The Changing World of Doctors and Patients

Advances in medicine have brought us the stethoscope, artificial kidneys, and computerized health records. They have also changed the doctor-patient relationship.

This book explores how the technologies of medicine are created and how we respond to the problems and successes of their use. Stanley Joel Reiser, MD, walks us through the ways medical innovations exert their influence by discussing a number of selected technologies including the X-ray, ultrasound, and respirator. Reiser creates a new understanding of thinking about how health care is practiced in the United States and thereby suggests new approaches to effectively meet the challenges of living with technological medicine.

As health care reform continues to be an intensely debated topic in America, Technological Medicine shows us the pros and cons of applying technological solutions to health and illness.

Stanley Joel Reiser, Clinical Professor of Health Care Sciences and of Health Policy at The George Washington University School of Medicine and Health Sciences, is known nationally and internationally for his scholarship and teaching in ethics, history, technology assessment, and health policy. Before arriving at The George Washington University, he held teaching positions at Harvard University and the University of Texas Health Science Center at Houston. He has written more than 120 books and essays. His articles have appeared in such publications as Journal of the American Medical Association, New England Journal of Medicine, Annals of Internal Medicine, American Journal of Public Health, Health Affairs, Hastings Center Report, Scientific American, and The New York Times.
TECHNOLOGICAL MEDICINE
The Changing World of Doctors and Patients

STANLEY JOEL REISER
The George Washington University School of Medicine and Health Sciences
Remembering: Sylvia and Harry Reiser
and I. Bernard Cohen

Celebrating: Katharyn, Traci, Adam, Vanessa,
Thomas, Caroline, and Tessa
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This book explores how the technologies of medicine are created; how society, patients, and practitioners respond to the problems and successes of their use; and how this response changes them. For as we create technology and strive to apply its powers, it re-creates us. To demonstrate the different ways through which medical innovations exert their influence, a number of selected technologies are examined. We explore how the first widely used technology to diagnose illness, the stethoscope, transformed the relationship between patients and doctors as it revealed hidden sounds produced in us by disease. We probe the elation and benefits experienced by doctors and the public when the X-ray gave them the power to see into the body and the unanticipated problems its use created. We examine the creation of the artificial kidney and the public efforts first to ration its use and then to fund it. The development of the artificial respirator and a journey that led it to sustain polio victims and later irreversibly comatose patients is explored, with its generation of medical, legal, and ethical quandaries. The events leading to the electronic health record, hailed in contemporary times by doctors, policy makers, and the public as a key to a less costly and more effective health system are probed and the promises of this belief examined. This is followed by considering the rise of scientific means to determine whether therapies are effective or not, such as the randomized clinical trial; and the innovative social and medical decision process Oregon instituted to decide what therapies to offer through publicly funded programs. Technologies to prevent disease and the ambiguous place of securing health as a goal of medical practice are probed, after which the transformation of birth from a social to a technologically driven medical event is discussed, followed by an explanation of the nature of technology and how
it exerts its compelling influence. The understandings gained from this exploration are then applied to suggest fundamental ways to change thinking and practice in health care, and thereby to meet more effectively the challenges of using and living with technological medicine. The book is written for a public, health professional, and health policy readership.

In developing the content for and in writing this book, I have had the constant support and insightful criticism of its editor at Cambridge University Press, Richard L. Ziemacki, to whom I am deeply grateful. In guiding the book through later stages of editing and production, Cambridge editor Eric Crahan made creative and valued contributions, and Shana Meyer, project manager at Aptara Inc., provided always perceptive suggestions.

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