6-2003

Providing health care for older persons in Singapore

Peggy TEO
National University of Singapore

Angelique CHAN
National University of Singapore

Paulin STRAUGHAN
Singapore Management University, paulints@smu.edu.sg

Published in Health Policy, Volume 64, Issue 3, June 2003, Pages 399-413
https://doi.org/10.1016/S0168-8510(02)00201-4

Providing health care for older persons in Singapore

Peggy Teo [a,*], Angelique Chan [b,1], Paulin Straughan [c,2]

[a] *Associate Professor, Department of Geography, National University of Singapore, 1 Arts Link, Kent Ridge, Singapore 117570, Singapore*

[b] *Assistant Professor, Department of Sociology, National University of Singapore, 11 Arts Link, Kent Ridge, Singapore 117570, Singapore*

[c] *Associate Professor, Department of Sociology, National University of Singapore, 11 Arts Link, Kent Ridge, Singapore 117570, Singapore*

Abstract

Health care social policy in Singapore has passed the burden of care to the individual and the family on the rationale that it would enable the state to contain the costs of long-term care by channelling some of its funds to community services and to providing essential health services to all Singaporeans and not just the older group. While a wide array of services has come into existence, there is a lack of integration between the available resources and needs of the individual/family and what has been availed at the community and state levels. Part of the problem lies in the stringent criteria to which the state allows subsidies to be used; the lack of understanding with regard to the profile of users of services; and the case manager approach in offering services. Mapping health care has proven more difficult than anticipated because ageing is a diverse experience, varying by gender, race, income, religion and intergenerational relationships. A social policy does not apply to a 'universal citizen' and services that exist in the public sphere should not exist as merely commodified services which require a great deal of institutional processing.

Keywords: Residualisation; Individual responsibility; Community services; Private and public spheres

1. Introduction

In 1989, a national policy on ageing was announced which included a package of structural and social changes to meet the challenges of an 'older' population. The age of retirement was increased, contributions to the social security or central provident fund (CPF) system were adjusted, recommendations for revised wage structures adopted and several community care services

* Corresponding author. Tel.: +65-6874-6104; fax: +65-6777-3091.

E-mail addresses: geoteop@nus.edu.sg (P. Teo), socchana@nus.edu.sg (A. Chan), socstrau@nus.edu.sg (P. Straughan).

[1] Tel.: +65-6874-5027; fax: +65-6777-9579.

[2] Tel.: +65-6874-6112; fax: +65-6777-9579.

Table 1
Actual and projected elderly population 1980–2030

Year	Population aged 65–74		Population aged 75 and above		Total elderly population	
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%
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%

Source: Teo, 1994.

implemented together with a programme to educate Singaporeans on the 'correct' attitude to take towards older persons in the community [1]. Since then, a new Inter-ministerial Committee for Health Care for the Elderly has been formed, tasked with the process of defining and fine-tuning the health care system in response to changing demographic conditions and the rise in health care costs across the world.

This paper analyses the health care social policies of the state and suggests that these and the efforts of the family in caring for older persons need to be better integrated. In USA and UK, a wide array of public and community health services has come into existence [2,3] but at the same time, the state has compelled greater *individual* responsibility for health care on the rationale that escalating costs justify a residualist approach in dealing with health care for an ageing population. The western virtues of *self-reliance* and independence [4, p.2] are extolled and become the basis for *privately provided support*, whether this is given by the family or paid by the care-recipients themselves. Access to services therefore depends on the ability to pay and even with many schemes available to assist the less privileged, the underlying philosophy of *self-care* undergirds the majority of health and long-term care services provided to older persons. In Singapore, this residualist philosophy has also become the praxis for health care policies.

In contrast, fully funded long-term care by the state as practised in Denmark at the county and municipal levels [5] is a *collectivist* welfare system that also appeals to Singapore. Communitarianism, whereby collective well-being is put before self, is evident in the form of support provided by voluntary welfare organisations (VWOs). With a great deal of state funding, VWOs set up and run community services for older persons at a heavily subsidised rate.

The concurrent application of both philosophies has proven problematic for Singapore, especially around the issue of 'who pays?' On the one hand, social policy and public and community services are meant to mitigate the escalating costs of health care. On the other, the many restrictions placed by the application of the residualist philosophy have raised a flag about whether, in the end, older persons and their families actually find health care costs affordable. This paper provides empirical evidence to document the slippage between social policy and the exercise of individual/family responsibility. First, it outlines the demographic reality of an ageing population in Singapore. Second, government health care policies are discussed and evaluated against empirical data on the medical needs of older persons; the strategies they employ to cope with their health care needs; the extent of family assistance; and the use of community services. In the final section, the confluence between policy, needs, self-responsibility and costs is examined.

2. An ageing population

The age pyramid which is used to reveal economic and social problems that may emerge with time indicates that in Singapore, the young population has shrunk tremendously in the last 30 years. In 1965 when the country became an

Table 2
A comparison of elderly populations (aged 65 and above in %)

Country	1995	2000	2030
Developing countries			
China	6.1	6.7	14.4
India	4.6	5.0	9.6
Indonesia	4.3	4.7	9.7
Philippines	3.4	3.6	8.3
Thailand	5.0	5.8	14.4
Vietnam	4.9	5.2	9.3
NICs			
Hong Kong SAR	9.8	11.1	27.7
South Korea	5.6	6.7	17.4
Singapore	6.8	7.2	18.4
Developed countries			
Australia	11.7	11.9	19.0
Canada	12.0	12.6	22.9
France	15.2	16.2	23.9
Germany	15.2	15.9	24.9
Japan	14.2	16.5	26.3
Netherlands	13.2	13.6	24.8
New Zealand	11.4	11.3	22.4
Sweden	17.3	16.7	22.4
United Kingdom	15.8	15.8	21.9
United States	12.6	12.4	20.0

Source: Inter-ministerial Committee on Health Care for the Elderly, 1999:18.

independent nation-state, its population was 1.89 million and the total fertility rate was 4.6 [6]. From the state's perspective, Singapore's struggle to develop was severely handicapped by a growing population. In 1974, the 'Stop at Two' population policy was implemented with many deterrents to reduce the size of the population. These, together with socioeconomic change, were so successful that in 1987, the state reversed to a pro-natal population policy when it became apparent that low fertility augmented by longer life expectancy had created an ageing population. While in the early 1960s, 43% of the population was under 15 years of age and those 60 and above never exceeded 4% of the total population, by 1990, those aged 15 and under had shrunk to 23% and those 60 and above had grown to 9.1% of the population [6,7]. In the 2000 census, an aged population was redefined as aged 65 and above and this constituted 7.2% of the population (Table 1) [8]. It is projected that by 2030, 18.4% of the population will be in that age category, comparable to USA and Australia at 20 and 19%, respectively (Table 2). While 11.6 working age people (defined as 15–65 years) supported one older person in 1990, by 2000, this had dropped to 9.8 persons and is expected to be only 3.5 by 2030 (Table 3). Below replacement fertility and longer life expectancy (76 years for males and 80 for females in 2000) have been cited as the main causes of ageing [6]. This is a worrisome trend for the state, especially since the US Bureau of Census in its analysis of ageing trends across 21 countries between 1985 and 2025 listed Singapore as the second fastest ageing population (Choo, 1991 cited in Ref. [7]).

Women deserve special mention. While they tend to live longer, older women of the current generation also tend to have very few economic resources available to fend for themselves [9]. Presently 55% of the older population in Singapore are women and there is a tendency for them to depend on the family for support. According to a survey conducted on 5538 senior citizens in 1983 [10], 91.2% of older women depended on their children/grandchildren for support. In addition, only 5.9% of older women had pension or a CPF[3] compared to 28.5% of their male counterparts (Table 4). Since women tended to work in manufacturing or service, lower pay also meant that their CPF savings were necessarily lower [9]. In an updated analysis by Chan [11] comprising a 4750 sample drawn from the 1995 National Survey of Senior Citizens, 78% of females and 48% of males cited their children as main sources of income.

[3] Under the CPF scheme which is open to all employed persons in the private and public sectors, 20% of a person's income is put into the CPF, with a matched amount from the employer, yielding a total of 40%. The contributions have fluctuated according to the ups and downs of the economy. For example, in 2002, the proportions are 16% for the employee and 20% for the employer, yielding a total of 36%. Self-employed individuals may also contribute to themselves. The money yields interest and can be used to purchase property, blue-chip shares and for education and medical expenses (it is the equivalent of social security in USA).

3. Providing health care for older persons in Singapore

In developing a social policy for health care, three levels of responsibility were carved out by the state. Each of these will be analysed in turn.

3.1. The individual older person and the family

According to the Inter-ministerial Committee on Health Care for the Elderly [12, p.23], 'every Singaporean is *personally* (emphasis authors' own) responsible for his own health and well-being'. By placing the responsibility on the individual, the state distances itself from the expensive costs of long-term care. To encourage Singaporeans to look after themselves, many public programmes have been implemented to spur older Singaporeans into living a healthy life-style. There are programmes that explain balanced eating and the benefits of exercise. The state also provides free annual medical check-ups at the community centres. Educational exhibitions are held at public places like recreation centres, shopping centres, parks, community clubs and at the foyers of workplaces, clinics, hospitals and other health care facilities. Advertisements on radio/television and the newspapers are common features. From the ill effects of smoking, the early signs of cancer, cardiovascular problems, hypertension and diabetes, the intent is to educate the public so that they can be empowered to look after themselves. In addition, the Ministry of Health has also validated a protocol for a comprehensive outpatient geriatric assessment that includes weight, vision, hearing, continence status and habits such as smoking, drinking and exercise. By promoting *personal* responsibility, 'over-reliance on state welfare or medical insurance' can be avoided [12, p.21]. Implicit in this statement is an inimical assumption that an ageing population would deprive 'good and affordable basic medical services to *all* Singaporeans' [12, p.21].

Besides the individual, the family is adjudged to have a 'primary' responsibility as well. Staying with the family 'benefits them psychologically and socially, (thus) the elderly should be cared for in their own homes as far as possible' [12, p.23]. This position clearly ignores literature that document tensions between older persons and their adult children [13]; on the strains on the caregiver or the family unit [14–16]; on elder abuse [17–19]; and most of all, fails to acknowledge the gendered nature of eldercare [20–22]. Basing its rationale on Asian values, the state promotes the 'ideal' family not necessarily as an extended family but a close-knit family where familial ties bond the unit together, especially in intergenerational transfers on both sides [23–25]. While nuclear family units form the basis of most household units in Singapore, living close to parents is also very common [11]. In effect, the state has come up with several housing schemes to encourage the 85% of the population who live in their public housing flats to live in proximity to their parents. For instance, the Joint Selection Scheme enables parents and adult children to live within the same block of public housing flats or close to each other; the Multi-Tier Family Housing Scheme encourages living under the same roof with concessions such as bigger 'jumbo' flats, lower down-payments, maximum loans and a head-start in the allocation of the flat (basically a shorter wait period for getting the flat). Granny flats and studio apartments which are smaller and more manageable in size have also been introduced [26].[4]

The impact of the family on health care provision for older persons is not only apparent in the day-to-day routine of looking after them but also in the financial aspects of assistance given. Not only has it has been recorded that in many Asian countries older persons depend on adult children for financial support [27,24] but in the case of Singapore, it also appears in institutional form

[4] Granny flats were located in the newer housing estates and were placed at the lower floors but these proved to be unpopular primarily because older people were unwilling to move away from housing estates they were familiar with. The joint allocation scheme and the studio apartments were more successful mainly because the former provided a substantial S$60 000 discount on the flats and the latter were built in older housing estates as part of the overall upgrading exercise undertaken by the state. The exercise included improving facilities, expanding the spaces inside the flats, extensive façade upgrades and demolition and rebuilding.

Table 3
Actual and projected working age persons per elderly person 1980–2030

Year	Working age persons per elderly person
1980	13.7
1990	11.6
2000	9.8
2010	8.7
2020	5.3
2030	3.5

Source: Inter-ministerial Committee on Health Care for the Elderly, 1999:19

such as in the health care insurance schemes. Acute health care services in Singapore are financed through Medisave (a Medical Savings scheme for which part of a person's income is put aside for health care needs and emphasises personal responsibility); Medishield (a health insurance scheme for catastrophic illnesses whereby premiums are paid from Medisave); Eldershield (an insurance scheme for long-term care of older persons with disabilities); private insurance schemes; and out-of-pocket payments at the point of consumption.

In the case of Medisave which was introduced in 1984, 6–8% of the monthly wages of all CPF holders have to be put aside, up to a ceiling of S$28 000 (Lim, 1986 cited in Ref. [28]).[5] At the end of December 1999, 2.69 million Singaporeans had Medisave accounts [29]. This can be used for hospitalisation and outpatient medical expenses incurred by the individual or his/her ill parents. In addition, individuals may top up the CPF accounts of their parents, thereby giving them more access to Medisave or other schemes available.

In the case of Medishield, an individual can opt for the catastrophic illness insurance scheme which became available in 1990 and revised in 1994. It is, however, only available to individuals 75 years and below and coverage is only up to the age of 80. It can include young/old dependents for which the insurance will pay for hospitalisation costs in-

[5] The conversion rate is US$1 to approximately S$1.79 at October 2002 rates. The ceiling will be revised to $30 000 by the end of 2003.

Table 4
Sources of support for older persons aged 60 and above 1983 (%)

Source of support	Male	Female
Own source		
Salaries/business income	30.4	9.3
Interest/dividend/rent	11.9	5.2
Pension/CPF/insurance	28.5	5.9
(Average gross CPF balance[a] for all working persons regardless of age)	($20 274)	($16 418)
Own savings	46.2	29.3
Other sources		
Spouse	4.7	10.9
Children/grandchildren	79.6	91.2
Relatives/friends	5.8	6.2
Others	3.0	2.5

Source: Ministry of Social Affairs, 1983. Percentages do not add to 100% as respondents had multiple sources of income.
[a] 1990 figure.

curred by all members. Twenty percent of the 2.02 million Medishield holders in 1999 were parent dependents [29]. To prevent Medishield users from passing the health care costs back to itself, the state requires that claimants provide certification of their medical condition and disability *from accredited health care professionals*. In addition, cash payments to the insured should be suited to the medical needs of the claimant and not be *confined to medical institutions alone*. For example, claims for expenses incurred in community-based day care, day rehabilitation centres and nursing homes as well as claims for home nursing, home help and help given by informal caregivers are included. Benefits are set at an appropriate level so that *individuals and their family members are still expected to co-pay* for the service at the point of consumption. Premiums are kept affordable so that they can be *paid from Medisave* (one's own money) and incentives such as lower premium can be provided for *those who lead a healthy lifestyle and who go for regular check-ups* [12, p.45–6]. The emphasis on the individual and his/her family is never more clearly stated.

Eldershield is a new insurance scheme introduced in 2002 and is meant for older Singaporeans who require long-term care because of *severe* disabilities. As with Medishield, premiums are

Table 5
Projected use of acute care services in the public sector by older persons

Service	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 and 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

Source: Inter-ministerial Committee on Health Care for the Elderly, 1999:36.

Table 6
Profile of sample (%)

	Sample	Singapore
Gender		
Male	42.4	46.3
Female	57.6	53.7
Ethnicity		
Chinese	76.4	80.0
Malay	16.8	10.7
Indian	4.6	7.8
Others	2.2	1.5
Age		
Below 65	26.0	31.8
66–69	15.0	25.5
70–75	17.6	19.6
76–79	9.6	11.5
80 and above	31.8	11.6

Source: Survey data; Department of Statistics, 2001a.

Table 7
Illnesses afflicting the sample (%)

	Male	Female	Total
Arthritis/rheumatism	34.4	54.5	46.0
High-blood pressure/hypertension	28.8	36.5	33.2
Cataract/glaucoma	25.0	25.7	25.4
Diabetes	16.0	12.8	14.2
Coronary problems	17.9	10.4	13.6
Stroke	8.0	4.9	6.2
Memory problems	5.7	6.6	6.2
Respiratory problems	5.2	3.8	4.4
Cancer	1.4	1.7	1.6
Renal problems	0.5	2.1	1.4

Source: survey data. Percentages calculated out of the respective columns of male ($n = 212$), female ($n = 288$) and total sample of 500.

deducted from Medisave. The policy will give $300 a month up to a maximum of 5 years to help pay for care at home, at day rehabilitation centres or nursing homes. Only Singaporeans aged 40–69 are eligible and at the point of application for the insurance scheme, cannot already have a disability that prevents them from walking, eating, moving out of bed, dressing, bathing or going to the toilet without help. For persons aged 70 and above and who already have disabilities, an interim plan that will pay $100–150 a month up to 5 years has been set up for those who qualify (the criterion for qualification is the inability to perform three or more of the above functions).

As far as private insurance schemes go, under the Blue Paper for a National Health Plan recommended by the Ministry of Health in 1983, the state comes out strongly against a comprehensive health insurance scheme that would cover 'all kinds of medical services, from hospital care and physician services to dental, eyeglasses and prescription drugs' [28, p.37]. The obvious effect would be a major increase in the demand for health care since the direct costs to patients would be minimised. Instead, insurance for catastrophic illnesses is preferred and even then, a deductible is recommended by the 1983 Ministry of Health Blue Paper.

In sum, the combination of Medisave, Medishield, Eldershield, private insurance schemes and out-of-pocket expenses are effective instruments at removing the responsibility of the state in providing for high health care costs, without abdicating its responsibility to those who cannot afford. For this last category, there is Medifund which comes up from an endowment fund (valued at $800 million in FY2001) which is available only to the 'indigent elderly', currently numbering about

Table 8
Who brings respondents to visit the doctor

	Male	Female	Total
Daughters	21	77	98
Sons	27	12	39
Spouse	20	10	30
Daughter-in-law	2	10	12
Grand-daughter	–	7	7
Grandson	–	4	4
Siblings	3	–	3
Son-in-law	–	2	2
Other relatives	1	2	3
Others	–	5	5

Source: survey data. Multiple persons may be involved in this task.

Table 9
Main caregivers cited by sick older persons

	Male	Female	Total
Daughters	37	116	153
Sons	30	46	76
Spouse	30	9	39
Daughter-in-law	4	35	39
Other relatives	7	6	15
Grand-daughter	2	9	11
Son-in-law	1	1	2
Friends/neighbours/maid/welfare	27	38	65

Source: survey data. Multiple persons may be involved in this task.

67 000 recipients [12, p.45]. As far as the state's role is concerned, its primary task is provide an efficient medical service by promoting the primacy of the family in caregiving while minimising its own role to that of a last-resort safety net.

Last in the basket of policies with regard to individual responsibility is the Advanced Medical Directive implemented in 1997. This allows the individual to state in advance that he/she would like to stop receiving life-sustaining treatment when he/she is terminally ill. Only 500 Singaporeans had signed this directive by the end of 1998. There are ethical issues that were debated in Parliament concerning the Directive. Nevertheless, it was made legal in 1997 which indicates an unapologetic interventionist position of the state with regard to containing costs. In a survey conducted in 2000 on end-of-life issues, of 43 Chinese subjects interviewed at a day care centre, 83.7% never heard of this Directive and only one-third agreed that making such a directive is necessary in old age [30].

3.2. *The state as provider*

National health expenditure which formed 2.7% of Singapore's GDP in 1996 is projected to increase to 7% of GDP by 2030 [28,29]. The majority of the increased costs come from older persons. In 1995, the Ministry of Health reported that they accounted for 19% of the attendance at polyclinics; 20% of admissions to acute care wards; and 99% of admissions to community and chronic sick hospitals run by VWOs [12, p.35]. If the projected needs of older persons as stated in Table 5 are actually met, costs will quadruple to $694 million (based on 1995 prices) per year in 2030 [12, p.38].

To cope, the state has divided its health care into two categories: acute care and long-term care. The former is within the realm of its control as it is the most expensive and requires the highest subsidies, while the latter has been relegated to the community and the family.

Acute hospital care is provided by 21 hospitals (eight are public restructured hospitals and the remaining are private sector hospitals) and six government speciality clinics. In and outpatient geriatric care are also available at three of the public hospitals while the rest provide a very high level of specialised tertiary care. Outpatient acute primary care is looked after by 17 government polyclinics [29, p.40–41]. Recently, the Ministry of Health made geriatric care a mandatory part of the syllabus for medical students studying in Singapore.

3.3. *The community*

The community has played the most vibrant role in meeting the long-term health care needs of older persons in recent years. Although government grants are given to VWOs to build and run health care services, the state still administers assess-

Table 10
Who paid for hospitalisation?

	Male	Female	Total
Sons	10 (28.6%)[a]	22 (57.9%)[b]	32 (43.8%)[c]
Self	18 (51.4%)	13 (34.2%)	31 (42.4%)
Daughters	8 (22.9%)	9 (23.7%)	17 (23.3%)
Grandchildren	–	4 (10.5%)	4 (5.5%)
Spouse	–	1 (2.6%)	1 (1.4%)

Source: survey data. Note that more than 1 source may be used for each hospitalisation.

[a] Expressed as a percentage of male respondents who were hospitalised ($n = 35$).

[b] Expressed as a percentage of female respondents who were hospitalised ($n = 38$).

[c] Expressed as a percentage of total respondents who were hospitalised ($n = 73$).

ments. VWOs provide long-term care in the form of:

(1) Non-residential long-term care in day rehabilitation and day care centres. There are 21 day rehabilitation centres that can provide physiotherapy and 5 day care centres with places for older persons with senile dementia [29, p.61]. Although these centres are geographically dispersed over the whole of Singapore, there are not enough where older persons proportions are high [26]. Moreover, transportation to these centres continue to be a problem for many families who have to ferry the older persons to these centres and back at the end of the day. The state is looking into working with the Land Transport Authority and with other voluntary organisations to overcome this problem. It has also been suggested that day care centres should be multi-purpose, incorporating social activities under its roof so that their attractiveness would be enhanced.

(2) Home Care/Home Medical Care/Home Nursing/Home Help serve to meet the medical and daily needs of older persons who cannot leave their residences. In 1999 alone, 355 older persons received home medical care provided by volunteer doctors while nurses made about 48 000 visits to 5614 older persons [29, p.61].

(3) Residential long-term care in four community hospitals provide step-down care for a total of 410 beds [29, p.60] and two more are planned which will be adjacent to the public hospitals.

Table 11
Amounts of Medisave available in respondents' CPF accounts (%)

	Male	Female	Total
< $5000	45.8	31.6	37.6
$5001–9999	5.7	1.0	3.0
$10 000–19 999	9.4	1.0	4.6
$20 000–29 999	1.4	–	0.6
No CPF	2.4	0.3	1.2
Do not know/no answer	35.3	66.1	53.0
Total	100.0	100.0	100.0

Source: survey data.

Three of the community hospitals are run by VWOs—St. Luke's, St. Andrew's and Kwong Wai Shiu Hospital. Only Ang Mo Kio Community Hospital is owned by the state.

(4) In addition, chronic sick hospitals provide prolonged medical and nursing care for chronic sick patients. Ren Ci and St. Luke's Hospitals provide a total of 218 such beds.

(5) Nursing homes provide nursing care for those who cannot be cared for at home. Of a total of 5135 nursing home beds, 68% are provided by 24 VWO-run nursing homes while the remainder are private.

Although the community provides a substantial amount of long-term health care, they cannot do so without the assistance of the government. In 1999 alone, assistance to VWO-run homes amounted to $51.8 million [29, p.61]. The state's subventions come in the form of up to 90% capital funding for construction and equipment costs and up to 90% of recurrent or operating costs. The state also waives foreign worker levies for them so that they can get cheaper manpower from overseas (e.g. nurses from the Philippines).

4. Methodology

The data collected to evaluate the health conditions and the strategies used to deal with health care needs was carried out at the end of 1999. Initially, the Department of Statistics was approached to acquire a random representative sample. Unfortunately, the request was turned

Table 12
Main concerns of older persons (%)

	Male	Female	Total
Health	25.9	30.2	28.4
Finances	20.3	15.3	17.4
Insecurity about the future	9.4	6.9	8.0
Family relations	6.1	2.8	4.2
Difficulties at work	2.8	0.3	1.4
Too busy	–	0.7	0.4
Others	1.4	4.2	3.0
No answer	0.5	–	0.2

Source: survey data. Percentages are expressed in terms of the male, female and total columns.

down.[6] The Ministry of Community Development and Sports was more helpful in allowing the study team to use the sample frame of the 1995 National Survey of Senior Citizens ($n = 4750$). Although the sample would have aged 4 years by the time the survey was carried out, at least it was a sample derived randomly. Since Singapore's population is an ageing one, the conclusions drawn from such a sample would still be representative.

On the basis of this frame, a sample of 1901 was drawn. The low success rate was attributed to change of address, death, and unwillingness to co-operate. In addition, spoilage came from recollection problems and inconsistent answers that could only be clarified if supplementary qualitative data were available. Unfortunately, resources did not permit this. In the end, only 500 questionnaires were complete and usable. The length of the survey was also a deterrent and led to the many spoilt questionnaires that had to be discarded.

The survey investigated the health, wealth and welfare conditions of older persons in far greater detail than the 1995 study and therefore not all data can be compared. For the purpose of this paper, analysis is confined to cross-sectional data to document the strategies adopted by the sample to cope with health care needs at one point in time. Only where the data is compatible with the 1995 data will some comparisons be made. In addition, where inadequacies existed in answering some of the questions raised in this paper, additional information collated by the authors in other studies will be used as supplementary sources.

Although stratification was not employed, the basic characteristics of the sample reflected Singapore's older population in the 2000 census, with the exception that the survey had more persons aged 80 and above than the national profile (Table 6), attributed to the fact that the sample frame is derived from an earlier study as outlined above.

Having ascertained the policy issues addressed by the state and contextualised the survey, the next section looks at the reality of older persons' health care needs.

5. Results

5.1. Perceptions of health, health status and the need for care

Although not the best indicator of actual health, perceptions of individuals of their own health status provide a good ruler of the health care needs of older persons. In this sample, 43.6% listed their health as 'good' and a further 4.2% as 'very good' compared to 67.3 and 18%, respectively in 1995. At least half (52.2%) listed it as 'not too good' or 'very poor' as compared with 14.7% in 1995. The numbers are expected as the sample had aged. In the 1999 survey, as many as 48.8% of the respondents had a physical check-up in the last year. The majority of the respondents checked their blood pressure and blood sugar levels (48.8% in each case), their cholesterol levels (36.8% of the sample), did an eye-test (34.8%) [7] and had an X-ray taken (32.4%). The incidence of mammograms (25.7% of all women) and pap smear (16% of all women) for women was not exceptionally high.

[6] As data includes the identification number of every respondent, Department of Statistics gives only aggregated information unless the request comes from another government agency. The identification number permits checks on all information regarding an individual and is thus not given freely.

[7] Eye check-ups are required for older persons aged 60 and above who intend to drive. This accounts for the somewhat high rate of this check-up.

When asked about what illnesses the doctors had diagnosed them with, it was found that arthritis/rheumatism (46%), high-blood pressure (33.2%), cataract/glaucoma (25.4%), diabetes (14.2%) and coronary problems (13.6%) were the most serious problems afflicting the respondents (Table 7). With the exception of coronary problems, none of the major afflictions mentioned by the sample is classified as 'catastrophic illnesses' by the state and therefore, the respondents cannot use Medisave or Medishield to offset their health care costs.

5.2. Strategies to cope with health care needs

Although not life threatening, with the exception of cataract/glaucoma, all the respondents were receiving medical care for their condition(s) and the majority were seeking treatment from doctors trained in western medicine rather than Chinese or other traditional medicine. 54.5% of the sample was taking medication on a regular basis for their condition and spent on average $715 in the last year for their medication and doctor's visits.

The majority of the respondents also depended on their family to assist them in visits to the doctor/hospital (Table 8) and one-third of all respondents (or 25.9% of males and 44.8% of females) had their health care costs paid for by their children. Sons ($n = 143$) seemed to have paid more often than daughters ($n = 107$). Women were the main caregivers where assistance was needed for older sick persons. Daughters accounted for the most help (Table 9).

Of the 17.6% of respondents who were hospitalised in the last 12 months, the average length of stay was 10.4 days and 83% used Medisave to pay for their expenses. Of those hospitalised, the majority used their children's Medisave accounts to pay (Table 10). This is expected since a large proportion (37.6%) had less than $5000 in their Medisave accounts (Table 11). Sixteen percent of the respondents actually benefited from their children topping up their CPF accounts while 4.4% were specifically to meet health care costs. Of all the causes of stress for older persons, health topped the list of concerns with 28.4% of the respondents citing this as their foremost concern, followed by financial needs (17.4%) (Table 12).

5.3. Using community care services

Of the 500 respondents in this study, the preference stated for meeting the health care needs of the respondents was private clinics (55.6%), self-medication (28.4%), polyclinics and rest-at-home (21.2% each). Only 17.8% of the respondents used Free Clinics offered by the community and only 5.2% ever visited a health exhibition. Data from another study conducted by one of the authors found that although community services are available, the take-up rate is low (23.6% for day care centres and 2% for meals on wheels and home help), contrary to Ministry of Health data [26, p.431].

6. Discussion and conclusion

According to the Ministry of Health, the responsibility for health care for older persons is obviously shared out among three main groups: The individual and his/her family; the state; and the community. The services provided are similarly spread in the same fashion with the bulk of the costs of long-term and preventive care borne by the community and the individual/family. In spatial terms, these services are separated into two spheres: the private sphere/domain of the home and the public sphere where hospitals, clinics and other community services reside. Some services such as home nursing, home care and home help cross both spheres.

The intrusion of the state into the private sphere of the individual and/or his/her family can be problematic. For a long time, the state has used the concept of 'collective good' to engender co-operation for its policies, for example in housing and population policies [31]. The argument that sacrifices made by Singaporeans will assist Singapore in attaining an even higher level of development has now permeated into health issues as well, namely that the individual must bear some of the costs of heath care and the role of the state is to ensure excellent health care but moderate prices so

that they do not escalate beyond what Singaporeans can afford. After all, health is a form of human capital investment which should be everybody's concern [28, p.43].

The individual and his/her family seem for the most part to be bearing their load well. In the survey, a high proportion of the respondents depended on their children to assist them in their visits to the doctor, in payments for their doctor's fees and their medication, and even in hospitalisation costs. Some children have even topped up their parents' Medisave accounts to assist in meeting health care costs. While so, it is ironical that on the one hand, the state adjudicates the individual/family to act responsibly to ensure adequate savings to pay for health care costs, on the other, the state does not fully empower the individual/family because it imposes strict rules on the maximum amount that can be withdrawn from Medisave. For example, there are regulations with regard to what proportion of the medical bill Medisave can pay (up to $300 per day for hospitalisation at restructured or private hospitals; up to $150 per day for community hospitals and $50 per day for convalescence homes with a cap of $3000 a year; up to $20 a day for health care centres with a cap of $1500 a year); for outpatient services, what illnesses are covered (namely, renal failure, HIV Aids, thalassemia and cancer); the maximum limit to Medishield claims (capped at $30 000 a year with a lifetime limit of $120 000); what illnesses Medishield can pay for (only catastrophic illnesses are allowed); and the type of care that is appropriate. This is determined by the physician. Even for Eldershield which became fully operational in September 2002, a criterion of having three disabilities must exist before a person is eligible for assistance.

The restrictions and the case manager assessment method limit individual choice and serves only to enhance the power of bureau-professionals [2]. Cases are assessed solely on the basis of the medical evaluations of doctors and on the eligibility of income. Singaporeans have overcome these limitations by using the Medisave accounts of *several* siblings to pay the medical expenses of one parent. This is a way of stretching the dollar in cases where there are inadequate funds or where the illness is extended. Indeed, in the survey, multiple withdrawals were made, mostly funded by a combination of self, sons and daughters. The state obviously sets the parameters of health care provisions for Singaporeans and through the Medisave and insurance schemes, unnecessarily limit rather than open up options of health care for Singaporeans, all in the name of containing costs. In the race to contain costs, the state has overlooked that for majority of older persons, treatable long-term illnesses consume most of the income of older persons, more so than catastrophic illnesses. For example, in this survey, arthritis/rheumatism, hypertension, and cataract/glaucoma were the most common ailments, none of which can draw Medishield or Eldershield benefits and none from Medisave except where surgery or hospitalisation occurs.

In 1999, the average length of stay for inpatients at the Geriatric Departments of Tan Tock Seng Hospital, Alexandra Hospital and Changi General Hospital were 11, 9.1 and 11.6 days, respectively [29, p.59]. In this sample, the average stay was 10.4 days. According to the Inter-Ministerial Committee on Health Care for the Elderly [12, p.30], these are 'overstayers' who are fit for discharge and whose needs can be better served by more community long-term care services. The circumstances surrounding the 'overstays' have never been explicated. This is obviously an area of need that can close the borders that separate the home space from the community and public space. Only by investigating the circumstances leading to this situation can more informed decisions be made about the type of care older people need in Singapore. At the moment, there is a one-stop centre at every hospital that will deal with the administrative task of payment when a patient is admitted. Eligibility for subsidies is assessed at this point. What is needed is a similar centre with trained staff who have knowledge of all public facilities which may be appropriate for the discharged patient. This will definitely integrate acute care with outpatient and home care. Mismatches between need and services can therefore be forestalled.

The lack of synergy between the private and public is also apparent in housing policies. In an

attempt to pass on the costs of long-term informal health care to Singaporeans, the state manipulates the private spaces of individuals without concern for the burdens it may cause to caregivers, especially women, and conflicts that may arise as a result of extended caregiving or heavy financial responsibilities associated with it. Indeed, in this study, the main caregivers were women, mainly daughters (Table 9). While decisions about the health care needs of older persons must eventually reside in the home sphere where the individual and family can decide for themselves what dignified old age means, the state's over-reliance has obviously created other problems—that of the strains on women as caregivers. In the US, it has been found that although families play the primary role in maintaining the chronically ill older person at home, both children and spouses require outside help in order to sustain such care over time [32]. In the UK, Qureshi and Walker [33] assert that family care can be both the best and worst form of support. Brody [34] discusses women aged 45–54 as the 'sandwiched generation' in which they care for older parents as well as children who have not yet left home. In the Asian context, this is even more apparent as there is a tendency for adult children to look after the old parents while their own unmarried children are still under their roof. More important, changes within the private sphere are already at hand that will put the reliance on family as a main source of health care support in jeopardy. The first is rising singlehood—the fact that in 2000, 30.3% of women aged 35 and above were not married; rising divorce rates (38 900 divorce cases for women in 2000 compared to only 17 700 in 1990) and higher female labour force participation rates (55.5% in 2000 compared to 44.9% in 1985) [35] means that adjustments are necessary to link the private sphere of the home with services that exist in the public sphere.

Building on Wenger's [36] work on supportive networks of care of older persons, Phillipson, Bernard, Phillips and Ogg [37] argue that relationships providing help to older persons are highly focused on the immediate family and on close friends. In addition, older people are themselves involved in a long-term chain of social support, especially to their adult children. Based on these arguments, they conclude that community care can never become part of the personal supportive networks on which many older people rely. In addition, Phillips and Bernard [38] show that career women (and men) actually look beyond the burdens of caregiving and are able to derive positives from balancing work and caregiving. These findings render even more support for the case being made in this paper that better integration between social policies and the care provided by community and family support is overall beneficial.

The state has over the years, fostered greater and greater community involvement by making financial contributions to VWOs willing to set up health care support services. However, the demand for these services by older persons seems very limited, as conveyed in this survey in which there is a strong preference for private physicians. Eligibility criteria present some hurdles. In the past, community care services provided by VWOs were meant for low-income households (of $<$\$2000 a month for the *whole household*). As the philosophy of the state has shifted to include more middle-income households (as the population ages), it has been recommended that instead of a means test for eligibility, subsidies on a sliding scale commensurate with income be implemented. For instance, at community hospitals, a patient whose *per capita* income (calculated as total family income divided by number of people in the family) is less than \$300 will receive the full 75% subsidy; those with \$301–700 will receive 50% subsidy; those between \$701–1000 will receive 25% and incomes exceeding \$1000 will not be eligible. Some Singaporeans have expressed that the subsidy is not enough, especially for long-term illness and if the family unit comprises of an unmarried or single adult looking after two elderly parents [39].

Another major issue lies in the fragmentation of community services. For example, services are now divided between medical versus social services; domiciliary versus residential care; and acute versus long-term care. There are also a multiplicity of providers in the community and from private sources, not to mention more state bodies becoming involved such as the Ministry of Community Development and Sports and the Ministry of

National Development (housing and transport), besides the Ministry of Health. All aim to keep sick older persons in the community for as long as possible but where is the intersection between the private and the public spheres? Having the range of alternatives made possible by the support of the state does not make the consumers of these services sovereign, especially if they cannot make effective choices. The fact that day care centres and day rehabilitation centres have low rates of participation suggests that the two spheres of the home and public spaces are divergent when it comes to meeting the health care needs of the older person. Similarly, long average length of stays at the geriatric wards spell the same problem.

Individual users of long-term care and their family members face a bewildering and fragmented array of health, social service, and financial entitlement programmes. They may easily go through several different assessment, eligibility, and fee-charging processes to obtain needed services [40,41,3]. For the uneducated older persons of Singapore, as well as for the less economically well-off family members, they have to wend their way through this maze, 'advised' by physicians more than social workers. To compound the problem, these decisions are often made at difficult times, such as after a hospital stay or a crisis. The constant ideological bombardment that they should bear some of the costs only leaves them perturbed because they may be well aware of their personal financial and social resources within their private sphere of their home and family spaces, but what are they up against in the public space of community services for which they are never certain what they are eligible for.

Singapore's current drive to become a regional player in medicine has led to further fine-tuning of the health care system. Life sciences is being pursued actively, with a lot of money being invested into research such as stem cells and the like. In addition, as expected of a knowledge economy, medical technology is making leaps and bounds in Singapore that will change how medical care is dispensed to the patient. Last, a case-funding model similar to the system in Australia is being developed to secure funding from the state based on the case-mix of the hospitals. Hospitals themselves are distinguished between specialised tertiary centres or regional hospitals serving less specialised needs. As these are recent developments, their impact is yet to be seen. For older persons and their families, a sense of further manipulation seems in store.

In conclusion, while the Singapore government must be commended for its foresight with regard to health care needs in view of demographic shifts, the mapping of health care remains an elusive problem. Part of the complication arises from the 'social engineering' mentality associated with demographics ([3] for an extended critique) which leads to social policy plans which fail to recognise that ageing itself is a diverse experience, varying by gender, race, income and religion. A social policy does not apply to a 'universal citizen' [42, p.90] because 'differences between people according to resources and needs, family situation and point in life cycle, and life history with regard to the world of work are. . .significant'. Thus the circumstances of the individual older person and his/her family as experienced in the private sphere of the home is shaped in many senses by the public sphere, as demonstrated by the amounts that are available in Medisave and Medishield which can be taken out. Similarly, services that exist in the public sphere in terms of community services need to be matched with the needs of the older persons and their families and not just exist as commodified services which require a great deal of institutional processing or red tape. If any, lessons from USA, UK and Australia can be learned whereby the residualisation strategy has led to more care provided by private sources or a lack of match between community services with individual needs. As these countries refocus on the individual and his/her family, so Singapore must also recognise the value of better integration between the public and private spheres.

Acknowledgements

The authors thankfully acknowledge the financial assistance of the National University of Singapore (RP3981049). An earlier version of

this paper appeared in *Journal of Aging and Social Policy*.

References

[1] Teo P. The national policy on elderly people in Singapore. Ageing and Society 1994;14:405–27.

[2] Walker A, Warren L. The care of frail older people Britain: current policies and future prospects. In: Olson LK, editor. The graying of the world: who will care for the frail elderly?. New York: Haworth Press, 1994:129–62.

[3] Estes CL, et al. Social policy and aging: a critical perspective. Thousand Oaks, CA: Sage Publications, 2001.

[4] Olson LK. Introduction. In: Olson LK, editor. The graying of the world: who will care for the frail elderly?. New York: Haworth Press, 1994:1–23.

[5] Walker A, Maltby T. Ageing Europe. Buckingham: Open University Press, 1997.

[6] Teo P. Aging in Singapore. Journal of Cross-cultural Gerontology 1996;11(3):269–86.

[7] Lee WKM. Economic and social implications of aging in Singapore. Journal of Aging and Social Policy 1999;10(4):73–92.

[8] Department of Statistics. Singapore Census of Population 2000 Statistical Release No. 1: Demographic Characteristics. Singapore: Department of Statistics; 2001.

[9] Shantakumar G. The Aged Population of Singapore. Census of Singapore 1990 Monograph no. 1. Singapore: Department of Statistics; 1994.

[10] Ministry of Social Affairs. Report of the National Survey of Senior Citizens. Singapore: Ministry of Social Affairs; 1983.

[11] Chan A. The role of formal versus informal support of the elderly in Singapore. Is there substitution? Southeast Asian Journal of Social Science 1999;27(2):87–110.

[12] Inter-ministerial Committee on Health Care for the Elderly. Report of the Inter-ministerial Committee on Health Care for the Elderly. Singapore: Ministry of Health; 1999.

[13] Clarke EJ, Preston M, Raksin J, Bengston VL. Types of conflicts and tensions between older parents and adult children. The Gerontologist 1999;32(6):261–70.

[14] Cantor M. Strain among caregivers: a study of experience in the US. The Gerontologist 1983;23:597–604.

[15] Brody E. Parent care as a normative family stress. The Gerontologist 1985;25:19–29.

[16] White LK, Rogers ST. Strong support but uneasy relationships: co-residence and adult children's relationships with their parents. Journal of Marriage and the Family 1997;59(1):62–76.

[17] Kwan AYH. Elder abuse in Hong Kong: a new family problem for the old East. In: Kosberg J, Garcia JL, editors. Elder abuse: international and cross-cultural perspectives. New York: Haworth Press, 1995:65–80.

[18] Craig YJ. Elder abuse and mediation: exploratory studies in America, Britain and Europe. Aldershot: Avebury, 1997.

[19] Carp FM. Elder abuse in the family: an interdisciplinary model for research. New York: Springer, 2000.

[20] Hooyman N. Social policy and gender inequalities in caregiving. In: Dwyer J, Coward R, editors. Gender, families and eldercare. Newbury Park, CA: Sage, 1992:181–201.

[21] Climo J. Eldercare as 'woman's work' in poor countries. In: Johnson N, Climo J, editors. Special issue: aging and eldercare in lesser developed countries. Thousand Oaks, CA: Sage Publications, 2000:682–713.

[22] Brewer L. Gender socialisation and the cultural construction of elder caregivers. Journal of Aging Studies 2001;15:217–35.

[23] Chow N. Family care of the elderly in Hong Kong. In: Kosberg JI, editor. Family care of the elderly: social and cultural changes. Newbury Park, CA: Sage Publications, 1992:123–38.

[24] Croll E. Endangered daughters: discrimination and development in Asia. London and New York: Routledge, 2000.

[25] Salaff JW. The modern Chinese family as network: intergenerational support by daughters and sons. Paper presented at the Conference on Families in the Global Age: New Challenges Facing Japan and Southeast Asia, Singapore: 4–6 October 2000.

[26] Teo P. Space to grow old in: the availability of public spaces for elderly persons in Singapore. Urban Studies 1997;34(3):419–39.

[27] Chayovan N. Women and ageing in Thailand. In: Mehta K, editor. Untapped resources: women in ageing societies across Asia. Singapore: Times Academic Press, 1997:117–46.

[28] Toh MH, Low L. Health care economics, policies and issues in Singapore. Singapore: Centre for Advanced Studies and Times Academic Press, 1991.

[29] Ministry of Health. Annual Report 2000. Singapore: Ministry of Health; 2000.

[30] Low JA, Ng WC, Yap KB. End-of-life issues: preferences and choices of a group of elderly Chinese subjects attending a day-care centre in Singapore. Annals Academy of Medicine 2000;29:50–6.

[31] Chua BH. Communitarian ideology and democracy in Singapore. London and New York: Routledge, 1995.

[32] Johnson CL, Catalano DJ. A longitudinal study of family supports to impaired elderly. The Gerontologist 1983;23:612–28.

[33] Qureshi H, Walker A. The caring relationship. London: Macmillan Press, 1989.

[34] Brody E. Women in the middle: their parent-care years. New York: Springer Publishing Company, 1990.

[35] Department of Statistics. Yearbook of Statistics 2001. Singapore: Department of Statistics; 2001.

[36] Wenger C. The supportive network. London: George Allen and Unwin, 1984.

[37] Phillipson C, Bernard M, Phillips J, Ogg J. The family and community life of older people: social networks and social support in three Urban areas. London and New York: Routledge, 2001.
[38] Phillips J, Bernard M. Perspectives in caring. In: Phillips J, editor. Working carers. Aldershot: Avebury, 1995:4–19.
[39] The Straits Times. Income to help decide the size of hospital subsidy. 30 June 2002; H24.
[40] Phua KH. Financing health and long-term care for ageing populations in the Asia-Pacific region. In: Phillips DR, editor. Ageing in the Asia-Pacific: issues, policies and future trends. London and New York: Routledge, 2000:93–112.
[41] Woolhander S, Himmelstein D. When money is the mission: the high costs of investor-owned care. New England Journal of Medicine 1999;341:444–6.
[42] Sassoon AS. Equality and difference: the emergence of a new concept of citizenship. In: McLelland D, Sayers S, editors. Socialism and democracy. Houndmills, Basingstoke: Macmillan Press, 1991:87–105.