



FINDING VALUE IN CONNECTED HEALTH SOLUTIONS



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INTRODUCTION

We all know how quickly the healthcare landscape has been changing over the past few years, spurred on by the shift to value-based care, the dizzying speed of technological advancement, and the focus on patient-centric solutions. These factors are forcing a convergence among all aspects of care - pharma with drug delivery and medication adherence programs, medtech with evermore complex software and data management, and everyone with big data and analytics are just a few examples. As if these disruptive changes aren't enough - consumerization, gamification, and the connectedness of everything (the Internet of Things -IoT) are having a huge impact on how we all expect to interact and engage with all aspects of healthcare.

All this has given rise to a new ecosystem model for healthcare - **connected health**. There is real opportunity for those pharma, medtech, and HIT companies who embrace the business model changes required to thrive in this ecosystem - and real danger of being relegated to commoditized niche players for those that don't.



Companies are often constrained by factors hard to overcome without significant changes to strategy, structure, and approach:

→ **Clinging to traditional views**

Many companies have rigid internal organizational structures with clear - and wide - separation between engineering disciplines or product teams which makes it difficult, if not impossible, to build a team to pursue the multi-discipline needs of connected health. This often results in an unwieldy arrangement where percentages of time from key contributors are allocated to an effort - but it is not the singular priority for anyone. It may look good on paper, but such efforts are doomed from the outset. All too often, key contributors are pulled from such efforts to support the current product portfolio, and then are expected to bounce back, pick up where they left off, and carry on. Still, many try this approach and plod along, thinking they're doing the right thing.

One approach that some companies try is to treat connected health as a «special initiative» side project. This may sound good, and may appease a board of directors and key customers who are wondering what you're doing about this connected health phenomenon, but ultimately this is a dodge around embracing the inevitability of connected health as part of your core strategy. Connected health is a reality - the challenge is finding your place - and the value - in it.

Another challenge for some companies is the inability to shift away from their traditional marketing view of their own value. They cling to the drug, the device, or the database. After all, it has served them well up to this point and provided good market share and lots of revenue. Over time - and in a shorter time span than you might think - the market share and revenue margin begins to erode, often usurped by good-enough competitors with better connected health solutions. As one leading pharmaceutical executive said "it's not the pill anymore - it's the program." The corollary is obvious - it's not the device, and it's not the database either. This view fundamentally challenges your traditional core business model - you still need to pay attention to what got you here, but recognize the need to adapt to the changing ecosystem around you.

Some companies have managed to navigate the internal organizational and business model challenges, only to stumble when it comes to the operational aspects of connected health. One such temptation is to rely on your internal IT infrastructure and staff, when that organization and technology stack are probably not set up to handle external customer support or the system service expectations for performance, availability, and security essential to support connected health.

→ **Underestimating disruptive factors**

Disruptive innovation in the healthcare industry in the connected health space is moving at the same frenetic pace as in other industries - you just may not be aware of it yet, especially if you are only looking at your traditional competition. This disruption can come from various sources: a good-enough competitor to your core product who offers better connectivity and value-added services around information and analytics; the ever-increasing play in this space from Google, Apple, IBM, and others; or an «invading» third-party who simply wraps new services and connectivity channels on top of your existing product and turns you into a commodity provider overnight (think of what Trivago has done to other online hotel and travel businesses). This kind of disruption may even come from your own current design, research, or manufacturing partner who has gained enough knowledge and experience to expand into being a competitor instead of just being a supplier.

→ **Lack of true systems thinking**

Consider the diagram below. If your focus is drawn only to the endpoints and not to the connections, then you may not be seeing that it is the web of connections that hold the greater lasting value, whereas the endpoints have value but are always subject to commoditization and being replaced by the next best solution in that space.

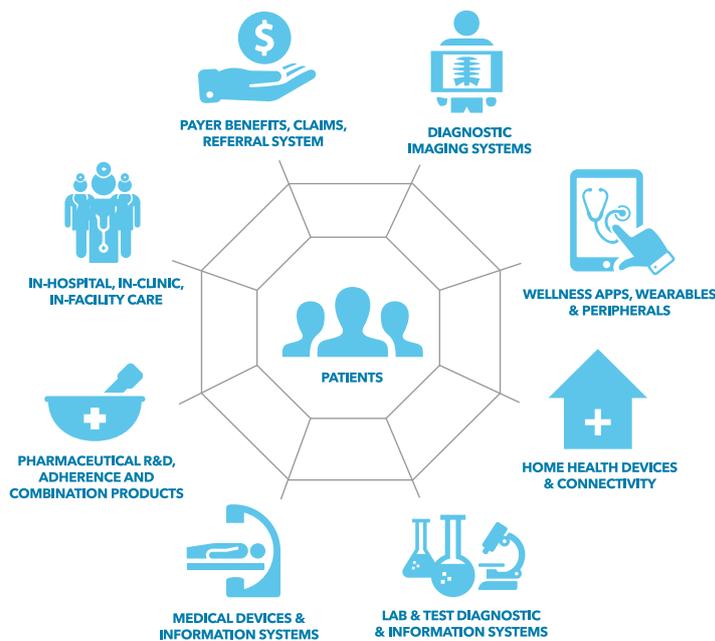


FIGURE 1 - THE CONNECTED HEALTH ECOSYSTEM

Systems thinking is the ability to see beyond an endpoint and envision the value in the set of connections emanating from your current position. Where traditional systems analysis focuses on system decomposition, systems thinking is more holistic in its approach and looks at how systems interrelate and work over time within the context of an ecosystem. This ability to manage the complexity of a "system of systems" approaches is likely difficult to find within your company, because the natural tendency is to focus on your product portfolio - drug, device, or data - and what it takes to manage those core assets, and you may be new to viewing connected solutions as an essential part of your core strategy.

There are three primary activities you need to undertake to find value in connected health, and to avoid being relegated to a commoditized, replaceable position. These bold steps may require you to change your way of thinking, your business model, and your organization - but you'll be in a better position to provide greater value for your customers within this rapidly changing and converging healthcare ecosystem.

→ **Put the customer at the center and rethink your revenue model and market strategy, specifically focusing on:**

Your customer's needs - the changing and converging ecosystem is not only affecting you, but your customers as well. Their workflow, collaboration, information needs, reimbursement, system interaction expectations are all in flux. Your solution to their changing needs may need to be radically different as well. Think how effective the iPod-iTunes model has been - taken separately, they were each reasonable products, but the combination redefined an industry. Can your core product be extended, perhaps through a combination approach, to address more of your customer's work needs within the ecosystem?

Your revenue model - the days of relying solely on a drug or "box and consumables" or digitizing existing paper-based workflows are waning. Can you change the game by shifting your pricing and selling structures? Can you move to a metered use and outcomes based payment structure? Can you add extra cost valued-added services? Instead of installing a product, can you offer to take over key aspects of your customer's work using your solutions - for instance, instead of selling lab & test solutions, manage the lab for your customer?

Your sense of market - are there new sectors within your market or new markets that you can now embrace? For instance, if you're managing data within your connected health solution, do you have the opportunity to sell de-identified data as research data? If your offering provides a mobile point of care testing solution within a hospital, can you extend that to address home health needs?

You may need some an objective third-party to assist with this "re-thinking" to get past assumptions that have been built up over time, but the effort to reconsider your approach to innovation - perhaps embracing disruptive innovation considerations in addition to more incremental innovation - can only improve your overall strategy.

→ Embrace a systems thinking approach to find value in this converging ecosystem. Systems thinking brings the discipline to capture:

Purposefulness - capturing not only what your product does or intends to do, but understanding why the users and other stakeholders do what they do with your product within the context of completing their tasks and activities.

Composition - the ability to reach the right compromise among seemingly contradictory needs and interdependencies. Some of these opposing needs are well known: security vs. performance, customization vs. standardization, and others. Some are more subtle - but the point is always to achieve the right balance among the full set of these needs. This requires a holistic view, for this balance cannot be managed by any individual component of a system alone. In addition, the relationship of your product with other products and systems within the ecosystem will change over time, and this evolution needs to be anticipated.

Connectedness - understanding the behavior and value of your product within the context of the ecosystem within which it operates, and to understand the influences and implications of that ecosystem on your product. The concept of "connected" here addresses the inter-connected, inter-operable nature of your product or system in the overall delivery of healthcare.

Perspective - the ability to see that actions intended to produce one outcome actually cause the opposite results. For example, a hospital information systems (HIS) vendor added capabilities to allow the end user to self-customize and self-configure the product, ostensibly to reduce support and development costs. The result - customers were so confused by the complexity that the vendor ultimately had to add support staff (and cost) to train and help configure the system for each customer.

Emergence - the result of the set of interactions within your product that can yield additional capabilities and values that are not always apparent on first consideration. For example, one radiology information system / picture archiving and communication system (RIS/PACS) vendor added remote diagnostics and monitoring to reduce customer and field support costs. While this achieved its immediate goal, it unexpectedly led to the ability to inform customers of work queue challenges and patterns of use among radiologists and technicians in a way that provided great value to their customers.

Based on this analysis, you can determine how to leverage value from your current assets, what additional assets or capabilities are needed to fulfill your business strategy and vision, and the value proposition those bring.

→ **Focus on your core business and find the right partners, because you can't do this all by yourself. Collaboration is the name of the game now given the increasing technical complexity and the multiple disciplines that need to be brought together to create meaningful, value-driven solutions. In order to partner successfully, you need to determine:**

Clear objectives - A shared common vision and purpose that builds trust and openness and recognizes the value and contribution of each partner is essential. Additionally, shared and transparent decision-making processes lead to efficient coordination of execution and delivery, and, ultimately, better outcomes.

Allocation of capabilities and responsibilities - You should maintain internal responsibility for those aspects of your collected health strategy that you value as core or for which you have the right competencies and capabilities. The aspects that are critical or otherwise needed are those responsibilities you should seek the right partner to deliver and maintain. For instance, as a pharma manufacturer you'll want to control medication development and manufacturing, but partner with someone for a drug delivery device or medication adherence app. There are proven methodologies that you can use to help determine what is core for your business, and what aspects provide the best opportunities to partner. The right partner will have not only the right technical skills, but employ a user-centric approach driven by best-practices experience as well.



CONCLUSION

The key for real growth in this changing, converging, connected health ecosystem - and maybe for survival - is to embrace radical change and innovation. While continuous iterative development based on learning from your customers and the market may have served you well so far, the shift to a patient-centric and connected health driven world will disrupt your current business model. Ignore this at your peril; the same forces you are facing now have rocked other industries before -with scores of mature companies unable to hold on, despite their best efforts.

Focus your innovation and investment strategies on how you can find value in this changing ecosystem. Rethinking your business model, embracing systems thinking, and finding the right partners are the essential ingredients to allow you to survive and prosper.

ABOUT THE AUTHOR

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