Robots, Augmented Intelligence, and Things Only Humans Can Do

Stephen K. Klasko, MD, MBA

*Editor-in-Chief,
Healthcare Transformation;
President and CEO,
Thomas Jefferson University
and Jefferson Health*

It's been a year of *Healthcare Transformation*—this is our fourth issue. We wanted to be bold and provocative, and each issue has carried ideas that could save the planet ... or at least set healthcare delivery on an optimistic path. We've talked to legends, such as **Andrew Young**. We've talked to pioneers, such as **Bernie Marcus**. We've talked to leaders, such as **Aneesh Chopra**.

In this issue, we are honored to have a rare interview with **Judy Faulkner**, the founder of EPIC, the nation's leading (and dominant) provider of electronic health records (EHRs). Whatever you think of EHRs, there is little question that the opportunity is clear: to create the digital concierge, as she calls it, that can flag “rising risk” for thousands of patients at a time. **Judy Faulkner's** story is pure—the computer science student who found a problem and sought to solve it. She is the only computer scientist and woman running a major health tech company. We are delighted she agreed to imagine the future with us.

In addition to **Faulkner's** story, this issue tackles the intersection of digital technology and human health: EHRs, wearables, high speed genetic analysis. Could your doctor be a robot?

I'm going to make a prediction:

The future of healthcare will not be found in artificial intelligence (AI), although AI will contribute more than we imagine. The future of healthcare will not be found in augmented reality (AR), although AR will transform our experiences.

My prediction is that healthcare will be driven by augmented intelligence that places the locus of meaning back at home—back with the patient—and allows the physician to get back to the role of guide.

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The one thing human beings can do that no robot can do is be human. We can help patients, families, and communities make sense of what's happening. We can help build meaning, and we can build motivation, even at the end of life.

To find the physician of the future requires a revolution in medical education, not incremental reform. For a century, we've selected and trained doctors to be memorization machines. If an applicant to medical school can remember 19 causes of jaundice, that applicant beat the one who could only remember 17. But we don't need that level of memorization. There will be a robot who can remember all signs of an illness, and correlate those signs with personalized genetic markers, with risk profiles, and with evidence-based protocols for treating that patient.

If a robot can do that, what we need are doctors who can do what robots cannot do. We need doctors who can answer your question when you ask, "What does this mean?"

I often use the case of an obstetrician delivering a baby who unexpectedly has Down syndrome. What the parents need at that moment is not someone who can define Trisomy 21 and run through a list of potential health and developmental challenges for babies with this diagnosis.

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What the parents need is a doctor who can say, “What this means is that you’ve delivered a beautiful baby. It means your baby will grow, and love, and be loved. It means we’ll find parents with other beautiful babies like yours so that you can talk with them and learn from them what’s unique about your child.”

Each of the patient advocates profiled in this issue has faced the need to create meaning. **Emily Kramer-Golinkoff**, **Nicole Johnson**, and **Mark Laabs** each face rare, life-threatening, soul-destroying illnesses. None caved in. Each has found meaning disrupting traditional organizational practices and accelerating science.

I’m especially struck with **Emily’s** observation: that science is a network of communities. When we engage with patients, we reconfigure those networks. We speed and focus our work.

And we find meaning. ■■■