SCOTTSDALE INSTITUTE CHIEF MEDICAL INFORMATION OFFICERS SPRING SUMMIT

Wednesday, April 19, 2017

Leadership, Influence and the Ever-Evolving Role of CMIOs

Prepared by Rochelle Abbott, Hearst Health

Executive Summary: During the Scottsdale Institute Spring Conference, eleven Chief Medical Information Officers (CMIOs) and former CMIOs convened for an exclusive discussion of the CMIO's identity and mission within a health system. The discussion explored leadership strategies for influencing and effecting transformative changes in the way care is delivered. The group also assessed how the role has evolved, its career trajectory, and anticipated challenges for the future.

SCOTTSDALE INSTITUTE
COLLABORATION • EDUCATION • NETWORKING

HEARST HEALTH
fdb • zynxhealth • mcg • homecare homebase • MEDHOK

CMIO SUMMIT PARTICIPANTS

> S. Nicholas Desai, MD – Houston Methodist

> Anupam Goel, MD – Advocate Health Care

> Greg Hindahl, MD – BayCare Health System

> William Holland, MD – Banner Health

> Tim Jahn, MD – Baptist Health (Kentucky/Indiana)

> Gil Kuperman, MD, PhD – NewYork-Presbyterian

> Jason Lyman, MD – University of Virginia Health System

> M. Michael Shabot, MD – Memorial Herrmann Health System

> Keith Starke, MD – Mercy (MO)

> Ferdinand Velasco, MD – Texas Health Resources

> Alan Weiss, MD – Memorial Hermann Health System

ORGANIZER: SCOTTSDALE INSTITUTE

> Chuck Appleby

> Janet Guptill, FACHE

> Shelli Williamson

SPONSOR: HEARST HEALTH

> Rochelle Abbott

> Gregory Dorn, MD, MPH

> Justin Graham, MD, MS

MODERATOR: HEARST HEALTH

> Jeffrey Rose, MD

Introduction

As the market surge to purchase and implement electronic health record systems (EHRs) moves to a denouement, the role of the CMIO is expanding beyond informatics. On April 19, 2017 at the Scottsdale Institute Spring Conference in Scottsdale, Arizona, a group of eleven CMIOs and former CMIOs met to discuss the expectations and challenges for this role. The discussion was a follow-on to the September 2016 Scottsdale Institute CMIO Summit, in which the group cited change management and leadership as central capabilities for the successful CMIO.

"CMIOs are unique in the C-suite because they must interact with IT, administration, finance, clinicians, and patients," said the April meeting's facilitator Dr. Jeffrey Rose. "In a post–meaningful use world, the most challenging part of a CMIO's job may be embodying effective leadership and change management because they are tasked with changing hearts and minds."

The ensuing discussion examined the realities of the CMIO role and explored effective leadership strategies.

THE CMIO AT THE HEART AND CENTER

The CMIO holds a unique position in the hospital or health system at the convergence of medicine, technology, quality, and executive management. This perspective, and its requisite professional capacities, positions the CMIO as a key leader in the transformation of care. "We know how important it is to have a CMIO because we don't have one right now. As a result, we collectively spend a lot of time in translational

Mercy

"We know how important it is to have a CMIO because we don't have one right now. As a result, we collectively spend a lot of time in translational communication, reframing questions, a role that the CMIO would ordinarily fill."

— **Keith Starke, MD**, SVP & Chief Quality Officer, Mercy (MO)

communication, reframing questions, a role that the CMIO would ordinarily fill," said Dr. Keith Starke of Mercy in St. Louis. "Clinicians are connectors; they are the only ones who understand all the different languages across these disciplines."

CMIOs are called upon to lead transformative initiatives that reach far beyond the scope of venue-specific medical informatics, because they have skills and influence to bring about pervasive changes in the organization. "How do we change practice? How do we have a system that helps us do care redesign and implement change management along the way?" said Dr. Michael Shabot of Memorial Hermann Health System. "Also, there is going to be less money in the healthcare system. How do we tailor our systems to that reality?

RESPONSIBILITIES

The CMIO participants have responsibilities across multiple areas, such as:

> Inpatient
> Ambulatory
> Clinical Decision Support
> Clinical Informatics
> Population Health
> Physician Optimization and Satisfaction
> Telemedicine
> Consumer Engagement

MEMORIAL HERMANN®

"How do we change practice? How do we have a system that helps us do care redesign and implement change management along the way? Also, there is going to be less money in the healthcare system. How do we tailor our systems to that reality? All of this puts the CMIO at the heart and center of changing practice."

– **M. Michael Shabot, MD**, EVP, System Chief Clinical Officer, Memorial Hermann Health System

All of this puts the CMIO at the heart and center of changing practice."

To lead their organizations through these profound changes, CMIOs employ two key strategies: incorporating change management as an organizational discipline and cultivating their influence throughout disparate functional teams.

CHANGE MANAGEMENT AND BEING A CHANGE AGENT

A decade ago, CMIOs had focused on information system design, with attempts to inject decision support into automated medical record processes. "In the early days, it is amazing how much we changed practice doing simple things, like making a choice available and putting it at the top of the list. We changed prescribing behavior by taking lists of the top ten drugs that our docs order, and showing it to them in order of importance from quality and cost perspectives," said Dr. Alan Weiss. "We were a small group called upon to be change agents, although often we were viewed solely as technology people." In the more mature CMIO role, the purview and mission has expanded to be one of effecting change more broadly and pervasively, now extending to comprehensive redesign of care processes. While inducing the behavior change to move from paper to computer use in medical practice was difficult and required a good deal of skill in teaching clinicians new methods of documenting care and ordering activities, the discipline around change management has become even more vitally important as the role has matured. "We are increasingly change agents for entire process redesign, though we often get misdirected or pigeonholed into working only on technology usability," said Dr. Nicholas Desai of Houston Methodist. "Process redesign doesn't really belong to anyone. The CMIO does indeed do usability work, but as systems have evolved and changed, process redesign has increasingly accompanied usability efforts. So, when we changed EHR systems, I ensured effective, tactical communication and change management were joined together and embedded in everything we did."

HOUSTON Methodist
LEADING MEDICINE

"We are increasingly change agents for entire process redesign, though we often get misdirected or pigeonholed into working only on technology usability."

– **Nicholas Desai, MD**, CMIO, Houston Methodist

Despite being frequently cited as critical to success, change management knowledge and techniques are often under-leveraged. "The success of an EHR implementation is more about change management than technology, yet it is so often the piece that's missing," said Dr. Shabot. "Usually it's the people and process that makes a difference." Operational methodologies from

the manufacturing sector, such as Lean and Six Sigma, have gained favor in health systems as means of increasing efficiencies and effectiveness in use of new technology. When Baptist Health's Dr. Tim Jahn was a CMIO overseeing an implementation, he saw broken processes everywhere, so he underwent training in Lean. "The minute you've gone live, it's about process. Change management and process excellence works in other industries, so why not healthcare?"

A CMIO's ability to champion change management so that it becomes embedded in the organization's ethos is made possible by his or her influence throughout many departments and functions in the health system.

MANAGEMENT VS. INFLUENCE

An ongoing philosophical discussion is whether the CMIO's influence would be more effective with a reporting structure that is inclusive of the multiple disciplines who contribute to system-wide changes, such as project management and various clinical functions. "The CMIO has an opportunity to understand existing processes, how team members might do the work in the future, and how to measure success. But are we really the change agents? There is still a need for senior leaders to say 'go,'" said Dr. Anupam Goel from Advocate Health Care. The CMIO has become a key part of the leadership team effecting systemic change in the complex processes of care delivery, which can become even more challenging if leadership relationships are confused

Advocate Health Care

"The CMIO has an opportunity to understand existing processes, how team members might do the work in the future, and how to measure success. But are we really the change agents? There is still a need for senior leaders to say 'go.'"

– **Anupam Goel, MD**, VP, Clinical Information, Advocate Health Care

or misaligned, particularly in large systems. "If your reporting structure is in the right place, you can have synergies and avoid fragmentation," said Dr. Desai.

The management of such complexities is integral to being a CMIO, and the work to be done in the new world of care redesign. The skills the effective CMIO needs to foster positive change in processes and results involve change-management practices, but there is no one-size-fits-all approach, because different methods are used depending upon the general culture of the enterprise in which one works. Some cultures are more attuned to control and

BAPTIST HEALTH

"In leadership you can be very prescriptive, or you can act more collaboratively. I see the CMIO as an influencer. The skill set has to be there."

– **Tim Jahn, MD**, Chief Clinical Officer, Baptist Health

command, but others require talents in tactical and insightful influence. "In leadership you can be very prescriptive, or you can act more collaboratively," said Dr. Jahn. "I see the CMIO as

an influencer. The skill set has to be there." The healthcare culture and myriad participants in clinical informatics initiatives—IT professionals, administrators, finance and floor operations—require CMIOs to be adept and flexible learners and leaders. The only way to move such complex organizations to new ways of performing is for CMIOs to employ various diplomatic and insightful approaches to gain influence and be effective.

GRASSROOTS PARTNERSHIPS

Banner Health has cultivated an ecosystem of clinical consensus groups, which has been an effective means to develop change agents on the front lines of clinical practice. In this way, the CMIO can help colleagues make change acceptable and positive. As Dr. William Holland describes, "The people driving changes to alerts and logic in the EHR system cannot be simply 'computer people.' We have a process where we collaboratively define the problem we are trying to solve, and can turn out 40 to 50 impactful changes per

Banner Health.

"The people driving changes to alerts and logic in the EHR system cannot be simply 'computer people.' We have a process where we collaboratively define the problem we are trying to solve, and can turn out 40 to 50 impactful changes per year under this approach."

– **William Holland, MD**, VP & CMIO, Banner Health

year under this approach." These partnerships with practicing physicians are an important mechanism of influence for generating desired changes in care delivery.

The CMIO can influence physicians by building partnerships at local levels. "We need to ask ourselves, 'How do we support docs better?' They want a relationship, not a number they can call," Dr. Holland added. "I have a team that designs clinical decision support, where many of the ideas come from practicing physicians."

BUILDING TRUST OVER TIME

The CMIO can also gain influence playing the long game of building trust over time. "Up to the last four to five years I have been blamed for everything," said Dr. Greg Hindahl from BayCare Health System. "But now I am an infiltrator. I know how to practice medicine, I know how the technology works, so now anyone with a problem comes to me to help them fix it. You just learn through experience."

BayCare

"Up to the last four to five years I have been blamed for everything. But now I am an infiltrator. I know how to practice medicine, I know how the technology works, so now anyone with a problem comes to me to help them fix it. You just learn through experience."

– **Greg Hindahl, MD**, VP & CMIO, BayCare Health System

EHR OPTIMIZATION

For ongoing support and success of initiatives, the CMIO reinforces the partnership with clinicians by advocating optimization of the entire system, paying close attention in the post–meaningful use era to making EHR-related changes that will protect practitioners from technology-related burnout.

"We have a savvy group of docs I meet with regularly, and it is amazing how differently each of them handles workflow," said Dr. Jason Lyman of University of Virginia Health System. "We are trying to look at that data to see how providers are using their EHRs." Drs. Goel and Holland stressed the importance of advocating for more resources to fix IT issues, though it is more challenging to explain internally how hard it is to retrain a physician when one leaves. "Making a case for implementing a system to drive performance is a more straightforward discussion," said Dr. Holland. "Historically, discussions around physician retention and engagement have been more difficult to quantify, although that is starting to change across the industry."

> "We have a savvy group of docs I meet with regularly, and it is amazing how differently each of them handles workflow."
>
> – **Jason Lyman, MD**, Associate CMIO, University of Virginia Health System

ADDITIONAL ROLES AND CAREER GROWTH

With the CMIO's level of influence and his or her breadth of perspective being at the convergence of medicine, technology, quality, and executive management, many CMIOs have found their roles have evolved and grown over the years. Putting systems in initially is hard, but as Dr. Alan Weiss of Memorial Hermann Health System noted, "Implementations never really end, but there are additional things we are asked to do that add breadth to implementations, and are very interesting—such

> "Implementations never really end, but there are additional things we are asked to do that add breadth to implementations, and are very interesting—such as assessing data validity and creating automated methods to underpin population health."
>
> – **Alan Weiss, MD**, CMIO, Ambulatory, Memorial Hermann Health System

as assessing data validity and creating automated methods to underpin population health." Dr. Holland added, "Even in the short seven to eight years I have done informatics, my job has changed three to four times. For example, now I have responsibility for meaningful use and MACRA, and most of my meetings this week have been related to registration and scheduling processes. My role is definitely more strategy today and less clinical decision support; my goal is to inspire others to be the change agents."

FORMAL TRAINING

How many of the 11 participants have had formal training in the following areas?
> Leadership – 10
> Analytics – 1
> Finance – 1
> Change Management – 3

Much of the added responsibility reflects the growing and evolving needs in healthcare as a whole, such as market consolidation. "Consolidation in healthcare creates challenges for IT and also

NewYork-Presbyterian

"Consolidation in health care creates challenges for IT and also organizational complexity that can be addressed by IT. At many organizations, people naturally come to the CMIO to help manage these issues."

– **Gil Kuperman, MD, PhD**, IS Director, Population Health, NewYork-Presbyterian

organizational complexity that can be addressed by IT. At many organizations, people naturally come to the CMIO to help manage these issues," said NewYork-Presbyterian's Dr. Gil Kuperman. But IT expertise is no longer enough, and it seems that when CMIOs have proven value in their difficult arena with clinical IT they often become go-to resources for other problems and challenges. "It always seems like there is a role in the organization that's missing—and it becomes the CMIO's job to do it," agreed Dr. Weiss. Emerging needs in organizations reveal gaps in the realms of analytics and quality improvement, which have proven to be opportunities for advancement for many CMIOs. "There are opportunities and vacuums, and this has guided the trajectory of successful CMIOs," said Dr. Ferdinand Velasco of Texas Health

Texas Health Resources®

"There are opportunities and vacuums, and this has guided the trajectory of successful CMIOs."

– **Ferdinand Velasco, MD**, SVP & CHIO, Texas Health Resources

Resources. Many CMIO roles mature and grow from directors of clinical IT into more expansive roles: Chief Health Information Officer, Chief Innovation Officer, and Chief Clinical Officer.

There is a natural course of career progression for CMIOs that builds upon their leadership abilities and their technical and clinical knowledge, achieved through a combination of formal training and practical experience. "CMIOs seem to reach a point in their career where they begin to float upward," said Dr. Weiss. This career progression also holds importance for advancing the field. As Dr. Kuperman describes, "IT continues to evolve as a field and its capabilities are increasing. If you're not thinking of new ways to use IT to solve problems, you're missing the boat."

CHALLENGES FOR THE FUTURE

The phenomenon of change in responsibilities is expected to persist. The continued evolution of the CMIO role will include the challenges of:

> **Expansion of influence to payers.** "Another audience that will need to be understood and influenced is payers, a realm where many CMIOs do not have experience." – *Dr. Velasco*

> **Realizing the pragmatic view of system redesign.** "CMIOs traditionally have worked on transactional aspects of care—the individual order, the individual document, etc.—but we need to work on systems of care: not just '(a) happens,' but '(a) happens so that (b) happens so that (c) happens.' Clinical decision support can help the transactional aspects of care, but optimizing care across care delivery settings is much more complicated." – *Dr. Kuperman*

Resources

Fix processes first: Add an EHR only after freeing clinicians through efficient care protocols. Dr. Tim Jahn. Modern Healthcare. February 28, 2011. Available at: **http://www.modernhealthcare.com/article/20110228/MAGAZINE/302289981**

Strategies for creating, sustaining, and improving a culture of safety in health care: Real-world solutions to challenging safety culture implementation issues. 2nd ed. Joint Commission. February 2017.

The value of physician leadership. Angood P, Birk S. Physician Exec. 2014 May-Jun;40(3):6-20. Available at **http://www.physicianleaders.org/docs/default-source/special-reports/the-value-of-physician-leadership.pdf**

About the sponsors

The **Scottsdale Institute (SI)** is a not-for-profit membership organization of prominent healthcare systems whose goal is to support our members as they move forward to achieve clinical integration and transformation through information technology.

SI facilitates knowledge sharing by providing intimate and informal forums that embrace SI's "Three Pillars:"

> Collaboration

> Education

> Networking

For more information visit:
www.scottsdaleinstitute.org

FDB (First Databank), Zynx Health, MCG, Homecare Homebase, MedHOK and **Hearst Health International** comprise the Hearst Health network.

The mission of Hearst Health is to guide the most important care moments by delivering vital information into the hands of everyone who touches a person's health journey.

Each year in the U.S., care guidance from Hearst Health reaches 84 percent of discharged patients, 177 million insured individuals, 60 million home health visits and 3.1 billion dispensed prescriptions.

The annual Hearst Health Prize, in partnership with the Jefferson College of Population Health, offers a $100,000 cash award each year in recognition of an organization's or individual's outstanding achievement in managing or improving wellness. **www.jefferson.edu/HearstHealthPrize**

For more information visit:
www.hearsthealth.com