
Bending the Cost Curve Emerging International Best Practices

2 February 2011
Washington, DC



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Introduction

On 2 February 2011, PwC, in conjunction with three sponsoring organizations—the Atlantic Council, McGill University and The Commonwealth Fund—launched *Bending the Cost Curve: Emerging International Best Practices*, a series of four symposia to be held on four continents over the course of two years. The objective is to bring together the world’s leading healthcare experts to explore common challenges of containing healthcare costs while increasing access and quality care.

“Everyone’s healthcare system looks a bit better from the outside than it does from the inside,” commented one expert at the meeting. Through this unique event, these health leaders were able to “get inside” other health systems through a doorway of five case studies in five countries. Each case study provided a clear example of how healthcare is being delivered more cost efficiently and at higher quality. Through vigorous debate and discussion, participants could vet the decisions that made that possible. For those presenting case studies, they received insight from a singularly global group of peers to help them face the next set of challenges.

Health systems are in a state of change, and each case study developed in an ephemeral mix of economic, political and social conditions that continues to evolve. With that in mind, these case studies were chosen as leading practices that will evolve and expand. The summary below includes background, details about each case study, and finally, the difficult issues that were discussed in the context of leveraging their experiences more broadly.

Across the case studies, we saw the following:

- Public-private investment partnerships are demonstrating savings and efficiencies beyond constructing and maintaining hospital facilities. However, for political reasons, some regions are not ready for private partners to provide clinical services.
- Downward innovation is possible with strong and committed physician leadership.
- Chronic illness management and primary care needs a new business model that is heavily technology dependent, and should be enabled to out-run the medical profession.
- Price competition alone is insufficient to bend the cost curve without reimbursement and payment reform.
- The National Institute for Health and Clinical Excellence (NICE) and other comparative effectiveness efforts are important tools for bending the cost curve, but they must be accompanied by other reform efforts. Effectiveness research, however, fills knowledge gaps that the industry is not currently set up to do.

The views and opinions expressed in this document are those of the roundtable participants and not necessarily of the speakers. All comments were made off-the-record.

Session 1

Managing Rising Costs in a Fiscally Constrained World: The Role of Public-Private Collaboration

Background

Healthcare public-private partnerships (PPPs) have emerged as one approach to balancing the roles of the public and private sectors in healthcare. Across the globe, PPPs are being formed to make government and private industry more accountable for maintaining the health of citizens, according to a recent report by PwC, which found that such partnerships can evolve to bend the cost curve.¹

As one participant said: “There is an almost universal appreciation that governments can’t do it all and the private sector can’t do it all.” By forming PPPs, governments seek to leverage the resources and capabilities of the private sector to achieve public policy goals. Public-private partnerships are distinguished from outsourcing or contracting in two important ways. First, in a PPP risk is shared between the public and private partners. This essential element, which ensures the alignment of incentives that is required for success, is missing in outsourcing arrangements. Secondly, the PPP is not a form of privatization; the public sector does not hand over the reins to the private sector. Rather, the two sectors form a long-term partnership under which many assets remain in public ownership.

Studies in the UK have shown that where there are PPPs, there is greater competition on the provider side, higher staff productivity, higher patient satisfaction, and lower mortality rates.

The public-private investment partnership (PPIP) is an end-to-end solution that bundles finance, construction, maintenance and service delivery (Figure 1). The integration of service delivery distinguishes this model from other forms of PPPs. Most PPPs worldwide are infrastructure-oriented: the government turns to the private sector for help in rebuilding a crumbling facility, without changing the way care is delivered and without integrating primary, secondary and tertiary care. Because clinical and ancillary services account for roughly 80% of the costs of a hospital system (and infrastructure only 20%), adding integrated service delivery to the model gives PPIPs much greater potential to bend the cost curve.¹

Figure 1

Public-Private Investment Partnerships



The PPIP model embraces the full spectrum from financing through integrated service delivery

Case Study: The Alzira Project

One of the most widely known and longest-running PPIPs is in Alzira, a district of a quarter-million people in Valencia, Spain. In 1999, the Valencia region was facing public budget deficits as well as inefficient, fragmented delivery of care and a deteriorating medical infrastructure. To address the problem, the government partnered with a consortium of private providers that would be required to serve all of the district’s residents, regardless of income. By integrating both primary and secondary care, Alzira could boost efficiency and effectiveness through coordination of care.

The government set up the contract so that money follows the patient. Alzira residents are allowed to go outside the district for treatment if they are dissatisfied with the quality of care. However, if they do so the consortium must pay 100% of the diagnosis-related groups fee back to the government. That is a powerful performance incentive for the private consortium to provide quality care and service.

The consortium is paid a capitation rate set at 25% lower than the rate for public facilities. The government also capped the return on investment (ROI) that private investors could earn at 7.5%.

The Alzira partnership has delivered superior health outcomes, better access, and high levels of patient and staff satisfaction at 25% lower cost than the public health system it replaced. Consistently across surveys, the Alzira project, and the four other PPIPs in Valencia that have replicated the model, are ranked high nationally.

Can this model be implemented elsewhere? How?

The discussion centered on these key issues:

Political slant of elected leaders

The leadership of the center-right government in Valencia, which favored private sector innovation, made it possible to incorporate primary care services into Alzira's model. While political leadership should be open to private sector involvement, it doesn't necessarily need to be from the right. The UK PPP program grew under the leadership of Prime Minister Tony Blair. Even so, many governments may be willing to partner on financing and building a hospital, but not delivery of care. For example, PPIPs that include clinical services may be more likely to emerge in the middle- and low-income countries.

Lack of bidders

One participant said she has seen a lack of private partners on such projects because of the recession. In some cases, bidders were not able to raise the capital needed. As a result, the government took over most of the financial risk in the project.

Opposition from physicians

One participant noted that organized medicine groups often will oppose PPPs: "They will always oppose every new reform and every new change. But they do not speak by any means for every senior doctor in the country. You can enlist the reformers; you can enlist those who would like to be part of the leadership of a new system, of a new way of doing things. And these individuals will provide you with your clinical leadership, your medical leadership and will bring colleagues with them."

At Alzira, physicians had been working short days at the hospital and supplementing their public jobs with private practices. Under the PPIP arrangement, the physicians were given salaries of 25% more than they had been earning, but required to work full-time at the hospital. Other staff members were given performance and productivity incentives, putting some of their compensation at risk.

Divergent assumption and expectations

One participant summed up the problem this way: "The public sector is—by and large—a bad contractor. It's a bad contractor because it hasn't ever been used to having to specify what outcomes it wants to achieve for a given pot of cash that a healthcare system or a healthcare organization is being asked to deliver. And that creates huge problems both on the public sector side but also on the private sector side, too."

However, this expert noted the need for change on the private sector side as well: “I think the private sector was arrogant and thought, ‘Oh, we’ve got this stitched up, we can do this so much better than the public sector.’” As a result, “To succeed, partnerships require flexibility and the recognition by both parties that when you transfer risk, there is a real cost to that risk.”

One particularly illuminating comment was, “You need to be aware what private sector companies in the business are doing. They’re not in the business of taking risk. They’re in the business of eliminating risk. Government is in the business of taking risk, and I think has a great deal more experience in doing so.”

Winning over skeptical citizens

Reduction in wait times proved to be a powerful selling point. One expert talked about reducing the wait time for surgeries, another had achieved a similar result in lab tests. Added one expert: “No one cares anymore what we did or how we did it. They care that we delivered a better quality service.”

Communicate the benefits early and often

Emphasize that the PPP will be cost-neutral, that it will create transparency in terms of the ROI, that it will increase quality and access. Communicate clearly and often the benefits of the initiative, to make it more politically palatable to the general public and to unions and medical staff.

Post-recession challenges

The current economic environment is making it more difficult to maintain the Alzira model. The global capitation rate is based in part on the Valencia government’s budget, which is shrinking, squeezing the budgets of public hospitals and the ROI potential of the private sector partners in PPPs. It’s questionable whether private partners in new projects can generate a ROI of 7.5%.

Perception of privatization

One participant said his government did not want to take on the controversial perception that the government was privatizing healthcare. Some populations are afraid that their safety net hospital might be taken away. There were major union protests when the Alzira PPP was launched, but these died down within a year, once union members experienced the PPP in operation. Painting a clear picture upfront of the benefits of the PPP may help to calm fears and win support from union members. Said another expert: “You can rationalize all of this stuff as much as you like, but in the end somebody somewhere has got to take a very difficult decision and upset quite a lot of people.”

¹ PricewaterhouseCoopers Health Research Institute, “*Build and Beyond: The (r)evolution of healthcare PPPs*,” December 2010.

Session 2

The Power of Process and Downward Innovation

“Much of the healthcare industry is obsessed with developing a magic pill, faster scanner or new operation. What the world really requires today in healthcare is not innovation in products, but innovation in the process of delivering to the masses what is already available.”

Background

In the healthcare industry, costs rise rapidly and relentlessly, and the extra costs often yield only incremental value. By contrast, many other industries innovate continually to improve quality while reducing costs simultaneously—often dramatically. Japanese automakers rose to the top of their industry through radical rethinking of processes in the 1970s and 1980s that led to dramatic increases in quality and reductions in cost.

The technology industry is a prime example of a sector that delivers significant performance improvements and cost reductions year after year. Technology manufacturers have coined the term “downward innovation” to describe how they redesign complex, costly machines into simple ones that cost a fraction of the price and can be manufactured and sold in mass quantities. This approach can also be applied to radically re-engineering health-related processes and leveraging economies of scale to achieve similar results for patients.

Case study: Narayana Hrudayalaya health system

The Narayana Hrudayalaya (NH) health system in Bangalore, India, performs a high volume of open heart surgeries at a fraction of the cost of such procedures in other countries, and achieves equivalent and, in some cases, superior outcomes. The system was founded in 2001 by Dr. Devi Prasad Shetty, a world-renowned cardiologist who was the personal physician to Mother Teresa.

In 2004, the typical cost of an open heart surgery at NH was 90,000 rupees, or about US \$2,000. Since then, NH has driven down the cost to \$1,700, in part due to the high volume of procedures it performs. For instance, in 2010, NH performed about 2,600 pediatric heart surgeries; by contrast, the busiest center for such operations in the US completed roughly 800 pediatric procedures. This high volume of surgeries gives NH the bargaining power to drive down the cost of materials, which account for 40% of the organization's total costs.

The rest of the cost reduction comes from a relentless drive to improve processes. To bend the cost curve downward, NH focuses on standardizing procedures and breaking down processes into their component parts—an approach akin to that of the automotive industry. For instance, highly paid senior surgeons perform only the main part of the operation; more junior physicians open and close the chest. Prepping 84 infants for cardiac surgery—a process that takes up to two hours in the US—was completed in 12 minutes during a recent visit by PwC. During the same visit, PwC observed 84 infants in cardiac post op neonatal unit receiving individual care; at major US medical centers, two to four is the norm. A strong telemedicine network improves the efficiency of operations further, and makes it easier to follow up with patients from remote villages.

The results speak for themselves: The volume of coronary artery bypass graft (CABG) surgeries performed at NH exceeds those of the leading US institutions with equivalent or better outcomes than the rates of the top US institutions (see Figure 2). This high volume of procedures enables NH surgeons to pursue subspecialties, further enhancing quality and driving up efficiency. While CABG procedures account for the bulk of the work, if a surgeon decides to specialize in another procedure, such as valve replacements, there are plenty of cases available.

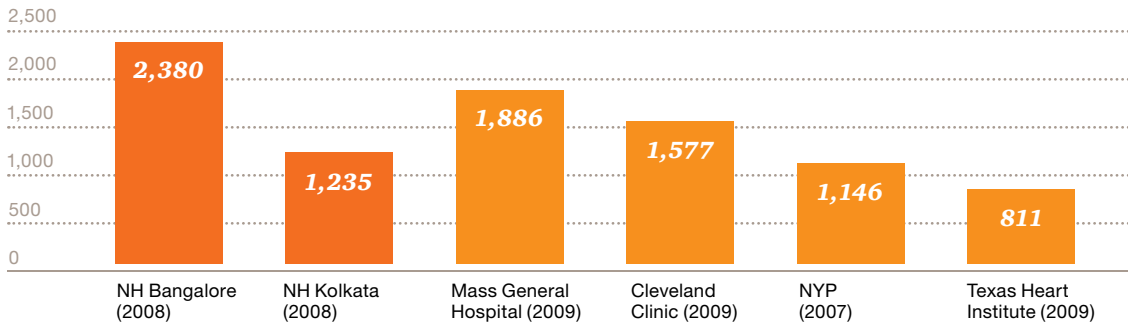
The quality of NH's work has enabled it to secure accreditation by various national agencies, and most recently, by the Joint Commission International. To ensure quality is maintained, NH has an ongoing post-graduate training program in cardiac surgery, cardiology, pediatric cardiology, and various other areas. To improve quality further, NH plans to launch a six-year cardiac surgical training program. Rather than rotating trainees through three years of general surgery, they will be rotated through various cardiology procedures, enabling them to develop relevant skills more quickly than if they spent more training time doing general surgery.

Dr. Shetty's ultimate goal is to drive down the cost of heart surgery to \$800 per operation. To do that, NH plans to grow the organization to a 30,000-bed operation by 2017, by opening a national network of 55 low-cost, 300-bed heart hospitals.

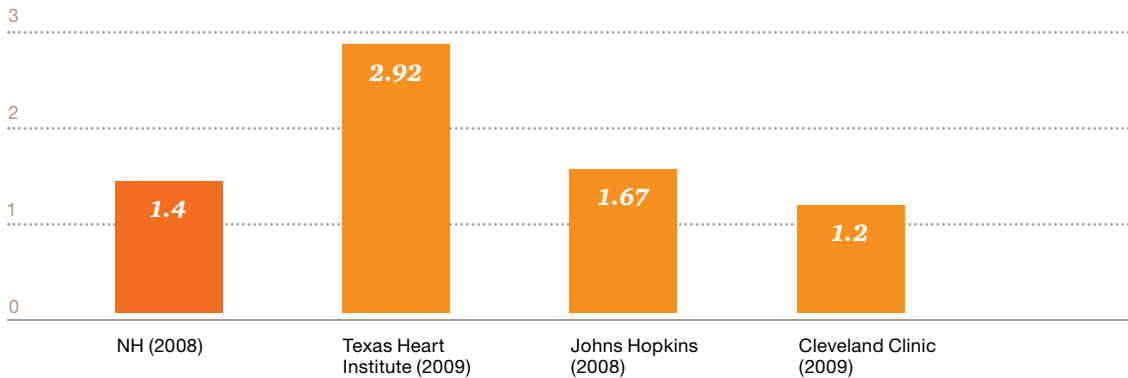
NH does more heart surgery, probably more than any other organization on earth, at lower costs and with dramatically better results than virtually everywhere.

Figure 2

Volume of CABG surgeries, Narayana Hrudayalaya and top U.S. cardiac hospitals



CABG observed mortality rates, Narayana Hrudayalaya and top U.S. cardiac hospitals



NH's surgical volumes exceed those of leading US institutions, and outcomes are in line with or better than many of these institutions. (Mortality rates for NH are observed, while the rates for US institutions are risk-adjusted)

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Can this model be implemented elsewhere? How?

The discussion centered on these key issues:

Achieving collaboration among physicians

Surgeons work for the NH organization because they believe in Dr. Shetty's vision and respect his skills as a surgeon. Despite long hours, burnout is not an issue because NH provides a satisfying work environment where surgeons freely help one another. In the decade since it was founded, only one surgeon has left NH.

However, this culture may not be transferable to other countries. As one expert noted, one medical organization chief espoused a similar philosophy: "You do them more often, you do them better. You do them cheaper. And you do them with less complication. But somehow this is not what his membership wanted to hear. And now he's no longer the chairman of the association."

Developing a funding model

Annually, about 2.5 million people in India require heart surgery, but only 90,000 procedures are performed each year. While the country has a large number of doctors, nurses, and medical technicians, patients cannot afford to buy the care they need. NH and the government of Karnataka designed a micro finance scheme called *yeshasvini* to help cover the costs of serving the poor. Under this novel scheme, residents of the Indian State of Karnataka pay a tiny amount monthly (initially, the equivalent of 11 cents) in insurance, and the government matches the amount. The funds raised from the large population are sufficient to cover a substantial portion of the costs of surgical procedures, including complex heart and brain surgeries. In addition to helping provide insurance to the masses, the government offers heavily subsidized land to NH, and some cases, provides land for free.

While \$1,700 for open heart surgery—the current cost at NH—is shockingly low by US standards, it is a huge sum for a poor farmer in India. The *yeshasvini* insurance pays roughly \$1,300 of the cost. To cover the rest, NH has implemented a tiered pricing scheme under which wealthy patients subsidize those who are poor. The organization offers a wide range of packages, and patients with higher incomes have the choice of staying in a better ward with more amenities. At the time of admission, NH performs a financial risk analysis, categorizes patients into one of three risk-based levels, and tailors a package of care based on the patient's risk profile.

Health system as charity

Dr. Shetty's goal was to bring heart surgery to the masses. NH is not striving to make the most money but to deliver the best care to everyone, regardless of their ability to afford it, a noble vision and atypical business model. Noted one expert in the discussion: "But can we think about this social business model and a willful reduction in cost based on a charitable notion? Does that work anywhere?"

In the developed world, it's unrealistic to expect that the cost of cardiac surgery could be reduced to \$800, but by radically reengineering processes through this goal, it might be possible to reduce costs and increase the number of surgeries by 25% or more.

Medical staff recruitment, compensation and training

Labor accounts for 30% of NH costs. This percentage is far lower than in the developed world, but on the basis of purchasing power parity basis, NH's cardiac surgeons are paid well; in fact, they are among the highest paid professionals in India. In general, NH does not recruit surgeons at the senior level but rather allows its medical professionals to grow up in the organization. Skills develop quickly because of the volume of operations performed, which increases quality. Some surgeons run two operating theaters and may perform four or five surgeries each day. A few have completed 5,000 Tetralogy of Fallot surgeries to correct congenital heart defects—likely an impressive record.

Session 3

Redefining Primary Care and Wellness

Background

Australia has a population of roughly 22 million, spread out over a huge geographic region, and a universal healthcare system that provides subsidized access to doctors, subsidized pharmaceuticals, and free public hospital care for all. About 65% of healthcare is publicly funded, 10% is funded through private insurance, and 25% is paid out of pocket by citizens. State governments own and operate public hospitals, but more than 90% of primary care and more than 55% of surgeries are delivered by the private sector. While Australia has performed well on some aspects of healthcare, such as longevity, it has done a poorer job of guaranteeing access, safety and equity. In 2008, the government established the National Health and Hospitals Reform Commission to address these issues through a comprehensive evaluation of the country's healthcare system.

The commission delivered its final report in June 2009, offering 123 recommendations under four themes:

1. Taking responsibility for health and well-being, individually and collectively
2. Connecting care—providing comprehensive, coordinated care over the course of a lifetime, and focusing more on primary care and less on hospital-centric care
3. Addressing the inequities of the system that result in indigenous and rural populations receiving poorer quality care
4. Driving quality performance – developing leadership and systems to ensure the sustainability of the system by making the best use of limited resources.

During this process, the commission discovered *headspace*, an impressive program that embraced all four themes. *headspace* was innovating in an area—mental health services for young people—that had been sadly neglected in the Australian healthcare system. In addition, mental health had been cited as the number three concern of Australians. Addressing this issue required a hard look at prevention.

As one expert noted: “If you want to make a really big difference in mental health, you don’t wait (until problems have become severe). That’s very costly. The social and disability costs are very high, and you have only small improvements. You end up actually with a disability support model. So, the peak incidence of onset of mental health problems is actually in the teen period, post-puberty and then up to about age 25.”

Another added that the danger wasn’t in mental health patients becoming violent. The real problem is that they “mainly sat on their own, at home, alone, disconnected from education, disconnected from employment and consuming very high levels of disability support payments for life.”

Case study: *headspace*

headspace is a national, not-for-profit social venture company that operates independently of the government and delivers a variety of services, mainly focused on mental health, through local consortia of private providers. The organization serves young people between the ages of 12 and 26, who can use their universal health insurance at any of the 30 *headspace* centers around the country. An individual can visit a *headspace* center for any reason; there’s no need for a referral from a physician, or a formal diagnosis.

headspace is based on the premise that investing in early identification and treatment of mental health problems generates a substantial return in the long run, for the individuals treated and for society as a whole. Mental health issues, if left untreated, can put young people at risk for problems such as substance abuse as well as physical health problems later in life, including heart disease and diabetes. When not addressed early, these problems often lead young people to drop out of school or the workforce, resulting in huge social and economic costs, in the form of disability payments, lost productivity and in some cases, incarceration.

headspace was established through a national government grant. Recurring funding comes from several public agencies, including agencies focused on education, employment and research as well as health, reflecting the program’s goal of achieving broad social objectives by addressing mental health issues early. Funders are interested not just in health outcomes but in keeping young people in school or at work.

***headspace** is one of very few programs that considers healthcare costs in a broader context, focusing on the impact of health problems on social and economic outcomes. Its officials estimated that every dollar spent on mental healthcare returns four dollars in terms of employment and productivity.*

Can this model be implemented elsewhere? How?

The discussion centered on these key issues:

Overcoming obstacles with the traditional medical system

In some ways, *headspace* bypasses the typical medical system. Traditionally, when young people seek treatment, they are seen by a general practitioner who may have little or no training in mental health issues. Noted one expert: “Most GPs that I speak to say, ‘If only we had somewhere we could send them because this is just beyond us. It’s beyond us in capability, knowledge and certainly not something we could deal with in six minutes, let alone 20 minutes.’” Others noted that primary care doctors are at capacity, and so patients with mental health issues don’t get the treatment they need. Said one: “You have to actually create new capacity.” One solution is group interventions, although one expert added: “Providers hate them. Providers love individual interventions.”

Too often, mental health problems are addressed in emergency rooms and hospitals, after problems have progressed and become severe. It’s an inefficient, costly, and largely ineffective approach that leads to high costs, poor outcomes, health challenges later in life, and the mistaken notion that mental health problems cannot be treated effectively.

One comment was: “My greatest frustration on a day-to-day basis is most professional organizations—not just the doctors, the psychologists, everybody else—wants to maintain very informal ad hoc arrangements and sees that as good enough.”

Treating reluctant populations

headspace centers do not look or feel like health clinics. The centers employ a range of youth-friendly health professionals who offer not just mental health counseling but general health services, help in dealing with alcohol and substance abuse problems, and education, employment and other services, in an atmosphere that’s inviting to youth.

This youth-friendliness is a key to improved access, particularly for males. Under Australia's traditional model, two-thirds of those who accessed mental health services were young women. By contrast, more than half of *headspace* users are young men. Typically, they're brought to a center by a mother, sister or friend, and stay because they find the services relevant.

Another factor in the success of *headspace* is its patient-centered focus. *headspace* empowers young people to take responsibility for their own health and wellbeing, and provides the tools for them to do so.

Partnering beyond the medical system

headspace works closely with schools, which play a key role in identifying mental health problems, as these problems often manifest in declining school performance. The program also provides support for families, viewing family involvement as critical to mental health, and strives to involve the young person's social network.

Redefining primary care through technology

Technology tools are a key ingredient in the lives of young people. *headspace* is developing online clinics and services and exploring social networking and other technologies that are relevant to a youth audience. E-health is an interesting battleground between the traditional provider-driven mental healthcare and new ways of having access to care. For example, young people seeking mental health treatment like the anonymity of e-health. One expert talked of a successful e-health program for young girls suffering from eating disorders in which psychiatrists offered chat sessions on an anonymous basis. "The success was enormous, but the reason for success is that it could be done anonymously," she said.

Embedding technology in the process

The Australian government has funded a cooperative research center that's working with IT partners to explore the commercial viability of social networks for delivering mental health services. And one Australian private insurer has funded an online information portal and moderated chat environment called *DepressioNet*. Added one expert: "Young people and their use of technology will defeat traditional providers. In the past it might cost us \$15,000 to develop a solution that you can now buy in the form of an iPhone app for \$1.99. Younger generations prefer to use technology tools and often will choose to bypass the healthcare system because it doesn't respond to their needs. Smart, entrepreneurial providers and private companies will recognize this and adapt to new technology much faster than government systems will."

Session 4

Healthcare Costs and Privatization

Background

Healthcare reform in the Netherlands is a cautionary tale of ups and downs, the partial successes and unintended consequences of making major changes to a well-entrenched healthcare system. The issues that drove the Dutch health reforms began back in the 1980s, when healthcare costs began accelerating. The Netherlands had mandated universal healthcare coverage for all citizens since 1942, but access was poor. And despite the growing national tab for medical care, patients faced long waiting lists and had little choice of providers. The government granted hospital budgets, fixed prices, and made all investment decisions. As a result, providers focused all their creativity and money on influencing the government to raise prices and safeguard their market.

Case study: The Dutch National Healthcare Authority (DNCA)

DNCA was formed in 2004 to create and monitor the functioning of healthcare markets in the Netherlands, with the goal of improving efficiency, increasing choice, and bending the cost curve. The Dutch government enlisted an outsider, Wisse Dekker, CEO of Philips Electronics, one of the world's largest electronics companies, to evaluate the system and recommend reforms. The main reform was the introduction of competition among providers, which previously received set budgets from the government. Under reform, the government pays private insurance companies, and they pay providers, using market pressure to increase quality and reduce costs. While the government continues to set some prices, many are done through negotiation between insurers and providers.

The Netherlands reforms delivered on an issue that was high in importance to the general public: the elimination of waiting lists. And, 2010 was the first year in which prices of hospital procedures dropped.

Thanks to the bargaining power of insurance companies, many medical procedures that formerly were performed in hospitals have been contracted out to nearby private clinics that guarantee they will deliver the services at a cost substantially below the hospital's price. But the volume of procedures has increased sharply as providers, who are paid on a fee-for-service basis, strive to compensate for the lower price per procedure. As a result, overall healthcare costs continue to climb.

While reforms in the Netherlands thus far have not succeeded in bending the cost curve, they have eliminated waiting lists—a key concern of the public, and a major reason why reforms were initiated. Patients also have access to a wider range of private providers—another popular feature of the new system. What has been less popular are the difficult decisions the government made about what is excluded from the basic benefits package (e.g., dental care above the age of 18). The pharmaceutical industry also is concerned because insurance companies have won major pricing concessions for generic drugs.

It is not clear yet how the Netherlands' new system will impact insurers over the long term. Will they be able to sustain profitability, given the mandate to provide a minimum level of benefits and the requirement to offer coverage to everyone, regardless of risk profile? And will the government offer the support required to drive quality improvements? For instance, if an insurer refuses to contract with a hospital because of a track record of poor quality, will politicians back the effort or try to save the facility for political reasons? On all of these questions, a great deal of uncertainty remains.

Can this model be implemented elsewhere? How?

The discussion centered on these key issues:

When prices decline, volume increases

In healthcare, competition does not necessarily lead to lower overall costs. In the Netherlands, it increased demand. Both providers and consumers generated more demand, which increased overall spending. One solution that has been suggested, but the government has not yet implemented, is the use of co-payments to temper demand. However, that is expected to be unpopular with patients. In addition, co-pays may prompt consumers to forego necessary care to save money, which could impact overall health outcomes.

Sustaining a market in which private health plans can compete and profit

Every health insurance company in the Netherlands is required to accept every patient, regardless of pre-existing conditions, and all insurers must offer the same basic package of benefits. To create the right incentives for insurance companies to participate, the government had to provide risk adjustment payments. That created a level playing field, sustaining competition even if the insurance market is highly concentrated (as it is in the Netherlands). If an insurer delivers poor service or raises premiums too high, plan members can simply switch to another insurer that offers better service and rates. As in the case of Australia's *headspace*, money follows the patient, providing a powerful incentive for insurers to deliver quality service at a competitive price.

Under the new system, insurance companies are obliged to accept every patient, regardless of pre-existing conditions, and each insurer is required to offer the same basic package of benefits, which is written into the reform law. Consumers who are dissatisfied with one insurance company can simply move to another, since all offer the same basic benefits package. Consumers also can choose to purchase higher-cost plans that include additional features, such as more options of providers they can see and hospitals they can access.

Benchmarking quality

The Netherlands has no comprehensive, objective database of quality information and benchmarks. Such a database is needed to give insurers the information and data they need to lean on hospitals and providers to boost quality. After years of discussion, but no action on the government's part, one major insurer declared it would no longer contract with hospitals that did not perform a minimum level of procedures. But without an objective source of quality benchmarks, the company had little basis for the number it chose.

Insurance companies have asked the government to develop an objective common knowledge base around quality issues and outcomes. This is a difficult challenge, but a necessary step in strengthening competition, improving quality, and reducing costs. The availability of a reliable, objective source of quality data would enable insurance companies to engage in more sophisticated negotiations with hospitals—for instance, to offer financial incentives for achieving certain quality benchmarks. The challenge is that the quality improvements paid for by one insurance company would benefit competing insurers that contract with the facility.

Using reform to drive integration of care

The Dutch healthcare system provides some incentives to encourage integrated care. For instance, insurance companies pay more to general practitioners who coordinate care for patients when they are diagnosed with diabetes, with the goal of avoiding hospitalization. But to succeed, the Netherlands must eliminate the remnants of its previous healthcare budgeting system, which separates primary and secondary care.

A greater focus on prevention also could help to improve health outcomes and reduce costs. Prevention has grown in importance along with the increased incidence of chronic diseases such as diabetes, but the issue is not addressed easily through the insurance system. There is little incentive for insurers to invest in preventive care in the short term, knowing that a competitor might reap the benefits down the line if the patient switches insurers. It may be more appropriate to address the issue of prevention via public health initiatives.

That said, in the US, there is a growing recognition on the part of health insurers that it is in everyone's best interests to address prevention. While an insurer may lose out on some investments in preventive care when policyholders leave, they also may reap returns on investments made by others, as members swap health plans.

An appropriate pace for change to occur

Optimists view the reformed Dutch system as halfway there, while pessimists see it as stuck in the middle, with incentives not fully working because many prices continue to be fixed by the government. Some important reforms have been delayed. For instance, specialization of hospitals is being postponed by individual hospitals because many prices are still fixed, and doctors want to retain whatever fixed pricing remains.

Session 5

Comparative Effectiveness: Change accelerator or barrier?

Background

A new science is emerging that focuses on how to assess and compare different medical treatments, programs and potentially, even healthcare systems. This movement toward comparative effectiveness is analogous to the emergence three decades ago of evidence-based medicine, which sought to leverage the best scientific evidence in making clinical decisions. Comparative effectiveness leverages an even broader base of data to produce what might be called evidence-based policy.

Policy experts see comparative effectiveness research as “a tool in the box” to bend the curve on healthcare cost. As one participant said: “The global recession has shattered the old assumption in healthcare policy that the only way to drive improvements in performance is through more investment. That world is over. The public no longer is willing to sign a blank check. They want to know what they get for what they pay.”

Case study: the British National Institute for Health and Clinical Excellence (NICE)

Since 1999, NICE has provided comparative effectiveness guidance to the National Health Service (NHS) of Great Britain. NICE follows four principles:

1. Clinically robust data based a systematic review of the evidence
2. Stakeholder inputs
3. Transparency so that whenever possible, the evidence used is in the public domain.
4. Independence based on work informed by clinicians, not politicians

Over the years, NICE has produced roughly 700 forms of guidance, and the number of programs has expanded to address a variety of areas, from the public health systems to recent innovations in medical technologies and diagnostics. In 2010, the agency began to produce quality standards which it expects high-performing institutions to meet; organizations that measure up will receive additional funding. In addition, recently NICE developed a search engine, NHS Evidence, to enable health professionals to mine the Internet to find reliable sources of information.

Today, NICE routinely assesses healthcare providers based on quality and efficiency. Now the agency is exploring a third metric that will focus on patient-reported outcomes. Combining all three metrics will enable NICE to develop a better understanding of how healthcare organizations are improving the quality of life for patients—the ultimate objective of the organization.

In determining the comparative effectiveness of a given intervention, NICE considers economic costs as well as social and scientific factors. In assessing cost-effectiveness, the agency focuses on incremental costs and benefits, expressed in terms of the quality-adjusted life year (QALY), defined as the improvement in quality of life resulting from a particular intervention multiplied by the number of years it adds to the patient's life. The agency is not allowed to consider the affordability or budgetary impact of treatments.

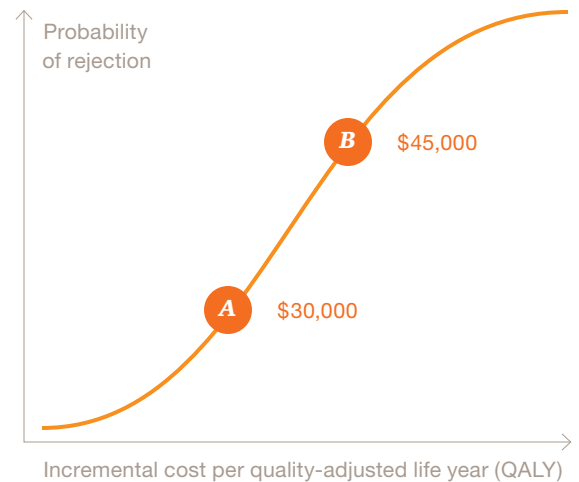
NICE also considers the social value of interventions, addressing questions such as whether to consider the severity of disease and whether special attention should be given to treatments for children, or to end-of-life interventions. To make those social value judgments, in 2002 NICE established the Citizens Council, which includes a broad range of representatives of the general public.

Several changes to NICE are on the horizon. Under the new administration, NICE will add social care to its areas of responsibility. As the field of personalized medicine advances, the agency also will be performing more assessments of new personalized therapeutics and companion diagnostics.

One open question is how NICE will perform in a new era of budget constraints. Thus far, NICE has operated in an environment in which the NHS budget has been increasing annually at a rate of roughly 7.5% in real terms. As budgets tighten and national resources shrink, how will this affect the agency's decisions about new treatments and technologies?

Figure 3

Cost Ineffectiveness



Source

National Institute for Health and Clinical Excellence

In a November 2010 Commonwealth Fund study, adults in 11 countries were asked how confident they were that they would receive the most effective treatments and drugs if they were seriously ill.² The UK ranked at the top of that list with 92% of respondents saying they were confident in the quality of care they would receive—a strong endorsement of NICE.

Can this model be implemented elsewhere? How?

The discussion centered on the following issues:

A perception that comparative effectiveness is about rationing care

For some people, NICE has been accused of rationing care or limiting choice. However, as one participant said: “The truth is every healthcare system in the world has to find matching desirable outcomes with pretty limited resources.” If people are uncomfortable with judgment, you can use this process to get their input into developing an evidence base.

Keeping up with the exploding amount of research

Already, volumes of medical research emerge daily, and there is a need for intermediaries to monitor the research and synthesize the results. NICE plays this role, but even NICE could get submerged under the deluge of data at some point.

The healthcare industry isn’t alone in dealing with information overload, but it’s more difficult to analyze healthcare data, which often is not transparent to buyers and is not reported in a standardized way. Greater transparency and the development of data reporting standards could make it easier for any healthcare organization to do its own data analysis.

For-profit companies may have a role in digesting research and determining comparative effectiveness, for example. This is already occurring to some extent. For instance, in 2008 Medco Health solutions, one of the largest pharmacy benefit managers in the US, launched a research partnership with the US Food and Drug Administration to evaluate the link between genetics and the efficacy of prescription drugs, to help them determine whether to include personalized medicines in their menu of benefits. However, consumers may still want verification by independent organizations such as NICE that medical tests and treatments are effective.

Comparative effectiveness by country

Would every country need its own NICE? More countries are considering or implementing their own independent organizations to evaluate comparative effectiveness, including Canada, Australia, Germany and France, among others. Rather than starting from scratch, some are leveraging data from NICE and from the US. This approach is particularly useful for lower-income countries with limited resources to conduct their own comparative effectiveness research. However, each country must decide for itself what it considers cost-effective. Treatments and technologies that may pass the test in the UK or Canada might be unaffordable for Mexico, Hungary or Poland. In addition, countries have different social values and priorities which should enter into the equation.

Using research to determine prices

In some cases, comparative effectiveness is altering how much government pay for treatments. In Great Britain, the new administration is moving forward with value-based pricing of pharmaceuticals and is seeking estimates of cost per quality from NICE to use in pricing negotiations. As one expert said: “You negotiate the price for the value you believe your product brings.”

Applying comparative effectiveness to traditional treatments

While comparative effectiveness is typically used to evaluate new treatments and procedures, it could yield even bigger rewards by evaluating existing ones. Noted one participant: “We are very conscious of the need for disinvestment. In terms of clinical disinvestment, yes, there are things that people should stop doing.” Another agreed, saying: “the current system needs to be more systematically evaluated to create space for innovation and to say, “Look, what we’re doing is rubbish in some areas.”

Clinical autonomy

When NICE was launched, there was great concern that physicians would resist the agency, fearing that it would erode their freedom to make clinical decisions. In fact, the overwhelming response from the medical community has been one of support, not resistance, because NICE relieves physicians of the burden of making difficult, real-time decisions for which they often they feel ill-equipped. Thousands of physicians have contributed their expertise to NICE on a voluntary basis, helping the agency to gain major credibility within the medical community. Said one participant: “It’s estimated that, for a general physician to keep up to date, he needs to be reading between 18 and 20 peer-reviewed articles every day of the week, including the weekends, including public holidays.”

Political support against private sector demands

The first decision made by NICE after its creation in 1999 was to determine that the flu medication Relenza did not pass the test of comparative effectiveness; the incremental benefits it delivered were not worth the incremental costs. Tony Blair, then the prime minister, took an enormous amount of criticism for the decision from the drug’s manufacturer but sided with NICE, saying he had created the organization to make such difficult decisions and would not overrule it. That support from the head of the government helped the agency to get off to a strong start.

Making comparative effectiveness mandatory, not advisory

Before NICE was launched, there was much discussion of whether it should simply offer advice or if the NHS should be required to implement the agency’s decisions. Ultimately, it was decided that implementation would be mandatory. This decision has been critical to the effectiveness of NICE, as advice only makes an impact when it is translated into action.

² Cathy Schoen, Robin Osborn, David Squires, Michelle M. Doty, Roz Pierson and Sandra Applebaum: “How Health Insurance Design Affects Access to Care and Costs, By Income, in 11 countries,” *Health Affairs*, 29, no.12 (2010): 2323-2334

Conclusion

As these case studies illustrate, it is possible to bend the cost curve, but it is not easy. However, it is perhaps the most exciting journey we will ever take: the opportunity to improve the health of our nations now and in the future. By reducing costs today, we can also reduce unnecessarily shifting more debt onto the next generation.

Each of these efforts may have a head start on the rest of the world, but the work is not over.

As Dr. Shetty continues to ratchet down the cost of heart surgery, NICE expands its effectiveness research into social care. While the Dutch pursue broadening the competitive playing field, the Australians add more online tools for mental health. And, Alzira prepares for tougher budgets in a post-recession world.

Through PwC's symposia series, *Bending the Cost Curve: Emerging International Best Practices*, we can probe and query, absorb and apply the lessons we learn here. By doing so, we hope participants will achieve what these systems have done and become the next showcase for change.

Roster of participants

2 February 2011 Roundtable

Dr. Christine Bennett

Former Chair of the National Health and Hospitals Reform Commission of Australia; Chief Medical Officer, Bupa Asia Pacific

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Bending the Cost Curve

2 February 2011

Agenda

The Ritz Carlton Hotel, Plaza Ballroom
1150 22nd Street, Washington, DC

7:30–8:00am ***Registration and Continental Breakfast***

8:00–8:15am ***Opening Remarks***

8:15–9:45am ***Session 1***
***Managing Rising Costs in a Fiscally Constrained World:
The Role of Public-Private Collaboration***

Introduction by **Sir Richard Feachem**, Executive Director, UCSF Global Health Sciences and Professor of Global Health, University of California San Francisco and University of California Berkeley

Case study: **The Valencia Concessional Model: A PPP example in Spain**. Comments by **Lady Neelam Sekhri Feachem**, CEO, Healthcare Redesign Group

9:45–11:15am ***Session 2***
The Power of Process and Downward Innovation

Introduction by **Dr. David Levy**, Global Leader, Healthcare, PwC

Case study: **Narayana Hrudayalaya Hospital of Bangalore, India**. Comments by **Dr. Julius Punnen**, Senior Consultant Cardiac Surgeon, Narayana Hrudayalaya Hospital

- 11:15–12:45pm **Session 3**
Redefining Primary Care and Wellness
- Introduction by **Dr. Christine Bennett**, Former Chair of the National Health and Hospitals Reform Commission of Australia; Chief Medical Officer of Bupa Asia Pacific
- Case study: **headspace: Australia’s Youth Mental Health Foundation**. Comments by **Prof. Ian Hickie**, Professor of Psychiatry, University of Sydney; Executive Director, Brain and Mind Research Institute
- 12:45–1:30pm **Networking lunch**
The Roosevelt Room
- 1:30–3:00pm **Session 4**
Healthcare Costs and Privatisation
- Introduction by **Ms. Marja Spaans-den Heijer**, Partner, Healthcare, PwC Netherlands
- Case study: **Adapting to an Evolving Regulatory Environment: The Dutch Healthcare Authority**. Comments by **Mr. Theo Langejan**, Chairman, NZa (Dutch Healthcare Authority)
- 3:00–4:30pm **Session 5**
Comparative Effectiveness: Change Accelerator or Barrier?
- Introduction by **The Rt. Hon. Alan Milburn**, Former Secretary of State for Health with the British Labour Party
- Case study: **Cost Effectiveness: Britain’s National Institute for Health and Clinical Excellence (NICE)**. Comments by **Sir Michael Rawlins**, Chairman of the National Institute of Health & Clinical Excellence (NICE)
- 4:30–5:00pm **Closing**

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McGill University

McGill University is one of Canada's best-known institutions of higher learning and one of the country's leading research-intensive universities. With students coming to McGill from about 150 countries, our student body is the most internationally diverse of any medical-doctoral university in Canada.

The oldest university in Montreal, McGill was founded in 1821 from a generous bequest by James McGill, a prominent Scottish merchant. Since that time, McGill has grown from a small college to a bustling university with two campuses, 11 faculties, some 300 programs of study, and more than 36,000 students. The University partners with four affiliated teaching hospitals to graduate over 1,000 health care professionals each year.



The Commonwealth Fund

The Commonwealth Fund, among the first private foundations started by a woman philanthropist—Anna M. Harkness—was established in 1918 with the broad charge to enhance the common good. The mission of The Commonwealth Fund is to promote a high performing health care system that achieves better access, improved quality, and greater efficiency, particularly for society's most vulnerable, including low-income people, the uninsured, minority Americans, young children, and elderly adults.

The Fund carries out this mandate by supporting independent research on health care issues and making grants to improve health care practice and policy. An international program in health policy is designed to stimulate innovative policies and practices in the United States and other industrialized countries.

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