

QA



DR. MICHAEL DAHLWEID,
Global Chief Medical Officer, DXC Technology

In an interview, Dr. Michael Dahlweid, global chief medical officer of DXC Technology, explains why healthcare providers looking to improve patient care must first modernize their use of data analytics, AI and IT platforms.

BUILDING AN IT FOUNDATION FOR QUALITY CARE WITH THE PATIENT FRONT AND CENTER

How can data analytics help healthcare providers improve patient care?

Analytics can help patients by first helping their providers. Healthcare providers can use analytics to learn whether a specific clinical or medical treatment has actually helped. We can do this by linking the outcomes reported by patients back to the clinical points where we made the original diagnostic and therapeutic decisions.

Ultimately, analytics will be part of patient-centered care. But that comes back to what kinds of data we can share — and what kinds of insights we're capable of generating.

Why is it so important to move healthcare beyond the hospital's four walls?

Only 1% or 2% of activities related to patient health take place in the hospital. Everything else happens in the patient's home, work, social environment, and community. That's why we cannot provide everything within those four walls. That's why telemedicine, telehealth, virtual/digital medicine are so important.

But without analytic and other digital capabilities of dealing with the data, we won't be able to do it. For example, today's EMRs aren't designed for this new environment; their data resides in silos and is difficult to share. Now we need to lift the technology to make data accessibility ubiquitous.

How about artificial intelligence? What role can it play?

Today we face a huge healthcare-provider shortage. So we need to augment that. We already have everything documented electronically — clinical data, vital signs, bio-signals, and more. But we haven't yet made that data available; we haven't labeled it in a meaningful way; and we haven't provided additional insights to help doctors make better decisions. AI can help with all this.

Looking at early AI applications, we can see three important things. One, physicians are freed from repetitive tasks, so

they can focus on more challenging patient interactions. Two, diagnostic precision is enhanced. And three, we're seeing diagnostic patterns and insights unknown before, which empowers clinicians to truly provide precision medicine.

Data management sounds boring, but isn't it important for healthcare?

Absolutely. I was recently at one academic health center that had 519 different solutions for clinical data management. Everything resides in those 519 silos.

To make advanced sense of that data, you have to be able to combine it. To do that, you need a common environment or platform, so folks can access that data in a way that enables AI capabilities. Within our current clinical-documentation systems, this capability simply doesn't exist.

These new platforms will need capabilities — such as a way to create insights from the data providers already have.

Will APIs [application programming interfaces] be part of this too?

APIs are fundamental. No single enterprise in the world is capable of providing all the kinds of software solutions and applications needed, given the scope of clinical questions we must consider.

For example, assume we would like to create a single AI tool for every single diagnosis. We'd have to create 24,000 applications. Of course, one organization creating 24,000 apps is impossible. Instead, these applications will be created by many folks. So we need both an ecosystem and a way for these various application creators to link into the ecosystem — and that way is with APIs.

Also, healthcare today is part of a larger ecosystem that includes not only providers and patients, but also life sciences, pharma and payers. That's a core capability of DXC. We're in all those buckets, so we can help bridge those gaps that accelerate treatment and help improve care outcomes.