

Exploring Clinical Informatics: Challenges, Key Topics, and the Future

BRIGHTEST MINDS WEBINAR SUMMARY



Webinar Date: JULY 13, 2023



1.0 Edera Hosts Second Brightest Minds Live Webinar

Edera was thrilled to host another webinar on July 13, 2023, connecting some of the brightest minds in clinical informatics to share their valuable industry expertise.

Edera Chief Executive Officer (CEO) Dr. Kevin Carr welcomed everyone to the event and was excited to kickstart an informative conversation with a team of incredibly talented health care experts. Edera Managing Director Felishia Perry, who has more than 20 years of experience in clinical, financial, and technical electronic health record (EHR) solutions, moderated the panel.

2.0 Meet the Panelists

The bright minds who joined Dr. Carr and Ms. Perry for the webinar included four industry experts with decades of experience in health care and valuable insight into the key topics associated with clinical informatics, including inevitable challenges and what the future holds. Edera was honored to welcome Dr. James Ellzy, Oracle's Vice President (VP) Federal and Health Executive & Market Lead; Liz Johnson, retired Chief Innovation Officer (CIO) at Tenet Healthcare; Bruce Prince, Assistant Vice President (AVP) of Change Management (CM) and Communications at HCA Healthcare; and Dr. Hasan Shanawani, the U.S. Department of Veterans Affairs' (VA's) Chief Medical Information Officer (CMIO) of Veterans Integrated Service Network (VISN) 10, which includes Indiana, Michigan, and Ohio.



James Ellzy, MD, MMI, CMQ, FAFP

VP Federal, Health Executive
& Market Lead

Oracle

As VP Federal, Health Executive & Market Lead at Oracle, Dr. James Ellzy provides strategic clinical direction for Oracle's federal business, including VA, the U.S. Department of Defense (DoD), the U.S. Coast Guard (USCG), and the Centers for Disease Control and Prevention (CDC). He leads development of the vision and strategy for the largest health care transformation in history.





Liz Johnson, MS, FAAN, LCHIME, RN-BC, FHIMSS, CHCIO

Retired CIO

Tenet Healthcare

Liz was a nationally recognized, award-winning CIO, Acute Care Hospitals & Applied Clinical Informatics for Tenet Healthcare. She provided the strategic vision and tactical planning for all clinical, patient management, imaging, productivity, and supply chain systems used across Tenet's acute care hospitals nationwide. As a pioneer in nursing and nurse informatics, Liz led the most aggressive and successful EHR implementation effort in the nation.



Bruce Prince

AVP, CM & Communications

HCA Healthcare

Bruce Prince is AVP of CM and Communications for the Expanse program at Hospital Corporation of America (HCA) Healthcare. He is responsible for leading the CM and communications strategy for Expanse, helping end users and providers bridge the gap between current and future state.

Bruce rejoined HCA in 2023 after two years as AVP of Clinical Informatics at Lifepoint Health, where he led a team of clinical analysts that implemented, supported, and optimized community hospital EHR efforts.



Hasan Shanawani, MD

CMIO, VA VISN 10 Serving Indiana, Michigan, and Ohio

VA

Dr. Hasan Shanawani, MPH, MD is CMIO for the VA Midwest Network, serving 600,000 Veterans across 11 medical centers and 50 federal community clinics in Michigan, Ohio, and Indiana. He is a practicing pulmonary critical care physician. His prior experience includes being Medicare Advantage Chief Quality Officer, Patient Safety Physician, and CMIO for the VA federal system. His views are his own and do not represent VA or the U.S. government.



Webinar participants tuned in to meet and learn from these talented and knowledgeable panelists, who answered four main questions about clinical informatics:

1. What are some of the current challenges in clinical informatics?
2. What role does CM play in clinical informatics, and how has that changed over time?
3. Do you have any recommendations for people who are setting health care policy for clinical informatics?
4. If you could pick one thing, what would you focus on for the future of clinical informatics?

3.0 A Brilliant Discussion

Following Dr. Carr’s opening remarks, Ms. Perry started the conversation by noting that 20 years ago, clinical informatics was not what it is today. Back then, when she researched the topic online, Google asked if she meant to search for “clinical information” instead. Today, the evolution of clinical informatics is evident, and the panelists were eager to talk about it.

3.1 What are some of the current challenges in clinical informatics?

Dr. Shanawani kicked off the question-and-answer portion of the event by saying one of the biggest challenges he has struggled with for 20 years now is how to make data and information available, accessible, and understandable to patients and the providers who serve them. Part of the issue with this challenge is many patients receive both private and public health care, so their data isn’t always in one place. On top of this, the data that *is* available is not typically understandable the way it is presented to patients and providers.

For example, if a patient receives a chemistry panel with seven labs, and the results reveal the patient has high sodium levels, the provider cannot expect the patient to know what that means. Similarly, the data often is not presented to providers in an understandable way, either. This issue presents itself like a giant haystack that must be meticulously dug through to find the “needles,” or meaningful and important data.

Equity also plays a role in the issue of access to data. Dr. Shanawani explained there is a big difference between people who have access to data, high-speed internet, and quality providers and health care systems and people who might not have access because of circumstances such as ZIP code and lower income and literacy levels. And even if the data is ready for these people to access, it might be too far from their reach.

Dr. Shanawani expressed the need to put the data into the hands of those who own it so they can use it to enable their health. On the other hand, it also must be available to medical professionals who support the patients. Appropriate access should be given not just to nurses, but to pharmacists, dieticians, physical therapists, community providers, and more so patients can receive the health recommendations they deserve.

Building off Dr. Shanawani’s remarks, Mr. Prince said another obstacle he has encountered is how to leverage existing data to be actionable during patient appointments. He expressed the want to have clinical decision-making embedded into clinical workflows, but finding the balance between having the right information to present at the right time and reducing overcommunication is an ongoing challenge.



The last thing providers want is to overwhelm patients with so much decision support that they don't know where to begin.

Mr. Prince added that, at the end of the day, finding the sweet spot of integrated decision-making in the flow of work without having to balance among a variety of applications continues to be a point of refinement. "We have the data, goals, and initiatives," he explained. "But now we need to figure out the best way to bridge in the user experience, so providers are more enabled to move quickly and address patient care needs."

3.2 What role does CM play in clinical informatics, and how has that changed over time?

Mr. Prince dove right back in with his response to the second question. He reported he keeps looking back at major implementations, such as moving from paper documentation to EHRs and the introduction of advanced clinical concepts during the early 2010s, but he also thinks providers took a "field of dreams" approach to implementing those things.

He explained people leading the initiatives assumed if they build the new tools or concepts, people would accept the tools because "everyone is moving in a forward direction; everybody is on the same boat." He thinks there are unfortunately many technology implementation examples that have missed the mark because implementation teams are focused on the perception of ease of use rather than how to structurally manage the change.

To overcome this lack of CM, Mr. Prince emphasized the need for strategic communication and engaging end users from the beginning. Users often are not prepared for how their jobs will change after going live with a new technology and are presented with an overload of information in a short duration that dilutes their ability to absorb and retain it. Mr. Prince thinks this absence of standard processes and approaches to appropriately preparing end users to use the technology they work with leads to end users questioning their value. They wonder if technology developers and implementation teams consider how the technology impacts their workflow. "This lack of information sharing and end-user consideration can feed negative sentiment if end users are not front and center in the discussion about the changes. Change can happen to you or with you, and it should happen with you," said Mr. Prince.

Technology developers and implementation teams can help navigate through the CM obstacle by strongly considering who the end users are, why they are invested, and how to provide the information that empowers them, including why the change is happening and what will be different. Mr. Prince concluded end users deserve to be part of the change, which includes being transparent and authentic.

Dr. Ellzy added some final thoughts about CM's role in clinical informatics. He thinks a lot about how clinical informatics previously homed in on technology, but now they are doing more in the CM world to consider the people the technology impacts and workflow processes that best benefit those people. Ten years ago, people were largely focused on implementation, but today they are starting to focus more on technology optimization.

3.3 Do you have any recommendations for people who are setting health care policy for clinical informatics?

Ms. Johnson was eager to answer this question, noting she is very passionate about the topic. "Policy and passion go together," she stated. She explained clinical informaticists should recognize they are the



experts in their field and are some of the best people to help contribute to setting policies that affect them. “We are the ones who understand clinical operations, practice, and data, and it makes a huge difference when policy-setters have access to our knowledge that helps them make better decisions,” said Ms. Johnson. She added it’s even more important that clinical informaticists contribute to setting the policies, because the policies have a direct impact on the work informaticists do and, as the experts, they need to advocate for themselves.

Clinical informaticists getting involved in setting health care policy was the primary theme of Ms. Johnson’s response to this question. She explained that to get involved, health care workers should first connect with national associations such as the American Medical Informatics Association (AMIA), the American Nursing Association (ANA), the American Medical Association (AMA), and more. It’s important to connect with these associations because they are the people who bring influential policy information to lobbyists and legislative groups.

She noted it can be intimidating to get involved at first and, to become more confident, people must be willing to volunteer for the political committees within the associations, which leads to gaining a better understanding of how they can best share their knowledge with the right people. Ms. Johnson’s biggest tip for doing this strategically is to learn how to tell a story. “If you can bring your or someone else’s personal experience to the table, then you will get their attention,” she explained. “They are going to walk out of that room remembering that they need to do something about it.”

In addition, Ms. Johnson suggests getting involved by attending legislative sessions. Clinical informaticists need to understand the lifecycle of developing, passing, and introducing a bill. If they understand the logistics involved in the process, it’s easier for them to be part of the solution rather than sitting out and waiting for a bill to go into action that doesn’t consider the knowledge and experiences of those it directly impacts. Other ways to get involved in health care policy-setting include connecting with federal agencies, getting to know association lobbyists, participating in national boards, and adding comments to newly published federal rules.

1. **Connecting with federal agencies:** A handful of federal agencies plays a major role in the health care policy-setting world. Those agencies include the Office of the National Coordinator (ONC), the U.S. Food and Drug Administration (FDA), Office of Civil Rights (OCR), and Centers for Medicare & Medicaid Services (CMS).
2. **Getting to know association lobbyists:** Every association has lobbyists who lobby for the association’s very specific desires, so why not get to know them, and exchange valuable knowledge they can consider?
3. **Participating on national boards:** Ms. Johnson shares the best way to be a participant is by volunteering. “Raise your hand. Say, ‘I want to help; I want to be involved,’” she said. By doing this, board members will begin to recognize your name, associate the knowledge and passion you have with your name, and consider inviting you to join the group.
4. **Adding comments to newly published federal rules:** Once a bill or rule is published to the federal registry, time is set aside for comments to be added and considered before the rule is passed. Comments can include notes about anticipated impacts, such as financial and safety implications.

Overall, Ms. Johnson advises that, when getting involved in helping to set health care policy for clinical informatics, maintain the understanding that, as a clinical informaticist, you are probably one of the



most knowledgeable people in the room since you are engaging in conversations about what you do every day. “You understand clinical practice and data. You have so much to offer, so don’t be intimidated,” she explained. “They are anxious for you to show and teach them what you know. There is a place for you out there.”

Dr. Shanawani jumped back into the conversation to share an important recommendation for people who are setting health care policy for clinical informatics. Dovetailing off Dr. Ellzy’s comments regarding people, processes, and technology, Dr. Shanawani added policy changes should also account for the cultural changes that occur over time.

He explained technology is the easiest part of the clinical informatics “puzzle” to manage, but we sometimes are our own worst enemy in the technology world. For example, before COVID-19 erupted, providing telehealth was entirely foreign and even considered malpractice. In reality, it’s no less foreign than when Steve Jobs introduced the iPhone; 30 years ago, no one could have imagined people would be using the device in the ways it is being used today.

3.4 If you could pick one thing, what would you focus on for the future of clinical informatics?

Each panelist eagerly spoke up to answer the last question of the event. Dr. Ellzy first explained he would focus on making the data work for clinicians in real time. He would love to be able to go into a patient’s room and already have much of their data analyzed so he can make quicker decisions to address their health care needs. Ms. Johnson stated she could not agree more with Dr. Ellzy’s response and added if clinicians have broken down, analyzed data in their hands, they can advance even further by using tools such as artificial intelligence (AI), robotics, and genomics to change the way medicine is delivered.

Mr. Prince agreed with Dr. Ellzy and Ms. Johnson. He likened harnessing data to be thinking ahead for providers to a dating app where clinicians can swipe left or right to indicate what next steps they would like to take to move forward with a patient’s care journey. If a provider is routinely seeing similar types of patients and has a tool that knows what they are looking for, it would be advantageous to have valuable recommendations presented for quicker decision-making. Mr. Prince concluded by noting there is a great opportunity to use the technologies that already exist for thinking ahead, predictive analytics, and communications and begin embedding them more into the day-to-day caregiver workflow.

Finally, Dr. Shanawani answered the last question by emphasizing the need to make sure groups of people are not left behind as technology advances because, as it advances, there is a real potential threat to equity. He would like to focus on taking advantage of the advancements in ways that serve providers and patients of all types — and ultimately improve health equity. “I do not want the quality of care or the opportunities for the best care to depend on what ZIP code someone lives in, what kind of smartphone and technology they have access to, and what their health literacy is,” he concluded.

4.0 Questions From the Webinar Chat

Webinar attendees were very engaged during the event and asked their own questions in the live chat. Panelists had time to answer one of the questions during the event and provided an answer to a second question via email.



1. What have the panelists seen as successful measures to get executive leadership to financially support CM involving informatics projects?
 - a. Two panelists contributed to this answer. Ms. Johnson clearly stated the hard benefit, return on investment (ROI), is what executive leadership wants to see. “You’re not going to sell without funding,” she said. Mr. Prince relayed people trying to gain leadership support must be able to sell the “end game” or whatever it is they are trying to achieve. He advises highlighting what is at stake by *not* investing in the project.

2. As part of CM for EHR implementation, I believe it is important for end users to be involved in all aspects of the project from the very beginning. With the current culture of staffing shortages, how do we make this important adoption an expectation of leadership?
 - a. Ms. Johnson shared a few tips for how to make EHR implementation adoption for all end users an expectation of leadership. She advises working with site leadership during the onset of implementation planning to identify current staffing shortages and anticipate additional barriers and challenges to staffing throughout implementation.

“Starting the conversations with the leadership executives around how they manage staffing shortages today, including what type of registry or locum tenens they use to support and augment their current staff, is one good place to start,” Ms. Johnson said. “It is also important to determine if they use a singular source or multiple sources to provide staff coverage. They may consider expanding their agreements/contracts to include more staffing agencies if their need is significant, and that work should be done at the start of implementation so contracts can be secured.”

She noted sometimes a site may plan to bring additional staff in specifically for training and to perform as Super-Users (SUs), but the ideal best practice is to use existing staff to elevate them to a position of knowledge and wisdom that can be shared among the staff for perpetuity. “It is also helpful to provide evidence that supports outcomes with proper staffing. Several white papers have been published outlining the benefits, including human capital retention and satisfaction and fiscal benefits. This information is also helpful as the leadership considers their options for appropriate resource support for this complex endeavor,” Ms. Johnson concluded.

5.0 Moving Clinical Informatics Forward

Ms. Perry concluded the insightful discussion by thanking the panelists for their participation, knowledge, and wisdom and thanking participants for engaging by asking great questions.

Edera is dedicated to fostering further discussion about relevant health care topics with continued live webinars. Join the conversation, and be on the lookout for more information about the next event on [Edera’s Brightest Minds Event page](#) and [LinkedIn page](#).

[Watch and/or listen to the recording of Edera’s second Brightest Minds webinar](#) to learn more about what Dr. Ellzy, Ms. Johnson, Mr. Prince, and Dr. Shanawani think about clinical informatics — challenges, key topics, and the future.

