



Seven reforms that address supply and demand in the health care market may help to curb ever-increasing spending.

What's working in health care reform

Jean P. Drouin, Viktor Hediger, Nicolaus Henke, Ludwig Kanzler, and Paolo De Santis

Runaway health care spending is hardly news; health care leaders have been alarmed for some time and are taking steps to control it. But it is hard to know which buttons to push or how a country's overall reform program will address the underlying drivers of the supply of and the demand for health care services.

We do not claim to know all the answers; much more research is needed on the efficacy of various reforms and the circumstances in which they work best. But we do believe that an approach attacking the problems where they lie—in the drivers of supply and demand—is the right next step for the health care system's leaders as they confront an alarming future.

McKinsey's Health Systems Interest Group, in collaboration with the McKinsey Global Institute, has surveyed health care reforms across the

globe. Together, we have developed a framework to help those who shape the system—policy makers, industry leaders, and stakeholders such as educators and patients—to understand both the kinds of reforms being tried and the ways they act on supply and demand in the health care market. The system's shapers can use this knowledge to develop a coherent reform program for a nation's health care system. The framework outlines seven domains of reform,¹ and all of them are meant to cut costs, which is the great health care challenge of the century.

¹ Diana Farrell, Nicolaus Henke, and Paul D. Mango, "Universal principles for health care reform," *Health International*, 2007 Number 6, pp. 12–21.

Reforming supply

Each of the first three sets of reforms below provides a way for leaders to adjust supply—the most direct way to influence the health care system. Yet while increasing or eliminating supply can be a powerful force for change, this sort of adjustment is among the hardest to reverse.

Promote efficient capacity

Health care systems should have sufficient capacity to provide the quantity and quality of health care that consumers want, at sustainable prices. Achieving adequate long-term capacity is an important policy objective. Most systems, however, do not directly plan the size of their workforce or their physical capacity. Rather, they enable or disable capacity indirectly, by creating incentives—some subtle (such as the education and conditions of the workforce), others less so (like regional plans for hospitals). As

a result, many health care systems have too few or too many doctors, nurses, and other health care workers. The developing world has the biggest shortfalls, while some European countries (and Egypt) consistently produce more health care workers than they will need.

Instead, the leaders of health care systems should move deliberately to strike the right balance not only in staff but also in physical resources (for instance, buildings and beds) and technology (such as drugs and medical equipment).

Staff. The number of well-trained health care workers—in particular, specialist physicians—is potentially the most important lever to get right, and the hardest. It takes more than a decade to train a specialist and almost as long to adjust capacity by creating or closing medical schools.



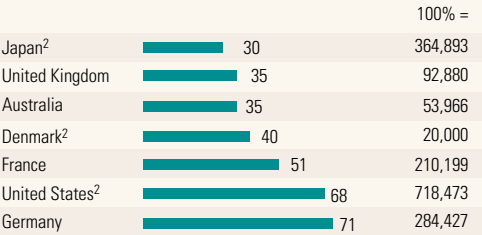
EXHIBIT I

Difference in numbers of specialists

Difference in density of clinicians between Japan and average of 9 other countries, %



Share of doctors who are accredited specialists,¹ 2006, %



¹Specialists accredited in a main specialty (excluding subspecialties, general medicine, and family medicine) by national board.

²2004 figures for Japan, 2005 figures for Denmark and United States.

Source: For Australia: Medical Labour Force Survey, 2003; for Denmark, Finland, Iceland, Norway, Sweden: *Physicians in the Nordic Countries 2006*, Nordic Medical Associations; for France: register of Ministry of Health (ADELI) managed by Directorate of Research, Studies, Assessment, and Statistics (DREES), 2005; for Germany: German Medical Association (Bundesärztekammer), 2006; for Japan: Japanese Ministry of Health, Labour and Welfare (MHLW), Japanese Board of Medical Specialties, 2004; for United Kingdom: National Health Service (NHS) Information Centre, 2006; for United States: *Physician Characteristics and Distribution in the US*, American Medical Association, 2004

Different systems approach training in remarkably different ways. The leaders of these systems must invest in research to understand their staffing needs and then design programs with clear rules that will promote their objectives.

The developing world has some of the worst shortages of skilled health care workers and managers, but specific kinds of specialists are also scarce in developed countries. Our research revealed one such gap

in Japan, where psychiatrists and anesthesiologists are woefully few in number (Exhibit 1).

In response, some countries have launched major initiatives. To confront a shortage of senior managers in India, for example, the Public Health Foundation of India (PHFI) is aiming to set up five Indian Institutes of Public Health to train, in large numbers, the men and women who will shape the health care system of the future.

EXHIBIT 2

Costs and lengths of stay vary

Cost per case across 4 similar hospitals in a region in United Kingdom (hospitals A through D)

Nonelective surgery		Nonelective medicine	
Admissions, thousands	Cost per case, £	Admissions, thousands	Cost per case, £
A 4.7	3,016	10.0	3,167
B 4.2	2,329	7.9	2,089
C 17.4	1,608	29.9	1,269
D 15.4	2,963	25.3	2,397

Variation in average length of stay (ALOS) for patients of doctors (A through R) in one department of an English teaching hospital, Oct 2005–Nov 2006

	ALOS, days	Number of admissions
A	2.8	40
B	3.2	144
C	3.4	66
D	4.1	80
E	4.3	138
F	4.4	81
G	4.4	70
H	4.4	25
I	4.5	101
J	4.6	96
K	5.3	80
L	5.5	74
M	5.7	131
N	6.0	65
O	6.2	116
P	6.5	37
Q	6.6	18
R	6.6	45

Source: National Health Service (NHS) Hospital Episode Statistics (HES), 2005–06; McKinsey analysis

Physical resources. The way physical assets are configured matters a lot, for only some configurations generate the minimum number of cases needed to run a service that is both excellent and economically viable. The National Health Service (NHS) in London, which has treated acute stroke at many hospitals, offers an example of what not to do. The odds of recovery improve greatly for

many victims of stroke if they receive thrombolytic drugs within the first six hours after an attack. Yet most London hospitals that have provided acute stroke services could not even offer a CT scan—a pre-requisite for beginning any treatment—in this time frame. To address the problem, the NHS is concentrating its acute stroke services in London in a small number of efficient, high-quality



units that can provide appropriate care at any time, day or night.

Technology. To adjust the technological capacity of a system, its leaders must monitor the development of new technologies to determine whether they meet the needs of the population it serves. The newest and most expensive device is not always the most appropriate one. Many systems, such as the National Institute for Clinical Excellence (NICE), in the United Kingdom, and Institute for Quality and Efficiency in Health Care (IQWiG), in Germany, are assessing their health technologies. Their recommendations, both positive and negative, often have a significant effect, and as the pace of technological change quickens their role will become even more important.

Optimize costs among providers

The expense of providing health care services varies substantially among countries. To highlight one of many remarkable differences, an average hospital stay costs €12,833 in the United States but only €3,671 in Germany.

Moreover, costs vary substantially within systems—for example, by as much as 60 percent for a standard hospital case at four regional English facilities with a similar mix of cases. In another system, some doctors in a single hospital department have adjusted length-of-stay figures that are twice those of their colleagues (Exhibit 2).

This variance suggests opportunity, and system shapers are considering a variety of ways to capture it. These include changing the incentives (as in England, which is setting standard national tariffs for treatments), introducing competition among providers (in England and Germany), and inviting private hospital groups to take over public hospitals (in Germany). Other health care systems are introducing more efficient processes within and across provision systems, as well as professionalizing procurement, though with varying degrees of success. Meanwhile, hospital chains in countries such as Germany, India, South Africa, and the United States are working on

revolutionary new methods to reach the next level of productivity.

Ensure quality among suppliers

Because consumer demand for health care often does not reflect a true understanding of the quality of the services offered, most countries have safeguards to ensure minimum standards. Like costs, quality varies significantly within and across hospitals, regions, and countries. Consider the example of two common procedures performed at a regional peer group of hospitals with a very similar mix of cases. The worst performers have readmission rates three or four times as high as the best. These differences in quality do not reflect differences in costs—for instance, there is no correlation whatever between regional diabetes outcomes and spending.

The single most important step the shapers of health care systems are considering to ensure the quality of their services is the creation of better data for patients and doctors alike. Systems such as the NHS in the United Kingdom, as well as the Veterans Health Administration and Kaiser Permanente in the United States, are spending huge sums on ambitious new IT programs. We believe that better information will be crucial to define and measure health care spending. It will show, perhaps for the first time, what investments in health care actually buy.

At the national level, better information is also helping to set policy

priorities. Bahrain, for example, had very high cancer mortality rates in 2002—for some common cancers, twice those of Western countries. It introduced a program of coordinated interventions along the whole continuum of care, including educating patients and screening them to improve early detection, as well as better treatment and follow-up care. The results have been impressive. More to the point, Bahrain has invested in the IT needed for a detailed analysis of its performance (Exhibit 3), since to create actionable opportunities, the best health systems break down performance data for each site, service line, and even individual doctor.

Better information is important, but more is needed: changing the behavior of clinicians and helping them to make the best decisions about care is essential too. Consider the success that Norway and the Netherlands have had in encouraging doctors to change the way they behave: as a result, these two countries have largely controlled infections acquired in hospitals. Yet the United Kingdom and Canada struggle to achieve the same degree of cultural change.

Reforming demand

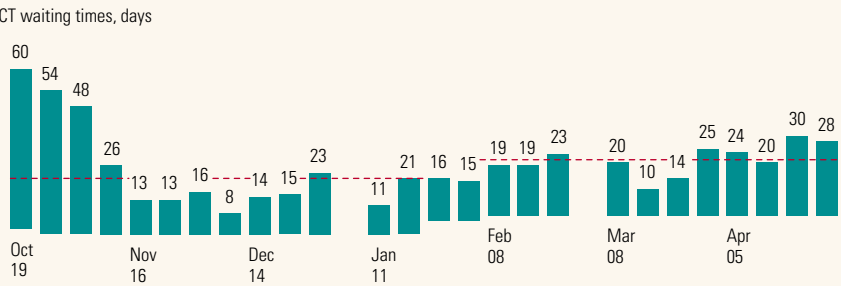
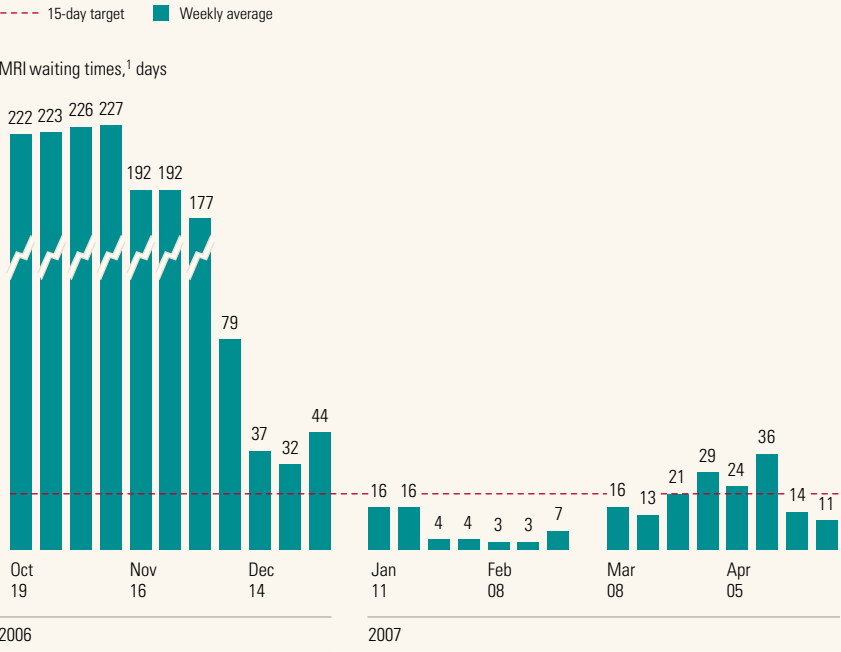
The next three domains involve ways for leaders to influence demand.

Prevent illness and injury

Efforts to promote health and to reduce the burden of disease and injury on health care systems can not only cut demand for medical services

EXHIBIT 3

Bahrain's success in cutting radiology waiting times



¹Data include all brain or spine MRIs, accounting for 80% by volume of all MRI scans at this hospital.
Source: Salmaniya Medical Complex; McKinsey analysis

but also produce better outcomes at lower cost. Leaders of systems can take many steps to prevent illness and injury: promoting better hygiene, providing immunization programs, and working with employers to reduce absenteeism and address mental-health issues, to name just a few. The power of prevention is its almost

direct link to social norms, a key driver of demand.

Countries have achieved remarkable things in prevention, particularly through higher levels of hygiene and immunization. Egypt, for example, has set up 27 regional-health authorities and launched immunization

campaigns (against measles, hepatitis B, influenza, DPT,² and other diseases) for all its people. In this way, it has increased its life expectancy to 71 years, from 45, within five decades.

Some system shapers, however, believe that the public-health function in their countries isn't sufficiently professional. The 1 to 3 percent of health care budgets devoted to public-health measures such as disease prevention may be these systems' best-spent money, as many believe. Nonetheless, few systems have appropriate ways of determining how effectively they spend their budgets or truly professional management structures. As a result, many systems may underinvest in the prevention of disease—and, as a corollary, overinvest in its treatment.

Leading systems in the developed world are devoting more managerial attention to the problem and have succeeded in professionalizing the metrics and improving the performance of the public-health function. Prevention can be one of the most powerful levers in developing countries as well. In a transformative project to prevent maternal mortality in Mauritania, a McKinsey team observed a decrease in the number of deaths—to 103 a year, from an indexed rate of 747—after the introduction of a basic package of preventive-care measures for mothers in the year before and after they gave birth.

Promote value-conscious consumption

Any health care system benefits when consumers—either patients or payors, who are consumers at the wholesale level—make rational decisions about how best to use the care available and the choice of providers. The resulting improvements in quality, and especially efficiency, can be substantial. But consumers will make more rational choices only if they have better information. Since 2003, the people of Norway, for example, have been able to choose the hospital where they receive treatment, and to help them make the choice they have access to online data on performance and waiting times. This system is making demand more predictable and raising standards.

To promote value-conscious consumption, many health systems are altering the incentives for consumers. In Singapore, a patient in a semiprivate room in a hospital is partially reimbursed, while a patient in a private room, in the same facility, must pay the full cost not only of the stay but also of medical care. And admission to the emergency room requires about a \$60 copayment regardless of reason for admission, discouraging use by the well and nearly well. As a result, Singapore's risk-adjusted emergency room usage is less than half that of London's.

Promote sustainable funding mechanisms

Many governments are reconsidering how to finance health care. Some systems put most of their hope in

² Diphtheria, pertussis (whooping cough), and tetanus.

copayments, which not only raise income but also deter consumers, thus reducing demand. Yet in some countries, such as Japan and Germany, copayments have not been as effective. Tinkering with other underlying demand drivers may prove to be more powerful.

Singapore again provides an interesting example. Fifty years ago, more than half of its health system funding came from taxes, and the rest from the out-of-pocket expenditures of patients. Today, only 25 percent of the funding comes from taxes or the government, the remainder from a web of individual health savings accounts, employers, and insurance. This approach may be possible only in a system that, as a matter of basic philosophy, regards health as the citizen's personal responsibility. But Singapore's approach to funding may be one reason the country spends less than 4 percent of its GDP on health care yet has a life expectancy of 77 years, similar to that of the United States.

Many countries, instead of choosing this self-reliant route, have tried to

change funding opaquely, by taking items off the list of reimbursable services (Exhibit 4). The debate between the two approaches, exemplified by Singapore and Japan, respectively, will probably come to the fore, especially as technology moves past the care and cure of disease to the more speculative realm of improving basic bodily functions.

Connecting supply and demand

The final domain of health care reform is establishing effective links between supply and demand. In typical markets, price and regulation are two of the most important factors that mediate this relationship. Price is not only the critical information that helps to inform the behavior of buyers but also affects suppliers in the form of profits and margins. Regulation defines the rules of the game, providing guidelines for competition and quality.

In the latter half of the 20th century, most health systems in advanced countries took price out of the equation in the name of equity. While this had the desired effect of making

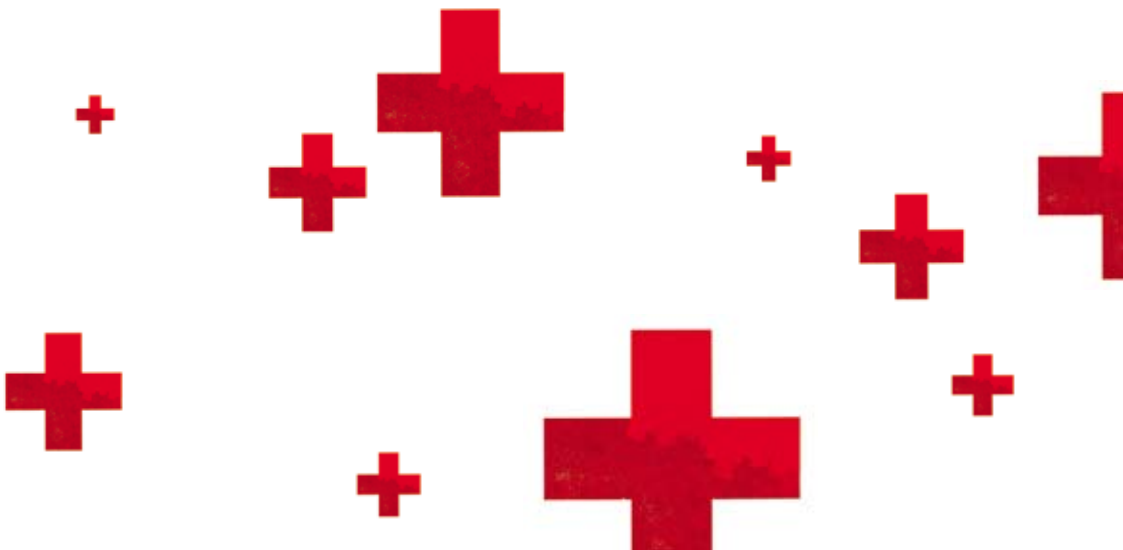
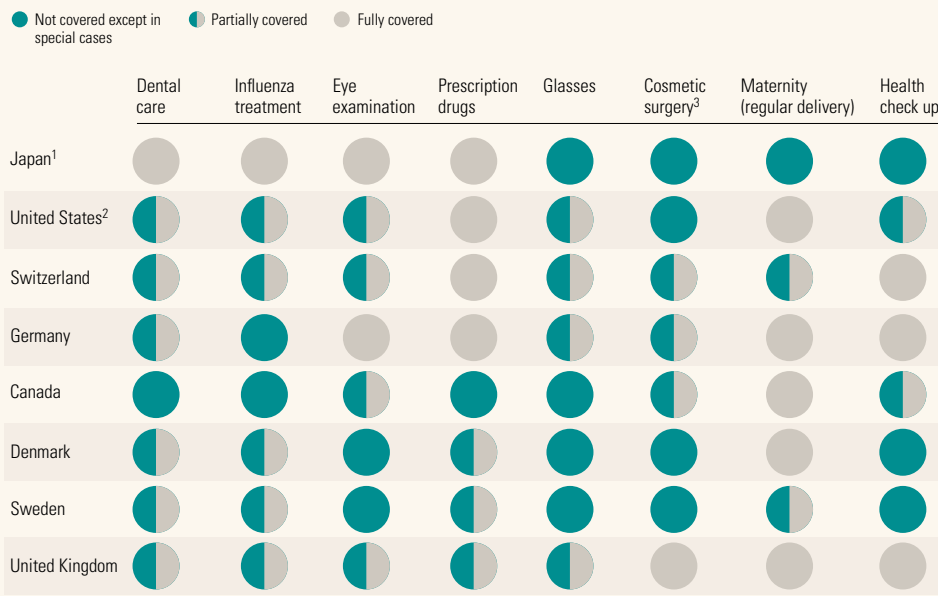


EXHIBIT 4

The stealth approach



¹Maternity in Japan is not covered by the country's National Health Insurance (NHI) system, however, local governments pay lump sum (which may or may not cover cost of delivery) per birth.

²Varies widely by payor and health plan.

³For physiologically distressed and reconstruction cases.

Source: Reimbursement lists for countries shown; McKinsey analysis

care available to more people, it also made these systems much less transparent. In a world of block contracts and direct grants, providers failed to develop basic managerial tools and disciplines—tools that in other industries are considered necessary for survival. One consequence is that hospitals in many countries still cannot produce an itemized bill for individual patients. The opaque and inefficient accounting systems these institutions use cannot link costs to individual activities. Over the past 20 years, health systems have begun to remedy these

problems. More than 40 countries adopted case-mix-based funding (for instance, diagnosis-related groups). Systems are actively pursuing ways to put a price on community care, mental health, and integrated care. Similarly, several payors are introducing higher payments for quality.

Over the same period, a second trend has emerged: moving accountability for decisions closer to the front line. On the provider side, hospitals are creating service lines—in other words, independent business units

with profit-and-loss accountability. On the payor side, several governments are pushing accountability for the purchasing of care to regional and local bodies, such as primary-care trusts in England.

We hope that this framework and the accompanying exhibits will function in two ways—as a checklist to review initiatives for health care

reform and as a tool to evaluate how well these reforms harness the power of the basic forces that drive supply and demand. More evidence-based research on specific reforms and groups of reforms is needed, along with a deeper understanding of how these system-level activities can best be used to influence the system's players and to raise the quality of leadership, build new capabilities, and manage performance. +

Jean Drouin is a principal and **Nicolaus Henke** is a director in McKinsey's London office; **Viktor Hediger** is a principal in the Dubai office; **Ludwig Kanzler** is an associate principal in the Tokyo office; and **Paolo De Santis** is a principal in the Rome office.