EHR tune-up: Refine EHR implementation and maintenance processes

When Ector County Hospital District in Odessa, Texas, placed some of the blame for financial losses on an unexpectedly costly EHR implementation, it joined a long list of organizations that hit major financial turbulence after implementing a new EHR system. In a March financial report, Vanderbilt University Medical Center said that high operating expenses related to implementing Epic in 2017 took a huge bite out of net patient services revenue that would otherwise have been in excess of the budget. And in 2016, Massachusetts-based Southcoast Health announced it was cutting staff after a $100 million Epic implementation. Training costs alone accounted for a $9.9 million operating loss.

Everyone who's weathered an EHR implementation, switched vendors, or pushed through a major upgrade knows go-live is a bumpy process at best. Coding and documentation accuracy can take a hit as staff get the hang of a new system and IT works out the inevitable last-minute bugs. Productivity also tends to drop as staff adjust and hours are lost to additional training or system downtime. All of that means an organization will be slower getting claims out the door, delaying revenue and running the risk of missing timely filing deadlines.

These problems don't go away once the facility goes live. Recurring technical glitches, staff training, and the backlog of work can continue to sap resources and revenue well after the hospital and vendor officially announce the project is completed.

Revenue integrity needs to claim its seat at the EHR implementation and maintenance table to ensure revenue disruptions are kept to a minimum. Developing an action plan, budgeting appropriately, and working with peers to catalog and monitor for ongoing issues will be critical to ensuring that the organization reaps the benefits of the system.

The next phase

In the early days of EHRs, some organizations might have hoped that implementation of systems and migration of records would be a one-time project. But as time has proved, nothing is ever really final in the digital world. Organizations often switch to new vendors and systems, add specialized EHR products, and integrate homegrown software designed to address an organization's specific needs. On top of that, software and hardware upgrades can require as much work as implementation. Even a relatively minor software upgrade can have a big impact if it changes the user interface.

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As many organizations evolve from purely hospital-based or physician practice–based organizations to all-inclusive health systems, they're moving to comprehensive, organizationwide EHR systems, says **Sarah Humbert, RHIA,** coding and compliance manager at KIWI-TEK in Indianapolis, Indiana.

"Instead of piecemealing together something for their professional fee and their clinics and then

their hospital, they're going to systems that can capture everything, the EMR, the billing aspect, all in one system," she says. "Which, overall, has great functionality, especially for the clinical staff. But what we often see when a system makes these big implementations at one time is that there's generally hiccups."

Although most staff don't relish the idea of repeating often-lengthy implementation projects, sticking with an old system the organization has outgrown isn't ideal, points out **Dan Rounds,** president of Immersive Healthcare in Panama City, Florida.

"Many of our legacy environments are rooted in 1990s technology and processes," he says. "In our rapidly changing healthcare environment, we need systems that can meet our requirements, both today and tomorrow. EHRs are foundational systems, and you won't be able to meet more advanced needs if you're building on a foundation that isn't solid."

Learning curve

Switching systems or going through a major upgrade aren't just big IT projects. Everyone who uses the EHR, from clinical to billing staff, will be impacted. Staff will need ample training before the system is live. As staff rotate in and out of training sessions, departments can be spread thin, overtime hours can pile up, and productivity can take a dive.

"Especially in the coding realm, you're taking a whole group of coders out for training and it's generally for at least two to three hours a week for several weeks. You're losing productivity," Humbert says. "There's the implementation and the training

time that automatically costs a lot, and just as with anything new, there's a learning curve."

Clinical and registration staff will also need to get the hang of a new system. Even minor changes to information fields, checkboxes, and templates can throw staff. If information is missing from the chart, CDI and coders will need to query more frequently.

As productivity drops and queries rise, the organization could see its discharged not final billed (DNFB) number skyrocket. These are claims that have not been coded or released to the payer. The DNFB is a critical number that the C-suite often monitors daily, and it should be closely watched during EHR implementations and upgrades, Humbert says.

"If an inpatient coder was regularly doing 24 inpatient cases per day, and then during this learning process they're down to even just 18 or 20, that's a significant loss," Humbert says. "If you consider that on average perhaps each inpatient case is worth $25,000, you start to do the math and then you take that general down trend across all patient cases. Coders are learning a new system, and you're losing the daily cash flow or the daily revenue push from getting these bills out the door."

Even with the best testing and training plan, it's likely that bugs and other issues will be identified after go-live. Although pushing through fixes or customizations is necessary, taking the system down for 20 or 30 minutes to make those changes will cut even further into productivity and bloat the DNFB, Humbert says. It can take months for coding to catch up and stabilize.

Pre-plan

Despite the best planning, major EHR changes rarely go smoothly, Humbert says. However, organizations can stack the odds in their favor by making a contingency plan. Each department should have a realistic expectation of how many training hours and, if applicable, overtime hours or additional staff will be required. Staff should get the education they need while minimizing productivity loss. If extra staff need to be brought in, it's easier

to bake that into the budget ahead of time rather than trying to make the case later, she points out.

If you recruit additional staff, they'll need access to the EHR and other systems used for coding and billing. Once the budget for extra staff is approved, reach out to IT to get system access and usernames and passwords set up, Humbert advises. If this task is left to the last minute, IT might be too overwhelmed to process the request in a timely manner. That will just add to the potential coding backlog and waste the resources devoted to bringing in extra staff.

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Finally, network with other revenue integrity professionals who have weathered similar changes. If your facility is switching to Epic, for example, reach out to peers who are at Epic facilities or helped shepherd a facility through an Epic go-live. Colleagues at other facilities or vendors you work closely with might be able to provide a list of common problems and issues to keep an eye out for along with tips for avoiding trouble in the first place, Humbert says.

Fine-tune

You've made the switch and sailed through go-live while controlling DNFB—but don't declare victory too soon. Seemingly small issues deferred or unnoticed during the rush of go-live can come back to bite an organization months or even years later. Revenue integrity needs to scrutinize reports to spot revenue issues that can be traced to an inefficient software setting, poor template design, or incorrectly configured edits. Having an EHR means constant change, says **Susan Gatehouse, RHIA, CPC, CCS,** chief executive officer of Axea Solutions, Inc., in Atlanta.

At a high level, a hospital's goal is to get a compliant claim out the door as quickly as possible, Gatehouse says. At the same time, many assume that the edits built into the EHR are correct. It's often only through retrospective audits and analysis of denials and edits that these assumptions are proven wrong. In some cases, the EHR may apply an edit that should not be applied. Or, the EHR might miss an edit, leading to a denial from the payer or, even worse, an overpayment.

Fine-tuning edits is an ongoing process. The EHR shouldn't miss edits, but neither should it apply edits that aren't appropriate, Gatehouse says. It's a mistake to rely solely on the vendor to ensure that edits are valid and updated as needed, she adds. An organization should be willing and able to look into edits.

"It's not a one-time check," Gatehouse says. "NCCI and other Medicare claim edits change on a quarterly basis. Your medical necessity edits change on a whim."

Some organizations might not invest in researching claim edits and finding root causes. It can be easy to simply write some edits off, particularly if each individual edit is for a low dollar amount, Gatehouse says. But those lower dollar amounts can add up—especially in high-volume areas such as labs or drugs, she says.

"I think hospitals are so focused, and I understand why, on getting the claim out the door as accurate as possible, and the high-dollar, high-volume claims are looked at. So, the ones with edits that may not be over $500 are generally not given a lot of attention," Gatehouse says. "Until that $500 adds up to a million. And that may take three or four years to go by."

It's not always practical or economical to hold every claim for every edit. If a $10,000 claim is stopped for a $15 edit, most organizations will write off the $15 rather than delay revenue, Gatehouse says. Instead, revenue integrity can trend edits and denials and set a threshold that triggers an internal audit. Revenue integrity should compare edit rates to historical data in two ways: volume of edits and dollar value of edits. If either measure has gone up,

what service lines are most affected? Are problematic areas such as drugs, labs, pathology, or interventional cardiology hitting more edits? Or, are they sailing through the edit queues only to be denied?

Gather evidence if your investigation points toward an incorrect EHR edit setting, Gatehouse says. Vendors want to provide excellent service, and their goal is to have the most accurate, up-to-date edits included in the system. Most vendors will want to correct an error, but they will need more than simply your word that an edit is incorrect.

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"In our experience, when working with the vendor, it's not as simple as calling and saying the edit is wrong," Gatehouse says. "It's the proof the edit is incorrect, and this is why, this is what the LCD says, this is what the NCD says, this is what the Mutually Exclusive Edits says or the NCCI edits."

In addition, provide examples of when the erroneous edit occurred at your facility, she says.

Data mining

Revenue is ultimately based on data entered in the EHR. As revenue integrity helps iron out billing and claims processing hitches in a new system, they'll likely stumble on data input and collection issues. Bad data has a ripple effect. Patient care and revenue suffer, and the organization's ability to run reports and trend data is hindered. Bad data also throws a wrench in population health programs and value-based reimbursement models that calculate reimbursement and risk scores based on patient data, Rounds says.

EHRs have long been blamed for data problems. During the early phases of EHR adoption, vendors and healthcare organizations might not have realized

the full potential and impact of the data collected by EHRs. As a result, EHR implementations weren't always done in a way that supported the use of that data post-implementation, Rounds says.

Common sources of bad data include templates and smart text. Vendors and organizations work hard to design compliant, efficient, and user-friendly templates and smart text fields, Rounds says. But technology, treatments, and organizations themselves constantly evolve, and EHR templates might not keep pace. In addition, many organizations try to limit the number of templates they build and maintain; however, sometimes a clinical encounter can't be adequately documented using the available templates, he says.

"I totally understand, whether it's IT or informatics, whoever maintains those templates, you want to maintain dozens instead of hundreds," Rounds says. "Clinicians attempt to use the templates as designed, but they're not always sufficient for their particular needs. Unfortunately, we often see templates and smart text that should be reevaluated and optimized."

Templates and smart text should be evaluated and updated regularly, including after changes to government or commercial payer regulations. It's important to catch bad templates sooner rather than later—otherwise staff will be forced to create their own workarounds, Rounds says, which might work in the moment but will likely cause problems in the long term. An improvised workaround could raise compliance issues, impact data quality and reimbursement, or introduce costly inefficiencies.

Organizations need to ensure that EHRs are serving the data needs of all stakeholders in a compliant and efficient manner. A bad process can leave the organization vulnerable, eat into revenue, and hamper productivity.

"We have many processes that result in inadequate data for all of the business's needs," Rounds says. "Organizations have the opportunity to realize additional value from their data and reduce unnecessary costs by reevaluating and remediating bad and broken processes that simply aren't data-aware." NJ