Putting the patient first
How the life sciences industries might look in 2018

Kinapse Consulting, 2013
The life sciences industries have seen their reputation with patients and shareholders decline in recent years, as dwindling scientific output, aggressive marketing and deteriorating investment returns take their toll. We believe the only way out of this predicament is to put patients first.

In the following pages, we’ll discuss how the healthcare ‘ecosystem’ in which the life sciences industries operate is changing, how those changes are opening doors that were previously closed and how individual companies can create more value for patients. We’ll focus on six major challenges:

- **Collaborating with the healthcare community to pool resources**
- **Engaging directly with patients**
- **Using ‘big data’ to develop personalised solutions**
- **Repairing damaged relations with the public**
- **Reorganising around patient segments, not diseases; and**
- **Providing integrated healthcare packages**

Addressing these challenges won’t be easy, but there’s a huge incentive. If the life sciences industries succeed, they will be able to develop the tools and services patients need to get the medicines they require. That, in turn, could eliminate more than US$800 billion a year in wasted healthcare expenditure – releasing funds to pay for new diagnostics, devices and services, and for the relatively few therapies that provide a real breakthrough. By concentrating on their core role of value creation for patients, the life sciences industries can once again deliver enhanced shareholder returns while rebuilding their reputation with all the stakeholders in the healthcare ecosystem.

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**Introduction**

In August 1952, George Merck, then chairman of Merck & Co., featured on the cover of *Time* magazine, with the words: ‘Medicine is for people, not for profits.’ Merck wasn’t a naïve idealist. He simply thought that the purpose of business was to do something useful. ‘We try to remember that medicine is for the patient,’ he elaborated in a speech made at the Medical College of Virginia. ‘The profits follow, and if we have remembered that, they have never failed to appear.’

Most life sciences companies have arguably strayed a long way from this credo in recent years. Indeed, one senior R&D executive at a top research firm questions whether they have ever adhered to it. ‘In the pharmaceutical industry we all say that our goal is taking care of the patient. Never!’ he ruefully remarked in a recent interview.

We believe that must change. If the life sciences industries (including pharmaceutical and biotechnology companies, diagnostics and device manufacturers, healthcare IT providers and the like) put the patient before the patent, they can overcome many of the problems they face and the profits will follow.

We’ll focus here on what the life sciences industries can do to create more value for patients – and thus for their other stakeholders, including investors – *within the next five years*. That precludes improving the discovery process, since it takes at least a decade to get a molecule from the laboratory to the marketplace. But it’s more than enough time in which to make other changes that could greatly enhance many companies’ offerings.
Why sticking to the status quo won’t work

One thing is clear; the life sciences industries can’t just carry on as usual. Their dwindling scientific productivity is proof of that. The number of new therapies approved by the US Food and Drug Administration (FDA) per billion inflation-adjusted dollars spent on R&D has halved roughly every nine years since 1950. Today, it costs more than $1 billion to produce a single new medicine where, 60 years ago, that money would have produced nearer 50 (see Figure 1).³

A growing ‘back catalogue’ of high-quality generic medicines has compounded the challenges associated with research and development (R&D). Some 25,000 of the 30,000 drugs on the market are now off patent.⁴ That’s good news for patients, who can get a wider range of drugs at lower prices than ever before, but it’s bad news for research firms because it’s increasing the ‘evidential hurdles for approval, adoption and reimbursement’ of new treatments.⁵

Confronted with soaring costs and deteriorating pipelines, some companies have resorted to aggressive marketing tactics. This has alienated the very patients they serve. A full third of the 600 patient groups participating in one recent global survey said that pharmaceutical multinationals had ‘poor patient-centred strategies’. They were even more damning about the pricing policies and transparency of the companies concerned.⁶

The result – predictably, George Merck might have argued – is that shareholders have suffered as well. In 2010, the world’s 50 top drugmakers generated an average post-tax return on R&D expenditure of just over 10%, down from 17% in 1990.⁷

The life sciences industries have seen their standing suffer with patients and investors alike, but they are by no means alone. The healthcare ecosystem in which they operate is under enormous pressure, too. That’s partly because the global population is expanding and ageing. However, other factors are also at play. The prevalence of chronic conditions like cardiovascular disease, asthma and diabetes is increasing. So is the incidence of infectious diseases, as new pathogens emerge (e.g., SARS) and existing pathogens become drug-resistant (e.g., tuberculosis).
Demand for healthcare is therefore rising and medical advances have greatly improved the quality of care, although there’s huge scope for further progress by adopting a more ‘patient-centred’ approach. New diagnostic technologies like nuclear imaging and new devices like implantable defibrillators have transformed the treatment of heart disease, for example. Yet such improvements have come at a hefty price. Take the US, where medical technology is thought to account for 27-48% of the growth in health spending since 1960.8

All these changes explain why expenditure on healthcare is increasing in both rich and poor countries. Moreover, it’s not just increasing in absolute terms; it’s swallowing a steadily larger share of their total output – a situation no country can indefinitely sustain (see Figure 2).9

So the healthcare industry, like the life sciences industries, is facing serious financial problems – and has also seen its reputation decline. Fewer than half of the patient groups participating in the same global survey that faulted ‘big pharma’ rated private healthcare providers and non-profit health insurers ‘good’ or ‘excellent’. For-profit health insurers fared even worse.10

Meanwhile, patients are becoming much more demanding. Better access to healthcare information – both general information (e.g., medical websites) and individual information (e.g., genetic tests from companies like 23andMe) – has helped to drive up expectations. In fact, some patients know as much as, if not more, about their conditions and the therapeutic options than the general practitioners who treat them.

However, this isn’t the only reason expectations are rising. The global ratio of public to private expenditure on healthcare is climbing, primarily as a result of greater government investment in healthcare in the emerging economies.11 Yet most patients in mature countries now have to foot a bigger share of their own costs.

Some instances? In 2010, the German government passed a law raising premiums for the country’s 72 million people with state health insurance.12 The Irish government recently trebled prescription charges.13 And many big US employers are switching to health plans with high deductibles, where policyholders have to pay a larger share of their claims.14

So a growing number of patients are becoming customers as well as end users, and the more they have to dip into their own wallets, the more they expect to call the shots. They want healthcare that’s tailored to their particular needs.

In short, the life sciences and healthcare industries are reaching breaking point just as patients are exerting more power. Yet the context in which life sciences companies operate is also changing dramatically – and opening doors that were previously closed.
New developments in the healthcare ecosystem

Two key structural changes are taking place in the healthcare arena, at the same time that technological advances are transforming everyday medical practice and the world is becoming more prosperous. All these trends have a bearing on the future of the life sciences industries.

Privatisation and standardisation

First, the boundaries between the public and private sectors are blurring, as both parties realise they can’t solve the challenges of providing universal access to good healthcare alone. Many of the German municipalities are partly or fully privatising their hospitals, for example.15 And, in February 2012, the British government took the unprecedented step of hiring a private healthcare contractor to run the troubled Hinchcliffe Hospital in Cambridgeshire on behalf of the National Health Service (NHS).16

Second, the healthcare sector is gradually becoming more standardised, with the introduction of electronic medical record systems (albeit at different rates in different countries), the development of evidence-based care pathways and the shift from individual medical practice to collective medical practice. It’s also learning to use the Internet and new technologies to interact with patients in new ways.

Both these changes have major implications for life sciences companies. Most commentators predict that the private sector will play an increasing role in healthcare delivery – even in countries like the UK, where private providers currently account for less than 20% of the market.17 The automation of key healthcare processes will simultaneously generate vast amounts of data from which to derive new insights.

The emergence of a new treatment paradigm

The technological landscape is changing even more radically, as digital devices infiltrate our daily lives. And that, as leading US physician Eric Topol has persuasively argued, is changing the treatment paradigm itself.18 Wireless sensors will play a part in the revolution. Smartphone ‘apps’ and miniature transmitters for measuring calorie consumption, exercise patterns and the like have been available for some years, but far more sophisticated sensors are now emerging. One such instance is AliveCor’s heart monitor, an FDA-approved device that captures a patient’s real-time heart rhythms via a smartphone and displays them as a single-channel electrocardiogram.19

Robust, pocket-sized imaging devices capable of producing 3D anatomical representations rapidly and conveniently are also reaching the market. GE Healthcare has, for example, developed a handheld, high-resolution ultrasound machine.20 Similarly, Neurologica has developed a miniaturised CT scanner, and Given Imaging has developed a tiny endoscopic camera that can be swallowed to produce snapshots of the gastrointestinal tract.21

Meanwhile, genomics is gradually unveiling the genetic foundations of disease. With genome-wide association studies, scientists can identify the alleles linked to a specific illness and thus to individual variations in response to medication. By mid-2012, 1,350 such studies had been published.22

But it’s the combination of wireless physiological monitoring and anatomical imaging with genomics and electronic medical records that will facilitate the real leap forward. Collectively, these technologies will enable doctors to ‘digitally define the essential characteristics of each individual’ (see Figure 3).23

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Figure 3: The digital patient is nearly here
Source: Adapted from Eric Topol, The Creative Destruction of Medicine.
Again, this has enormous implications for the life sciences industries. Digitisation will produce a detailed 3D map of the human body in all its permutations. The technologies used in that process will also help companies test their products more effectively, by bringing some of the controls used in clinical trials into everyday medical practice. That, in turn, will give them a much clearer idea of how their medicines work in real life.

**Greater global affluence**

The global population is concurrently becoming far more affluent. The OECD predicts that the number of middle-class people (defined as those living in households with daily per capita incomes of between $10 and $100, adjusted for local purchasing power) will rise from 1.8 billion in 2009 to 3.2 billion in 2020 and nearly 4.9 billion by 2030.\(^{24}\)

The projected increase in purchasing power over the same period is equally noteworthy. By 2030, the global middle class could be spending nearly $55.7 trillion a year, up from $21 trillion today – with more than 80% of this growth in demand coming from Asia (see Figure 4).\(^{25}\)

![Figure 4: Spending by the global middle class could more than double by 2030](source: OECD, ‘The Emerging Middle Class in Developing Countries’)

To sum up, the opportunities for private-sector participation in healthcare are expanding. Personalised medicine is replacing population-based medicine. And, with greater prosperity, many people will be able to afford better healthcare. So how can the life sciences industries capitalise on these advances to create more value for patients? They can start by redefining what they do and using what they already have more effectively.
Developing solutions instead of products

Ask most life sciences executives what they focus on, and they’ll say that it’s the development and commercialisation of new medicines. But, as marketing guru Theodore Levitt noted in his book The Marketing Imagination, people don’t want products; they want solutions.²⁶

Levitt illustrated his point by citing a certain Leo McGinneva on why people go shopping for drill bits. ‘They don’t want quarter-inch bits. They want quarter-inch holes,’ he explained.²⁷ The same is true of drugs. Most patients don’t take medicines because they like popping pills; they do so because they want to feel better. The medicine is simply the means to that end.

So, if the life sciences industries are to create more value for patients, they must concentrate on the hole, not the bit. In essence, they must focus on helping patients get the best possible outcomes, given their individual circumstances. And that means developing a much deeper understanding of the people who use their products, including the obstacles those people face (see Figure 5).

Figure 5: Life sciences companies can create more value for patients by understanding them better
Source: Kinapse
Putting the patient first

Unfortunately, this entails overcoming some significant hurdles. One key issue is getting the consent of the patients concerned, since they arguably own their personal data. Another is the current lack of common data definitions and standards. Establishing such standards would make it very much easier and cheaper to integrate data from multiple sources. Moreover, many executives report that they have yet to get their own houses in order. And, without the right mechanisms to manage the data they already possess, including proper metadata tagging, they certainly can’t manage ‘big data’.

That said, the tools both to process vast quantities of heterogeneous data and to convert bytes into insights have improved by leaps and bounds in recent years. With sophisticated analytics software, it’s now possible to analyse very large data sets comprising a much wider range of data forms. It’s also possible to analyse data in motion rather than at rest and model complex ‘what if’ questions with previously unimaginable levels of sophistication, speed and accuracy.

Many of the technological obstacles are therefore diminishing – and the momentum will accelerate as the leading systems companies continue to invest heavily in the development of new applications for turning big data into big information. Cloud computing, although still in its infancy, will also reduce the cost of entry. So the main barriers are now primarily behavioural and organisational: the challenges associated with managing major change, deciding which activities to outsource and what to do with expensive incumbent infrastructure, hiring people with the right skills and creating the right reporting structure.

Collaborating with the rest of the healthcare community

The first task, of course, is to acquire the necessary information – and here all life sciences companies will have to collaborate with organisations in other parts of the health ecosystem, since the data they require sits in four distinct data pools controlled by four different communities. Some of the data has yet to be digitised, some of it isn’t stored and very little is currently shared by the respective parties. Nevertheless, it’s the integration of the data that will yield the biggest opportunities (see Figure 6).

Figure 6: Data on patients sits in four distinct data pools
Source: Kinapse

<table>
<thead>
<tr>
<th>R&amp;D data</th>
<th>Behavioural data</th>
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<tbody>
<tr>
<td>(e.g. genome studies &amp; clinical trial data) collected by academia, life sciences companies &amp; genetic testing companies</td>
<td>(e.g. exercise patterns, diet &amp; mental attitudes) collected by retailers &amp; online patient forums</td>
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<th>Health outcomes data</th>
<th>Consumption data</th>
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<tbody>
<tr>
<td>(e.g. medical records &amp; images) collected by healthcare providers</td>
<td>(e.g. costs, claims &amp; utilisation rates) collected by healthcare payers</td>
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‘Big data’ integrated to create ‘big information’
Creating an effective digital information strategy

However, getting access to the data other organisations collect is only one step on the path to a patient-centred approach. The life sciences industries will also have to engage directly with patients – and social networks provide a very effective, economic way of doing this.

Roughly half of all adults in Britain, the US, Russia, the Czech Republic and Spain now use social media sites such as Facebook (see Figure 7). Peer-to-peer networks such as Health Unlocked and Patients Like Me, where patients canswap notes with people who have the same condition, are also proliferating. Yet most life sciences companies have been relatively slow to recognise the real potential of social media; those that use it often do so only for marketing purposes.

![Figure 7: Social networking is on the rise around the globe](source: Pew Research Center, ‘Social Networking Popular Across Globe’)

Creating an effective digital strategy requires considerable sensitivity. It also requires that a company put mechanisms for securing proper patient consent in place and treat all the data it collects responsibly, with robust privacy and security measures.

Yet many life sciences executives seem surprisingly complacent on this score. In one recent survey, only 41% of respondents expressed concern about their company’s ability to protect its intellectual property and customer data. This despite the fact that, in the US alone, there have been 556 significant security breaches involving patients since October 2009.

Lastly, it’s crucial to listen to what patients actually say. K-V Pharmaceutical learned that the hard way when it tried to stop pharmacists compounding synthetic progesterone for pregnant women at risk of giving birth prematurely, after launching a similar drug for a much higher price. The move sparked a furore on Facebook – which the company ignored, until the FDA announced that it wouldn’t prosecute pharmacies compounding synthetic progesterone with a valid prescription. In August 2012, K-V Pharmaceutical filed for bankruptcy.
Using data to generate more value for patients

There’s no point in collecting vast swathes of data, though, unless that data can be put to good use. So what can life sciences companies do with all this information? One thing they can do is conduct pharmacogenomic studies to improve the administration of medicines that are already on the market and help patients get the best treatments for them.

Improving the administration of existing medicines

Numerous drugs exist for the treatment of many common diseases. There are, for instance, more than 100 different products, including combinations, for hypertension and 11 different classes of drugs, providing nearly four million permutations, for Type 2 diabetes.

But since the root causes of these diseases differ from one person to the next, so does the way in which individual patients respond to therapy. About 20% of all hypertensive patients have a genetic variant that means they can’t derive any benefit from diuretics or the most commonly used angiotensin receptor blockers, for example. Similarly, some patients with Type 2 diabetes can’t manufacture insulin, while some can’t process it and some can’t do either.

Yet doctors currently have no easy means of distinguishing between these patients, so they have to rely on a process of trial and error. They prescribe one of the many therapies on the market, and change the prescription if a patient doesn’t appear to be getting any better.

The life sciences industries could thus add considerable value by performing pharmacogenomic studies to define which patients will benefit from a particular medicine. Mapping the common genetic variants associated with a disease and developing diagnostic tests and assays to identify the variants individual patients carry would help doctors prescribe more accurately. It would also reduce the incidence of adverse events.

Other opportunities for improving the outcomes from marketed medicines abound. Most life sciences companies still tend to work on the premise that one size fits all, for example, even though differences in age, weight, gender, genes and lifestyle influence how people respond to the same dose of the same drug. These companies could therefore increase the value they provide by developing tests to determine the ideal dose in individual patients, where the response to the standard dose varies greatly.

They could likewise develop tools to identify the best combination of drugs for patients who have to take multiple medications, as EuResist has done for people with HIV. EuResist’s computerised system can predict the optimal ‘cocktail’ treatment, based on a patient’s medical history and the particular version of the virus he or she carries, with 77% accuracy.
**Resuscitating and repurposing old drugs**

That’s not all. The life sciences industries could use the information they collect to resuscitate medicines that cause harm in some patients while working well in others. The COX-2 inhibitor lumiracoxib, made by Novartis, is one such instance. Lumiracoxib was formulated to avoid the cardiovascular side effects caused by other Cox-2 inhibitors but later withdrawn because of liver problems. Using genome-wide association studies, Novartis has now created a genetic test to screen out patients who are susceptible to liver damage.35

In fact, creating companion diagnostics to stratify patients has two advantages. It allows a company to rescue good drugs that have fallen by the wayside because they behave inconsistently in the patient population as a whole. It also provides clear evidence of a medicine’s value in a specific patient segment – and healthcare payers are increasingly reluctant to reimburse products with marginal benefits for a broad patient base (see Figure 8).

Moreover, companion diagnostics may not be even be necessary to repurpose some medicines. Scientists at Georgetown University in Washington, DC, have, for example, created a software programme that can rapidly compare information on the structure of a drug with the structure of human proteins to find the best matches. The prototype has already identified several potential interactions that have not yet been observed in the real world.36

**Figure 8: Companion diagnostics can be used to rescue failures and show value**

Source: Kinapse

Many life sciences companies still shy away from repurposing because they’re wary about uncovering problems that might destroy a successful product, but it’s both quicker and cheaper than starting from scratch. Whereas only 10% of new molecular entities in Phase II trials, and 50% of those in Phase III trials, reach the market, the rates for repurposed compounds are 25% and 65%, respectively.37 That’s obviously beneficial for the companies concerned. However, lower costs should also translate into lower prices – and give patients access to a bigger arsenal of treatments more economically.
Learning from the past

There’s yet another thing the life sciences industries can do with the information they collect: use it to learn from past disappointments. As the authors of one scientific paper noted, most researchers spend most of their time on products that fail. They therefore suggest appointing a ‘Chief Dead Drug Officer’ to analyse the causes of drug failure at every stage of R&D.38

We think this is an excellent idea. A Chief Dead Drug Officer could focus on the big picture; comparing failure rates across therapeutic areas might, for example, expose issues that would otherwise be very difficult to detect. And he or she would be unlikely to share the optimism too many researchers display.

Rebuilding trust with greater transparency

One of the various criticisms levelled against life sciences companies is their lack of transparency, especially when it comes to revealing unfavourable clinical data. About half of all clinical trials have never been published, and positive trial results are twice as likely to be published as negative findings.39 In January 2013, the British Medical Journal and several scientific charities therefore launched a campaign calling for the disclosure of all trial data.40

US trade body Pharmaceutical Research and Manufacturers of America opposes the idea on the grounds that releasing the information would ‘jeopardise patient privacy and could serve as a deterrent to individuals considering participation in trials. It would also encourage second-guessing of the regulatory approval process, which would be disastrous for patients.’41

However, a number of regulators, including representatives of the European Medicines Agency (EMA), have stated that they would welcome the publication of all clinical trial data, subject to the adoption of robust mechanisms for preserving patients’ privacy and ensuring the quality of independent meta-analyses.42 And, in February 2013, GlaxoSmithKline (GSK) decided to back the campaign.

GSK has pledged to release clinical study reports for all its medicines once they have been approved or discontinued from development and the results have been published. It has also promised to publish reports for all approved medicines dating back to the formation of the company in 2000, after confidential patient information has been removed.43

Other companies may decide to emulate GSK and we strongly recommend doing so. Publication of blinded data from every clinical trial would help healthcare providers make more informed choices, permit the testing of secondary hypotheses and improve the design of future trials. Even more importantly, it would show that a company is acting in good faith.

Focusing on patient segments, not diseases

The long-term implications of putting patients first are even bigger. Most life sciences companies are currently organised by disease area or indication, but patients don’t sit – or stay – within a single therapeutic category. We believe it would thus be better to adopt a structure that is based on specific patient populations. Some examples will help to explain what we mean.

In her teens, a girl may have acne and menstrual problems. She may also want birth control and slimming aids. In her childbearing years, she will be more concerned with fertility and pregnancy. In her 40s or 50s, she will go through the menopause and may contract one of the various forms of cancer from which women alone suffer. And, in her old age, she will probably be afflicted by arthritis or osteoporosis. A woman’s uniquely female healthcare needs therefore change, as she matures (see Figure 9). Yet few, if any, life sciences companies can satisfy all these needs, so the support they provide is inevitably sporadic. Concentrating on what women want as they move along the physiological continuum from youth to old age would, by contrast, enable a company to forge long-term relationships with them and serve them more effectively at each stage in their lives.
There are, of course, many other ways of defining a patient segment. Take the elderly. Most seniors suffer from two or more conditions at the same time (see Figure 10). What these patients therefore need is not the best drugs but, rather, the best combination of drugs for treating all their ailments and associated co-morbidities, together with diagnostics to track their progress.

Figure 10: Most elderly patients have more than one illness and need multiple medications
Source: Kinapse
The key point is that, in organising themselves by disease or indication, life sciences companies are creating artificial barriers. Focusing on specific patient segments could remove those barriers and make it easier to understand the patients in those segments, as well as how best to help them accomplish their healthcare goals.

But this knowledge should be practical as well as theoretical. Understanding what causes a disease is quite different from understanding what patients with that disease actually experience. So we believe it’s important to ensure that the scientists developing a drug, device or diagnostic for a particular patient segment get direct exposure to patients in that segment early in the R&D cycle.

We also suggest assigning someone specifically to represent the patient’s perspective. The Chief Medical Officer cannot really fulfil this role, because he or she ultimately represents stakeholders who are secondary to the patient. We therefore recommend appointing a ‘Chief Patient Officer’ who can assess what patients need without looking through the lens of the drug.

Offering integrated healthcare packages

We’ve talked about focusing on patient populations as distinct from diseases – and covering their full spectrum of needs. However, if many patients are to get the most from their medications, they’ll require certain services, too. This is uncharted territory for most life sciences companies, although a number of firms in other product-based industries have successfully made the transition. Rolls-Royce is one such instance, with its pioneering ‘power by the hour’ business model where clients pay for a working aeroplane rather than repairs or spare parts. Services now account for about 70% of the aircraft engine-maker’s profits.44

So how might a life sciences company make the same shift? Suppose, for example, that it decided to concentrate on helping women manage their health. It would provide medicines for every disease on the age-related continuum. But it would also provide dermatological advice, dietary guidance, exercise facilities and other such services designed to stop women getting sick in the first place (see Figure 11).

Figure 11: Creating an integrated package of products and services for women patients would enable a company to offer them continuous support
Source: Kinapse
Getting the regulators onside

Naturally, the life sciences industries can’t make some of the changes we’re advocating without clearance from the regulators, but that may be more forthcoming than many executives surmise. The FDA has shown that it’s quite prepared to accept patient-reported outcomes, as long as the instruments used to measure them are scientifically rigorous. In fact, when the agency gave Incyte the go-ahead to market myelofibrosis drug Jakafi in late 2011, it stated that patient-reported outcomes had played a key role in securing the product’s approval.49 The EMA has also signalled that it’s willing to accept such evidence.

Moreover, although some people may be concerned about any relaxation of the rules governing the dissemination and use of patient data, many others believe the potential benefits far outweigh the risks. It’s notable, for instance, that there have been very few objections to the British government’s recent decision to give life sciences companies access to the blinded records of all 52 million patients in the NHS for the purposes of research.40

Similarly if a company decided to focus on the elderly, it would provide guidelines on the best preventative measures, common drug combinations and dosing levels for ageing patients, together with online educational materials and self-management workshops. It would also provide age-friendly packaging and adherence aids – e.g., containers with embedded microchips or medicines with ingestible sensors like those developed by Proteus Digital Health.45 It could even deliver and administer complex injectable therapies in patients’ homes.

In other words, such a company would do everything it could to help patients take their medicines as directed and remain as healthy as possible. This is in marked contrast to the approach many companies currently adopt – with limited, if any, investment in improving compliance.

Clearly, most companies won’t be able to supply every product and service required by a particular patient segment, so they will have to collaborate with other providers. However, there are many services they can offer digitally. Indeed, this is where the true promise of the digital channels lies: as a means of engaging directly with patients and their families.

Several recent experiments show just what can be achieved. In July 2010, Pfizer launched virtual clinic Man MOT for British men who dislike going to a doctor. It has now handed control of the service to UK charity Men’s Health Forum because its priorities have shifted, but the project has been a resounding success. Almost 72,000 men have visited the website and more than 2,000 one-to-one online consultations have taken place.46

Meanwhile, Novartis has created a highly regarded online community for people with cystic fibrosis. CFvoice provides clear educational and motivational content, including games, videos, podcasts, articles and recipes, for patients in different age groups. It also contains information for parents and caregivers.47 And Boehringer Ingelheim is piloting a health management service for patients with diabetes that combines digital coaching with wireless monitoring.48

Branching out from products into services isn’t easy, but it’s a proven means of creating more value for customers – and, as experience in other industries shows, it’s often a better way of building a brand. The most successful brands don’t rely on functionality for their appeal; they connect with the customer. So developing an integrated package of products and services based on an understanding of the patient, the disease and the drug, and branding it accordingly, would be a much more effective strategy than branding the medicine in isolation.
Letting the profits follow

To conclude, the social, political and regulatory context in which the life sciences industries operate is changing as significantly as the treatment paradigm. True, some of these changes are increasing the pressure; healthcare payers won’t pay premium prices for new drugs that are only marginally better than existing treatments. But why should they?

We believe most life sciences companies can provide much greater value by developing the tools and services to help patients get the medicines they need, take those medicines as directed and modify their lifestyles, where required. That’s what we mean by putting the patient first.

The savings to society would be substantial. The global healthcare bill is now about $6.5 trillion. However, it’s widely recognised that some of this money is wasted; indeed, recent research suggests that roughly 27% of all US healthcare expenditure goes on preventable conditions and clinical problems which the life sciences industries could make a difference (see Figure 12). Other countries spend less – and may squander less. Nevertheless, even if the level of waste was only half that in the US, eliminating it would save about $877 billion a year.

This would release funds to pay for the provision of new diagnostics, devices and services, and for the relatively few new medicines that really do offer a breakthrough. So the profits would follow – and that would enable life sciences companies to create more value for their long-suffering shareholders.

Figure 12: Nearly a quarter of US healthcare expenditure is wasted on behavioural and clinical problems the life sciences industries could help to solve
Source: PwC Health Research Institute, ‘The price of excess’.
What next?
We recommend making six changes to help your company put patients first:

1. Focus on how patients feel, not just the scientific facts. Form relationships with patient groups to get a practical understanding of what patients experience, and consider reorganising your R&D activities around patient segments.

2. Create a robust digital information strategy. The ability to process vast quantities of data efficiently and effectively – and turn big data into big information – will be a prerequisite for all life sciences companies in the future.

3. Look at best practice in other high-tech industries. Learn from the most successful companies, especially those that have reinvented themselves to become hybrid product-service providers. Explore the opportunities for creating alliances with companies that could offer enhanced patient services.

4. Assess your organisation’s readiness to embrace the new paradigm. Evaluate its global footprint, core and non-core activities and systems. Ask yourself what new technologies, skills and partnerships you will need.

5. Collect evidence continuously to demonstrate the value of your products in real life. Test and refine the evidence by consulting patients, healthcare providers and payers and other external experts.

6. Share your evidence openly and systematically both to regain public trust and to help stakeholders collaborate in maximising the value patients get, while minimising the risks.
Notes

1 *Time* (18 August 1952).

2 The New York Community Trust, ‘George W. Merck, 1894-1957’.


5 Scannell et al., op. cit.


9 PwC, ‘Pharma 2020: From vision to decision’ (November 2012).

10 PatientView, op. cit.

11 In 2003, public expenditure on healthcare accounted for 58.2% of worldwide expenditure on healthcare. By 2010, it was 62.8%. For further details, see World Bank, ‘World Development Indicators’, http://data.worldbank.org/indicator/SH.XPD.PUBL/countries?display=graph (accessed 26 February 2013).


16 ‘Hinchingbrooke Hospital’s bosses claim improved care’, *BBC News* (1 August 2012), http://www.bbc.co.uk/news/uk-19073700


19 AliveCor website, http://www.alivecor.com/


23 Topol, p. 18.


25 Ibid.


27 Ibid.


32 Topol, p. 213.

33 Topol, p. 213.

34 EuResist prediction system, http://engine.euresist.org/


38 Scannell et al., op. cit.


41 Pharmaceutical Research and Manufacturers of America (PhRMA), ‘PhRMA Statement on Clinical Trials and Bad Pharma’ (4 February 2013), http://phrma.org/media/releases/phrma-statement-clinical-trials-bad-pharma
44 Growth Champions’ (February 2013), http://growthchampions.org/growth-champions/rollsroyce/
About Kinapse:

Kinapse provides expert consulting and outsourcing services to the life sciences industries. We collaborate with our clients to innovate for exceptional results.

Our expert teams work with our clients to design and deliver strategic and operational change, and business process outsourcing solutions. We bring industry insights and technical expertise throughout our engagements. We develop actionable recommendations and innovative solutions which are implemented successfully.

Our clients are the world’s leading life sciences organisations, their customers, suppliers and regulators. Our client references are the strongest testament to the exceptional results we deliver in partnership with them.

We are one global business with expert teams providing excellent services.

With over 300 professionals worldwide, we select our teams to deliver the best possible solutions. Our deeply held values and operational processes drive our teams to ensure excellent client service on all our engagements.

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