



Affordable Health Care

AFFORDABLE HEALTH CARE

A White Paper

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EXECUTIVE SUMMARY

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

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

Defining WHERE the government is going to manage the health care system

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

tertiary² - 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.

GOAL/AIM

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;

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 health 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.

In February 1992, the Government accepted the report of the Review Committee on National Health Policies chaired by Dr Aline Wong, Minister of State for Health. The Government then set up a Ministerial Committee under BG (Res) Lee Hsien Loong, Deputy Prime Minister and Minister for Trade and Industry, to follow-up on the Review Committee's recommendations. In particular the Ministerial Committee was tasked to review and recommend the Government's role in the provision of health care with the following objectives:

- a. To create an efficient quality health care system;
- b. To keep basic health care accessible to all; and
- c. To contain long-term health care costs and government subsidies.

Appendix A lists the members of the Ministerial Committee.

Aim

The Government has accepted the proposals of the Ministerial Committee. This White Paper is based on the Committee's recommendations. It sets out the Government's approach to controlling health care costs, and proposes specific policies to implement this philosophy, and to keep basic health care affordable and accessible to Singaporeans.

Need to Control Health Care Costs

Expenditure on health care is rising in many countries. In most developed countries health expenditures have grown much faster than the economy, and absorbed an increasing share of the nation's resources. With growing affluence and rising expectations, societies place more emphasis on the quality and value of life and demand better medical services. The problem is exacerbated by ageing populations, rising manpower costs and greater use of expensive medical technology and drugs.

No society, except the poorest, can tolerate a situation where a large part of the population is deprived of affordable health services. The Government, on behalf of society, therefore must play an active role in managing the health care system. It determines the structure of the entire system, whether by commission or omission of policy. It may regulate prices, subsidise privately provided medical care, or provide health services itself.

Currently, Singapore's national health expenditure (NHE) is 3.1% of GDP. Government subsidies for health make up 0.7% of GDP. Medical costs form only 2.5% of household expenditure. This is much lower than the developed countries. The US spends 13% of its GDP on health, the OECD countries between 6-9%, and Japan 6-7%.

However, Singapore's health care costs and demand for health services are rising steadily, while the economy is maturing and growing more slowly. In the longer term, health care expenditure will inevitably increase. Medical

expenses will take up an increasing share of household expenditure. **But there is a limit to the amount of resources which can be devoted to health care, and to the financial burden households can bear. We must therefore establish guiding principles and policies to manage the health care system, and in particular to control health care costs.**

Whichever way we choose to finance the cost of health care, the burden ultimately falls on the people.

This is true regardless of whether patients **pay directly for their medical treatment, buy medical insurance to cover the risk, get employers to provide them with medical benefits, or pay taxes to fund medical subsidies from the state.** Insurance premiums have to be paid by the insured, employee medical benefits form part of wage costs, and taxes are paid by taxpayers.

The question therefore is not whether the state or the individual should pay for health care in Singapore. It is rather how best to

structure the health care system, and the means of financing it, in order to keep it efficient, and make it accessible to all citizens at rates they can afford.

Any health care policy has to trade off among four competing goals:

- **Equitable access;**
- **Freedom of choice for patients;**
- **Affordability; and**
- **Freedom to organise production and to price.**

No known health care system achieves all four goals simultaneously. A system can attain three of them with some compromise. Which three to aim for depends on the prevailing social, financial and political conditions. **Given Singapore's environment, we have to compromise the last goal: freedom to organise production and to price.** Except for the United States, most developed countries have implicitly or deliberately made the same choice. Appendix B compares the health care systems of selected countries.

Key Areas for Action

In health care, supply tends to create its own demand, thus raising health care expenditure. The Government therefore needs to intervene to prevent an over-supply of services, to dampen unnecessary demand and ultimately, to control costs.

Proposed Health Care System

We propose a hybrid approach to controlling health care costs: neither to create a totally regulated national health service, nor to give providers full freedom to organise and to price health services in a completely free market. The hybrid system will comprise three components :

- a. Subvented hospitals will be subject to regulation in key areas of pricing and operations;
- b. The private sector, when it treats patients using Medisave, will be subject to Medisave reimbursement limits and caps on balance billing; and
- c. The private sector, when it treats

patients not using Medisave, will be subject to minimal regulations.

Implementing the Philosophy

Everyone has a part to play to help curb increases in health care costs and ensure that basic health care remains affordable. Individuals should take responsibility for their health by adopting a healthy lifestyle, not demanding excessive medical services and saving up for their own health care needs. The Government will emphasize education and preventive programmes to encourage Singaporeans to stay healthy. It will also regulate the health care system to keep costs under control. The Government will continue to provide subsidies to the lower income groups and waive charges for the needy, to keep basic health care accessible to all Singaporeans.

Action is needed on many fronts. Chapter 2 discusses the Government's health care philosophy. Unless this philosophy is sound, our efforts will not be effective in curbing cost increases.

Chapter 3 outlines the basic health care package the Government intends to make available to all Singaporeans at affordable rates. We need to limit resources for treatments that yield the most worthwhile outcomes. Chapter 4 explains why the supply needs to be regulated, and the key areas requiring regulation. It also outlines a plan to give Singaporeans a wider choice of care. Chapter 5 discusses the key areas in subvented hospitals that the Ministry of Health will need to control to cap cost increases and give Singaporeans value-for-money. Chapter 6 explains the need to structure the financing system to create incentives for individual responsibility. Chapter 7 proposes capping private sector charges and limiting balance billing for patients who use Medisave. Chapter 8 deals with the need to direct medical research and development. Chapter 9 outlines the strategic direction for medical education and training. Chapter 10 concludes the report.



2 HEALTH CARE PHILOSOPHY

The Government's approach to health care has 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 emphasise health education and disease prevention programmes. We need to encourage the population to keep fit, adopt healthy lifestyles, and use medical services judiciously. For example, patients should see their family doctor first before consulting specialists. We must also encourage doctors in

the private sector to set up more family physician type clinics. Employers, unions and individuals have to play their roles, as these objectives cannot be achieved by Government efforts alone.

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.

The pursuit of excellence is a national ethos. Our medical services have built up an international reputation for excellence. The NUS medical faculty is recognised as an outstanding medical school in the region. However, in medicine, the pursuit of excellence must always be subject to what the nation can

afford. **Singapore should not aim to be a centre of medical excellence in all fields, but should seek to excel, within the resources allocated, in areas that reflect national needs and priorities.**

We cannot avoid rationing medical care, implicitly or explicitly. Funding for health care will always be finite. There will always be competing demands for resources, whether the resources come from the State or from individual citizens. Using the latest in medical technology is expensive. Trade-offs among different areas of medical treatments, equipment, training and research are unavoidable. When public funds are involved, doctors have to decide which patients will benefit most from an expensive treatment. **To get the most from a limited health budget, we need to exclude treatments which are not sufficiently cost effective to belong to the basic health package available to all.** **We must allocate resources according to rational priorities so that they can do the most good for the largest number of people.**

The Government has promised

Singaporeans access to affordable basic medical services. This basic package will reflect good up-to-date medical practice, but it will not provide the latest and the best of everything.

The medical treatment provided will be cost-effective and of proven value. This basic package will evolve, as medical science improves and as what society can afford increases. Today, major surgical operations such as renal transplants for patients meeting certain medical criteria have become part of the basic medical package. Heart and liver transplants have not.

A large part of this basic care will be provided in the subvented hospitals. Medical care in Class B2 and C wards will reflect this basic package. Services in these wards are heavily subsidised by the government.

With growing affluence and rising expectations, some Singaporeans will want more medical care than the Government can provide in the basic package. We should not prevent people from obtaining more medical services if

they are prepared to pay for it. They can either do so by paying for the extras in the subvented hospitals, or they can seek treatment from specialists and hospitals in the private sector.

We must rely on competition and market forces to impel hospitals and clinics to run efficiently, improve services and offer patients value for money. National health systems which ignore the cost of the resources they use eventually become wasteful and bloated, and deliver poor service to patients. But market forces alone will not suffice to hold medical costs down and to produce efficient health services. **For humane reasons, even destitute persons who cannot afford to pay should not be deprived of basic health care.**

However, health care is an instance of market failure. Health care services are to a significant extent supply-driven. Supply creates its own demand. More competition and supply of medical services may drive costs up instead of down. When a third party pays for all or part of the care provided, which is

usually the case, doctors have few incentives to moderate the care they provide, and may prescribe treatment which is not absolutely necessary. **Second, ill and worried patients and their families depend on doctors to advise them on the treatment they need. They are not fully informed, dispassionate consumers who can make objective choices among competing alternatives.** Health care providers are therefore in a position to influence the demand for their services, and thereby evade the usual discipline of the free market.

In unregulated markets, medical insurance services develop naturally. Because individuals cannot predict when they will fall ill, they will seek to pool risks to protect themselves against the uncertainty of an expensive bout of illness. Unfortunately, unregulated health insurance suffers from three problems:

- a. **Diseconomies of small scale:** Competing insurance companies each have their own administrative and marketing overheads. In the US, administrative costs have been estimated to consume a hefty 22% of total health care expenditure.

- b. **Moral Hazard:** Insurance-based health systems reduce the cost to the individual at the point of treatment. In the long run, this removes the incentive for the individual to stay healthy or to minimise his use of health care services.
- c. **Adverse Selection:** Insurance companies can pick and choose only those whom they want to insure, leaving high risk groups without insurance cover. This creates a serious problem of equity.

We therefore cannot let market forces alone structure our health system. **The Government has to intervene to prevent over-supply, moderate demand and create incentives to keep health care costs under control.** The Government will need to regulate the provision of facilities, medical manpower and the flow of funds. Specifically, it must manage directly 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 supply of doctors and hospitals;

- c. Key operational aspects of subvented hospitals;
- d. The way the medical services are financed;
- e. Charges on patients using Medisave in private hospitals;
- f. Medical research and development; and
- g. Medical education and training.



W

e must get value for what we spend on health care. **Hospitals and doctors must continually trade-off competing needs and allocate more resources for cost-effective treatments that yield the best outcomes.** Sometimes the returns may not be measurable financially, or easily quantified. But we must always satisfy ourselves that the benefits - quality of life improved, suffering relieved, or lives saved - are worthwhile and commensurate with the effort and resources expended.

MOH will define the basic medical package which all Singaporeans will have access to, as it has always done. Without such a basic package, there is no limit to the amount of medical care which patients might want, and which the state will have to subsidise.

A medical condition may be treated in many ways, depending on the severity of the condition, the doctor's judgment and sometimes the patient's preference. For example, the patient may seek treatment at a tertiary hospital for a condition

which can be adequately dealt with at a secondary or community hospital at lower cost. A fussy patient may even choose a hospital for its location or ambience, even though it does not offer the cheapest or most effective treatment for his problem. At the hospital, he may choose to have a room to himself, with a nurse assigned exclusively to look after him 24 hours a day, or he may stay in an open ward with other patients. Depending on his condition, the doctor may give him either a simple but adequate examination, or a battery of sophisticated tests to rule out unlikely diagnoses and confirm what he already knows. He may then prescribe a generic drug costing a few cents per dose, or a proprietary product which is marginally better but much more expensive. If the patient is terminally ill, doctors may treat him conservatively, giving him sedatives and pain-killers to ease his pain and agony, or they may prolong his suffering for a few days or weeks with aggressive treatment in an intensive care unit.

Other countries too have found it necessary to limit state subsidies for medical care to a basic package. For

example, one US state, Oregon, has developed through an elaborate process of public consultation, the Oregon List Of Prioritised Health Services for funding under the Medicaid Programme. Under this system, a standard package is provided only for the first 587 services on the prioritised list of 709 services. In UK, the National Health Service is gradually moving away from the principle of comprehensive “cradle to grave” health care towards a basic health service which will exclude certain types of treatment and surgery. Canada also has a basic package of medical services outside of which individuals will have to meet the full cost of treatment.

In Singapore we can define the basic package by more pragmatic and less formal methods. The basic package will reflect good up-to-date medical practice, and is broadly what is already available in B2 and C Class wards of subvented hospitals. It will contain essential and cost-effective medical treatment of proven value for illnesses, without which the patient’s health and quality of life will be significantly compromised. 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.

The basic package includes treatment by qualified doctors and specialists, but does not give the patient the right to choose his specialist. It includes drugs on a standard list which is based on WHO recommendations, and covers nearly all normal medical requirements. But it excludes alternative drugs which may be marginally better than those in the standard list, and experimental drugs. Some expensive investigations, drugs and procedures are subject to procedural restrictions as a safeguard against overuse: they are available in the basic package, but can only be ordered by a consultant or senior doctor.

It is not practical to enumerate all the items in the basic package. Firstly, these cover a large part of the practice

of medicine, an enormous field. Secondly, MOH can only specify the basic package in broad terms. A great deal of judgment as to when exactly to carry out a procedure or to prescribe a drug must be left to hospitals and doctors. They are the ones who actually diagnose and treat the patients. Doctors have a fiduciary duty to act in the interests of their patients and in accordance with professional standards. They must judge whose need is greater and who can benefit most from the procedures or drugs, taking into account the medical conditions of individual patients, and working within the overall resource constraints.

However, we can cite examples of specific treatments which do not belong to the basic package:

- Cosmetic surgery e.g. liposuction, facelifts, mammoplasty;
- Cosmetic dentistry e.g. orthodontic treatment other than for medical indications;
- Sex reassignment operations;
- In-vitro fertilisation treatment;

- Heart, lung, liver and bone-marrow transplants;
- Artificial appliances other than the most basic models for the heart, hips, knees, etc.;
- Experimental drugs and chemotherapeutic agents not of proven value;
- High cost methods of investigation and treatment where effective cheaper alternatives are available.

In deciding how to treat individual patients, doctors will often be guided by treatment protocols, which set out the standard practice in given circumstances. Such protocols help doctors to avoid ordering unnecessary investigations and treatments, and are especially useful where the treatments are not of proven clinical effectiveness or will not improve the patient's quality of life significantly. Examples of such situations are:

- Aggressive treatment of incurable diseases where there is no chance of survival;
- Long term life-support for severely brain damaged patients with no chance of recovery; and
- Intensive care for very premature

newborns who are unlikely to survive and whose long term prospects, even if they survive, are uncertain.

The purpose of the basic package is only to define what medical services the Government will subsidise and make available to the whole population. The Government will not and should not prevent people from obtaining medical services beyond the basic package. Hospitals and doctors may provide services not in the basic package, but the Government will not subsidise them. The patient will have to pay their full cost, or obtain them by participating in some research programme.

The Government will continually review the basic package to take account of medical progress (new drugs, procedures and equipment) and social and economic changes. MOH will consult the subvented hospitals, medical professionals, and other experts when doing so.

4 SUPPLY OF DOCTORS AND HOSPITALS

The Government will ensure an adequate supply of medical manpower and facilities to meet the health care needs of all Singaporeans. But it will also need to prevent an over-supply. The experience of other countries shows that when there are too many doctors and specialists, demand for medical services is inflated, and spending on health care goes up. **Therefore the Government will regulate the overall number of doctors and specialists, the total numbers of hospital beds (including ICUs), and the introduction of new medical technology.**

Training of Doctors and Specialists

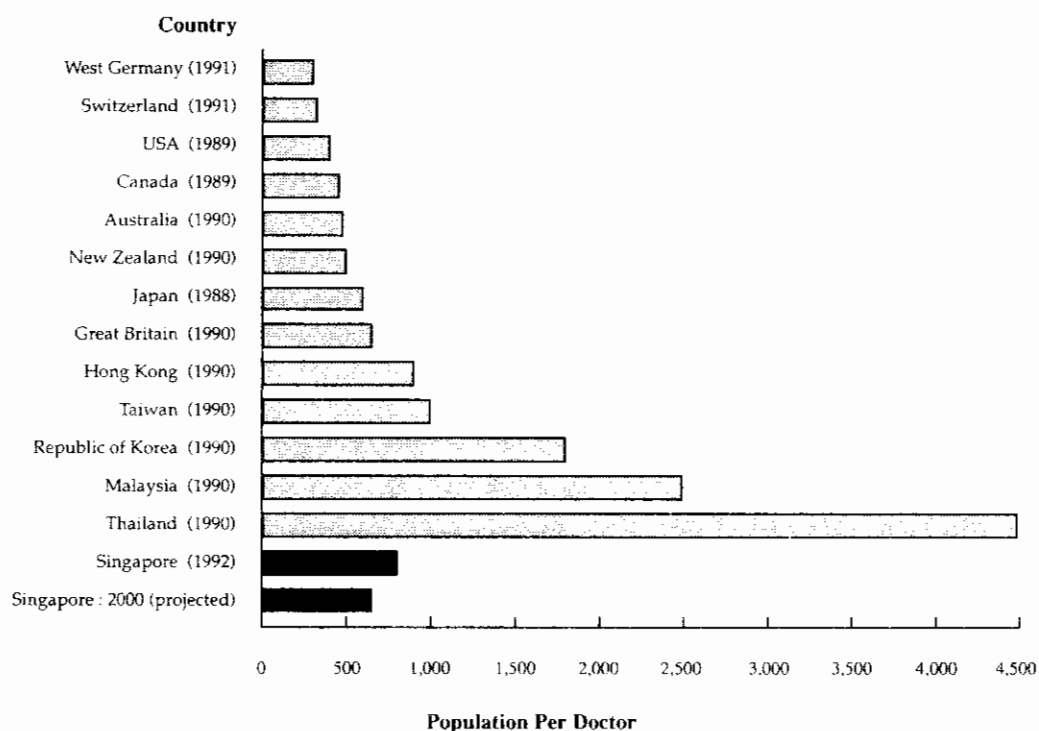
Training doctors and specialists is expensive. The Government currently subsidises the training of each medical undergraduate by over \$200,000, far more than it subsidises any other undergraduate university course. Subsidising medical training is necessary, but it distorts the labour market for doctors. It encourages more qualified students to study medicine than the country requires. Not

all who apply can be given places. **The Government must therefore continue to regulate the number of doctors being trained.**

MOH sets the number of medical students to be admitted into NUS each year. There is no formula to determine the optimal number of doctors in a country. However, taking into account

patient load, disease patterns, changing demographic profiles, foreign patients and increased medical R&D, MOH projects that the number of doctors needed will increase from the present 3,600 to 5,200 by the year 2000. This will reduce the population to doctor ratio from 800 to 650. The chart below gives an international comparison of the ratio of population to doctors.

POPULATION PER DOCTOR IN DIFFERENT COUNTRIES

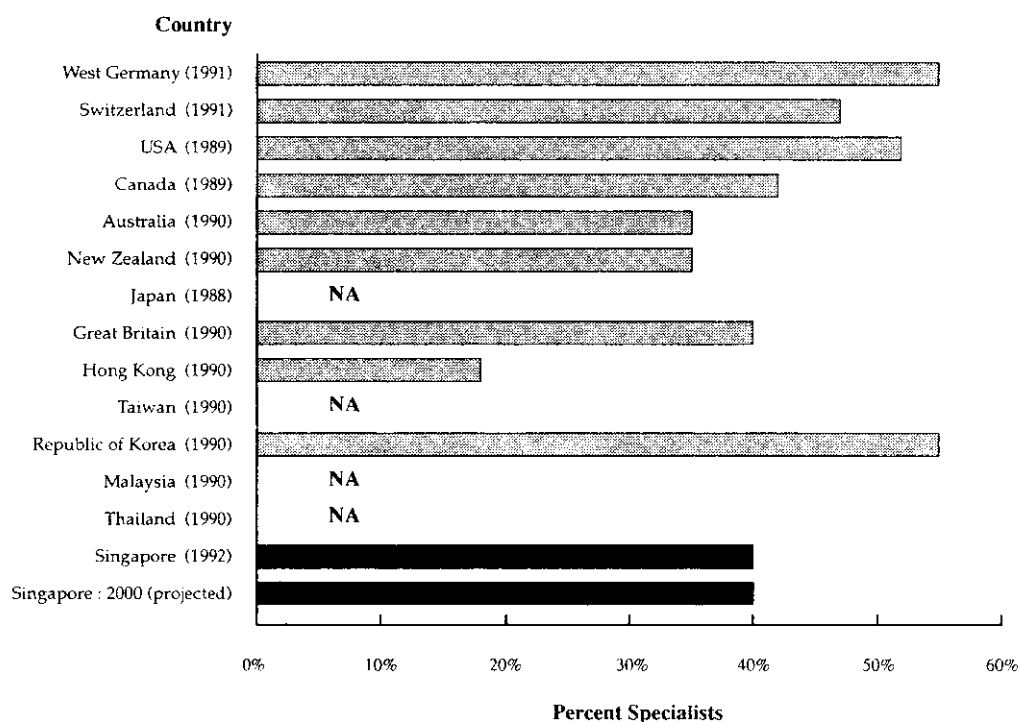


At present, about 50 foreign-trained doctors per year register to practise in Singapore. Allowing for this, NUS needs to admit no more than 150 medical students per year to meet the target. The Ministry of Health is reviewing the criteria for registering foreign-trained doctors to ensure that professional standards are maintained and the numbers are not excessive. From time to time,

we will also need to review the annual intake of medical students to NUS.

Over-specialisation will increase the demand for health services, result in inefficient use of talent, and raise costs. At present 40% of doctors are clinical specialists. This proportion compares favourably with other countries. It should not be further increased.

PERCENTAGE OF DOCTORS WHO ARE SPECIALISTS



MOH should also regulate the number and type of trainee specialists and the development of sub-specialisations, and coordinate the development of specialist departments in subvented hospitals.

The training of doctors and specialists should be dictated by needs. As 60% of doctors will become family practitioners, undergraduate medical training must continue to emphasize primary health care and not high-tech medicine. Specialist training should, as far as possible, be carried out locally, using all subvented hospitals in order to take full advantage of the training materials available. Overseas training should be confined to selected top trainees, or disciplines where local expertise is inadequate. However, we should not expand or introduce new hospital facilities solely to train doctors.

Provision of Hospital Beds

MOH should control the total number of hospital beds in Singapore taking into account changing disease patterns and the ageing population. Because health care services are supply

driven, providing more hospital beds will not necessarily drive down health care prices. It may instead pressure doctors to admit patients more readily or keep them in hospital longer than necessary.

MOH must also control the number of Intensive Care Unit (ICU) beds a hospital may have, as the ICU is the most expensive service in any hospital.

Regulate Specialist and Sub-specialist Disciplines and High Tech-Medicine in Each Hospital

Hospitals need regularly to upgrade their standards of medical care, by introducing new services and acquiring new technology and equipment. Not all new technologies prove more expensive in the long run. Some help to cut medical costs or reduce patient suffering, for example, the use of lithotripsy instead of surgical operations to remove kidney stones, or Minimally Invasive Surgical Techniques (MIST) to replace conventional major operations. Nevertheless, the increasing use of more sophisticated and expensive equipment,

tests and drugs which yield marginal improvements in diagnosis or treatment, poses problems for health care systems worldwide.

MOH will coordinate the development of specialist and sub-specialist disciplines and services in the subvented hospitals. Each hospital should seek to excel and make its name in some field of medicine, instead of trying to cover the whole field of advanced medicine. Hospitals should only introduce new technology and equipment when they prove effectual and cost-effective. They should not enter into a technology race among themselves, unnecessarily duplicating expensive facilities and specialties.

MOH will continue to ensure that the new technology or equipment is safe, doctors and operators are properly trained, and outcome assessments are favourable. MOH will allow patients in private and subvented hospitals to use Medisave for new treatment procedures only after it is satisfied that the procedures have been tried, tested, and generally accepted as good medical practice.

A Wider Choice of Hospital Care

We need to offer patients a wider range of choices in acute hospital care. Not all subvented hospitals should provide identical services. SGH and NUH are tertiary care hospitals which provide sophisticated but more costly medical care. Most patients admitted to hospitals need only secondary care. Chronically ill patients, especially the elderly, only need a hospital ward to recuperate, with access to specialist treatment if their condition worsens. This can be done more cheaply in community hospitals.

It would be wasteful to equip all hospitals as comprehensively as SGH, and unreasonable to allow all hospitals to charge as much as SGH does for their services. **We need a range of subvented hospitals — tertiary, secondary and community — to provide the level of care appropriate to the needs of the patient.** Which hospital a patient is admitted to should then depend on his medical needs and the advice of his doctor. Secondary and community hospitals should charge less than tertiary

hospitals because they provide a less sophisticated range of services. But they should be linked up with tertiary hospitals, to give their patients access to specialised care should they need it.

The two tertiary hospitals, SGH and NUH, will be sufficient to meet Singapore's tertiary medical requirements for the foreseeable future. Over the next decade, the Government will build three more secondary hospitals: a new hospital on the Tan Tock Seng (TTSH) site, a new hospital to replace the existing Kandang Kerbau Hospital (KKH) and another hospital in the Eastern part of Singapore. We will also upgrade some of the older generation hospitals to modern standards, such as Toa Payoh Hospital (TPH) and Alexandra Hospital (AH). However, these will all be secondary hospitals, and should not seek to duplicate the expensive and sophisticated facilities available in SGH and NUH. We will redevelop part of the existing TTSH into a rehabilitation hospital and eventually convert the existing TPH to a community hospital. This will be much cheaper than building new hospitals from scratch.

For some specialist disciplines, for example burns and radiotherapy cases, the number of patients in Singapore is too small to justify duplicate facilities in the two tertiary hospitals. For other disciplines like cancer, heart disease, skin and eye diseases, and neuroscience, while the overall number of cases is large, complex cases requiring expensive equipment, highly specialised expertise, or multi-disciplinary treatment are relatively few. There may be significant economies of scale in treating these cases, both in terms of capital investments as well as results. For example, experience overseas has shown that hospitals which do many heart bypass operations have significantly better patient survival rates than hospitals which only carry out heart bypasses occasionally.

We should concentrate our resources to develop centralised national centres for such disciplines. Specialists from all hospitals should have access to these centres. These centres will not monopolise treatment of all cases in their disciplines. All hospitals must continue to treat patients with cancer or heart disease, which are major causes of death

in Singapore. But they must do so within their capabilities, and refer patients who need more sophisticated medical treatment to the national centres. This system will give patients the best and most comprehensive medical treatment at the lowest cost.

While all the subvented hospitals are currently run either by the Health Corporation of Singapore (HCS) or the Government, this need not always be the case. The Government encourages private sector organisations, especially civic and voluntary welfare groups, to take over and run subvented hospitals. They should do so on the same terms as the HCS, so that the competition will be fair and the public can choose the most efficient provider. This will generate more competition, and offer the public a wider choice of medical services to satisfy different needs at competitive prices. It will also demonstrate that the Government is not making money out of providing health care, and that the hospitals break even only because they receive heavy Government subsidies.

While the subvented hospitals provide

good basic medical care, private hospitals and specialists can serve Singaporeans and foreigners who seek medical treatment beyond this basic level. The private sector can provide the full range of services that its patients demand, with few constraints. Increasingly, patients are opting for the more personalised and lavish service offered by the private sector. This is so especially in obstetrics. More than half the babies in Singapore are now born in private hospitals.

The private sector presently provides 20% of acute hospital beds, mainly at the higher end of the hospital market. There is room to increase their share to 30% by 2010. This will free the Government to focus on providing quality basic services to the majority of Singaporeans. To encourage the private sector to play a larger role, we will limit the number of Class A beds in subvented hospitals, and periodically release land parcels for private hospital development.

Over time, four groups of institutions will develop :

- a. Tertiary institutions, namely SGH and NUH, plus national centres for specialist disciplines, e.g. eye, skin, cancer, heart, neuroscience;
- b. Secondary hospitals, e.g. AH, TTSH, Eastern General Hospital;
- c. Community hospitals, e.g. Ang Mo Kio Hospital (AMKH); and
- d. Private sector hospitals.

In primary care, there is already sufficient competition from the private sector. The public sector should maintain its current market share of 25%, to cater to the needs of the lower income group and the training of primary care physicians.



5 REGULATING SUBVENTED HOSPITALS

Subvented hospitals should emphasize basic medical care rather than high-tech and high-cost services like heart and liver transplants. They should generally confine their procedures and drugs to the most cost-effective items. **They should not spearhead the introduction of novel high-tech medicine, until these have proven to be more cost-effective than existing procedures or treatments.** They must care for the terminally ill and aged sick sensibly and humanely but should not offer treatments to prolong life regardless of financial costs and human suffering. The basic medical care they provide need not always be curative, but should offer relief from suffering and respect for human dignity.

We should rely more on day surgery and ambulatory care as well as community-based health services. Providing care outside conventional hospital settings, e.g. in nursing homes and community hospitals, will reduce the cost of treating patients who do not need acute medical intervention. We must make arrangements for rehabilitation, convalescence, and

hospice care in patients' own homes or other appropriate community settings. We should encourage the development of community-based services, and domiciliary and ambulatory care for the elderly and the mentally ill.

Role of MOH

Subvented hospitals must be managed efficiently. They must pitch their standard of service, and hence their cost, at a level which both the Government and the public can afford. Cost containment should become part of the hospital management culture, both among administrators and clinicians.

Subvented hospitals will compete against one another in terms of price and quality of service. They must have the incentive to improve service and cut costs. This incentive must be a profitable bottom line, not in an absolute sense, but after taking into account government subsidies. This was why we restructured the Government hospitals to make them independent operating entities.

Subvented hospitals need flexibility to compete effectively against one another, but they must be subject to certain controls. In a normal market, the Government can, after determining the subsidies, leave individual hospitals to decide what services and level of service they should provide; how much to charge their patients; and what costs to incur. Each hospital's profit or loss will depend on these decisions, and on the demand for health care. Hospitals which misjudge the market will lose patients and money and may eventually close down.

Unfortunately this self-regulating control mechanism does not fully work in health care, because of market failure, as explained earlier. Even with Medisave, which is really patients' own money, experience has shown that patients are more ready to spend their Medisave balances than if they had to pay cash. Hospitals can therefore pass on excessive costs to patients by prescribing more tests and treatments than necessary, or simply by raising charges, without losing patients.

We need additional controls to keep hospitals efficient and to prevent cost inflation. As restructured hospitals gain more autonomy, the Government will need to specify more precisely and transparently what rules they are subject to, and what freedom they have to operate on their own.

MOH will act as buyer of hospital services on behalf of the public, to obtain the best value for the money spent on health care, both the Government's subsidy as well as the individual's Medisave and cash payments. MOH will specify the package of services to be provided, and negotiate with subvented hospitals to obtain these services at the lowest price.

Key Areas of Control

Specifically, for the subvented hospitals, MOH needs to control :

- a. **The number of beds and their distribution by class in each hospital** (a maximum percentage for Class A and a minimum percentage for Class B2/C);

- b. **The ambience, service norms and standard of service** (e.g. minimum number of beds per ward, maximum floor area per bed, air-conditioning);
- c. **The revenue per patient day by class of ward;**
- d. **The amount of subsidy; and**
- e. **The development of specialist departments and the introduction of new technology.**

Many other countries have found it necessary to regulate key aspects of hospital care. Canadian hospitals must obtain a Certificate of Need before buying major capital items. In theory private physicians can buy any equipment they want, but they cannot be reimbursed by either the government or the patient unless there is a procedural item on the fee schedule. The US similarly controls hospitals accredited to treat Medicare and Medicaid patients. Japan allows reimbursement for certain high-tech treatments only when they are provided in designated institutions. Non-approved hospitals are therefore unlikely to purchase such equipment or provide such treatments as they cannot get reimbursed.

Limits on Bed Distribution

As incomes and Medisave balances have risen over the last decade, the population has increasingly demanded and been able to afford better class hospital services. Fewer patients are choosing Class C, and more are opting for Class B2 or better. This trend will continue. To ensure enough affordable beds for all income groups, distributed fairly among the hospitals, MOH must regulate the proportion of the different classes of beds in the subvented hospitals.

At the top, we need to limit the proportion of unsubsidised Class A beds. This will allow subvented hospitals to focus on their primary mission: to provide quality basic medical care to the middle and lower income groups at affordable prices.

From the point of view of cost recovery, more Class A patients means less subsidies. But we should not provide too many Class A beds because:

- This may encourage patients who cannot really afford Class A beds to opt for them. Already 17% of

patients earning less than \$1,000 per month opt for Class A.

- This will raise the expectations of patients in other wards that they too should receive, at subsidised rates, services not belonging to the basic package, but which are available to Class A patients paying the full costs.
- This will crowd out the private sector, and make it harder for the private sector to grow.

We should retain some Class A wards in subvented hospitals. These beds will serve as a benchmark for the private sector, and help to restrain the cost of private medical services.

But the proportion of Class A beds in subvented hospitals should not exceed the present level of 11% . While there can be some variation among different hospitals to cater to different demand patterns, **no hospital should have more than 13% Class A beds.**

To guarantee enough subsidised beds for the lower income groups, each subvented hospital should have at least 65% of Class B2+, B2 and C beds.

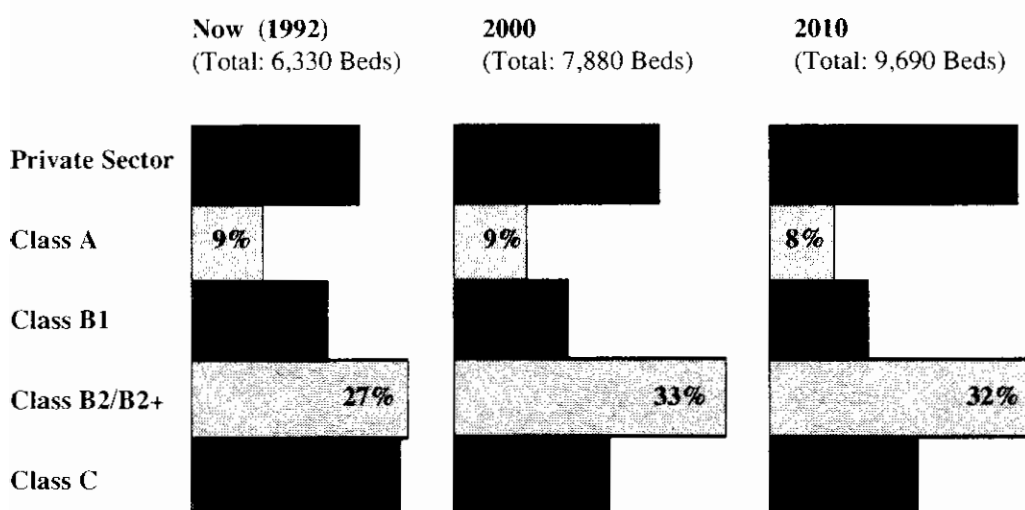
Subvented hospitals will always have Class C beds, to serve the most needy Singaporeans. The new subvented hospitals being built will have Class C beds. The percentage of Class C beds in each hospital will vary according to actual demand. Presently, they form 33% of beds in subvented hospitals. MOH expects this proportion to fall to 25% by the year 2000.

The following chart shows how the distribution of acute hospital beds in different ward classes will evolve over

the next two decades. The projection is based on current demand patterns and trends, and will be reviewed every 5 years.

A subvented hospital may want to develop additional Class A wards or clinic suites, in order to offer new unsubsidised services. It may do this on its own, like any private hospital, provided the project is commercially viable, and can be funded on a commercial basis without Government support. The project should preferably

TARGET BED DISTRIBUTION IN ACUTE HOSPITALS



be run as a separate company with a different corporate name and image. Physically the additional facilities should be as distinct as possible from the subvented operation, e.g. in a separate block, which for practical reasons can adjoin the public hospital. The project must be clearly seen to be a private venture which is outside the subvented hospital system, offering services which are not within the basic health care package which is available to all citizens.

Specifying Ambience, Service Norms and Standard of Service

The trend of patients shifting away from Class C wards has helped focus the heavier subsidies for Class B2 and C on those who really need them. In the longer term, we need to manage demand for these wards so that the highest subsidies continue to be targeted at the lowest income groups.

The direct way to manage demand, which may eventually become necessary, is to use a means test. This is an expensive and administratively clumsy

procedure, which the public will take some time to get used to, and which we should postpone so long as alternatives are available.

One alternative is to allow less subsidised wards to enhance the basic medical package with some services not within the basic package. However, patients will have to pay full incremental costs for these additional services, which the state will not subsidise. For example they may be given the right to choose their consultants, be allowed expensive drugs and procedures which offer marginal improvements to those in the basic package, or have fewer patients per nurse. This will be done without compromising the standard of medical care in Class B2 and C wards.

A second alternative is to differentiate standards of non-medical items provided by the different wards, such as the ambience and creature comforts. Class C wards should provide good medical service without frills like air-conditioning. 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 will use them. Specifically, we need to specify for each class of ward:

- a. The minimum number of beds per room;
- b. The maximum floor area per bed;
- c. Whether or not the ward should be air-conditioned; and
- d. Whether or not the patient can choose his consultants.

Limit Hospital's Revenue Per Patient/Day

MOH and MOF will jointly set **revenue caps on hospitals to constrain directly the increase in medical charges over time.** Revenue includes both what the patient pays in fees and what the Government provides as a subsidy. **The cap will be set in terms of average revenue per patient day.** There will be different caps for different ward classes, different groups of medical specialties (e.g. oncology patients will have a higher cap than paediatric cases), and different types of hospitals. Tertiary hospitals

will have higher caps than secondary hospitals. The caps will be adjusted yearly to allow for inflation (as measured by the Consumer Price Index, or CPI), productivity increases, and medical progress. The maximum percentage growth in revenue allowed each year will be $CPI+X$, where X is the control variable to be decided by MOH and MOF. To give hospitals some stability in planning, X will not be revised annually, but only once every few years.

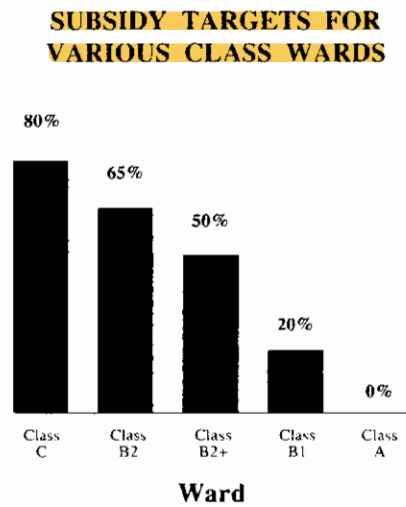
The caps will constrain hospitals to service their patients within a fixed amount of resources and conform to reasonable cost norms per patient or per patient day. Hospitals can decide on the menu of services and set individual prices as they think fit, so long as their average revenue stays below the cap. **This will discourage them from ordering unnecessary services and passing on the charges.**

This mechanism leaves room for hospitals to compete with one another, in terms of the quality of their medical care and the cost of their operations. Those which reduce costs can keep the

savings and improve their service. Those which attract more patients, paying or subsidised, will earn more both from fees as well as subsidies.

Setting the Amount of Subsidy

The Government has set the following subsidy targets for various class wards as shown in the chart.



In principle, the revenue caps for the various ward classes, together with these subsidy rates, will automatically determine the total amount of Government subsidy to the hospital. However, this will

happen only after the hospitals have reached the target subsidy rates, which so far they have not. In the interim, MOF will set the amount of subsidy, in terms of dollars per patient day, at the beginning of each year, and progressively approach the subsidy targets over several years.

Once hospitals know their revenue caps and their subsidy amounts, they can revise their fees in order to break even while staying within the revenue caps. Since the costs of providing medical care will rise over time, hospitals cannot hold their prices indefinitely without unacceptably lowering standards. But hospitals can and should minimise the impact of fee increases on the public. They should give people adequate warning of price changes, and make more frequent but smaller price adjustments instead of infrequent large adjustments.

It is a popularly held view that the key question of health care financing is who pays for it - individuals, the Government, insurance companies, or employers. This belief is mistaken, because no matter who pays for health care in the first instance, ultimately the burden is borne by the people themselves. If the Government pays, it must collect taxes from the people to do so. If insurance companies pay, they must collect premiums from those who are insured. If employers pay, they must add this to their wage costs, and trade it off against other components of the wage package. The real issue is therefore not who pays, but which system best encourages people to use health care economically, and encourages health care providers to minimise costs, inefficiency and over-servicing.

The fundamental principle of our health care financing is individual saving. Government subsidies and catastrophic insurance play supplementary roles. Patients themselves must pay directly at least part of the costs of their medical care. Patients who demand

higher levels of service must be prepared to pay more. This partnership principle applies even to the most heavily subsidised Class C wards. We thus avoid the danger of unlimited demand for “free” medical services.

We have set up Medisave to help individuals meet their medical costs.

This implies that medisave is a kind of inter temporal transfer of wealth from healthy state to sick state where savings are depleted each time one gets sick.

Medisave is a saving, not an insurance scheme, in which each person contributes in advance to his future medical expenses and those of his immediate family. Medisave gives individuals a strong incentive to remain healthy and to use medical services only when absolutely necessary, as a person who draws on his Medisave account is really spending his own money.

However, our system does complement Medisave with significant insurance components. Government subsidies to hospitals are an implicit form of universal insurance: in C class wards, patients pay only 20% of the cost of services. Medishield provides catastrophic health insurance, with an element of co-payment. Medifund offers a safety net of last resort for those who

have participated in Medisave and Medishield, and despite their best efforts, find themselves unable to meet essential medical expenses.

Medisave, Medishield and Medifund, together with government subsidies, ensure that no Singaporean is deprived of basic medical care. However, the coverage of Medisave and Medishield is not complete, especially for the self-employed and older Singaporeans. Now that Medisave has been extended to the self-employed, in time all Singaporeans will be covered. But until that happens, Medifund will be more liberal in helping those without Medisave. This is why the Medifund guidelines specifically identify Singaporeans born before 1940 as a group who merit extra help.

The present Medisave contribution rates should be sufficient to meet the medical costs of contributors and their immediate families, both during their working lives and also into retirement and old age. If medical costs rise by more than we expect, we may later need to raise the compulsory Medisave contribution rate somewhat. But we

can check if they increased their compulsory medisave contribution rate or not

Has the medisave rate increased greater than 10%?

should aim to contain medical costs so that we can always keep the Medisave rate below 10%.

Medical Insurance & Medishield

The disadvantage of relying exclusively on savings to finance health care is that with inadequate medical insurance, individuals will need to save more for their medical expenses than they are likely to spend, just in case their expenses turn out higher than expected. In turn, higher Medisave savings will increase the temptation for patients to draw on these balances even when they do not absolutely need to.

We must avoid unrestricted and open-ended medical insurance as practised in the US, which leads to the over-provision of medical services and escalating premiums. However, most other developed countries have evolved forms of medical insurance which have avoided the worst pitfalls of the US system. We too should explore ways to make greater use of medical insurance. This will reduce the need to over-save for medical

purposes.

In Singapore, basic medical insurance policies generally do not contain any co-payment or deductible element, although catastrophic insurance policies do. Neither do they have negotiated fee schedules to restrict what healthcare providers may charge the insured. Control is through limits on the liability per individual and type of illness. While these controls offer some safeguards, such policies still present the danger of a "buffet syndrome", because they give neither the insured patient nor his doctors any incentive to save on medical costs.

The local medical insurance market is small but growing rapidly. Gross premiums increased by 31% in 1990 and 24% in 1991, reaching \$82 mn in 1992. Three quarters (\$60 mn in 1992) of this is from group insurance, which is probably paid for by employers. Thus while the problem is not imminent, we should act now to guide the growth of the insurance market and avoid more serious difficulties later.

Due to the uncertain nature of the event, people end up overestimating the probability of loss and save a higher amount

In theory, medical insurance policies requiring co-payments and deductibles should be attractive because they require lower premiums: firstly because the patient pays part of the cost of the medical services directly at the point of use, and secondly because there will be less free-loading and over-consumption of medical services. But in practice the insurance companies have not found a ready market for such policies.

It is risky to expand medical insurance coverage for Singaporeans through private sector medical insurance policies until the necessary safeguards are in place. It will take time for the medical insurance industry to evolve in this direction. A more direct approach, which will also speed up this process, is to extend Medishield, which already incorporates these safeguards.

Medishield already protects 1.5 million Medisave members and their dependants. It covers expenses during hospitalisation and some outpatient treatments. We can extend Medishield in two ways :

- By improving the basic Medishield

benefits package, for example by raising the maximum coverage limits to provide more cover for treatment in Class B2 and C wards, and lowering the deductible amounts, which are presently quite conservative, to a smaller but still significant quantum; and

- By introducing a second tier of coverage, Medishield II, for those who want more coverage, on a voluntary opt-in basis. Medisave can be used for this second tier. Medishield II will offer the same benefits structure as the basic Medishield package, but it can have higher limits on daily reimbursement rates, in order to cover a larger part of hospitalisation expenses in higher class wards.

We should allow people to use Medisave not only for Medishield II, but also for other approved private sector medical insurance policies which conform to similar criteria, with co-insurance and deductibles. This will encourage the private sector medical insurance market to develop, and promote competition. It will also give Singaporeans who want medical insurance coverage a wider choice: the basic Medishield package, Medishield II, or private medical

Allow medisave to work with all kinds of insurances.

insurance offering similar benefits.

Employer Medical Benefits

Employer-provided medical benefits serve a useful function, as they are a way for employers to show concern for their employees' welfare and health, and reflect employers' recognition that a fit and healthy employee is a productive employee. But such medical benefits should not transfer the responsibility of staying healthy from employee to employer, or shift the burden of payment to a third party such as the insurance firm.

Tax free employer-provided medical benefits can aggravate the problem of overuse of medical services and inflate health costs. This has happened in the US. Because such benefits are tax free, whereas cash wages are taxable, both employers and employees prefer to receive higher medical benefits and a smaller wage, rather than fewer medical benefits but a higher wage. Furthermore, when the employer covers his responsibility by buying medical

insurance, he transfers liability to a third party and creates the risk of a buffet syndrome.

Conventional employer medical benefits also reduce the job mobility of workers who are in ill health, by tying them to their current employer and their current medical benefits. A worker who loses his job automatically loses his medical benefits. This does not matter if he is in good health, as he can find a new job and obtain another set of medical benefits from a new employer. But if he is not in good health, a new employer will be reluctant to take him on and accept the burden of his medical expenses. This will happen even if the employer medical benefits are in the form of group medical insurance, because such group insurance policies are tied to the employer and cannot be transferred to another company.

In the Budget this year, the Minister for Finance announced that he would cap tax free employer-provided medical benefits at 2% of total remuneration. This will limit the tax distortion, and remove the incentive for companies to

provide disproportionately lavish medical benefits. Later, after we gain several years of experience with Medishield II, the Government will consider further restricting the tax deductibility of employer medical benefits, to exclude medical insurance coverage which does not follow the Medishield II model.

We need to consider what sort of medical benefits employers should provide in the long term, as health costs rise. The popular but mistaken view of medical benefits are something workers enjoy over and above any wage package. Employees must negotiate the best benefits they can get out of employers and strive to improve upon them from year to year, if necessary by arduous bargaining. In reality medical benefits form part of the total labour cost. With the tax loophole closed, every additional dollar of medical benefits means one fewer dollar available to be paid as wages, or as some other component of wage costs. Workers enjoy better medical benefits really at their own expense.

We should not phase out medical

benefits completely, and replace them with a clean cash wage. Not all workers will have the self-discipline to save part of their wages while they are healthy, to provide for their medical needs should they later fall ill. Ideally employer medical benefits should make use of and build upon the national system of health care financing, namely Medisave, Medishield and Medifund. Employers should not need to set up individual systems of health coverage company by company.

One way employers can make use of the Medisave system is for them to make voluntary contributions into the Medisave accounts of their employees, over and above the statutory Medisave contributions, in lieu of part of their traditional medical benefits in kind. These voluntary Medisave contributions by the employer should naturally be tax free, up to a limit of 2% of salary, corresponding to the 2% cap on tax free medical benefits.

Many employer medical benefits currently cover some outpatient expenses, e.g. partial reimbursement of the fees for

visits to GP clinics. As Medisave does not pay for all types of outpatient treatments, these employers will probably wish to convert only the hospitalisation part of the benefits to Medisave, and retain their outpatient benefits in kind. Outpatient medical benefits are usually limited and stable, and are less likely to balloon than hospitalisation costs, so that retaining them should not pose much danger.

Converting medical benefits to additional Medisave contributions has several advantages. The employer continues to be concerned over the health of his employees, but in a way which preserves the incentive for employees to use medical services responsibly. The employee has complete freedom of choice to decide what he wants to use the Medisave amounts for, whether he wants to use them for his family members as well as himself, and whether he wants to buy more insurance coverage with Medishield II. It also does not tie down employees to a particular job, as their Medishield coverage is personal to themselves, and will follow them even if they change jobs after developing health

problems.

The Government will encourage companies to follow this model, but will not compel them to do so. As the largest employer, the Government will set the example. The Civil Service is currently reviewing its medical benefits package. It will use this model for its new package, which will apply to new recruits into the service.



7 MEDISAVE IN THE PRIVATE SECTOR

As explained earlier, the Government sees a growing role for private sector hospitals, although subvented hospitals will always treat the majority of patients. However, the Government cannot adopt a completely laissez-faire policy towards private sector medicine for two reasons.

Firstly, the public and private sector medical markets are interlinked. Private sector practices significantly influence the public sector. The public sector has had to increase salaries of its doctors and other medical staff, partly because incomes in the private sector have risen steadily, especially after Medisave was introduced. This has contributed to a rise in health care costs.

Secondly, the majority of private sector patients use Medisave to pay for at least part of their medical bills. Before we had Medisave, a significant share of patients in private hospitals were foreigners from the region. Now the majority of their patients are Singaporeans. 74% of the patients treated by private hospitals and

hospital-based specialists use Medisave to pay part of their bills. Income from Medisave patients constitutes 50-60% of private doctors' total earnings. Because people tend to be less restrained when using their Medisave than when paying cash, fees of private specialists and hospitals rise whenever Medisave contribution or reimbursement rates are increased.

Other countries which have managed to control national health care costs, e.g. Germany and Japan, have found it essential to control private sector fees and charges. They often limit or forbid balance billing, i.e. the amount doctors can charge in addition to what the insurance plan or state subsidy system will reimburse them. MOH will need to take similar measures.

There are already limits on the amount of Medisave patients may draw per day or per procedure in both private and subvented hospitals. But there are presently no limits on balance billing. The Government will work out ways to limit balance billing of Medisave patients

by private doctors and hospitals. This is the private sector equivalent of revenue caps for the subvented hospitals.

We can control balance billing in various ways. We can limit the amounts charged for different operations, and for each in-patient visit by doctors. Later we can develop mechanisms such as the Diagnosis-Related Group (DRG) to control the total amount a hospital can bill a patient for a particular type of illness, regardless of the number of days that a patient stays in hospital, or the type of tests or medications ordered for him. This will discourage doctors and hospitals from liberally ordering tests, treatments and medications, or keeping patients hospitalised longer than necessary.

At present, the Government does not propose to control the billing of patients in private hospitals who are not using Medisave.

Medical Fees Council

We need to gain experience with this

scheme of controls on private and subvented hospitals. Initially, MOH will manage the system, and adapt it in the light of experience. After several years, when the system has stabilised, we will set up a Medical Fees Council (MFC) to take over the responsibility, and also to set the caps on the revenues of the subvented hospitals. The MFC should comprise representatives from the Government, private health care providers, CASE, employers and unions. Like the Public Transport Council, the MFC can provide a wider spectrum of inputs into the decisions, and reassure the public that their interests are being looked after.



8 RESEARCH & DEVELOPMENT

The National University of Singapore (NUS), MOH and subvented hospitals need to do medical research to keep up with developments in the field, maintain teaching standards and improve the standard of health care. For the University, a good research environment is one of the best ways of attracting high calibre staff. However, the scale and goals of the research must be realistic. Talent and funds available for medical R&D and experimental medical technology are limited. Improvements to the health care system do not depend on indigenous breakthroughs in medical research. While medical research increases the pool of human knowledge and can improve the quality of health care, it generally does not yield any financial returns, even over the long term.

The amount spent on medical research must therefore be commensurate with :

- a. The amounts spent on research in other areas of science and technology by the universities and the NSTB;

- b. Government subsidies for health services; and
- c. The expected returns.

Medical research falls broadly into three areas:

- a. Research that is primarily academic, and may be theoretically significant, but has no immediate practical application;
- b. Research that has cost-effective practical applications, e.g. on preventive medicine or lowering costs of diagnosis and treatment. Such research may not be academically glamorous, but will contribute to improving the health care system; and
- c. Research that has practical applications which are expensive, e.g. organ or bone marrow transplantation. Such work is often developmental, involving experimenting with new procedures or drugs that have been developed elsewhere. It can thus raise health care costs without commensurate returns.

NUS will focus on research in the first and second categories, but mainly in the first category. Subvented hospitals

will focus on applied research in the second category. The third category of research should be undertaken only with strong justifications. Even then we must be careful to avoid raising unrealistic public expectations that the new procedures or drugs will become universally available, and will successfully treat conditions which were previously untreatable.

NUH has established expertise in various medical disciplines. Its research in fertility has gained international recognition. The hospital also has strong Departments of General Medicine, General Surgery, Paediatrics and Orthopaedic Surgery.

The other subvented hospitals have also built up centres of expertise in particular medical specialties, e.g. cancer, heart diseases, general medicine, and plastic and reconstructive surgery in SGH, neuroscience and respiratory medicine in TTSH, ophthalmology in the Singapore National Eye Centre (SNEC), skin diseases in National Skin Centre (NSC), and neonatology in KKH. They too

need to experiment with new techniques and technology in their respective fields to maintain the quality of the care they provide. But they must carefully distinguish their research from the basic medical care which they provide, especially when the research project falls under the third category. These service hospitals will find it harder than NUH, which is primarily a university teaching hospital, to draw a line between research and service.

A review of current medical research projects shows that they are generally acceptable in terms of objectives, feasibility and cost. They are also unlikely to raise public expectations as to their eventual widespread application. We should ensure that this state of affairs continues.

Location of Research

Clinical research should be carried out at centres where there is a high workload, a high concentration of specialists and where it makes medical sense to concentrate resources. A critical

mass of patients and expertise is crucial for developing programmes to improve the understanding, prevention, diagnosis and treatment of the disease. Centralising resources avoids both duplication and under-utilisation of expensive high-cost high-tech equipment.

The Eye Centre and Skin Centre serve the entire island. MOH plans to start a Heart Centre and a Cancer Centre at SGH, and a Neuroscience Centre at TTSH. These centres will concentrate the country's expertise in the respective fields and provide specialised care to patients with complex clinical problems. Their primary role is to provide clinical service. Research and teaching are secondary missions. Nevertheless, they are natural foci for research, especially as they will be open to specialists from other hospitals. Research projects at these centres will benefit from the high patient load, concentration of specialists and equipment.

In contrast, the primary role of the NUS Medical Faculty is teaching and research, while clinical service is

secondary. NUS will set up a National University Medical Institute (NUMI), which will centralise the University's research infrastructure and focus on research in a few selected areas, in particular heart disease and cancer. NUMI will work with the science departments of the University (Biochemistry, Microbiology, Physiology, Pathology and Engineering) and develop links with the Institute of Molecular and Cell Biology (IMCB), Mindef's Defence Medical Research Institute (DMRI) and the various MOH Centres and the Department of Clinical Research. Research institutes should develop links with one another, and collaborate on research projects to conserve limited resources.

National Medical Research Council

We will set up a Medical Research Council to disburse R&D funds, and to approve, oversee and co-ordinate medical research in the various hospitals, centres and institutions which has clinical implications. The Council will be chaired

by a person who understands the overriding national need to contain health care costs, and who has broad experience in the management of research. MOH, MOE and NUS will be represented on the Council.

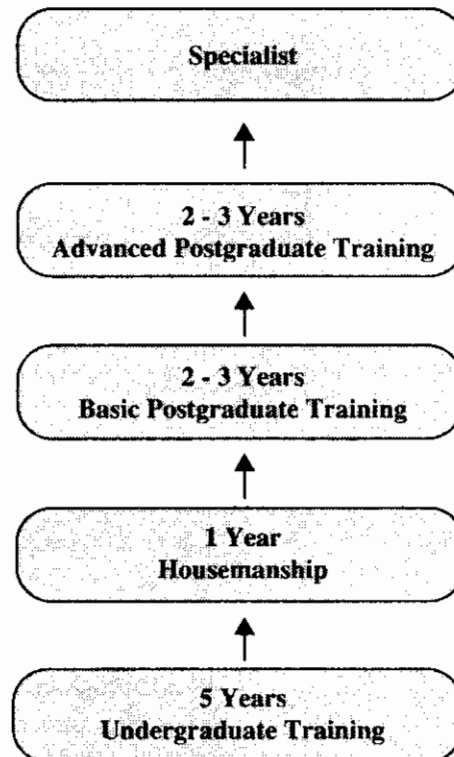
9 MEDICAL EDUCATION AND TRAINING

Training a person to become a doctor, and later a medical specialist, is both time consuming and costly. It covers three stages over a period of 10-12 years :

- a. The MBBS comprises five years of undergraduate training followed by a houseman year, after which the medical student is qualified to be a general practitioner;
- b. Basic post-graduate training lasts 2-3 years. After the doctor obtains the Master of Medicine (M.Med or the equivalent MRCP, FRCS) he is still not qualified to practise as a specialist; and
- c. Post M.Med Advanced Training lasts 2-3 years. During training the doctor can branch into a number of sub-specialist disciplines. After this the doctor is qualified as a specialist (i.e. he can be appointed as a Senior Registrar).

While a large part of undergraduate medical training is done in NUH, the other subvented hospitals are also teaching hospitals affiliated to NUS. They too carry out both undergraduate

Training of Specialists



training and especially postgraduate medical teaching where a large patient base is crucial. Some coordination and regulation is therefore necessary.

Undergraduate Level

NUS is responsible for undergraduate medical education and training. Its

Faculty of Medicine is the preeminent medical school in the region. We should maintain the 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 the health care system. 60% of each cohort of doctors will practise as family practitioners. Family doctors serve as gate-keepers who advise patients whether they need to consult specialists. They need to stay in touch with new developments in medicine to perform their role well.

Undergraduate medical training must therefore emphasise primary health care, not high-tech medicine, and must provide students with strong clinical and diagnostic skills that will enable them to become good family doctors. The students must learn to administer cost effective treatments and avoid over-dependence on costly investigations, excessive tests and drugs. NUS must therefore regularly review its medical undergraduate curriculum together with MOH and the Singapore Medical Council.

As NUH has only 14% of the total acute beds in subvented hospitals, NUS needs to utilise not just NUH — a tertiary hospital — but also the other hospitals and polyclinics for clinical

teaching. This is the cost-effective approach to training medical students, and will expose them to a wider and more varied mix of patients.

MOH will provide all subvented hospitals, including NUH, the same rates of subvention to meet their clinical service roles. MOE will separately fund the additional resources which the subvented hospitals will need to support undergraduate teaching.

Postgraduate Level

MOH is responsible for coordinating postgraduate and advanced medical training at subvented hospitals. Because of the expense involved, and the need to deploy talent optimally, the training of specialists should be based on service needs. It must be centrally coordinated and periodically reviewed. Specifically, MOH will :

- a. Determine the types of specialisation and sub-specialisation that should be supported in Singapore;

- b. Determine how many specialists Singapore needs, and thus the intake of basic and advanced trainees for subvented hospitals; and
- c. Coordinate the development of specialist and sub-specialist disciplines and services for subvented hospitals.

MOH will set up an Advisory Committee on Medical Specialists to advise it on post-graduate medical training. The Committee will be chaired by the Director of Medical Services with representatives from MOH, NUS, the Singapore Medical Council, the Academy of Medicine, the School of Postgraduate Medical Studies, the restructured hospitals and the private sector.



The proposed approach to controlling health care costs is neither a totally regulated national health service, nor a completely laissez faire system where providers have full freedom to organise and to price. It is a hybrid system, comprising three levels:

- a. Subvented hospitals, subject to controls in the key areas of pricing and operations;
- b. Private sector patients using Medisave, subject to controls on amounts above Medisave reimbursement limits; and
- c. Private sector patients on their own, subject to minimal controls.

There is no 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 resources. It must create incentives for patients and doctors to be responsible, and encourage hospitals to compete with one another to provide efficient and cost-effective service. But the Government does not have to operate the

health care system by itself. The private sector should play a bigger role. The Government encourages civic organisations to run some subvented hospitals. This will introduce more competition and offer the public a wider choice.

Subvented hospitals should emphasize basic medical care and stay away from the frontiers of medical technology. We should emphasize good basic clinical skills and primary health care rather than high-tech, high-cost medicine in the training of medical undergraduates. The training of specialists must reflect national needs.

MOH will continue to coordinate and regulate the development of medicine in the subvented hospitals at a pace which the nation can afford. We should not pursue medical excellence per se, but aim for medical excellence selectively, within the resources available, to meet national needs and priorities. Every citizen has the duty to keep fit, stay healthy and save for his medical needs.

As our economy matures, health care spending will outstrip economic growth. Such expenditure is currently only 3.1% of GDP, but will rise steadily over the next two decades. Although health costs are not yet a serious problem in Singapore, we must act now to keep health care affordable and avoid the painful dilemmas which face so many developed countries.



MEMBERS OF THE MINISTERIAL COMMITTEE ON HEALTH POLICIES

BG (Res) Lee Hsien Loong - Chairman till 6 Dec 92
Deputy Prime Minister (PMO)

Mr S Dhanabalan - Chairman wef 7 Dec 92
Minister for Trade & Industry

Members :

Mr Yeo Cheow Tong
Minister for Health and
Minister for Community Development

Dr Lee Boon Yang
Minister for Labour, and
Second Minister for Defence

Mr Lim Boon Heng
Minister Without Portfolio, and
Secretary General, National Trades Union Congress

Dr Aline Wong
Minister of State (Health)

Mr Lim Hng Kiang
Minister of State (National Development)

**COMPARATIVE HEALTH CARE
SYSTEMS OF SELECTED COUNTRIES**

(TABLES)

COMPARATIVE HEALTH CARE SYSTEMS OF SELECTED COUNTRIES

Subject	Singapore	USA	Canada	UK	Australia	New Zealand	W Germany
1. Land Area ('000 sq km)	0.62	16,300	10,400	130	7,680	270	250
2. Population (in millions) 1990	2.76	259.60	26.62	57.41	17.09	3.38	63.07
Below 15	23.2%	21.4%	20.9%	19.0%	22.1%	22.7%	15.0%
15 – 64	70.6%	66.0%	67.7%	65.5%	67.0%	66.4%	69.6%
65 and above	6.2%	12.6%	11.4%	15.4%	10.9%	10.9%	15.4%
3. Life Expectancy at Birth (Years) 1989	75.7	75.2	76.4	75.6	76.5	74.2	75.8
Males	73.5	71.8	73.0	72.8	73.3	71.0	72.6
Females	77.9	78.5	79.7	78.4	79.6	77.3	79.0
4. Crude Birth Rate (per 1000) 1990	17.3	16.7	15.0	13.9	15.0	17.8	11.3
5. Crude Death Rate (per 1000) 1989	4.7	8.7	7.3	11.2	7.4	7.9	11.5
6. Infant Mortality Rate (per 1000) 1989	5.5	9.2	7.2	8.4	8.0	10.2	7.5
7. Main Causes of Death	(1991)	(1988)	(1989)	(1990)	(1988)	(1987)	(1989)
Rank 1	Cancers	Heart diseases	Heart diseases	Heart diseases	Heart diseases	Heart diseases	Heart diseases
2	Heart diseases	Cancers	Cancers	Cancers	Cancers	Cancers	Cancers
3	Cerebrovascular disease	Cerebrovascular disease	Cerebrovascular disease	Cerebrovascular disease	Cerebrovascular disease	Cerebrovascular disease	Cerebrovascular disease
4	Pneumonia	Accidents	Accidents	Pneumonia	Accidents	Accidents	Accidents
5	Injuries	Pneumonia	Pneumonia	Accidents	Bronchitis, emphysema & asthma	Pneumonia	Bronchitis, emphysema & asthma
8. Medical Manpower/Facility							
Doctor : Popn Ratio	1 : 800 ('92)	1 : 400 ('89)	1 : 460 ('89)	1 : 650 ('90)	1 : 480 ('90)	1 : 500 ('90)	1 : 300 ('91)
Specialist : Popn Ratio	1 : 1900 ('92)	1 : 770 ('89)	1 : 1100 ('89)	1 : 1650 ('90)	1 : 1400 ('90)	1 : 1500 ('90)	1 : 550 ('91)
Hospital Beds : Popn Ratio	1 : 327 ('92)	1 : 210 ('89)	1 : 150 ('89)	1 : 157 ('89)	1 : 200 ('90)	1 : 140 ('90)	1 : 93 ('89)

Sources: 1) OECD Health Data 1991

2) WHO - Annual Statistics

NR For Singapore, 1991/1992 data is provided throughout

Prepared by Research & Evaluation Dept, MOH

COMPARATIVE HEALTH CARE SYSTEMS OF SELECTED COUNTRIES (CONT'D)

Subject	Singapore	USA	Canada	UK	Australia	New Zealand	W Germany
9. Health Financing	<p>Health Care Services generally taxation based.</p> <p>Medisave – a compulsory savings scheme covering 6% of an employee's salary (7% for employees aged 35 years and above). Mainly used to cover hospitalisation and day surgery.</p> <p>Medishield – a national catastrophic health insurance scheme. Premiums paid from Medisave funds.</p>	<p>a) Private Health Insurance for the general population.</p> <p>b) National Insurance Schemes</p> <ul style="list-style-type: none"> – Medicare: population aged over 65 years – Medicaid: for the needy regardless of age 	<ul style="list-style-type: none"> • National Health Plan, financed through taxation; provides medical care to the general population at no charge. • Provincial government pays for medical care for all citizens with provincial and federal funds. No privately financed medical system. • All medical care is free, including long-term home care and nursing home care. • Patients under 65 pay for outpatient medications. 	<p>97–98% Health Care provided by NHS</p> <p>NHS:</p> <ul style="list-style-type: none"> • Nationally financed • Income derived from: <ul style="list-style-type: none"> government taxation (89%) NHS Insurance Contributions (9%) Charges (2–3%) 	<ul style="list-style-type: none"> • National Health Insurance Scheme called Medicare. Medicare financed from taxes. Covers full costs in public hospitals and part of costs in private hospitals. • Private Health Insurance also available for private patients in public hospital or private hospital charges. • Federal Pharmaceutical Benefits Scheme to assist in meeting cost of drugs. 	<p>Up to 1990: Extensive Govt. subsidy in health care. Public hospitals and Obstetric services were free, private hospital charges subsidised by 50%, and primary care by GPs low in cost because of Government benefits.</p> <p>Since 1990: Government subsidies radically reduced. The top one-third of income earners required to pay a large part of the cost for health care.</p> <p>Primary Health Care benefits also removed.</p> <p>Govt. may introduce compulsory health insurance.</p> <p>Private Health Insurance already available.</p>	<p>Statutory Health Insurance System</p> <ul style="list-style-type: none"> – Population covered by various statutory sickness funds. All employees earning less than a certain ceiling are compulsorily insured. Those earning more can stay voluntarily in a statutory sickness fund or opt out. – Sickness funds funded by contributions, half from employee, other half from employer contributions can vary. <p>Private insurance</p> <ul style="list-style-type: none"> – Those opting out may buy private insurance. Members of sickness funds can also buy supplementary private insurance. <p>Unemployed</p> <ul style="list-style-type: none"> – Covered by local sickness fund.

Source: Various Country Reports

COMPARATIVE HEALTH CARE SYSTEMS OF SELECTED COUNTRIES (CONT'D)

Subject	Singapore	USA	Canada	UK	Australia	New Zealand	W Germany
10. Health Care System	<p><u>Primary Health Care</u></p> <p>Provided by -</p> <ul style="list-style-type: none"> Govt. OPDs/ Polyclinics which provide Community Health and Maternal & Child Health Services. Health Services for the Elderly available in designated Polyclinics. Responsible for 25% of Primary health services. GPs and Specialists in private practice. Responsible for 75% of Primary health services. <p><u>Institutional Care</u></p> <p>Provided by -</p> <ul style="list-style-type: none"> Public Sector hospitals which also offer specialist OPD services. Provides 80% of care. Private hospitals and nursing homes. Provide 20% of care. <p>Many specialists in private practice have admitting privileges in the private hospitals.</p>	<p><u>Primary Health Care</u></p> <ul style="list-style-type: none"> Mainly provided by private GPs and specialists. Govt. Public Health Agencies run community health, maternal and child health, school health and preventive health services. <p><u>Institutional Care</u></p> <ul style="list-style-type: none"> Most are private hospitals providing short-term acute curative services. There is a free movement of generalists and specialists between hospitals and doctors' clinics. The Govt. runs the Veterans' Hospitals and Hospitals for Eskimos and Indians. Nursing Homes (75% private) 	<p><u>Primary Health Care</u></p> <ul style="list-style-type: none"> Provided by GPs and specialists; public health nurses in sparsely populated areas. <p><u>Institutional Care</u></p> <ul style="list-style-type: none"> Secondary care provided in area hospitals and tertiary care in regional hospitals. Hospitals also provide outpatient and ambulatory care services as well as Public Health programmes through their Community Health Centres. About 75% of doctors are office based; most have hospital admitting privileges. 	<p>Services provided by NHS:</p> <ul style="list-style-type: none"> <u>Primary Health Care Services</u> General Medical Services Primary Health Care Teams General Dental Services Pharmaceutical Services Ophthalmic Services Chiropody Services <u>Hospital Services</u> Specialist Care provided through referral from primary health care Inpatients, outpatients and day patients <u>Private Health Care</u> Private medical practice is small. Provides both outpatient and inpatient care. Inpatient care provided in private beds in NHS hospitals and private hospitals. 	<p>1. <u>Primary Health Care</u></p> <p>Provided by -</p> <ul style="list-style-type: none"> Community Health Centres GP's Private Specialists Pharmacists <p>2. <u>Institutional Care</u></p> <ul style="list-style-type: none"> Public hospitals ranging from small rural hospitals providing basic medical/ surgical care to large urban district hospitals and teaching hospitals with full range of services. Private hospitals Mental Institutions Nursing Homes <p>3. Domiciliary Care Services</p> <p>4. Aerial Medical Services</p>	<p><u>Primary Health Care</u></p> <p>Mainly provided by GPs and some specialist paediatricians. If specialist care needed, referred to hospital's outpatient clinic.</p> <p>The Bureau of Public Health & Environment Protection and district health officers oversee Primary Health Care Programmes.</p> <p><u>Hospital Care</u></p> <ul style="list-style-type: none"> Public hospitals provide comprehensive health services. Private hospitals mainly provide long term care to elderly. 	<p><u>Primary Health Care</u></p> <p>Mainly provided by doctors in private practice (both GPs and specialists)</p> <p><u>Institutional Care</u></p> <p>Provided by -</p> <ul style="list-style-type: none"> Public hospitals, financed by the Government, Universities, local authorities or statutory boards Private non-profit voluntary hospitals run by the Church or welfare organisation. Private profit making hospitals. <p>Sharp demarcation between outpatient and inpatient care. Office based physicians have no hospital privileges and hospital based physicians cannot provide outpatient care.</p>

Source: Various Country Reports