

Transforming Singapore Health Care: Public-Private Partnership[†]

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Abstract

Prudent health care policies that encourage public-private participation in health care financing and provisioning have conferred on Singapore the advantage of flexible response as it faces the potentially conflicting challenges of becoming a regional medical hub attracting foreign patients and ensuring domestic access to affordable health care. Both the external and internal health care markets are two sides of the same coin, the competition to be decided on price and quality. For effective regulation, a tripartite model, involving not just the government and providers but empowered consumers, is needed. Government should distance itself from the provider role while providers should compete – and cooperate – to create higher-value health care systems than what others can offer. Health care policies should be better informed by health policy research.

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Introduction

Should health care services be publicly or privately funded? And should these services be publicly or privately provided? The answers to these questions largely depend on whether one considers health care a public or a private good.

Most people would consider the provision of street lighting and national security to be a public sector responsibility, and luxury items like cars and annual holidays abroad to be private consumption goods best left to the individual to purchase and the private sector to provide.

When it comes to health care, however, the issues become highly contentious and the answers are not as clear-cut. While consulting a doctor is a very personal matter, the thought of denying a fellow human being access to the same level of health care because of his or her inability to pay, stirs deep emotions. Historically, the pendulum in the health care debate has swung back and forth between the state and the private sector.

Definitions

In this paper, the term “public sector” refers to that part

of the economy concerned with providing basic government services while the “private sector” is that part of the economy not controlled by the government. The latter could be “for-profit”, or “not-for-profit” in nature.

The term “public-private partnership” in health care finance refers to the situation where the government mobilises private sector sources of funds to finance health care services. Correspondingly, public-private partnership in health services provision entails government encouragement of private sector participation in the delivery of public services. The possible combinations of public-private mix in the health sector are shown in Figure 1.

International Experience

The key questions surrounding health care systems around the world are: (a) how to raise revenues to pay for health care; (b) how to pool risks and resources; and (c) how to organise and deliver health care in the most efficient and cost-effective manner. Whether the strategies adopted rely on public sources like taxes and social insurance, or private sources like private insurance and out-of-pocket payment,

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		Provision	
		Public	Private
Finance	Public	Publicly financed Publicly provided	Publicly financed Privately provided
	Private	Privately financed Publicly provided	Privately financed Privately provided

Fig. 1. Public-private mix in health care provision and financing.

will have a profound impact on health care costs, quality, and access.

In making the choice, technical efficiency is an important, but not the only consideration. Most health care systems in western industrialised countries assume a high degree of responsibility for personal health care because they are driven by values which lean heavily towards notions of equity, fairness and solidarity. With the notable exception of the United States, all the Organisation for Economic Co-operation and Development (OECD) countries (including Japan and South Korea) have opted for publicly financed health care systems that provide universal coverage.

The United States relies heavily on the private sector to finance health care, with the result that in 2002, 15.8% of its population (or 42.3 million people) were not covered by health insurance of any form.¹ The Europeans and Canadians (and indeed many Americans themselves) consider this to be highly inequitable. At the same time, they are saddled with runaway health care costs from which they are struggling to break free. The facts on the ground are often different from the official rhetoric.

Thus, although the British in theory enjoy free health care under the National Health Service, 10% of the population have purchased private health insurance, with one-fifth of all elective surgery being performed in the private sector. Likewise, although New Zealanders may enjoy free health care, one-third of the population have private health insurance, with one-fourth of all surgery being performed in private hospitals.² In Canada, where the single-tier health care system is mandated by law, increasing numbers who are frustrated with the growing waiting lists for surgery simply cross the border to the United States to buy more responsive, private health care.

In fact, all the welfare states have, without exception, found it necessary to impose arbitrary limits on health care spending and to ration access to expensive medical technology — to the extent of compromising on health care quality.

In recent years, the trend in both the developed and developing worlds has been towards greater private sector involvement in health care provision and financing. Reasons

for this include insufficient government resources and poor performance on the part of the public sector. State-run institutions are notoriously bureaucratic. There is a growing realisation that involving the private sector in health services provision could lead to improved systems efficiency.

Even in Europe, the sustainability of health care systems founded on egalitarian welfarism is increasingly being challenged as growth in demand outstrips supply.³ The debate is no longer about “who should pay?” or “who should provide?” but “who can do the job more efficiently?”.

Singapore's Experience

Health Care Finance

Singapore's experience exemplifies an evolving public-private partnership in health care financing and provision. In the 1980s, the Singapore government reexamined from first principles the role of the state in health care financing and provision, and concluded that a British-style National Health Service was neither a viable nor a sustainable option. It decided that while the government would continue to subsidise health care (along with other important social areas like housing and education) to bring prices down to an affordable level, the people would have to share in the costs of the services they consume.⁴

The “3M” system — Medisave (1984), Medishield (1990) and Medifund (1993) — which forms the centrepiece of Singapore's health care financing system, was therefore premised on the philosophy of shared responsibility, and the economic principle that health care services should not be supplied freely on demand without reference to price. In persuading the people to accept this hard-nosed policy, the government reasoned that the question “who pays?” was not the right question to ask, for “whether it is the government, Medisave, employers, or insurance, it is ultimately Singaporeans themselves who must bear the burden” — since insurance premiums are ultimately paid by the people, employee medical benefits form part of wage costs, and taxes are paid by taxpayers.

Over the years, the demand for health care has increased in tandem with the key drivers of health care costs, such as the rapid ageing of the population, advancing medical technology resulting in the increased range and number of possible interventions, and rising public expectations. Singapore's innovative 3M system of health care financing has proven to be very effective in mobilising private financial resources. Medisave, the state-run medical savings accounts, which is compulsory for the working population, today stands at a staggering S\$30 billion, an amount that can underwrite Singapore's total health care expenditure for the next 5 years.

A most remarkable achievement has been the gradual

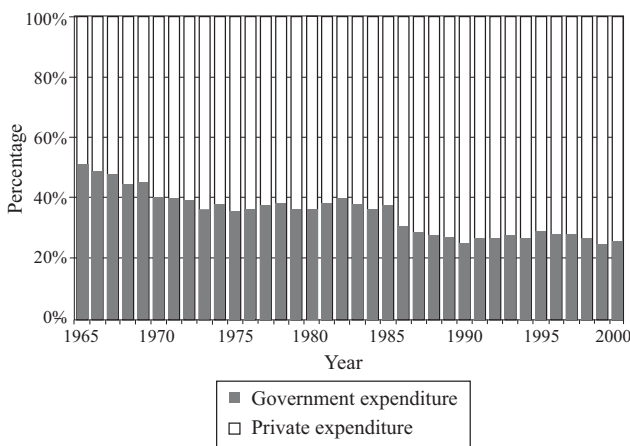


Fig. 2. Public versus private health financing, Singapore (1965-2000).

shift of the financial burden from the government to the private sector (Fig. 2).⁵ Since access to needed care is explicitly guaranteed for the poor,⁶ and the state-run Medishield insurance scheme protects against financial ruin from catastrophic illness, the system is on the whole no less humane than a state-funded one.

Health Care Provision

Health care provision comprises a mix of 8 public hospitals and 5 specialty centres which together account for 80% of inpatient beds, with 13 private hospitals accounting for the remaining 20%. Primary health care is easily accessible through an extensive and convenient network of private general practitioners (80%) and public outpatient polyclinics (20%). In addition, an estimated 12% of daily outpatient attendances are by traditional Chinese practitioners in the private sector.

The successful corporatisation of Singapore's health care institutions between 1985 and 2002 has resulted in better efficiency and improved service levels. Market mechanisms and structures have replaced old bureaucratic ones. Presumably, better and more informed decisions are being made at the local level, compared to central planning by the Ministry of Health (MOH).

Patient responsiveness today is a far cry from the overcrowded wards and specialist outpatient clinics of yesteryear. Patient satisfaction is reportedly high (85%); average waiting time for elective surgery is apparently a mere 2 weeks; and the average length of stay in a public hospital is 5 days. With first-world standards of health attainment (an average life expectancy of 78.4 years and an infant mortality rate of 2.2 per 1000⁷) at an affordable 3% to 4% of GDP for the last 3 decades, Singaporeans appear to be getting good value for their money.

Singapore Health Care at the Crossroads

Looking ahead, a number of challenges place Singapore's health care system squarely at the crossroads. These include (a) the need for cost containment on the domestic front; (b) Singapore's push to become a regional hub of medical excellence; and (c) the ongoing quest for quality and patient safety.

After years of continuous growth averaging 8.0% between 1965 and 2000, the Singapore economy began to flounder during the 1997 regional financial crisis and the subsequent economic slowdown in 2003 associated with the SARS outbreak. Although it has since bounced back (8% to 9% projected growth for 2004), Singapore's maturing economy faces tough times ahead, including the effects of globalisation and increased competition from China as the emerging economic powerhouse. The government is committed to restructuring the Singapore economy and some recommendations of the Economic Review Committee (2002) have implications for the health sector such as (a) the reduction of the Central Provident Fund (CPF) contribution rate (thus affecting the Medisave contribution rate) and (b) the identification of the health sector as an important sector to target economic growth – in other words, to further commercialise medicine and turn it into a money spinner for the Singapore economy.

Challenge of Cost Containment

In theory, rising health care costs should not pose a problem if the rate of increase is matched by rising national income, just as the legendary Milo of Crotona grew stronger each day by lifting his calf every day — as the calf grew, so did his muscles! Unfortunately, in Singapore's case the calf is growing faster than our ability to carry it. Health care expenditure cannot remain at 3% of GDP for long. For one thing, as the economy matures and GDP growth inevitably slows, the masking effect of an expanding GDP denominator will disappear. Another factor is the rapidly ageing population, now constituting a mere 7.7%, but projected to increase to 14% in 2010 and 25% in 2030. The 3M formula was not designed to take into account the long-term care needs of the elderly. Advancing medical technology in the era of genomic medicine will add to the mounting cost pressures.

New schemes like Eldercare and Elderfund have been added. The government has acknowledged that the key parameters for Medishield (since 1990) such as premiums, deductibles and benefits have not been sufficiently updated to reflect the increased cost of hospitalisation. Hence, a major revamp is underway to fine-tune Medishield and to broaden its risk pool.

However, a more fundamental weakness of Singapore's cost containment strategy that has not been adequately

addressed is its almost exclusive focus on the demand side. The 3M system was explicitly designed to curb overconsumption and to counter the “moral hazard” associated with fee-for-service, third-party reimbursement. The result has been the successful moderation of the government’s share of total expenditure, but not private spending. It can be observed that total health care spending has in fact risen exponentially, despite the 3M system being in place (Fig. 3). The focus has been on how to pay for health care, not how to purchase health care wisely.

It is pertinent to point out that every dollar spent on health care is a dollar earned by health care providers. Hence, there is inherently no incentive for health care providers to want to contain costs. Indeed, providers could be expected to exhibit entrepreneurial behaviour.

Casemix was introduced in 1999 as a cost containment measure to check supply-side moral hazard. But alas, since $E = P \times Q$ (where $E =$ expenditure, $P =$ price and $Q =$ quantity) controlling price (P) alone (which is what reimbursement based on DRG attempts to do) is not going to curb the quantity (Q) of services supplied. There is also no evidence that the splitting of Singapore’s health care institutions into 2 competing clusters has resulted in competition of the healthy kind that would justify the increased overheads of having 2 clusters, or that Singapore’s doctors are rendering health care at the economically optimal point, where the marginal benefits to patients would justify the marginal costs of treatment.

Challenge of Becoming a Regional Medical Hub

The fact that Singapore’s major private sector health care players are listed on the Singapore Exchange reflects the government’s favourable disposition towards the commercialisation of health care services. The government has in recent years also allocated billions of dollars to

attract foreign pharmaceutical and biotechnology companies to Singapore, including multinationals like Schering-Plough, GlaxoSmithKline, Merck, Sharp & Dohme, Aventis and Pfizer. Realising that Singapore doctors enjoy a good reputation, as attested by the 200,000 foreign patients who came from the surrounding region in 2003,⁸ it wants to turn Singapore into the premier medical hub in the region.

The Economic Review Committee, charged with making recommendations to improve Singapore’s competitiveness, has set an ambitious target of one million foreign patients a year by 2010, which would bring in an estimated \$3 billion annually and create 13,000 jobs.⁹ In 2004, the Economic Development Board, Singapore Tourism Board (STB) and International Enterprise Singapore (IE) announced the launch of Singapore Medicine, a multi-agency government initiative aimed at developing Singapore into one of Asia’s leading destinations for health care services.

Who should drive the regional push: the public or private sector? As with health care financing, focusing on “who?” is to ask the wrong question. To use Deng Xiaoping’s metaphor, what matters is not the colour or breed of the cat, but its ability to achieve results.

The challenge is not only to achieve the set targets, but to do so in a manner that enhances Singapore’s standing in the international arena and its relations with its neighbours. The last thing we want is to become a high-priced medical “tourist trap” founded on activity-based, rather than evidence-based medicine. This means a focus on the basics — ethical, cost-effective medical practice, with emphasis on quality and patient safety.

This leads us to the third challenge, which has implications for both the domestic and regional/international fronts.

Challenge of Quality and Patient Safety

There is growing concern worldwide that the health care industry is plagued with unnecessary and inappropriate care, even replete with medical errors. The Institute of Medicine’s 1999 report, “To Err is Human”, has put the issue of patient safety and quality firmly on the public agenda. The 2001 sequel, “Crossing the Quality Chasm”, has described the wide gulf that exists between what is and what should be in terms of quality health care.^{10,11}

How does medical care in Singapore measure up in terms of safety, effectiveness, patient-centeredness, timely care, efficiency and equity? To safeguard patient safety and ensure quality care, it is essential that these unknowns about our health care processes and outcomes are measured — for what we do not measure we cannot manage.

Singapore’s journey in quality and patient safety has been discussed elsewhere and will not be repeated here.¹²

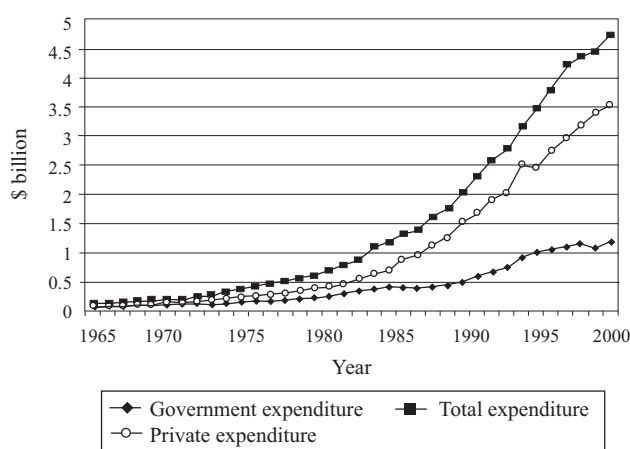


Fig. 3. Trends in national health expenditure, Singapore (1965 to 2000).⁴

One thing is clear, however: while professional self-regulation is important, it is insufficient. Regulatory structures external to the doctor-patient relationship are needed to protect the public interest and to align provider behaviour with desired goals. However, government regulation is also of limited effectiveness, for the government, too, faces the same problem of information asymmetry as the patient — given the large grey zone of clinical judgment and the delicate nature of the doctor-patient relationship, which precludes over-intrusive monitoring. What is needed is a new paradigm of health care regulation involving the participation of empowered consumers, more of which will be described later (Fig. 4).

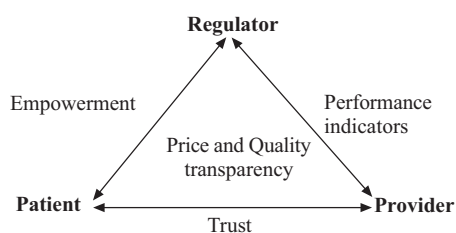


Fig. 4. Tripartite regulatory framework.

The Way Forward

The three challenges highlighted above — cost containment, developing a medical hub and ensuring quality and patient safety — are interrelated. A focus on costs without a corresponding focus on quality and patient safety is meaningless. Care that is cheap but of poor quality is surely not what Singaporeans want or deserve. Neither will a reputation for expensive or inappropriate treatment propel us towards our goal as a medical hub.

Both cost containment and quality of care are critical factors to Singapore's success as a regional medical hub. The international market competition, as with the domestic market competition, will ultimately be decided on the basis of both price and quality. A first step towards achieving all of these goals is to create the right conditions for (a) competition, (b) consumer choice, and (c) provider cooperation.

Competition

The literature on the effects of hospital competition in the US reveals that competition has been beneficial, lowering cost and increasing quality. Market competition is conducive to innovation and continuous improvement. It provides a more appropriate equilibrium of prices, technology, and capacity than would be possible by central planning. Furthermore, studies have shown that private delivery of

health care services has efficiency advantages over public delivery.

Still, whether private hospitals are more efficient than public hospitals is beside the point; what is important for market competition to work is that there is a level playing field for both public and private providers. Such a competitive model provides strong incentives for both technical and allocative efficiency. Those providers (public or private) unable to compete in terms of price and quality of their services should bow out and let others step in. The government's role would be to monitor and enforce contractual arrangements. It should provide oversight, not micro-manage, and should intervene only when there is market failure.

It is telling that the imperative for cost control and increased efficiency has driven even the welfare states of Europe to introduce competition in their health care systems. In tax-based systems (e.g., the UK), this has meant the establishment of "internal market" mechanisms, enforcing a split between purchasers and providers. The evidence from Scandinavian countries shows that competition and a split between providers and purchasers improve productivity, access and quality.¹³

Singapore's health care environment is presently competitive in form but not in substance. Despite restructuring, the Singapore government still multi-hats as regulator, policymaker, asset owner, and major purchaser and provider of services, remaining effectively in control of the 2 health care clusters. This makes arms-length regulation difficult. The inter-cluster competition is somewhat artificial and may even be counterproductive. The government should further distance itself from the public provider role and confine itself to being a policy setter and unbiased regulator, applying a consistent approach to all service providers. Public sector providers should be given greater exposure to market forces, including having to compete with the private sector for a share of state-subsidised patients.

Consumer Choice

Singapore's regulatory framework should not merely consist of 2 parties, namely the regulator (MOH) and the regulated (public and private providers). It should ideally be tripartite, in which empowered and well-informed consumers play their rightful role in selecting health care providers on the basis of price and quality of care provided (Fig. 4). Information asymmetry would not be an insurmountable barrier once the full power of information technology plus the role of the media is brought to bear.

The government's role should be to ensure transparency of key performance measures across the system so that consumers will be well informed and able to make sound

decisions. The publication of selected prices of certain procedures on the Ministry of Health website in 2004 has already led to some dramatic price reductions. Once government websites start publishing reliable and valid provider data on quality, safety and health outcomes in addition to pricing, there will be a major shift in the balance of power, resulting in a more stable equilibrium of provider accountability. Providers would be motivated to improve responsiveness to consumer preferences, and consumers would be empowered to choose freely between providers, both public and private, on the basis of cost, quality and other desirable attributes.

Cooperation

The twin notions of competition and cooperation among providers need not be contradictory. Providers already know there is advantage to be gained by cooperation (which was what “clustering” of public sector hospitals was supposed to do, except that it would have worked better if the cooperation had been spontaneous rather than forced).

“Coopetition”, or cooperation amidst competition, should be the watchword as Singapore strives to become a regional medical hub. Ultimately, Singapore’s health care institutions must compete successfully with the “competition out there” on the basis of clinical quality and price, in addition to other desirable service characteristics such as “one-stop, seamless care”. For this to happen, Singapore providers must first get their internal act together. Only by cooperating can they leverage on the respective strengths of the public and private sectors, and can they hope to innovate and create higher-value health systems than what others offer.

The Electronic Medical Records Exchange (EMRX) is a fine example of inter-cluster cooperation. In addition, Singapore’s first Cyclotron (at a shared cost of \$5.5 million) to support the operation of positron emission tomography scanners is a good example of cooperation between the public (SingHealth) and private (AsiaMedic and Medi-Rad Associates, a subsidiary of Parkway Holdings) sectors, contributing to the common goal of enhancing Singapore’s standing as a hub of medical excellence.

Continuous dialogue is needed to build trust and to evolve a common strategic vision. Just as cooperating with competitors in the local market brings mutual advantages, avenues for strategic alliances with external partners or competitors to achieve win-win situations should also be explored.

Conclusions

Strength: Public-Private Partnership Foundations Already in Place

Prudent policies involving public-private partnerships in

both health care provision and health care finance have conferred on Singapore a distinct advantage over other nations facing similar challenges of diminishing resources in the face of increasing demands: It is far easier to set priorities when patients are conditioned to cost-sharing rather than free health care, and when the range of policy options available is broadened by a healthy mix of public and private providers.

Weakness: Insufficient Evidence Base for Policy Making

A key weakness of Singapore’s health care system is its lack of a culture of rigorous and transparent evaluation. For example, no major effort has been undertaken to gather relevant data in a systematic manner over time to assess the full impact of hospital corporatisation. Neither has the 3M system been subject to critical analysis with all the relevant data at disposal. Likewise, to be the market leader in health care provision in the region requires in-depth knowledge and an understanding of the nature and behaviour of cross-border trade in health care services, the cost and quality performance of self versus the competition, and the health-seeking behaviour of local and regional consumers.

Formulating health policies without the benefit of health policy research is like flying an expensive passenger aircraft without instruments. Given that Singapore spends \$5 billion on health care annually, and is set to invest millions more to build the base to attract the regional health care clientele, it would seem penny wise, pound foolish not to invest a tiny fraction of that to find out what works and what doesn’t.

Going Forward

If Singapore’s health care system is to be transformed into a modern and responsive 21st-century health care system, it needs to be decidedly consumer-focused. In particular, it needs to be competitive in terms of price and quality because that is what consumers everywhere expressly look for. A tripartite model of health care regulation, involving the active participation of empowered consumers, is Singapore’s best hope for containing costs and ensuring quality of care.

Getting the internal (i.e., domestic health care) and external (i.e., regional medical hub) acts together are two sides of the same coin, involving the same principles of competition, consumer focus and cooperation. “Who (public or private) does what” is not as important as “what gets the job done”.

Recommendations

The devil is (as always) in the details, but it is proposed that the following broad principles should form the basis of strategic planning and structural reform aimed at getting our internal and external acts together:

1. To contain health care costs, both sides of the equation must be simultaneously addressed: supply side control mechanisms in addition to demand side constraints.
2. To achieve greater efficiency, public sector provisioning should be exposed more to market forces.
3. To grow as a regional medical hub, a coordinated effort involving greater public-private, private-private, and public-public partnerships is necessary.
4. To ensure a level playing field for market competition to take place, the government should further distance itself from the public provider role and confine itself to being a policy setter and unbiased regulator.
5. To empower consumers to choose providers on the basis of price and quality, the government should actively pursue a policy of transparency of information on the price and quality of care of providers.
6. To balance the need to grow commercial medicine on the one hand, and keep domestic health care costs affordable on the other, health policy makers need to pay attention to the alignment of incentives with goals, and anticipate unintended side effects.
7. To improve health policy-making, the evidence base should be strengthened considerably. Health policy needs to be informed by health policy research.

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