SCOTTSDALE INSTITUTE

INSIDE EDGE

Quality Reporting in the Era of Meaningful Use

EXECUTIVE SUMMARY

Reporting on quality measures is not something new to hospitals and health systems, which have reported on measures like HEDIS, Core Measures, Joint Commission Oryx and PQRI in some cases for two decades or more. What's new is HITECH Meaningful Use, which beginning with Stage 1 and through Stage 3 requires a gradually escalating level of electronic analysis and reporting for an expanding array of highly specific quality measures.

To say the least, the transition from traditional methods to electronic reporting is not easy. As leaders in IT, Scottsdale Institute member organizations have developed mature quality programs led by sophisticated executives and teams that engage the enterprise. Yet, even these organizations are struggling with the new demands for quality reporting. Why is it so hard?

First, the fact that quality measures have not been harmonized across quality programs presents health systems with challenges. Entire encyclopedias exist to define one system's clinical measures, and sometimes multiple measures addressing the same condition have a slightly different set of definitions for some of the data elements or the calculation. Second, Meaningful Use on the surface may seem more lenient in some respects than reporting to CMS for the Inpatient Quality Reporting (IQR) program, for example, and that can lead to a false sense of competency in the quality reporting game overall. Third, and most significant, the advent of electronic reporting is truly a game changer—as Meaningful Use meant it to be—that requires an organization to shed its paper skin, so to speak, and embrace an electronic one. If you thought that molting had already occurred, talk to some quality experts. We did and the following report is what they had to say.

Truly meaningful

Sorting out the discrepancies between 'general' quality reporting and Meaningful Use for Stage 1 requires a veteran eye, so we turned to Jane Metzger, research principal for CSC's Waltham, Mass.-based Global Institute for Emerging Healthcare Practices, to identify key differences. She started with the fact that CMS has set a lower bar for Meaningful Use, allowing clinical quality measures to be calculated based on the information available in the EHR (rather than all relevant patient information).

Volume 17, Number 6

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Catholic Healthcare West

The Scottsdale Institute is proud to announce Catholic Healthcare West (CHW) as a new member.

CHW is a family of more than 60,000 caregivers and staff dedicated to delivering high quality, affordable health care services in a compassionate environment to diverse communities across Arizona, California and Nevada.

Founded in 1986 and headquartered in San Francisco, Catholic Healthcare West (CHW) is the fifth largest hospital provider in the nation and the largest hospital system in California. CHW currently has 40 hospitals, 56 ambulatory care centers and 4 health plans.

In fiscal year 2010, CHW had more than 1.8 million acute patient care days and provided $1.3 billion in free care to the poor, community benefit programs, and unreimbursed patient care.

Welcome to Lloyd H. Dean, President/CEO, Deanna Wise, CIO and the CHW IT Leadership team.

Jane Metzger, research principal, CSC

CSC

"That breathing room doesn't exist in general quality reporting requirements," says Metzger. Instead it must cover all applicable patients and all applicable patient-specific information. "Meaningful Use gives a little room here, at least in Stage 1. But we tell people, 'Go for truly Meaningful Use.' That's the only way you are building the foundation for the future."

A lot of Stage 1 is focused on data capture, and again CMS has set lower standards for Stage 1. A good example is the electronic problem list. Meaningful Use allows an organization to provide a problem list for only 80 percent of patients and only a single entry counts as a problem list in Stage 1.

"I don't think there's an admitted patient known to man that has just one current and relevant historical condition," says Metzger. Not only is a real problem list critical for clinical care, but most measures, whether process or outcome-based, rely heavily on problems/conditions to include or exclude patients from the measure. Further, because substantiating a diagnosis under coding for both reimbursement and quality reporting requires physician documentation, physicians must maintain the problem list.

"As people think about the problem list in Stage 1," she says, "they should bite the bullet and get a *complete*, physician-maintained problem list in place for every patient. Meaningful Use points organizations in the right direction, but organizations need to aim higher to build a solid foundation for the future."

Sleeper

"The sleeper in Meaningful Use is quality reporting," notes Metzger. "Even the clinical quality measures for Stage 1 include many data elements not addressed in the Stage 1 requirements including, for example, medication administration and clinical reasons that a recommended intervention doesn't apply. Not only do hospitals need to exceed the specified data capture requirements for Stage 1, but they also need to at least plan to capture all of the other needed information in the EHR. Meaningful Use measures for venous thromboembolism (VTE) are already teed-up for the Value-based Purchasing program, and CMS has said many times it will be harmonizing measures *and* electronic reporting across programs, including HITECH, to minimize the burden on hospitals. Only organizations that reflect this eventuality in how they approach Meaningful Use will be ready."

And only digital systems, of course, can accommodate the steadily increasing number of quality measures required not only by the federal government, but also by states, accrediting authorities, and

private payers. As the move to the EHR occurs, there are other issues, including a move away from text and toward structured, discrete data elements. "It has to be coded to be available for other uses than viewing," says Metzger, and it's very clear a lot of documentation has to come from the physician. The industry as a whole has a lot of work ahead to figure out how to do this without taking too much time."

Reporting from Intermountain

Physician documentation is an issue that resonates with leading health systems as they dig deeper into the relationship between quality reporting and Meaningful Use.

"When you look at the Meaningful Use Stage 1 measures, it looks pretty reasonable from the 5,000-foot level," says Len Bowes, MD, senior medical informaticist at Intermountain Healthcare, the Salt Lake City-based, 23-hospital integrated delivery system. "However, when you get into the details there are lots of inconsistencies," he says, and physician reporting is one of those details.

For example, CMS wants health systems to collect quality data using certified technology. However, while CMS defines Meaningful Use rules, the Office of the National Coordinator (ONC) defines what is a certified technology. More specifically, for stroke patients hospitals are required to collect data for when that patient was "last known well," or when the patient was not having a stroke. This information is ideally captured from physician's notes. Under the ONC's definition of certifiable technology, however, capability for entering physician notes—which would incorporate such a data element—is not required to be certified, therefore the data must be entered in a module that is certified, requiring redundant documentation.

"You have to build workarounds that aren't best practices," says Bowes.

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Len Bowes, MD, senior medical informaticist, Intermountain Healthcare

Another fuzzy area is exactly what CMS plans to do with the data once it is received. "We know the data reported on Core Measures will be published and compared," he says, but there's no clarity about end use of reports for Meaningful Use. "Our leadership is concerned about that. Everyone in this clinical quality-measure business should really try to decide on what measures we need. Let's pick one set and stick with it."

Maintain your standards

Given the vagaries, Intermountain has decided to do the best it can, accepting the fact that it will likely underreport to meet Stage 1 Meaningful Use for its 23 hospitals. For example, CMS

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wants hospitals to report if they gave certain medications to stroke patients, and if not why not. The problem that arises—similar to reporting on VTE prophylaxis—is the sophisticated and quickly changing nature of stroke medications. Because it's often impossible to keep pace with newer medications and input them for selection in the EHR, it follows that it's also impossible to properly do quality reporting on the measure. In other words, a behind-the-times standard can prevent a hospital from collecting data for a specific quality measure.

Compounding the issue is the fact that the 15 input measures for Meaningful Use reporting involve more than 90 data elements. "Every EHR will have to collect those 90 elements on every patient," says Bowes, unlike the sampling of data from a much smaller set of patients required under Core Measures. "That's a huge challenge."

Despite the obstacles, Bowes recognizes that electronic capture of such quality measures is here to stay. "You just need to pay attention to Stages 2 and 3. Make sure you have people on your team who will dive into the details as soon as the preliminary and final regulations are released. Also, network with other organizations in a similar situation. We networked with Partners Healthcare and Harvard because they're in the same boat. Their systems are homegrown."

Intermountain, which has for years been working on quality measures using its data warehouse, plans to concentrate on improving four areas:

1. Order sets with clinical decision support—order sets need to be driven by problems;
2. Physician documentation must enable capture of some coded fields necessary for quality measure documentation;
3. Development of a discharge module that tells why a discharged patient received or didn't receive therapy;
4. Ensuring that all data is collected at the point of care.

"In the next three to five years we need to get to the point where this data is collected in the normal clinician workflow," he says.

Memorial Hermann

A CMIO at another leading health system is quick to put the quality reporting effort into perspective.

"We're all struggling with a period of fundamental change and transformation in healthcare," says Bob Murphy, MD, CMIO at Memorial Hermann Healthcare in Houston. We need to remind ourselves of how far we've come, he says. "In the past 15 years, as an industry we've developed a well-honed process for Core Measures that has been successful enough to achieve 100-percent compliance with measures such as oxygen for pneumonia—and retire them."

In successfully addressing Core Measures over those years, hospitals

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have invested great effort in building a workflow for paper-based documentation and reporting. "Organizations have really hard-wired an operational workforce to optimize paper-based processes. Now there's a rapid shift to not only electronic data collection but also to multiple users contributing the data in the electronic systems," says Murphy.

Robert Murphy, MD, CMIO, Memorial Hermann Healthcare

That rapid shift has resulted in understandable stresses, typically on the granular scale. One of those is the process for correctly entering into the system why a patient should be excluded from having to take a suggested drug, because she has an allergy to it, for example. Merely not administering the drug to keep the patient safe is not enough—quality reporting under Meaningful Use requires more than just a statement proving that the physician considered the therapy in a free-text progress note. "Now this reason must be codified" says Murphy. "When you have to document the reason you didn't do something, it requires specific extra steps of workflow to comply with such a precise element," says Murphy.

Managing multiple information sources also poses a big challenge. A single doctor can generate handwritten, dictated or EHR-structured data. But when the quality reporting module is directly within the EHR, there is not an automated way to get the free text responses into the quality reports. A physician may dictate a superb note, detailing all the appropriate exclusions, but to get this in the quality module via a rule or additional electronic form requires additional steps—in essence, "double documentation."

Additional work in transition

Still, Murphy acknowledges that it's always been clear Meaningful Use would take a five-year period of transition to achieve its goal of automating patient care information: "The technical specs are being developed as we speak."

Quality departments must concurrently meet the ongoing CMS measure specifications at the same time they are adopting the new Meaningful Use measures in their fully electronic formats. The big questions are, one, how long will the dual-reporting period last and, two, will there be any relaxation of requirements? "It's an incorrect assumption that just because information is structured that it's going to be accurate. As a former ED physician, years ago I got my first quality report saying I didn't give aspirin to a patient. That was because the patient received aspirin in the EMS, but it didn't count for the Core Measure. I learned to do that on paper. This alternate source of information such as an electronic EMS run sheet is not easily incorporated into

continued

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the hospital's clinical system. It is just going to take time to get such details figured out," says Murphy.

Among other ramifications, this period of dual reporting has caused Memorial Hermann to consider expanding rather than reducing quality abstractors. "Our internal debate is whether the electronic submissions will still need the same level of abstraction and audit before we send to CMS," Murphy notes. "If so, this may take more time. Will this duty fall to nurses at the bedside, or will we need to supplement our quality staff? We all await clarification from CMS in the final rules for Stage 2 and 3."

Another challenge is time, including the time it takes from the publication of technical specifications of the quality measures until the time organizations are held responsible for reporting on them. "Our vendors need time to program new specifications into a new software release, and then we often have an extensive period for building, testing and training on the new software before we implement," says Murphy. "Previously, new core measures releases came to the quality department and minor modifications to paper forms might be necessary. With significant code or package updates, meeting these electronic standards will require a far greater investment of time and IT resources. We do believe these methods of electronic capture and submission will be better in the long run, but it will probably be more work in transition."

"We cannot lay this at the feet of the vendors. Clinical documentation software as delivered is capable of supporting structured data fields for documentation. It takes effort to make it work."

Lifespan

Lifespan, a Providence, R.I-based four-hospital health system is working closely with physicians to establish improved quality as the overall goal for any reporting measures, not just those for Meaningful Use.

Mary Cooper, MD, JD, CQO, Lifespan

Lifespan

"When we set up our Meaningful Use implementation," says Lifespan CQO Mary Cooper, MD, JD, "we set it up with quality as the underpinning knowing that a quality framework would improve participation by the clinicians. We did everything from the perspective that certifying in Meaningful Use would improve the quality of care delivered to our patients. Our entire organizational structure has driven forward those quality indicators. Our success is based on driving the Meaningful Use indicators down to the field level. We're now going back and validating our other quality indicators at the field level, a task that will take at least a year."

Lifespan CIO Carole Cotter says it is a misperception that Meaningful Use is at cross purposes with traditional quality reporting or that vendors are AWOL on the issue. "We cannot lay this at the feet of the vendors. Clinical documentation software as delivered is capable of supporting structured data fields for

documentation. It takes effort to make it work." She gives credit to the health system's CMOs for their leadership in persuading physicians to adopt electronic health records.

Carole Cotter, CIO, Lifespan

"This is not a technology project. It is a quality project. We measure quality objectively using structured data with national standard code sets. We can use those measures to find the opportunities to improve outcomes internally, learning from each other. Because Meaningful Use is a national initiative, we will be able to benchmark with our peer group in an objective manner. Ultimately, that's what Meaningful Use is all about," says Cotter. Toward that end, Lifespan emphasizes two critical factors: physician buy-in and adoption of national standard code sets for lab results, radiology results, problem lists, and pharmacy.

In these areas, Lifespan has benefited greatly from a foundational partnership between quality and IS. CIO Cotter, for example, has taken leadership in the area of national standards such as SNOMED for problem lists and LOINC for laboratory data. "Those terms are not even in my lexicon," says CQO Cooper. "People who work in quality have traditionally not understood these standards. In healthcare, it's the IS people who do. That gave us a framework."

Mirroring the workflow

Another key success factor: communication between quality and IS in configuring complex clinical software to the way physicians work. "I could say, 'Here's how we create buy-in with clinicians. Here's how the information flow mirrors the workflow,'" Cooper says. "Carole's relationship with the vendors was key. She worked with vendors, telling them we need to collect these data at optimal points in the clinical flow." Being beta partners with vendors also helped.

Getting buy-in from Lifespan's nearly 2,000 physicians for the overall quality initiative was obviously critical. "We said, 'Tell us how you work. We'll collect the data. This is only going to help you become a better clinician. You'll come to rely on those data to see how you're performing,'" she says.

CIO Cotter summarizes IS's role in quality as threefold: 1) reformatting the workflow; 2) directing the collection of data from different data sources to structured fields; 3) retraining clinicians to collect data. "We use all three solutions to collect quality data. Sometimes that involves changes to software, to data or to training," she says.

"It takes a village," says CQO Cooper, to implement such a major quality initiative. In addition to quality and IS staff, the project team includes CMOs, CNOs, nursing leaders, quality staff, marketing and communications and the training department. "We're building a framework for quality because I

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think Meaningful Use in and of itself is not compelling enough for hospitals to get there. We're now using quality to validate all we do. There are so many dollars for quality at stake, not only with Meaningful Use but also with Value-based Purchasing and partnerships with payers. We need to be 100-percent sure that our data are clean."

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After building the framework for Meaningful Use, Lifespan is now focused on transitioning to electronic capture of data elements across the board, a move that will position itself for a future that will be dominated by the need for safety and quality compliance. "We're especially sensitive to cross-walks between Meaningful Use, HEDIS and PQRI," says Cooper, adding that the move to electronic data is already beginning to transform quality reporting. "We've been used to data samples of 30 patients, but with electronic data I can analyze 4,000 patients—and it's objective."

A supplier's perspective

"The complexities of quality reporting continue to pose a challenge," says Kim Hlobik, VP for Lighthouse, a quality solutions unit at Kansas City-based Cerner Corp. "Many of the measures out there are not EMR-based or EMR friendly," she says.

As a result, Cerner has become active with federal agencies, Meaningful Use advisory boards, the Joint Commission and clients to try to convey an understanding of the EMR especially functions like electronic submission of quality reporting. In particular, the supplier wants to help shape how CMS and the Joint Commission develop the algorithms for quality reporting.

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Cerner, Hlobik says, wants to develop quality reporting at the point of care within an end-to-end solution incorporating real-time dashboards, real-time data and clinical decision support to allow providers to make changes in care when it counts. While many people are involved in quality reporting, from bedside clinicians to abstractors to quality managers, the goal is to automate as much as possible a process that is heavily weighted toward manual chart review.

It's an ongoing process in which the vendor assigns quality and performance-improvement experts to observe client workflow, process change, personnel and technology that enable data capture and algorithm calculations.

"Algorithm calculations are one of our biggest challenges because they're not all standardized," says Hlobik. For example, Meaningful Use calculates stroke guidelines slightly differently from the American Heart Association and other organizations. Even slight variations can result in a multitude of differing results. "We need to get to one set and today there's not a whole lot of convergence. We're building client consortiums to achieve consensus. You don't want the

burden on reporting itself but on how to achieve better outcomes. That's what Meaningful Use is ultimately about."

Where the journey is going

The first step is to capture the initial data, critical not only for Meaningful Use but any emerging payment framework. "You see where the journey is going with Value-based Purchasing and readmissions. You're going to get paid for outcomes," Hlobik says.

Max Reinig, VP for physician solutions at Cerner, says the data-capture requirements for quality reporting on stroke, for example, vary from Meaningful Use to Joint Commission to the American Heart Association. "We're being very vocal in industry committees and working closely with clients" to standardize such data capture, he says. In the meantime, the company is working on data-capture solutions to address not only stroke but VTE and other conditions.

"The list just continues to grow. We're going to have to see some convergence, especially as more and more agencies go to electronic submission," he says. The real need is for such data capture to be within the workflow, especially at the point of care, for it to impact the quality of care. That's the whole point of quality reporting in the first place.

Historically, such data capture has been performed using manual chart abstraction for retrospective reviews which only allows hospitals to see how they performed a month after the fact. "But if all your data is coursing through the EHR you can get test results, a complete chart summary. The EHR can calculate the data, present it to the provider as part of the visit, take action, and provide reporting or compliance," Reinig says.

Another factor complicating the picture of quality reporting is that the person who owns quality at a hospital varies widely from facility to facility. Some places it's the CMIO, others it's the CMO, CNO or CQO. "We're seeing more CFOs involved," says Hlobik, because of the reimbursement ramifications. "IT is always there because IT is the enabler."

Conclusion

Quality reporting in the era of Meaningful Use puts hospitals and health systems in two worlds: the first, a well-trod, paper-based world in which highly-paid nurses perform manual chart review and report on a small sample of patients; and the second, a new, still emerging and incomplete automated world in which every data element about every patient flows freely through an EHR that is so interconnected it can follow the patient throughout the continuum of care.

The transition is painful for healthcare organizations because it requires the most exquisite attention to detail that is often-times contradictory while moving the entire organization toward a future that is still forming. It's the old metaphor of having to rebuild the car while you're still driving it. The healthcare enterprises that succeed, however, have set their GPS to quality as their very identity.

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