

WHITE PAPER

Six myths about social determinants of health data that payers shouldn't believe

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SIX MYTHS ABOUT SDOH DATA THAT PAYERS SHOULDN'T BELIEVE

Healthcare payers are now at a crucial crossroad that demands greater predictive accuracy of healthcare risk. Rising medical costs and a continuing shift to value-based care have led to the introduction of medical loss ratios and other regulations focused on improving health outcomes and lowering cost of care. Employers are increasingly evaluating insurers based not only on cost and coverage, but also on wellness and care management program offerings. As individuals enroll for the first time or switch health plans, payers need to be able to assess risk with minimal or no claims data. As a result of these trends, member risk stratification and proactive intervention have become paramount.

Social determinants of health (SDOH), including information on relatives and associates, assets, trends over time, neighborhood and household characteristics and more, can be utilized to improve care management and risk stratification activities.

While the value of SDOH is becoming clearer, defining what data provides insight into SDOH and how to use it is far less so. Learn to find the truth and separate the myths on what socioeconomic data is and isn't and how healthcare organizations can tell the difference.



**25¢ of every healthcare dollar
is spent on health conditions that
result from changeable behavior¹**

MYTH VS TRUTH



Socioeconomic data is just more noise in an already data-overloaded world.



Medical care determines only 20% of overall health—while social, economic and environmental factors determine 50% of overall health.²

To effectively achieve better health outcomes for members, payers cannot afford to ignore 50% of what determines their members' overall health. The National Quality Forum, CDC and WHO have all acknowledged the impact and importance of addressing SDOH. Various studies have shown the impact that social determinants have on health:

Social isolation can increase risk of heart disease by 29% and stroke by 32%.³

Poorer neighborhoods have higher rates of obesity, likely due to safety concerns and barriers to physical activity and healthy foods.⁵

Lower education levels are correlated with higher likelihood of smoking and shorter life expectancy.⁴

75-90% of primary care visits are due to effects of stress—money, work and family responsibilities are top 3 causes of stress.⁶

Social factors account for over **1 in 3** total deaths in the U.S. annually.⁴

Innovative payers are already determining ways to incorporate socioeconomic data into their predictive modeling and care management programs. With SDOH data, payers can design better care management programs to meet the needs of their members. More accurately identifying high-risk members can help payers to become more effective and efficient by allocating limited resources to support the members most in need.

MYTH VS TRUTH



All data regarding a person's lifestyle, environment, situation and behaviors relates to their social determinants of health.

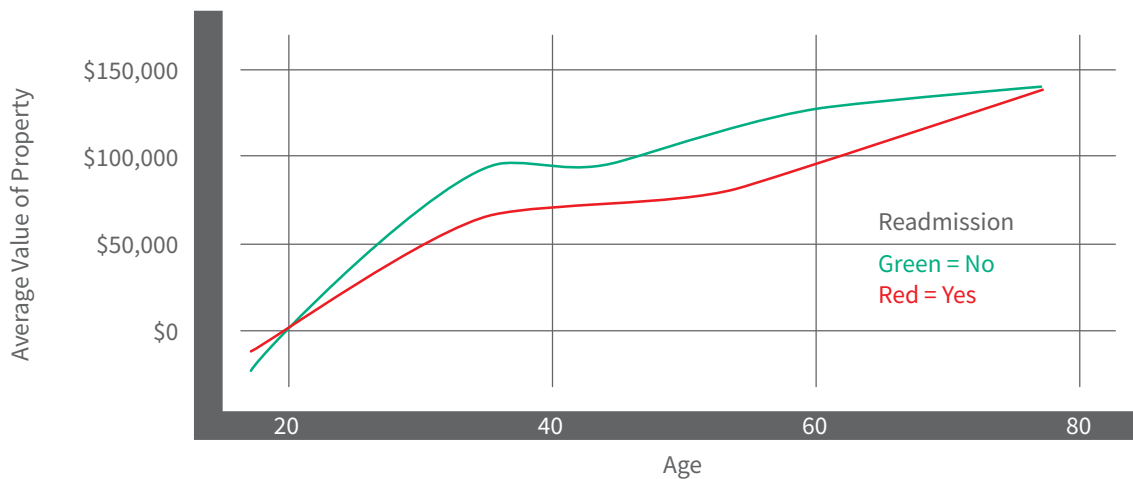


While the data may be useful in some capacity, not all data on a person is a social determinant of health.

Although there is a myriad of basic demographic data and survey data available to payers today, much of it has limited potential for improving accuracy or identifying additional costs and risks. The key to addressing SDOH is to identify a source of data that is continually refreshed, provided in a consistent format, based on reliable sources such as public records, and contains data that has been clinically-validated to predict healthcare outcomes.

Clinically validating attributes is critical to successful predictive analytics because some attributes do not correlate strongly to health outcomes. For example, while knowing how close an individual's nearest relative or associate lives to the member does correlate to health outcomes; knowing how many of those relatives or associates have registered automobiles does not. In an analysis of over 560 attributes, 442 were found to correlate with health outcomes.

Even when attributes are clinically-validated, different attributes correlate to different outcomes with different accuracy strengths.



Predictive accuracy is not just a matter of adding more data. Put another way, it is a science to determine which datasets enhance predictive power—and which simply add to the noise.

MYTH VS TRUTH



Examining only individual socioeconomic attributes about a person will allow you to make accurate predictions about a member's overall health risk.



Focusing in on individual attributes, rather than the combined picture, can be misleading.

When predicting risk and personalizing care management, it is crucial to view a person holistically across multiple categories of social determinants, ranging from social and community context to economic stability and education to neighborhood and built environment.

Any attribute on its own is not enough to develop an accurate risk score understanding. By using a combination of relevant attributes, a more complete picture emerges. For example, low income often correlates with poorer health outcomes. However, low income plus college attendance may indicate that the low income is simply a temporary status. In this scenario, the member is actually more likely to attain a better health outcome since education often leads to better career opportunities and a higher future income.

MYTH VS TRUTH



You must conduct surveys or use demographic data to get socioeconomic data.



LexisNexis® has access to over 10,000 sources of public and proprietary records.

Trying to understand a member's social, environmental and economic situation and how the combination impacts health outcomes requires leveraging a lot of data. Demographic data may be too limiting or get outdated quickly. Survey data is difficult to refresh on a regular basis and is dependent on the accuracy of the member supplying the data and on the staff member manually entering the results in the system.

Instead of relying on demographic or survey data, public records data provides a reliable alternative. More than 10,000 public and proprietary data sources, providing comprehensive, longitudinal and current socioeconomic information on members, continuously feed into LexisNexis. This data is linked to a unique LexID® to create identity profiles for each individual. Then, proprietary linking technology matches member lists sent by payers to these approximately 280 million consumer identities and returns individual-level socioeconomic attributes and scores.

MYTH VS TRUTH



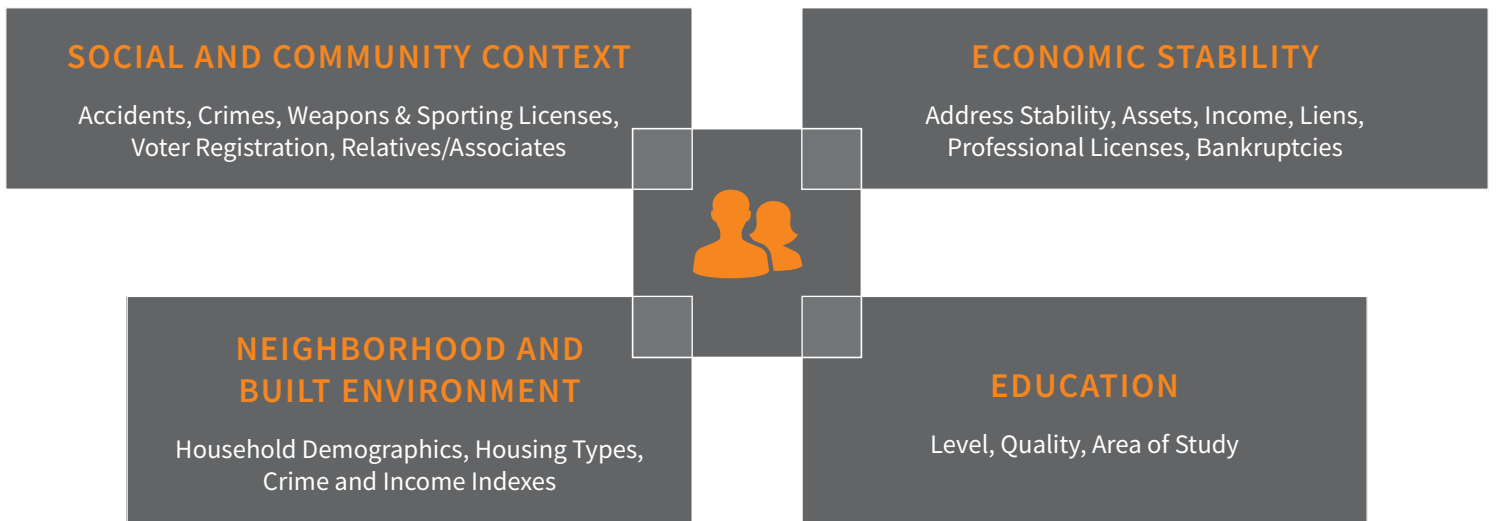
Aggregated data at the zip code or census level can be used to personalize care for a member.



For personalizing care, individual level data is necessary to explore the combined impact of socioeconomic data.

For market expansion and resource allocation decisions, looking at an aggregated level can be a useful option. For personalizing member care, however, hundreds of attributes need to be considered when determining an individual's health risk. Within a single zip code, it is not unusual to see variance in income levels, crime rates and other factors impacting an individual's neighborhood and built environment. This is why it is important to look at an individual's actual address. Further, focusing on zip code alone ignores the influences of education, economic stability and social and community context.

SOCIAL DETERMINANTS OF HEALTH ARE THE X FACTOR NEEDED TO IDENTIFY WHO NEEDS HELP AND HOW TO HELP THEM ACHIEVE OPTIMAL HEALTH



MYTH VS TRUTH



Socioeconomic data is only useful in combination with clinical data.



Socioeconomic data is valuable with or without clinical data.

Adding socioeconomic data to clinical data can help payers to personalize care and more accurately predict risk. Even in the absence of clinical data, using only socioeconomic data has proven to more accurately predict risk based on total cost than traditional age/gender predictions alone. A premier engagement solution provider for employers and health plans compared LexisNexis® Socioeconomic Health Scores® to claims data and validated the scores' accuracy for overall health risk and risk among seven conditions: diabetes, cancer, cardiovascular conditions, end-stage renal disease, musculoskeletal conditions, gastrointestinal conditions and respiratory conditions. Members with the top 10% of Socioeconomic Health Scores did have significantly higher risk than average and were more likely to have a chronic condition.

Even small lifts of a percent or two in accuracy over traditional age/gender predictions can lead to big impacts. Using socioeconomic scores to more accurately identify higher-risk members—who account for the majority of healthcare costs—and proactively address their care can lead to 10% to 20% savings over using traditional age/gender model risk stratification alone.⁷

Conclusion

Once the myths are carefully reviewed and discarded, the conclusion becomes obvious: socioeconomic data is a vital force for healthcare risk prediction. Though these attributes do not replace the value of medical data, they can be very powerful in the absence of medical data or as a supplemental data source to more comprehensively understand virtually any individual's risk level.

Of all the data out there, LexisNexis data offers the capability of deciphering what is truly relevant from a clinical perspective. With the industry's most comprehensive and accurate collection of data on SDOH branded as Socioeconomic Health Attributes®, every attribute is validated using industry-leading predictive analytics. LexisNexis also utilizes these attributes in Socioeconomic Health Scores® to provide further insight into risk stratification.

The more organizations embrace socioeconomic data to understand the social determinants of health of their members, the more they can better understand and manage health risk. We've only just begun to explore the possibilities.

For more information, call 866.396.7703 or visit
risk.lexisnexis.com/healthcare

¹ “Medicine’s Response to Lifestyle-Related Preventable Illness,” AMA Journal of Ethics, <http://journalofethics.ama-assn.org/2013/04/fred1-1304.html>, (April 2013)

² Bridget C. Booske et al, “Different Perspectives for Assigning Weights to Determinants of Health,” <http://www.countyhealthrankings.org/sites/default/files/differentPerspectivesForAssigningWeightsToDeterminantsOfHealth.pdf>, (February 2010)

³ Dhruv Khullar, “How Social Isolation is Killing Us,” The New York Times, https://www.nytimes.com/2016/12/22/upshot/how-social-isolation-is-killing-us.html?_r=0, (December 22, 2016)

⁴ Harry J. Heiman and Samantha Artiga, “Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity,” The Henry J. Kaiser Family Foundation, <http://www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/>, (November 4, 2015)

⁵ Alice Park, “Change Your Neighborhood, Improve Your Health,” Time, <http://healthland.time.com/2011/10/20/change-your-neighborhood-improve-your-health/>, (October 20, 2011)

⁶ JL Boone and JP Anthony, “Evaluating the Impact of Stress on Systemic Disease: The Most Protocol in Primary Care,” The Journal of the American Osteopathic Association, <http://jaoa.org/article.aspx?articleid=2092899>, (May 2003)

⁷ Based on estimated calculations from LexisNexis data scientists



Health Care

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Our healthcare solutions combine proprietary analytics, science and technology with the industry’s leading sources of provider, member, claims and public records information to improve cost savings, health outcomes, data quality, compliance and exposure to fraud, waste and abuse.

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