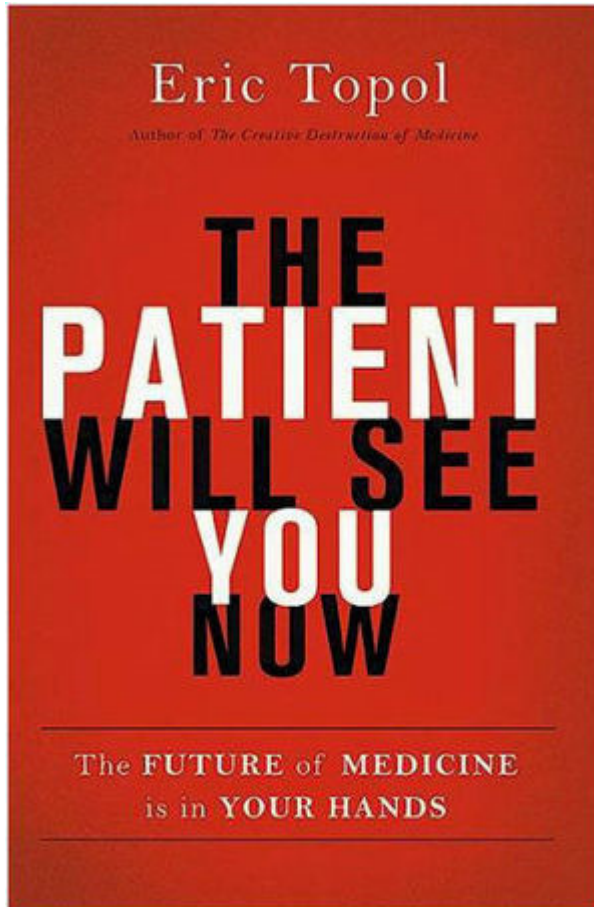


'Future of Medicine' thought-provoking

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"The Patient Will See You Now: The Future of Medicine is in Your Hands" by Eric Topol. New York, N.Y.: Basic Books, 2015. 384 pages, \$28.99.



“Getting first-rate health care will always be quite different from ordering something from Amazon,” Eric Topol explains near the beginning of *“The Patient Will See You Now: The Future of Medicine is in Your Hands,”* his much-anticipated treatise on the seismic shift taking place in the delivery of medical services. “We’re talking about the most precious part of life – one’s health – not buying a book.”

“We’re embarking on a time when each individual will have all their own medical data and the computing power to process it in the context of their own world,” he continues. “There will be comprehensive medical information about a person that is eminently accessible, analyzable and transferable. No longer will MD stand for medical deity. Indeed you will still be seeing doctors, but the relationship will be radically altered.”

A 1975 graduate of the University of Virginia, Topol completed medical school at the University of Rochester, with additional training at the University of California at San Francisco and

Johns Hopkins University. He was a professor at the University of Michigan for six years before founding the Cleveland Clinic Lerner College of Medicine in 2002. He joined the faculty at Case Western Reserve University in 2003. Topol is director of the Scripps Translational Science Institute, the chief academic officer for Scripps Health and he holds the Gary and Mary West Endowed Chair of Innovative Medicine at the Scripps Research Institute. His books include *“The Creative Destruction of Medicine: How the Digital Revolution Will Create Better Health Care,”* *“The Textbook of Interventional Cardiology,”* with Paul S. Teirstein, and *“Acute Coronary Syndromes,”* an edited volume.

As has been the case with everything Topol has been involved with throughout his career, this latest contribution is extensively researched, with 58 pages of source notes at the conclusion of the 15 chapters that comprise the main text. The tome is arranged in three major sections: *“Readiness for a Revolution,”* which consists of four chapters that set the stage for what follows; *“The New Data and Information,”* five chapters that explain the logistics of the health care metamorphosis; and *“The Impact,”* the final six chapters that discuss the immense implications of the ongoing tectonic shift in considerable detail.

In a nutshell, Topol sees technological advances, particularly those occurring since the advent of the Internet and smartphones, as having profound repercussions for the medical profession at virtually all levels. Many of the changes we are witnessing have been fermenting for several decades, but true reinvention has only become possible as processing power has increased exponentially. In my grandparents' era, for example, the authority of the physician was unquestioned. If you wanted to get better, you did what the doctor prescribed and hoped it worked. Expertise was housed completely outside the realm of the patient; the professional reigned supreme (and often unchallenged).

“Just as the first home pregnancy test of 1978 heralded a new era of consumer empowerment back then, these new products and companies are the precursor to an upcoming, unbridled capability of across-the-board lab testing anytime, anywhere,” Topol writes. “Patients are generating their own data on their own devices. The data are immediately analyzed, graphed, displayed on the screen, updated with new measurements, stored and, at the discretion of the individual, shared. Putting this power in everyone's pocket could preempt an emergency room visit or an urgent clinic appointment.”

An analogy Topol alludes to consistently throughout the manuscript revolves around the transformation that almost immediately followed Gutenberg's pivotal enhancement of the printing process in the middle of the 15th century. Just as technology revolutionized the world by making books accessible to the general public, the development of super-fast processors embedded in handheld devices connected to broadband services is similarly altering the fundamental practice of medicine. And it's not only the traditional office visit being affected; it's everything associated with the health care industry.

“Hospitals as they exist today are set up to fail,” the author writes. “Their fiscal future is beyond bleak; their paradoxical harm instead of health potential cannot be dismissed or substantively diminished. There are 440,000 lethal, preventable events each year from care in hospitals, or roughly one-sixth of all deaths that occur in the U.S. each year. The majority of hospital CEOs think a hospital-building bubble has popped.”

Topol argues this trend has been entirely predictable for a long time and is driven to a significant extent by consumer empowerment. Moreover, he attributes the explosive rise in health care litigation directly to the unprecedented ability of patients to question their own prognosis using real-time data and sophisticated diagnostic techniques rivaling those of the physicians and facilities from whom they have sought treatment. Not surprisingly, many in the therapeutic community are not overly enthusiastic about these emerging trends.

“We've never seen such a discrete challenge to the medical profession, but we've not had the platform or landscape for that to be accomplished,” Topol notes. “Until now.”

Perhaps David Cutler, Otto Eckstein Professor of Applied Economics at Harvard University, says it best: “Health care will be less frustrating when the power shifts from sellers to buyers, and when the patients are more in charge.”

In the final analysis, I found “The Patient Will See You Now” to be extraordinarily thought-provoking and even provocative. Topol gets a little technical at several points throughout the narrative, but the world he envisions is already exceedingly close to being realized; the writing on the wall is clear, unambiguous and unmistakable. This would be a great book to read sitting in a waiting room or during a stay at the hospital. I recommend it highly.

— *Reviewed by Aaron W. Hughey, Department of Counseling and Student Affairs, Western Kentucky University.*