Case Study Analytics as Drivers in Creating a Culture of Wellness



Even health care organizations are not exempt from the rising costs of providing health benefits for their employees. A case in point is Sentara Health care, a Norfolk, Virginia-based integrated health care delivery system that operates more than 100 care-giving sites, as well as a full range of health coverage plans and home health and hospice services.

Sentara addressed this challenge with a renewed focus on wellness, leveraging its organizational integration to facilitate the change and relying on analytics from LexisNexis[®] to make the right decisions for the employer, its providers and its 24,000 employees.

Launched in 2008 in partnership with Optima Health, Sentara's health insurance division, the wellness program – Mission: Health – sought to lower costs by encouraging employees to improve their health and maintain healthy lifestyles. Once in place and delivering positive results, the program also was intended to be a model for use by other employer groups.

For LexisNexis, which has partnered with Optima Health for eight years, the endeavor served as a showcase for solutions that provide health plans and insurers with systematic planning, analytics, reporting and predictive capabilities to drive operational efficiencies, enhance quality and improve member services to support profitable growth.

Karen Bray, RN, PhD, Optima Health's vice president of clinical care services, was instrumental in developing the clinical protocol and processes behind the program, as well as creating a structure that established trust and collaboration across the medical group.

Key to her endeavors, she said, was the organization's integrated structure, which proved to be a two-edged sword.

On the one hand, the different segments operated independently and would have to be convinced to convert to a more collaborative structure, she explained. On the other hand, she said: "The integrated system gave us the opportunity to look at a disease state across all the places where disease states are managed, in the hospital, the doctor's office, the nursing home, the health plan."

That "complete data," coupled with powerful analytics from LexisNexis allowed the team not only to educate audiences throughout the organization, but also to improve programs while enabling the transformation to a wellness-centered focus.

Analytics at Work

The planning team created a matrix for the organization's clinical integration activities that included four components:

- Clinical analytics (population profiles) and operational coordination
- Chronic disease population management
- Incentive programs
- Outcomes measurement and reporting



They also looked at challenges from the perspectives of three key groups, creating a physician focus, an employer group focus and a member/employee focus for the project.

At each touch point, powerful analytics would prove invaluable in making the case for wellness and attaining the organization-wide consensus needed to make the program work.

The Physician Group

With physicians, data was used to broaden their view from single patients to their patient population, with analytics that shed light on issues from member attrition to use of primary care physician services.

With the health plan's more robust information and LexisNexis algorithms, physicians could see the gaps in their own data, creating the opportunity to determine why a patient stopped coming or whether those that chose them as their primary care physicians actually ever used their services.

This drove home the point that important questions were going unanswered. Had patients gotten better or gone elsewhere? Were they using only specialists or needed only occasional urgent care? Who really was treating them and what was the true status of their health?

"With LexisNexis analytics," Dr. Bray said, "if we can agree who the physician is, we can analyze the population related to physician provision of services."

That analysis, according to LexisNexis, allows organizations to intelligently allocate resources for care coordination and management, identify gaps in care, proactively identify at-risk patients and understand the patient mix, risk and actionable events.

Significantly, analytics on episode treatment groups and pharmacy and inpatient medication data pointed the way to the three participant segments that were responsible for 80 percent of Sentara's health care costs – those persons with diabetes, congestive heart failure and coronary heart disease.

This figure was in line with U.S. Department of Health and Human Services statistics, which have shown that 75 percent of health care dollars are spent on chronic conditions such as diabetes, obesity, cardiovascular disease and asthma.

These statistics make the case for wellness programs, as most of these conditions are preventable through positive health habits. They also give weight to patient-centric medicine, which fosters coordination of care and medication reconciliation, as well as strategies for prevention.

The Employer Group Perspective

As Dr. Bray noted, health plans are unique in that they meet with employer groups, the actual payers. This allows them to get the employers' perspective and help them manage their costs.

When addressing wellness with employer groups, the Mission: Health team used both clinical and financial analytics to provide highly detailed reports on the groups' beneficiaries, breaking them down by category into those who were well, low-risk, moderate-risk or high-risk with multiple diseases and those requiring complex and intensive care.

They also provided information such as the impact of screenings to catch potentially catastrophic diseases early on and other preventive measures.

With this information, employers could see where their dollars were going and where they should focus their attention, creating strategies to make the most impact.



Employee Buy-In

The fact is, Dr. Bray said, wellness programs historically have achieved only modest success. That's because they generally appeal to those employees already committed to healthy lifestyles but are not incentivized enough to engage and motivate those with the greatest health concerns to make the best choices.

As Sentara wanted to use Mission: Health as a model, it had to have the data and analytics to prove it could be successful.

In its goal of improving employee health, according to Dr. Bray, Sentara / Optima Health built on its strengths, including an existing wellness program (though with less than 20 percent participation) and its comprehensive health data.

LexisNexis' Risk Navigator suite and its access to analytics transform health care data into actionable information and create customized prevention programs.

Program Basics

The wellness program begins with a Personal Health Profile, which must be completed by each plan participant each year at enrollment.

This information plus biometrics regarding cholesterol, body mass index, blood pressure, tobacco use and frequency of exercise are used to determine levels of risk. In the effort to change behaviors and encourage participants to maintain or improve their health, monetary incentives in the form of employee premium reductions are in place for both the healthy and those willing to address their health issues with the help of a coach.

Results

Today nearly 80 percent of Sentara's benefit-eligible employees have opted into the program, and employee health indicators have improved appreciably.

As a result, the company has saved \$3.4 million, representing a 6-to-1 return on investment – almost double the ROI of most wellness programs, which, according to a Harvard report, have reduced medical costs by an average of \$3.27 for every dollar spent on them.

This improvement in both individual health and the organizational bottom line explain Dr. Bray's summation of creating such programs: "It takes time. It is not easy. But it is worth it!"

Going Forward

According to a 2010 PriceWaterhouse Coopers report, nearly 90 percent of U.S. businesses have some form of wellness program in place, with two-thirds of them indicating their intentions to improve or expand their programs within a year.

For those initiatives to reach or exceed the success attained by Sentara / Optima Health, they will need superior analytics and advanced business intelligence on both the macro (organizational) and micro (patient) level to effectively design motivating programs and manage them profitably, using ongoing measurement to make adjustments as needed.



Case Study Snapshot

The overall health care costs for 2009 were a stunning turnaround from the previous year's figures.

Total costs, including medical claims, incentives, wellness claims and program costs, totaled \$27.6 million, representing a \$3.4 million savings over 2008.

Mission: Health Program Costs			
	Mission: Health Actual 2007	Mission: Health Actual 2008	Mission: Health Actual 2009
Disease Management Claims	\$2,877,414	\$3,400,223	\$2,144,630
Disease Management Incentives	\$0	\$206,120	\$217,780
Wellness Claims	\$24,146,530	\$27,579,924	\$25,485,003
Program Ops	\$0	\$528,500	\$463,396
Total	\$27,023,944	\$31,714,767	\$28,310,809
Net Variance 08 – 09: Favorable / (Unfavorable)			\$3,403,958



Year 2 2010 Personal Health Profile Screening Results ng Results ed by Medical Plan

For More Information Call 800.869.0751 or visit www.lexisnexis.com/risk/healthcare

About LexisNexis® Risk Solutions

LexisNexis Risk Solutions (www.lexisnexis.com/risk/) is a leader in providing essential information that helps customers across industries and government predict, assess and manage risk. Combining cutting-edge technology, unique data and advanced analytics, Risk Solutions provides products and services that address evolving client needs in the risk sector while upholding the highest standards of security and privacy. LexisNexis Risk Solutions is part of Reed Elsevier, a leading global provider of professional information solutions across a number of sectors.

Our health care solutions assist payers, providers and integrators with ensuring appropriate access to health care data and programs, enhancing disease management contact ratios, improving operational processes, and proactively combating fraud, waste and abuse across the continuum.

About Sentara Healthcare

Sentara operates more than 100 care giving sites, including 10 acute care hospitals with a total of 2,349 beds, six outpatient care campuses, seven nursing centers, three assisted living centers, eight advanced imaging centers and about 380 primary care and multi-specialty physicians. Sentara also offers a full range of award-winning health coverage plans, home health and hospice services, physical therapy and rehabilitation services. In addition, Nightingale - the region's first air ambulance service - has reached out to more than 16,000 patients since its inception in 1982.



The opinions expressed within this case study represent customer opinions. LexisNexis believes this case study experience generally represents the experience found with other similar situations. However, each customer will have its own subjective goals and requirements and will subscribe to different combinations of LexisNexis services to suit those specific goals and requirements. This case study may not be deemed to create any warranty or representation that any other customer's experience will be the same as the experience identified herein. LexisNexis uses the customer's trademarks herein with the customer's permission.

LexisNexis Population Health Monitor and Risk Navigator Clinical do not constitute a "consumer report" as that term is defined in the federal Fair Credit Reporting Act, 15 USC 1681 et sec. (FCRA). Accordingly, LexisNexis Population Health Monitor and Risk Navigator Clinical may not be used in whole or in part as a factor in determining elegibility for credit, insurance, employment or other permissible purpose under the FCRA. Due to the nature of the origin of public recoird information, the public records and commercially available data sources used in reports may contain errors. Source data is sometimes reported or entered inaccurately, processed poorly or incorrectly, and is generally not free from defect. This product or service aggregates and reports data, as provided by the public records and commercially available data sources, and is not the source of the data, nor is it a comprehensive compilation of the data. Before relying on any data, it should be independently verified.

LexisNexis and the Knowledge Burst logo are registered trademarks of Reed Elsevier Properties Inc., used under license. Copyright © 2014 LexisNexis. All rights reserved, NXR05029-0