Case study: Auburn Community Hospital
Auburn, New York
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Snapshot of Auburn Community Hospital
Located in the Finger Lakes region of central New York, Auburn Community Hospital (ACH) is a not-for-profit, 99-bed acute care facility serving approximately 80,000 people in Cayuga County and the surrounding areas. Its mission is to provide compassionate quality care to its community.

ACH is the sole provider of acute and general hospital services in the area. Over 95 percent of the physicians on staff are board certified in at least one specialty.

The challenge: Using data to drive results
Deploying data to drive decisions, take action and measure results was at the heart of ACH’s challenge. Although the ACH team had access to and was reviewing data and information supplied by 3M Health Information Systems, they knew they could use it more effectively to identify opportunities for improvement in both operations and quality.

The ACH vice president of Quality and Care Transitions, Ann E. Doran, working with the chief financial officer, recognized the important role that data and analytics would play in accountable care and performance-based payment systems. This added a level of immediacy to their quest for actionable data to drive results.

The solution
The path to more effectively using data to drive decision making began with the sharing of data and analytics with the Utilization Review (UR) committee at ACH. This was supplemented by the creation of a multi-disciplinary group that reflects the intersection of quality and finance. This group is called the Preventing Readmissions and Mortality Team, and it is crafting the approaches for improvement on key performance measures.

The first area the team tackled was looking at the data in concert with the individual medical records to verify accurate documentation. For readmissions, the teams began closely examining the reasons patients were being readmitted and then developed initiatives to address the issues. “Reducing and preventing readmissions is a key priority that has been on my radar for some time,” says Doran. “With the insights provided by the 3M data, we were ready to act.”

Launching important initiatives
Based on what they learned from the analyses on readmissions, the team designed and implemented a number of initiatives including:

- Conducting daily rounds of a multi-disciplinary group of clinicians and staff to improve processes and operations.
- Working closely with nursing homes to aid in their clinical decision making and to ensure that the staffs have the skills and training necessary for more expanded roles in care delivery, such as IV therapy and wound care.
- Ensuring that patients are discharged with appropriate instructions for at-home care, with the right medications, and with a follow-up appointment with their primary care physician before they leave. Currently, the team is examining models for scheduling primary care appointments and crafting agreements with pharmacies for home delivery of needed medications.
- Engaging hospice for palliative care, where necessary.
- Facilitating coordination between the emergency department (ED) and hospitalists to determine if a patient is going to be a readmission and finding an alternative to inpatient care.

“Data is meaningless without an explanation of what it means and how to act on it. Having 3M provide us with both the data and the insight has been priceless. This has given us the knowledge we need to do something and move forward.”

— Ann E. Doran, vice president, Quality and Care Transitions
Collaborating and communicating

The success of these efforts has been due to collaboration among the Care Transitions department, led by Sarah Vienne, LMSW, and ACH’s two embedded home care agencies, Gentiva® Home Health and Lifetime Care. This group ensures that the rapid care delivery services needed to prevent readmissions are in place.

As a result of these initiatives, ACH has experienced reductions in their readmissions rates, as shown in figure 1.

Tackling high mortality rates

A similar effort was also conducted to examine mortality rates since the hospital was showing higher-than-expected rates. An examination of the data related to deaths, in conjunction with the patient records, revealed that patient severity wasn’t being accurately documented for patients admitted for palliative or comfort care—and this was having a substantial negative impact on value-based payments for expected/unexpected mortalities.

Because the documentation was not accurately reflecting patients’ comorbidities and severity levels, the deaths of many complex and severely ill patients were being categorized as “unexpected;” this has had an impact on ACH’s case mix index (CMI) and its reimbursement.

To address this issue, the team began conducting physician education on appropriate documentation and staying in constant communication with all physicians. Today, the record for each patient mortality is reviewed by both a nurse and a hospitalist to identify any issues in documentation. This has led to ACH’s CMI increasing, reflecting the actual severity of illness of the patients.

“One of the most valuable lessons we learned is that data can help you identify and address systemic issues with documentation,” says Doran. “Never before has this been more critical.”

A unique feature of the 3M-ACH partnership has been the inclusion of a 3M representative on the hospital’s UR committee. “Although this raised some eyebrows, 3M’s insight and input on the opportunities being shown in the data has been extremely helpful,” says Doran. In fact, she notes that the result of one of the first meetings with 3M in attendance was an in-depth analysis of costs that helped to identify higher-than-anticipated charges for certain items, beginning with orthopedics. “Because 3M was at the table, they assisted in determining the analysis that would best help us answer some of our strategic and operational questions,” Doran says.

Real results

With data on its side, Auburn Community Hospital’s Preventing Readmissions and Mortality Team has designed and implemented initiatives that have:

- Reduced overall potentially preventable readmissions by 0.72 percent
- Reduced readmissions related to high-volume conditions, including a 10.74 percent reduction in COPD readmissions
- Increased the hospital’s CMI from 1.14 to 1.29, more accurately reflecting patient severity through improved documentation
- Corrected a documentation practice that negatively impacted mortality rates and reimbursement

“Reducing and preventing readmissions is a key priority that has been on my radar for some time. With the insights provided by the 3M data, we were ready to act.”

— Ann E. Doran, vice president, Quality and Care Transitions
About Ann E. Doran

Ann E. Doran, MHSM, MPA, CPRHM, is the vice president for Quality and Care Transitions at Auburn Community Hospital. She coordinates, directs and manages the hospital-wide performance improvement program, infection control and care transitions program.

Doran earned a Bachelor of Science degree in Health Care Administration from Southern Illinois University, a Master of Public Administration and a Master of Health Services Management from Webster University, St. Louis, Missouri. She served in the United States Navy for 20 years and retired as a chief petty officer hospital corpsman; she is a Persian Gulf War veteran.

Her career in quality began in the U.S. Navy as a Total Quality Leadership coordinator and continued after her Navy retirement as a director of Quality at Holly Hill Hospital in Raleigh, North Carolina, before moving back home to Upstate New York.

Once in New York, Doran was employed at Bassett Healthcare Network in Cooperstown as the director of Patient Safety and Risk Management. In August 2011, she took the next step in her career and moved into her current position at Auburn Community Hospital.

The results

Using data and analytics to guide their decision making, the team at Auburn Community Hospital:

1. Realized significant reductions in readmissions related to high-volume conditions during the first five months of 2014 (which reflects the time period during which work to reduce readmissions has been conducted) as compared to the first five months in 2013. Results are shown in figure 2.

2. Increased CMI from 1.14 to 1.29 to more accurately reflect patient severity through improved documentation.

3. Identified and corrected a documentation practice that was having a significant negative impact on the reporting of mortality rates and related reimbursement.

Continuing to improve

ACH’s focus on improving key performance measures through data-driven decision making and the Preventing Readmissions and Mortality Team have led to significant results. Reducing readmissions related to high-volume conditions was a significant accomplishment, according to Doran. In addition, ACH is now more accurately documenting patient severity, which is having a positive impact on ACH’s CMI as well as its “unexpected” mortality rates.

With the ability to drill down into the analytics, the ACH team is now identifying opportunities to improve performance on key measures related to congestive heart failure and sepsis. The team is also beginning to examine medical cost and high cost outliers.

“This is just the beginning of our journey toward improvement,” says Doran.

Reduction in readmissions for high-volume conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>2013 readmission rate (first 5 months)</th>
<th>2014 readmission rate (first 5 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COPD (chronic obstructive pulmonary disease)</td>
<td>22.81%</td>
<td>12.07%</td>
</tr>
<tr>
<td>Heart failure</td>
<td>17.02%</td>
<td>12.60%</td>
</tr>
<tr>
<td>Septicemia</td>
<td>12.70%</td>
<td>8.86%</td>
</tr>
<tr>
<td>Pulmonary edema and respiratory failure</td>
<td>35.00%</td>
<td>22.02%</td>
</tr>
<tr>
<td>Overall readmission rate</td>
<td>11.27%</td>
<td>10.55%</td>
</tr>
</tbody>
</table>

Figure 2. Comparison of 2013 and 2014 readmission rates at ACH for four high-volume conditions