Developing a care management plan that reduces the likelihood a patient will be readmitted to the hospital within 30 days of discharge can help to improve patient health outcomes and significantly cut hospital costs.

In a value-based reimbursement environment, reducing readmissions is critical for healthcare providers treating Medicare patients with these beneficiaries contributing the most to high hospital costs related to readmissions.

Addressing the factors leading to hospital readmissions among this patient population is key to succeeding as a Medicare accountable care organization (ACO) where financial risk is high. But reducing hospital readmissions rates depends on much more than direct healthcare delivery, according to LexisNexis experts.

In a recent HealthITAnalytics.com webcast, LexisNexis Risk Solutions Health Care Strategic Solutions Consultant Director Rich Morino and Market Planning Director Erin Benson stressed the importance of using the right data to meaningfully address the factors contributing to a patient population's ability to maintain treatment plans and improve overall health.

Social determinants of health data (SDOH) play a much more significant role in determining whether a patient will be readmitted to the hospital than many providers realize. “Only 20 percent of health outcomes are a direct result of the care provided, so gaining insight into the patient’s social, economic, and behavioral conditions are critical if you want to keep them healthy,” said Morino.

Collecting population health data about these extra-physiological factors enables healthcare organizations to gain more accurate insights from analytics and predictive modeling. Providers have a more comprehensive picture of the factors beyond their control that may influence patient health.

“Social factors account for over 33 percent of total deaths—social, economic, and environmental factors determine 50 percent of all quality of health outcomes,” said Morino.

With accurate and rich population health data, healthcare organizations can help patients change behaviors detrimental to their health. Addressing a patient’s unhealthy habits can have a significant effect on a hospital’s bottom line since at least 25 percent of healthcare spending treats diseases or disabilities resulting from potentially modifiable behaviors.

“Without the appropriate insight into our patient's social, behavioral, and economic situation, we’re effectively using a magic eight ball to assess where our own health risks reside,” said Morino.

Available SDOH solutions are becoming more useful as more data is made available and collected. First-generation attempts to use community data to address SDOH missed the mark, said Market Planning Director Erin Benson. “It missed all the other categories of social determinants, which really require patient-level information,” she explained.

Community data about geographic locations can be misleading. “While some neighborhoods are homogenous and assumptions can be inferred, other neighborhoods such as in urban areas have luxury condos and section 8 housing next door to each other,” said Benson.

Second-generation SDOH solutions incorporated data sources that provided patient-level detail, but the data was not built for healthcare use cases. Instead, these data sets came from marketing and consumer data companies and were difficult to use in creating predictive models.

“The match and fill rate tended to fluctuate widely,” said Benson. “Not all data about a person is a social determinant of health.”

Next-generation SDOH solutions are better equipped to address multiple categories of SDOH through higher-quality data.
“We need to zero in on the data that actually correlates to health outcomes,” she said.

There are several ways healthcare organizations can collect and leverage SDOH for population health management. Two common methods include raw attributes and predictive risk scores.

Raw attributes are used for predictive modeling. This data can be combined in clinical analytics models to better assess risk for patients with or without claims data. Raw attributes correlate to total cost, hospitalizations, prescription costs, emergency room visits, stress, and motivation to care for one’s own health.

“Data scientists can identify data that is relevant by clinically validating socioeconomic attributes against actual healthcare outcomes, such as readmission rates or medication adherence.”

“These attributes don’t replace the value of claims and clinical data,” Benson elaborated. “They can be powerful in the absence of such data or as a supplemental data source to more comprehensively understand the individual.”

Meanwhile, predictive risk scores are used directly in care management.

“Health risk prediction scores provided at the patient level and leveraging validated socioeconomic attributes to provide a picture of future risk can be useful for those who want a quick way to stratify their patient population,” said Benson.

Integrating socioeconomic attributes and risk scores into care management and patient engagement strategies can help providers accurately identify patients who require further action and improve care management and discharging planning.

More personalized care can also lead to better-engaged patients and boost patient retention rates. Leveraging SDOH to take preventative action can also help healthcare organizations improve their performance against quality metrics across federal incentive programs.

“Social determinants of health information only furthers the ability of care providers to prevent complications down the road,” said Benson.