Overview

The need
Schneck Medical Center needed to develop a strategy to address a disproportionately high number of chronic obstructive pulmonary disease (COPD) patients in its population and reduce the associated readmissions.

The solution
The team used IBM® CareDiscovery® to identify the root of the hospital’s rising readmission rate and formulate a plan to improve its patient-centric approach across the care continuum.

The benefit
The data available in the CareDiscovery solution helped the hospital focus efforts to improve care for COPD patients, resulting in an 80 percent reduction in the unplanned COPD readmission rate and hundreds of thousands of dollars in savings.

Schneck Medical Center
Targeting readmission rates for COPD with the CareDiscovery performance improvement solution

Schneck Medical Center is an independent, 93-bed community hospital with 1,000 employees in Seymour, Ind. It was founded in 1910.

Susan Zabor, Vice President of Clinical Services for Schneck Medical Center, was proud of the hospital’s 100-year legacy, and knew it was enjoying measurable success in the form of a 2011 Baldrige Award, a Centers for Medicare & Medicaid Services (CMS) five-star rating and positive results in CMS pay-for-performance initiatives. But because of an organizational culture that was steeped in data, she and her team knew there were aspects of the hospital’s performance that were not at the levels they needed to be. She turned to IBM® Watson Health™ to help benchmark system-wide performance.
“At Schneck, data is the foundation that we use to drive improvement in our organization, and IBM CareDiscovery is a tool that we use to accomplish that,” Zabor said. “We knew we were doing well on process measures and publicly reported measures, but we weren’t doing so well on some bigger issues like complications, mortality and length of stay, and we leaned on CareDiscovery to give us actionable data that was as close to real time as possible to help us improve.”

When Schneck’s leadership used CareDiscovery to conduct its first data review in 2014, they immediately identified a red flag. The hospital had a raw readmission rate of nearly 14 percent, a mark which was continuing to trend upward. What’s more, 10 percent of the facility’s readmissions were due to chronic obstructive pulmonary disease (COPD). These readmissions had cost the hospital in excess of nearly $300,000 that year alone.

“For us, the data determined where we need to focus. It let us know — based on the benchmarking with other peer group hospitals — how we had been progressing, and then it let us see where we need to refocus,” added Shery Tiemeyer, Director of Patient, Volunteer and Long-Term Care Services at Schneck.

**Combating the COPD problem**

With the assistance of the CareDiscovery performance improvement solution, the Schneck team was able to focus its efforts on a disease plaguing its community.

“COPD became our focus. As the third-leading cause of death in the nation, it is very prevalent in the United States, but it’s also incredibly prevalent in the state of Indiana, and specifically in our county, which has a COPD population that’s two times the national average,” Tiemeyer said. “We could see from the data that it was our second-leading cause of readmissions, and that was an opportunity for us from the standpoint of both readmissions and mortality.”

“With CareDiscovery, we decided to look at our readmission rates, our lengths of stay, our mortality rates and also the cost of our COPD patients,” Zabor added. “After we analyzed that data, we saw that we had gaps in performance, and we were able to pull together teams that were able to focus on what resources we needed to close those gaps.”
Schneck’s organizational efforts for COPD patients included developing a long-term care practice. This practice currently includes a physician medical director, a full-time physician, three nurse practitioners and two medical assistants, as well as the hospital’s respiratory care department. This team makes weekly respiratory care visits, incorporates sleep studies into its observations and conducts patient discharge planning. In addition, the hospital put in place new protocols that included the installation of a transition team to help with patient discharge, follow-ups with recently discharged patients and annual facility education regarding COPD.

**Better outcomes and curtailing costs**

Schneck’s team saw impressive results.

“Once we took steps to address our COPD population, we were not only able to reduce our raw readmission rate by 55 percent, but we also saw that the number of COPD patients being admitted to the hospital was dramatically decreasing.” Zabor explained. “That was good news. We could see that because we were taking better care of our patients in the community — through dedicated care focused on COPD, care managers, weekly respiratory care visits — people with COPD were not requiring as many hospitalizations.”

The number of patients admitted to the hospital with a COPD diagnosis fell by 55 percent, from 146 patients in 2014 down to just 66 in 2017. As a result, from 2014 to 2017, the number of unplanned readmissions decreased by 80 percent. The extra cost of the hospital’s readmissions decreased by 99 percent, from over $280,000 to just $3,054.

“The shift to a value-based care model has put one foot in value and one foot in volume,” Zabor explained. “But in the end, we will always choose what is best for our patients, and that is achieving better outcomes for them, and keeping them out of the hospital. With CareDiscovery, that’s exactly what we’ve been able to accomplish.”

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– Susan Zabor, Vice President of Clinical Services at Schneck Medical Center
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Working across the landscape, from payers and providers to governments and life sciences, we bring together deep health expertise; proven innovation; and the power of artificial intelligence to enable our customers to uncover, connect and act — as they work to solve health challenges for people everywhere.

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