Over the years, CDI professionals have been tasked with more and more responsibilities. This increase in scope can be linked to the general expansion and transition of healthcare from quantity-based to quality-based reimbursement, but also simply to the fact that CDI programs have proved themselves infinitely valuable to organizations. CDI professionals everywhere likely have a visceral reaction to the question “you’re already in the chart, so can you look at XYZ too?” due to prior horror stories of program scope creep. Much like Bilbo Baggins, CDI professionals may feel a bit like butter scraped over too much bread. And in many cases, they have good reason to feel so.

According to the 2021 CDI Week Industry Survey, CDI specialists hold a wide variety of responsibilities simultaneously, including:

- Sending concurrent queries (92.04%) and following up on queries post-discharge (73.50%)
- Concurrent reviews for financial impact (87.35%) and for quality and nonfinancial impact (83.64%)
- Sending retrospective queries (69.90%)
- DRG reconciliation (69.68%)
- Developing and/or presenting physician education (61.61%)
- Posing verbal queries (52.89%)
- Retrospective, pre-bill reviews for financial impact (41.33%) and for quality and nonfinancial impact (42.75%)
- Rounding with physicians on the floor (23.56%)
- Participating in the denials management process (19.41%)

And that list isn’t even digging into the organization-specific projects CDI teams are often involved with, new expansion areas, and one-off requests that come to any CDI program on a weekly basis.

The moral of the story is that CDI professionals are busy and while everyone would love to add more staff to their team, the reality is that many programs simply don’t have the budgetary bandwidth. Plus, with more staff often comes more responsibility. CDI programs are rarely status quo—which is often good for both the staff members and the organization as a whole—and teams are frequently asked to do more as they grow.

This is where technology steps into the picture for many teams. Technology was never meant to take CDI professionals’ jobs away, but instead to function alongside them, supporting their efforts, removing some of the “low-hanging fruit” tasks, and freeing up their valuable time to focus on bigger and more complex issues.

According to recent data from the 2022 ACDIS CDI Leadership Council Research Series survey, created in partnership with 3M Health Information Systems, programs heavily leverage software to help them accomplish their goals. The most popular solutions according to the survey’s findings are:

- Electronic grouper (95.26%)
- Electronic querying (86.26%)
- Computer-assisted coding (77.25%)
- Chart prioritization (76.78%)
- Natural language processing (72.04%)
- Computer-assisted physician documentation (25.12%)

Add in the number of individuals using home-grown solutions, and nearly every CDI department is using technology to reach their goals and boost their effectiveness. This is not the same world we were living in even five years ago. Technology is allowing CDI teams to see the cases that matter, focus on the big issues that require heavy critical thinking, and spend time developing and delivering physician education to make a long-term impact.

It’s really amazing to see.

Of course, the number of solutions available on the market, budgetary restraints, and customizability and compatibility concerns can complicate the tasks of choosing the right solution and implementing it effectively. Fortunately, those who have gone before you are glad to share their experiences and input to ensure a smooth process. That’s one of the beautiful things about ACDIS, and that’s what you’ll find in the next few pages of case studies.

As CDI expands their reach, extends their impact further and further, technology should be a support to keep you from being stretched too thin. Think of it as a little extra butter to get you all the way across that bread.

Editor’s note: Archibald is the associate editorial director for ACDIS in charge of publications and membership. Contact her at larchibald@acdis.org.
Technology to make an impact on case review with prioritization

It's no secret that healthcare is undergoing a drastic transformation that values quality over quantity. In the past, CDI departments could show an impact on a case-by-case basis. How should today's CDI programs define success? By showing the value and impact of their work, and not just the number of cases reviewed.

Worklists that work for you
Prioritization in 3M™ 360 Encompass™ for clinical documentation integrity uses advanced natural language understanding (NLU) and artificial intelligence (AI) technology to find cases with documentation gaps. The NLU technology suggests queries for CDI specialists based on things hidden in the patient's documentation to get the most out of every review. The prioritized worklists update in real time with new patient information or team actions.

This customizable tool embedded in 3M 360 Encompass for CDI saves CDI teams hours of meticulous manual review by locating the highest opportunity cases-based priority factor scoring tailored to your organization. 3M's algorithm flags cases for review based on DRGs, quality indicators, clinical classifications, financial opportunity and more. It has never been easier to identify documentation improvement opportunities and increase efficiency—with one tool.

A guide to successful implementation
Launching priority worklists may seem like a daunting task, but organizations don’t have to start from scratch. 3M has best practice prioritization settings that are used and may be modified after implementation, if desired. Using the 3M default settings in conjunction with super users who become working experts on the 3M 360 Encompass prioritization feature to ensure a successful implementation. Hospitals and health systems can also customize the rules, logic and targets to prioritize based on program goals. 3M prioritization is differentiated with the ability to apply clinical, coding and quality compliance to avoid complex case loss. You will always know why a case was prioritized as 3M offers flexibility and transparency into prioritization AI, rules, and scoring.

Taking CDI transformation, a step further
Once teams can focus on high opportunity cases first, organizations can begin to cultivate a mindset shift more about proactively impacting cases than quantity of charts reviewed and writing queries.

Prioritizing your worklist doesn’t just help your CDI team. Concurrent coding worklists are prioritized as well and have their own footprint and priority factors. If a factor is addressed by concurrent coding that doesn’t impact the CDI priority factor. With 3M 360 Encompass CDI, working DRGs can flow into the electronic health record (EHR). This means that people outside of the CDI department can see what the working DRG is and begin to understand what is happening with the patient. Using the auto suggested DRG as a baseline, information can be shared with case managers to prioritize their work. The prioritization tool removes the guesswork and improves cross team collaboration.

Now is the time to rethink value
With a new priority workflow structure in place, organizations can zero-in on the CDI cases with the highest impact.

AI-powered prioritization can expand your CDI program—without expanding your staff and allow existing staff to focus on clinically complex cases. With one tool, organizations can increase efficiency with flexibility and customization. Prioritization is an enhancement to current CDI functionality that uses data to drive how CDI teams can do their work with the highest impact.
Advanced code sequencing holds the key to telling the full patient story

When hospitals and health system’s CDI teams review clinical documentation, they are responsible for making sure the accurate and complete story of a patient’s healthcare encounter is captured so that it can be reflected in the final code set. Complex patients often present with multiple diagnoses related to the reason for admission and co-existing chronic conditions. Coding professionals are tasked with capturing diagnoses documented by the provider in line with coding guidelines. They must ensure the final code set reflects accurate reimbursement and capture quality aspects such as indicators and risk adjustment within the top twenty-five codes. This is done by manually ordering the code set which is a laborious and inconsistent process. Advanced code sequencing technology streamlines much of the manual process.

Why is sequencing important?

To effectively manage revenue, organizations must have the ability to accurately capture MS-DRGs. Medicare supports up to 25 diagnosis codes on a claim. If the sequencing of diagnosis codes doesn’t include quality indicators, co-morbidity measures and risk adjustments, then some high impact codes may sequence below 25 and not make it to the claim.

The risks of manual sequencing

Using 3M™ 360 Encompass™ for clinical documentation integrity can help ensure documentation includes all the components of the patient story to avoid the following risks:

- The most impactful codes do not always get submitted
- The code set does not tell the full patient story
- Inaccurate reporting to quality ranking or peer comparison organizations
- Incomplete feedback about patient population
- Potential penalties (e.g., patient safety indicators not reported)
- Dedicated staff to make manual code sequence adjustments
- Severity of illness (SOI) number
- Risk of mortality (ROM) number
- Hospital acquired conditions (HAC)

With advanced sequencing technology, in addition to traditional factors, the following factors are also considered when sequencing diagnosis codes:

- Agency for Healthcare Research and Quality (AHRQ) indicators including:
  - Patient safety indicators (PSI)
  - Neonatal quality indicators (NQI)
  - Pediatric quality indicators (PDI)
- Elixhauser comorbidity index

Using technology to enable accurate population reflection

Using the transformational software logic within 3M 360 Encompass to capture financial, quality and risk removes the critical responsibility of the inpatient coder to manually ensure quality aspects are captured. When a code set is completed and processed by the appropriate grouper(s), the diagnosis codes are automatically sequenced based upon several factors. Traditionally, these factors include:

- Principal Diagnosis
- Procedure
- MCCs
- CCs
- Severity of illness (SOI) number
- Risk of mortality (ROM) number
- Hospital acquired conditions (HAC)

Using advanced code sequencing technology in conjunction with your clinical documentation integrity program is essential to ensure not only accurate reimbursement but also surfaced true complexity of the patient population. When accurate documentation is captured in an advanced code set the highest level of coding occurs thus healthcare organizations can decrease their discharged, not final billed accounts to improve revenue cycle performance.

Improve revenue cycle performance

“To comply with complex government regulation, you’re required to have medical records, coding and release-of-information departments. But CDI is not mandated by a governing body. We have to prove our worth. 3M’s software for CDI worklist prioritization helped us do just that.”

—Kathleen Murchland, manager, documentation excellence, Kettering Health Network
In this time of rapid CDI evolution, CDI leaders and teams are continually asked to do more. Physician engagement remains a challenge in the face of burden and burnout. Workforce shortages make it nearly impossible to address these issues by simply adding staff.

CDI leaders are turning to innovative technology to help meet these new challenges – for example, proactive CDI solutions that use advanced AI, NLU, and computer-assisted physician documentation (CAPD) to help substantially improve documentation integrity while reducing manual work. These solutions close the loop between the often-siloed workflows of clinicians and CDI specialists—enabling CDI teams to engage physicians in clinical documentation integrity at the point of care, and supporting their ability to scale to meet new demands.

**Computer-assisted physician documentation**

CAPD is one component of proactive CDI. It’s used to nudge physicians to close common gaps in real time, inline in their normal EHR workflow, helping to improve documentation quality while minimizing rework. There are many ways to design and deploy CAPD technology—when considering CDI solutions that include CAPD, it’s important to dig into the details. Key factors include:

**Clinical threshold customization**

In a CAPD context, clinical thresholds are the clinical value sets that determine when a nudge is triggered. The most advanced CAPD technology enables CDI teams to customize clinical thresholds based on specific system, facility or service line protocols. This is critical to ensuring that the technology supports the organization’s needs, and offers CDI teams an ideal opportunity to collaborate with clinical teams to engage them more deeply in CAPD adoption and CDI overall.

**Physician supportiveness**

Nudges should complement, not interfere with physician workflows. For example, advanced CAPD technology provides the option to resolve, dismiss, or ignore a nudge – the technology should never force a physician to respond before proceeding with their work.

**CDI feedback loops**

As part of a CDI solution, CAPD technology should provide CDI teams visibility to physician nudge interactions, so they can optimize effectiveness. For example, over time CDI teams commonly see physicians no longer needing a given nudge, because the nudge has habituated them to fully specifying for that condition. This may indicate an opportunity to turn on nudges for a new condition or diagnosis. CDI teams also track physician agreement rates, and may revisit nudge wording, clinical thresholds, or other variables to continually improve the nudge’s value to physicians and documentation integrity overall.

**Connecting front-end and back-end workflows**

A full, proactive CDI solution encompasses both front-end CAPD capabilities and back-end CDI efficiency and automation. When physicians and CDI teams take advantage of shared clinical understanding within a connected, closed-loop workflow, both teams spend less time closing routine documentation gaps, and more time on fulfilling, higher-level work. CDI teams have time for complex quality reviews, and burned out physicians have time to care. And with more complete, accurate, fully specified documentation, hospitals are reimbursed more appropriately for the care they provide, and improve care quality for patients.
Creating a successful HCC program: A framework for success

The role hierarchical condition categories (HCC) in value-based care

An increasing number of provider organizations, hospital networks and physician practices, are entering into value-based contracts with their payers. By 2030 more than 40% of patients will participate with a value-based risk plan. These risk-adjusted programs are ultimately designed to provide a model that improves patient care and reduces healthcare costs. As part of this trend towards risk-based plans, healthcare organizations are using the HCC risk adjustment models to calculate risk scores and predict potential healthcare costs and spending for a specific patient population. The intent is to provide a more accurate picture of the patient’s chronic condition. This requires physicians to document the highest disease categories for each patient’s condition, demonstrating the patient’s conditions were monitored, evaluated, assessed, and treated on an annual basis.

Establishing your HCC program.

Establishing an HCC program can be a complicated process. HCCs span multiple stakeholders within a healthcare organization and across the continuum of care. Knowing where to start, what’s at stake and who to involve is a huge hurdle to overcome. Begin with the basics.

1. Define the opportunity

   Ask questions.
   - Does my coding accurately reflect the burden of illness?
   - Can I manage the growing risk populations and support providers in their efforts to be complete and compliant?

2. Operationalize the process

   Once the baseline, opportunities and workflow have been identified, integrating technology will provide an operationalized and sustainable process to manage an HCC program. Integrating technology, such as 3M™ M*Modal HCC Management, can provide a scalable process for a healthcare organization as they continue to expand value-based programs. 3M™ M*Modal HCC Management provides a closed-loop process between the physician and the clinical documentation specialist that improves risk-adjustment documentation and coding, care management and reimbursement across the continuum of care, using artificial intelligence and natural language understanding. This provides the ability to drive clinical concepts that enable:
   - Appropriate RAF score based on accuracy and continuity of HCC diagnosis capture
   - Real-time nudges deliver patient specific insights during the physician and patient encounter
   - Outpatient CDI workflow to prioritize patient population based on RAF gaps and outpatient visit schedule.

   Operationalizing an HCC process will drive higher quality data capture that improves patient care and communication.

3. Optimizing your HCC process

   An effective HCC process will allow an organization to meet their goals and keep patient care at the center of the focus. With the right expertise and technology, an HCC program will help create an infrastructure that delivers:
   - Data quality for improved care and communication between the physician and the patient
   - A process allowing physicians to identify and capture accurate and compliant patient insights within their existing workflow
   - Analytics that provide measured outcomes
   - HCC capture and RAF scores that are accurate and appropriate