

CASE STUDY

Wise Health System Improves Clinical Quality and Revenue Lifecycle with Data Analytics

Collaborative culture yields drop in readmissions and highest ever patient satisfaction scores

Summary

In 2014, Wise Health System began a clinical documentation initiative to improve coding. Three years later, what began as a revenue cycle priority became a new collaborative culture that improved clinical outcomes. With data analytics as a unifying factor, the health system bridged the gap between financial and clinical areas of the hospital, reduced heart failure readmissions, improved the average A1C rate among diabetics, and increased patient satisfaction scores to a new high.



Goals

- Improve clinical documentation
- Bridge the gap between clinical and financial areas of the hospital
- Use analytics to identify opportunities for clinical quality improvement
- Establish a continued collaborative culture

Results

- Reduced heart failure readmissions from 32% to 6%
- Decreased average A1C rates from 8.78 to 7.07
- Reduced unspecified code usage by 18.2%
- Increased case mix index by 34.7%
- Improved CC/MCC capture rates by 129.2%
- Increased appeal success rates by 18.3%
- Achieved highest customer service score from 80% of patients

About Wise Health System

Founded in 1973, Wise Health System is a network of hospitals and clinics based in Decatur, Texas and is affiliated with Baylor Health Care System, one of the most highly regarded healthcare systems in the world today. Wise Health System provides inpatient and outpatient services at more than two dozen locations across Wise county. These include hospital facilities, primary care and specialty clinics, physical therapy and rehabilitation centers, imaging centers, and bariatric surgery program offices. With more than 1,300 employees, the health system is the county's largest employer.

Challenge

As healthcare continues to dominate political wrangling, the one idea that everyone seems to agree on is that the focus on cost and quality is here to stay. An overriding shift to value-based care requires providers to maintain a greater focus on improving clinical quality and reducing the cost of healthcare. However, in many health systems, clinical and financial areas of the hospital operate in silos, severely limiting collaboration and communication.

For Wise Health System, the adoption of ICD-10 illuminated the disconnect between clinical and financial operations. There was little communication between clinical utilization review, revenue cycle, and hospital and clinic locations. Additionally, there was no integration between the health system's multiple hospital systems and clinics. The revenue cycle, business office, HIM, coding, and patient access rolled up to the CFO. Nursing, case management, utilization review, and discharge planners rolled up to the CNO. The disconnect yielded coding issues, an increase in denials, workflow inefficiencies, and other challenges.

Since ICD-10 required greater clinical specificity and physician education, it became clear that the clinical and financial areas of the health system needed to work in concert with each other. "This initiative started when we were working through how we were going to incorporate the physicians into our ICD-10 conversion," said Lynn Giddens-Branscum, vice president of revenue cycle and audit for Wise Health System. "We recognized the divide between the financial and clinical areas and needed to bridge the gap."

After identifying the organizational divide, the health system recognized that bridging the gap would not only help with ICD-10 coding for the revenue cycle, but also drive improvements in clinical quality.

"Regardless of the department or side of the house, we needed a collaborative effort across teams and organizations," said Giddens-Branscum. "It's common for physicians to think that those of us in the revenue cycle are only interested in documentation. But it's really all about having a true picture of the acuity of the patient and approaching cost and quality in a collaborative way."

The Solution

Data Analytics as a Unifying Factor

In its efforts to bridge the divide between the clinical and financial areas of the health system, Wise recognized that data analytics would play a crucial role. The organization's data gives them a clear picture of the patient and clinical acuity. Physicians, nurses, and those in the revenue cycle all find value in the data and can use it to synchronize their efforts.

"We established a committee with representation from quality, nursing, physicians, admissions, financial counseling, CDI, coding, HIM, and billing," said Giddens-Branscum. "The committee worked collaboratively to define target areas, associate goals to those areas, and collect and analyze data on defined measures."

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VP of Revenue Cycle & Audit
Wise Health System*

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Initially, Wise used their data just to improve coding. However, as the relationships between clinical and financial teams grew stronger, they decided to use data across the health system to improve clinical outcomes. The data brings to light the greatest opportunities for improvement. “It’s important to trust the data and stick to it,” said Giddens-Branscum. “We learned not to chase rabbit trails and only focus on the programs that would bring the most value.”

One of the organization’s earliest initiatives targeted follow-up care provided to patients who were discharged with congestive heart failure. The data showed that this was one area that would see the greatest improvement. With an initial focus only on patients admitted for observation, they expanded analytics across the enterprise to include patients seen at all 18 clinics to ensure proper follow-up after discharge. After seeing a decline in readmission rates as a result, the cardiology department then decided to expand the program across all acute cardiac care facilities.

Wise also used the data to bring focus to patient intervention and education activities for the health system’s pre-diabetic and diabetic populations, using the data to track A1C measurement. Initially, the target population was limited to a single location. They later expanded analytics across the enterprise and are better able to assist patients in managing their care and reduce diabetes-related admissions.

Adopting an Enterprise Approach to the Revenue Lifecycle

Before using their data to drive clinical improvements, Wise integrated analytics across the revenue lifecycle. With analytics in all areas of the revenue cycle—patient access, mid-cycle, and the business office—Wise gained a unified view of revenue across the health system. This holistic view enables the health system to reduce revenue leakage and ensure financial viability.

This enterprise approach to the revenue lifecycle includes:

- Real-time analytics during the patient registration and payment clearance processes to improve point-of-service collections
- Opportunities to improve revenue capture, minimize audit risk, and succeed with ICD-10
- Improvements in cash flow and collections by exposing black holes, bottlenecks, and outliers that result in lost revenue and reimbursement delays

“As we continue to grow and diversify our patient offerings, it was clear that we needed a continuous process for revenue cycle management across the enterprise.”

*Lynn Giddens-Branscum
VP of Revenue Cycle & Audit
Wise Health System*

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The Results

In the end, Wise Health System turned raw data into analytics power that drove clinical and cost improvements across the organization. In addition to promoting communication and collaboration between clinical and financial areas of the organization, the health system achieved measurable improvements in congestive heart failure readmissions and diabetes-related admissions.

For congestive heart failure specifically, the overall readmission rate of 32% declined to just 6% when the health system expanded analytics across the enterprise. For pre-diabetic and diabetic patients, the first year of patient intervention and education programs yielded an improvement in 5% of the identified population with an average A1C of 8.78. In the second year, 80% of the population participated in the program, and the average A1C dropped to 7.07.

With an enterprise approach to revenue lifecycle management, the health system achieved results in coding. Unspecified code usage dropped by 18.2% and CMI increased by 34.7%. Additionally, CC/MCC capture rates improved by 129.2% and appeal success rates increased by 18.3%.

One unexpected benefit of the initiative was an increase in patient satisfaction levels. As of March 2017, nearly 80% of patients gave the health system the highest possible customer service score, compared to just 69% a year earlier.

“This process has not been without its challenges,” said Giddens-Branscum. “But it was a great win for everyone involved. Building a collaborative culture has enabled us to grow and evolve and makes Wise Health System a great place to work.”

PROVIDER SOLUTIONS

Revenue Cycle Management

- Patient Access
- Revenue Integrity
- Business Office

Value Based Performance

- Population Health
- Quality Management

Cost and Operations

- Supply Chain
- Labor Productivity
- Service Line
- Throughput

Enterprise Performance Management

- Action Planning
- Progress Tracking

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