# INSIDE & EDGE

## **CMIO Outlook 2013**



Our first Inside Edge of the year has traditionally been the CEO

Outlook, in which CEOs of Scottsdale Institute member organizations highlight their top IT-related strategies for the year. In the past two years we featured CIOs and CMOs in the Outlook. This year we're shifting perspective to the CMIO.

CMIOs have become the go-to players for the EHR, from implementation to physician adoption and Meaningful Use. By taking ownership of the EHR during the past five years, CMIOs have taken their place as strategic executives for the emerging health system built upon quality, safety and efficiency.

Like last year, we begin by framing the CMIO discussion with input from Korn/Ferry, the executive-placement firm that recruits CMIOs and other healthcare C-suite executives. We also talk to CMIOs from three SI member organizations: Livonia, Mich.-based Trinity Health, Clearwater, Fla.-based BayCare Health System, and St. Paul, Minn.-based HealthEast.

It's difficult to overestimate the value the CMIO contributes today as healthcare evolves to an IT-based, valuedriven model built upon accountable care and population health. CMIOs are "mission critical" leaders in making this millennial-sized transition work.

It may be early, but let's just call the CMIO SI's 2013 Person of the Year.

#### **Prophet**

With information increasingly driving quality, safety and economics in care, the CMIO has taken on more responsibility for quality and become the prophet of IT for large physician-group adoption, says Tom Giella, managing director for healthcare services at Korn/Ferry International.

In CMIO line experience, one of the biggest challenges is to integrate clinically and financially the many physicians recruited to the health system during the latest phase of industry consolidation. IT has become the key to making that happen in the form of standardized protocols and processes and ultimately the EHR.

Doug Greenberg, a senior client partner at Korn/Ferry who engages directly with CMIO placements, says that most health systems either have a CMIO or are seeking one, although the title varies from institution to institution. "Ten years ago most didn't have the role," he says, adding that CMIO job descriptions vary depending on what stage a health system is at in the EHR life cycle.

Organizations in early EHR development typically employ a CMIO to drive system implementation and physician Volume 19, Number 1

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Tom Giella, Managing Director, Korn/Ferry International

adoption. Those in the middle stages commonly seek a CMIO to implement the important tools of CPOE and clinical documentation. "Those CMIOs are focused on system optimi-

zation and meeting requirements for Meaningful Use," says Greenberg. The third phase goes beyond system deployment and physician change management to the CMIO driving value from the EHR through the development of a clinical and business intelligence strategy focused on Big Data and analytics that enables predictive modeling and clinical decision support.

## **Enterprise-wide job**

Achieving Meaningful Use incentives has likely been the biggest and/ or most recent single driver for the proliferation of CMIOs. "Organizations that didn't previously invest in technology now want the baseline for Meaningful Use, although they might stop short of pursuing value generation with BI tools. At the end of the day, the whole point of IT and the CMIO's role is to make better decisions," he says.

"CMIOs work enterprise-wide regardless of the organization's life cycle or how it defines the role. There is a debate within the profession as to whether the CMIO should practice patient care. Most today are practicing anywhere from 5 percent to 20 percent of their time—to establish credibility with the docs with whom they work and to assure themselves of the usability of clinical systems. Again the benefit depends on the particular organization," says Greenberg.

There's a growing trend toward CMIOs having informatics training or going back to learn IT. Early CMIOs tended to be individuals who could help drive adoption and buy-in because they were very well-respected by medical staffs. "Now CMIOs are more technical and more about changing the delivery of care. Many have more formal informatics training and more background in CDS," he says.



Doug Greenberg, Senior Client Partner, Korn/Ferry International

A few health systems have already begun to absorb the CMIO role into the CMO, and some industry observers predict the CMIO's demise in the next 10 years as CMOs become IT savvy.

However, Greenberg believes the jury is still out. "In a perfect world, perhaps the CMO would absorb the EHR role. What I'm seeing now in the CMIO is a trend toward more ambiguity, including dotted-line reporting to more than one person, which is not necessarily a bad thing. In effect, the CMIO has become a missing link between the CIO and the CMO, creating a successful triumvirate. Because it's an enterprise-wide role that understands and touches all facets of care, the CMIO role is not going away soon."

#### **Expanding playing field**

Talk about the changing role of the CMIO. Last April, Eric Hartz, MD, took the CMIO job at Trinity Health after serving in the same post at Eastern Maine Medical Center in Bangor. Hartz now collaborates with 12 CMIOs serving 47 hospitals in nine states at Trinity, the 10th largest health system in the country; Eastern Maine is a 411-bed hospital and part of a seven-hospital system.

Still, in 2013 at Trinity he's facing the same "mandatory top two" issues he faced at the much smaller medical center: Meaningful Use and ICD-10. Alright, those issues are now exponentially larger, but Hartz, an oncologist by training, has a dozen regional CMIOs as management support at the ground level and has learned the art of simplifying the message for a sprawling organization. His goal at Trinity is to "make Meaningful Use more meaningful by improving care processes."

The same philosophy applies to ICD-10. "We're using ICD-10 as an impetus to more sharply focus our entire physician-documentation strategy. And we're using tools to make the experience of doctors more efficient and complete—to satisfy ICD-10, but also enhance communication among the care team, insurers and others interacting with the patient. We didn't want to just put something in to comply with a regulatory requirement," Hartz says.

Those tools include decision-tree software that guides clinicians in treating a broken elbow, for example, or natural-language software to enable easy and accurate search of the entire physician-documentation database for data nuggets like a patient's surgical details. The objective is to display structured data such as abstracted reports, labs, medication lists and allergies "that can identify what's missing in the record," he says.

#### **Customized training**

In 2013 Trinity is also seeking to acquire and implement new training tools that incorporate modules for specialists like surgeons and oncologists. "We're looking at ways to tailor the ICD-10 training to the physician," Hartz says.

After Meaningful Use and ICD-10, a third major effort by Trinity's medical informatics team will be to scrutinize the entire continuum of care, including factors like changing reimbursement models, strategies to keep patients from unnecessary hospital readmissions, data analytics and population-health management. "We're trying to see the patient experience through their eyes," says Hartz, and generate a patient portal strategy that supports new patient-engagement initiatives, he says.

"Each of our regions has different competitive drivers. There's a different strategy for Boise than Columbus," he says, but the goal is to excel at providing the best and really unique patient experience.

"How do we connect physician offices, pharmacies, case managers and even churches—each part of the patient experience?" asks Hartz. "There are so many options, so many different vendors. Then there are the varying

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 Joe Van De Graaff, research director, Business Intelligence, KLAS

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markets. We want to encourage our patients to be loyal for life, to create that loyal partnership within the Trinity family and patients. So they see us as a trusted partner for life."

#### Markets of mobility

Connecting to the patient becomes a market-driven solution. "For one market, it's smartphones, another market, the Internet or portals. We have to think how our customers want to communicate. Different strategies come into play," he says.





Eric Hartz, MD, CMIO, Trinity Health A fourth initiative on Hartz's list for 2013: Determine how to standardize care processes on evidence-based medicine and clinical guidelines—and then use data ana-

lytics "to prove we have the best care." For example, Trinity would standardize a surgical procedure from Maryland to California and then be able measure and maintain best practices for that procedure.

Given that Trinity employs only one in five of its physicians, the challenge is vast.

"Every market we're in is competitive. A lot of our emphasis this year will be to get data analytics to those physicians in those markets. It takes a tremendous amount of resources," says Hartz. Trinity has implemented many clinical

collaboratives, including one for sepsis patients that saved 406 lives in 2012. Another collaborative that focused on elective newborn deliveries within 39 weeks helped Trinity to cut those rates to 0.1 percent from 4.7 percent in 2010, a huge achievement considering Trinity delivers 1 percent of all the babies born in the country.

#### **Embodying change**

Hartz has seen his own CMIO job change dramatically. "The biggest change was that in Maine I was a practicing physician and other doctors trusted me, I had a foot in the door. The hardest part of being in the home office is that I don't personally know 100 doctors like I did in Maine. I have CMOs and CMIOs interacting with those physicians and have liaisons on the ground to help do change management."

In a familiar refrain, the biggest challenge is culture, not technology.

"I've found it hard to really understand the culture at each site enough to move those physicians toward adopting best practices. Physicians are very, very data centric. If I can get them the data they're not against change. But to just say, 'Don't you know this is not the way to do things,' I won't get too much adoption," he says.

A fifth major initiative for spring 2013 will be to collaborate with Catholic Health East assuming their coming together occurs as planned. Sharing best practices across different platforms to ensure highest quality care will be their focus. Hartz will work with Mike McCoy, MD, CMIO at CHE to take, for example, processes in the

OR and implement them across all sites.

#### **MU first**

BayCare Health System has many high-priority items for 2013, and Meaningful Use is certainly on that list.

"We're a big organization," said Greg Hindahl, MD, BayCare's chief medical information officer. "We started our EHR initiative way before Meaningful Use was out. With 11 hospitals, it's a challenge to make sure the same processes and functionality are standardized throughout our entire organization. This is critical when it comes to generating the necessary reports required as part of the attestation process. Because of the CPOE go-live schedule at our different hospitals, some of our hospitals are on a different attestation schedule than others."

Meaningful Use is about having all the tools in place including an EHR that is CCHIT-certified. Then for Stage 1, you have to have enough adoption of the technology to satisfy all 10 of the core items and five of the 10 menu items. Some of the measures can be satisfied by saying "yes" you have the technology and it's turned on. Other measures are based on being above the threshold percentage for things like medication reconciliation and problem lists.

"While we're still in Stage 1 MU, we're already hard at work determining what's going to be required to meet Stage 2," Hindahl said. "It's going to be way harder than Stage 1 both from

a technology and patient-care process standpoint."

Stage 1 items are still required for Stage 2, but for most measures, the threshold percentages increase like CPOE, medication reconciliation and recording patient demographics. Also, mandatory patient engagement kicks in with Stage 2. "Five percent of hospital patients who were inpatient or observation have to go online and view, print, or send a copy of their summary of care document to someone," he says.

#### Like a snowball

A second emphasis for 2013 is to finish the rollout of CPOE and physician documentation at BayCare. At that point, all 11 hospitals will be live with the same Cerner inpatient EHR. It's a six-year project that for the past 16 months focused on engaging BayCare's 3,000 physicians, including those who may only admit or refer patients once or twice a year.

"With nine hospitals on CPOE and two to go, it's like a snowball 20 feet in diameter rolling down a steep mountain," Hindahl says. "There are still physicians who don't want it, but they can't stop it or even slow it down. A big challenge with a staggered rollout is the hospitals which have been live for a while want enhancements while others are trying to train on existing functionality. It's a real juggling act to build CPOE so that remaining hospitals can go live while the early ones want changes."

After CPOE, BayCare's third area of emphasis in 2013 is CDS (clinical decision support).

#### continued

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 Andrew Weier, director, Quality Analysis and Decision Support, Ministry Saint Joseph's Hospital

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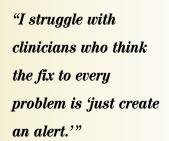
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Greg Hindahl, MD, CMIO, BayCare Health System

"We have CDS turned on, but the challenge is to make sure every-body uses it," he says. "We want to get to a place where alerts and reminders are always meaningful

and easy for the clinicians to use or respond to. I sit in meetings and struggle with clinicians who think the fix to every problem is 'just create an alert,' but that is not always the answer. I often say 'I'll give you one, but tell me one that is not meaningful that we can get out of the system,'" says Hindahl.

"We need to do everything we can to avoid alert fatigue as these systems mature, hopefully we can allow physicians to spend even more time with their patients and focus more on critical thinking and clinical-decision making that improves the overall delivery of care."

## Pop health

BayCare's fourth area of focus for 2013 is population health. BayCare has 1.4 million patients in its service area, which includes Tampa, Clearwater, and St. Petersburg. BayCare started a CIN (clinically integrated network) with a combination of employed physicians and affiliated physicians. BayCare's CIN currently has 900 specialists and primary care physicians and plans to have 1,500 by the end of 2013.

"The CIN has several different EMRs, so we're in the process of trying to get as many as possible connected to our internal HIE," he says. "We have to

figure out how to manage our population so we can be in a position to participate in an ACO when the time comes."

Part of being in the CIN is agreeing to practice evidence-based medicine for things related to your specialty. For primary care, it's things like checking your diabetic patients for hemoglobin AIC regularly and lowering the cholesterol of your heart patients.

A fifth initiative is to continue implementation of BayCare's EHR. "It's as much about your health system's process as it is about the technology," Hindahl says. "I see it almost every day. As we roll it out, we have to go back and re-evaluate to ensure the workflow evolution matches up to the technology."

## Swapping out an EHR

Brian Patty, MD, CMIO at HealthEast, a four-hospital health system serving the Twin Cities, cites his "three biggies" for 2013: switching the organization's EHR; building a private health-information exchange (HIE) network for sharing data with independent physicians; and launching analytics tools to help manage population health.

Oh, by the way, he must drive this troika while the organization attests next summer for Year 1, Stage 2 of Meaningful Use and converts to ICD-10 coding in October 2014. "Other than that, it's a perfectly stress-free undertaking," says Patty.

Clearly, the swapping out of the EHR to an Epic platform to replace both in-patient McKesson and outpatient Allscripts systems—is monumental in itself. The goal is to better manage patients across the continuum. "We find there's a lot of difficulty sharing patient data between the systems. It's either incomplete or outdated. We need a single platform with a single database," he says. The fact that all the other health systems in the Twin Cities are using Epic was key because it will facilitate data exchange with them.

#### One-EHR city

"When we go up on Epic every adultcare hospital in the Twin Cities will have the same platform. We're the first major metro area in the nation where that's true," notes Patty. HealthEast signed its EHR contract this month and expects its four hospitals to go live in about 16 months, by June of 2014. Its 18 clinics will require 22 months, and go live by December 2014.

That timeline is the biggest challenge. "In July, August and September we're attesting for the first year of Stage 2 for Meaningful Use and in October cutting over to ICD-10 coding," he says. HealthEast has completed Stage 1, Year 1, and is attesting for Year 2 of Stage 2 now.

As CMIO, Patty oversees the entire EHR platform, including CPOE, documentation and CDS. It's a job that balances maintenance of legacy applications while implementing a completely new EHR. CPOE is already up and running at all four hospitals with successful adoption and engagement of the vast majority of physicians, which includes 1,400 medical staff; 900 of whom are considered active, 300 of those are employed.

"The workflows will change, and that will be a big part of the effort," says Patty. The health system has a team of specialists just examining workflows to determine how processes will change and how to make those changes. Training is obviously critical to optimizing the platform—and make efficient use of time.

#### Time is of essence

"We try to train them as much to optimize time management as use of the system itself," he says. Training—some online and some classroom—aims to help users understand the clinical applications as well as the modules that incorporate workflow scenarios related to specific patient conditions. Training users how to use the applications in their daily work is key to ensuring their successful use of the applications.

HealthEast's 2013 HIE initiative starts with this month's technology launch. After that, it's a matter of building the actual network. "We'll spend the next four months just connecting ourselves to ourselves, our primary care system to our inpatient system," he says.

The organization selected HIE vendor Relay Health, which in the past has successfully connected McKesson and Allscripts, a necessary first step until the new EHR is rolled out. The HIE vendor also offers the data-repository model favored by HealthEast because it aggregates all the data in a single place rather than relying on a data-locator model, which Patty considers too slow for clinicians. "I want all the records in a single repository. As we set

"We'll spend the next four months just connecting ourselves to ourselves, our primary care system to our inpatient system." "If there are too many log-ins, physicians will say, 'I just didn't have enough time to look at it.' That scares me."

up the HIE ahead of time we'll look at the aggregated data set. So as a clinician it's faster for me to get to the data. The good news is that, while it's a bit of a challenge, training physicians to use the HIE is fairly self-explanatory," he says.





Brian Patty, MD, CMIO, HealthEast

Having a single EHR platform for the enterprise helps the HIE work more seamlessly too. "It will remove a lot of confusion but also eliminate the need for mul-

tiple log-ins. If there are too many logins, physicians will say, 'I just didn't have enough time to look at it.' That scares me. People aren't going out there and utilizing those resources," says Patty.

### New tools for data analysis

Acquiring analytics tools to help manage population health is the third major CMIO emphasis for 2013 at HealthEast. The need is to include a broad spectrum of patients and determine who the outliers are and be able to drill down to individual patients.

"We want to establish a global view of patients, identify the problem areas and drill down to find out why we're having those outliers," says Patty. In May the health system plans to implement a powerful analytics tool from Humedica that will enable it to do just

that when coupled with its existing McKesson data warehouse.

"We'll be able to analyze clinical data and hope to add claims data from CMS based on our Medicare Shared Savings program and from other payers with whom we have ACO-like contracts. We believe it's how we should manage all our patients to improve quality of care at the lowest cost. High quality, patient satisfaction while maintaining low cost is population health in a nutshell," he says, while acknowledging it's a very difficult task to fully identify a population of diabetics, for example, and manage them well as a group.

Analytics can also be used to monitor how well HealthEast is managing population health according to both internal and external benchmarks. "Humedica allows you to use de-identified data to compare your organization with other organizations on the same platform," says Patty.

## **Changing CMIO role**

Like other CMIOs, his job has evolved. "My role has changed over the years from being a physician consultant on IT and engaging physicians to managing the entire EHR and having 50 people reporting to me. My role has certainly expanded over the past seven years," he says.

Whether that trend means the CMIO eventually being subsumed under the CMO role is another question. Although he sees other CMIOs moving in that direction, Patty doesn't think it will become an industry trend. "I think the CMIO will remain distinct. I don't

see it merging into either the CMO or the CIO," he says.

The primary reason for this independence is the CMIO's overarching oversight of the EHR. "The CIO is responsible for the overall IT infrastructure, which is not something I want to own. The CMO oversees credentialing and managing the medical staff, also something outside my interests. I really do see the CMIO role remaining distinct and focused on the EHR and decision support."

Whether the CMIO reports to the CMO or the CIO is also another question, and one that depends on what works best for the organization. "I've had five different reporting structures since I've been here. First it was the COO, then the CMO, then dual reporting to

the CMO and the COO, then next to the CEO; currently it's the CIO," says Patty. "It really doesn't matter to me. My work doesn't change."

#### **Conclusion**

If you are a CMIO looking out on the rest of 2013, you would be forgiven for some fear and trembling. As executive owner of the EHR you are responsible for its implementation, physician adoption, enhancement with CPOE and CDS, and Meaningful Use. You're probably also charged with converting the organization to ICD-10 coding. As healthcare moves to accountable care and population health, you are now in charge of deriving value from the EHR. It almost makes you long for the days when the EHR was still 10 years away.



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