

# **Digital Health Systems**

Educational Briefing for Non-IT Executives

### **Executive Summary**

IT's role in health care has expanded from one of being helpful in reducing costs and improving quality to also being essential in implementing overall organizational strategy (see graphic below). There will be no paper-based population health managers or consumer-friendly organizations! Provider organizations must now view IT as an operational optimizer, a strategy enabler, and potential industry disrupter; track the ever-accelerating changes in technologies and IT-related capabilities; and capitalize upon opportunities for IT-powered incremental, sustaining, or disruptive innovation. Provider organizations must expand beyond just an automation focus (utilizing IT to automate manual processes) to also include a focus on digitization (fundamentally rethinking and digitizing key customer or internal journeys). Leading providers are beginning or continuing on the path to becoming digital health systems.

# What is a Digital Health System?

Digital health systems take full advantage of IT-related capabilities in three domains: to redefine business models; to improve processes, quality, and cost structure; and to identify and address customer and patient needs. We're seeing progress in all three of these domains now. First, new IT-powered business models are being built as we move from volumes to value. For example, leading organizations are accepting more financial and clinical risk and therefore are building "IT-enabled medical perimeters" to avoid unnecessary hospitalizations. Next, technology is beginning to help expand care delivery from primarily a "find it, fix it" model to one that is more predictive, proactive, preventive, and precise. Lastly, technology is playing a key role in helping patients change from being passive recipients of care to becoming active participants in their own health and health status.



## Why are they important?

Health care has historically been largely immune to change and IT's role has not been as significant as in almost all other industries, so it may be difficult to visualize "IT-powered health care transformation or disruption." Initially, IT in the 1980s and 1990s was seen as a cost to be minimized. In the 1990s and 2000s, most organizations viewed IT as a tool to improve efficiency or quality in niche areas. Now, as business and clinical needs escalate and technology becomes more powerful and useful, IT enables organizational strategy and will likely transform the basis for competition. There will be no paper-based population health managers or consumer-friendly organizations. As in other industries, transformative use of IT can be a competitive differentiator.



### How do Digital Health Systems affect providers and non-IT leaders?

As today's health care organizations evolve to digital health systems, IT will continue to move from "the back room to the boardroom." As a result, IT must be a "team sport" with non-IT leaders working collaboratively with IT leaders. Non-IT leaders do not need to become "techies," just as car drivers don't have to be master mechanics. Non-IT leaders do need to understand their role in achieving value from IT-related investments, and the potential capabilities of disruptive technologies such as artificial intelligence, cloud computing, and the Internet of Things. This understanding will help non-IT leaders play key roles in five essential domains:

- Vision and strategy—Clearly define the IT-enabled enterprise vision and strategy and help implement the enterprise strategy for IT
- Organizational change—Lead IT-enabled process transformation and organizational change management; clearly define roles, accountabilities, and rationale for transformation
- Demand management—Help prioritize the seemingly insatiable demand for IT-related activities; have justified confidence that the IT function and IT infrastructure are managed well
- Funding—In a cost-constrained environment, help ensure adequate funding; understand different funding approaches for different types of investments
- IT-powered innovation—Help create an environment for appropriate IT-powered incremental, sustaining, and possibly even disruptive innovation

#### Five Things Non-IT Executives Need to Know About IT

### IT is now essential to enabling organizational strategies

Both operationally and strategically, technology is no longer optional or "nice-to-have."



(II) IT is changing even faster than the health care industry is

Multiple technologies are advancing exponentially and being combined to create frequently astounding new capabilities.



#### Expect digital disruption in health care

We're already seeing digital disruption in health care with new business models, core processes, and relationships with patients and consumers.



#### "Apples-to-apples" IT benchmarks are difficult to establish

Different definitions of IT-related costs, application portfolios, and variations in organizational characteristics complicate meaningful IT benchmarks.

### IT must be a "team sport"

Non-IT leaders and IT leaders must have a shared vision, aligned strategies, strong governance, and sustainable funding mechanisms.

	Questions That Hospital Executives Should Ask Themselves
1	What IT-powered innovations or disruptions are we seeing in health care?
2	What do the non-IT leaders and IT leaders need to know and do differently for IT to become a "team sport"?
3	What are the impacts of technology's expanding role on strategy formulation, governance, funding, and organizational mindset?
$\mathcal{O}$	Additional Advisory Board research and support available
	Report: The Internet of Things (IoT) in Health Care Webconference: 5 Things CEOs Need to Know About IT