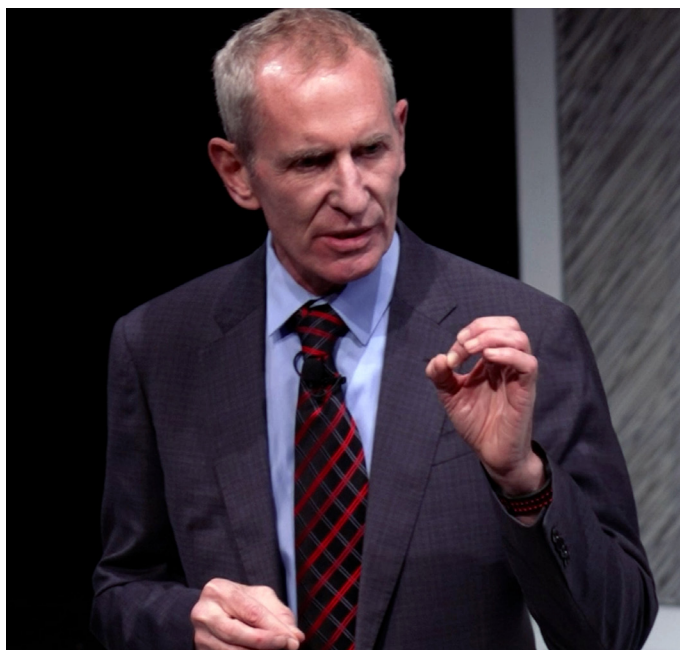


Barry Chaiken, MD

The healthcare industry, unlike many others, runs on time-tested ways to practice excellence in medicine. But does that mean adherence to practices and processes that are fifty, seventy, or a hundred years old?

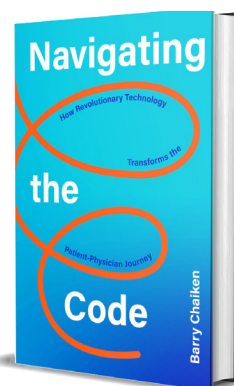
Dr. Barry P. Chaiken thinks not. With his 25+ years of experience as a physician and an informaticist, he believes information technology is healthcare's most powerful tool to address the most challenging medical and business problems of the 21st century.

Dr. Chaiken authored *Navigating the Code: How Revolutionary Technology Transforms the Patient-Physician Journey* and is currently President of DocsNetwork Ltd. He has worked with the National Institutes of Health, UK National Health Service, McKesson, Infor, and Salesforce/Tableau. During his career, Dr. Chaiken provided expertise in quality and patient safety to providers, payors, and life science organizations helping them utilize information technology to improve clinical and administrative activities. He has delivered more than 60 CME lectures and regularly contributes a column for the journal of *Patient Safety and Quality Healthcare* and *Health Data Management*.



“...this is not a treatise about cloud, mobile, internet of things, AI, or blockchain. He focuses on the principles that enable organizational transformation regardless of the tech stack.”

—John Halamka, MD
President, Mayo Clinic Platform



“...weaves in historical lessons learned and great little pop facts... and grounds it in established change management theories.”

—Lyle Berkowitz, MD
Founder of Healthfinch and Keycare

Topics

Healthcare in 2035

Soon-to-arrive medical advances deliver miraculous outcomes

Medication Shortages

Obtaining the proper drugs we need

Artificial Intelligence and Precision Medicine

Delivering care based upon who we are

Quality or Cost

Focusing on value rather than spending





When I began my medical career as a medical detective at the Centers for Disease Control more than 25 years ago, my technology tools were a stethoscope and a blood pressure cuff. Our information came primarily from paper reports and attending conferences. Computers were for the back-office accounting and management staff, not for doctors.

Look at the progress we have made. Or have we?

Of course we have. As the famed science-fiction author Arthur C. Clarke, who penned the novel *2001: A Space Odyssey*, said so well, “Any sufficiently advanced technology is indistinguishable from magic.”

My interest in the magic of technology has paralleled my medical pursuits. Yet over the years, I saw healthcare failing to sufficiently take advantage of technology.

My presentations explore how much more we can achieve by expanding our technical knowledge and skills and using them in the delivery of healthcare. We are not doing badly, but there is so much more we could be doing if we were only to deploy all the technological tools at our disposal.

Health 2035: Medical AI, Precision Medicine, Printed Organs, Virtual Reality

The U.S. offers the best healthcare services in the world. Or does it? Can a patient in rural Iowa access the same level of care as someone in Boston? The recently expanded use of telemedicine helped reduce the regional gap in care, but more evolution is necessary. Our embrace of artificial intelligence and precision medicine is just beginning, and new information technology tools, such as virtual reality, are helping to bring it to the bedside. Replacement organs will first be harvested from animals, followed by their assembly, printed cell by cell.

Combination medications with dosing specific to the individual are digitally printed daily in the home. The patient experience will be seamless and comprehensive. The expansion of healthcare IT will drive these trends and help us secure the best care for ourselves and family.

Medications Are a National Security Issue

While our cutting-edge healthcare system delivers miracle treatments that extend lives, we fail to maintain an adequate supply of effective, inexpensive medicines such as cancer drugs, antibiotics to prevent sepsis, and, most recently, pediatric analgesics. Worried parents with children suffering from RSV or the flu purchase \$4 over-the-counter medicines for \$30 and up online due to shortages. Cancer patients receive substandard treatment due to a shortage of the inexpensive drug methotrexate. And these problems are not due to supply chain issues created by the pandemic.

Shortages of critical medications go back more than a decade, with the FDA issuing an annual report on the subject since 2012. Currently, the FDA lists over 100 drugs as being in short supply. With our healthcare bill surpassing \$4 trillion, we have the resources to ensure our hospitals and pharmacies have an adequate supply of life-saving drugs. It is time for us to invest in raw material supply chains, manufacturing capacity, and stockpiling of medications to protect patients from unnecessary harm.

Cost or Quality: Why Our Thinking About Healthcare Spending is All Wrong

Health maintenance organizations, capitated plans, restricted networks, and accountable care organizations were all created to manage the cost of care. But is cost the right place to focus? These strategies did not control costs, as the U.S. surpassed \$4 trillion in healthcare spending. Our focus should be on the same thing that all our other purchases are based on – value.

Aren't we consuming healthcare services, and therefore, that makes us consumers? Perhaps our patient experience should mimic our consumer experience, where care is patient/consumer-centered. And that includes how we interact with our providers, payers, and caregivers.

Artificial-intelligence-driven bots, efficient workflow, and analytics-influenced processes are just some ways revolutionary information technology can bridge the value-cost gap. Rather than focus on what we spend on healthcare, we must aim to deliver value and decide how to invest our resources.

Dr. Chaiken tailors his keynotes to address the interest of each audience. He adjusts his presentation to accommodate the needs of both healthcare and non-healthcare attendees. Everyone buys and consumes healthcare, so it is in all our interest to understand the trends in healthcare and learn how to navigate upcoming changes.