What Determines the Goals of Healthcare Financing Policies in Singapore?

> We owe it to ourselves individually to keep fit and healthy. *To strengthen the sense of personal responsibility, the health care system must give the individual the maximum incentive to stay healthy, to save for his medical expenses, and to resist the temptation to use medical services he does not really need. The patient must pay directly for at least part of the cost of the health services he uses. He should not feel entitled to unlimited services at the expense of a third party, be it the State, his employer or an insurance company* (emphasis from original).
>
> – White Paper on Affordable Health Care[1]

> *I believe that the history of public health might well be written as a record of successive redefinings of the unacceptable.*
>
> – Sir Geoffrey Vickers[2]

Introduction

In early 2013, Singapore's Finance and Health Ministers announced that the healthcare financing system was being reviewed with a view to having the government shoulder a larger share of healthcare costs. Specifically, the government's share of national health expenditure would increase from the current one third to 40 percent, or more, depending on factors such as demographics and the government's ability to contain costs and to target subsidies.[3] As part of this review, the Health Ministry would also study how insurance could be used to finance a greater portion of healthcare costs. To provide perspective, MediShield, the basic catastrophic insurance scheme administered by the government, had covered only one to two percent of the national healthcare expenditure between 2002 and 2011.

The two main tasks of this case is for readers to examine the factors that drive healthcare financing policies in Singapore, and to recommend how the healthcare financing system that existed at the time of the Ministers' announcements could have been improved in a politically feasible and fiscally sustainable manner.

The remainder of this case comprises four sections and an epilogue. The next section provides a background of the healthcare financing system as it was when the government announced the review.

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[1] Ministry of Health, "Affordable Health Care: A white paper," October 1993, http://www.moh.gov.sg/content/dam/moh_web/Publications/Reports/1993/Affordable_Health_Care.pdf (accessed on 22 June 2014).

[2] Sir Geoffrey Vickers, "What Sets the Goals of Public Health?," *The Lancet* 271(7021):600.

[3] Ministry of Finance, "Budget Speech 2013," updated 25 February 2013, <http://www.singaporebudget.gov.sg/budget_2013/speech_toc/download/FY2013_Budget_Statement.pdf> (accessed 30 April 2013); Ministry of Health, "Better Health for All (Part 2 of 2)," updated 13 March 2013, <http://www.moh.gov.sg/content/moh_web/home/pressRoom/speeches_d/2013/MOH2013COSMinSpeechBetterHealthforAllPart2of2.html> (accessed 30 April 2013).

This case was written by Alisha Gill under the guidance Donald Low, Lee Kuan Yew School of Public Policy (LKY School), National University of Singapore and was funded by the LKY School. The case does not reflect the views of the sponsoring organization nor is it intended to suggest correct or incorrect handling of the situation depicted. The case is not intended to serve as a primary source of data and is meant solely for class discussion.

This is followed by a section that describes the shortcomings of the current system, and the changes that have taken place in Singapore's socio-political context in early years of the 2010s. The third section presents policy alternatives that the government can choose from. The case concludes with several discussion questions. The epilogue summarises the outcome of the review of the healthcare financing system, and invites readers to contemplate the implications that it has on Singapore's philosophy to social welfare financing in Singapore.

Box 1: Why do governments of developed countries intervene in healthcare markets?[4]

Governments in developed economies intervene in healthcare markets primarily because of the lack of and unequal access to information in these markets. Consequently, both public and private institutions formed provide a way around the uncertainties that these informational failures generate.

One source of uncertainty is that consumers do not know when they might fall sick, but would like to consume medical care if they do, even if some forms are unaffordable. The cost of treating chronic diseases, such as renal diseases, can be higher than most households' incomes. The low frequency of contracting such diseases combined with their high impacts on individuals and the fact that most are usually risk averse create the demand for health insurance. This can either be provided by the state or by private insurers. In Singapore, the government provides a non-compulsory, low cost, and basic catastrophic insurance MediShield, whose coverage can be enhanced by purchasing riders from private insurers, or through employer-provided health insurance.

A second source of uncertainty is that consumers usually do not know which or how much of medical care services they might require. Instead, they rely on doctors for advice thereby establishing a principal-agent relationship. This gives doctors (the agent) the incentive to over-service patients (principals) to maximise earnings, and in so doing increase overall healthcare costs by more than would be the case if consumers were in a position to choose wisely for themselves. Singapore overcomes over-servicing (also known as supplier-induced demand) by rationing medical services. Specific measures taken by the government include regulating the overall number of doctors and specialists, controlling the total number of subsidised and private beds, and calibrating the mix of private and subsidised hospitals.[5]

The third source of uncertainty stems from consumers' inability to observe the quality of treatment that they receive. Consumers often cannot tell if the persistence of poor health post-treatment is a consequence of low quality care or of the underlying disease. This creates a demand for both professional and state regulation (certification or licensing) of medical care providers and hospitals.

Finally, uncertainty also exists because insurers cannot tell the insured's consumption of healthcare. Hence, insurers are likely to engage in cherry picking by providing low premiums to those who are good risks, such as the young and those without pre-existing conditions. There is thus an incomplete market for healthcare insurance for those who present higher health risks. Some societies overcome this by providing compulsory social insurance to all, even the sick and old. The successful implementation of social insurance requires both compulsion and subsidisation so as to overcome the free rider problem and to ensure that the poor can afford the premiums.

[4] Joseph P. Newhouse, *Pricing the Priceless* (Cambridge, London: MIT Press, 2002): 3-5; for a lengthier treatment of this question that is based on the Singapore healthcare system, see also Donald Low, "The Quirky Economics of Healthcare," November 2010, http://news.sma.org.sg/4211/In_Sight.pdf (accessed on 24 June 2014).

[5] Affordable Healthcare – A white paper.

Singapore's Institutions for Healthcare Financing

Singapore's healthcare financing systems comprises four main institutions to address the uncertainty that arises in healthcare markets, and to ensure that every Singaporean has access to affordable basic medical care. These institutions include government subsidies, Medisave, MediShield, and Medifund.[6] Together, they form what is commonly referred to as "subsidies+3M".

1. Subsidies

The government provides means-tested subsidies to citizens and Permanent Residents for inpatient services, day surgery, and specialist outpatient treatments received in government-owned restructured hospitals. These subsidies cover between 20 and 80 percent of the cost of treatment. Means-tested subsidies are also given for intermediate and long-term care (ILTC), while universal subsidies are provided to those who obtain general practitioner (GP) care at government-owned polyclinics. Older citizens who pass a means test can apply for a Community Health Assist Scheme (CHAS) that allows them to receive subsidised care at private GP clinics.

2. Medisave

The primary aim of Medisave is to help individuals and their families save for their hospitalisation expenses, including those that will be incurred during retirement. Employed individuals are required to make monthly contributions, which increases with age, to their Medisave accounts, which are a part of Singapore's defined contribution pension system, or the Central Provident Fund (CPF). To prevent over-consumption of health care and the premature depletion of Medisave, the Health Ministry sets detailed rules and withdrawal limits concerning the permitted uses of Medisave.[7] Patients can use the Medisave of immediate family members for healthcare financing. This enables income and risk-pooling at the household level.

3. MediShield

The primary aim of MediShield is risk pooling for catastrophic healthcare episodes for which it is inefficient to save. As MediShield was intended as an affordable insurance scheme, its benefits are designed to be sufficient to cover the bills incurred in Class B2/C[8] wards in public hospitals and selected outpatient treatments such as chemotherapy and radiotherapy for cancer and immunosuppressant drugs for organ transplant. Individuals with MediShield can buy riders, which are provided by private insurers, to help them pay for bills incurred in higher-class wards in public hospitals and in private hospitals.

MediShield is neither compulsory nor universal. Though the default is for everyone to be automatically enrolled in it, they can choose to opt out. The elderly above 90 are excluded and those with severe pre-existing conditions cannot re-join MediShield once they have opted out. Those who cannot afford to pay for their premiums are also excluded from MediShield. As of 2013, MediShield covered 93 percent of Singaporeans and Permanent Residents. Of the 7 percent without MediShield

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[6] Another component of the healthcare financing system is ElderShield, which was introduced in 2002. ElderShield provides basic financial protection to the elderly who need long-term care due to severe disabilities. At present, all CPF members who reach the age of 40 will be automatically enrolled in ElderShield. As the insurance is voluntary, members can opt out. They can, however, re-join the scheme as long as they are below 65 and subject to a medical assessment. See Ministry of Health, "ElderShield," updated 19 April 2013, <http://www.moh.gov.sg/content/moh_web/home/costs_and_financing/schemes_subsidies/ElderShield.html> (cited 30 April 2013). ElderShield was omitted from the case because there is no indication that the government intends to review its purpose or design as part of its review of the healthcare financing system.

[7] See Ministry of Health, "Withdrawal Limits," updated 14 March 2014, http://www.moh.gov.sg/content/moh_web/home/costs_and_financing/schemes_subsidies/medisave/Withdrawal_Limits.html (accessed on 28 June 2014).

[8] Class B2/C wards refer to beds in public hospitals that are highly subsidized by the government. They are distinguished from other classes of ward types, such as B1 and A, by the lower level of amenities that they have. For instance, Class C wards comprise as many as eight beds in a non-air conditioned room, whereas a Class A ward comprises air-conditioned private rooms.

coverage, 39 percent are above 65, and 16 percent are low-income or unemployed workers between 21 and 65 who had their MediShield coverage lapse due to their inability to pay premiums.[9]

MediShield's premiums are actuarially determined, and can be paid for using Medisave. High-risk individuals, such as those with severe pre-existing conditions and the very old, are excluded, as their actuarial premiums would be very high making the insurance unattractive to them. The premiums also increase with age to minimise cross-subsidisation across age groups; in 2013, those aged 1 to 20 years old paid $50 in annual premiums while those between 86 and 90 paid $1,190.[10]

As MediShield offers protection against large bills, it operates with co-payment features by incorporating deductibles and co-insurance. Its claim limits—$70,000 for each year and $300,000 per policyholder[11]—and the absence of 'stop-loss' measures[12] effectively transfers all the risk of very large medical bills to patients and their families.

4. Medifund

Medifund is a safety net of final resort for Singaporeans who cannot pay for subsidised medical care, even after utilising their Medisave, MediShield, and seeking help from their families. The presence of Medifund ensures that medical organisations that provide subsidised care do not end up in bad debt when they treat patients who cannot afford care. Medifund is administered by the various public healthcare institutions, and is not limited only to government-owned restructured hospitals.

Since 2002, the subsidies+3M system has accounted for between 31 and 39 percent of the total health spending (**Exhibit 1**).[13] Out-of-pocket payments by patients and other third-party insurers account for the remaining 60 percent of the national health expenditure.

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[9] Ministry of Health, "MediShield Life Review Committee Report," updated 27 June 2014, http://www.moh.gov.sg/content/moh_web/medishield-life/mlrc-report.html (accessed on 9 July 2014).

[10] Ministry of Health, "MediShield Premiums," updated 1 March 2013, <http://www.moh.gov.sg/content/moh_web/home/costs_and_financing/schemes_subsidies/Medishield/Premiums.html> (cited 30 April 2013).

[11] See Central Provident Fund Board, "General Information on MediShield Scheme", updated 26 March 2013, <http://mycpf.cpf.gov.sg/CPF/my-cpf/Healthcare/General_Info_MSH-Scheme.htm> (cited 30 April 2013).

[12] A stop-loss is binding contract that limits someone's liability to a risk. Stop-loss measures in a health insurance could either limit the insurer's liability (in which case it is referred to as a claim limit) or the insured's liability.

[13] Ministry of Health, "Healthcare financing sources", updated 13 May 2013 < http://www.moh.gov.sg/content/moh_web/home/pressRoom/Parliamentary_QA/2013/healthcare-financing-sources0.html> (cited 30 May 2013). Refer to **Appendix A** for a detailed breakdown of the healthcare financing sources.

Exhibit 1: National health spending by source for 2002 to 2011 in S$million

Year	National Health Expenditure	Government Health Expenditure		Medisave	MediShield	Other third-party insurers and out-of-pocket payments
		Medifund	Subsidies			
2002	5,916	26	1,532	361	77	3,920
2003	6,479	34	2,036	328	77	4,004
2004	6,911	32	1,746	367	84	4,682
2005	7,437	39	1,804	398	88	5,108
2006	8,000	40	1,970	445	113	5,432
2007	9,055	50	2,233	517	137	6,118
2008	10,100	59	2,755	558	161	6,567
2009	11,538	64	3,670	601	215	6,988
2010	12,365	79	3,767	678	249	7,592
2011	13,141	91	3,988	722	282	8,058

Source: Ministry of Health, "Healthcare financing sources," <http://www.moh.gov.sg/content/moh_web/home/pressRoom/Parliamentary_QA/2013/healthcare-financing-sources0.html> (accessed on 22 March 2014).

Setting the Goals of Healthcare Financing Policies

The Singapore government's share of national healthcare spending has hovered between 25 to 31 percent between 2002 and 2011 – about 40 percentage points lower than the OECD average. This difference is a consequence of Singapore's philosophy towards social welfare financing. As Singaporean civil servant, Lim Xiuhui wrote, "[T]he Singapore [welfare] model is based on the premise that people can often take steps to avoid the need for public assistance, for instance by saving in their earlier years, or relying on family and community support."[14] This ethos is distinct from that of the classical welfare state which assumes that no one would willingly choose to land themselves in a bad state, and that it is therefore incumbent on a civilised society to support those who do end up in bad states.

Personal responsibility—and the resultant cost-shifting in healthcare from the state to individuals and their families—emerged as the cornerstone of Singapore's healthcare financing system as a consequence of two major forces: the government's ideological aversion to classical welfare systems; and an economic viewpoint that pervades policy-making in Singapore.

1. PAP's ideological stance against classical welfare systems

Scholars studying the philosophy undergirding Singapore's healthcare financing system often remark on the significance of the beliefs of the early leaders of the People's Action Party (PAP), which has formed the government since 1959 when Singapore gained self-government from the British. [15] The first Prime Minister, Lee Kuan Yew, often stressed that the western-styled welfare state was not viable for Singapore because it bred dependency on the government, and was expensive. He observed, "[The British] belief that all men are equal and that no one should be denied the best medical services was idealistic but impractical and led to ballooning costs."[16]

[14] Lim Xuihui, "Security with Self-Reliance: The argument for the Singapore model," 3 October 2007, https://www.cscollege.gov.sg/Knowledge/ethos/Issue%203%20Oct%202007/Pages/Security-with-Self-Reliance-The-Argument-for-the-Singapore-Model.aspx (accessed on 28 June 2014).

[15] See Jeremy Lim, *Myth or Magic: The Singapore healthcare system* (Singapore: Select Publishing, 2013), 14-29; William A. Haseltine, *Affordable Healthcare: The Singapore healthcare story* (Singapore: Ridge Books, 2013), 1-15.

[16] Lee Kuan Yew, *From Third World to First*, (Singapore: Times Media Pte. Ltd, 2000), 122.

This belief has endured; subsequent generations of PAP leaders have adopted an approach where the individual, and not the state, are expected to bear the main responsibility for meeting his/her needs in healthcare, retirement, unemployment, and other episodes of income volatility.[17] The family is expected to buttress self-reliance by providing care to its members, and by providing opportunities for income and risk pooling at the household level. As a result, Singapore, in comparison to other advanced economies, provides relatively little social protection and redistribution. There is no state pension, no automatic unemployment benefits, and little by way of intergenerational transfers (except in education, and in various endowment funds that the government has established over the years). The government has chosen to be the safety net of last resort.

In spite of the hegemony enjoyed today, Cabinet did not always unanimously agree that it was the best approach to healthcare financing. In 1975, when Lee's Cabinet discussed the proposal of compulsory individual medical savings account that would be supported by a 2-percent monthly income contributions, Goh Keng Swee, an economist by training, agreed with Lee that it was a better proposal than generalised insurance because individual payments would check abuse. Toh Chin Chye, then healthcare minister, was reluctant. He wanted the proposal shelved because he was unconvinced that the state could not fully finance and deliver quality healthcare services to the population.[18]

But Toh was in the minority. By 1983, the government was moving resolutely in the direction of cost shifting to individuals. To help individuals pay for their rising share of healthcare expenditure, Medisave was established in 1983. When Parliament debated the adoption of Medisave, Toh, by then a backbencher, asked if the government could not shoulder the increase in healthcare costs through the use of general revenues instead of shifting it to individuals.[19] In response, then Second Minister for Health Goh Chok Tong said:

> I believe he has left his telescope behind when he moved out of the Health Ministry, or maybe we are talking at different wave lengths or at cross purposes. I say that we are taking a long-distance view of the problem, and I believe he is bogged down by today's situation. He examined the financial status of Singapore and argued that we have enough funds to pay for the entire budget for the Ministry of Health. He suggested that there are enough funds in payroll taxes to cover the entire deficit or even the entire health budget. I think we have got to take a longer view than merely looking at the present.[20]

The incremental steps of cost shifting to the individual and the family culminated in the 1993 White Paper on Affordable Healthcare, in which the Health Ministry formally identified individual responsibility as the cornerstone of Singapore's healthcare financing framework. [21] The approach of having patients co-pay for their treatment either through Medisave or out-of-pocket is widely seen as being the main reason for containing national and public spending on healthcare. Singapore's national healthcare expenditure is about only 4 percent of gross domestic product (GDP), with the state financing about a third (or slightly above 1 percent of GDP) of costs—both very low by the standards of OECD countries (see **Exhibits 2 and 3**). Healthcare costs in Singapore are also contained by its

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[17] Lim Xiuhui, "Security with Self-Reliance: The Argument for the Singapore Model," updated 3 October 2007, https://www.cscollege.gov.sg/Knowledge/ethos/Issue%203%20Oct%202007/Pages/Security-with-Self-Reliance-The-Argument-for-the-Singapore-Model.aspx (accessed on 26 June 2014).

[18] *From Third World to First*, 122.

[19] Parliament of Singapore, "Medisave Scheme," 30 August 1983, http://sprs.parl.gov.sg/search/topic.jsp?currentTopicID=00058864-ZZ&currentPubID=00069454-ZZ&topicKey=00069454-ZZ.00058864-ZZ_1%2Bid038_19830830_S0004_T00172-motion%2B (accessed on 25 June 2014).

[20] Parliament of Singapore, "Medisave Scheme," 31 August 1983, http://sprs.parl.gov.sg/search/topic.jsp?currentTopicID=00058888-ZZ&currentPubID=00069455-ZZ&topicKey=00069455-ZZ.00058888-ZZ_1%2Bid004_19830831_S0002_T00021-motion%2B (accessed on 25 June 2014).

[21] Refer to **Annex A** for an executive summary.

relatively young population and through the government's supply side controls, such as limits on the number of doctors, hospital beds, fee controls, and ownership of public hospitals.

Exhibit 2: National healthcare expenditure as a percentage of GDP of Singapore and selected OECD countries

Country	2006	2007	2008	2009	2010	2011
Singapore	3.4	3.4	3.8	4.2	3.9	3.8
Australia	8.5	8.6	8.8	9.0	8.9	NA
Canada	10.0	10.0	10.3	11.4	11.4	11.2
France	11.0	10.9	11.0	11.7	11.7	11.6
Germany	10.6	10.5	10.7	11.8	11.5	11.3
Japan	8.2	8.2	8.6	9.5	9.6	NA
Korea	6.1	6.4	6.6	7.1	7.3	7.4
Netherlands	10.7	10.8	11.0	11.9	12.1	11.9
United Kingdom	8.4	8.5	9.0	9.9	9.6	9.4
United States	15.9	16.2	16.6	17.7	27.7	17.7
OECD Average	8.6	8.6	8.9	9.6	9.4	9.3

Exhibit 3: Public expenditure on health as a percentage of national health expenditure of Singapore re and selected OECD countries

Country	2006	2007	2008	2009	2010	2011
Singapore	25.1	25.2	27.9	32.4	31.1	31.0
Australia	66.6	67.5	67.9	68.5	67.8	NA
Canada	69.8	70.2	70.5	70.9	70.8	70.4
France	77.2	77.3	76.8	77.0	76.9	76.8
Germany	76.4	76.4	76.4	76.8	76.7	76.5
Japan	79.4	80.4	81.4	81.5	82.1	NA
Korea	54.8	55.1	54.8	56.7	56.5	55.3
Netherlands	84.4	84.5	85.0	85.9	86.1	85.6
United Kingdom	81.3	80.2	81.1	82.6	83.5	82.8
United States	45.0	45.2	46.0	47.2	47.6	47.8
OECD Average	71.4	71.3	72.0	72.6	72.3	72.2

Notes: Expenditure for Singapore includes contributions to endowment funds.
Sources for Exhibits 1 and 2: OECD, "OECD Health Statistics 2013 – Frequently Requested Data," http://stats.oecd.org/Index.aspx?DataSetCode=SHA (accessed 22 March 2014); Ministry of Health, "Healthcare financing sources," http://www.moh.gov.sg/content/moh_web/home/pressRoom/Parliamentary_QA/2013/healthcare-financing-sources0.html (accessed 22 March 2014); Department of Statistics of Singapore, "Time Series on Annual GDP at Current Market Prices," http://www.singstat.gov.sg/statistics/browse_by_theme/economy/time_series/gdp2.xls (accessed 22 March 2014).

As a result of these cost and risk-shifting policies, the Singapore government's share of total healthcare expenditure fell from 50 percent in 1965[22] to 31 percent in 2012. Even though these policies entailed a concomitant increase in the private cost of medical care, the government has, for most of the previous four decades, enjoyed broad-based societal support, or at the very least acquiescence, for its healthcare financing policies. Academic Lim Meng Kin has argued that Singaporeans demonstrate "ready acceptance for a social contract based on 'individual responsibility' and 'co-payment'" because of three unique features of Singapore's politico-social context.

First, Singapore has prospered in spite of the odds largely due to a strong government. As a result, the government has enjoyed high levels of trust from the people. Second, Singapore has no tradition of state largesse or generous welfare benefits. The colonial health system, though free, was primarily targeted at the colonisers instead of the colonised. Local residents relied mostly on traditional

[22] Lim, 83.

medicine for healthcare. Even though diseases and poverty were rampant in British Singapore, the first hospital, Tan Tock Seng hospital, was built using funds self-raised by Chinese community leaders, not the state. Third, Singaporeans are pragmatic and understand that irrespective of whether the healthcare financing burden falls on taxes, Medisave, employer benefits or insurance, it is ultimately themselves who pay. [23]

Though there is no strong empirical support for the reasons posited by Lim, the 2002 *World Values Survey* (WVS) confirms that a majority of Singapore's respondents (55 percent) thought that Singapore should be a society where taxes are low and individuals take responsibility of themselves. Only about 25 percent felt that the state should provide extensive social welfare and collect high taxes. Significantly, this finding lends credibility to assertions made by political leaders, such as the current Prime Minister Lee Hsien Loong, that Singaporeans would "not be willing to pay taxes that Scandinavians pay" to sustain a social welfare system that is founded on social instead of personal responsibility.[24]

Box 2: Is Highly Subsidised Health Care the Only Reason for High Healthcare Costs?

The short answer is no. Other major cost drivers include the cost of advanced medical technology, supplier-induced demand by healthcare professionals, and, especially in the American healthcare system, the administrative costs incurred by private insurers that are passed on as higher premiums to the insured.

Before examining these cost drivers, it is useful to understand why a highly subsidised healthcare system is often perceived as leading to high national health expenditure. The framework undergirding this perception is the "trilemma" faced by all healthcare policymakers on how to balance the aims of achieving high access, quality, and cost containment. Yale health economist William Kissick describes this trilemma as the Iron Triangle of Health Care and represents it as an equilateral triangle to suggest that all three priorities are equally important, and that giving more weight to any one priority comes at the cost of compromising the healthcare policymakers' ability to achieve one or both of the remaining priorities. Therefore when governments provide highly subsidised healthcare to improve access, the logic of the Iron Triangle suggests that they move further away from providing high quality care and from containing cost. This is the classic restaurant check problem at work. When numerous people dine together and pay for the average cost of the bill, instead of for what they consume, all have the incentive to consume the most expensive item on the menu thereby leading to cost escalation.

But medical care consumers are not like hypothetical diners, and the role that moral hazard plays in escalating healthcare costs is usually exaggerated. This is because healthcare cost tends to be heavily concentrated among a small group of relatively sick patients who must consume their high-cost medical treatment to improve the length and quality of their lives.[25] As most patients do not have specialised knowledge on how to deal with their diseases, they consume health care services based on the advice of their doctors. That patients pay for high-cost medical care through medical insurance should not be surprising (that is why they bought insurance), but this is more the result of providers prescribing expensive drugs and treatment.

The key drivers of high healthcare cost are therefore more likely to be supply-side factors, a fact that

[23] Lim, 89.

[24] Prime Minister's Office Singapore, "Speech by Prime Minister Lee Hsien Loong at Economic Society Of Singapore Annual Dinner," updated 18 June 2012, http://www.pmo.gov.sg/content/pmosite/mediacentre/speechesninterviews/primeminister/2012/June/speech_by_prime_ministerleehsienloongateconomicsocietyofsingapor.html> (cited 30 April 2013), para 33.

[25] Peter R. Orszag, "How Health Care Can Save or Sink America: The Case for Reform and Fiscal Sustainability," *Foreign Affairs* 90(5): 42-56.

the 1993 White Paper on Affordable Care acknowledged. In the US, for example, advances in diagnostic and therapeutic interventions that have been largely responsible for the increases in the length and the quality of life, have also been responsible for cost escalation. Not all medical technologies are, however, created equal. Hence, advocates for cost containment in the American healthcare system have urged the government to establish large, semi-independent organisations (similar to Britain's National Institute for Health and Clinical Excellence) to evaluate the relative costs and benefits of new healthcare interventions. In the American context, the organisation would have to be large and semi-independent because of the numerous new interventions, and new applications of old technologies that enter into the market each year and because of the strong anti-government sentiment. In Singapore, MOH rations the introduction of new medical technology in public hospitals to avoid unnecessary proliferation and duplication of expensive facilities. Yet another approach for containing cost would be to have healthcare organisations perform a cost-benefit analysis of a given intervention for a patient.[26] Public hospitals in Singapore are already required to perform such an evaluation and incentivised to do so by revenue caps that are set by the government.[27]

Another cost-driver in the American system is administrative costs, which may be relevant to Singapore as it seeks to expand the role of insurance. High administrative cost, especially of private insurers, can drive up premiums and the overall spending on healthcare.

2. Economic viewpoint to healthcare

The economic view, which emphasises scarcity, substitutability, choice, trade-offs, and goals such as efficiency, is another reason why personal responsibility has emerged as the cornerstone of the healthcare financing system. The Singapore government keenly appreciates the delicate workings of the market mechanisms, and of the role of incentives in influencing behaviour. As John W. Thomas and Lim Siong Guan (then Singapore's head of civil service) wrote in 2001:

> Singapore recognised the potential of markets to enhance the process of governing and has selectively employed market mechanisms as instruments of government for some time. In few countries is the market used as extensively in the management of traditionally public functions; and no country has been more thoughtful in its approach to this issue, more selective in how it has used the market in governing, or more careful in evaluating the performance of markets and their impact on the quality of governance.[28]

Where healthcare financing was concerned, the Singapore government spurned heavily tax-financed systems and comprehensive social insurance in favour of individual responsibility and low-cost basic catastrophic insurance to address low frequency, high impact medical conditions. Emphasising individual responsibility is consistent with the free market ethic on the distribution of income, "To each according to what he and the instruments that he owns produces."[29] This ethic frowns on redistribution because it generates welfare losses for society by reducing the incentive to work. In a similar vein, granting individuals the choice to decide whether they want insurance preserves their freedom to choose a consumption bundle according to their personal utility functions. Had the government forced all citizens to enrol in MediShield, it would reduce the welfare of those who

[26] Victor R. Fuchs, "Three "Inconvenient Truths" about Health Care," *New England Journal of Medicine* 359: 1949-1951.

[27] See "Affordable Health Care – A white paper". The revenue caps vary with ward class, medical specialty, and type of hospital.

[28] John W. Thomas, and Lim Siong Guan, "Using Markets to Govern Better in Singapore," *HKS Faculty Research Working Paper Series*, August 2010, accessible at https://research.hks.harvard.edu/publications/workingpapers/citation.aspx?PubId=7993 (accessed on 27 June 2014).

[29] Milton Friedman, *Capitalism and Freedom Fortieth Anniversary Edition* (Chicago and London: The University of Chicago Press, 2002), 161-162.

preferred other consumption goods to an insurance policy, and therefore reduce the overall welfare of the society.

The government's market-oriented ethic in healthcare financing has not been without its critics. Several have argued both in Parliament and outside that while the PAP government is long on rational economic calculations, it is short on compassion for the maginalised. In other words, the PAP's economic point of view is of a hard-headed and hard-hearted strain, leaving little room for considerations about equity.[30]

Notwithstanding these criticisms, the healthcare financing system does, in fact, comprise institutions that improve both efficiency and equity. Medisave and MediShield improve efficiency by minimising overconsumption of healthcare services, and over-saving. Medifund and government subsidies improve equity by ensuring that those with little means can still gain access to healthcare. The alternative to Medifund may well have been to force hospitals to accumulate bad debts, which might have incentivised hospitals to avoid treating patients who cannot pay, to stint on their treatment, or to (arbitrarily) pass on the cost of treating them to other patients – all of which would have been inefficient and inequitable outcomes.

Moreover, the free market ethic of the government did enjoy support. Academic Chris Hamm speculated that the PAP succeeded in making personal responsibility the cornerstone of its social welfare financing system because it had a "stakeholder economy" with high growth and full employment which provided Singaporeans with the means to save to meet the costs of medical care, retirement, etc. He wrote in 1996:

> If citizens feel valued through employment and incomes then it may be possible to persuade or compel them to take greater responsibility for their welfare. If, on the other hand, they feel excluded from the economy and society, then there is no economic or moral basis for expecting them to take a stake in the system. Singapore has successfully appealed to its citizens' self-interest by providing them with the means to fully participate in society. The means it has chosen may not meet with universal approval, but it demonstrates clearly the basis on which a new social contract may be constructed.[31]

Box 3: Who pays for free healthcare?

Individuals and their families pay for free healthcare through taxes or premiums that are collected to finance social insurance, lower public expenditures in other policy areas, and lower take-home pay.

First, if healthcare is primarily paid for by the state, the state does so by collecting taxes or premiums for national health insurance schemes from its citizens. Some countries raise revenue by borrowing, which means that future generations would have to eventually tax themselves to pay for the healthcare cost of the present generation and the interest accumulated on the debt. Apart from paying directly through taxes and premiums, citizens also pay implicitly if healthcare budgets encroach into the budgets of other government programmes such as education, defence, environmental protection etc.

Second, if healthcare is paid for through employer-provided insurance or through compulsory contributions to employees' medical savings account, there are three main ways employers can cover their additional cost. One way is to increase the price of the final product it produces, which reduces the real wages of all employees. Another is to reduce potential wage offers to new employees and to

[30] For a concise, non-economic, view on the Singapore approach to social welfare spending see Lim Xiuhui, "Security with Self-Reliance: The Argument for the Singapore Model," updated 3 October 2007, https://www.cscollege.gov.sg/Knowledge/ethos/Issue%203%20Oct%202007/Pages/Security-with-Self-Reliance-The-Argument-for-the-Singapore-Model.aspx (accessed on 26 June 2014).
[31] Chris Hamm, "Learning from the tigers: stakeholder health care," *The Lancet* 347, 953.

reduce the wage increases given to existing employees (i.e., wage growth will lag behind growth in productivity). The final way is to accept a fall in the profit share by capital owners.

The question of who pays for healthcare is nevertheless an important one because the distribution of financial burden has a significant impact on access to quality care for low to moderate-income families, and on tax burden for richer families. Most civilised societies provide universal access to adequate medical care as one of their goals and are willing to use to arm of the state to achieve this goal. Countries, however, differ on what counts as adequate care and the extent to which the rich should subsidise the healthcare consumption of low to middle-income citizens.

Weaknesses of Singapore's Healthcare Financing System

Scholars and commentators have evaluated Singapore's healthcare financing system according to three criteria: efficiency, equity and adequacy.

First, Asher and Nandy argue that the financing system is inefficient because it has limited risk-pooling features. MediShield is *not* an extensive risk-pooling arrangement when measured against the universal health insurance of other developed economies. Instead, MediShield excludes both high-risk individuals (the elderly above 90 and those with severe pre-existing conditions),[32] and a wide range of health risks (such as long-term care) from coverage. While private insurers have filled in the gap by providing insurance plans that cover some of the health risks currently excluded from MediShield, these insurers stop short of providing affordable coverage for high-risk individuals. These individuals are thus forced to accumulate large savings to finance healthcare episodes that may or may not materialise, leading to an inefficient and inequitable curtailment of their consumption and well-being.

Second, Abeysinghe, Himani, and Lim argue that the reliance on personal and family responsibility and co-payments means that the system is highly income dependent, and therefore potentially regressive and inequitable.[33] An income-dependent system would be regressive if the if the government subsidies provided to lower and middle income Singaporeans are not large enough to ensure that they spend a smaller fraction of their income on healthcare than richer individuals. There is admittedly little hard evidence that sheds light on how regressive the financing system is. Abeysinghe, Himani and Lim speculate that if HDB 1-3 room, 4-room, 5-room and executive, private flats and landed property owners sought treatment at Class C, B2, B2+, B1, A wards respectively, the financing system would be regressive.[34]

A related concern is the extent to which the current healthcare financing system provides "peace of mind". In a 2012 survey by Mindshare, 72 percent of respondents agreed with the statement "we cannot afford to get sick these days due to the high medical costs".[35] The staggering agreement raises question about whether healthcare remains affordable and accessible for the *majority* of Singaporeans. Aggregate data suggests that basic inpatient care (i.e., treatment provided in Class B2/C wards) remain affordable on average. For instance, in 2009 and 2010, between 82 and 84 percent of Class B2/C bills were fully covered by the then prevailing Medisave withdrawal limits.[36] Between 2010 and 2012, about 92 to 93 percent of bills incurred in Class B2/C wards were covered by MediShield and

[32] Those with pre-existing medical conditions form less than 1% of the total resident population.

[33] Abeysinghe, Himani and Lim, 14.

[34] Abeysinghe, Himani and Lim, 15. The hospital expenditure as a share of income would be as follows: Class C (47%), B2 (34%), B2+ (28%), B1 (40%), and A (40%) (Abeysinghe et al, 2010). The authors used data of 30,192 hospitalisation episodes of 18,935 elderly patients who sought treatment at a tertiary public hospital in 2007. They linked dwelling types to the class of ward used by the patient to overcome the constraint of the absence of data that links income to patient expenditure.

[35] Joyce Hooi, "Singapore's emigration conundrum," Business Times Singapore, 6 October 2012, n.p.

[36] MOH stopped reporting the proportion of Class B2/C bills fully covered by the Medisave Withdrawal Limits as a Key Performance Indicator from Budget 2013 onwards. It was replaced by the indicator average coverage of bills by Medisave and MediShield for B2/C wards. See Ministry of Finance, Revenue and Expenditure Estimates, various years.

Medisave. These figures, however, do not convey if patients can afford the share of the bills not covered by Medisave and MediShield. In addition, with an ageing population, and with risk-pooling at the household level, middle-aged Singaporeans who are supporting their old parents may run down on their Medisave even before reaching retirement when they can expect their healthcare spending to escalate. Even if healthcare is affordable on average, further questions ought to be raised about the reasons for the gap between the actual and perceived cost of healthcare.

Medifund, which is meant to improve the equity of the financing system, has stringent and opaque eligibility criteria that have led some to challenge its efficacy in providing assurance to Singaporeans facing large medical bills. For example, Member of Parliament Lam Pin Min recounted the story of Marjorie Soh who was diagnosed with bone cancer in 2003 and raked up an estimated $400,000 in medical bills. Her bills were financed through the sale of her family's flat, her family's savings, bank loans and the good will of friends. Lam asked his fellow parliamentarians if Singaporeans should be "subject to financial distress in seeking medical treatment"; if they should "have to borrow from banks and friends to pay their bills"; and if they should have to "sell their assets before they can qualify for medical assistance under the stringent eligibility criteria". [37] Cases like Marjorie's, while not representative, demonstrate that some Singaporeans, especially those who do not (or cannot) accumulate sizable savings, might face significant financial distress when their family members experience a catastrophic health condition.

Third, there are signs that the financing system may be inadequate. Many Singaporeans do not meet the Medisave Minimum Sum or the minimum amount of savings that they must accumulate in their Medisave when they turn 55 (see **Exhibit 3**). In addition, MediShield is not universal; as at the end of 2011, it covered 92 percent of the population and excluded 35 percent of elderly above 75.[38] Moreover, though MediShield is ostensibly for protecting patients from catastrophic health expenses, Abeysinghe, Himani and Lim find that MediShield covered only 40 percent of the most expensive 10 percent of medical episodes faced by elderly seeking treatment in a particular public hospital in 2007. [39] Separately, academics Asher and Nandy have criticised the exclusion of high-risk individuals from Medishield and its exclusion of many health risks from coverage.[40] Medishield also excludes those who cannot afford the premiums. Between 2006 and 2011, about 1 percent of MediShield policyholders saw their policies lapse each year due to non-payment of premium caused by insufficient Medisave balances.[41] Low-income elderly Singaporeans, who have to pay high premiums, may be especially vulnerable to such lapses of their and their family member's MediShield policies.

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[37] Parliament of Singapore, "Debate on President's Address," 17 October 2011 (Dr Lam Pin Min), <http://160.96.186.106/search/topic.jsp?currentTopicID=00076369-WA&currentPubID=00075801-WA&topicKey=00075801-WA.00076369-WA_7%2Bpresident-address%2B> (cited 30 April 2012), column 67-68.

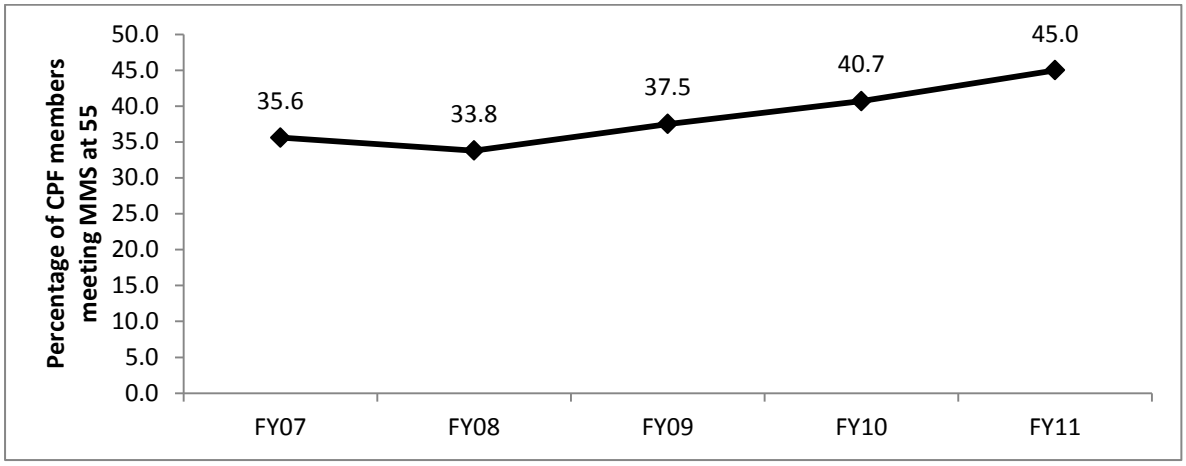
[38] See Ministry of Health, "MediShield Coverage of Population," updated 17 February 2012, <http://www.moh.gov.sg/content/moh_web/home/pressRoom/Parliamentary_QA/2012/medishield_coverageofpopulation.html> (cited on 30 April 2013). MediShield coverage for those below age 21 stood at 94%. Of the working age population (those 21 to 65 years old), coverage was 95%.

[39] Abeysinghe, Himani, and Lim, 10.

[40] Asher, and Nandy, 89.

[41] Ministry of Health, "Medishield Lapsed Policies," updated 11 September 2012, <http://www.moh.gov.sg/content/moh_web/home/pressRoom/Parliamentary_QA/2012/medishield_lapsedpolicies.html> (cited 30 April 2012), para 1.

Exhibit 4: Percentage of CPF members (excluding the self-employed) meeting MMS at 55



Source: Ministry of Finance, "Growing Incomes and Strengthening Social Security," http://app.mof.gov.sg/data/cmsresource/SPOR/2012/SPOR%202012%20Chapter%202.pdf (accessed 22 March 2014).

Resetting the Goals of Health Care Financing Policies

The context

Overlaying the weaknesses of the healthcare financing system are the changes to Singapore's socio-political context: the population is ageing, incomes are growing more unequal therefore making it harder for some to save for healthcare, and declining trust in government has become more visible and salient.

As the population ages, national healthcare spending will increase since older persons consume more healthcare than the young. Due to Singapore's emphasis on personal responsibility, the risks associated with ageing, such as retirement adequacy or healthcare financing, are mostly concentrated on the individual and the family. This serves to accentuate the rising income inequality in Singapore because a richer household is better placed to absorb the risks faced by an ageing member than a middle or low-income household. The rich may also be able to afford significantly better care for their elderly members.

Politics have become more competitive in Singapore. Though the PAP comfortably won the 2011 general elections, it lost a group representation constituency (GRC) for the first time and with it several senior political figures such as the then Foreign Affairs Minister George Yeo, Minister in Prime Minister's Office Lim Hwee Hua and Senior Minister of State for Foreign Affairs Zainul Abidin Rasheed. The PAP also recorded its worst performance when it secured 60.1 percent of valid votes—a six percentage point decrease from 66.7 percent in the 2006 general elections. Commentators attributed the PAP's performance to both the electorate's desire for greater political competition and representation, and widespread public unhappiness with how PAP had handled challenges in housing, transport, cost of living, healthcare, and inequality in the context of much higher immigration and a rapid increase in Singapore's total population in recent years.

Since the 2011 elections, the PAP government has done more to strengthen social safety nets. It has relaxed the eligibility criteria, and expanded the quantum, of a variety of social welfare schemes. Deputy Prime Minister and Finance Minister Tharman Shanmugaratnam also acknowledged that the Cabinet had shifted left—away from the free market ethic discussed earlier in the case. He said in an interview in 2013:

> If I compare our thinking in Cabinet, or the weight of thinking in Cabinet, when I first entered politics about 11 years ago, I would say it was, the weight of thinking was centrist but there were two flanks on either side of it. There were some who were a little right-of-centre, and there were some a little left-of-centre. Now, I would say the weight of thinking is left-of-centre. You still get diversity of views in Cabinet but the centre of gravity is left of centre. And that means the current team is very clearly focused on upgrading the lives, improving the lives of lower-income Singaporeans and of our older folk.

Back to the review: tiptoe or leap to the left?

How the government's behaviour would change in this shifting context remains unknown. There is uncertainty about what the review signals. Would the government be making incremental changes to the healthcare financing system to address its problems but without altering its fundamental philosophy of personal responsibility? Or, would the government rewrite its social compact with the citizens through the review of the healthcare financing system—an approach that other governments have taken in the past?

Both interpretations have merit. The government has indeed been making incremental changes to the healthcare financing system to keep up with demographics, expectations, and to contain costs, and target subsidies all the while preserving personal responsibility as its cornerstone. Besides, the government had moderated expectations from the start by emphasising that it only intended to socialise 40 percent—still nearly 30 percentage points lower than the OECD average — of the national healthcare expenditure. Anything beyond would depend on demographic patterns, and on the government's ability to contain costs and to target subsidies. Given that individuals and their families were still expected to bear the bulk of healthcare spending after the review, the review may not seem to mark a significant departure from the government's long-standing emphasis on personal responsibility.

But the announcement of the review came at the back of a hotly contested general election. Was it meant as an appeasement tactic? After all, public concerns about the affordability of healthcare have been perennial,[42] and the government has been planning for an ageing population since the 1980s. Would the government go as far as to overhaul its ideology by rewriting its social compact with the paper to one that is based more on social responsibility?

Many of these questions remain unanswerable at this stage of the review. Nevertheless, some things can be said about how the current healthcare financing system can be improved.

(i) Improve certainty

One of the key problems with the subsidies+3M system is that it is failing to offer peace of mind to Singaporeans. This is in spite the fact that the system, in theory, guarantees that every Singapore would have access to good healthcare irrespective of their ability to pay. One may therefore argue that the only problem the government needs to address is the uncertainty Singaporeans have about how much of their assets they would have to spend on their or their family member's healthcare before they can look to the government for help.

To improve certainty, the government could introduce stop-loss measures in the healthcare-financing framework. These are measures that explicitly cap the financial liability of citizens. One of the opposition parties, the Singapore Democratic Party, for instance, proposed a stop-loss measure when it recommended capping each Singaporean's annual healthcare spending at $2,000.

[42] For instance, even when Singapore's healthcare system was ranked first in Asia and sixth globally by the World Health Organisation (WHO) in its World Health Report for the year 2000, Singapore was ranked 102-103 (out of 191 countries) in terms of fairness in financial contributions. See World Health Organization, "Statistical Annex" in *The world health report 2000 - Health systems: improving performance*, http://www.who.int/whr/2000/en/whr00_annex_en.pdf?ua=1 (accessed on 19 June 2014).

But the introduction of stop-loss measures would mark a fundamental shift in healthcare financing because it would transfer the risk of catastrophic costs currently borne by individuals and their families to the MediShield system and probably to taxpayers. To finance such a measure, MediShield premiums, taxes, or both would have to increase. As the low income, elderly and those with pre-existing conditions face more anxiety about the affordability of care, the stop loss mechanism should apply to them too. For this to be so, they would have to be included into the insurance pool too through compulsion and subsidisation. Consequently, healthcare financing may begin to look more like a collective instead of an individual's responsibility.

Perhaps, a cheaper way to achieve certainty without changing the philosophy of the healthcare financing system would be to make transparent the eligibility criteria of Medifund. This is as Medifund already functions like a de-facto stop loss mechanism. By making its eligibility criteria known, Singaporeans know how much of their asset they would have to spend on healthcare before they can apply to Medifund for help.

In the long-term (and perhaps even in the short term), however, it is unclear whether improving the transparency of Medifund's eligibility criteria would remain cheaper than introducing stop-loss measures in MediShield. This is because it makes sense to assume that society's perception of what is the just amount of healthcare cost a household can absorb is constant irrespective of whether Medifund or MediShield is used as the vehicle to achieve this perception of justice.

(ii) Improve coverage

Another key concern with the healthcare financing system is the limited role that insurance plays. There are several strategies to expand the role of insurance.

First, as noted, those currently excluded from the MediShield can be included. A decision would, however, have to be made on whether MediShield should be compulsory for all. If it is, another needs to be made on how much subsidy the government is willing to provide to those who cannot afford the premiums. In addition, a decision also would have to be taken as to whether those with pre-existing conditions would have to pay higher premiums or would be subsidised by their healthier fellow citizens.

Second, the elderly receive care not only in inpatient acute care settings (which would be covered by MediShield) but also in other intermediate and long-term care (ILTC) settings. A decision would have to be taken on whether MediShield should cover the cost of care in the ILTC setting or if the government should organise a dedicated long-term care insurance system to deal with that, so as to keep premiums low for MediShield.

Whither Individual Responsibility

Assuming that you are responsible for reviewing the healthcare financing system,

1. What are the main ingredients of a sound healthcare financing framework? What other inputs would matter in setting the goals of healthcare financing policy?

2. What determines the goals of healthcare policy in Singapore? How does Singapore's approach to healthcare financing differ from that in your country?

3. What is the best mix of interventions that healthcare policy makers in Singapore should pursue? What implications might your proposal have on the current social compact between the government and the people?

Annex A

Executive Summary of the White Paper on Affordable Health Care[43]

National health expenditure in Singapore is currently 3.1% of GDP. Government subsidies for health care amount to 0.7% of GDP. But health care costs and demand for health services are rising steadily, while the economy is maturing and growing more slowly.

In the long term, both national health expenditure and government subsidies will inevitably increase. Medical expenses will absorb an increasing share of household expenditure. However, the resources which we can devote to health care are finite. There is also a limit to the financial burden families can bear. We need to establish guiding principles and policies to manage the health care system and control health care costs.

The Government set up a Ministerial Committee to review the state's role in providing health care, and recommend ways to improve the health care system while containing the long term increase in costs and subsidies. This White Paper is based

[43] Full text is available at http://www.moh.gov.sg/content/dam/moh_web/Publications/Reports/1993/Affordable_Health_Care.pdf.

on the Committee's recommendations. It sets out the Government's philosophy and approach to controlling health care costs, in order to keep basic health care affordable to all Singaporeans.

Health Care Philosophy

The Government's health care philosophy is based on five fundamental objectives:

a. To nurture a healthy nation by promoting good health;

b. To promote personal responsibility for one's health and avoid over-reliance on state welfare or medical insurance;

c. To provide good and affordable basic medical services to all Singaporeans;

d. To rely on competition and market forces to improve service and raise efficiency; and

e. To intervene directly in the health care sector, when necessary, where the market fails to keep health care costs down.

We must continue to emphasize health education and disease prevention programmes, and encourage the population to adopt a healthy lifestyle. This is more beneficial to the health of the population than spending large amounts on medical services.

We owe it to ourselves individually to keep fit and healthy. The health care system needs to be structured to strengthen this sense of personal responsibility. It must give the individual maximum incentive to stay healthy, save for his medical expenses and avoid using more medical services than he absolutely needs.

The Government has guaranteed Singaporeans access to affordable basic medical services. A large part of the basic care will be provided in the **subvented hospitals**[1]. These hospitals

[1] In this paper, the term "subvented hospitals" refers to hospitals which receive Government subsidies. This includes Ministry of Health (MOH) hospitals, Health Corporation of Singapore (HCS) restructured hospitals, and the National University Hospital (NUH).

provide subsidised wards and services to cater to middle and low income Singaporeans, as well as unsubsidised wards for those who want better service and can afford to pay the full costs for this service.

We must rely on competition and market forces to impel hospitals and clinics to run efficiently, improve services and offer patients better value for money. When hospitals are insulated from price signals and market forces, the potential for inefficiency and waste is enormous.

However, market forces alone will not suffice to hold down medical costs to the minimum. The health care system is an example of market failure. The Government has to intervene directly to structure and regulate the health care system, to prevent over-supply of medical services and dampen demand.

Specifically, the Government will manage the following aspects of the health care system:

a. The definition of the basic medical care package which will be available to all Singaporeans;

b. The overall supply of medical services;

c. Key financial and operational aspects of subvented hospitals;

d. Financing of health care;

e. Charging of patients using Medisave in private hospitals;

f. Medical R&D; and

g. Medical education and training.

Defining A Good Basic Medical Package

We must get maximum value for what we spend on health care. To do so, we will need to trade-off competing needs and allocate more resources for cost-effective treatments that yield the best outcomes.

MOH will define the basic medical package which all Singaporeans will have access to, as it has always done. The basic package will reflect up-to-date good

medical practice. It will contain essential and cost-effective medical treatment of proven value. The treatment will be delivered without frills by trained personnel using appropriate facilities. It will exclude non-essential or cosmetic services, experimental drugs and techniques whose effectiveness is not yet proven, and extravagant efforts to keep gravely ill patients alive using high technology equipment, regardless of their quality of life and prospects of recovery.

Regulating Supply of Doctors and Hospitals

The Government will regulate the overall number of doctors and specialists. It will control the total number of hospital beds, the number of subvented hospitals to be built, and the mix of private and subvented hospitals.

Factors like an ageing population or more intensive practice of medicine can raise demand for health care, but to a significant extent health services are supply driven. Studies have shown that countries with more doctors, especially specialists, tend to spend more on health care. Therefore we must continue to control the number of doctors trained and the type of training they receive.

The Ministry of Health (MOH) needs to regulate the number and type of specialists to be trained, and the development of specialist departments and sub-specialisations in subvented hospitals. At present 40% of Singapore doctors are specialists. This proportion compares favourably with other countries and should not be increased.

MOH should control the provision of hospital beds in Singapore, including the number of Intensive Care Unit (ICU) beds, the most expensive service in any hospital. MOH should also coordinate the introduction of new medical technology in subvented hospitals to avoid unnecessary proliferation and duplication of expensive facilities.

We need a range of subvented hospitals - community, secondary and

tertiary[2] - to provide the patients with the varying levels of care they need. Civic organisations should be encouraged to run subvented hospitals to offer the public a wider choice of medical services.

The private sector currently provides 20% of acute hospital beds, mainly at the higher end of the hospital market. We can increase this share to 30% by 2010. This will free subvented hospitals to focus on their main responsibility: to provide quality basic medical care to the middle and lower income groups. To encourage the private sector to play a bigger role, the Government will limit the number of Class A beds in subvented hospitals. It will also earmark and periodically release land parcels for private hospital development.

Regulating Subvented Hospitals

Subvented hospitals should pitch their standard of service at a level which both the state and the public can afford. They should emphasize basic medical care rather than high-tech and high-cost services like heart and liver transplants. Hospitals must continually trade-off competing needs and allocate more resources for cost-effective treatments. We should rely more on day surgery and ambulatory care as well as community-based health services.

To ensure this, MOH will need to control:

a. The number of beds and their distribution by class in each hospital;

b. The ambience, service norms and standard of service;

c. The revenue per patient day by class of ward;

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2 A **Community Hospital** provides intermediate level care, in a community setting, appropriate for the management of patients suffering from conditions which do not need the specialised expensive care provided by secondary hospitals.

A **Secondary Hospital** provides general and specialised inpatient and outpatient care in medical and surgical disciplines necessary for the majority of patients requiring hospital treatment.

A **Tertiary Hospital** provides, on top of the services given by a secondary hospital, specialised care for a minority of patients who have complicated medical conditions.

d. The amount of subsidy by class of ward; and

e. The development of specialist departments and the introduction of new technology.

Unsubsidised Class A beds in subvented hospitals should not exceed the present 9% of the total number of beds in the country. To ensure that there are enough subsidised beds, the total number of Class B2+, B2 and C beds should form at least 65% of the total number of beds in each subvented hospital.

MOH will set guidelines on the standard of service in the different ward classes. The package of basic medical services will be available in all classes of wards. Non-subsidised wards may offer non-essential medical services beyond this basic package. For example patients may be allowed to choose their consultants, or enjoy a higher staff to patient ratio.

The ambience in the more heavily subsidised wards should be kept simple, with only those creature comforts which are absolutely necessary. This way we will not inadvertently provide and subsidise Class A standard of service at Class C rates, and we can keep costs in Class C wards affordable to the low income patients who use these wards.

MOH and the Ministry of Finance (MOF) will jointly set revenue caps on the subvented hospitals to restrain the rate of increase in medical charges. The revenue caps will vary with ward class, medical specialty, and type of hospital. The caps will be revised yearly to allow for inflation, productivity increases, and medical progress. The maximum growth in revenue per year will be CPI + X, where CPI is the cost of living index, and X is the control variable to be decided by MOH and MOF.

The Government has announced the subsidy rates for the different classes of wards. These rates, together with the revenue caps, will determine the dollar amount of subsidy to each hospital. Hospitals will be required to break even within these revenue caps and subsidy rates.

MOH will also coordinate the development of specialist and sub-specialist disciplines and services, and the introduction of high-cost and high-technology medicine and equipment in all subvented hospitals. This will enable us to introduce medical technology at a pace we can afford.

Financing

Our health care financing is based on individual responsibility, coupled with Government subsidies to keep basic health care affordable. To avoid the pitfall of "free" medical services stimulating insatiable demand, patients pay directly for part of the cost of medical services which they use, and pay more when they demand a higher level of services.

As health care costs rise, we will need to raise the Medisave contribution rate progressively. But we should contain health care costs so that the Medisave contribution rate will not need to exceed 10%.

We should also explore ways to make greater use of medical insurance, especially by widening and improving Medishield. But, we must avoid unrestricted and open ended medical insurance as practised in the US, which leads to the provision of unnecessary medical services and escalating premiums.

We will extend Medishield in two ways. The first is by improving the present basic Medishield benefits package which covers Class B2 and C wards. The second is by introducing Medishield II — a second tier of coverage, on a voluntary basis, for those who want higher limits on daily reimbursement rates to cover a larger part of the hospitalisation expenses in higher class wards. To give Singaporeans a wider choice of medical insurance coverage, we will also allow people to use Medisave to buy other approved private sector medical insurance policies which conform to the same criteria as Medishield I and Medishield II, with co-insurance and deductibles.

In the long term, as health care costs rise, employers should shift more to those types of medical benefits which will not encourage overuse. One way is for

employers to build their medical benefits system on Medisave. They can make voluntary Medisave contributions for their employees, over and above the statutory contributions, in lieu of part of their traditional benefits in kind. These additional contributions should be tax free, up to 2% of salary, corresponding to the 2% cap on the tax deductibility of free medical benefits.

The Civil Service is the largest employer in Singapore. It will set the lead by introducing a new medical benefits scheme for new employees along these lines. New recruits will receive additional Medisave contributions over and above the statutory Medisave contributions, in lieu of hospitalisation benefits. They will also retain the traditional outpatient benefits, but subject to a cap. This will give them more freedom to decide how they want to use the Medisave amounts.

Private Sector Medisave Patients

Private sector practices significantly influence the public sector. The public sector has had to increase salaries of medical practitioners and staff partly in response to income trends in the private sector. This has contributed to a rise in health care costs.

Many private sector patients use Medisave to pay part of their medical bills. The Government needs to limit balance billing by private doctors and hospitals of Medisave patients, i.e. the amount which patients are charged in addition to the Medisave reimbursement limits.

MOH is the regulator and administrator of the health care system. Initially it will decide the revenue caps for subvented hospitals and the controls on balance billing in the private sector. Later we will set up a Medical Fees Council to take over this responsibility. The Council can comprise representatives from the Government, private health care providers, CASE, employers and unions.

Medical R&D

The National University of Singapore

(NUS), MOH and subvented hospitals need to do medical research to maintain teaching standards, keep up with developments in the field and provide more cost-effective care. But the scale and goals of the research must be realistic. Talent and funds for medical R&D are limited. More importantly, the objective must be cost-effective medical practices and not to be at the cutting edge of high-tech medicine.

We will set up a National Medical Research Council to disburse R&D funds, and to approve, oversee and co-ordinate medical research done by the various hospitals, centres and institutions. The Council will be guided by this research objective in approving and funding medical research projects.

Medical Education and Training

The NUS Faculty of Medicine is responsible for undergraduate medical education and training. We must maintain high standards of medical education and training so that Singaporeans can continue to enjoy good medical care. Our doctors must receive training relevant to our national health needs and in line with national health policies.

Primary health care is the first line of medical care. 60% of doctors will practise as family practitioners. Family doctors need to stay continually up-to-date so that they can perform their role well. They serve as gate-keepers to the medical system, and advise patients whether they need to consult specialists.

Medical students must therefore learn to administer cost effective treatments and to avoid over-dependence on costly investigations, excessive tests and drugs. NUS must regularly review the medical undergraduate curriculum together with MOH and the Singapore Medical Council.

Because of the expense involved, and the need to deploy limited talent optimally, the training of specialists should be based on the medical needs of Singaporeans. MOH must centrally coordinate and periodically review postgraduate and advanced medical training at subvented hospitals.

Conclusion

This approach to controlling heath care costs is neither a totally regulated national health service nor a pure free market system where providers have full freedom to organise and to price their services. It is a hybrid system comprising three levels:

a. Subvented hospitals, subject to controls in key areas of pricing and operations;

b. Private sector patients using Medisave, subject to controls on charges above Medisave reimbursement limits; and

c. Private sector patients on their own, subject to minimal controls.

There is no natural limit to the demand for medical care. Because the health care market is imperfect, the Government must intervene to prevent health care costs from consuming a disproportionate share of the nation's or a family's resources. We must give patients and doctors the incentive to be responsible, encourage hospitals to compete with one another in providing efficient services, and thus keep health care costs under control.