INTRODUCTION

Digital health—the intersection of health care related software applications, analytical tools, medical device technology and electronic data assets that are enabled and achieved through the use of the internet and hand-held devices—is having a profound effect on all facets of the health care delivery and payment system. Digital health is changing the provider-patient relationship by improving the ways in which providers deliver (and patients access) care, overall care quality, individual patient outcomes and satisfaction, and population health. At the same time, it is empowering the innovation needed to meet the imperative for a transition from payment based on volume to payment based on value that is evaluated in terms of measurable improvements in care delivery and population health. The rise in both the supply and demand for technology solutions that present the potential for accelerating this transformation is exponential.

EXAMPLES OF DIGITAL HEALTH AT WORK IN ALTERNATIVE PAYMENT SCHEMES

Digital health tools are being used in countless ways by physicians, hospitals and other health care providers to deliver higher quality, lower cost care. Prominent among the many examples of this rapidly growing trend is the use of digital health tools by accountable care organizations (ACOs) participating in the Medicare Shared Savings Program (MSSP)—the inaugural Medicare program health reform initiative. Under the MSSP, ACOs receive incentive rewards if they are able to improve the quality of care provided to Medicare beneficiaries, and decrease or control health care costs.

ACOs believe that, by investing in and harnessing the power of digital health tools to better coordinate and deliver higher quality, more cost-efficient care, they will be able to maximize their financial rewards under MSSP. From the initial launch of the movement to create ACOs to participate in the MSSP and other government and private sector payment innovations, ACOs have relied on electronic health records (EHR), health information technology and “big data” to support the performance measurement and incentive allocation that was then, and still is, essential to the ACO and its provider participants’ ability to participate in and earn the rewards offered by the MSSP. For example, the ACO’s participating providers began to share data...
between and among EHRs in “real time” through health information exchanges (HIEs) operated or facilitated by the ACOs in order to better manage and coordinate care for individual patients across specialty areas and the spectrum of care. The ACOs collected data from the providers’ EHRs and aggregated the data into a central warehouse of “big data” that could be used to measure and reward achievements in quality, patient satisfaction and outcomes. The ACO then applied IT analytics capabilities to conduct analyses of provider performance to produce “scorecards” and/or “dashboards” to inform the participants, and enable them to keep track of, their own performance and the performance of one or more groups of providers relative to performance measures and targets. As these digital health tools become increasingly sophisticated, they are able to support the ever-increasing complexity of performance measures and other payment innovations and the robustness of the data exchanged and aggregated in connection with the ACO.

ACOs are also implementing other digital health strategy tools to reduce unnecessary or preventable urgent care and emergency department visits by giving patients a means to access convenient, timely and responsive health care services. An increasing number of ACOs are using telemedicine programs that offer patients 24/7 virtual access to primary care and family medicine practitioners in an effort to encourage more efficient utilization of costly emergency care services. ACOs are also looking to remote patient monitoring programs to better track the health status of patients with chronic illness to avoid preventable hospital admissions and readmissions. Consider, for example, how digital health tools are now being applied to transform care management of diabetes patients, a chronic disease with various, associated chronic conditions, receive health care. Using digital health tools, diabetic patients can download data directly from their personal insulin meters to their smart phones and set up medication alerts and reminders, track their intake of food, integrate this data with weight and cholesterol management recommendations and transmit all of this valuable health information, in real-time, to a variety of different medical professionals—many or all of whom may be part of a clinically integrated ACO, following “best practice” care management protocols, and sharing patient health data under the same EHR system so as to allow them to reach their patients and make any necessary adjustments before rather than after problems arise. The growing sophistication of the digital health tools used by ACOs to treat assigned patients and support the ever-increasing number of performance measures, and the nature and amount of data exchanged and aggregated in connection with the ACO, will undoubtedly continue.

Recent initiatives and associated commentary of the Centers for Medicare & Medicaid Services (CMS)—the government agency tasked with the primary role in implementing the federal health reform initiative—evidence its endorsement of digital health tools as critical to achieving the transition to value-based care. For example, the June 2015 MSSP final regulations cite the role of telemedicine as a means to improve care and avoid unnecessary costs citing 80 Fed. Reg. 32,723 (June 9, 2015). Further, CMS added a new eligibility criterion in the final regulations that requires an ACO to describe in its MSSP application how it will encourage and promote the use of technologies that improve care coordination for beneficiaries, citing telemedicine and remote patient monitoring services as possible platforms citing 80 Fed. Reg. 32,725 (June 9, 2015). The Center for Medicare & Medicaid Innovation has similarly demonstrated its support through the issuance of payment policy waivers that remove the strict geographic site and originating site requirements for the payment of telemedicine services for its voluntary Bundled Payment for Care Improvement Models 2 and 3 and Next Generation ACO Model, as well as for its first mandatory model, the Comprehensive Care for Joint Replacement Model, allowing eligible beneficiaries to receive virtual care in their home or in other approved originating sites (with certain restrictions).

The Medicare Access and CHIP Reauthorization Act (known as MACRA)—which directly ties both payment increases and reductions to various, specific efficiency and value measures—will certainly further fuel the movement toward the use of digital health tools. For example, the Merit-Based Incentive Payment System (MIPS), one of the two available payment pathways under MACRA, assigns points to clinicians in different performance categories, several of which provide opportunities for the adoption of digital health solutions. To illustrate:
The Quality category requires six measures to be reported, many of which may be leveraged through the use of digital health tools. For example, the Maternity Care: Post-Partum Follow-Up and Care Coordination measure tracks the percentage of patients who were seen for post-partum care within eight weeks of giving birth who received particular evaluations, screening and education. Obstetricians, gynecologists and family medicine practitioners could earn points under this measure by using telemedicine technologies, like videoconferencing platform, to engage in virtual patient visits with post-partum patients to answer the patient’s questions, provide education on the recovery process and assess the patient’s physical and mental health status, including the performance of mandatory post-partum depression screenings.

The Advancing Care Information category requires the use of certified electronic health record technology to coordinate care through patient engagement (e.g., secure messaging). The implementation of patient portals with integrated messaging platforms facilitate communication between the patient and health care practitioner, providing additional functionalities like sending reminders, engaging in dialogue about follow-up care, encouraging preventative action and distributing educational materials. These portals typically also give the patient access to timely and informative data, like test results, that allow the patient to play a role in decision making and (hopefully) empower the well-informed consumption of care.

The Clinical Practice Improvement category is perhaps the best opportunity for digital health integration. Activities that improve beneficiary engagement, population management, expanded practice access and care coordination—among others—are assigned points and weighted. Here, mobile apps have the capability to enable e-visits via videoconference as an alternative method to an in-person visit; facilitate questionnaire reporting; and send reminders, materials and other notifications to alert and educate patients about services due. The apps also provide opportunities to generally inform the delivery of care for the specific patient by sending alerts to providers to indicate that it’s time for a visit or that a problematic symptom was noted on a questionnaire. Further, clinical practices could leverage app-sourced data to gain information about patient trends, clinical areas of concern or successes related to digital health tool utilization.

LEGAL AND REGULATORY, AND PRACTICAL CONSIDERATIONS

Academic medical centers, hospitals and other health care providers face both immense opportunities and daunting challenges when developing and implementing digital health innovations. One key challenge faced by developers and users of digital health relates to compliance with the often complex state and federal laws and regulations adopted by the numerous regulatory bodies responsible for overseeing different aspects of digital health. The regulatory bodies identified under the cloud in the below illustration have been increasingly focused on the use of technology in healthcare and are expected to continue their focus and enforcement activities in the coming years.
Because innovation is moving faster than the law in this area, in-house counsel and compliance officers must understand how each of these regulatory bodies oversees and regulates digital health. They must also pay careful attention to legal and regulatory developments and be prepared to identify and manage the myriad compliance and liability risk considerations arising from participation in and use of digital health tools.

In addition to understanding, monitoring and developing compliance strategies for legal and regulatory requirements, health care providers, patients and consumers must approach these advancements with a reasonable degree of caution. As AMA CEO James L. Madara, MD, advised in his address at the recently concluded 2016 AMA Annual Meeting, “…. Appearing in disguise among these positive products are other digital so-called advancements that do not have an appropriate evidence base … or that just do not work well or that actually impede care, confuse patients and waste our time … from ineffective electronic health records to an explosion of direct-to-consumer digital health products to apps, some of which are of poor quality.” As a result, providers must perform sufficient “due diligence” to determine whether the digital health tool is capable of effectively meeting their specific clinical and business needs, as well as the needs of their patients, and to evaluate the developer’s compliance with applicable laws and regulations.

CONCLUSION

The shift toward alternative and value-based payment models will incentivize the further adoption of digital health tools by health care providers to facilitate compliance with or maximize financial performance under new payment schemes. The successful adoption of digital health technology requires providers and hospitals to not only choose the right tools, but to correctly implement them, ensure their consistent use and track and monitor the realized efficiencies. Growing pains are anticipated as hospitals and physicians use their best judgement and resources to identify which tools will provide the most long-term value, but, given the potential toward meeting the demands of alternative and value-based payment models, the overall benefits are worth the discomfort.