focused on elements surrounding your target market Usually direct connection vs a model approach	If you expand product or population targeting, elements built in may not be available for new population
Model & Segments	Example: • Health & Behavior • Mind Base • Digital Neighborhoods • Socio Economic & Risk	Segment and sub segments typically provide insight on the risk level of the individual, media channels they respond to as well as how to message to them	Can be retired by vendor "Black box" on how developed and what drives classification

Once the necessary data has been acquired, we have extensive experience in combining client and vendor data, stratifying the data and segmenting populations into pre-defined health risk and behavioral groupings. This typically involves several iterations that reveal what the data can help inform in terms of the best fit categorizations for analytic purposes.

www.wellsolutionsgroup.com info@thewsg.com 833.952.9355 www.datawellinformatics.com info@dwlinfo.com 833.328.2935

Improve Outcomes and Effectiveness of Programs:



As a case in point, DataWELL recently worked with a client who was developing programs to improve outcomes for their patients. This organization took steps to capture information on social determinants of health via their initial patient risk assessment interview. For example, asking specific questions about safety in the home, and concerns about having sufficient resources in place to follow through on medical advice and access to food and medicines. In other words, curating questions that would pertain to attributes and life circumstances that are expected to play a role in having a good outcome so that the information gathered could be more directly actionable.

DataWELL was able to assist client in taking these data points and aligning them with other pertinent clinical information from patient charts, creating an effective and efficient way to establish priorities for outreach and modifications to clinical programs that addressed the needs and vulnerabilities of their patient population.

This is a good example of a way to make sure that a focus on social determinants of health can become an integral part of a clinical program and practice. DataWELL has the experience and expertise to assist clients interested in making such an investment, as a more cutting-edge way to incorporate a "whole person" perspective toward achieving positive outcomes.

www.wellsolutionsgroup.com info@thewsg.com 833.952.9355 www.datawellinformatics.com info@dwlinfo.com 833.328.2935