

Linklaters

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Fit for the future. Encouraging sustainable innovation in health – The highlights

Executive summary

Linklaters commissioned the Institute of Global Health Innovation at Imperial College London to conduct research on how sustainable innovation can be encouraged in the healthcare sector.

Spiralling costs and rising expectations risk crippling healthcare systems around the world. In advanced economies, demand and cost pressures combine to drive spending upwards, consuming an ever greater share of national economies. For emerging economies trying to build health systems comparable with the best in the world, the challenge is to invest in a way which prevents healthcare becoming a budgetary time bomb.



Healthcare businesses from advanced and emerging countries were surveyed to help us learn more about how to drive cost-effective innovation and to understand better its potential effects on the future of the healthcare industry. The key findings are:

- > Although there are important external barriers, such as regulation and reimbursement mechanisms, they do not prevent companies from taking specific and practical actions in order to encourage cost-effective innovation.
- > Technology may enable cost-effective innovation, but it is seldom sufficient. The most powerful innovations change business models, processes or ways of working.

- > Truly disruptive innovations are most likely to come from new entrants – especially using approaches from other industries.
- > Emerging markets are a hotbed of cost-effective innovation. They generate both opportunities and threats for incumbent healthcare businesses.
- > Leadership, and a supportive culture, will be critical to meeting the challenge of sustainable innovation.





Increasing demand: As income rises people have more resources to spend on healthcare in emerging countries like Brazil, Russia, India, China and South Africa.

The challenge of sustainable innovation

Amongst the countries of the Organisation for Economic Co-operation and Development (OECD), health expenditure has on average exceeded the rate of economic growth by 2% annually for the past 60 years. All advanced economies are facing a similar situation where spending on healthcare could rise to the extent that other areas of public spending, such as education, infrastructure or

policing, will suffer. And it is not clear that high expenditure results in high returns: there is no simple causal relationship between higher health expenditure and better health outcomes.

Health expenditure growth is a result of two trends. First, demand for healthcare has grown rapidly in recent decades, a development which is likely to accelerate. This is partly a consequence of getting richer: as income rises people have more resources to spend on healthcare.

This is particularly true in the emerging countries of Brazil, Russia, India, China and South Africa, where incomes are increasing rapidly.

Demand growth is also a consequence of ageing populations: in all OECD countries, the ratio of over 65s to under 65s is set to increase substantially by 2050. Older populations are far more likely to suffer from an increased prevalence of non-communicable diseases (NCDs) such as diabetes, coronary heart disease and mental illness. These are expensive long-lasting conditions, consuming approximately two-thirds of healthcare resources in advanced economies. And non-communicable diseases are no longer a worry just for high-income countries; the total economic burden is projected to exceed a staggering \$21trillion in low and middle-income countries from 2011-2030. This is about the same size as the 2010 economies of the US, Germany, France and the UK combined.

The second key trend that explains increasing health expenditure is that, on average, we are spending more per patient. Technological innovation often reduces costs in other industries such as personal computing. In healthcare, however, the focus has traditionally been on providing new drugs, equipment or techniques that deliver the best possible outcomes with little attention to cost. Healthcare innovation is clearly necessary if we are to continue the rate of healthcare improvement and meet expanding demand. The costs of this innovation, however, could make health systems unsustainable.



\$21 trillion

the amount of the projected economic burden in low- and middle-income countries resulting from non-communicable diseases between 2011 and 2030



What is holding back cost-effective innovation?

To observers unfamiliar with the dynamics of healthcare, it may be surprising that cost-effective innovation does not emerge naturally as a result of market forces. However, several important barriers are perceived to impede or distort these forces.

Payment or reimbursement mechanisms incentivise providers to treat patients efficiently and reduce length of stay, but they don't reduce hospital usage. Reimbursement systems also tend to favour existing ways of carrying out healthcare.

Regulation is also an oft-cited obstacle. For some industries, and in some markets, the **lack of effective intellectual property protection** is an impediment to innovation, including the cost-conscious variety. Healthcare **markets are often very imperfect** and lack competition. Where competitive forces are strongest, cost-effective innovation is abundant.

Several executives interviewed described the tension between an organisation's **scale** and innovation. Small and entrepreneurial firms think large multinationals have no incentive to undermine existing revenue streams. Others believe large businesses

are best-placed to bear the investment and regulatory costs required to bring cost-effective innovations to market.

Culture and mindset was also cited as a barrier to cost-effective innovation because we attach so much value to our own health. People are willing to spend large amounts on healthcare (particularly as they get richer) and are relatively insensitive to its price. The innate conservatism of medical professionals can also be an obstacle: clinicians will often default to using familiar premium brands.



Positive incentives: Approaches have experimented with positive incentives designed to keep people healthy.



What can be done to encourage cost-effective innovation?

The research identified five key enablers of cost-effective innovation: culture, pricing, localised product cycles, standardisation and specialisation, and new business models.

Creating a culture of cost-effective innovation

Creating the right culture begins with **senior leadership**. The organisations studied for this research **manage their people** to encourage cost-effective innovation. For several, this means ensuring that business minds are recruited and paired alongside scientists and clinicians. Creating appropriate **incentive and reward structures** is also important, as is embedding cost awareness into the DNA of the business by **putting the concept of value at the heart of product development**. The process of innovation and product development must explicitly be structured to identify and reward cost-effectiveness.

Pricing to encourage cost-effective innovation

Current pricing approaches often reward the development of incremental innovations that do not solve a health problem but do make small improvements to treatment at significant cost. What is needed is a pricing structure to encourage prevention and reduction of ill health. Alongside pricing, there need to be more **incentives for people** to behave in a cost-effective way. Still other approaches have experimented with positive incentives designed to keep people healthy.



Localising product cycles

Although the world may share common healthcare challenges such as the rising burden of non-communicable disease, healthcare systems vary widely: local knowledge is essential. **Localised product cycles** are needed to match local needs. There are many ways to achieve this – one approach is to partner with local organisations that understand local dynamics. Another method is to acquire businesses that give a local presence. Localising *manufacture* creates benefits, but the greatest benefits are to be gained if *design* is localised.

Designing cost-effective products for emerging markets requires serious investment in local product teams. Whilst these potential customers may say they need the newest high-end products, often what they really need are bespoke solutions which help them to do their jobs more cost-effectively. A final aspect of localising product cycles is the **involvement of clinicians** who will be using them. Clinical involvement is also crucial to innovation in healthcare delivery.

Standardising and specialising

Research shows that 30–40% of patients do not receive healthcare that follows known best practice. Standardisation is a means to closing the gap between practice and evidence. Related to standardisation is the concept of **specialising on a particular healthcare need**. This approach gives clarity of purpose and allows innovation to be focused.

New business models

The key to most low cost innovations is **changing how care is delivered** because the most significant cost in healthcare is labour. Innovation which reduces labour costs can therefore have a bigger overall impact; technological innovations have the greatest potential for cost reduction when they catalyse changes in business models, processes or ways of working. **Task shifting** employs people with fewer skills and qualifications – and consequently lower costs – to carry out roles previously performed by more highly trained staff. The logical conclusion of task shifting is enabling people to self-care or self-diagnose.

Enabling people to take greater charge of their own health, whilst reducing reliance on clinicians, has significant potential for cost reduction. That potential, however, remains largely unrealised. The direct-to-patient approach often utilises techniques developed in other industries, although incumbent organisations can find it difficult to identify and embrace these opportunities because it threatens their existing business models. Sometimes, therefore, cost-effective innovation will come from new entrants from other industries moving into healthcare.

This is a summary of the Linklaters *Innovation in Healthcare* report. To access the full report with complete methodology, interview and research references, please go to linklaters.com/healthcare

