

3M Health Information Systems

Case study:

Value of AI-powered CDI at large flagship hospital

Eastern United States





Hospital Profile

Location:

Eastern United States

Type:

Flagship hospital of a large health network

Admissions:

20,000+

Annual ER visits:

50,000+

For physicians, closing the loop with CDI teams was crucial to reducing disruptive retrospective queries often required for appropriate reimbursement downstream.

Real results

This hospital uses 3M CDI Engage One to deliver AI-powered, proactive clinical insights to physicians at the point of care and within the normal Epic EHR workflow to:



Decrease query response time by

50%



Alleviate administrative exhaustion for clinicians



Reduce physician burnout and disruptive retrospective queries



Optimize and unify physician workflows within Epic EHR



Increase accuracy and efficiency for clinicians and CDI teams



Build confidence with physicians by delivering immediate value on high priority objectives

The challenge

Like so many of their peers industry wide, physicians at this flagship hospital faced the heavy administrative task to accurately document patient encounters. Overburdened physicians often documented cases based on their clinical experience but without close attention to the specific language required for accurate coding and reimbursement. As a result, coders couldn't submit bills to support appropriate reimbursement without physician rework. To respond to queries from clinical documentation integrity (CDI) specialists, physicians had to interrupt their workflow to research past cases, out of context from the task at hand.

For physicians, closing the loop with CDI teams was crucial to reducing disruptive retrospective queries often required for appropriate reimbursement downstream. They needed a way to achieve accurate and complete documentation in real time—and to get it right the first time. In addition to reducing administrative burden for physicians, expected benefits included a more comprehensive picture of the acuity of the patient population, and ultimately better patient care.

The solution

Hospital leaders tasked technology to better capture the patient story at the point of documentation. This hospital partnered with 3M to deliver real time clinical insights within the electronic health record (EHR) workflow using **3M™ M*Modal CDI Engage One™**.

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Long time users of 3M™ M*Modal Fluency Direct for real time speech recognition, this hospital had also used the 3M™ Coding and Reimbursement System for many years. Success with these core 3M solutions provided a solid foundation for advanced coding and CDI automation. For example, the hospital's physicians—both within the hospital or in connected medical practices—developed high trust with the speech recognition system. Consequently, they were open to adding computer-assisted physician documentation (CAPD) and other automation technology to their workflow. CDI teams were also open to the benefits proactive CDI technology had to offer.

In the last two years, this hospital implemented the 3M™ 360 Encompass™ System for computer-assisted coding (CAC). Then in 2020, it partnered with 3M to implement 3M CDI Engage One to give physicians proactive, artificial intelligence (AI)-powered clinical feedback from the entire patient record. 3M CDI Engage One provided AI-enabled clinical support for physicians on the front end and closed the loop with back end CDI workflows to reduce retrospective queries. This collaboration also enhanced CDI worklist prioritization, summarization of quality indicators and clinical validation. Consolidating on the 3M platform provided a more cohesive, end-to-end workflow across coding, CDI teams and physicians.

Clear focus on top priorities

3M CDI Engage One is highly flexible and customizable. Users can fine tune the AI technology to deliver the right volume and type of clinical nudges physicians should see. To achieve this, 3M partners start by running the software in “silent mode” to collect data on all the clinical nudges that would be triggered if the AI were fully enabled. The goal is to pinpoint areas where clinical support is most valuable without overwhelming physicians—delivering only high value clinical nudges while minimizing disruptions.

A phased approach allowed this hospital's leaders to see how the AI-enabled clinical nudges aligned with their top priorities, including issues that generated the most manual queries. CDI specialists at the hospital identified high volume, high impact queries—including respiratory failure, chronic obstructive pulmonary disease (COPD), anemia and sepsis. Then hospital project leaders worked with 3M experts to fine tune the software to focus on these issues. 3M also tailored the volume and type of clinical nudges sent to different physician groups, hospital departments and even individual clinicians.

Technology changes clinician behavior

Physician leaders at the hospital say the technology is changing clinician behavior without the end users really being aware of it. The technology educates clinicians on the latest documentation requirements as they work and changes clinicians' behavior as they learn new habits for accurate and complete documentation.



3M products used

- 3M™ M*Modal CDI Engage One™
- 3M™ M*Modal Fluency Direct
- 3M™ 360 Encompass™ System
- 3M™ Coding and Reimbursement System

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Because nudges from 3M CDI Engage One are part of the standard EHR workflow, they're not disruptive. The technology works in the background, searching through the encounter, including EHR notes, narrative documents, problem lists and medication data. AI queries the chart to find deficiencies, inaccuracies, gaps and opportunities. Plus, the AI technology continually learns from user actions and gets smarter and more targeted over time.

As the accuracy of physician documentation improves, CDI teams can be more efficient, as they are empowered to focus on more complex cases that leverage their unique expertise, rather than sending repetitive queries about routine, high volume diagnoses.

3M partners worked closely with CDI specialists, physicians and coders during implementation and beyond. Using a data-driven approach tailored to the hospital's goals, 3M adoption services teams provide ongoing, 'boots on the ground' support to end users to help them get the most benefit possible from 3M technology.

The results

After several months, the hospital is already seeing significant and sustained results. It has decreased its query response time by an average of 50 percent and is now able to send 69 percent of queries while the patient is still in house. With front end AI support, physicians finish documentation in real time and work more efficiently with CDI teams to avoid unnecessary retrospective queries, which can come weeks later, cause frustrations with rework, and take attention away from the patient in front of them.

Health information management (HIM) leaders report that 3M's technology helps their clinicians and CDI teams to increase documentation accuracy, optimize workflows with the EHR and build confidence to reach quality, compliance and reimbursement goals. The hospital's initial goal was to alleviate the administrative burden of clinicians and improve documentation quality. Now the leadership team is looking ahead for more ways to redesign care and minimize the intrusiveness of technology in the doctor-patient relationship, such as virtual assistant and ambient intelligence solutions. The hospital's aim is not only to improve its ability to deliver high quality care, but to bring more joy back into the practice of medicine.



Decrease query response time by **50%**



Reduce physician burnout and disruptive retrospective queries



Increase accuracy and efficiency for clinicians and CDI teams



Call today.

For more information on how 3M software and services can assist your organization, contact your 3M sales representative, call us toll-free at 800-367-2447, or visit us online at www.3M.com/his.



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