

CDI TECHNOLOGY BUY-IN

More than 78% of survey respondents said they believe AI will become more prominent for CDI and coding in the future.



The Participants



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Gone are the days when clinical documentation integrity (CDI) professionals had to work with paper medical records and queries or scan documents into a rudimentary electronic health record (EHR) system. As the CDI industry has advanced and expanded and organizations have increasingly realized the value of a well-oiled program, more and more technological solutions have arisen with an aim at streamlining, simplifying, and supporting CDI work. While some solutions only affect the CDI professional reviewing the record, physician-facing artificial intelligence (AI) solutions are becoming more prominent, which requires a well-trained eye toward physician buy-in.

“Technologies utilized in the CDI/coding space have come a long way and are getting ‘smarter’ every day,” says **Chinedum Mogbo, MBBS, MSHIM, RHIA, CDIP, CCDS, CCS**, manager of CDI at Tenet Healthcare in Dallas, Texas. “We have come a very long way from the days of manually coding from code books, reviewing records on paper, and generating documentation queries on paper.”

In partnership with Cerner, the Association of Clinical Documentation Integrity Specialists (ACDIS) CDI Leadership Council conducted a nationwide survey on technology buy-in and asked members to share their organizational approach to this topic. Following is a review of the survey results.

Technology implementation status

While it’s rare that a CDI program would rely solely on non-technological manual processes today, rarely do organizations have access to every solution on the market. According to the survey, nearly 88% of respondents reported having fully implemented electronic grouper solutions, followed by 77.78% with electronic querying systems, and 68.98% with computer-assisted coding (CAC) solutions. (See Figure 1.) The high adoption rate for these solutions is likely because electronic groupers, querying tools, and CAC solutions have been on the market and available to CDI programs for quite some time now.

In contrast, other newer tools have far lower rates of adoption. For example, 63.89% of respondents said that they either haven’t implemented a computer-assisted physician documentation (CAPD) solution yet (but plan



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—Chinedum Mogbo, MBBS, MSHIM, RHIA, CDIP, CCDS, CCS



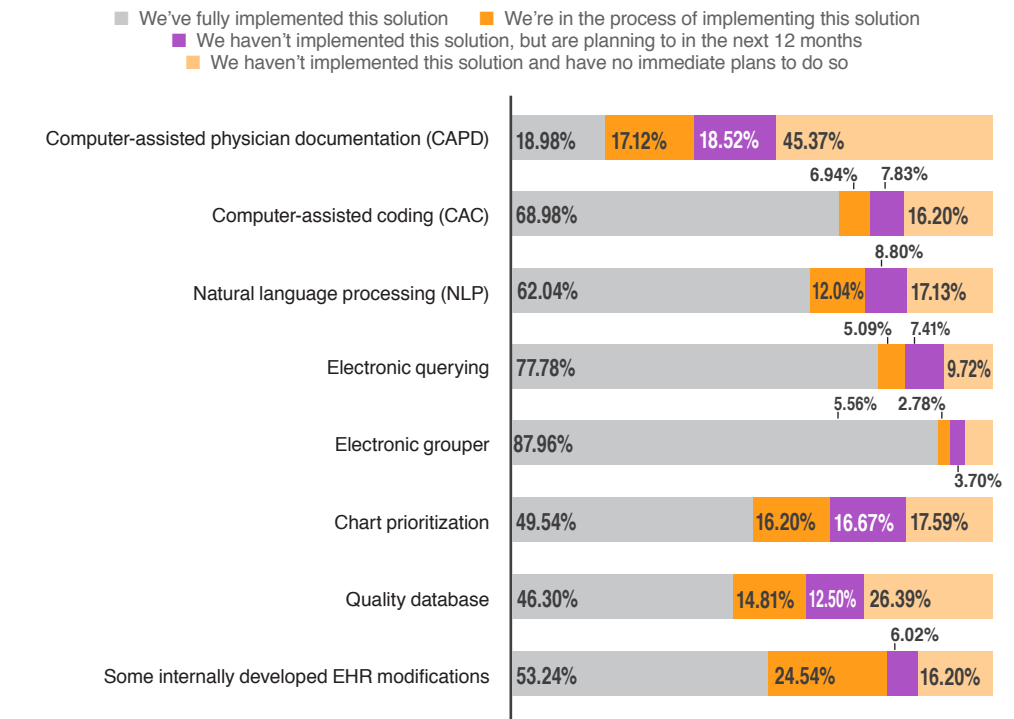
to soon) or have no plans to implement such a solution. Part of the hang-up, according to Mogbo, may be the physicians' perception of these types of AI solutions.

"While all the tools have the same goal of improved efficiency and effectiveness and overall reduction of undue burden on CDI staff and physicians, the CAPD is seen by some physicians as intrusive, [...] hence it is less popular," she says. "Physicians really don't see it as a tool that helps them more than it helps the health system make more money."

To address this buy-in issue, CDI leaders must work with the appropriate physician leadership or a physician advisor to explain the benefits of AI technology to their medical staff. This topic will be explored further in the following sections of this report.

Across all technology categories, many respondents said they're planning to implement a new solution in the next 12 months, but few were actively in the process of implementing a new system outside of internally

Figure 1. Technology implementation status



Selected "other" responses:

- Internal auto-assignment for CDI specialists to get new reviews.
- CDI software tool
- Attempted NLP but suspended the implementation.
- CDI note reader in the EHR.
- We tried a CAPD tool but didn't roll it out broadly/ discontinued it.
- We removed the CAC.
- We use an internally developed query tool that flows into the permanent record and coding application.



developed EHR modifications at the time of the survey. This could be due to budget constraints placed on CDI departments and healthcare organizations more broadly in the wake of the COVID-19 pandemic. As budgets begin to loosen again, CDI leaders will likely have better success advocating and securing funding for additional technological solutions.

“As AI technologies have advanced, the interest in introducing a CAPD solution has increased among our clients,” says **Andrea Groenhagen, RN, BSN, CCDS, ICP-ACO** and senior product owner at Cerner Corporation in North Kansas City, Missouri. “Organizations are looking for opportunities to utilize technology to reduce the cognitive burden on physicians and improve the quality of documentation.”

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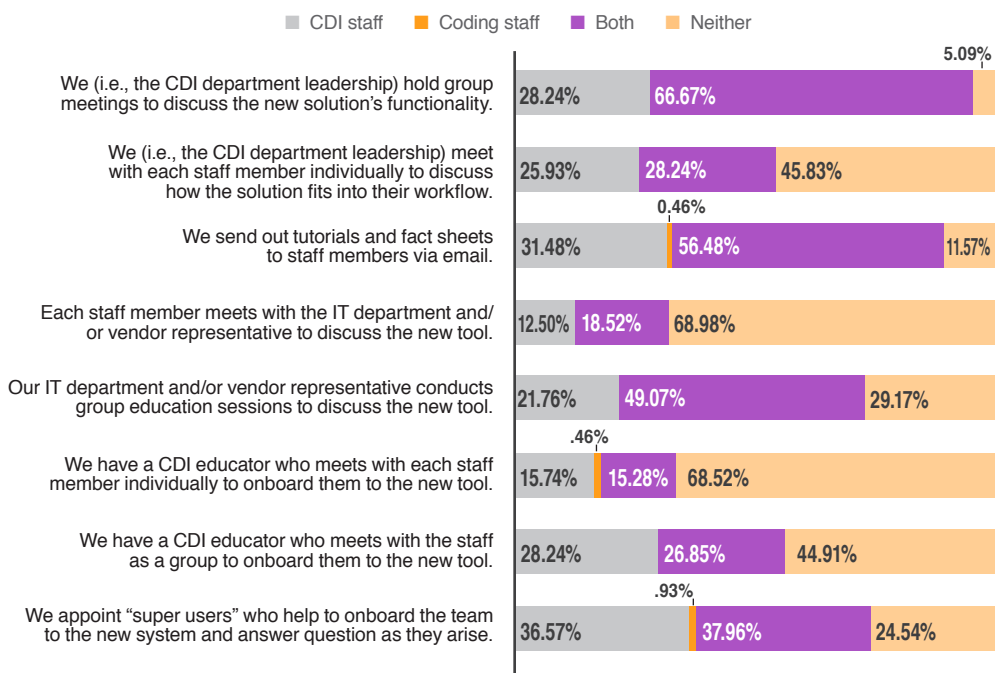
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Introducing new AI impacts

Whether the AI solution will be physician-facing or CDI-facing, CDI leaders need to spend time ensuring all impacted parties understand the implications of the solution implementation. According to survey respondents, the most popular communication tactic when introducing new solutions to the CDI team was to appoint “super users” who help onboard the team to the new system and answer questions as they arise (36.57%), followed by sending out tutorials and fact sheets to staff via email (31.48%), using an educator to meet with staff as a group (28.24%), and holding group meetings to discuss the solution’s functionality (28.24%). (See Figure 2.)

“Having super users fill in as subject matter experts is crucial in implementing new systems but having super users without properly educating the end-users (i.e., coders and CDI staff) is counterintuitive,” says Mogbo. “I would say a combination of the two methods allows for a more synergistic and effective way to ensure a smooth sailing implementation and post-implementation process.”

While very few respondents reported that they use any of the listed communication tactics with their coding staff alone, many respondents conduct joint education for both the CDI and coding teams, echoing Mogbo’s sentiments. The most popular joint education option was to hold group

Figure 2. Communicating new AI solution impacts**Selected "other" responses:**

- The corporate office CDI team develops the education and hosts virtual training sessions.
- Leadership trains the staff along with IS assistance.
- We don't have an educator but do have an assigned person to perform the training.
- We have not introduced AI and no current plans of doing so.
- We have a superuser team, regular check-ins with our vendor for any technical issues, and a regular systemwide superuser call to discuss issues.
- The coding leadership educates the coding team, CDI leadership educates the CDI staff.

meetings to discuss the solution's functionality with 66.67% reporting using this method.

"Joint education of the CDI and coding teams helps in breaking down silos that exist in many organizations and allows for more open communication," Mogbo says. "It enables everyone to hear the same message as opposed to a watered-down messaging when passed from one person to another (often times missing key points). Everyone hears from the same source and has the ability to ask questions and seek clarifications that are beneficial to all end-users."

The least utilized methods were to have each staff member meet with the IT department and/or a vendor representative to discuss the new tool with 68.98% saying they don't use this method with either department, followed by having an educator meet with each staff member individually (68.52%), and leadership meeting with each staff member individually (45.83%). These methods also likely represent the least efficient methods, and due to

their other responsibilities, leaders often must choose to focus on getting the most bang for their buck when it comes to educational efforts.

Seeking feedback, communicating impacts for physician buy-in

As all CDI professionals can attest, even the best-laid plans can be stymied by poor physician engagement. This is especially true for new technological solutions that directly affect their workflow such as physician-facing AI solutions (e.g., CAPD technology). To make technology implementations smooth sailing, CDI leaders solicit physician feedback before implementing new solutions by:

- Conducting demos for physicians (46.30%)
- Meeting with the physicians to discuss workflow impacts (35.19%)
- Working with their advisor/champion who then disseminates the info (29.17%)
- Working with physician leaders in each service line who then disseminate the info (28.70%)
- Giving physicians early access to the tool (27.78%)

Of those who have a physician-facing AI tool, only 1.39% say they don't solicit provider feedback at all. (See Figure 3.)

In addition to soliciting physician feedback, CDI leaders also need to be clear about the potential positive impacts a new AI tool offers to engender buy-in. Most respondents (56.02%) put their primary focus on improved patient care. (See Figure 4.)

Figure 3. Seeking physician feedback on physician-facing AI solutions

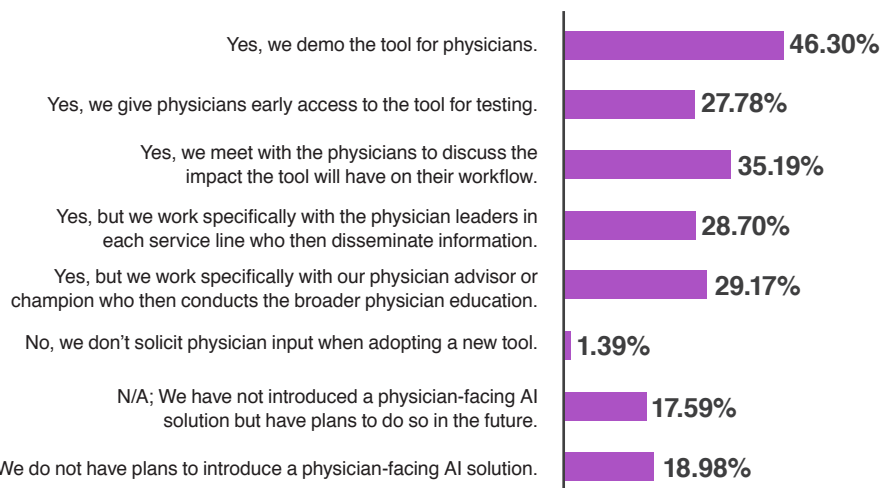
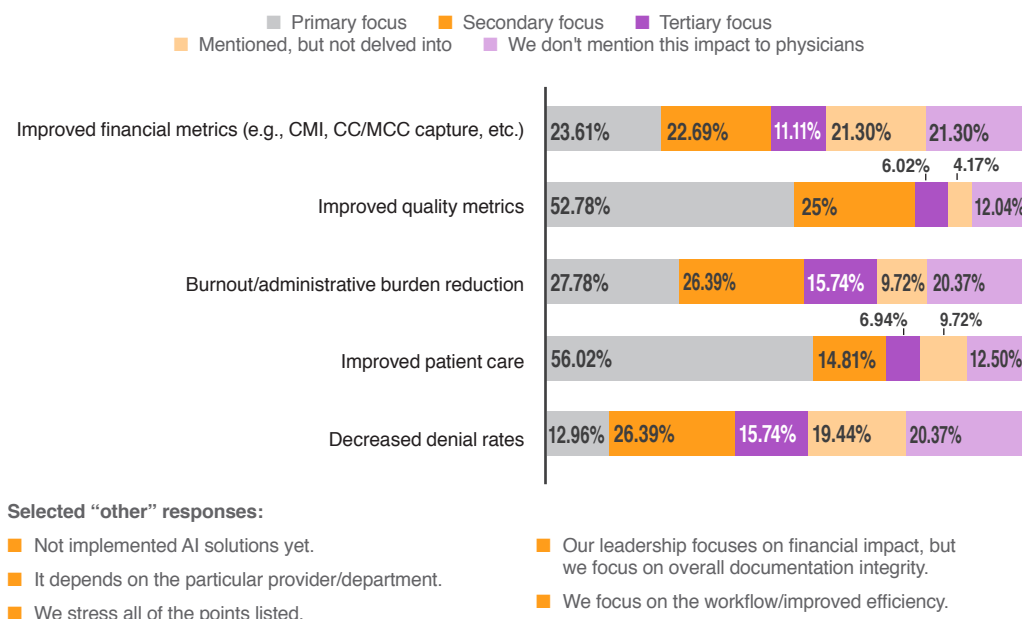


Figure 4. Focus when presenting AI solutions to physicians to gain buy-in

"That is what physicians are really focused on," says Mogbo. "It is an open secret that if you want physicians engaged, you have to demonstrate that whatever tool you are trying to implement has to lead to better outcomes for their patients. The tool has to also reduce the administrative/clerical burden on the physicians while providing them a platform to provide quality care to their patients."

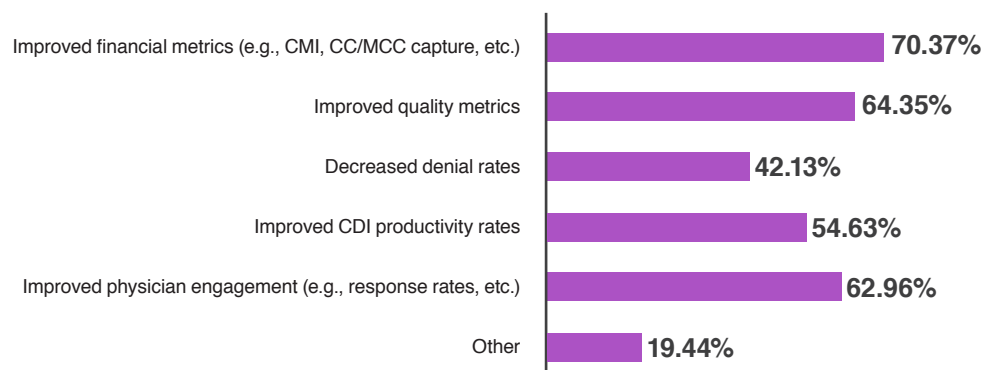
After focusing on improved patient care, an additional 52.78% of respondents said they focus on improved quality metrics. According to Mogbo, this focus often goes hand-in-hand with a focus on improved patient care and provides a natural one-two punch.

"If you can prove that proper utilization of an AI tool can lead to better quality metrics without compromising the care of the patient then you have buy-in from the physicians," she says.

The least popular focus was decreased denial rate with 25.46% placing it in last place in their priority list, likely because any changes in these can be difficult to pin on any one initiative/change and they aren't an immediate reflection since many denials go through a multi-level appeal process before reaching a resolution. Improved financial metrics and burnout reduction also rated low on the priority list with 21.30% and 20.37% of respondents, respectively, placing it in last place.

Metrics for evaluating AI solution efficacy

If an organization does choose to budget for and implement an AI solution, they'll want to see that their investment paid off and was effective in

Figure 5. Metrics to evaluate AI solution efficacy**Selected “other” responses:**

- Not implemented AI solutions yet.
- Number of cases with impact vs. cases reviewed.
- Provider satisfaction metric/report card.
- We don’t evaluate the AI tool specifically, just the quality of the CDI work in general.
- Improved accuracy in diagnosis code selection.
- Decrease in query volumes.
- HIM owns our CAPD tool and evaluates ROI.
- HCC capture rates.

improving their metrics. The most popular metric for proving AI solution efficacy was improved financial metrics (70.37%), followed by improved quality metrics (64.35%), and improved physician engagement (62.96%). The lowest rated impact was decreased denial rates (42.13%), aligning with the focus areas in Figure 4. Again, this may potentially be because that denial rate may be difficult for CDI leaders to access/attribute to one thing such as an AI solution. (See Figure 5.)

Of course, like most CDI efforts, if physicians aren’t bought into the solution and don’t use it effectively, these metrics won’t improve or change as expected.

“Measuring the efficacy of the tool via improved financial and quality metrics, is all dependent on how the tool is utilized,” says Mogbo.

To ensure that physicians do use the tool effectively, Mogbo suggests focusing on how the new tool and process will ultimately reduce query rates and therefore decrease their administrative burden associated with the CDI process. “If you have a CAPD in place, you want to assure physicians that utilizing the tool will eventually lead to a reduction in the volume of queries they get—that should get their attention,” she says.

According to Groenhagen, there has been a very positive response from clinicians to a CAPD solution that assists them with their note as a natural part of the chart review and documentation process, instead of having to address queries outside of their workflow. It’s important to recognize, however, that new technology requires change. “Physician adoption cannot be



underestimated. Ensuring success requires training, seamless workflow integration, and solid physician champion support,” she says.

While some measures, such as improved financial metrics, may be relatively simple to track and trend pre- and post-implementation, measures such as improved physician engagement don’t have a clear numerical measure for reporting and tracking purposes. Reduced query rates, however, imply that physicians are documenting more completely and clearly up front, which means they can also be trended for concrete proof of “improved physician engagement.”

“The whole goal of the CAPD is to reduce documentation burdens on the physicians and ensuring that documentation is accurate, codable, and billable with minimal input from a CDI professional or coder sending a documentation query,” says Mogbo. “Reduction in the volume of documentation queries, while achieving the same goals that could have been achieved with placing queries is a good way to measure engagement.”

CDI staff responsibility when implementing CAPD

Implementing a new CAPD solution involves several departments working in concert and most CDI departments have a role to play. According to survey respondents, the most common CDI responsibility was ensuring the validity of the AI content that’s implemented as part of the solution (31.94%), followed by responsibility for all queries (both AI and CDI-generated) (30.56%), and ensuring the solution adheres to all compliance guidelines (26.39%). Still just over 50% of respondents said they have not implemented a CAPD solution and another 11.57% don’t have input. (See Figure 6.)

Figure 6. CDI staff responsibility while implementing CAPD

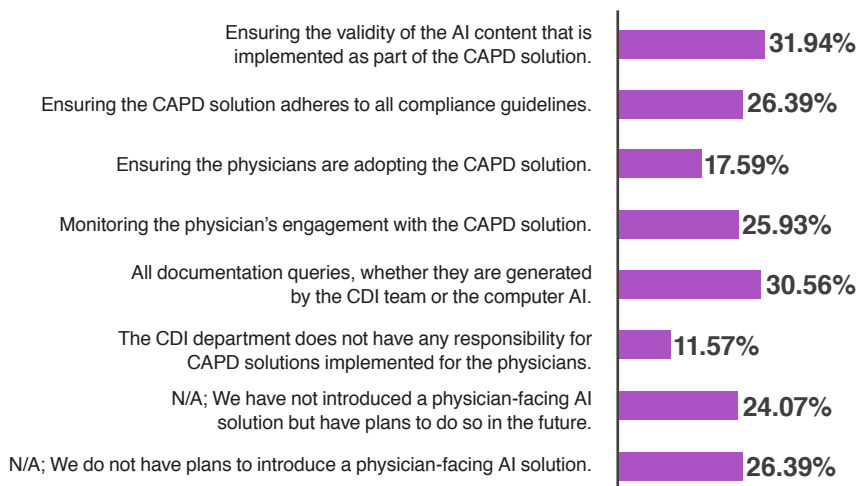
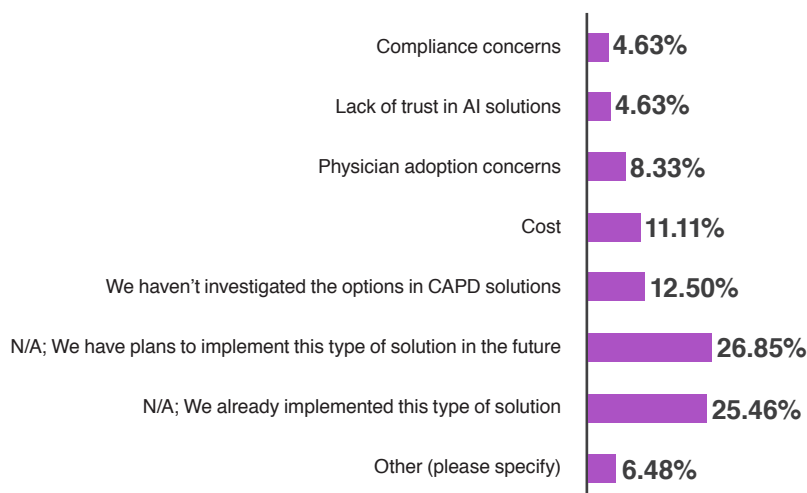


Figure 7. Reasons against implementing physician-facing AI solutions**Selected “other” responses:**

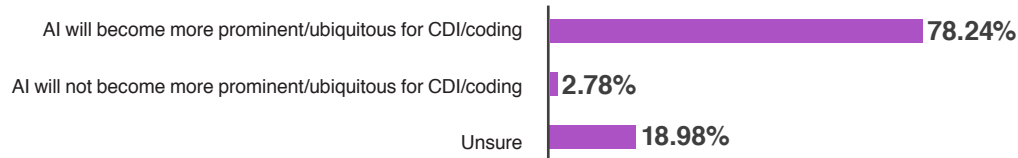
- We're incrementally implementing this to ensure validity, use, and impact.
- We implemented CAPD, but had functionality issues and discontinued.
- We're starting with the ambulatory setting first.
- Accuracy and compliance.
- Unsure of the reason.
- We haven't found a solution that won't add work for the physician workflow.

While CDI professionals have great expertise to lend to the implementation process, Mogbo warns that assigning too much of the responsibility to the CDI department can slip quickly into mission creep and overtax an already busy department. Instead, leadership should work with other departments to ensure the AI content is valid and that queries/auto-suggested diagnoses are appropriate. That doesn't mean, however, that CDI staff shouldn't have *any* role in the implementation process or that they shouldn't understand the new tool's functionality.

“The CDI staff's primary role should be to help in educating the physicians on the importance of utilizing the tool and providing support as needed,” says Mogbo. “Validation of the tool's performance and its adherence to compliance standards is something that the CDI leadership in conjunction with other departments like compliance and quality and the vendor should have the ownership of.”

When it comes to ensuring the tool is compliant, an organization's compliance department should work with the vendor on any questions or concerns. This will take some of the pressure off the CDI leadership and ensure that nothing gets overlooked.

“The vendor has the responsibility to ensure that its tool adheres to compliance standards and performs the functions it is built for,” says Mogbo.

Figure 8. Outlook for AI in CDI/coding


“The CDI staff can, however, assist in providing feedback on physician utilization of the tool.”

“CDI professionals play a very critical role in the implementation and adoption of CAPD solutions,” adds Groenhagen. “This technology is designed to complement the role of CDI by shifting some of the chart review and physician documentation feedback further up in the clinician’s workflow, thus allowing for these documentation improvements to be presented more concurrent with the care that is being provided.”

Barriers for AI solution implementation, the future of AI

Unsurprisingly, the biggest reason against implementing physician-facing AI solutions was cost (11.11%), followed by physician adoption concerns (8.33%), though most said they either don’t have the solution or don’t have CDI input. (See Figure 7.) When addressing the budgetary concerns, Mogbo suggests focusing on the metrics covered in Figure 5 during conversations with C-suite leadership to show the potential benefit of AI solutions.

“The return on investment tied to reduction in the administrative burden on physicians while ensuring overall improvement in both financial and quality metrics should be the focus,” she says. “You should be able to make a case that it is a one-stop-shop devoid of any bottlenecks that will hinder patient care and the revenue cycle flow.”

Despite the 50-odd-percent of respondents who did not have a CAPD solution at the time of the survey and the cited roadblocks, still 78% said they believe AI will become more prominent for CDI and coding in the future. (See Figure 8.) As technology becomes more integrated into the CDI process, it’s important to remember that CDI professionals and their unique skillset will remain essential to the process, working in concert with the technology to focus on more complex review types and focus areas.

“Like with anything technology, the human component cannot be over emphasized,” says Mogbo. “CDI programs should evolve as technologies evolve and the focus should gradually shift from merely capturing CC/MCCs to being involved and impactful in the continuum of care- thereby showcasing the true value of a CDI program.”