Trinity Health achieves significant operational efficiency and financial gains

Considered the region's premier health system, Trinity Health is a nonprofit, integrated organization providing a full complement of health care services to the people of North Dakota and Eastern Montana. With facilities, partnerships and affiliations throughout the region, the Trinity system employs 2,620 people and includes three hospitals with a total of 441 beds, a medical group with more than 220 providers, and nursing homes, clinics and other facilities.
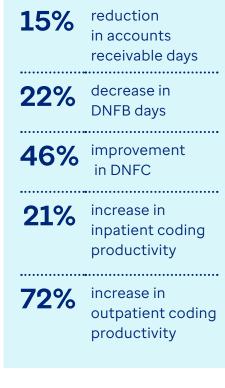
Background

Like many organizations, Trinity Health (hereafter, Trinity) had an extensive backlog of uncoded encounters affecting financial operations and organizational efficiency. Two primary factors lead to this perpetual predicament. First, Trinity is located in a rural area without any nearby health information management (HIM) educational resources, which makes it difficult to recruit enough qualified local coders to meet its needs. Second, the HIM department lacked the technology needed to enable remote coding and support the accurate and timely completion of the large number of cases it must process.

Challenges

When Deb Boppre joined Trinity as enterprise HIM director, she worked with hospital administration to develop a short- and long-term strategy to address the coding backlog and increase overall HIM efficiency. The first step was a financial analysis — examining all options. Once that was completed and reviewed, she took immediate steps to decrease the coding backlog, including supplementing the internal coding operation with outsourced coders while expanding programs already in place to recruit and train in-house coders for Trinity.

She also helped develop a long-term strategy that included implementing a computer-assisted coding (CAC) system that would dramatically improve coding efficiency, accuracy and quality. "The challenge, quite frankly, was to get caught up and stay caught up," says Boppre. "In addition to finding creative ways to attract coding staff, we needed to take advantage of CAC to efficiently achieve complete, compliant coding."

By implementing Optum® Enterprise CAC, Trinity Health achieved:

15% reduction in accounts receivable days

22% decrease in DNFB days

46% improvement in DNFC

21% increase in inpatient coding productivity

72% increase in outpatient coding productivity

In addition to finding creative options to attract coders, Trinity needed improved CAC technology to increase productivity and offset staffing needs.

Solutions

As part of the CAC acquisition process, Trinity completed a comprehensive analysis of the industry's leading CAC solutions. The procurement team — made up of representatives from HIM, information technology and finance — thoroughly reviewed four technologies before selecting Optum® CAC solutions.

"Our HIM department is responsible for all hospital, clinic and professional coding, and we needed a vendor who could provide CAC that supported all of our needs. Optum could cover the full spectrum," says Boppre.

Optum and Enterprise CAC met additional key selection criteria:

• A robust and flexible workflow component

• A sophisticated natural language processing (NLP) engine

• An intuitive, easy-to-use system

• The proven ability to interface with Trinity's hospital information system

"We were also very impressed that the Optum team could perform every function requested during the demo," says Boppre. "One of my analysts is extremely knowledgeable and experienced and knows a lot of different systems. During the demonstrations, Optum was the only vendor that she could not stump. That sealed the deal for me."

After system selection in 2015, Trinity scheduled its go-live for early 2016 to allow time to get up and running with ICD-10 before switching systems. "We were not just implementing a new product, but a new code set as well," says Boppre.

Susan Weidler, Trinity's coding and data quality manager, added, "In the implementation phase, we spent a significant amount of time mapping our documents and ensuring the system contained all of the documents our coders use. Our coder analysts were very particular, and this helped the implementation go smoothly." In preparation for go-live, Trinity coders practiced dual coding in both ICD-9 and ICD-10, and thoroughly tested the new system.

According to Boppre, the Optum project manager stayed on top of things throughout the project. "By the time we went live, we had vetted everything we needed to and had very few issues. It was one of the smoothest go-lives that I've ever been involved with."

Boppre also credits teamwork as an important factor in the smooth implementation. The Optum and Trinity teams worked together to do the necessary front-end legwork and made sure everything was done correctly. "From the beginning, the CAC team from Optum was very engaged," says Boppre. "We always knew their expectations from us, and they knew our expectations from them."

> **"**
>
> **One of my analysts is extremely knowledgeable and experienced and knows a lot of different systems. During the demonstrations, Optum was the only vendor that she could not stump. That sealed the deal for me.**
>
> — **Deb Boppre**
> Enterprise HIM director

Results

Enterprise CAC has delivered a number of impressive results for Trinity. "The CAC platform has allowed us to both increase productivity and support more efficient billing," says Trent Chastain, Trinity's vice president of revenue cycle. "We've eliminated a lot of rework and unnecessary touches, so we're now getting better, more accurate bills out the door faster. The system paid for itself pretty quickly."

Improved productivity: Enterprise CAC dramatically increased coder productivity throughout the organization:

- Inpatient: 21% improvement
- Same-day surgery: 38% improvement
- Observation: 26% improvement
- Outpatient: 72% improvement

By improving productivity, Enterprise CAC has helped speed up the billing process, eliminate backlogs and reduce reliance on contract coders.

Faster reimbursements: Improved coding accuracy and efficiency has streamlined processing. As a result, bills are sent out faster and reimbursement time is decreased. This is reflected in the improvement in Trinity's discharged not final billed (DNFB) and discharged not final coded (DNFC) numbers since system implementation:

- DNFB: decreased by 22%
- DNFC: decreased by over $5.6 million

Reduced accounts receivable (A/R) days: Enterprise CAC has helped Trinity process more encounters using the same number of people, while dropping cleaner, more accurate bills sooner. These accomplishments helped the organization decrease A/R days by 15% in the first year after the system was implemented.

Improved CMI and DRG performance: Enterprise CAC contributed to Trinity's 22% case mix index (CMI) increase during its first year in use. Over that period, the CMI moved from 1.32 to 1.61.

The Enterprise CAC NLP engine also drove more accurate coding by fully capturing all diagnoses in each record, including CCs and MCCs that were previously overlooked. Within three months of implementation, Trinity's top four DRG triads improved significantly, reflected in more appropriate reimbursement supported by more accurate coding.

"Our case mix has gone up because we are not missing those diagnoses that are hidden in a big chart that might have 30 or 40 codes," says Weidler. "We want to make sure that we're capturing CCs and MCCs in those codes, and we've found the NLP-powered code suggestions have been a huge help for the coders. It makes sure our accuracy is high and reflects the quality of care we're providing."

Better work management: The Trinity HIM department manages coding for several locations and departments, including inpatient, acute care, rehab, psych, chemical dependency, provider clinics and more. Its previous system did not provide the robust workflow automation needed to effectively manage this complex environment.

> **"**
>
> **The Enterprise CAC platform has allowed us to both increase productivity and support more efficient billing. We've eliminated a lot of rework and unnecessary touches, so we are now getting better, more accurate bills out the door faster. The system has paid for itself pretty quickly.**
>
> — **Trent Chastain**
>   Vice president of revenue cycle

With Enterprise CAC, Trinity now has the work queue tools needed to increase productivity and improve financial performance. The system categorizes records based on patient types, services, specialties and more, and automatically routes them to the appropriate work queue. Coders no longer search for the records they wish to code; appropriate cases automatically flow into their queues. The system can also identify high-dollar cases for priority coding without requiring inefficient manual review by the business office.

"We wanted to have better control over all our coding queues and be able to monitor and report on a daily basis if we needed to," says Boppre. "We were never able to successfully do that before. Now we are able to filter, sort, slice and dice data any way we want. That's been a big gain for us. We are a lot more nimble."

Better coder management and training: Enterprise CAC provides the technology and tools needed to ensure that the coding team is more efficient, productive and successful, while providing operational benefits.

- Management uses work lists to identify areas where coding is falling behind, and can quickly assign more resources for those record types.
- Skill sets are more easily transferrable between different coding areas, because everyone is using the same system.
- The technology enables remote coding and monitoring, since all users have access to robust CAC capabilities and see the same user interface, references and documents.
- A consistent solution across coding types makes it easier for coders to fill in for various areas and cover vacations without requiring outsourcing.

"The system's dashboard is a valuable management tool," says Sherilyn Abrahamson, Trinity's coding supervisor. "You can find out what work is outstanding without having to dig too deep, which is a big timesaver for management supervisors."

Enterprise CAC also supports Trinity's vital coder apprentice training program and improves new coder accuracy. The organization's entry-level coders begin with outpatient coding and shift to other patient types as they gain experience. "The solution makes cross-training for different patient types a lot easier," says Abrahamson. "It's easier for coders to complete records with help from the NLP engine, since they review suggested codes and the supporting highlighted documentation, rather than starting from scratch. The system also makes it simpler for supervisors to check work and identify further training opportunities."

Increased satisfaction: Enterprise CAC has improved satisfaction among staff, physicians and even patients. "There is no question that satisfaction among our coders has increased since we implemented the system," says Chastain. "Given the challenge with staffing in a rural area, this is huge. It's helped with teamwork as well. I think that as an organization, implementing a forward-looking solution like Enterprise CAC reflects our willingness to say 'Hey, if there's a better way to do something, let's look at it and work together to get that solution in here.'"

> **"**
>
> **Now we are able to filter, sort, slice and dice data any way we want. That's been a big gain for us. We are a lot more nimble.**
>
> — **Deb Boppre**
>   Enterprise HIM director

Optum solution helps Trinity fill coding void

Because of its rural location and lack of local HIM education opportunities, Trinity didn't have a pool of qualified coding candidates from which to hire. In order to attract talent with the right education, skills and credentials, the organization had to be creative. As a result, Trinity participates in an HIM apprentice program, and is able to set up paid apprenticeship positions that uniquely bridge education and employment.

Optum Enterprise CAC helps support this effort. The solution makes it easier to train, measure performance and transition apprentices to different areas so they can expand their skills. Through apprenticeship, qualified but inexperienced coders move to North Dakota to train on site at Trinity for a year. Once they complete training and meet quality and productivity standards, the coders have the opportunity to stay and work at the facility, or work remotely from any location using the same secure CAC functionality and capability that they used on site.

Because Enterprise CAC enables secure remote coding, it allows greater flexibility for both management and coders, and also makes it possible to hire experienced coders in any location without requiring them to relocate and train.

The program has been very successful to date. "In the last three years, we have had four or five coders who made it through our training program and have transitioned into full-time employees, and the Optum technology was key in making our program successful," says Deb Boppre, Trinity's enterprise HIM director.

Conclusion

Optum Enterprise CAC has helped Trinity to make improvements in many areas since its implementation. In addition to the productivity, revenue, management, training and staffing benefits, the system has also greatly decreased Trinity's reliance on outsourced coders. In the first year following go-live, Trinity has cut its use of outsourced coders in half.

Trinity continues to expand its use of the Optum Enterprise CAC Platform and is now implementing Optum CAC Professional for physician and ambulatory coding.

For more information, visit:

optum.com/contactus

Optum