Introduction

The American Telemedicine Association (ATA) defines telemedicine as the use of telecommunication technologies for the exchange of medical information to improve a patient’s health status. Telemedicine utilizes communications pathways such as secure online video, e-mail, smartphone applications, texting, and other wireless tools to deliver health care services, thereby creating additional, alternative, and complementary methods for advancing patient care. Embracing the technological revolution, innovative telemedicine companies are rapidly creating new solutions to age-old problems that plague the U.S. health care industry—tackling physician shortages and the high cost of providing care, among others.

Many in the health care industry today believe greater utilization of telemedicine by patients and providers will help policymakers accelerate needed reforms for the U.S. health care system. For example, in addressing access to care, some telemedicine companies offer physician services 24 hours a day, seven days a week, 365 days a year for as little as $49 per encounter. This means that, in a sense, the traditional “house call” is coming back, albeit virtually, using technology to bring the doctor into the patient’s home for consultation, diagnosis, and treatment—all at a reasonable price point—eliminating barriers created by cost, distance, and time delays.

Indeed, telemedicine is a major disruptive market force that is revolutionizing the way patients in the United States and all across the world seek and obtain medical care. With the foreseeable dramatic rise in telemedicine over the next five to ten years, this is a market space poised to disrupt the U.S. health care industry by leveraging the ongoing exponential pace of smartphone adoption, improved Internet access, and mobile device developments. Just as the smartphone had an impact on the telecommunications, banking, and retail industries, technologies (especially mobile) deploying telemedicine have the power to drive changes in the U.S. medical industry.
by altering consumer expectations regarding cost, quality, and timeliness of service delivery. For this reason it is important to understand not only the technology and patient care aspects of telemedicine, but also the critical policy and legal issues that surround and support—and sometimes impede—its adoption.

The purpose of this book is to provide a broad overview of the telemedicine industry and prepare the reader to better understand and address these critical and evolving questions. Chapter 1 begins with a brief overview of the history of telemedicine, followed by an explanation of the terms “telehealth,” “telemedicine,” and “mobile health” (or “mHealth”). It also includes examples of companies operating in the telehealth, telemedicine, and mHealth markets and a discussion of how telemedicine is well positioned to address some of the current U.S. health care market failures.

Chapter 2 provides an overview of the current state of the telemedicine market in the United States, including the role of major market participants—patients, providers, and payers. Benefits of telemedicine are discussed, including greater patient engagement, access to primary and specialty care, lower cost of services, and greater coordination of care. The chapter also includes an overview of the size and projected growth of the U.S. telemedicine market, including major market drivers and barriers to growth. Chapter 2 concludes with an explanation of key risks to future growth of the mHealth market.

Chapter 3 provides an in-depth overview of state laws and regulations affecting telemedicine, as many regulatory topics governing telemedicine are based in state law, such as licensure, standard of care, physician/patient relationships, and prescribing authority. While telemedicine enables care to cross geographic boundaries, state-to-state regulatory schemes and laws differ, leaving telemedicine companies with the task of synthesizing a variety of applicable rules and regulations when building a national or even regional telemedicine delivery system. Chapter 3 explores state legal and regulatory issues and examines how the lack of legal and regulatory consistency creates barriers to greater telemedicine adoption and growth. Also included is a sample form for informed consent to receive telemedicine services courtesy of the ATA.
Chapter 4 describes how telemedicine reimbursement, credentialing, and privileging policies and regulations affect telemedicine adoption. Specifically, this chapter provides an overview of current Medicare and Medicaid telemedicine reimbursement policies, trends in the private payer market, the importance of telemedicine provider compliance with the False Claims Act, and emerging Medicare and commercial payer reimbursement initiatives. Closely tied to the topic of reimbursement is that of credentialing and privileging of health care providers. Chapter 4 also describes a unique credentialing option available for telemedicine providers—credentialing by proxy.

Chapter 5 explores the future of telemedicine by offering a macro-level overview of emerging issues with an emphasis on possible federal government initiatives for advancing telemedicine in the coming years. For example, what will the role of government be in response to medical devices and mobile applications that, under existing legal definitions, are deemed to “practice medicine”? Will one federal regulatory agency take the lead in developing policies and regulations to oversee the telemedicine market in the future? This is followed by a discussion of how, in the face of continuing ad hoc federal efforts regarding telemedicine, the regulatory landscape will likely remain fragmented. The role of private and public insurers is also discussed, as payers continue to adopt policies fostering greater reliance upon telemedicine. In addition, Chapter 5 includes an overview of possible future changes to state laws and policies governing telemedicine. The chapter concludes with an overview of the future of the telemedicine market, including a discussion of how telemedicine may be leveraged to address public health issues such as chronic disease management.

To provide the reader with ongoing resources and information specific to the topics outlined in this book, several appendixes are included at the end of the book to provide: (i) references to resources for telemedicine-specific information (Appendix A); (ii) a form of telemedicine informed consent document developed by the ATA (Appendix B); and (iii) a matrix from the ATA of information on Medicaid and private payer “parity” laws as of January 2015 (Appendix C).

In closing, it appears nearly certain that, in the future, using telemedicine to access health care services will be as commonplace as today’s use of
smartphones for banking services. Such a reality, however, likely necessitates adaptation of federal and state laws, regulations, and policies to strike the right balance between protecting citizens from potential harm while leveraging the many social and financial benefits of telemedicine. The potential promise of ever-greater telemedicine adoption for providers, payers, and patients is compelling and real. The challenge will be to create thoughtful and flexible legal, regulatory, and policy frameworks that support rather than impede these smart technologies and service delivery models.