

Owning the disease: Adapting strategy into successful business tactics

Highlights

- A version of this paper appears in the April 2013 edition of *In Vivo* magazine
- Owning the Disease represents a powerful new business model for medical technology companies as they seek to adapt to a changing environment
- Organisations that successfully own a disease align their incentives with those of other stakeholders in the market by developing the capabilities to deliver compelling new value propositions

Increasingly, data, information and analytics are organisations' only competitive advantage as they position themselves for the future of healthcare.

Financial constraints, policy reforms, demands for more services and demographic changes are altering the economics and operational dynamics of healthcare. These changes are introducing new markets and care delivery models enabled by ubiquitous mobile applications, affordable and intuitive monitoring sensors and devices and the resultant avalanche of data.

While disruptive technologies, such as mobile health, have been lauded for their potential, the challenge many organisations face is going beyond a technology-based approach to one that is solution-based. According to ***Emerging mHealth: Paths for growth***, 64% of doctors and payers say that today mHealth has exciting possibilities but too few proven business models.¹

Some of the most advanced medical technology companies are adapting by migrating from an episodic or intervention-focused business model to a convergent care model that enables them to provide solutions along the continuum of care. The integrated solutions inherent in this approach to 'owning the disease' combine drug, device, diagnostic and consumer-centric solutions to establish creative platforms in which a company can dominate the diagnosis and treatment of a disease or condition. Providers are also recognizing the value, in terms of improved care and reduced pressure on staffing, of delivery networks and systems with integrated electronic health records and health information exchanges.

While some organisations have made progress towards adopting the ideas behind owning the disease, no company has succeeded entirely at this point. Although regulatory and reimbursement challenges exist in the current health



¹ Economist Intelligence Unit, *Emerging mHealth: Paths for growth*, May 2012, p. 33.

environment, the larger issue facing manufacturers is the need to adopt a holistic approach to enterprise innovation and transformation.

Based on our experience and insight within healthcare and other industries, this issue presents our view on how early adopters of owning the disease are implementing changes to their operations, the results they have seen so far and what other medical technology companies must do to incorporate the principles of owning the disease into their own operations.

What do we mean by 'owning the disease'?

As stated in a PwC article in the December 2011 issue of *In Vivo*, owning the disease should not be confused with disease management. Early iterations evolved during the heyday of managed care but lacked the connectivity and incentives to effectively understand, monitor, influence and change patient behaviour, as well as support care coordination or overcome the cultural divide between payers and providers. Owning the disease, on the other hand, uses interoperable devices — or mHealth — real-time integrated data and imbedded intelligence within an engaged social community to support patient behavioural change and improve outcomes.

For example, Apollo Hospitals uses mobile technology in its diabetes programme to create an integrated loop between doctors and patients that includes voice, text and mobile apps.² This integration has improved compliance with care protocols and has helped diabetics manage their condition more effectively. New processes were created along the way, but mHealth was integrated into existing healthcare rather than standing apart from it.³

By owning the disease themselves, medical technology companies can create and make available a complete solutions platform across the entire value chain. They are focusing not on the episode of care but on the entire patient interaction suite: preventative health and wellness, diagnostics, devices, therapies, post-treatment processes, chronic disease management and even structures for patient interaction and education.

The business model

The focus is increasingly on business models that deliver quality care with demonstrable outcomes in a more cost-effective manner. Traditionally, healthcare companies, such as those in the medical technology industry, adopted business models that have no visibility to outcomes because of how their businesses have operated. The model for owning the disease collapses the linear healthcare value chain and introduces a new ecosystem of actors that have a shared concept of how healthcare should be delivered. For example, some companies are creating new models of innovation that concentrate on disease solutions instead of the types of silo-based institutional approaches to operations and research and development that are centred on historical departmental structures.

Channel domination is yet another approach, and here healthcare is beginning to resemble financial services. For years, banks have expanded their value proposition so that a single institution can provide mortgages, credit cards, savings and checking accounts, insurance, brokerage and wealth management services. Those banks that control the channel and relationships can leverage them to provide more value with related services. In such situations, data, information, insight and analytics provide the keys to the value proposition and the 'stickiness' in the relationship.

Finally, select companies are attempting to establish creative dominions that develop solutions that no one else has and that cannot be easily replicated. Such creative dominions, which are at the heart of owning the disease, are intended to be fully integrated into the care delivery ecosystem. This power arises from the network effects that come from information technology-driven strategies that harness social, mobile, analytics and cloud, enabling entirely new value propositions unimaginable in a physical world of plastics, steel and electronics.

We see this development already in worlds of online shopping, travel, media and entertainment, and healthcare will be one of the next to benefit from these technologies. As such, they provide greater value and more powerful franchise protection than standard intellectual

² PwC, "Bending the Cost Curve: Global Best Practices. Singapore Proceedings Report," November 2011.

³Economist Intelligence Unit, *Emerging mHealth: Paths for growth*, May 2012, p. 33-34.

property, which is how value is protected today. Yet, without access to the ecosystem, conventional intellectual property is without value.

Companies focused on owning the disease reorganise their teams, capital, operations and market approaches in order to make themselves more competitive in an evolving environment. This is perhaps the most challenging path, since it requires organisational reinvention that entails major cultural changes as well as a fundamental operational reorientation.

Four themes dominate the 'owning the disease' landscape

Owning the disease is built around four key themes. These themes, which run through all aspects of a company's attempts to improve competitiveness by owning the disease, reflect the challenges posed by an evolving business landscape.

1) Innovation in business and enterprise models

In order to own the disease, medical technology companies must look at innovation as an enterprise function that extends beyond the functional boundaries of the traditional organisation, whether operations, marketing, sales, finance, customer service or research and development. They must reappraise how teams are organised; what metrics are appropriate for measuring innovation; and how innovation within and without the organisation is sourced, evaluated and developed. Equally important, they need to reconsider how value is validated, documented and captured from the kinds of integrated solutions that are at the heart of owning the disease. They must have an innovation operating model they drives their innovation processes.

Fundamental assumptions about the ways in which innovation occurs and how its results are leveraged across a global enterprise need to be challenged. This becomes particularly important when considering, for instance, how the advances in personalised medicine made possible by scientific discoveries in genomics

Tips for Driving Data Innovation

Significant change is underway in the medical technology industry. Cutting edge companies are driving innovation by:

- Linking mobile sensors to their products to generate new data and sources;
- Equipping experts to investigate their own and others data and not rely wholly on others;
- Creating interactive big data analysis to answer questions at the speed of thought;
- Blending Big Data sources within and without to generate a more complete picture; and,
- Making it easier to share analyses for cross-team and ecosystem collaboration.

and proteomics affect innovation and improve health outcomes in therapies, diagnostics and consumer products.

Another key issue is determining whom to target. While owning the disease is inherently consumer-centric, the patient is not necessarily the target from a business perspective, especially in cases in which treatment is primarily provided by a physician or other professional. Some organisations will own the disease in a B2-B2-C model, while others will do so in a B2-C model. For instance, Endo Health Solutions' subsidiary HealthTronics offers a pelvic health business model in which the provider is the primary targeted customer, where the company attempts to help the provider deliver greater value to patients.⁴ In contrast, Sanofi's diabetes treatment model focuses on the patient as the primary targeted customer and provides additional tools and support for providers.⁵

A crucial aspect of this targeting is portfolio selection. Given the high investment typically required to own the disease, many companies

⁴ Healthtronics website, 14 May, 2013, <http://www.healthtronics.com>

⁵ Sanofi 2011 Annual Review, "Putting Patients First," (2011) <http://annualreview2011.sanofi.com/flipbook/annual-review/index.htm?&lng=en>

pursuing this strategy concentrate on only a limited part of their portfolio.

Linking operations to the strategy is an important consideration. When pursuing owning the disease, broader ecosystem management and operations are needed, including in such areas as cost structure, revenue and margins. When supplying another ecosystem, the cost structure and margins look more like those associated with component suppliers in the automotive or aerospace industries, with lower margins, greater volatility in stock valuation, etc. Companies and their investors must understand this and be prepared for it.

While organisational size does not necessarily reflect a dominant position in companies' attempts to own large, population-based diseases, a certain critical mass is necessary to be relevant to customers as an owning the disease solutions provider. Endo Health Solutions, for instance, made acquisitions to gain the scale in the urology sector.⁶ As a result, it gained greater insights as to what urologists need.

Endo Health Solutions is an example of a company trying to leverage their size to become the conduit through which not only they deliver their own products but also third-party products and services. A minimum number of tools, insight, capabilities and relationships are necessary to become a player in owning the disease on this basis; beyond that, gaps can be filled through partnerships rather than acquisitions. In essence, companies have to earn the right to own the disease.

Such creative approaches to owning the disease are increasingly common. As companies look to own the disease, they must consider how to build the capabilities required. Currently, no organisation has all of the requisite competencies needed to own the disease. Determining how to acquire these capabilities, whether through in-house development, mergers and acquisitions or alliances and partnerships, is a vital decision that can well determine the effort's success.

2) Navigating an increasingly dynamic regulatory landscape

Pharmaceutical and medical device companies seeking to own the disease will need to cope with an increasingly demanding regulatory environment. For instance, the emerging requirements associated with the comparative effectiveness of various medical interventions require that companies understand and manage cross-jurisdictional obligations at multiple agencies.

A further challenge is associated with the evolving standard for regulatory approval. Formerly, this was *efficacy*, whether a product did what it claimed to do. The newly accepted standard for most drugs and devices is *effectiveness*, not simply whether a product does what it claims to do but also whether it produces the clinical outcome it claims to produce.

Moreover, medical device companies must address efficiency issues, whether the clinical effect is superior to and/or less costly than currently available comparable therapies. Meeting these new standards often means greater investment in product development, product design and clinical trials. Indeed, entrants into new markets must proactively deliver this level of evidence to be competitive; it eliminates the previously popular strategy of creating 'me-too' therapies, devices and solutions.

This illustrates the power of creative platforms. Incremental therapeutic differences, such as those epitomised by some extended-release formulations, have little or no added value. Patent expirations have smaller economic risk in creative platforms because integrated solutions require that any replacements have higher therapeutic, economic and customer value. And margins are protected, and the penalties associated with healthcare reform are better managed, because creative platforms entail integrated solutions that include access to data. Data analytics, as a result, drive the power of extending creative platforms.

Strategic considerations around how intellectual property is protected in these environments,

⁶ "Endo Pharma's Big Acquisition Streak Ends With Latest Deal," Dow Jones News, April 11, 2011.

how existing tax policy affects organisational structures and intellectual property and how adverse events are identified and responded to all should change when companies attempt to own the disease. Companies may need to adopt new strategies, staffing and operating principles.

Finally, the complexity of regulatory compliance increases dramatically for companies operating in a global environment, since owning the disease will almost always require cross-border operations, the demands on companies increase exponentially. Movement towards greater harmonisation in regulation and payment will help, but this will remain a challenge for some time to come.

3) *Streamlining business operations around patients, not products*

Owning the disease requires companies to re-think their operating principles, organisational structures and business strategies not only within the disease but also throughout the company. The focus needs to shift from making products to creating solutions that serve patient needs regardless of whether they fit into preconceived categories.

Human-centred design can be a starting point to build health systems that are more active, adaptive, participatory and emotionally satisfying. While applying a design thinking discipline to healthcare services is not new, healthcare organisations are starting to use design thinking to re-examine aspects of care delivery to make the patient experience better.

The next level of health system redesign will require adding choice and influence to the patient experience. In other words, going patient-centricity and allowing patients to be active in co-designing their care.

For example, Apollo Hospitals, a healthcare provider in India, floundered when the focus was on mobile technology. But according to Sangita Reddy, Executive Director of Operations at Apollo Hospitals, everything else fell into place when it put the patient at the centre of its operations.⁷

Owning the disease need not mean complete ownership of every product and service. Organisations can seek to control an entire channel by acting as a conduit through which others sell their products and partnering with other companies to deliver services in select areas such as information technology systems and lab services.

In fact, innovations that drive channel growth, data and analytics and information technology strategies will be even more important than traditional drug or device product development when it comes to owning the disease. While the lifetime of a product may end within 10 to 15 years after its launch, the sustainable competitive advantage from investments in, for instance, analytics may be available for the long run, especially if it enables the acquisition of patient data sets that are otherwise difficult to assemble.

Sales forces may need to be realigned and new management structures adopted to provide such customer-focused solutions. In diversified drug and device firms, marketing may need to be coordinated in different ways, with client account leaders that focus on selling total solutions as opposed to single products. The release of an integrated solution could require new pricing and promotional policies. There may be broad implications for an organisation's supply chain, its technology strategy and platform and its personnel operation, including recruitment, training and retention programs.

Other units face similar challenges, as entire business ecosystems will need to be created, revamped and managed to provide the integrated care solutions inherent in owning the disease. A research and development structure originally developed for siloed products developed from the top down may need to be redesigned to focus on consumer engagement.

In an age in which outcomes, and not necessarily sales, drive revenue, finance and accounting functions will likely require restructuring and new management techniques to address a new set of dynamics. Customer service and support probably will require a reorientation to improve user experiences and interfaces since companies

⁷ Economist Intelligence Unit, *Emerging mHealth: Paths for growth*, May 2012, p. 33.

that own the disease must become much more consumer-centric and customer oriented than in the past.

4) Business development as we know it is finished

Owning the disease requires a broad reappraisal of business development, licensing and joint ventures. The standard model of corporate business development emphasises efficiency at the level of the sales force and putting new products in the hands of representatives. However, new limitations on what salespeople can offer to physicians means that marketing and co-promotion must be crafted in a far more sophisticated fashion in order to be effective.

Beyond enhancing sales operations, business development executives will need to consider cross-sector opportunities incorporating diagnostics, pharmaceuticals and devices into a potential offering. As they do so, they will need to re-examine their models for payments, revenue, financials and intellectual property ownership.

The hierarchical structure that characterises most organisations in the health industries makes adaptation to this new environment challenging. While medical device companies, on the whole, have proven themselves to be more nimble than pharmaceutical firms in developing and offering new products, they find themselves less agile than technology and consumer products companies now entering the healthcare field. The simple willingness to enter a new field proves the flexibility of these companies; many also bring with them advantages, whether it is an existing customer-centric culture or robust finances.

Challenges facing the industry

The future of the owning the disease concept is highly positive. Yet there are roadblocks that could present barriers for many companies.

While most or all companies see the same or a similar future, many of them cannot change their internal structures and practices to align with that future. They are too large, too silo-

based or too focused on yesterday — or today — to modify their organisational structures in a productive way for tomorrow. Some lack the right leadership. Some are waiting for others to change and hope to become 'fast followers' instead of leaders and innovators.

Another issue for some companies is the nature of the provider workforce. Owning the disease can require fundamental changes that can be disconcerting. Many established physicians, nurses and other health professionals are reluctant to make broad changes to their practices or how they interact with device or pharmaceutical companies. Younger professionals, while more willing to adapt, often are employed by large companies and lack the autonomy to make decisions about products or services. The challenges of owning the disease should not be underestimated for healthcare companies. Yet, the consumer and physician experience in these consumer technology markets is informing and creating their expectations in healthcare. Patients want and increasingly demand that same experience in both worlds, and do not understand when they cannot have it. Patients' awareness of developments in technology supports this. In fact, patient expectations for care may be growing as diagnostic capabilities become more advanced: in ***Emerging mHealth: Paths for growth***, there is consistent support among patients, providers and payers for engaging in health diagnosis, treatment and monitoring using consumer tools such as mobile phones.⁸

Increasingly, the ubiquity of mobile phones and the proliferation of smart phones make these consumer expectations global. Other factors come into play, including global mobility that facilitates increasing cross-border knowledge and greater access to data which is driving understanding, heightening expectations for quality care in all markets.

But the advantages outweigh the shortcomings. The status quo is simply not an option in a world in which revenues are declining, expenses are climbing and structural changes make the prospects for any long-term recovery questionable. Medical technology companies that choose to own the disease can build solutions that patients, payers and providers alike want, can build more sustainable

⁸ Economist Intelligence Unit, *Emerging mHealth: Paths for growth*, May 2012.

sources of revenue and will be better positioned to navigate the current and coming storms. It will be these organisations that will be the future market leaders.

10 Things to Remember About Owning the Disease

1. Expanding the value proposition for clients is *the* crucial part of owning the disease. This requires both a more focused effort on innovation and a greater tolerance for risk and failure.
2. Concern about destroying cultures that have been successful is merited, but owning the disease ultimately entails the creation of a new, convergent culture to generate new sources of value for clients.
3. Owning the disease entails breaking down silos to better understand a customer's total needs while decreasing the complexity in providing solutions.
4. Scale matters in owning the disease – but not in the way many expect. Some large organisations may find it difficult because they are too complex, too divided into silos and unable to leverage resources.
5. Owning the disease changes a business from selling products and services to selling solutions. As a result, the mix of revenues will gradually shift to a roughly equal split between products and services, in which information and analytics will become the key differentiators and drivers of value.
6. Owning the disease can involve controlling a channel so that the company becomes the essential conduit through which others sell their products.
7. Information strategy drives owning the disease. As value in healthcare migrates from things to information, organisations that harness data most effectively will have a competitive advantage.
8. Owning the disease is *not* a diversification play. Instead, it is focused on integration and cooperation to bring an integrated solution to the customer, whether that is the patient or the provider.
9. When focused on the provider as the customer, it may be easier to own the disease in small, focused segments rather than large diseases in which patients have co-morbidities and multiple needs and where owning the disease must be focused on the end consumer.
10. Analytics are the 'secret sauce' to owning the disease. The challenge in creating analytics is obtaining the complete sets of underlying data needed for study.

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