# Technology for the modern age

*by Linnea Archibald*

**CDI technology options** have come a long way, adapting as the industry's role in the healthcare environment has shifted from a primarily financial enterprise to one that includes quality reviews, denials management and appeals, risk adjustment, and settings beyond traditional inpatient acute care. As CDI professionals' jobs have gotten more complex and their reviews more in depth, their technology they rely on has also had to become more sophisticated.

When ACDIS conducted its first *CDI Week Industry Survey in 2011*, only 30% of respondents said they used electronic queries as part of their CDI practice, a tool that's nearly synonymous with CDI work today. The next year, *in 2012*, the same survey found that only 17% of respondents were working completely with an EHR; 81% said they either had a hybrid system, an all-paper medical record, or had to scan some paper materials into the EHR system after discharge.

In five years' time, *the CDI Week Industry Survey* showed that nearly 48% of respondents had a completely digitized EHR, 29% had an EHR with some scanned documents, and 18% had a hybrid system. Less than 1% of respondents said they used a fully paper record, and even those planned to switch to electronic by year's end.

Today, you'd be hard pressed to find an organization with a completely paper medical record, and the conversation has shifted from EHR implementations to advanced CDI-specific technologies—things like artificial intelligence, computer-assisted coding and physician documentation, prioritization, and more.

If you feel like the CDI technology world has shifted beneath your feet, that's because it has. Ten years ago, the majority of CDI programs didn't have access to something as ubiquitous as EHRs, let alone complex CDI software. A decade has made a world of difference to CDI technology, and CDI professionals have done an impressive job keeping up with the changing landscape.

And remember, it wasn't only technology that changed. CDI's expanding roles have led the charge. Take quality reviews, for example. When *ACDIS first asked* about CDI's involvement in this area in 2011, 62% of respondents said they did not review for any quality measures. *In 2020*, nearly 92% of survey respondents reported reviewing quality measures of some kind. Programs have also expanded beyond traditional inpatient acute care reviews to other settings such as outpatient, rehab, pediatrics, psych, and more, each of which bring their own set of technological challenges and needs to the table. (For information about CDI reviews in these areas, read the *May/June 2021 edition of the CDI Journal*.)

Technology, in many instances, has allowed CDI professionals to adapt to these additional review areas and expand their focus. It has also allowed CDI leaders to accurately track key performance indicators to show CDI's impact and adjust their focus as needed. According to a 2021 ACDIS CDI Leadership Council survey, conducted in partnership with 3M Health Information Systems, respondents said that technology has helped them:

- Perform more work remotely (57.83%)
- See more charts per day (increased productivity; 57.39%)
- Identify "low-hanging fruit" queries so staff can focus on more complex issues (54.35%)
- Increase collaboration with other departments and roles (49.57%)
- Monitor and improve known documentation issues with high-volume DRGs (40%)

Knowing *which* technology to select and where to apply your (often limited) budget to support your program's advancement is challenging, however. That's why the entire July/August 2021 edition of the CDI Journal is centered on technology's many facets. CDI's role has changed, it's expanded, and it's become even more important for healthcare organizations' success. Your CDI technology should support that reality and grow alongside you. It's easy to get overwhelmed but look how far we've come already; even 10 years ago, the advanced technology available today wasn't even a twinkle in someone's eye.

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# Engaging physicians in the golden moment

## CDI, powered by advanced AI, helps improve revenue integrity while relieving physicians' administrative burden

**The New England Journal of Medicine** recently published a study on the "Ecology of Attention," and how detrimental physician task shifting is to patient care and physician well-being. Looking at this issue through a CDI lens, it's no wonder that traditional CDI workflows, which are primarily focused on manual, retrospective queries, are time-consuming and challenging for both CDI teams and physicians. They require physicians to mentally shift from their current patient concerns to reconstruct details of patient encounters days or even weeks after the fact.

Forward-thinking health leaders are adopting a proactive approach to CDI, powered by advanced artificial intelligence (AI) and natural language understanding (NLU) technologies. Such computer-assisted physician documentation (CAPD) optimizes physician attention by engaging them in the golden moment at the point of care—with automated, in-workflow, in-context, and in-line insights that are clinically relevant and patient specific. This not only effectively engages clinicians in quality and reimbursement goals, but also positively impacts physician documentation behavior. It relieves physicians of having to know all the latest coding, quality, and compliance documentation requirements, enabling them to minimize rework and reduce frequent, disruptive queries.

**"The technology is educating clinicians on the latest documentation requirements as they work. This helps modify their documentation behavior and develop a habit for accurate and complete documentation at the point of care."**

For CDI teams, the technology proactively embeds their expertise in front-end physician workflows, helping them to address documentation deficiencies in real time. Importantly, advanced AI technology is configurable and tune-able, enabling CDI teams to partner with physicians upfront to customize nudges with their facility's or service line's specific clinical protocols. In this way, CDI teams can automate routine CDI work and prioritization, leaving more time to focus on complex cases, and providing the support they need as CDI programs expand to quality metrics and all-payer review.

The goal is creating time to care—alleviating the administrative burden and cognitive overload on physicians while simultaneously improving clinical documentation efficiency, quality, and ultimately revenue integrity. Leveraging AI and NLU technologies enables better outcomes for patients and physicians, improves healthcare efficiencies and transforms the experience of care for all stakeholders. ■

### Proactive CDI in action

The flagship hospital in a large health network faced a familiar CDI challenge: reimbursement pressures paired with overburdened physicians who often documented cases based on their clinical experience but without close attention to the specific language required for accurate coding and reimbursement.

The hospital adopted a new, proactive CDI solution—3M™ CDI Engage One™—to automatically deliver AI-powered clinical insights to physicians at the point of care, within their normal EHR workflow.

The result? In a few short months, the hospital:

- Reduced disruptive retrospective queries
- Decreased query response time
- Alleviated administrative burden of physicians
- Optimized and unified physician workflows within the EHR
- Increased accuracy and efficiency for physicians and CDI teams
- Built confidence with physicians by delivering immediate value on high priority CDI objectives

# Real-time worklist prioritization to drive quality and financial results

**Every year the scope of CDI and coding roles** continues to expand. What started as specific responsibility for improving the accuracy, clarity, and specificity of documentation for financial reimbursement has evolved to include quality impacts such as hospital-acquired conditions (HAC), patient safety indicators (PSI), preventable events, hierarchical condition categories (HCC), and quality risk methodologies. CDI and coding teams need to continually expand their knowledge of both reimbursement and quality and how they intersect. Time is also of the essence.

How do you prioritize cases for expanded and accurate impact? Consider the experience of South Shore Hospital.

## The Challenge

South Shore Health was struggling to complete documentation for a 400-bed hospital. "I had seven CDI specialists: five of them were nurses, and two of them were coders. To try to cover all of these beds presented a challenge. How do we pick our right cases?" asked Kim Conner, director of CDI at South Shore Health. With limited personnel and ever-growing cases, South Shore Health saw a drastic decline in their case mix index (CMI) and revenue impact.

## The Solution

To overcome these hurdles, South Shore Health transformed its CDI program by changing how the team prioritized cases with the 3M™ 360 Encompass™ System. The prioritization feature in 3M 360 Encompass helps CDI teams focus first on cases with the greatest CDI opportunities using the initial priority scoring (default setting) right out of the box. CDI teams can also modify priority scoring to target specific organizational goals.

3M 360 Encompass System not only identifies high priority opportunities but offers continual assessment and insights. The prioritization scoring updates are based on new patient information or team actions to ensure real time prioritization. Auto-suggested diagnosis related groups gave Conner's CDI specialists a clear clinical picture of the patient before they even touched the record. Furthermore, key quality indicators are built into prioritization factors and reporting so Conner's team could identify potential quality flags concurrently and see details of inclusion/exclusion criteria, methodology and reason for inclusion.

"With the prioritization, CDI specialists could see what surfaced to the top and what they needed to prioritize," said Conner. 3M 360 Encompass identifies high-value cases quickly, allowing users to target the most complex DRGs, like sepsis and pneumonia, without sacrificing core responsibilities or precious time.

South Shore Health used 3M's custom reports to regularly analyze performance. "The customizable and automated reports have been instrumental. These reports will show you the averages of your response rates, total of initial and continued review days, your queries and average percentage of queries overall," said Connor. "This tells us the financial impact. This tells us which physicians are answering and not answering." Connor's team could see their specific impact on important quality and financial metrics with automated query and team impact reports that eliminated previously laborious efforts and the subjectivity in reporting results.

## The Results

- More than tripled revenue from CDI reviews each month
- Increased monthly query percentage by 106%
- Decreased sepsis denials by 76%
- Achieved a 98% response rate from ICU providers
- Initiated HAC/PSI reduction program

**"We continue to be asked to do more with less for every department in every hospital, especially since COVID-19. Having 3M tools to assist us to be as efficient and productive as possible was instrumental."**

—Kim Conner, director of CDI at South Shore Health

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# Measuring CDI impact accurately, efficiently and comprehensively

## CDI impact across departments

**CDI, coding, and quality programs** often struggle to communicate efficiently across teams. Each department aims to show its impact on key financial and quality metrics while improving productivity and connectivity between CDI, coders, and quality staff. In addition, hospitals frequently run into issues with CDI, coding, and quality staff development and education, coupled with lack of physician engagement.

CDI teams have been required to greatly expand their impact scope areas, but often struggle to measure their impact accurately, efficiently, and comprehensively to include key quality measures. These expanded pressures lead to plateaus in progress, loss of momentum and difficulty justifying continued investment in improvement activities. Healthcare organizations need a partner to help them focus efforts and resources equally on people, process, and technology.

## A comprehensive approach

Since 2017, 3M has partnered with many healthcare organizations to implement the 3M™ Advanced CDI Transformation program (ACT) with the 3M™ 360 Encompass™ System. This comprehensive approach provides consulting, education, tracking, reporting, and prioritization in one program. 3M works with each organization to show key hospital and physician leadership the impact CDI, coding, and quality programs can bring when combining technology, advanced education, workflow optimization, and reporting across all departments.

Organizations can take advantage of 3M 360 Encompass to integrate computer-assisted coding (CAC), CDI, concurrent quality metrics, and analytics to capture, analyze, and advance patient information across the care continuum. The automated impact feature can take a previously laborious and manual reconciliation process and turn it into an automatic step in the workflow. CDI and quality teams can report impacts beyond financial metrics with key quality indicators infused throughout the platform in real-time. Even better, CDI teams can predict impact before final coding, and CDI specialists can review potentially missed opportunities concurrently. Teams gain a better understanding of what is driving impact and be consistent in how they calculate results.

3M™ Performance Advisory Services can analyze the 3M 360 Encompass data and identify prioritized areas to focus on first. Then, based on the prioritization, 3M consultants conduct improvement initiatives, including a comprehensive and in-depth approach to education and training for hospitals, physicians, mid-level practitioners, CDI, coding, and quality staff. Real-time monitoring and frequent communication between performance advisors and consulting teams is key to ensure the improvement initiatives drive results.

## What results can healthcare providers expect?

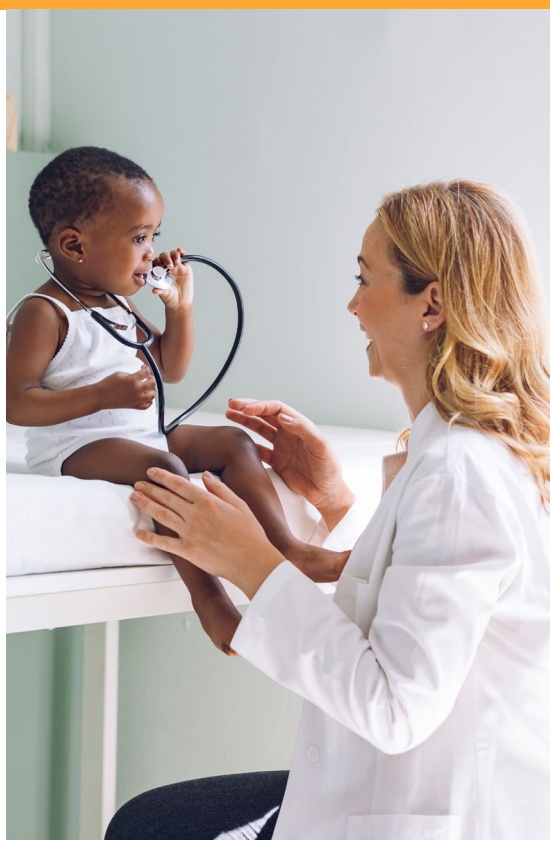
The analysis can surface priority tasks for each hospital, including metrics on individual physicians, service lines, and even specific patient cases. CDI specialists can expand their documentation review to include a full assessment of the severity of illness (SOI) and risk of mortality (ROM) measures from a careful review of gaps in the medical record and missing comorbidities. 3M™ Performance Data Monitoring provides benchmarks and reporting to monitor and track improvements as well as increased visibility for hospital and physician leadership. The reporting and dashboards provide the insights to justify continued investment from the leadership teams.

For sustained results, teams should continue to monitor their data consistently and look for new improvement areas while reinforcing best practices built through education and coaching. ■

**Teams can showcase the broad value CDI adds to documentation integrity such as:**

- Financial impact for each site
- CCs/ MCCs added
- Principal and procedure impact
- Clinical validation impact
- Shifts in SOI/ ROM
- Quality measure impacts

# Closing the gap: Three steps to build an effective HCC process across the continuum of care



**It's no secret** that value-based healthcare programs are changing how healthcare is delivered. And paid for. By 2030, more than 40% of patients will participate with a value-based risk plan. These programs are ultimately designed to provide a model that:

1. Improves patient care
2. Reduces healthcare costs
3. Improves population health

## What role do hierarchical condition categories (HCCs) play?

Healthcare organizations are increasingly using the HCC risk-adjustment models to calculate risk scores and predict potential healthcare costs in multiple value-based reimbursement (VBR) programs. HCC models are designed to predict the health spending for a specific patient population. In these models, the risk is equal to the level of expected healthcare spending, providing a more accurate picture of the patient condition.

Consistently and accurately monitoring HCCs across multiple care settings, however, can be challenging.

For example, nearly 80% of patient care occurs in the physician's office, and many office-based physicians lack the support of qualified coders and CDI specialists to routinely capture the full burden of illness.

With disparate systems and poor HCC management, it will be increasingly difficult to capture the full patient story and accurately predict the cost.

To achieve accurate HCC coding and receive appropriate reimbursement, an organization must capture a complete diagnostic profile of every patient. Physicians must document the highest disease categories for each patient's condition as well as demonstrate the patient's conditions were monitored, evaluated, assessed, and treated. HCCs must be captured every 12 months to receive accurate Medicare Advantage Plan reimbursement.

## How can you close the HCC gap at your organization?

### Step 1: Start with basics

1. Acknowledge that this is more than a physician documentation program. Healthcare organizations need a program that engages all stakeholders across the organization. The shift from volume to value will require organizational goals and support.
2. Create a sustainable process, reducing manual reviews or disparate processes. This is a complicated process that must provide reach into multiple departments, including financial, patient care, documentation, and coding.
3. Operationalize data and knowledge to make continuous improvements. Know your milestones for success.

### Step 2: Bring in expertise and technology

1. Get a fresh perspective from experts who can outline a direct path to your goals so you can maximize your time and resources. 3M HCC Services can do just that. We provide a full assessment, working with your organizational objectives and existing processes to outline a clear path forward.
2. Integrate technology into the process. 3M™ M*Modal HCC Management provides artificial intelligence (AI)-driven solutions to uncover clinical insights for both the physician and the CDI specialist. This can alleviate a heavy burden on your staff and significantly improve the capture of HCC data year after year, providing a closed system loop.

## What would that look like for your organization?

- Prioritize patients scheduled for visits based on clinical insights and risk adjustment factor (RAF) scores.
- Review patient diagnosis (claims and documentation) and what has been captured in a claim over the year.
- Physician notifications detailing what conditions are created and included in the physician workflow.
- Patient specific compliant notifications presented to the provider when they open the patient chart during the patient encounter, allowing the physician to focus on patient care.

### Step 3: Measure for success

An effective HCC process will help you meet your goals and keep patient care at the center of your focus. With the right technology and expertise, you can:

- Drive data quality for improved care and communication.
- Ensure patient RAF scores are accurate and appropriate.
- Provide physicians a way to identify and capture patient diagnosis without disrupting patient care through a comprehensive CDI and physician closed loop process.
- Provide analytics to measure success. ■