Pharma 2020: Challenging Business Models

Pharma’s fully integrated business model is under huge pressure and by 2020 no pharma company will be able to ‘profit alone’; instead, companies will have to collaborate with other organisations, both inside and outside the sector. A recent report puts forward two business models that are likely to emerge as companies prepare for this future.

The pharmaceutical marketplace is undergoing huge changes that will have a major bearing on the kind of business models pharmaceutical companies need to employ. Most Big Pharma companies have traditionally done everything from research and development (R&D) through to commercialisation themselves. But, in a recent report, we predict that by 2020, this model will no longer work for many organizations (1).

If they are to prosper, they will need to improve their R&D productivity, reduce their costs, tap the potential of the emerging economies and switch from selling medicines to managing outcomes – activities few, if any, companies can accomplish on their own. Even the largest pharmaceutical companies will have to collaborate with other organisations to develop effective new medicines more economically, help patients manage their health and ensure that the products and services they provide really make a difference. Moreover, they may have to step far outside the sector to find some of the partners they need.

In this article, we review the main conclusions of the report and outline the two principal business models – federated and fully diversified – that we believe will emerge, as pharma prepares for the future.

PROFITING ALONE VERSUS PROFITING TOGETHER

Big Pharma’s traditional business model hinges on the ability to identify promising new molecules, test them in large clinical trials and promote them with an extensive marketing and sales presence. In the predominant version of this model, a single company may employ contractors to supplement its own efforts, but it seeks to generate profits on its own. In essence, it pursues what might be called a ‘profit alone’ path.

By 2020, most medicines will be paid for on the basis of the results they deliver – and since many factors influence outcomes, this means that pharma will have to move into the health management space, both to preserve the value of its products and to avoid being sidelined by new players. If it is to make groundbreaking new medicines for which governments and health insurers are prepared to pay premium prices, it will also have to build the relationships and infrastructure required to ensure that it can get access to the outcomes data they collect.

Thus, by 2020, no pharmaceutical company will be able to ‘profit alone’. It will, rather, have to ‘profit
together’, by joining forces with a wide range of organisations, from academic institutions, hospitals and technology providers to companies offering compliance programmes, nutritional advice, stress management, physiotherapy, exercise facilities, health screening and other such services.

Of course, some pharmaceutical companies have already tried to collaborate with other organisations. So we are not suggesting that the differences between these early efforts and the business models that are likely to prevail in 2020 will be completely black and white. Nevertheless, we think that two key differences will apply. First, the technological and cultural pre-conditions to facilitate collaboration are now in place. In the mid-1990s, the internet was still in its infancy and many of the tools that enable collaboration did not exist. Today, however, such tools are plentiful and the wider business culture has changed dramatically. Second, by 2020, collaboration will be a ‘do or die’ requirement for pharmaceutical companies and healthcare payers alike. It will be essential for pharmaceutical companies to develop effective new medicines and address the demands of payers increasingly well-equipped to measure what they are getting for their money; and essential for payers to cope with rapidly escalating healthcare costs.

**READING THE SIGNS**

Various forces are changing the environment in which pharma operates and the relative positions of the different players in the healthcare arena. The global healthcare bill is soaring. As the population ages, new medical needs emerge and the disease burden of the developing world increasingly resembles that of the developed world – hence the fact that governments and health insurers everywhere are struggling to contain their expenditure. The issue is further exacerbated by the current economic turmoil that will put even greater financial pressure on the payer community.

Healthcare payers in both the developed and developing worlds are beginning to measure outcomes much more carefully and to emphasise the importance of prevention. By 2020, they will expect the industry to go ‘beyond the medicine’ by providing prophylactics and healthcare packages designed to help patients manage their health. Moreover, patients will play a much bigger role in determining how they are treated, as the money they spend on medicines likewise rises and the internet gives them access to more information. Armed with insights gleaned from educational websites, discussion groups and blogs, they will not only want better, safer medicines, they will also want a range of satellite services they can tailor to their individual needs.

Meanwhile, new technologies are providing new sources of knowledge. Home surveillance systems, portable devices and implants, links to online and wireless networks, will facilitate the monitoring of patients on a real-time basis outside a clinical setting. But if pharma is to get access to the outcomes that data remote monitoring generates, it will have to collaborate with the hospitals and clinics that capture this information.

To sum up, the key social, economic and technological changes currently taking place in the pharmaceutical and healthcare arena will all necessitate the development of multinational, multidisciplinary networks drawing on a much wider range of skills than pharma alone can provide. The constraints that previously hindered organisations from collaborating over distance are simultaneously evaporating – paving the way for the use of new business models.

One vital question remains, however; namely, what sort of model should companies use to effect these changes? We believe that two principal models – federated and fully diversified – will emerge.

**THE FEDERATED MODEL**

In the federated approach, a company creates a network of separate entities with a common supporting infrastructure. These might include universities, hospitals, clinics, technology suppliers, data analysis firms and lifestyle service providers based in numerous countries. They might also include business units within the company itself, which it places at ‘arm’s length from’ (see Figure 1).

The various participants have a mutual goal – such as the management of outcomes in a given patient population. They also share funding, data, access to patients and back-office services, and this interdependence is the glue that holds them together. They are rewarded for their efforts using measures such as increased life expectancy or quality-adjusted life years. And each is rewarded in a
manner that reflects the evidence base for the contribution it has made.

The federated model provides a framework for creating integrated packages of products and services, and thus diversifying beyond a company’s core offering. It also combines the benefits of nimbleness and size. It would enable each player to build a specific area of expertise, establish a competitive advantage as a result of that expertise and sell its products, knowledge or skills, leaving activities that are better performed by others to its partners within the federation.

More importantly still, the federated model might encourage greater cross-fertilisation and deliver bigger improvements in performance, without forfeiting any flexibility. The stronger members of the network could help the weaker ones to improve – since federations have an incentive to perform well as a whole – but they could also replace any participant that persistently underperforms. We have also identified two variants of the federated model:

Virtual Variant
In the virtual variant, most or all of a company’s operations – their R&D, manufacturing and promotional activities – are outsourced and the company itself acts as a management hub, coordinating the activities of its partners (see Figure 2, page 27). The pharma company can then focus on the value-adding functions where it can utilise its relationships, scale and market knowledge; this model also would enable companies to reduce their initial capital outlay, convert some of their fixed costs into variable costs, utilise their resources more efficiently and become more flexible.

Venture Variant
The venture variant of the federated model entails investing in a portfolio of companies in return for a share of the intellectual assets and/or capital growth they generate, rather than outsourcing specific tasks (see Figure 3). Special purpose vehicles are sometimes used to manage such investments, because they offer several advantages in terms of risk sharing and intellectual property protection. Such a model would alleviate the funding challenges in the biotech sector, where companies often struggle to raise a second or third round of financing because venture capitalists want to exit before they can commercialise their products. It would also allow promising start-ups to capitalise on Big Pharma’s experience without being stifled by a Big Pharma culture – both trends which might stimulate greater innovation.

THE FULLY DIVERSIFIED MODEL
The fully diversified model is one in which a company expands from its core business into the provision of related products and services, such as diagnostics and devices, generics, nutraceuticals and health management (see Figure 4). Johnson & Johnson is pharma’s leading exponent of this approach. It is the world’s largest consumer health company, the third-largest biologics company and the sixth-largest pharmaceutical company; it also has an extensive medical devices and diagnostics operation, and recently started building a wellness and prevention platform, with the purchase of HealthMedia, a web-based ‘health coach’ (2).

The fully diversified model has several merits, not least the fact that it enables companies to reduce their reliance on blockbuster medicines and spread their risk by moving into other market spaces with the potential to act as a bulwark against generic competition. Like the federated model, it also provides a means of moving into outcomes management by offering combined product-service packages and playing to the growing political emphasis on prevention rather than treatment. In addition to these advantages, it might offer opportunities
both to develop more powerful brands and to acquire a better corporate image.

However, the fully diversified model has drawbacks, too. It requires a substantial investment in new equipment, premises and personnel, as well as major cultural changes, since the provision of products is very different from the provision of services. It might also create new risks by distracting management’s attention from the core business – and even alienate investors, who often prefer to spread risk themselves.

The two models are not mutually exclusive. A fully diversified company might choose to use a federated model for certain aspects of its business, and vice versa. But we think that the federated model will ultimately dominate, primarily because it is quicker and more economical to implement.

We also think that the current economic downturn will accelerate the shift to these new models, both by reinforcing one of the key causal factors – the pressure on healthcare payers to maximise the value they get for the money they spend – and by opening up new opportunities to build or buy the networks that will be required.

**CONCLUSION**

Pharma’s fully integrated business model enabled it to profit alone for many years – but this model is now under huge pressure and, by 2020, will only work for companies who are lucky enough to develop blockbusters that the market wants and will pay for. If the industry is to improve its performance in the lab, reduce its costs, serve the emerging markets more effectively and make the transition from producing medicines to managing outcomes – as healthcare payers, providers and patients are increasingly demanding – it will have to collaborate with other organisations, both inside and outside the sector. It simply cannot do everything itself. In addition, there is a clear economic rationale for greater collaboration.

The transition will not be easy, for collaborative business models are far more complex than the integrated model that has previously prevailed. Moreover, no one model will suit every company. Each will need to assess its position, options and future course in light of its individual strengths and needs. However, the prospects for any pharmaceutical company that can make the switch are very promising. The potential for reallocating resources to deliver better outcomes and maximise the effectiveness of expenditure on healthcare is considerable in most healthcare systems.

To date, pharma has focused on the profits it can earn from the estimated 10 to 15% of the health budget that goes on medicines (3). Yet there are many opportunities to generate revenues by improving the way in which the remaining 85 to 90% is spent. It is these opportunities the industry will need to address in the brave new world of 2020.

**References**

3. Total expenditure on pharmaceuticals and other medical non-durables expressed as a percentage of total healthcare expenditure ranges from 12.4% to 29.7% in the OECD countries. On average, it is thought to represent about 15% of the global health budget. For further information on healthcare expenditure in the OECD countries, see OECD Health Data 2008, October 2008