

Medtech's Digital Health Opportunity for Greater Value Creation



Written by:

Caroline Dewing, Associate Principal, ClearView Healthcare Partners

Anne Smart, Managing Director, ClearView Healthcare Partners

Digital technologies are proliferating at unprecedented rates and are poised to transform the healthcare industry. Medtech companies are uniquely positioned to capitalize on the opportunities digital tools offer. In this white paper, we outline distinct ways that medtech companies can incorporate digital health technologies into their portfolios and the advantages those strategies confer.

Digital Technology's Role in Care

With increasing cost pressures, the healthcare industry is experiencing a critical transformation towards value-based care. The medtech sector is at the center of the discussion regarding how to define and demonstrate value as companies struggle to gain optimal market access and penetration. The clinical and economic evidence bar for new medical technologies has been raised, and payers are increasingly focusing on real-world effectiveness and demanding sustained benefits. Innovative business models and more comprehensive solutions, from disease prevention to sustained wellness, are needed to demonstrate value.

Digital health technologies represent a wide-ranging, enabling, and disruptive set of tools to help medtech companies address these challenges and drive tech-enabled value-based care. The diverse digital health market includes wearables and sensor technology, mobile apps, remote monitoring and telehealth, and other tools that incorporate artificial intelligence to inform clinical decision-making. With the right strategic approach, medtech companies have the opportunity to leverage the data, connectivity, automation, and analytic capabilities of these digital solutions in a meaningful way to redefine the value of their products and portfolios.

Medtech's Advantage

While tech companies and other non-traditional players are quickly moving into healthcare, medtech organizations are uniquely positioned to capitalize on the well-funded and fast-growing digital health market. They have an obvious familiarity with the intricacies of healthcare, established relationships across key stakeholders, and portfolios of healthcare products and services.

Medtech companies have the infrastructure to rapidly integrate digital health technologies. They can utilize their existing devices as conduits for data and their deep understanding of unmet needs to drive meaningful value. Digital health and medical technologies are complementary, and together can lower costs, improve quality, and enhance the patient experience. In addition, medtech companies have existing channels to the broad spectrum of healthcare stakeholders, including regulators, payers, providers, and patients.

However, each stakeholder in healthcare has different expectations for value (see Figure 1). Before incorporating digital solutions, medtech companies must understand the respective needs, motivations, and concerns of each player. Across stakeholders, the craving for greater clinical and economic value demonstration paves the way for a digital health and medtech convergence, and tech-enabled, value-based care.

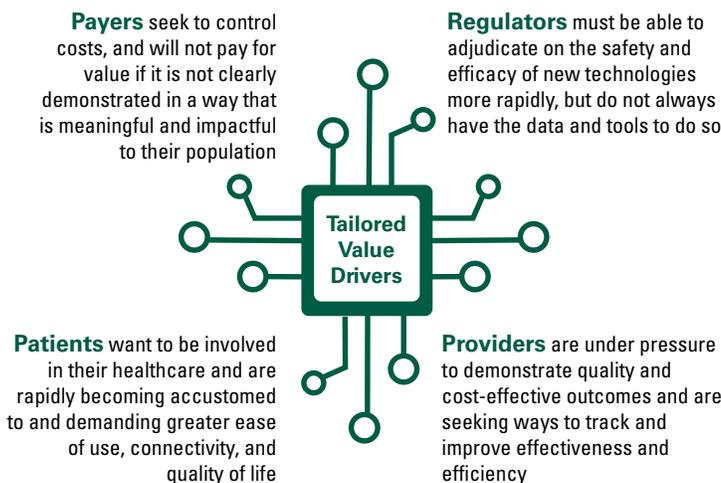
Strategic Approaches to Digital Integration

ClearView proposes three main approaches for medtech companies to integrate digital health technologies into their portfolios to be successfully positioned in the evolving healthcare landscape.

Develop a New Paradigm of Value

The ability to demonstrate the value of a treatment or intervention in new ways may be the most

FIGURE 1 - DEFINING VALUE FOR A DIVERSIFIED STAKEHOLDER AUDIENCE



compelling contribution of digital health technology for medtech companies today.

Digital devices and tools collect and analyze diverse types of data, including patient behavioral data, which companies can use to generate new and/or more detailed outcome measurements. These data streams are assessed with advanced analytics and machine learning algorithms, and insights can drive to more consistent tracking of outcomes and the development of measures not previously discernable through traditional trials.

Digital Tools Enhance Asthma and COPD Management

Digital sensor technologies from Propeller Health, Adherium, and Amiko Digital Health are being coupled with asthma and COPD inhaler devices to monitor patient medication adherence. Data analysis and machine learning are used by providers, payers, and patients to better understand what may be causing symptoms and to improve disease management.

Tools for tracking day-to-day activities and self-reporting allow for a greater understanding of patient behaviors, needs, and pain points. This facilitates the introduction of new outcome measures with relevance to specific stakeholders, such as adherence. Payers are increasingly using digital data to determine whether patients comply with treatment regimens and decrease insurance costs. Medtech firms can use such data and analytics platforms to demonstrate greater clinical value and cost savings.

Own the Disease Continuum

Traditional medtech portfolios are typically focused on a therapeutic or diagnostic intervention used at a given point in time. Digital health solutions can be valuable sources of portfolio building to extend across the continuum of care by building a supportive ecosystem around the devices and conditions. By collecting outcomes data and developing real-world evidence that are focused on broader upstream and downstream patient management, medtech companies can better understand the entire patient journey from symptom onset to ongoing management.

Real-time digital monitoring tools offer a myriad of opportunities to better understand and intervene across the continuum of care. For example, digital sensors that link to a smart phone and monitor critical functions at home (e.g., AliveCor's KardiaMobile, a mobile EKG technology) prevent adverse events, complications, and re-admissions. This can lead to improved patient outcomes and drive greater clinical and economic value of the original medtech intervention for patients and payers.

New digital technologies to extend the disease continuum are emerging in the COPD and emphysema space. Patients who continue to smoke post-thoracic surgery are higher risk and have greater chances of sub-optimal outcomes. Digital technologies, such as those from Carrot or Chrono Therapeutics that combine wearable or breath sensors with mobile coaching and support programs, can help people quit smoking and improve post-operative outcomes.

Diabetes care has emerged as another key area in which companies are tapping into the potential to extend their portfolios and own the disease pathway. Roche's acquisition of mySugr provided the company with a set of digital apps and services that combine diabetes coaching, therapy management, test-strip supply, and automated data tracking to blend with its own glucose monitoring systems. This extension across the diabetes continuum enables Roche to not only reach more patients, but also empowers patients and improves outcomes. Payers are taking note and there is some movement to provide reimbursement for even educational services.

In addition, Medtronic acquired diabetic prevention and self-management programs and developed a cognitive app, Sugar.IQ. This app taps into IBM Watson Health's machine learning capabilities to take real-time glucose monitoring and insulin information from Medtronic's pumps and glucose sensors to help patients better manage daily diabetes decisions. The integration of these digital technologies is enabling the company to own the disease and drive real value for patients, providers, and payers.

Medtech companies should consider incorporating these types of supportive digital technologies into their portfolios to extend across the disease continuum. By surrounding their products with an ecosystem that supports prevention, adherence, and recovery, they ultimately enhance the value of their own portfolios by improving patient outcomes.

Facilitate a Web of Connectivity

We operate in an environment where social media has redefined the parameters of connectivity. Healthcare is not immune to this change. Patients increasingly seek an active role in managing their conditions and interactions with stakeholders involved in the delivery of their care. We are moving to a more patient-centric, connected world. Digital health solutions that leverage crowdsourcing with social media allow for real-time connectivity that is quickly re-aligning relationships amongst old and new healthcare stakeholders and creating relationships between them that did not previously exist.

Digital players can offer health information sharing websites for patients to disseminate both personal stories and health data regarding their conditions. By gaining a better understanding of patient needs through such digital platforms, medtech companies can better understand the real-world medical value of their products. This in turn allows for accelerated development of new solutions for patients.

Future innovation will rely on the use of digital technologies to coordinate interactions and

collaborations amongst multiple stakeholders. Medtech companies can position themselves as the nexus of these relationships among patients, providers, payers, and regulators. This positioning will facilitate differentiation from other healthcare companies and high-tech firms.

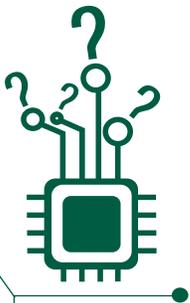
Digital connectivity tools will be critical to remaining relevant in the evolving healthcare space. In addition to bringing device makers closer to providers and payers, they empower patients to own their outcomes, encouraging compliance, wellness, and disease prevention, and facilitating a more personal, fulfilling experience.

Are You Thinking Digital?

Traditional medical devices enhanced with digital capabilities can be the conduit for collecting new streams of data and the cornerstone of connecting patients, physicians, and payers. However, with these innovations come the challenges associated with forging a new path. In addition to developing new internal capabilities, such as software and hardware expertise, and obtaining reimbursement, medtech companies will be at the forefront of cybersecurity, data sharing, and regulatory discussions. They also need to ensure that they gather data that are meaningful and necessary, and translate the new knowledge into clear benefits and value that will be paid for. Companies that figure this out will be the winners.

This paper has outlined specific goals that digital technologies can help achieve: developing new paradigms of value for medtech interventions; portfolio building to extend the continuum of care; and creating deeper relationships with healthcare stakeholders, especially patients.

The time to embrace digital health technologies is now. Medtech companies that fail to act will be left behind as others demonstrate value in ways that are meaningful to payers and differentiated from competition.



Questions Medtechs Should Ask

- What challenges exist to differentiate my medtech portfolio and what opportunities can be gained by incorporating digital technologies?
- Are there data that would help me understand my patients, disease continuum, customers, and markets better and how can I obtain it?
- What benefits of my technology are not currently being tracked?
- How can I apply machine learning and analytics to establish proof of concept and develop novel solutions to add value?
- How can I move to a more patient centric strategy and close the information gap on target populations, behaviors, and touchpoints?

About ClearView Healthcare Partners

Founded in 2007, ClearView Healthcare Partners is a global strategy consulting firm serving the life science sector.

The firm combines international industry knowledge and deep scientific expertise across a range of therapeutic areas with an extensive network of external stakeholders to deliver practical and actionable recommendations to our clients' most complex challenges. The firm's projects include cross-functional support at the corporate, franchise, and product levels for pharmaceutical, biotech, medical device, and diagnostics companies worldwide.

For more information, please contact the author at anne.smart@clearviewhcp.com.

To request information regarding ClearView, contact info@clearviewhcp.com.

Boston-New York-San Francisco