

Aged Care Services in Singapore – An Overview

Y Y Sitoh,*^{FAMS, MBBS, MRCP}

Abstract

Introduction: Aged care services have been rapidly and systematically established in Singapore over the past two decades in anticipation of the challenges that will accompany the rapid ageing of our population. This paper presents an overview of the geriatric services that have developed in Singapore, funding for these services, and aged care-related training programmes for doctors and nurses in Singapore. **Methods:** A non-systematic review of journal articles, local conference proceedings and state publications was undertaken. **Results:** Geriatric services have evolved rapidly with the establishment of 3 acute geriatric medicine units covering the different sectors of Singapore. Apart from the provision of acute medical care for older persons, geriatricians have also been increasingly involved in the enhancement of community aged care services under the Framework for Integrated Health Services for the Elderly. Concurrently, community services for the elderly have blossomed under the leadership provided by various voluntary welfare organisations. Innovative systems of funding the healthcare needs of older persons have also evolved over the past few years. In recognition of the increasing needs of our ageing population, the medical training curriculum is being continually reviewed to enhance the skills of medical practitioners in Singapore. **Conclusion:** Over a short span of 20 years, a comprehensive framework of services has been developed to meet the needs of our ageing population. While much has been accomplished, there is a need for continuous review of our services and healthcare policies to identify areas for further improvement.

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Introduction

The last century has witnessed the establishment of geriatric medicine as a well-recognised medical specialty supported by a respectable body of evidence, which shows that it is able to improve the health outcomes of frail older persons.¹⁻⁷ Since the pioneering work of Marjory Warren in the 1930s, different models of geriatric care have evolved in different parts of the world, with the most comprehensive services being found in countries such as the United Kingdom (UK) and Australia.⁸ Alongside the great strides that have been made in the art and science of geriatric medicine, there has been increasing awareness amongst governments across the world of the “demographic time bomb” that will accompany the ageing of their countries’ population. Consequently, public policy on ageing in most countries, especially the developed countries, has been driven by the anticipation of “...skyrocketing costs for health care, institutional care for the elderly and income support”.⁹

This article presents an overview of the geriatric services that have developed in Singapore, funding for these services, and aged care-related training programmes for doctors and

nurses in Singapore. It also suggests possible areas of need and areas that may warrant further improvement.

Methods

A Medline search was conducted using the key words “geriatric medicine”, “geriatric assessment”, “community hospital” and “nursing home”. Articles describing aged care services and, in particular, articles focusing on services within Singapore were identified. This was complemented by a search of local conference proceedings to identify previous studies relevant to this subject. A search was also done of state publications pertaining to the healthcare system and the care of older persons in Singapore.

Geriatric Services in Singapore

Over the past 38 years, Singapore has evolved from a fledgling third world nation state with no natural resources to a microcosm of successful governance. The accompanying improvements in the standard of living and the quality of healthcare have led to an increased life expectancy for the local population. Concomitantly, social and economic transformations over the same period have resulted in a falling birth rate which, coupled with increased

* Consultant

Department of Geriatric Medicine

Tan Tock Seng Hospital

Address for Reprints: Dr Sitoh Yih Yiow, Department of Geriatric Medicine, Tan Tock Seng Hospital, 11, Jalan Tan Tock Seng, Singapore 308433.

life expectancies, have led to an increasing old age dependency ratio, i.e. the number of Singaporeans aged 65 and older per 100 of those aged between 15 and 64 is projected to increase from 5.7 in 1970 to 29.5 in 2030.^{10,11} In anticipation of the impact of the impending “gray wave”, the Committee on the Problems of the Aged was established by the Ministry of Health, Singapore (MOH) in 1982 to study and suggest different strategies that may be adopted to meet the needs of the ageing population in Singapore.¹⁰ The committee recognised the importance of developing skills and knowledge that will be relevant to the provision of medical and nursing care for senior citizens and recommended the development of geriatric medicine within Singapore in its report.¹⁰ The development of geriatric services in Singapore may be considered in terms of 2 broad phases:

1. The development of inpatient geriatric units;
2. Establishment of community aged care services.

Development of Inpatient Geriatric Units

The first Department of Geriatric Medicine in Singapore was established in December 1988 by Dr Francis Joseph Jayaratnam in Tan Tock Seng Hospital (TTSH), one of the 5 government-owned general hospitals in Singapore. This had followed 2 years of preparation during which time Dr Jayaratnam had been sent by the MOH to observe different geriatric departments within the UK, and a 1-year trial of a pilot division of geriatric medicine within the hospital. In keeping with the multidisciplinary philosophy of care that typifies geriatric medicine, equal emphasis was paid to the training of nursing staff, with several nurses being sent overseas for training in gerontological nursing (vide section on “Aged Care-related Training”).

A second department was formed in Changi Hospital in 1993 and another in Alexandra Hospital (AH) in 1994. Currently, the 3 departments of geriatric medicine in TTSH, Changi General Hospital (CGH) and AH cater to the needs of acutely ill older persons in the central, eastern and western parts of Singapore respectively. Geriatric services were also started in Singapore General Hospital and National University Hospital in 2003.

Establishment of Community Aged Care Services

Cognizant of the fact that the elderly required a greater amount of medical attention than the younger population and were more likely to require longer periods of convalescence after acute illnesses,¹² the MOH established Ang Mo Kio Community Hospital in 1993. The community hospital was intended to provide care for the elderly who required an extended period of convalescence and rehabilitation but did not require the more intense medical services found in the acute hospitals, as well as for patients with uncomplicated medical conditions requiring hospital

care.¹³ This had followed the opening of the St Andrew’s Community Hospital (SACH) in 1992. SACH is owned by the Anglican Diocese of Singapore and was redeveloped on the grounds of the St Andrew’s Orthopaedic Hospital – a mission hospital that was closed in 1988 because of a decline in the need for its services at that time.¹⁴ In April 1996, St Luke’s Hospital for the Elderly, a community hospital managed by 8 “foundation” churches in Singapore, was opened and became the first community hospital in Singapore to employ a full-time geriatrician.¹⁵ More recently, Bright Vision Hospital was added to the list of community hospitals providing rehabilitation and convalescent care to the elderly. While these hospitals are largely run by voluntary welfare organisations (VWOs) and are mostly led by dedicated primary care physicians who have an interest in caring for older persons, local geriatricians have long played a supportive role by providing professional advice on the set-up of the different institutions as well as supervision for the clinicians running the hospitals. Most of the patients admitted to these establishments are transferred from general hospitals. The community hospitals play a vital role in the framework of geriatric services within Singapore and complement the rehabilitation services provided in the general hospitals.

Apart from community hospitals, Singapore also has a full range of services catering to the needs of older persons living within the community. Currently, there are a total of 25 centres providing day care for the frail elderly as well as older persons with dementia. In addition, there are 14 VWO-run centres providing day rehabilitation services, and 2-day hospitals run by the departments of geriatric medicine in AH and CGH respectively. Home nursing, home medical and home help services in different combinations are also provided by 25 service providers located over different parts of Singapore.¹⁶ As in the case of community hospitals, most of these services are run by VWOs and civic organisations, some of which have had a long history of providing care for the needy elderly in Singapore since the 1970s. Notably, the Home Nursing Foundation (HNF), a VWO established in 1976, was one of the organisations that played a pioneering role in the provision of home nursing services to the semi- and non-ambulant sick elderly within the community,¹⁷ while the Hua Mei Mobile Clinic (HMMC) was established in 1993 as the first domiciliary medical service in Singapore to specifically cater to the medical needs of the home-bound elderly.¹⁸

While the range of services available is impressive, the fact that they are provided by different organisations has often meant a lack of coordination and frequent duplication. In response to the need for better coordination and integration of services, community case management services have been established to coordinate the provision of services to

needy older persons within the eastern, central and western parts of Singapore.^{13,19}

Older persons who require high levels of nursing care and who cannot be cared for within their own homes may be admitted to nursing homes. Currently, Singapore has over 6400 nursing home beds, with 75% being provided by VWO-run nursing homes. Residents gain access to VWO-run nursing homes by way of referral through medical social workers, and may be eligible for varying degrees of government subsidy according to their financial means and levels of disability, and the homes that they are admitted to. All of these nursing homes are subjected to regular audits by the Licensing and Accreditation branch of the MOH to ensure that the minimum requirements for service provisions are met. In Singapore, VWOs have traditionally played an important role in caring for frail older persons requiring residential care, and the past 3 decades have seen a continual movement towards the improvement and upgrading of nursing home services.²⁰

Alongside the drive to establish the fundamental components required for the provision of a comprehensive range of geriatric services, the local government has been cognizant of the importance of integrating the individual brick and mortar into a seamless continuum of care. This aim of integrating the different services took a great leap forward towards concretisation in 2001 with the establishment of the Framework for Integrated Health Services for the Elderly by the MOH. It paved the way for greater involvement by the 3 geriatric medicine departments in selected nursing homes and community hospitals within their respective sectors. These nursing homes and community hospitals were given additional funding and were encouraged to expand their scope of services (such as the inclusion of day rehabilitation, home medical and home nursing services) in order to serve as nodal points for needy older persons and their families to obtain a full range of services, with their needs being met with minimal disruption as their medical conditions progress. Under the framework, geriatricians from the 3 hospitals were tasked to provide professional leadership and to assist in enhancing the standards of care of the selected community services.²¹ Further to this, the Integrated Care Service (ICS) was established in 2001 to take over the role of the Care Liaison Service of the MOH in co-ordinating the placement of all patients referred from the different government-owned general hospitals in Singapore for nursing home care. The aim is for ICS to take on the role of co-ordinating access to all community services for the elderly in the future.²¹

Funding of Geriatric Services

The majority of patients who are admitted to government-owned general hospitals receive significant government subsidy (up to 80%) for their hospitalisation and treatment,

with the level of subsidy being dependent on the types of ward accommodation chosen by the patients. Patients may pay the balance of their hospital charges that remain after subsidy through a number of means. First, most Singaporeans have a Medisave²² account that can be used to pay a portion of their healthcare expenditure. Medisave is a mandatory national medical savings scheme that is specifically used by the individual to help pay for part of his/her medical expenses. In addition, Singaporeans are invited to subscribe to a low-cost government-initiated medical insurance scheme called Medishield,²² that will help cover the cost of treatment for catastrophic illnesses. Medishield can be used to supplement payments from Medisave. Singaporeans who are financially challenged and are unable to pay for their medical expenses through either scheme may also apply for financial assistance through Medifund (a financial assistance scheme that is topped up by the government from budgetary surpluses).²²

Government-owned general hospitals receive subventions from the government for providing medical services to Singaporeans. In response to rising demands and the escalating cost of healthcare, the Casemix²³ prospective payment scheme (PPS) was introduced in Singapore in 1999 to facilitate the efficient and fair allocation of resources to government-owned general hospitals.

Older persons who require community geriatric services, such as admission to community hospitals or government-funded VWO-run nursing homes, may receive government subsidy, with the level of subsidy being determined by a “means test”.²⁴ Means testing was implemented on 1 July 2002 and is intended as an instrument to guide the allocation of appropriate amounts of subsidy to needy patients according to their “per capital household income”. Thus patients transferred from government-owned general hospitals to community hospitals for rehabilitation or convalescence may be expected to receive a lower level of subsidy for the duration of their stay in the community hospital than if they had stayed on in the general hospital. Similarly, patients using other community services will receive differing levels of subsidy, ranging from 75% subsidy for households with monthly per capita income of S\$300 or less, to no subsidy for those with monthly per capita income in excess of S\$1000.²⁴

In addition, state authorities have, in 2002, introduced a severe disability insurance scheme that is intended to provide a monthly stipend of S\$300 for 60 months for individuals who develop severe disability requiring long-term care. Dubbed “Eldershield”,²⁵ this scheme is a laudable attempt at helping to meet the challenge of rising healthcare costs in an ageing population. Unfortunately, the response to this initiative has been relatively muted, thus signalling a need for a thorough reassessment, both of the workings

of the insurance scheme and the psyche of the population in general.

Aged-care Related Training for Doctors and Nurses

Training of Geriatricians

Over the past 15 years, 28 geriatricians were trained in Singapore. The training programme has evolved over the years and it now consists of a 3-year structured programme, during which time trainees are exposed to the different aspects of acute geriatric care and different geriatric syndromes. In addition, trainees are exposed to rehabilitation medicine, psychogeriatrics and community services. Trainees are required to complete their membership examinations for the Royal College of Physicians (UK), or a similar grade of examination, prior to admission to the training programme for geriatric medicine. It is mandatory for all trainees to successfully complete an exit examination at the end of their training before they are accredited as geriatricians.

Besides the local training programme for geriatricians, the MOH has provided funding for trainees to be attached to reputable centres in geriatric medicine in different parts of the world. This is to allow the accrual of relevant expertise and to accelerate the development of geriatric medicine in Singapore. While the earlier cohort of geriatricians received training scholarships to different centres in the UK, in recent years the focus of training has shifted to include centres within Australia and the United States of America to allow for diversification of ideas and to enhance our appreciation of different systems of care.

Training of Primary Care Physicians

Together with the Society for Geriatric Medicine (Singapore), a professional body comprising mainly of specialists in geriatric medicine, the Division of Graduate Medical Studies in the National University of Singapore started a first 1-year part-time diploma programme for geriatric medicine in 1998. This was in response to the ministerial call for more primary care physicians to be well equipped with the skills necessary to care for ill older persons within the community. The course has been instrumental in training many of the primary care physicians who are working for the different community aged care services.

In addition, the College of Family Physicians (Singapore) is developing programmes for further training of primary care physicians who aspire to take up leadership positions in the provision of community geriatric services.

Training of Medical Students

The undergraduate medical school curriculum includes a compulsory 1-week attachment to a geriatric medicine

department during which final year medical students are taught the fundamental aspects of geriatric syndromes and common concerns in caring for the elderly.

Training of Nursing Staff

In recognition of the important role played by nursing staff in the provision of care for frail older persons, the MOH has, since 1988, sent 20 nurses to various reputable centres overseas so as to establish a core of senior nursing staff who are equipped with gerontological nursing skills. To date, 11 nurses have been sent to Australia, 5 to the UK, and 2 each to Japan and the United States of America. In addition, an advanced diploma in nursing (gerontology) was established by the School of Nursing (Singapore) in 1991 to provide training for local state registered nurses who have an interest in caring for the elderly. This course was subsequently transferred to be under the charge of the Nanyang Polytechnic in 1996.

Comments

From 1965 to the late 1970s, aged care services in Singapore were provided by a small number of civic groups and charitable organisations, with these services being confined to home nursing services and a small number of homes for the aged sick and homes for the destitute. Recognition of the challenges posed by the changing demographic trends that were to accompany Singapore's growth as a nation state led the government to formalise a multipronged strategy to tackle the problems of the aged that would address the social, economic and health needs of the ever increasing population of older persons.¹⁰

In the domain of healthcare, formal training for specialists in geriatric medicine and nurses in gerontological nursing, coupled with support rendered by the MOH and the Ministry for Community Development and Sports, resulted in the rapid expansion of the scope and depth of services available, many of which have been touched upon in the foregoing sections. Nonetheless, there remains room for further review and improvement in the provision of care for the needy and ill elderly.

Interface between Aged Care Services in General Hospitals and Community Hospitals

Since the inception of the first department of geriatric medicine in TTSH in 1988, geriatricians have contributed actively to the planning of community services and rendered professional guidance and supervision in the care of patients in both day rehabilitation centres and community hospitals. Nonetheless, such involvement have been limited in scope and most of the geriatricians have been largely involved in the provision of care for acutely ill older persons admitted to the general hospitals, with only 3 geriatricians having been employed full-time by community-based aged care

services.

While the philosophy of care in the 3 geriatric departments is consistent with models that have been shown to be beneficial (i.e. focus on medical illnesses in older persons that are associated with functional decline and the incorporation of measures targeted at the restoration and preservation of function), the current practice in Singapore is such that older persons requiring a prolonged period of convalescence or rehabilitation are transferred to a community hospital where the medical care is taken over by a new team of doctors and nurses. This is less than ideal as there is an inevitable loss of continuity of care. Conversely, patients admitted to community hospitals are often not adequately screened to determine their suitability for transfer, resulting in an inordinately high rate of transfer back to acute hospitals.^{26,27} This situation may possibly be exacerbated by the lack of mutual accountability engendered by the indirect relationship between the government-owned general hospitals and the VWO-run community hospitals.

Casemix Funding

While it has been shown that the casemix system of healthcare funding may lead to more efficient allocation of resources, it is equally well-known that such systems do not accurately reflect the true utilisation of resources by frail older persons requiring hospitalisation.²⁸ Indeed, the experience of other countries that have introduced such schemes suggest that the overall quality of care for older persons may have been negatively affected, with increased utilisation of nursing homes and patients being discharged “quicker and sicker”.²⁹⁻³¹ While it has been expressly stated that the PPS should not impact negatively on the quality of healthcare but rather facilitate the provision of “appropriate and good care”, with medical practitioners being responsible to ensure that “clinical practice conforms to best practice in accordance with the needs of the patient”,²³ it is inevitable that geriatric medicine units functioning solely within the acute hospital setting will come under increasing pressures to attain cost-effectiveness and to shorten the duration of hospitalisation for their patients. Thus, it may be worthwhile to consider the introduction of a separate funding scheme for the period of care, during which time the focus is predominantly on the rehabilitation of older patients. It has been shown that resource utilisation during such subacute periods of care are more accurately reflected by the functional status of the patients rather than their specific principal diagnoses.³²

Means Testing

While means testing is a useful instrument and has been successfully introduced in the National Health Service of the UK since the early 1990s, the lack of a similar yardstick for the allocation of subsidy for hospitalisation in the

government-owned general hospitals may provide a perverse incentive for patients to remain in the acute hospitals for a longer period than is necessary. In recognition of this danger, a “social over-stayer” policy was introduced in 2002, whereby patients who insist on remaining within public hospitals after they have been deemed to be medically fit for discharge to community medical services will cease to receive government subsidy. While such a system may conceptually provide an effective disincentive to potential over-stayers, in reality it is difficult to enforce, especially in an increasingly litigious culture that medical practitioners are required to work in.

Training of Medical Students

The current 1-week attachment to geriatric medicine departments within government-owned general hospitals provide an invaluable opportunity whereby students may gain some insight into the fundamental aspects of geriatric medicine. However, the effectiveness of such a programme has not been systematically assessed. Ideally, the undergraduate curriculum should provide opportunity for students to formulate a healthy perspective and attitude towards the elderly, and equip the students with the necessary skills to recognise problems faced by the elderly patients that they are likely to encounter in the early years of their medical career. Studies have shown that the attainment of such goals require a longer period of exposure to the needs of the elderly, and such exposure should not be limited to the frail elderly admitted to the hospital for acute illnesses.³³⁻³⁵ It may be worthwhile considering the expansion of the undergraduate geriatric medicine programme to incorporate structured opportunities to interact with the healthy elderly, as well as visits to community aged care services.

Conclusion

Geriatric services in Singapore have undergone significant evolution over the past 38 years and older Singaporeans are now able to access a range of services that are comparable to many developed countries. Such developments have been made possible by consistency in planning and foresight by the government. While the accomplishments have been impressive, it will be prudent not to rest on our laurels but to constantly review, reflect on and address the possible shortcomings in the system.

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