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ACRONYMS

CDC	-	Community Development Council
CPF	-	Central Provident Fund
FY	-	Financial Year
GST	-	Goods and Services Tax
HDB	-	Housing and Development Board
MCD	-	Ministry of Community Development
MND	-	Ministry of National Development
MOF	-	Ministry of Finance
MOH	-	Ministry of Health
MOM	-	Ministry of Manpower
NCSS	-	National Council of Social Service
NUS	-	National University of Singapore
PWD	-	Public Works Department
URA	-	Urban Redevelopment Authority
VWO	-	Voluntary Welfare Organisation

EXECUTIVE SUMMARY

CHAPTER 1 : INTRODUCTION

1. Singapore has one of the fastest ageing populations in the world. In mid-1997, the number of elderly Singaporeans (defined as those aged 65 years and above) totalled 217,000, making up 7.0% of the population. By 2030, the number of elderly is projected to reach 800,000, or 18.4% of the population. To meet the health care needs of the ageing population, the Ministry of Health set up the Inter-Ministerial Committee on Health Care for the Elderly in August 1997. The Committee reviewed the health care needs of the elderly, and identified the measures to be put in place over the next 5 to 10 years to ensure that their health needs will continue to be met and that health care remains affordable.

CHAPTER 2 : PRINCIPLES OF HEALTH CARE FOR THE ELDERLY

2. The Committee proposes that care for the elderly emphasise health promotion and disease prevention to enable the elderly to remain healthy and active in the community. A healthy physical, mental and social lifestyle, together with preventive medicine, will minimise common illnesses and injuries of old age. Such diseases should also be detected and treated early to prevent disability and complications. If disease and disability set in, the focus of care should be on retaining the elderly patients' ability to look after themselves or with assistance of their families.

3. The Government sets the policy directions, plans and develops services based on need, provides appropriate support to service providers and regulates the services to ensure a high standard of care. The Government will continue to be the main provider of acute hospital services and private general practitioners of outpatient services, complemented by

private hospitals and government clinics respectively. Voluntary Welfare Organisations (VWOs) should continue to be encouraged and supported to provide long-term care.

4. The elderly sick should be cared for in the community for as long as possible, and institutionalisation should only be a last resort. Elderly people generally prefer to live with their families and in a familiar environment. The Committee sees the primary responsibility for caring for the elderly as resting with their families. The increasing number of healthy and independent elderly should also be encouraged to volunteer their free time, expertise and experience to help the sick and dependent elderly. In addition, a more elderly-friendly environment should be created at home and in public places.

5. Appropriate and cost-effective health care has to be provided according to need. Appropriate care will allow the elderly to regain as much of their health and functional capacity as possible. Unnecessary care and inappropriate use of high-technology medicine will cause health care costs to rise.

CHAPTER 3 : PROMOTING HEALTH AND PREVENTING DISABILITY AMONG THE ELDERLY

6. Premature disability is caused mainly by cardiovascular disease, stroke, cancer, respiratory disease and injuries. These diseases are largely due to a sedentary lifestyle and unhealthy diet. Disability from complications often arises when acute diseases are not treated early. Social isolation will aggravate ill health and disability among the elderly. There is much that individuals and community can do to help to postpone or avoid the illnesses and disabilities in old age.

7. The Committee recommends a national disability prevention programme for the elderly involving individuals, health care professionals, and the community. Individuals can

maintain their health and well being by leading a healthy lifestyle and by seeking early medical treatment when they fall ill. Health care professionals should be more aware of how ageing affects the elderly's response to disease, injury and medication. The Community can provide more programmes that engage and challenge the elderly, encourage their economic independence through full-time or part-time work and promote support networks of families and friends.

8. To help the elderly detect medical problems early and prevent complications and disability, MOH is developing a quick and comprehensive geriatric screening protocol which can be used in all primary health care settings, for the elderly to receive screening once a year. Special attention will be given to hypertension and diabetes mellitus – the two most common chronic illnesses among the elderly. The Committee recommends that MOH also draw up guidelines on the types of health screening which are useful and cost-effective for early detection and prompt treatment of diseases, for the middle-aged population (aged 40 to 64 years) to avoid complications and disability requiring long-term care in old age.

CHAPTER 4 : PROVIDING HEALTH SERVICES FOR THE ELDERLY

9. Acute care for the elderly is now available in primary care clinics and acute care hospitals in both the public and private sectors. Some hospitals also have specialised departments of geriatric medicine. Long-term care for the elderly – available at community hospitals, chronic sick hospitals, nursing homes, day rehabilitation and day care centres, and in the elderly's own homes – is provided mainly by VWOs, with support from the Government.

10. MOH has set up a National Co-ordinating Committee on Geriatric Care, comprising representatives from service providers, NCSS, MCD and MOH to provide a forum for co-ordinating and developing different types of health services for the elderly.

11. The Committee proposes that doctors should be better trained in geriatric care. Training in geriatric medicine should be incorporated into the undergraduate medical curriculum and be strengthened at the postgraduate level. More doctors should receive further training in geriatric care at the primary care level, and form a core group of "community geriatricians".

12. On any one day, there are about 120 elderly patients staying longer than is necessary in acute care public hospitals because there are not enough appropriate, lower cost "step-down" facilities. These overstayers clog up acute beds and utilise expensive hospital care. The Committee recommends that MOH continuously monitor this situation and ensure that more long-term care facilities are available to meet the demand.

13. For day care services, a holistic approach with better integration of programmes is necessary. MOH and MCD should look into "multiservice centres" for the elderly, integrating health, social and other services under one roof. To get more elderly to take part in these programmes, MCD should also work with other organisations on the elderly's need for transportation to such programmes, and their transport needs in general.

14. To encourage the elderly to continue living at home and avoid premature institutionalisation, the Committee recommends that home health care services for the elderly be expanded to cater to all elderly. At the same time, MCD should draw up a master plan to ensure that every housing estate has adequate support services (such as meal delivery, laundry, home modification, telephone hotline, befriender services and mutual help groups) to enable the elderly to continue living in the community. Training programmes for home carers should be provided on as wide a scale as possible such as in grassroots settings.

CHAPTER 5 : PLANNING AND SUPPORTING HEALTH SERVICES FOR THE ELDERLY

15. Health deteriorates with age, and the elderly use more health care than the general population. As the proportion of the elderly increases rapidly, our health service capacity has to increase. Projected from current usage, the need for acute care services in the public sector (hospital wards, specialist outpatient clinics, accident and emergency departments, and government polyclinics) is expected to quadruple between 1995 and 2030.

16. It is important that MOH constantly review more cost-effective and efficient technologies and methods for long-term elderly care. MOH should also encourage R&D in developing new equipment and methods or adapting the equipment and methods currently used in advanced countries to our local population and local conditions. Taking into account the health care requirements of the elderly population, MOH should also regularly review the requirement for additional health care professionals, including doctors, nurses, therapists, and other support personnel.

17. The Government is already supporting VWOs which provide long-term care for the elderly, through financial and non-financial assistance. MOH should monitor the VWOs' provision of long-term services for the elderly closely to ensure that the provision of such services is able to cater to demand. The Committee recommends that MOH regularly brief existing and potential service providers on the long-term care requirements of the elderly, and actively encourage VWOs to provide services where there is a shortage.

18. Service providers, however, generally have difficulty securing land to build facilities. Hence, MOH should be a one-stop centre to assist VWOs and work with URA and HDB to alienate land for community hospitals, chronic sick hospitals and nursing homes. Such land can be leased by VWOs or other suitable organisations, or be put out for tender by commercial organisations. To speed up building, the Committee recommends that MOH and

PWD build elderly care institutions, with an ambience and physical standards pegged to subsidised wards of public hospitals, to be sold or leased to VWOs or commercial operators.

CHAPTER 6 : ENSURING QUALITY CARE

19. Acute care and residential long-term care services are now regulated by MOH. To standardise and improve the quality of non-residential long-term care (such as that provided by day rehabilitation centres) and home care services, the Committee recommends that MOH regulate non-residential long-term care as well, including regularly inspecting and auditing such services. MOH should provide benchmarks on the standards of service and make guidebooks available to providers of different types of long-term care.

20. Long-term care service providers should also implement quality assurance programmes to improve the process and outcome of care for the elderly under their charge.

CHAPTER 7 : FINANCING HEALTH SERVICES FOR THE ELDERLY

21. The philosophy of financing health services in Singapore, including health services for the elderly, emphasises individual responsibility and family support. But the community and Government will continue to provide a safety net for the indigent and low-income group who cannot afford to pay for their health needs.

22. Medisave, MediShield and Medifund, coupled with heavy government subsidy, ensure that every Singaporean is able to pay for his hospitalisation needs. The Committee is of the view that the current financing scheme for acute care services is appropriate to take care of the needs of the elderly in Singapore.

23. However, the Committee feels that funding for long-term care needs to be reviewed. The Government is committed to ensuring that the elderly have access to affordable long-term care. To achieve this, the cost burden for long-term care will need to be shared by family and the individual, the community and the Government.

Individual Financing

24. It is important to ensure that individuals are able to finance their own long-term care needs, especially during old age. After examining several possibilities, the Inter-Ministerial Committee recommends that MOH work with CPF Board and other relevant authorities to establish a Long-Term Care (LTC) Insurance Scheme along the lines of the existing MediShield Scheme. This Scheme will provide insurance coverage to those who need long-term care, such as those provided by community hospitals, chronic sick hospitals, nursing homes, day rehabilitation and day care centres, and home care services (including care provided by private or informal carers if appropriate).

Community Assistance

25. Most VWOs are now required to raise a significant portion of their operating expenditure. While recognising that it is necessary to involve the community in providing elderly long-term care, the Committee is of the view that it will not be financially sustainable for the VWOs to continue in this way because of the increasing needs of the ageing population. The Committee is of the view that, in general, community donations should be kept within 20% of the operating expenditure of VWOs on long-term care, so as to allow them to concentrate on providing and improving care instead of raising funds. The need to raise funds will be partly reduced by the recommendations in the earlier sections enabling individuals and their families to finance their long-term care needs. However, these are long-

term plans and the benefits will not be felt immediately. Therefore, the Committee recommends that existing government recurrent funding for VWOs be reviewed.

Government Funding

26. The Government supports long-term care services through subventions (grants in aid) to VWOs, for both their capital and recurrent expenditure. MOH currently provides capital funding of up to 90% of the approved construction and equipment costs.

27. We need significantly more long-term care institutions in the next 10 to 20 years, and need to ensure they are built cost-effectively and on schedule. The Committee therefore recommends that the 90% capital funding for VWOs building their own nursing homes be provided on a “cost per bed” basis. Such homes can incorporate some “private beds”, but the proportion of such beds receiving MOH capital funding should be limited to 10% of the total in each institution. Funding on a "cost per bed" basis will encourage efficiency and VWOs will have flexibility in their building plans. The Committee also recommends that a schedule to complete the building project undertaken by the VWO be agreed upon mutually by MOH and the VWO, to ensure availability of beds on time.

28. Government recurrent funding for VWOs now includes subventions of up to 50% of their operating expenditure and subventions of up to 100% of the rental cost if they are using state land or government buildings.

29. To ensure that public funds are channelled to those who are really in need of financial assistance, the Committee recommends that means testing be implemented for all categories of long-term care services and not just to nursing homes alone. The means test should be able to determine the appropriate subsidies to be provided to families from low-income as well as middle-income groups so that long-term care would be affordable to them. Since long-term care implies a long-term financial commitment for the family members, some middle-income

families will also be financially strained if there were no government assistance. The Committee recommends that the Government provide subsidies on a sliding scale to low-income and middle-income patients commensurate with their income.

30. Government subvention should also cover home medical care and home nursing services, to encourage more VWOs to provide these. This will help the homebound elderly sick to continue to stay at home with medical and nursing care, thus avoiding premature institutionalisation.

31. The Committee also recommends that government recurrent funding be provided on a piece-rate basis for all existing and new long-term care services, including day care. VWOs that are more efficient will be able to do more for their patients with the same rates, or invest the savings in service development.

32. MOH sets the norm costs of long-term care services as the basis for providing subventions. These norm costs are currently adjusted annually by the GDP deflator. But in healthcare, the rate of increase in annual manpower cost, which is the major component in health care cost, usually exceeds the annual GDP deflator. The Committee recommends that MOH and MOF review the formula to adjust government norm costs for long-term care services, to take into account the increase in manpower cost of health care professionals.

CHAPTER 8 : CONCLUSION

33. Singapore's ageing population presents new challenges for health care, especially long-term health care, in the next 30 years. MOH will regularly monitor the demographic changes and the resulting changes in health care needs, and review the measures to provide cost-effective care. Excessive use of inappropriate expensive technologies, and a subsidy system that fails to distinguish between those in need and those who can afford to pay, will only lead to wastage of national and family resources. Instead, the emphasis will be on health

promotion and disease prevention, care by the family within the community with institutionalisation only as a last resort, and cost-effective options appropriate to the individual elderly's needs. The Government will work with VWOs and encourage them to continue to provide long-term care services for the elderly. The Government is committed to ensuring that the elderly's health care needs will continue to be met, and that health care remains affordable.

RECOMMENDATIONS

The Inter-Ministerial Committee recommends that:

PROMOTING HEALTH AND PREVENTING DISABILITY AMONG THE ELDERLY

1. MOH set up a national disability prevention programme for the elderly, integrating strategies involving individuals, health care professionals and the community.

2. MOH develop a quick yet comprehensive geriatric screening protocol to detect medical problems early and prevent complications and disability among the elderly, which can be used at all primary health care settings so that the elderly can receive screening once a year.

3. Doctors give special attention to detect hypertension and diabetes – the two most common chronic medical problems among the elderly – and to prevent complications from these.

4. MOH draw up guidelines on the types of health screening that have been found to be useful and cost-effective for the middle-aged population.

PROVIDING HEALTH SERVICES FOR THE ELDERLY

5. NUS incorporate the teaching of geriatric medicine into the undergraduate medical curriculum.

6. NUS train more primary care doctors in geriatric medicine, to form a core group of "community geriatricians".

7. MOH continuously monitor the problem of elderly sick staying longer than necessary in acute care hospitals, and ensure that more cost-effective, step-down facilities are available.

8. MOH and MCD look into "multiservice centres" for the elderly, integrating health, social, and other services under one roof.

9. MCD work with the Ministry of Communications and other authorities to plan for the transport needs for the semi-ambulant and non-ambulant elderly.

10. MOH work with other agencies to strengthen and better organise the provision of home health care for the elderly.

11. MCD draw up a co-ordinated master plan to ensure that every housing estate in Singapore will have adequate support services to complement the health services being provided for the elderly.

12. MOH and MCD make available training courses for home carers at various grassroots settings, to benefit as many home carers as possible.

PLANNING AND SUPPORTING HEALTH SERVICES FOR THE ELDERLY

13. MOH regularly brief existing and potential service providers on the present and projected elderly long-term care service requirements, and actively encourage VWOs to provide services where there is a shortage.

14. MOH be a one-stop centre to assist VWOs and work with URA and HDB to alienate land for building community hospitals, chronic sick hospitals and nursing homes, to be leased to VWOs or put out to tender by commercial operators.

15. MOH and PWD build nursing homes and other elderly care institutions with an ambience and physical standards pegged to subsidised wards of public hospitals, to be sold or leased to VWOs or other suitable operators. These "turn-key" projects will

help to speed up the start-up time, especially for newer VWOs, which lack experience in developing such facilities.

16. MOH study and regularly review the requirement for health care professionals (including doctors, nurses, therapists, and other support personnel) to meet the increased health care needs of the ageing population.

ENSURING QUALITY CARE

17. MOH regulate and ensure the quality of residential and non-residential long-term care services, including regularly inspecting and auditing them.

18. MOH improve existing guidebooks on elderly long-term care by including benchmarks on care standards, and make available guidebooks to providers of different types of long-term care.

19. VWOs ensure quality care for the elderly by implementing quality assurance programmes to improve the process and outcome of care.

FINANCING HEALTH SERVICES FOR THE ELDERLY

20. MOH work with other authorities and establish a Long-Term Care (LTC) Insurance Scheme to provide insurance coverage for persons needing long-term care.

21. MOH provide capital funding up to a maximum of 90% of the “cost per bed” for VWOs building their own institutions, but with the number of “private beds” receiving MOH capital funding limited to 10% of the total number of beds in each institution.

22. MOH and MCD review the existing 50% recurrent funding for VWOs to allow them to focus on service delivery and reduce their need to raise funds for their operating expenditure.

23. MOH implement a means test to ensure that the government subsidy for long-term care patients is provided to those really in need. The means test should enable the Government to provide subsidies on a sliding scale to low-income and middle-income patients commensurate with their income.

24. MOH extend government subvention to cover home medical care and home nursing services.

25. MOH provide government recurrent funding on a piece-rate basis for all existing and new long-term care services.

26. MOH and MOF review the formula used for the annual adjustment of government norm costs for long-term care services, to take into account the increase in manpower cost of health care professionals.

CHAPTER 1

INTRODUCTION

1. Since the Government's acceptance of the 1989 Report of the Advisory Council on the Aged, much has been done to provide support programmes for the elderly, and to mould public attitude towards them.

2. Singapore's population is one of the fastest ageing in the world. In 1990, the elderly made up 6.1% of the population. In mid 1997 they made up 7.0%, and by 2030 they are expected to form 18.4% of the population, or 2.6 times the current level (Tables 1.1 and 1.2). In this Report, the elderly population in Singapore is defined as residents aged 65 years and above, in line with the definition used by the World Health Organisation in its *World Health Report 1997*.

Table 1.1

Actual and Projected Elderly Population in Singapore, Year 1980 - 2030

Year	Population Aged 65 – 74 Years		Population Aged 75 Years & Above		Total Elderly Population Aged 65 Years & Above	
1980	81,200	3.6%	30,700	1.3%	111,900	4.9%
1990	104,700	3.9%	59,400	2.2%	164,100	6.1%
1997 (June)	135,400	4.4%	82,000	2.6%	217,400	7.0%
2000	152,300	4.7%	82,200	2.5%	234,500	7.2%
2010	196,300	5.2%	116,000	3.1%	312,400	8.2%
2020	373,200	9.1%	156,900	3.8%	530,100	12.9%
2030	508,800	11.7%	290,000	6.7%	798,700	18.4%

Sources:
(1) Census of Population 1980 and Census of Population 1990, Department of Statistics (for 1980 and 1990).
(2) Monthly Digest of Statistics, December 1997, Department of Statistics (for June 1997).
(3) Population Planning Unit, Ministry of Health (Series V - February 1997) (for 2000 – 2030).

Table 1.2

A Comparison of Elderly Populations in Singapore and Other Countries

Country	% of Population Aged 65 Years & Above			Ratio of the Size of the Elderly Population in the Year 2030 to that in the Year 2000
	Year 1995	Year 2000	Year 2030	
Developing Countries				
China	6.1	6.7	14.4	2.1
India	4.6	5.0	9.6	1.9
Indonesia	4.3	4.7	9.7	2.1
Philippines	3.4	3.6	8.3	2.3
Thailand	5.0	5.8	14.4	2.4
Vietnam	4.9	5.2	9.3	1.8
More Advanced Developing Countries in Asia				
Hong Kong, China	9.8	11.1	27.7	2.5
South Korea	5.6	6.7	17.4	2.6
Singapore	6.8	7.2	18.4	2.6
Developed Countries				
Australia	11.7	11.9	19.0	1.6
Canada	12.0	12.6	22.9	1.8
France	15.2	16.2	23.9	1.5
Germany	15.2	15.9	24.9	1.6
Japan	14.2	16.5	26.3	1.6
Netherlands	13.2	13.6	24.8	1.8
New Zealand	11.4	11.3	22.4	2.0
Sweden	17.3	16.7	22.4	1.3
United Kingdom	15.8	15.8	21.9	1.4
United States	12.6	12.4	20.0	1.6

Sources: (1) World Population Prospects: The 1996 Revision, United Nations.
(2) Yearbook of Statistics, Singapore, 1996 (for Singapore figures).

3. Trying to support and care for such a rapidly ageing population will be an increasing strain on Singapore's younger generations. Today, 10 economically active persons are supporting one elderly. By 2030, only 3.5 persons will be supporting one elderly. The index of ageing (which reflects the size of the aged population compared to the size of the young population), was 17.7 per hundred population in 1980, is now 30.9, and will more than treble to 103.9 by the year 2030. (Table 1.3)

Table 1.3

Actual and Projected Working Age Persons per Elderly and Index of Ageing of the Population in Singapore, Year 1980 - 2030

Year	Working Age Person per Elderly	Index of Ageing (per hundred)
1980	13.7	17.7
1990	11.6	26.2
1997 (June)	10.0	30.9
2000	9.8	31.8
2010	8.7	40.8
2020	5.3	69.7
2030	3.5	103.9

Notes: (1) Working Age Persons per Elderly = Residents aged 15-64 years divided by residents aged 65 years and above.
(2) Index of Ageing = Residents aged 65 years and above divided by residents aged under 15 years.

4. **The elderly use more health care than the general population, as they are more prone to disease and disability and their complications, and they are more likely to need continuous long-term care.** Our rapidly ageing population and the elderly's growing health care needs are of increasing national concern.

5. In August 1997, MOH set up the Inter-Ministerial Committee on Health Care for the Elderly, to review the health care needs of the elderly and to identify the measures that will have to be put in place over the next 5 to 10 years if these needs are to be met at affordable cost to the individual and to the nation. The Committee's terms of reference are:

- to identify the health care needs of the elderly and gaps in the current provision;
- to review the projections for the health care needs of the elderly;
- to determine the policies and strategies to ensure adequate provision of health care facilities and services to meet the needs of the elderly; and
- to review health financing schemes for the elderly.

6. The Committee comprised representatives from various organisations involved in caring for the elderly, including government ministries and organisations, professionals and

community organisations, the National Trades Union Congress, and various VWOs. (The members are listed in Annex A.). This Report presents the Committee's findings and recommendations.

7. The Committee believes that **health care for the elderly should be holistic, encompassing their medical, mental, social and economic well being. It should also involve the Government, community, family and the elderly individuals themselves.** The Government provides the bulk of acute care through the public sector hospitals and polyclinics, while community organisations and VWOs provide most of the long-term care facilities. Both these services are heavily subsidised. Ultimately, the individual has the personal responsibility of ensuring that he remains healthy by following a healthy lifestyle, and of saving for his health care needs should he fall ill.

CHAPTER 2

PRINCIPLES OF HEALTH CARE FOR THE ELDERLY

AIM OF HEALTH CARE FOR THE ELDERLY

1. The Inter-Ministerial Committee upholds the basic health care philosophy outlined in the 1993 White Paper, *Affordable Health Care:-*

- to nurture a healthy nation by promoting good health,
- to promote personal responsibility for one's health and avoid over-reliance on state welfare or medical insurance,
- to provide good and affordable basic medical services to all Singaporeans,
- to rely on competition and market forces to improve services and raise efficiency, and
- to intervene directly in the health care sector, when necessary, where the market fails to keep health costs down.

2. **Care for the elderly in Singapore emphasises health promotion and disease prevention, to enable the elderly to remain healthy and active in the community for as long as possible.** When disease and disability set in, retaining the elderly's functional capability should be the primary focus. Appropriate and cost-effective health care will be provided according to individual need. As the elderly generally want to live with their families, they are to be cared for in the community for as long as possible. Institutionalisation of elderly sick should only be a measure of last resort**.**

ORGANISATION OF HEALTH CARE FOR THE ELDERLY

3. The elderly in Singapore have access to a wide range of health care facilities that range from the polyclinics, restructured hospitals and national speciality centres to long-term care facilities such as chronic sick hospitals and nursing homes. The private sector provides both primary care in general practitioner clinics, specialist and hospital care.

4. It is recognised that most of the medical needs of the elderly can be met in an outpatient primary care setting. Hospitalisation for more serious illnesses is required some of the time. As the elderly are more prone to chronic degenerative medical conditions (such as hypertension, diabetes mellitus, ischaemic heart disease, chronic lung disease and arthritis, as well as their complications that cause disability), a significant proportion of the elderly, especially those aged 75 years and above, will also require some form of long-term care

5. The approach to the health care needs of the elderly should be a holistic one, addressing their medical, mental and social well being**.** Issues such as the living environment (e.g. housing), transport and financial support frequently affect their health. To ensure that their care is continuous, the approach should be multidisciplinary, involving medical specialists, primary care doctors, nurses, psychologists, physiotherapists, occupational therapists, social workers, volunteers, and most importantly, carers in the family**.**

ROLE OF THE GOVERNMENT, COMMUNITY, FAMILY AND INDIVIDUAL

6. The Government, community, family and individual elderly have complementary roles to play in the health care of the elderly:

(A) The Government

7. **Public sector clinics and hospitals will continue to provide good and affordable basic care for short-term illnesses, complemented by private sector clinics and hospitals.** Working together with agencies such as MCD and the National Council of Social Service (NCSS), MOH also:

- sets policies on health care,
- plans health services based on need,
- regulates the service providers, and
- facilitates and provides financial and other forms of support for health services for the elderly.

(B) The Community

8. Long-term care can be very expensive, especially if the elderly were to remain in acute care hospitals longer than necessary because there is not enough appropriate and low cost alternative care. **As far as possible, long-term health care services for the elderly should be provided by the community and the VWOs, supported by Government.** Driven by altruism and community spirit, they add warmth to their provision of what can otherwise be the continuous grind of long-term care. They are also able to mobilise financial and human resources (i.e. donations and volunteers), and their continued participation will strengthen the community spirit in Singapore.

9. Private commercial operators are also encouraged to join in providing health care to the elderly, especially long-term care. By catering to the higher income groups, who may have higher expectations regarding ambience and privacy in the facilities they use, they allow the elderly a wider choice of the type and level of service.

(C) The Volunteer

10. With the stress on a healthy lifestyle, there will be **more healthy and independent elderly in future. They should be encouraged to volunteer their time and expertise to help their sick and dependent counterparts, through forming self-help groups.** More training should be provided to better prepare these volunteers and to reduce the reliance on professional carers. Community groups such as the Senior Citizens' Clubs can also be encouraged to organise self-help programmes for the elderly.

(D) The Family

11. **The primary responsibility for caring for the elderly rests with the family.** As most of the elderly prefer to live with their families, which benefits them psychologically and socially, the elderly should be cared for in their own homes as far as possible.

12. Since caring for the elderly includes providing the care itself, and not just giving financial and psychological support, family members (or their maids) need training so that they can provide the appropriate care and reduce carer fatigue. Training programmes should be tailored for home carers and made easily available through community and grassroots organisations.

(E) The Individual

13. Ultimately, **every Singaporean is personally responsible for his own health and well being.** Besides living a healthy physical, mental and social lifestyle, they should seek early treatment to minimise the effects of the common illnesses and injuries of old age. Elderly persons should also try to work for as long as possible, as being mentally and physically active will reduce ill health, social isolation and low self esteem. In addition, they

need to have adequate financial resources to take care of their own health care costs in old age.

ENVIRONMENTAL FRIENDLINESS FOR THE ELDERLY

14. As the elderly will form a more significant segment of the population, it is crucial that **there should be an elderly-friendly environment at home and in public places in Singapore.** HDB has introduced studio apartments for the elderly, incorporating elderly-friendly features. Other facilities for the elderly, including health care services, should also be made available in HDB estates. Aids such as grab bars and even floors, which help to prevent home accidents, and lifts, which stop at every level, also need to be incorporated in other types of housing. Ramps in public buildings and shopping centres will also help the elderly to move around.

15. Public transport should also cater to the special needs of the elderly. For example, taxis should be prepared to pick up the elderly at their doorsteps, and accommodate the wheelchair-bound. There should also be adequate special transport for the disabled elderly who need to visit health and rehabilitation services.

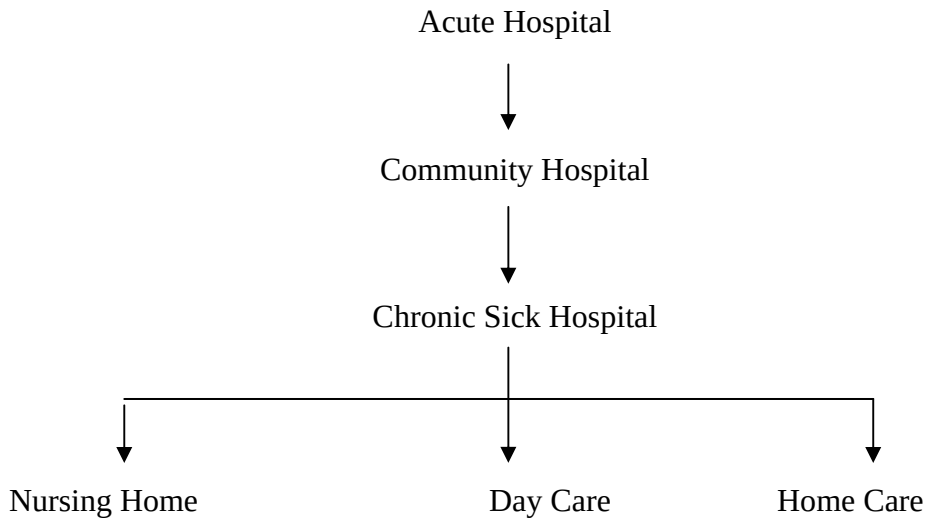
PROVIDING APPROPRIATE CARE BASED ON NEEDS

16. Ideally, care for the elderly should start at home and be given by family members as far as possible. If there is a need, community-based healthcare and outpatient treatment can be sought. To support such home and community-based care, co-ordination and integration among government agencies and service providers should be strengthened so that the different services can be provided seamlessly. Only when a higher level of care is required

should the elderly be transferred to a chronic sick hospital or nursing home depending on his condition.

17. Sufficient services at all levels of care should be made available so that the different needs of the elderly can be met appropriately and cost effectively. Unnecessarily long stays in hospitals lead to great financial burden for the elderly and their families, and the possibility of the elderly sick developing hospital-acquired infections. Caregivers should ensure that appropriate and cost-effective long-term care is provided, and avoid subjecting the elderly to unnecessary treatment and inappropriate use of high-technology medicine.

18 The hierarchy of care types in descending order of complexity and cost is shown below:-



19. The rest of the chapters will elaborate on the Committee's recommendations for policies and measures based on these principles.

CHAPTER 3

PROMOTING HEALTH AND PREVENTING DISABILITY AMONG THE ELDERLY

1. The average Singaporean's life expectancy at birth is 76 years. For those who are already aged 65 years, the life expectancy is another 15 years for males and 18 years for females. **The greatest health problem the elderly face is premature disability.** This chapter discusses how premature disability can be prevented.

PHYSICAL DISABILITY

2. Common disabilities in the elderly are deteriorating eyesight and hearing. They may also become physically unstable or immobile, less mentally alert and incontinent. They may also risk iatrogenesis (harm caused by medical treatment). All these lead to problems in their walking, bathing, grooming, toileting and feeding. The major diseases that disable and kill the elderly are cardiovascular disease, stroke, cancer, respiratory disease, hypertension, diabetes mellitus, arthritis, osteoporosis and hip fractures. These are caused to a large extent by an unhealthy lifestyle.

STRATEGIES FOR PREVENTING DISABILITY

3. To prevent disability, a 3-pronged approach involving individuals, health care professionals and the community should be adopted.

(A) The Individual

4. **The individual can change his lifestyle, and delay the onset of chronic debilitating diseases and disability.** Frailty often results from a sedentary life and lack of exercise, aggravated by acute illnesses. If not treated early, illness leads to a vicious cycle of complications and further frailty, or ends in death. It is not too late for all elderly persons, whatever their level of ability, to prevent further disability.

5. In the short term, he can be immunised (especially if he is very old or is already institutionalised) against influenza and pneumococcal pneumonia at approximately $50 per immunisation. Paying attention to factors which cause falls will reduce injuries and prevent the vicious cycle of becoming bedridden and its complications (e.g. developing bed sores, being infected with bronchopneumonia). Maintaining muscle tone and strength through exercising the thigh muscles will also reduce falls.

6. In the medium term, having hypertension and diabetes mellitus identified and treated early will reduce complications and other resulting diseases, especially stroke, which may lead to physical and mental disability.

7. In the long term, paying attention to diet, exercising, stopping smoking and reducing alcohol intake all help to reduce the likelihood of cancer, cardiovascular disease and respiratory disease.

(B) The Professional

8. **Health care professionals need to be more aware of how ageing affects the elderly's response to infection, injury and medication.** They need to convince the elderly

and their carers of the importance of early treatment, as early treatment will improve medical outcomes and enhance the quality of life for the elderly.

9. Chronic disease complications such as stroke, kidney failure, and limb amputations carry an enormous financial and social cost. Because of their high patient load, many primary care doctors in Singapore are only able to provide a short consultation service to their patients. This makes it difficult for the doctors to deal adequately with chronic conditions. Therefore, **doctors must be alerted to the need to devote adequate attention to elderly patients with chronic conditions.**

(C) The Community

10. Social isolation (the absence of social interactions, contacts and relationships) in the elderly is associated with increase in tiredness, more visits to health providers, over-consumption of medicine, and a host of physical and psychological symptoms. **Social support tends to hasten recovery and helps to maintain health.** However, as families are getting smaller in size, nuclear in structure, and as more women enter the workforce, there are fewer care givers at home. Neighbours can be harnessed to fill this gap. Grassroots organisations (Residents' Committees, Citizens Consultative Committees and Community Development Councils) under People's Association (PA) can be tasked to initiate more programmes to increase contacts between neighbours, especially in HDB estates with more elderly residents. In addition, PA and MCD should get grassroots organisations to work more closely with other voluntary and community organisations to provide social, cultural, recreational and volunteer programmes for the healthy elderly, counselling, social and rehabilitative programmes for the frail elderly and nursing care, rehabilitative and befriender programmes for the sick elderly. Programmes should be co-funded by individuals, the community and Government.

11. Early retirement, if it leads to social isolation and inactivity, may impact negatively on the health of the elderly. **Economic independence should be encouraged through full-**

time or part-time work. MCD is working with other government organisations such as Ministry of Manpower (MOM), to actively promote retaining older workers and encouraging the non-working elderly to return to work. The Inter-Ministerial Committee endorses these efforts and calls on more employers to change their mindset and provide job opportunities with flexible hours for older workers.

12. With better education and increasing longevity, **elderly retirees need programmes that engage and challenge them.** Community activities and a wider choice of leisure activities are the new norms for ageing persons. Further studies for self-development such as those offered by the "University of the Third Age" (U3A), development of new skills, or simply being occupied with interesting activities, are common among the elderly in developed nations and these activities could be encouraged for the elderly in Singapore.

MEDICAL SCREENING FOR THE ELDERLY

13. Regular medical screening for the elderly will allow medical problems to be detected and treated early. Unlike younger adults, the elderly require an overall assessment to identify any physical, cognitive and socio-economic problems that can be dealt with early. This will prevent later complications and disability, which will be more expensive to treat in the longer term.

14. The Inter-Ministerial Committee notes that MOH is validating a protocol for a comprehensive outpatient geriatric assessment, which takes about 10 minutes. This protocol will include checking the elderly's weight, vision, hearing, continence status, and habits like smoking, drinking, and exercise. Tests for diabetes, hypertension, and some cancers will also be carried out. Attention will be given to the independence of the elderly in activities of daily living (ADL), and their social and emotional well being. If this protocol proves useful, the Committee recommends that it be used in all primary health care settings, and that everyone aged 65 years and above should be screened once a year. Special attention should be given to

detecting hypertension and diabetes mellitus – the two most common chronic medical problems among the elderly – and preventing complications from these conditions. This is especially important as many elderly do not understand the serious consequences of undetected or untreated hypertension and diabetes because these two conditions usually show few symptoms and do not interfere with their daily activities until complications set in.

15. For the middle-aged population (aged 40 to 64 years), early detection and prompt treatment of diseases should be encouraged to avoid complications and disability which may result in a need for long-term care when they are old. MOH should draw up and publicise guidelines on the types of health screening that have been found to be useful and cost-effective for the middle-aged population.

SUMMARY OF RECOMMENDATIONS

16. The Inter-Ministerial Committee recommends that:

a. MOH set up a national disability prevention programme for the elderly, integrating strategies involving individuals, health care professionals and the community.

b. MOH develop a quick, yet comprehensive, geriatric screening protocol to detect medical problems early and prevent complications and disability among the elderly, which can be used at all primary health care settings so that the elderly can receive screening once a year.

c. Doctors give special attention to detecting hypertension and diabetes – the two most common chronic medical problems among the elderly – and to preventing complications from these.

d. MOH draw up guidelines on the type of health screening that has been found to be useful and cost-effective for the middle-aged population.

CHAPTER 4

PROVIDING HEALTH SERVICES FOR THE ELDERLY

1. This chapter examines the various health services the elderly need to maintain and improve their health. Health care for the elderly can be divided into:

a. *Acute care* available at public and private clinics and hospitals, and specialised care provided by speciality centres.

b. *Long-term care* provided mainly by VWOs and supported by the Government, including care provided by community hospitals, chronic sick hospitals, nursing homes, day rehabilitation and day care centres, and home care services.

(A list of the current providers of these services is in Annex B.)

ACUTE CARE

(A) Acute Primary Care

2. Acute primary care is basic health care provided by the 17 government polyclinics and about 1,000 private clinics run by general practitioners, for acute illnesses or chronic conditions that require regular follow-ups. These clinics are important for treating illness early and preventing disability, as they are usually the first-line contacts with the elderly. They are well distributed throughout Singapore and readily accessible. The government polyclinics cater to 18% of the general population and 32% of the elderly population.

3. With the rapidly ageing population, doctors in the community need to be better trained in geriatric care. The Inter-Ministerial Committee recommends that **geriatric medicine be incorporated into the undergraduate medical curriculum,** instead of being regarded as a specialised subject to be taught only at postgraduate level. In addition, postgraduate training in geriatric medicine should not be limited to only geriatric specialists in hospitals. The Graduate School of Medical Studies of NUS started a diploma course on geriatric medicine in 1997. The Inter-Ministerial Committee recommends that **more doctors be given access to further training in geriatric care at the primary care level, so that they can form a core group of "community geriatricians"**. These community geriatricians, many of whom will be working as family doctors, will be better able to identify the problems of the elderly at the outpatient level, assess their needs and refer them to the most appropriate level of care. They will ensure that the elderly receive the most appropriate and cost-effective type of care.

(B) Acute Hospital Care

4. Specialised geriatric care is provided at specialist outpatient clinics and inpatient wards in three regional hospitals - Changi General Hospital in the east, Tan Tock Seng Hospital in the centre, and Alexandra Hospital in the west. Highly specialised tertiary care is provided at Singapore General Hospital, National University Hospital, and at the various national speciality centres (Singapore National Eye Centre, National Skin Centre, National Heart Centre, National Cancer Centre, National Neuroscience Institute and Woodbridge Hospital).

5. A major problem is that about 3% of the beds in public acute care hospitals are occupied by elderly patients who stay longer than they need to. A recent survey showed that on any one day, about 120 patients who had been assessed by the doctors as being fit for discharge were still staying in the hospitals. Among these "overstaying" patients, 41% had overstayed for a week, 36% had overstayed from 2 to 4 weeks, and 23% had overstayed for 1 month or longer (of which 3% actually overstayed for 6 months or longer). They can be better managed, and at a much lower cost, at other long-term care facilities, if these are

available. For example, the current shortage of about 1,300 nursing home beds implies that many patients cannot be discharged from acute care hospitals. The Inter-Ministerial Committee recommends that **MOH continuously monitors the problem of elderly sick over-staying in acute care hospitals, and plan ahead and ensure that appropriate alternative long-term care services are available to meet the demand.**

LONG-TERM CARE.

(A) Non-residential Long-term Care

(i) Day Rehabilitation and Day Care Centres

6. Day rehabilitation centres provide active rehabilitation (to recover functional capacity after illness) and maintenance rehabilitation (to prevent functional capacity from deteriorating) to the elderly, and respite care. In 1997, there were 17 day rehabilitation centres with about 600 places for the frail and sick elderly, and three day care centres with about 100 places for elderly with senile dementia.

7. An increasing number of VWOs and community organisations are interested in operating day rehabilitation or day care centres for the elderly. MOH will monitor the situation to ensure that they are well distributed. MOH will also encourage VWOs and community organisations to consider other areas of care where there are shortages.

8. Some of these centres are not very well used. This is not because there are too many, but because they have limited operating hours, and the elderly lack transport or motivation to attend, or perceive that their programmes are of limited use. Indeed, day rehabilitation centres confine themselves to only rehabilitation, and the elderly have to be transferred

between these and the social day care centres (which are under MCD's purview) as their condition changes. To integrate these two currently separate programmes in a holistic approach, the Inter-Ministerial Committee recommends that **MOH and MCD look into "multiservice centres" for the elderly, integrating health, social, and other services under one roof.** The elderly should also be encouraged to form mutual support groups based in these "multiservice centres" in their neighbourhood.

9. As the elderly often do not have the means to travel to these centres, **MCD should work with organisations such as the Land Transport Authority (LTA) and CDCs to plan for the elderly's need for transportation to such programmes and their transport needs in general.**

(ii) Home Care

10. Care for the elderly in their own homes can be divided into:

- Home Medical Care – visits by a doctor to provide medical consultation and treatment. (In 1997, there were three VWOs providing up to 750 home medical visits per month.)
- Home Nursing – visits by a nurse to provide nursing care. (In 1997, there were two VWOs providing up to 5,000 home nursing visits per month.)
- Home Help – visits by a home-helper to provide services such as meal delivery, respite care, personal hygiene, home management, laundry, and escort to medical appointments. (In 1997, there were three VWOs providing up to 255 home visits per day).

11. The Committee has identified home care services as a major gap. The elderly who have difficulty moving out of their homes to obtain care usually risk developing serious illnesses and complications. This may eventually result in higher levels of care being required for a longer time and at a higher cost. However, this can be prevented if visits to the home are made to sick elderly with mobility problems, and illnesses are adequately treated. The Inter-Ministerial Committee therefore recommends that **there be more and better home health care services for the increasing number of elderly who need them, to encourage**

the elderly to continue living at home for as long as possible and to avoid premature institutionalisation or hospitalisation. Home care should be available to the general population and not just low-income elderly.

12. MOH is piloting a project in Kampong Glam Constituency to develop a model of home medical care and home nursing by identifying "at risk" homebound elderly with the help of grassroots organisations, VWOs and volunteers. If this model proves useful, MOH should work with other CDCs to implement it in other constituencies.

(B) Residential Long-term Care

(i) Community Hospitals

13. Community hospitals provide inpatient rehabilitation after an acute illness, for those who do not require high technology care, or for respite care. The care usually lasts one to two months.

14. In 1997, the four hospitals providing community hospital beds were:

• Ang Mo Kio Community Hospital	-	156 beds
• Kwong Wai Shiu Hospital	-	30 beds
• St Andrew's Community Hospital	-	60 beds
• St Luke's Hospital for the Elderly		180 beds
		426 beds

15. Two more community hospitals are planned – one by St Andrew's Mission Hospital at Simei next to Changi General Hospital; and the other by Ren Ci Hospital at the old Toa Payoh Hospital site. The Inter-Ministerial Committee endorses the building of long-term care institutions adjacent to an acute care hospital, as this will make it easier to move the elderly from acute hospital wards to community hospitals for rehabilitation.

(ii) Chronic Sick Hospitals

16. Chronic sick hospitals provide prolonged medical and nursing care for chronic sick patients. Such care usually lasts from a few months to years. In 1997, the two hospitals providing chronic sick hospital beds were:

• Ren Ci Hospital	-	174 beds
• St Luke's Hospital for the Elderly	-	44 beds
		218 beds

17. Ren Ci Hospital's new community hospital at the old Toa Payoh Hospital site will include chronic sick hospital beds.

(iii) Nursing Homes

18. Nursing homes provide nursing care and shelter for sick and frail elderly who require regular nursing care. Such care usually lasts from two to five years. In 1997, there were 47 nursing homes providing a total of 4,703 beds, with 23 of these run by VWOs (3,241 beds) and 24 run by commercial operators (1,462 beds).

19. In 1997, the estimated need for nursing home beds was about 6,000. There was then a short fall of about 1,300 nursing home beds. The situation will improve by the year 2003 when an estimated 7,300 nursing home beds will be available to meet the need for 7,700 beds.

NATIONAL CO-ORDINATING COMMITTEE ON GERIATRIC CARE

20. MOH has already set up a National Co-ordinating Committee on Geriatric Care comprising representatives from various service providers, NCSS, MCD and MOH, to co-ordinate health services for the elderly, especially long-term care. This Committee provides the forum for the representatives to inter-relate and work together to improve the accessibility and quality of services for the elderly.

OTHER SUPPORT SERVICES

21. Other support services which also enhance the health of the elderly and enable them to continue living in the community include:

- Meal Service – which delivers meals to the elderly's homes or provides eating places near their homes, especially for elderly persons living alone.
- Laundry Service.
- Home Modification Service – which provides simple modifications such as grab bars, non-slip tiles and levelled floors, to improve safety and convenience for the elderly, which will increase their independence and reduce their dependence on carers.
- Telephone Hotline Service – which provides counselling and information to both the elderly and their carers.
- Befriender Service – which provides help through volunteers visiting the elderly in their homes.
- Mutual Help Group – which encourages the elderly to form small groups of 10 to 30 people, to foster neighbourliness and mutual care and concern.

22. These services are still not well-established, leading to many elderly having to be institutionalised "prematurely". The Committee recommends that **MCD draw up a co-ordinated master plan to ensure that every housing estate in Singapore have support**

services available at low cost to the elderly. Community Development Councils can play an important role in co-ordinating and providing such support services.

23. Many elderly are cared for at home by informal carers, many of who may "burn out" easily because of lack of support and training. The Inter-Ministerial Committee recommends that **training courses for home carers of the elderly be made widely available through grassroots organisations to benefit as many carers as possible.** MOH and MCD should also publicise and make available their educational videos on elderly health care issues.

24. **Retirement villages or cluster housing (such as HDB studio flats) for the elderly should be encouraged.** These will bring together services within defined areas, and allow the elderly to live more independently within the community.

SUMMARY OF RECOMMENDATIONS

25. The Inter-Ministerial Committee recommends that:

a. NUS incorporate the teaching of geriatric medicine into the undergraduate medical curriculum.

b. NUS train more primary care doctors in geriatric medicine, to form a core group of "community geriatricians".

c. MOH continuously monitor the problem of elderly sick staying longer than is necessary in acute care hospitals, and ensure that more cost-effective step-down facilities are available.

d. MOH and MCD look into "multiservice centres" for the elderly, integrating health, social, and other services under one roof.

e. MCD work with Ministry of Communications and other authorities to plan for the transport needs for the semi-ambulant and non-ambulant elderly.

f. MOH work with other agencies to strengthen and better organise the provision of home health care for the elderly.

g. MCD draw up a co-ordinated master plan to ensure that every housing estate in Singapore will have adequate support services to complement the health care services being provided by the elderly for the elderly.

h. MOH and MCD make available training courses for home carers at various grassroots settings to benefit as many home carers as possible.

CHAPTER 5

PLANNING AND SUPPORTING HEALTH SERVICES FOR THE ELDERLY

1. A healthy lifestyle can prevent or postpone disease, and early treatment can prevent complications and disability. But we have to acknowledge that despite healthy living, health will deteriorate with age. By the year 2030, the elderly population will increase to 2.6 times the current level. This chapter looks at how health care services will have to be planned for the elderly in the next 30 years.

USE OF HEALTH SERVICES BY THE ELDERLY

2. **The elderly need more health care than the general population**. In 1995, the elderly made up only 6.8% of the population but they accounted for:

- 19% of attendance at government polyclinics;
- 12% of attendance at accident and emergency departments of public hospitals;
- 11% of new attendance at specialist outpatient clinics of public hospitals;
- 20% of admissions to acute care wards of public hospitals;
- 69% of admissions to Ang Mo Kio Community Hospital; and
- 99% of admissions to community and chronic sick hospitals run by VWOs.

3. As they form an increasingly larger proportion of the general population, the elderly's use of health care will also take up a greater proportion of the total amount of health care consumed. For example, in 1995, the elderly formed 20% of the total number of admissions into public hospitals. This is projected to increase to 23% in 2000, 32% in 2010, and 43% in 2030.

PROJECTED NEED FOR HEALTH SERVICES BY THE ELDERLY

4. The capacity of health services will have to be proportionately increased and the full range of acute and long-term care services should be made available.

5. The use of acute care services in the public sector (including hospital wards, specialist outpatient clinics, accident and emergency departments, and government polyclinics) by the elderly is expected to quadruple from the year 1995 to 2030 (Table 5.1).

6. When the new Tan Tock Seng Hospital is completed in 2000, there will be a total of 7,567 acute care hospital beds in Singapore. MOH is also planning another regional hospital in the west, and the private sector is encouraged to increase its share of hospital beds from the current 23% to 30% by the year 2010. 11,000 acute care hospital beds are projected to be available in the year 2020 (Table 5.2).

7. About 80 geriatric specialists, 800 acute geriatric beds, 2,800 community hospital beds, 1,200 chronic sick beds, 22,000 nursing home beds, 2,800 day rehabilitation places, 4,000 home medical care visits per month, 24,000 home nursing visits per month, and 3,200 home help visits per day, are projected to be required by the elderly population by the year 2030 (Table 5.3).

8. Ageing is associated with dementia. Local studies among the Chinese elderly population have shown that about 2.5% of the elderly aged 65 years and above have dementia. In the developed countries, prevalence rates are about 5% for those aged 65 years and above, and 20% for those aged 80 years and above. The problem of dementia will contribute to the increasing need for long-term care services.

Table 5.1

Projected Use of Acute Care Services in the Public Sector by the Elderly

Service	Year				
	1995	**2000**	**2010**	**2020**	**2030**
Admissions to Hospital Wards	50,205	57,600	77,500	126,900	197,300
Specialist Outpatient Clinic New Attendance	45,045	52,200	69,600	118,100	177,900
Accident & Emergency Department Attendance	61,488	71,300	95,000	161,100	242,700
Government Polyclinic Attendance	394,895	475,700	610,000	1,034,800	1,558,900

Table 5.2

Projected Need for Acute Care Hospital Beds, Year 2000 to Year 2020

Year	Projected Number of Beds Required	Beds per 1,000 Residents
1997	Availability: 7,200	2.3
2000	Estimated Availability: 7,600	2.3
2005	8,000	2.3
2010	9,000	2.3
2015	10,000	2.5
2020	11,000	2.7

Table 5.3

Projected Need for Elderly Health Services, Year 2000 to Year 2030

Type of Service	Planning Ratio	Year				
		1997	2000	2010	2020	2030
Acute Geriatric Beds	1 bed per 1,000 elderly	217 (188)	235 [226]	310	530	800
Geriatric Specialist	1 geriatric specialist per 10,000 elderly	22 (15)	25 [21]	30	55	80
Community Hospital Beds	3.5 beds per 1,000 elderly	761 (426)	820 [426]*	1,090	1,855	2,800
Chronic Sick Hospital Beds	1.5 beds per 1,000 elderly	326 (218)	352 [218]*	480	800	1,200
Nursing Home Beds (Including beds for dementia patients)	28 beds per 1,000 elderly	6,087 (4,703)	6,566 [5,635]*	8,800	14,900	22,400
Day Rehabilitation & Day Care Places (Including places for dementia patients)	3.5 places per 1,000 elderly	761 (701)	821 [820]	1,100	1,900	2,800
Home Medical Care Service (Projection unit: home medical care visits per month)	5 elderly needing 1 visit per month per 1,000 elderly	1,087 (750)	1,173 [825]	1,600	2,700	4,000
Home Nursing Service (Projection unit: home nursing visits per month)	15 elderly needing 2 visits per month per 1,000 elderly	6,522 (5,000)	7,035 [5,500]	9,400	15,900	24,000
Home Help Service (Projection unit: number of home help visits per day)	4 elderly needing daily visits per 1,000 elderly	870 (255)	938 [300]	1,250	2,120	3,200

Note: ( ) = Availability in 1997

[ ] = Estimated availability in the year 2000.

* Estimated availability will improve by the year 2003:
Community Hospital Beds = 940
Chronic Sick Hospital Beds = 400
Nursing Home Beds = 7,300

9. MOH must regularly review and adjust these projections, as the future will see more "very old" elderly, with a different socio-economic profile and possibly different patterns of use. Also, the different types of long-term care, including residential and non-residential, complement each other and any increase in supply or use of one particular service will imply less demand for another service.

10. If the Government matches its acute health care service capacity with the projected requirement, **the cost of acute inpatient services, specialist outpatient clinics, and accident and emergency services will quadruple from $178 million per year in 1995 to $694 million (1995 prices) per year in 2030.** Assuming the average subsidy level remains at 65%, the cost to the Government will increase from $116 million per year in 1995 to $451 million (1995 prices) per year in the year 2030.

11. Many developed countries already have sizeable elderly populations, and are actively looking into new and more cost-effective ways to look after the elderly sick. While we should be similarly engaged, we should also monitor developments elsewhere and explore how to adapt such improvements to suit our local environment. The Inter-Ministerial Committee recommends that **MOH continually review more cost-effective and efficient new technologies and methods of long-term elderly care. MOH should also encourage R&D in developing new equipment and methods or adapting the equipment and methods currently used in advanced countries to our local population and local conditions.**

GOVERNMENT SUPPORT FOR VWOs PROVIDING LONG-TERM CARE

12. Long-term health care is mainly provided by VWOs and other organisations. In addition to financial assistance (discussed in Chapter 7), the Government now also supports these VWOs by:

- Allocating state land or government buildings for residential long-term care facilities such as community hospitals and nursing homes;
- Allocating premises for day rehabilitation centres and home care services;
- Waiving their COE (Certificate of Entitlement) for vehicles and vehicle taxes;
- Seconding health care professionals, including doctors and nurses, to services with acute need for manpower;
- Training health care workers;*
- Assistance in application for work permits;*
- Waiving their foreign worker's levy;
- Issuing medical fee exemption cards for needy residents of nursing homes to allow them to receive free medical treatment in public hospitals and government polyclinics; and
- Co-ordinating placement in nursing homes and chronic sick hospitals through the MOH Care Liaison Service *

(* Also available to commercial operators)

13. As the needs of the elderly and the health services provided by the VWOs increase, the amount of such support required from the Government will also increase proportionately.

14. To ensure that the supply of health care services for the elderly matches demand, information on both demand and supply should be provided regularly to the service providers. The Inter-Ministerial Committee therefore recommends that **MOH regularly brief existing and potential service providers on the present and projected requirements for long-term care, and actively encourage more VWOs to provide services where there is a shortage.** Besides VWOs, commercial operators should also be encouraged to provide services with an ambience suited to the expectations of the more affluent Singaporeans.

15. Service providers generally find it difficult to secure land for building facilities. VWOs now either use their own land or get help from MOH to secure state land; commercial operators have to find their own means if they do not have their own land. But land purchase on the open market is generally beyond the means of both VWOs and commercial operators.

The Inter-Ministerial Committee therefore recommends that **MOH be a one-stop centre to assist VWOs and work with URA and HDB to alienate land for community hospitals, chronic sick hospitals and nursing homes, which can then be leased to VWOs or put out to tender by commercial operators.**

16. Between 1993 and 1997, VWOs built only three new nursing homes. The building pace has lagged behind demand, especially since it takes several years for VWOs to build the homes. The Committee considers this situation unsatisfactory and untenable.

17. MOH needs to ensure that supply matches demand closely, as otherwise the elderly sick will need to depend on the more expensive services provided by acute hospitals. The Committee therefore recommends that **MOH supplement the VWO's effort by building some of these institutional facilities on alienated land, and then selling or leasing them to suitable operators.** VWOs or other suitable operators can work with MOH and PWD to plan the facilities, which will be pegged to the standards of B2 or C class wards of public hospitals. These "turn-key" projects will help to speed up the "start-up" time, especially for the newer VWOs, which lack experience in developing such facilities.

PROJECTED NEED FOR HEALTH CARE PROFESSIONALS

18. In 1997, 4,912 doctors were registered with the Singapore Medical Council, giving a doctor-to-population ratio of 1:760. In the year 2000, there will be 5,300 doctors, and it is projected that 7,180 doctors will be required by the year 2010, to give a doctor-to-population ratio of 1:650. To meet the demand, the annual intake of medical students by the Faculty of Medicine of NUS was increased from 150 students to 180 students in 1997, and to 200 students from the year 1998 onwards. The requirements for nurses, therapists, medical social workers, etc, also need to be monitored and adjusted. Another category of staff, known as "case managers", who co-ordinate the management of the medical, psychological and social problems of the elderly, is also needed. These case managers are equipped with interdisciplinary skills and their role will be very important in view of the increasing

complexity of caring for the elderly. The Inter-Ministerial Committee therefore recommends that **MOH regularly review the demand for health care professionals, and ensure the supply is adequate to meet the increased health care needs of the ageing population.**

SUMMARY OF RECOMMENDATIONS

19. The Inter-Ministerial Committee recommends that:

a. MOH regularly brief existing and potential service providers on the present and projected elderly long-term care service requirements, and actively encourage VWOs to provide services where there is a shortage.

b. MOH be a one-stop centre to assist VWOs and work with URA and HDB to alienate land for building community hospitals, chronic sick hospitals and nursing homes, to be leased to VWOs or put out to tender by commercial operators.

c. MOH and PWD build nursing homes and other elderly care institutions with an ambience and physical standards pegged to subsidised wards of public hospitals, to be sold or leased to VWOs or other suitable operators. These "turn-key" projects will help to speed up the start-up time, especially for newer VWOs, which lack experience in developing such facilities

d. MOH study and regularly review the requirement for health care professionals (including doctors, nurses, therapists and other support personnel) to meet the increased health care needs of the ageing population.

CHAPTER 6

ENSURING QUALITY CARE

1. This chapter discusses how MOH can continue ensuring that the quality of health services for the elderly meets the desired professional standards to protect public interest.

ASSURING QUALITY

2. Acute care services and residential long-term care services are regulated and licensed under the Private Hospitals and Medical Clinics Act. (Licensing requirements cover the physical facilities, staffing norms, health care programmes, and the requirement to establish internal quality control programmes.) In 1995, MOH also established an internal quality assurance programme for all nursing homes, and regularly checks to ensure its proper implementation. The seven aspects of care and management included in the programme are:

- Services;
- Documentation and medical records;
- Medication;
- Infection control;
- Residents' safety;
- Care of equipment; and
- Housekeeping.

3. However, non-residential services (such as day rehabilitation centres and home care services) are not presently regulated by MOH. To ensure high standards of care and services are provided at these facilities, the Inter-Ministerial Committee recommends that **MOH also regulate and ensure the quality of non-residential long-term care services, including regularly inspecting and auditing them.**

IMPROVING CARE STANDARDS

4. As the range and volume of long-term care services increase, it would be necessary for MOH to ensure that services meet certain minimum standards. The IMC recommends that MOH set appropriate guidelines, and has an active programme of inspection and audit to ensure that the minimum service guidelines are being observed by the service providers.

5. MOH now issues guidelines for nursing homes and day rehabilitation centres, focusing on facilities and staffing. In order for service providers to appreciate the requirements and resources required, the Inter-Ministerial Committee recommends that **MOH make a guidebook available to providers of each type of long-term care category of service and that benchmarks on the standards of care be established.**

6. As an example, one way of improving care standards among acute care hospitals is by developing a "care path", which is a clinical protocol to be followed for a particular category of patient. This helps to ensure that service providers comply with established care procedures and tracks the progress of each patient and minimises variation in the care standards. A similar approach needs to be taken for long-term care. The Inter-Ministerial Committee recommends that **VWOs actively explore and implement various quality assurance mechanisms to help improve the process and outcome of care for the frail and sick elderly.**

SUMMARY OF RECOMMENDATIONS

7. The Inter-Ministerial Committee recommends that:

a. MOH regulate and ensure the quality of residential and non-residential long-term care services, including regularly inspecting and auditing them.

b. MOH improve existing guidebooks on elderly long-term care by including benchmarks on care standards, and make available guidebooks to providers of different types of long-term care.

c. VWOs ensure quality care for the elderly by implementing quality assurance programmes to improve the process and outcome of care.

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CHAPTER 7

FINANCING HEALTH SERVICES FOR THE ELDERLY

1. This chapter reviews the financing of health services for the elderly. It proposes various means to help the elderly finance their long-term care, and examines the roles of the Government, the community, and the individual. A comprehensive system of financing health services (acute care and long-term care) for the elderly will have to be put in place to ensure that such services are accessible and affordable, and that the future health care needs of the ageing population in Singapore will be met.

PRINCIPLE OF FINANCING HEALTH SERVICES FOR THE ELDERLY

2. The philosophy of financing health services in Singapore emphasises individual responsibility and family support, with the community and Government helping those who cannot afford to pay for their health care needs. The financing of health services for the elderly adopts the same principle, with the **sources of funding coming from the individuals and their families, the community, and the Government.**

FINANCING ACUTE CARE SERVICES

3. In Singapore, acute health care services for the elderly are financed through:

- The Individual
  - Medisave (the medical savings scheme emphasising personal responsibility).
  - MediShield (health insurance for catastrophic illnesses, with premiums payable from Medisave), and other insurance schemes.

- Out-of-pocket payment at the point of consumption.

- The Community
  - Financial and other forms of assistance provided to individuals by community organisations such as VWOs and CDCs.
- The Government
  - Government subventions for public sector health services.
  - Medifund (for those with little or no Medisave and insufficient family support).

4. **The current system of subsidies ensures that the elderly in low and middle-income families have access to affordable health care.** In government polyclinics, the elderly enjoy 75% subsidy (e.g. elderly patients pay only $4 for consultation). In public hospitals, the subsidies range from 20% to 80% of the cost of service, depending on the ward class.

5. The Committee is of the view that the current financing scheme for acute care services is appropriate to take care of the needs of the elderly in Singapore. Savings in individual Medisave accounts will be built up as the population ages. In addition, MediShield helps to pay for catastrophic illnesses. Thus, the future generations of elderly will continue to have sufficient financial resources to pay for their hospitalisation expenses.

FINANCING LONG-TERM CARE SERVICES

(A) Enabling Individuals to Finance Their Long-Term Care Needs

6. **Medisave, MediShield, and Medifund were set up primarily to finance acute hospital care.** Over the years, Medisave has been extended to provide limited coverage for selected non-acute hospital services including inpatient care in community hospitals and hospices and Home Nursing Foundation's rehabilitation services. However, there is still no comprehensive scheme to help individuals finance long-term care.

7. In Singapore at any one time it is estimated that 2.7% of the elderly will require residential long-term care, and another 5.3% will require non-residential long-term care, because their disabilities make them incapable of handling the activities of daily living and they require frequent medical or nursing care. In other words, some 8% of the elderly require long-term care of different levels of intensity. Long-term care can be expensive because of its duration. The problem for Singapore will worsen over the next 30 years, as there will be fewer working people to support the growing number of elderly.

8. The Government needs to establish a financing scheme to help the elderly finance their long-term care. **National health expenditure, which formed about 2.7% of Singapore's GDP in 1996, is projected to increase to 7% of GDP (in nominal terms) in 2030 when the elderly make up 18.4% of the population.** While the government will continue to heavily subsidise healthcare services for low-income families, there is a limit to the total amount of subsidies available. VWOs could assist by raising more donations from the community. But there will be a limit to how much funds the VWOs can raise. Efforts spent on fund raising would also affect VWOs' ability to provide quality care for the elderly.

9. **It is therefore important to ensure that individuals are able to finance their own long-term care needs, especially during old age.** The Inter-Ministerial Committee examined several options to help individuals finance their long-term care:

a. The Government could leave it to individuals to make their own provisions. However, some individuals will be unable to do so, and they will have to depend on the State and ultimately the taxpayers. Those who do make the effort to put aside adequate savings for long-term care will have locked up a significant portion of their income, which may otherwise be put to other productive uses.

b. The Government could provide a comprehensive financing scheme supported by general taxation for elderly long-term care, similar to Medicare and Medicaid in the United States. However, this will be very costly and is

unlikely to be sustainable in the long run, as tax revenue from a relatively smaller workforce will not be able to support an increasingly aged population.

c. The Government could set up an endowment fund to finance long-term care, similar to Medifund for acute medical care. The fund will have to be built up over several years, and then only if there are budgetary surpluses. As such, it is likely the amount will be sufficient to help only the indigent elderly.

d. An insurance scheme could be set up for long-term care. This appears to be the most pragmatic option.

The last option is discussed in greater detail below.

Long-Term Care Insurance

10. The Committee is of the view that risk-pooling is necessary for long-term care because only a relatively small proportion of elderly will require such care at any one time. An insurance scheme for long-term care will be feasible to help individuals pay for long-term care. This approach has already been adopted in several countries, e.g. US, France, Germany and Japan.

11. Safeguards will need to be included to ensure that the insurance scheme:

- encourages the use of cost-effective care at an appropriate level.
- does not lead to excessive consumption, or generate unnecessary demand and over-servicing by providers.

12. The Inter-Ministerial Committee concludes that **the best option is a Long-Term Care (LTC) Insurance Scheme along the lines of the MediShield Scheme.** Like the MediShield Scheme, the LTC Insurance Scheme should be voluntary, based on an opting out

approach, and have the features of deductibles and co-insurance to discourage over-consumption and over-servicing.

13. While MOH will need to look into the specific details, the Committee recommends inclusion of the following features in the proposed LTC Insurance Scheme:

- Claims should require certification of the patient's medical condition and disability by accredited health care professionals. This will determine the level of permanent loss of physical and mental capability, and the need for significant care and assistance in activities of daily living.
- Benefits should take the form of cash payments to the insured to help pay for the types of care most suited to their medical needs. Long-term care should include care provided by chronic sick hospitals, nursing homes, day rehabilitation and day care centres, and home care services (home medical care, home nursing, home help, as well as care provided by private professionals and informal carers). This will help the insured decide on whether to receive care at home supplemented by community-based services, or in an institution. This will also help avoid an over-reliance on institutional services, if benefits were restricted to only such services.
- Benefits should be set at an appropriate level so that the individuals or their family members are still expected to co-pay for the service at the point of consumption.
- Premiums should be kept affordable (even for the low-income groups), so that they can be paid from Medisave.
- Incentives (e.g. lower premiums) could be provided for those who lead a healthy lifestyle and have regular medical check-ups.
- There should be no cross-generation subsidy.
- Coverage should be till death.

14. Other insurance agencies, such as NTUC Income, are encouraged to provide similar insurance schemes. Those with additional finances could also buy other insurance policies to provide additional financial sources for long-term care.

(B) Community Assistance

15. Currently, VWOs provide services mainly to indigent and low-income families. The VWOs consequently charge very low fees, and need to raise a significant portion of their operating expenditure since government subvention covers at most 50% of the operating expenditure. The Committee recognises the benefit of involving the community in financing elderly long-term care. However, with the ageing population, VWOs will need to serve beyond their traditional low-income clientele. They will need to increase their services to serve also middle income families, which may not be able to afford services offered by private care providers. VWOs should be able to charge such clients closer to the cost of service. This will allow VWOs to devote their main effort to providing services, promoting community participation and enhancing social cohesion in the community for the care of the elderly, and to continue to raise funds to support only the indigent and low-income families,

16. **The Committee is of the view that, in general, VWOs should need to raise funds for up to 20% only of the operating expenditure, so as to allow them to concentrate on providing and improving care.** The need to raise funds will be partly reduced by more of the individuals and their families being able to finance their long-term care needs. However, as these are long-term plans and the benefits will not be felt immediately, the government will need to review the recurrent funding for VWOs. This is discussed in the following sections.

(C) Government Funding

17. **The Government supports long-term care services through subventions (grants in aid) to VWOs that operate them, for both their capital and recurrent expenditure.**

(i) Capital Funding

18. MOH provides capital funding of up to 90% of the approved construction and equipment costs to the building of voluntary nursing homes. In addition, it funds up to 90% of the approved costs for cyclical maintenance of the nursing homes run by VWOs.

19. An average size nursing home (250 beds) now costs about $16 million to build (excluding land cost). With 90% capital funding from the Government, most VWOs can raise the remaining 10% capital cost. MOH has projected that 9 nursing homes need to be built from the year 2000 to 2010, costing the Government $130 million in capital funding at the prevailing building cost.

20. With a rapidly ageing population, the number of long-term care institutions to be built in the next 10 to 20 years will be significant. There is a need to ensure building projects are cost-effective and proceed on schedule. The Committee recommends that **the 90% capital funding for VWOs building their own nursing homes should be provided on a "cost per bed" basis.** Such homes can incorporate "private beds", to cater to non-subsidised patients who wish to have some privacy, but the proportion of such beds receiving MOH capital funding should be limited to 10% of the total in each institution. The norm cost will be based on the building cost of the MOH/PWD-built institutions under the "turn-key" projects mentioned in Chapter 5. VWOs will have flexibility in facility design but they must meet MOH's guidelines within the funds provided based on the targeted number of beds. This will also encourage efficiency since the more efficient VWOs will be able to incorporate more features in their building plans. To ensure availability of beds on time, **a schedule to complete the building project undertaken by the VWO must be agreed upon mutually by MOH and the VWO.**

(ii) Recurrent Funding

21. At present, the Government funds the VWOs up to 50% of their operating expenditure. If they are using state land or government buildings, they also receive subventions of up to 100% of the rental cost.

22. Government subvention for the operating expenditure of VWOs is generally based on a percentage of the government norm cost of service (Table 7.1). Subvention for nursing homes is expected to take up the lion's share as more of such homes are being built (Table 7.2). However, some VWOs are required to raise as much as 65% of their operating expenditure from donations, as their operating costs are much higher than the government norm costs, and revenue from patient fees is not significant.

Table 7.1

Government Subvention Formula for Operating Expenditure of Elderly Long-Term Care Services Provided by VWOs in FY 98

Type of Service		Subvention (% of Government Norm Cost)	Government Norm Cost	Means Test
Community Hospital		Those receiving Public Assistance: 75% Others: 50%	$193 per patient per day	None
Chronic Sick Hospital		Those receiving Public Assistance: 75% Others: 50%	$58 per patient per day	None
Nursing Home		Those receiving Public Assistance: 75% Others: 50%	Category I: $454 Category II: $599 Category III: $778 Category IV: $1,126 per patient per month	Monthly Household Income of $2,000 or less
Day Rehabilitation & Day Care Centre		Up to 50% of Total Operating Expenditure	$30* per patient per session	None
Home Care Service	Home Medical	Not Funded	$60* per visit	-
	Home Nursing	Not Funded	$40* per visit	-
	Home Help	Those receiving Public Assistance: 75% Others: 50%	$246 per patient per month	None

Note: (1) Categories I to IV for nursing homes refer to increasing patient dependency.

(2) * These norm costs are estimates only and have not been used for computing government subvention.

Table 7.2

Government Subvention to Elderly Long-Term Care Services Provided by VWOs in FY 97

Type of Service	Government Subvention in FY 97			
	Capital Funding (Building Cost)		Recurrent Funding*	
	$	%	$	%
Community & Chronic Sick Hospitals	820,800	5.44	9,567,800	47.67
Nursing Homes (include inpatient hospice care)	11,822,400	78.40	5,776,600	28.78
Day Rehabilitation & Day Care Centres	1,274,500	8.45	1,672,900	8.34
Home Care Services	5,400	0.04	346,500	1.73
Other Health Services (Not specific to the elderly)	1,156,900	7.67	2,706,200	13.48
Total	15,080,000	100	20,070,000	100

* Recurrent Funding = Operating + Rental + Input GST Expenditure

23. **VWOs should focus on service delivery and avoid spending too much effort to raise funds.** Over the years, VWOs will find it increasingly difficult to raise funds to run their services.

24**.** As VWOs expand their services to cover middle-income families, it will be necessary to ensure that the limited public funds are channelled to those who are really in need of financial assistance. **The Committee recommends that means testing be implemented for all users of long-term care services and not just to nursing home alone.** MOH will need to determine the appropriate subsidies to be provided to families from different income groups so that long-term care would be affordable to them. The Committee is of the view that the current means test used by VWO's nursing homes, which allow only patients from families with household incomes of $2,000 and below to receive government subsidy, is too stringent. Since long-term care implies a long-term financial commitment for family members, and despite the Medishield LTC Scheme, some middle-income families will still be financially strained if there was no government assistance. **The Committee recommends that the means test should enable the Government to provide different subsidies on a sliding scale to low-income to middle-income patients commensurate with their income.**

25. **Government subvention should also cover home medical care and home nursing services,** to encourage more VWOs to provide them. This will help the homebound elderly sick to continue to stay at home with medical and nursing care, thus avoiding premature institutionalisation.

26. Currently government assistance to VWOs is pegged at 50% of their recurrent expenditure. This approach does not encourage service providers to be more efficient. **The Committee recommends that government recurrent funding be provided on a piece-rate basis for all existing and new long-term care services, including day care.** VWOs that are more efficient will be able to do more for their patients with the same rates, or invest the savings in service development.

27. MOH sets norm costs of long-term care services as the basis for providing subventions. These norm costs are currently adjusted annually by the GDP deflator (1.53% for FY 98). But in health care, the rate of increase in manpower cost, which is the major component in health care cost usually exceeds the annual GDP deflator. **The Committee recommends that MOH and MOF review the formula to adjust government norm costs for long-term care services, to take into account the increase in manpower cost of health care professionals.**

SUMMARY OF RECOMMENDATIONS

28. The Inter-Ministerial Committee recommends that:

a. MOH work with other authorities and establish a Long-Term Care (LTC) Insurance Scheme to provide insurance coverage for persons needing long-term care.

b. MOH provide capital funding up to a maximum of 90% of the "cost per bed" for VWOs building their own institutions, but with the number of "private beds" receiving MOH capital funding limited to 10% of the total number of beds in each institution.

c. MOH and MCD review the existing 50% recurrent funding for VWOs to allow them to focus on service delivery and reduce their need to raise funds for their operating expenditure.

d. MOH implement a means test to ensure that the government subsidy for long-term care patients is provided to those really in need. The means test should enable the Government to provide subsidies on a sliding scale to low-income to middle-income patients commensurate with their income.

e. MOH extend government subvention to cover home medical care and home nursing services.

f. MOH provide government recurrent funding on a piece-rate basis for all existing and new long-term care services.

g. MOH and MOF review the formula used for the annual adjustment of government norm costs for long-term care services, to take into account the increase in manpower cost of health care professionals

CHAPTER 8

CONCLUSION

1. Our population is ageing rapidly. It is timely that we develop strategies to ensure that we effectively meet the health care needs of the growing numbers of elderly, as they treble to nearly 20% of the population by the year 2030.

2. The elderly have greater health needs. Much of a person's total health care expenditure is concentrated in the last few years of his life. National health care expenditure will escalate and the health care system will be strained.

3. The Inter-Ministerial Committee formed to study the health care needs of the elderly upholds the basic health care philosophy elaborated in the 1993 White Paper *Affordable Health Care,* and builds on it in proposing an approach that involves the Government and all sectors of the community. It also highlights the importance of individual responsibility in leading a healthy lifestyle and saving for one's health care needs.

4. Excessive use of inappropriate expensive technologies, and a subsidy system that fails to distinguish between those in need and those who can afford to pay, will only lead to wastage of national and family resources. Instead, the main thrust to the elderly's health care is on health promotion and disease prevention. For those who require medical care, the Committee has reviewed the entire range of services now available and made recommendations to improve them.

5. One of the Committee's most important tasks is to project the quantum of the elderly's health care needs up to the year 2030. This is done after studying the experiences of other countries, consulting the opinions of local experts and health care professionals, and

reviewing literature on elderly care internationally. Gaps in service are also identified and solutions to overcome the shortage of nursing home beds and home health care services proposed.

6. Equal emphasis is placed on the quality of care, through regulation, quality control programmes, and quality assurance activities to improve the process and outcome of care for the frail and sick elderly.

7. However, without sufficient funding and proper long-term financing strategies, the various health services for the elderly cannot be developed and sustained. The Committee proposes the setting up of a Long-Term Care (LTC) Insurance Scheme to enable risk pooling for financing long-term care for the elderly. The Government should also look into assisting the middle-income elderly, to obtain affordable and cost-effective long-term care provided by the VWOs.

8. Ageing is a dynamic issue. MOH will need to continuously review the measures adopted for implementation, monitor changes in the population's health needs, work with VWOs and encourage them to continue to provide cost-effective long-term care services for the elderly, and ensure that health care remains affordable.

9. The elderly need not be a burden to society. With proper health maintenance, they are able to remain active and productive for many years. It is imperative that the family, community and the Government work together to engage and challenge the elderly to continuously contribute to society.

ANNEX A

MEMBERS OF THE INTER-MINISTERIAL COMMITTEE ON HEALTH CARE FOR THE ELDERLY

CHAIRMAN

Mr Yeo Cheow Tong	-	Minister for Health Minister for the Environment

DEPUTY CHAIRMAN

Mr Abdullah Tarmugi	-	Minister for Community Development

MEMBERS

Dr Aline Wong	-	Senior Minister of State for Health Senior Minister of State for Education
Mr Chan Soo Sen	-	Parliamentary Secretary Prime Minister's Office and Ministry of Community Development
Mr Bernard Chen	-	Chairman Government Parliamentary Committee (Health)
Mrs Yu-Foo Yee Shoon	-	Deputy Secretary-General National Trades Union Congress
Mr Moses Lee	-	Permanent Secretary Ministry of Labour (till 11 Dec 97)
Dr Eileen Aw	-	Executive / Medical Director St Luke's Hospital for the Elderly
Dr Cheong Pak Yean	-	President Singapore Medical Association
Mr Gerard Ee	-	Chairman Committee on the Aged National Advisory Council on Family and the Aged
Mrs Fang Ai Lian	-	President Home Nursing Foundation
Dr Robert Loh	-	President National Council of Social Service
Dr Mary Ann Tsao	-	President

Tsao Foundation

IN ATTENDANCE

Mr Koh Yong Guan	-	Permanent Secretary Ministry of Health
Mr Er Kwong Wah	-	Permanent Secretary Ministry of Community Development (till 11 Dec 97)
Mr Moses Lee	-	Permanent Secretary Ministry of Community Development (from 12 Dec 97) Second Permanent Secretary Ministry of Health (from 15 Sep 97)
Dr Chen Ai Ju	-	Director of Medical Services Ministry of Health
Mr Willie Tan	-	Deputy Secretary Ministry of Health
Miss Lim Hsiu Mei	-	Deputy Secretary (Services) / Director of Social Welfare Ministry of Community Development
Mr Lee Chiong Giam	-	Chief Executive Director People's Association

EXPERTS CONSULTED

Dr Philip Choo	-	Head Department of Geriatric Medicine Tan Tock Seng Hospital
Assoc Prof Goh Lee Gan	-	Department of Community, Occupational and Family Medicine National University of Singapore

SECRETARIAT – MINISTRY OF HEALTH

Dr Ling Sing Lin	-	Deputy Director of Medical Services (Elderly & Continuing Care) (till 31 Dec 98)
Dr Lam Sian Lian	-	Deputy Director of Medical Services (Professional & Service Development) (from 1 Jan 99)
Dr Lim Juay Yong	-	Director (Elderly Institutional Care) (till 31 Dec 97)
Dr Theresa Yoong	-	Director (Elderly Institutional Care) (from 1 Jan 98 to 1 May 98)
Dr Uma Rajan	-	Director (Elderly Institutional Care) (from 2 May 98 to 31 Dec 98)
Dr K Vijaya	-	Director (Elderly Policy & Development) (from 1 Jan 99)

Dr Arthur Chern	-	Deputy Director (Elderly Community Care) (till 31 Oct 98)
Dr Swah Teck Sin	-	Deputy Director (Elderly Institutional Care) (from 1 Jul 97 to 31 Aug 98)
Dr Lim Hui Chuan		Deputy Director (Elderly Policy & Development) (from 1 Jan 99)
Mrs Joanna Tan	-	Assistant Director (Elderly Institutional Care) (till 15 Nov 98)

ANNEX B

HEALTH SERVICES AVAILABLE TO THE ELDERLY

(AS AT DECEMBER 1998)

ACUTE PRIMARY CARE

(A) Government Polyclinics

Ang Mo Kio Polyclinic
Bedok Polyclinic
Bukit Batok Polyclinic
Bukit Merah Polyclinic
Chua Chu Kang Polyclinic
Clementi Polyclinic
Geylang Polyclinic
Hougang Polyclinic
Institute of Health Polyclinic
Jurong Polyclinic
Kelantan Polyclinic
Marine Parade Polyclinic
Queenstown Polyclinic
Tampines Polyclinic
Toa Payoh Polyclinic
Yishun Polyclinic
Woodlands Polyclinic

(B) Private General Practitioners

About 1,300 private general practitioners practising in 1,000 clinics all over the island

ACUTE HOSPITAL CARE

(A) Public Hospitals and Institutions

(i) Regional Hospitals

Alexandra Hospital]
Changi General Hospital] There is a Department of Geriatric Medicine in each of these hospitals
Tan Tock Seng Hospital]

(ii) Tertiary Hospitals

National University Hospital
Singapore General Hospital

(iii) Speciality Hospitals

KK Women's & Children's Hospital
Woodbridge Hospital

(iv) National Speciality Centres

National Cancer Centre
National Heart Centre
National Neuroscience Institute
National Skin Centre
Singapore National Eye Centre

(B) Private Hospitals and Institutions

Balestier Medical Centre
East Shore Hospital
Gleneagles Hospital
Mount Alvernia Hospital
Mount Elizabeth Hospital
Thomson Medical Centre
Raffles Surgi Centre

NON-RESIDENTIAL LONG-TERM CARE

(A) Day Rehabilitation and Day Care Centres

(i) Day Rehabilitation Centres

Adventist Nursing and Rehabilitation Centre
Apex Day Care Centre for the Elderly (Socialisation & Maintenance Therapy Centre)
Apex Day Care Centre for the Elderly (Rehabilitation & Medical Centre)
Asian Women Welfare Association's Readycare Centre
Ayer Rajah Day Care Centre
Day Care Centre for the Elderly at Ling Kwang Home for Senior Citizens
Day Rehabilitative Centre at St. Andrew’s Community Hospital
Day Rehabilitative Centre at St. Luke’s Hospital for the Elderly
Muhammadiyah Health & Day Care for Senior Citizens
Ren Ci Day Care Centre for the Elderly
Salem Day Rehabilitation Centre for the Elderly
Thong Teck Day Care Centre
Wan Qing Lodge
Metta Day Rehabilitation Centre
Home Nursing Foundation’s Senior Citizens Health Care Centre (Ang Mo Kio)

Home Nursing Foundation's Senior Citizens Health Care Centre (Bukit Batok)
Home Nursing Foundation's Senior Citizens Health Care Centre (Geylang)
Home Nursing Foundation's Senior Citizens Health Care Centre (Hougang)
Home Nursing Foundation's Senior Citizens Health Care Centre (Tampines)
Home Nursing Foundation's Senior Citizens Health Care Centre (Toa Payoh)

(ii) Senile Dementia Day Care Centres

New Horizon Centre (Bukit Batok)
New Horizon Centre (Toa Payoh)
Sunlove Abode for Intellectually Infirmed

(iii) Hospice Day Care Centres

Assisi Home & Hospice
Hospice Care Association

(B) Home Care

(i) Home Medical Care

Code 4 Medical Service
Hua Mei Mobile Clinic
Touch Home Care

(ii) Home Nursing

Code 4 Medical Service
Home Nursing Foundation (12 Home Nursing Centres)

(iii) Home Help

Presbyterian Welfare Services
Sunlove Abode for Intellectually Infirmed
Touch Home Care

(iv) Hospice Home Care

Assisi Home & Hospice
Hospice Care Association
Singapore Cancer Society

(C) Seniors' Clinic

Hua Mei Seniors' Clinic

RESIDENTIAL LONG-TERM CARE

(A) Community Hospitals

Ang Mo Kio Community Hospital
Kwong Wai Shiu Hospital
St Andrew's Community Hospital
St Luke's Hospital for the Elderly

(B) Chronic Sick Hospitals

Ren Ci Hospital
St Luke's Hospital for the Elderly

(C) Nursing Homes

(i) Voluntary Nursing Homes

All Saints Home
Assisi Home & Hospice
Bright Hill Evergreen Home
Grace Lodge Home for the Aged
Home for the Aged Sick
Ju Eng Home for Senior Citizens
Kwong Wai Shiu Hospital
Ling Kwang Home for Senior Citizens
Lions Nursing Home for the Elders
Little Sisters of the Poor Home for the Aged
Man Fut Tong Old People's Home
Methodist Home for the Aged Sick
Moral Home for the Aged Sick
Singapore Christian Home for the Aged
Sree Narayana Mission Home for the Aged Sick
St. Joseph's Home
Sunlove Abode for Intellectually Infirmed Ltd (for mental patients)
Sunshine Welfare Action Mission (SWAMI) Home
Tai Pei Old People's Home
The Salvation Army Home for the Aged (The Haven)
Thian Leng Old Folks' Home
Thong Teck Home for Senior Citizens
Villa Francis Home for the Aged

(ii) Commercial Nursing Homes

Cherry Nursing Home
Chow's After-Care
East Coast Medicare Centre
Econ Nursing Home Pte Ltd (Pulasan Road)
Econ Nursing Home Pte Ltd (Bukit Timah Ave)
Econ Nursing Home (Upper East Coast Road)
Econ Nursing Home Pte Ltd (Recreation Road)
Greenview Nursing Home
Lee Ah Mooi Old Age Home
Lentor Residence
Margaret Chio Nursing Home
Min Chong Comfort Home for the Aged & Handicapped
Moonlight Home for the Aged & Handicapped
Nightingale Nursing Home (106 Braddell Road)
Nightingale Nursing Home (146 Braddell Road)
Orange Valley Nursing Home
Our Lady of Lourdes Nursing Home for the Aged
Paean Nursing Home
Serene Nursing Home Pte Ltd
Soo's Nursing Home
Sunnyville Home for the Aged
Tan Seok Cheng Home for the Aged
Vanda Nursing Home
Windsor Nursing Home Holding

(D) Hospices

Assisi Home and Hospice
Dover Park Hospice
St Joseph’s Home