



The Hong Kong Geriatrics Society

c/o Department of Medicine and Geriatrics, Princess Margaret Hospital
Lai King Building, 10 Lai Kong Street, Kwai Chung, Kowloon, Hong Kong
Tel: (852) 27498228 Fax : (852) 27440249

e-mail: tkkong@ha.org.hk websites: <http://www.fmshk.org.hk/hkgs>, <http://www.hkgs.org.hk>

President	: Dr. Kong Tak Kwan	Council	Dr. Chan Ming Houng	Dr. Yuen Hui Chui
Vice-President	: Dr. Chan Hon Wai	Members :	Dr. Leung Man Fuk	Dr. Chu Leung Wing
Honorary Secretary	: Dr. Kong Ming Hei Bernard		Dr. Kwok Chi Yui	Dr. Dr. Shea Tak Ming
Honorary Treasurer	: Dr. Wong Tak Cheung		Dr. Luk Ka Hay James	
Ex-Officio	: Dr. Wong Chun Po			

Honorary Legal Advisor : Mr. C K Chan
Honorary Auditor : Mr. Eddy S B Wong

Will You Still Cure Me, Will You Still Care For Me, When I'm 75?
HKGS's Response to the Discussion Paper on "Building a Healthy Tomorrow –
Discussion Paper on the Future Service Delivery Model for our Health Care System"¹
(published by Health, Welfare and Food Bureau of the Hong Kong Special
Administrative Region Government in July 2005)

Saturday, 29 October 2005

Summary

- While the Discussion Paper realizes the need for future planning of hospital bed provisions to take into account the growing elderly population, it falls short of giving a clear **direction on how hospital geriatric care is to be provided** and is deficient in the area of acute care of elders.
- The proposed future **health care delivery model of primary, secondary and tertiary divisions** is not necessarily appropriate to the health care needs of many elders that depend on the full spectrum of progressive care from acute to rehabilitation to long-term care, as well as the continuum from hospital to community for the delivery of comprehensive effective and efficient geriatric care.
- The proposed **primary care model** of "family doctor and visiting medical officer" as gatekeeper can be ineffective and costly when applied indiscriminately to all elderly people without the direct participation of geriatricians. Elders with multiple illnesses, multiple pathologies, multiple aetiologies, multiple medications and multiple disabilities need seamless healthcare without primary and secondary divisions.
- The current and proposed acute hospital service ("**secondary care**"), designed for people who have only one thing wrong at once, is inadequate to meet the needs of frail elders with many things wrong, who turn out to be major users of hospital service.
- It appears from this Paper that the Government has not considered properly the **role of geriatric medicine and of geriatric specialists** in meeting the needs of the ageing society.
- Since the origin of the specialty of **geriatric medicine** in UK 70 years ago, an impressive knowledge base has been accumulated, and research has confirmed its **effectiveness** in both hospital and community settings in improving the outcomes of elderly people with multiple pathologies and functional problems.
- **Elders predominate hospital populations. Future hospital planning for elderly services should target at the 75+ age group** because they represent most of the **frail elders** with complex problems and multiple illnesses, often presenting as the "geriatric giants" (falls, immobility, confusion, incontinence) instead of singular presentations that can be explained by one single disease as in younger adults.
- The **single organ-system approach has its limitation** in the hospital care of frail elderly patients. Pitfalls in diagnosis, investigation and management, including iatrogenesis and adverse drug reactions, are prone to occur in the absence of a geriatrics perspective and knowledge base.

- **Inadequacies of acute care and rehabilitation services cause inefficient and expensive care.** Making progress will need action in many areas. It is important for the Government to have commitment to the care of elderly people in both the preventive and the remedial aspects.
- **Early access to geriatric care in the acute phase could help reduce morbidity and optimize use of hospital resources.** For an effective, efficient service and continuity of care, a structural and functional geriatric service is essential. However, there is a **lack of acute geriatric beds/wards** for the proper provision of geriatric service and the conduction of training in geriatric medicine to doctors and nurses.
- Implementation of the proposed **acute geriatric care model** would be cost-neutral to start with, by striking a balance between geriatric commitments and non-geriatric commitments of geriatricians. There is potential for cost saving in terms of optimal use of hospital resources; improving flow between the acute, rehabilitation, and long-stay compartments; reducing iatrogenesis and multiple medication problems; reducing disability; and reducing institutionalization.
- **Geriatricians can contribute to the care of elderly patients in the community** by providing direct specialist medical care, advising primary health care, working with a community based or outreach multi-disciplinary team, geriatric specialist assessment prior to entry to residential care homes for the elderly (RCHEs) or other community care packages, and giving advice about services.
- **Predictors of admission to RCHEs are overwhelmingly health-related (including undiagnosed medical conditions)**, rather than social. By optimizing an individual's health and functional capacity, their need of future expensive hospital and long term care services can be minimized. This is also in line with the **preference of most elders for living at homes rather than in institutions.**
- **Elders admitted to RCHEs** often have multiple chronic illnesses and complex medical problems, management of which **require the specialist input of geriatricians** in partnership with primary care doctors, nursing and allied health professionals. Augmentation of this is required to meet these needs.
- **Elderly patients should have access to the particular skills and experience of a physician trained in geriatric medicine and special services of a multi-disciplinary team.** As the population grows and demands both on emergency acute take for elders grow and the care provided within the community develop this is likely to require an **increase in geriatric specialists.** We do need to **maximize the 'division of labour'**, to including primary care doctors with the appropriate experience, competency and commitment, psychogeriatricians, geriatric nurse specialists and therapists in providing comprehensive services.
- Pertinent questions on **health care financing** have to be solved to bring about reform for sustainability, affordability, accessibility and quality health care for elders. The majority of the present generation of low income and under-privileged elders in Hong Kong will continue to rely on social security or the good will of their children for subsidy of their health care services. Workable health care financing models for the "to-be" old, especially the baby-boomers, have to be explored to meet the future escalating health needs of the elders.
- The Government should take on the lead to rekindle the Chinese virtue of **filial piety**, and that **"longevity" is to be viewed positively** as an opportunity for the young to pay tributes to the old rather than negatively as a burden; and to **dispel ageism.**
- The HKGS proposes that **geriatric medical care should be explicitly considered in the context of hospital and community care**, and that geriatricians be facilitated to contribute substantially to future hospital and community care of elders.
- The HKGS is ready to **contribute to the planning for the future health care of elderly people** and would be happy to see the establishment of a **communication channel** with the Health, Welfare and Food Bureau for future continuous consultation and dialogue.

The Hong Kong Geriatrics Society (HKGS), established in 1981, is a specialist Society of 181 doctors responsible for the management of acute and chronic illness, severe disability and terminal conditions in elderly people. Together with their multidisciplinary teams they are experienced in the management of disease in old age and in meeting the related ethical challenges. The HKGS is pleased to have the opportunity to respond to the Discussion Paper¹ and makes the following points:

A Critique of the Approach to Elderly Care in the Discussion Paper

1. While the Discussion Paper realizes the challenge of an ageing population (1 in 5 will be over 65 by 2023), and the need for future planning of hospital bed provisions to take into account the growing elderly population and the differential hospital utilization patterns of different age groups and gender (§5.8, p.32; §5.30, p.43);¹ it falls short of giving a clear **direction on how hospital geriatric care is to be provided**, and gives the impression of a simplistic “solution” to the rising health care costs by diverting medical care of elders from hospital to community.
2. In the Discussion Paper, the **future health care delivery model** (§3.4, p.14)¹ is perceived to structure with its primary, secondary and tertiary divisions. This is conceptual, and is not necessarily appropriate to the healthcare needs of many elders that cut across primary, secondary and tertiary boundaries.
3. The Discussion Paper’s framework in **community care** is based on “family doctor and visiting medical officer” functioning in the primary sector as the gatekeeper (§4.6, p.19; §7.9, p.58),¹ and sees this as almost the single solution to limit access and costs of health care. This idealized primary care model, when applied indiscriminately to all elderly people without the direct participation of experienced geriatricians, can be ineffective and costly. Elderly care should be maximized in the community. Yet when community healthcare deems less cost-effective than hospital care, they need seamless access to local general hospitals. To deny such a need for hospital care and to limit elderly patients in the wrong place to manage their health has and will jeopardize any success of this healthcare reform. The fact and decades of modern healthcare experience tell us that elders with multiple illnesses, multiple pathologies, multiple aetiologies, multiple medications and multiple disabilities need seamless healthcare, a continuum of care without primary and secondary divisions.
4. At first sight, it would appear that elderly people, though not explicitly stated as such, would be the target of the public hospital service in the future delivery service model proposed in the Paper, because of their ubiquitous presence in the four **priority areas**: acute and emergency care; low income and under-privileged groups; illnesses requiring multi-disciplinary professional team work; and training of health care professionals (§3.3, p.14; §5.30, p.43).¹ However, the Paper wished and concluded that in the future health care scene, “elderly individuals rarely need to be admitted through A&E departments” (§10.1, p.73).¹ On the contrary, the focus of hospital care in the Discussion Paper appears to be on acute catastrophic illnesses (§5.11, p.33),¹ and expensive illness entailing advanced technology (§3.3, p.14; §5.30, p.43)¹ – that assumes hi-tech medicine and interventions based on single organ is automatic priority in future public hospitals. However, **a service designed for people who have only one thing wrong at once is inadequate to meet the needs of frail elders with many things wrong, who turn out to be the major users of hospital service.**
5. The current and proposed Accident and Emergency and acute medical service thus have their limitations and problems in tackling the care of elderly people who are both frail and acutely ill. Today, the inpatient service for elderly people is increasingly fragmented with respect to organ specialties and new medical technology. Elderly patients, often with common diseases and “unusual” presentations, do benefit from these specialized services when carefully selected and appropriately applied. Indiscriminate use without a geriatrics perspective and knowledge base however results in costly and harmful medical care of elders, e.g. adverse drug reactions and post-operative cognitive deficit. Without a **system approach, good organisation of care, as well as the knowledge, skills and attitude in geriatric medicine**, organ-based medicine may be futile in the health care of elderly people.
6. Accordingly, the Paper is deficient in the area of acute hospital care of elders (“secondary care” in the framework of the Discussion Paper) and elderly services are grouped in Chapter 7 with long-term and

rehabilitation care services (“primary care” in the framework of the Discussion Paper).¹ By concentrating only on community and non-acute care of elders, the Paper **does not address the need for the full spectrum of progressive care from acute to rehabilitation to long-term care, as well as the continuum from hospital to community in the provision of comprehensive effective and efficient geriatric care.** It also gives a very narrow view of the scope of community geriatric care (by discussing in length on residential care only) and of a restrictive role of community geriatric assessment teams (§7.10, p.59).¹

7. It appears therefore from this Paper that the Government has not considered properly **the role of geriatric medicine and of geriatric specialists in meeting the needs of the ageing society.** In the following sections, the HKGS would like to propose how geriatric medicine can usefully contribute to future elderly health care in Hong Kong.

Background

8. It is 30 years since the establishment of a specialist geriatric service in Hong Kong to deal with the health care needs of elderly patients, originally modelled on that of Glasgow in UK.² **Geriatric medicine originated in the United Kingdom 70 years ago out of a reaction to neglect and apathy of elderly patients** thought not to be amenable to medical treatment and thus obliged to spend their last years in chronic infirmaries.³ Since Marjory Warren showed that many elderly patients had conditions from which they could often be cured or rehabilitated,³ the specialty of geriatric medicine has continued to grow and an impressive knowledge base has been accumulated.^{4,5} This, combined with increasing expertise in the multidisciplinary treatment and assessment of elderly patients and in ensuring that health and social services work in a coordinated fashion, has improved the care of ill elderly people.

9. While geriatric medicine originated from long-term care settings, its success in tackling the problems of frail elders lead to the earlier involvement of geriatricians in the acute phase of their illness. In the **progressive care model**, separate acute/rehabilitation/long-term settings and facilities are made available for patients at different stages of illnesses and treatment programmes. For the past 30 years, up to 130 specialists in geriatric medicine have been trained up in Hong Kong to meet the local service needs.

Ageing in Hong Kong and its Impact on Hospital Utilization

10. The Hong Kong elderly population aged 65+ is projected to grow from 816 thousand in 2004 to 900 thousand in 2010, an increase of 10%. The corresponding growth for the population aged 75+ is even steeper at 30%, from 339 thousand to 442 thousand. Since the prevalence of illness and disability rises with age, **the growth of the elderly population, particularly those in the older-old group (75+) has important implications for health and social services.**

11. **Elderly people are predominant in hospital populations.** In the year 2001, the 65+ age group, which constituted 11.2% of the Hong Kong population, accounted for 48.5% of patient-days utilized in public hospital. Within the 65+ age group, the hospital consumption per person per year rises rapidly with increasing age: those aged 85 and over spend on average 13-14 days a year in hospital, compared with 6-7 days a year for those aged 75-79, and 2-3 days a year for those aged 65-69. This contrasts sharply with the low hospital utilization rate of under one day a year for adults aged below 45(Figure 1).⁶

12. Knowledge of these **differential hospital service requirements of the age-sex distribution of the elderly population is important for planning hospital utilization**, and draws attention to the 75-plus age group in future hospital planning for elderly services.^{7,8} Today, there are five and a half times as many people aged over 75 as there were 30 years ago, and this age group will triple by 2031.

13. The hospital bed-days consumed for the 65+ age group is estimated to rise from 4.1 million to 5.6 million (an increase of 35%) from the year 2001 to 2010, and the corresponding rise for the 75+ age group is from 2.5 million to 4 million (an increase of 56%). It is projected that by 2010, the 65+ age group, will consume 51.8% of the patient-days in public hospital, and by 2030, the consumption will rise further to 69.1%, a challenge to the hospital services in Hong Kong.

The Scope of Geriatric Medicine and Evidence for its Effectiveness

14. Demographic trends and the age-distribution of illness make it unrealistic for one specialty, geriatric medicine, to look after all elderly people. What kind of elderly people, therefore, should geriatricians ideally manage? The best definition of a **geriatric patient** is one who exhibits the features of **biological ageing**. The term “biological ageing”, in contrast to “chronologically ageing”, is emphasised because not all patients age at the same rate. Such biologically aged patients are characterised by frailty and complexity. **Frailty** is a failure to integrate responses in the face of stress, so that, functions that require integration of higher brain processing, such as maintaining balance, walking, intellect are more likely to fail when stressed by diseases, resulting in falls, immobility, confusion or incontinence – the “**geriatric giants**”.⁹ The consequences of biological ageing are complex but the most important clinically relevant aspects are: atypical presentation of disease, multiple pathology, disabilities, and adverse social factors.

15. The response to the complex situation of the biologically aged ill person must be correspondingly complex. It is not sufficient to identify acute illnesses and deal with them medically in a narrowly defined sense. The **essence of management in frailty** is to embrace the complexity of the patients and their needs for care. We have complex patients (i.e. those with multiple diseases, multiple needs, and a multifactorially determined state) on whom we apply a complex intervention (comprehensive geriatric assessment and multidisciplinary care) to achieve a variety of ends. Although these **ends** roughly can be summarised as lessening pain, improving function and delaying death, they have many manifestations, which also require a complex measurement tool (e.g. Goal Attainment Scale, Quality of Care from patient’s perspective) than knowing their length of stay in hospital.⁹

16. The **essence of geriatric medicine** as a specialty is to assess and treat the medical and rehabilitative needs of elderly people. Every ill person deserves a diagnosis. This is carried out through a process known as **Comprehensive Geriatric Assessment (CGA)**. In simple terms, CGA is the process of knowing the frail elderly person: a multidimensional, often interdisciplinary, diagnostic process focused on determining a frail elderly person’s medical, psychological, and functional capabilities in order to develop a coordinated and integrated plan for treatment and long-term follow-up.¹⁰ When this is combined with a co-ordinated package of health and social care delivered by a **multidisciplinary team, led by a geriatrician**, there is **evidence** that the outcomes for elders with multiple pathologies and functional problems are improved in terms of: **reduced risk of mortality, greater chance of cognitive improvement, greater chance of physical function improvement, improved likelihood of living at home, and reduced hospital readmissions.**^{11,12}

17. How **comprehensive geriatric assessment within acute hospital**^{13,14} and **community**^{15,16} settings can meet the needs of an ageing population in Hong Kong has been discussed in policy meetings and open forums before. Since CGA can meet both ends of gate-keeping (with appropriate resource utilization and thus reduction of expenses from ineffective and inefficient care) and goal-keeping (meeting the needs of frail elders),^{15,16} **the HKGS proposes the Government to consider and endorse this evidence-based practice (CGA) as a policy in health care for elderly people.**

Hospital Geriatric Care

18. The **single organ-system approach**, which characterizes much of the modern medical specialization, has its **limitation** in the hospital care of biologically aged patients. In contrast to the younger adult, in whom the presenting problems can often be explained by one single disease (the dictum “one patient, one disease”); the biologically aged patient characteristically has multiple causes for their presenting problems; and ageing, disease, and treatment interact with one another to modify the pattern of illness. Because of their complexity, geriatric problems are seldom susceptible to a simple solution, and are often frustrating to those tuned to singular presentations capable of single diagnosis. Pitfalls in diagnosis, investigation and management are prone to occur in the absence of a geriatrics perspective and knowledge base.

19. **Iatrogenesis and adverse drug reactions** are common among acutely hospitalized elderly patients, with tremendous costs to the elders and the health care system.^{17,18,19,20} It has been shown that CGA reduced

serious adverse drug reactions while reducing suboptimal prescribing.²¹ As studies have shown inappropriate medication and adverse drug reactions are important causes of hospital admissions of elders,^{19, 22, 23} CGA targeting at polypharmacy can be both goal-keeping in improving medical care of elders and gate-keeping in reducing iatrogenic hospitalizations.

20. Thus, geriatricians should target their skills on the biologically aged patients. The **acute geriatric patient** can be defined on a **need-related** basis as: acute presentation with confusion, poor mobility, falls or incontinence; long-standing confusion, poor mobility, falls or incontinence; presenting with specific conditions requiring intensive rehabilitation e.g. stroke; multiple pathologies and thus multiple medications; residents of residential care homes for the elderly (RCHE) (signifying a degree of physical and/or mental frailty); and those previously under the care of a geriatric specialist.²⁴ Such patients consume significant hospital resources, with prolonged hospital stay because of their associated disabilities and need for rehabilitation. For example, of the 73 falls (in elders aged over 75) admitted daily into Hospital Authority, there are on average 17 hip fractures, 5 head injuries, and one subdural haematoma; and they occupy 457 acute beds and 334 non-acute beds daily.

21. **Whose responsibility?** Because of the reasons mentioned above, the care of a geriatric patient will require a **multidisciplinary team led by a geriatrician**, involving not only doctors and nurses but also therapists and social workers, working closely together, and tight coordination between hospital-based and community-based resources.

22. **Where to treat?**

22.1 **Designated acute geriatric wards and beds with progressive care to rehabilitation and long-term care:**

22.1.1 The kind of organization of services as described under paragraphs 16 and 21 is rarely found in acute medical or surgical wards where the emphasis is, understandably, on the management of acute illness based on single organ resuscitative treatments and single interventions. The integrated medicine and geriatrics model, as is practised in many local hospitals, would not work properly without a supportive ward environment and multidisciplinary team. Pooled or scattered beds would not be the answer, as this would fragment the multidisciplinary team and undermine the close working relationships that are essential to the kind of care geriatric patients require.

22.1.2 A 6-month survey of hospital utilization in the Hospital Authority in 2004 (Table 1) showed that an average of 1572 acute beds were occupied daily by frail elderly patients who fit into the definition of acute geriatric patients (care home residents, strokes, falls, delirium or dementia).^{13,14} However, such patients are scattered in different wards, making comprehensive geriatric assessment and intervention impossible.^{13,14} In the UK, it was reported that 69% of hospital patient population had needs for CGA and multidisciplinary intervention (mean age was 65.3 years for acute wards, 73.5 in rehabilitation wards, and 80.8 in continuing care); but again it was impossible directly to provide such care to all the hospitalized elderly people with multidisciplinary needs because these patients and their needs spread over so many wards.²⁵

22.1.3 In a systematic review of 20 randomised controlled trials on the evidence for acute geriatric assessment - either in care provided by mobile teams or of care based on specialist geriatric wards, **geriatric assessment wards were associated with significantly more patients surviving and returning to live in their own homes** (four extra for every 100 patients treated; 95% CI 1–6) when compared with conventional care in general medical wards.²⁶ There was no evidence of benefit from geriatric assessment teams (no patients per 100; 95% CI –4 to 5). The reasons for these differences are firstly, the delivery of daily nursing care differs between wards with nurses trained and experienced in dealing with frailer older adults and roving teams in general medical wards with non-specialist nursing staff. Secondly, the co-ordination and delivery of recommendations made during CGA can readily be achieved in geriatric wards but not in general medical wards.

22.1.4 A survey in July 2004 of 14 acute hospitals in Hospital Authority showed that there is **wide variation in the number of designated acute geriatric beds/wards available to practise acute geriatric medicine** (Table 2).^{13,14} Only 2 hospitals have adequate designated acute geriatric beds allowing direct

admission from A&E to geriatric wards. For the remaining 12 hospitals, ill elderly patients are admitted into medical wards with scattered, floating or no geriatric beds.

22.1.5 Because the majority of frail elderly patients requiring geriatric specialist care are spread in different general medical wards, **a designated setting for geriatric practice (multidisciplinary team, geriatric nursing, disability-free environment) is lacking.** This also hinders a timely response by geriatricians to meet their medical (early detection of diseases despite atypical presentations) and rehabilitative needs. Other specialty wards (e.g. infectious disease ward) also find difficulty in managing frail elderly patients with multiple pathologies and disabilities. Revolving door phenomenon occur because of premature discharge to homes/RCHE without appropriate support, and there is lack of continuity of care. Inappropriate transfers to rehabilitation/ convalescent settings also occur (too acute, no diagnostic workup, not benefiting from rehabilitation).

22.1.6 The **inadequacy in acute geriatric ward/bed numbers will ultimately result in a greater cost burden to society,** including the long-term care of an increasingly and unnecessarily dependent population.

22.2 Interface with Accident & Emergency Department:

22.2.1 The benefit of CGA has been shown at Accident and Emergency (A&E) Departments. Recent editorials^{27,28} have drawn attention to the **problems of A&E in managing frail elders.** There have been a few studies looking at CGA at A&E,^{29,30} showing reduced functional decline, enhanced function, and reduced admission, and use of care homes, without increasing the cost. Studies on **fall presenting to A&E** also highlight the importance of CGA in this area, with reduced serious injury and subsequent bed-day utilization.^{31,32,33}

22.2.2 Local survey revealed that 91% of 75+ age group with falls, stroke, delirium and RCHE residents are admitted to hospital via A&E compared with the overall average of 49% in-patient admissions via A&E. **Specialist geriatric involvement at A&E** can help in early identification of reversible cause of ill health or functional loss and avoidance of rejecting elders who need hospitalization. Elders who would not benefit from being admitted to an acute hospital bed can be directed appropriately back home with or without additional support. The diagnostic and therapeutic processes can continue once the patient has seen a geriatric specialist in the A & E.

22.3 Interface with other Hospital Specialties:

Geriatric patients present in many other settings than medical wards: **a successful geriatric service should be able to reach patients in non-medical wards** (orthopaedics,³⁴ surgical, neurosurgical, gynaecological, psychogeriatrics) to provide problem-focused (rather than solely organ-focused) services (e.g. falls and fracture service, memory service, stroke service), to improve diagnostic accuracy and need assessment, to reduce polypharmacy and avoid iatrogenesis, and to ensure smooth discharge.

Community Geriatric Care

23. The Discussion Paper falls short of recognizing the full range of roles of geriatricians in community geriatric care. It should be emphasized that geriatricians have more roles to play in community geriatric care than what the Paper perceives as just “discharge planning” and “providing support to doctors of Residential Care Homes for the Elderly (§7.10, p.59).¹

24. In a **local opinion survey³⁵ of geriatric specialists (58/139 responded) and primary care doctors (113/265 responded) with special interest in elderly care,** 64% of geriatric specialists disagreed that they should focus only in hospital work, and a significant proportion (19%) of geriatric specialists disagreed that Community Geriatric Assessment Teams (CGATs) should concentrate on discharge planning and support to visiting medical officers (VMOs).

25. The geriatric specialist has the knowledge and skills needed to provide specialist medical care to individual elderly people in whatever setting they are currently residing be it community or hospital, as well

as to provide advice, education and training to those who plan, commission, evaluate or provide health services to elderly people.

26. With increasing numbers of frail older people being managed in community settings, Challis has warned that an emerging geriatric giant is “informal care.”³⁶ Proper preparedness³⁷ is much needed in community care support in order that “informal care” would not be replaced by another “new” geriatric giant “inadequate care” or elder abuse. It will therefore be important for **geriatricians to work in partnership with general practitioners, Social Services, Non-government Organizations (NGOs) and private care providers to provide a geriatric care consortium.**

27. The **community activities of geriatricians** can range from geriatric day hospital (GDH) to assessment of patients at home, in RCHEs, or in primary care settings. The clinical service contributed by geriatricians in the care of individual elderly patients in the community may include:

27.1 **Providing direct specialist medical care**, especially targeting at frail elders with multiple pathologies and complex problems, whether they live at home or in RCHEs. Local studies have shown that 40-50% of residents of RCHE are frail, with multiple diagnoses on multiple medications, high dependency level and high hospital utilization rate, pointing to a need for geriatric specialist support.^{13,14,38} Further local studies have shown that CGATs can help to maintain such frail residents of RCHE within the community and help to reduce hospital utilization.^{15,16,39} Stroke patients are the major users of GDH, and they have been shown to improve in physical function at discharge from GDH in terms of self-care, mobility and household function^{13,14,40}

27.2 **Advising primary health care** through clinical liaison at outreach clinics or RCHEs. In the local opinion survey,³⁵ medical care for RCHEs is considered as a mixture of both primary and secondary care (because of the frailty of the residents as explained under 27.1); and thus geriatric specialist input must be available.

27.3 **Working with a community based or outreach multi-disciplinary team to support domiciliary rehabilitation and frail elders living at home. Most elders prefer to live at homes rather than in institutions.** While it is reassuring that the total proportion of elders living with their children at 56.8% in 2001 were just similar to 57.2% in 1991,⁴¹ the Government should take on a proactive role to promote and facilitate children living with and supporting their elderly patients by various means, e.g. providing mass education, tax incentive, alternative housing and legal safeguard, and the adequate provision of community resources to enable elders living at homes despite disabilities.

27.4 **Geriatric specialist assessment prior to entry to RCHE or other community care packages**

27.4.1 It must be emphasized that residential care is costly to the individual elder, his/her family and the society in both financial and humanistic terms. **Most elders prefer to live at homes rather than in institutions.**

27.4.2 Research has revealed the high prevalence of **undiagnosed medical conditions among elderly people prior to entry to care homes**: change in status and complaints of an elder that need medical treatment are not entered into a careful diagnostic approach but are falsely attributed to ageing or social problems and responded to with social measures, such as referral for institutional care.

27.4.3 There is **good evidence that multi-disciplinary assessment including the involvement of geriatricians, identifies unmet medical needs and results in alteration of decisions about appropriate residential care^{42,43} or future long term care in hospitals.^{44,45}** Such **pre-admission assessments** have been shown to detect treatable undiagnosed illnesses, improve physical function, and thus alleviate the need for care home placement and reduce total health and social cost. Thus geriatrics involvement is important both from the point of view of the individual patient and to preserve an effective and equitable use of expensive community care resources.

27.4.4 One useful index to the state of health of an elderly population is the proportion living in institutions – the **institutional rate**. In Hong Kong, the proportion of elders aged 65+ who are living in

institutions rather than domestic households increased from 6.2% in 1991 to 9.1% in 2001;⁴¹ and for the past 5 years, the proportion of elders institutionalized in care homes have been **rising** from 6.0% in 2000 to 6.7% in 2004 (Figure 2).^{15,16} These **local institutional rates are high when compared with** the institutional rates (overall: 5-10%, care homes: 0.5-6.5%, nursing homes: 2-5%) reported in **other developed countries with high life-expectancies**.^{46,47} Timely introduction of geriatric specialist assessment prior to care home entry locally, as well as the provision of geriatric support to those elders who prefer to live at homes despite disabilities, are important in checking this rising institutional rate with important implications on quality and costs of elderly health care.

27.5 Giving advice about services

Following a number of Government initiatives and funding for alternatives to hospital or residential care many different projects are developing in the community such as enhanced home and community care, integrated home care, and non-hospital infirmary care. Many of these projects depend on multidisciplinary clinical guidelines. Geriatricians should be involved locally in the development, implementation and audit of these guidelines.

28. Further Issues on RCHEs

In addition to the points raised under 19.1.2, 24.1, 24.2, and 24.4 above concerning the roles of geriatric specialists and CGATs in reducing the need for residential care placement through pre-admission assessment and intervention, supporting and maintaining frail elderly residents of RCHEs in the community through outreach clinics, and providing acute and continuing hospital geriatric care should the need arise; there are several further issues of concern in relation to residential care:

28.1 Quality of RCHEs

The quality of RCHEs in Hong Kong, especially the private ones, vary considerably in their provision of personal and nursing care to their residents. While the recently revised Code of Practice for Residential Care Homes has made welcome improvements, there remains a need for regular committed monitor of compliance to these regulations. Geriatricians and gerontologists can further enhance the quality of RCHEs through accreditation schemes.⁴⁸

28.2 Visiting Medical Officer(VMO) Service

28.2.1 In the recent local opinion survey,³⁵ almost all respondents agreed that engaged VMOs should attend to the basic medical needs of RCHEs on a regular basis. 95.3% of respondents agreed that the Code of Practice for RCHEs should be revised to engage doctors to take care of their residents' medical needs on a regular basis (instead of the present minimal input of a licensed VMO to undertake annual medical examination).

28.2.2 73.1% of respondents are willing to spend time looking after the medical needs of RCHEs on a regular basis, and 74.7% of them can devote over 1-2 hours per week. However, only 15.3% of respondents are willing to provide 24 hour medical support to RCHEs, and there is difficulty expressed, particularly by private practitioners in solo practice.³⁵

28.2.3 While 97.3% of primary doctors considered that they can act as gatekeepers, a substantial number of geriatricians disagreed (43.2%).³⁵ They have considerable doubt whether it is feasible to employ private primary care doctors to provide 24 hour support to RCHEs and to act as "gate-keepers" for Accident & Emergency Department attendances and hospital admissions. This was based on recent experience of Hospital Authority's VMO project in 2003/4 and evidence by the evaluation reports submitted to the Geriatrics sub-committee in 2004.⁴⁹

28.2.4 In the local opinion survey,³⁵ the **success elements** essential for VMOs to take up the role as gatekeepers in RCHEs, in order of decreasing importance, are time and frequency that the VMOs can afford to spend in RCHEs; financial return from RCHE visits; experience of having worked with CGATs; and possession of post-graduate diploma such as Post-graduate Diploma in Community Geriatrics (PDCG) or

Diploma in Geriatric Medicine (DGM).

28.2.5 As to what would be regarded as **reasonable financial return**, 84.7% of respondents considered this to be HK\$ 500-1,500 per hour as (as compared to the current Hospital Authority's remuneration package of HK\$ 300-500 per hour).³⁵

28.2.6 While the Discussion Paper's proposal on RCHE to employ medical personnel is good in theory, **financial considerations would limit its practice**. Even with the resources available to the current subvented homes, it is impossible for them to appoint resident VMOs unless new resources are pumped into long term care.

28.3 Gate Keeping versus Goal Keeping

Instead of just focusing only on gate-keeping, high quality and responsive health care for residents must be our common goals and these should be achieved through effective partnership of a range of disciplines, professions and departments.^{15,16} Continuity of care and quality assurance in RCHEs require collaborative development, implementation and adherence to multi-disciplinary guidelines and protocols agreed by all relevant parties, as well as valid quality outcome indicators for bench-marking. Vested interests are detrimental to such development.

Manpower and Training Issues

29. The major reason for teaching geriatric medicine is not simply the increase in numbers of old people, but rather the increase in knowledge of old people, and the need for special attitude and organizational skills. Although the medical faculties of both universities in Hong Kong now have geriatric medicine included in their **undergraduate curriculum**, the knowledge and skills taught to medical students are inadequate to equip doctors facing a growing elderly population, and a growing knowledge base in geriatric medicine. This has become more pressing with the increasing emphasis on community care and the involvement of general practitioners and family doctors in the care of elderly people. It is with this in mind that the Hong Kong Geriatrics Society, together with the University of Hong Kong, started the **Postgraduate Diploma in Community Geriatrics** programme in 2000, aiming to further the knowledge and skills of general practitioners in geriatric medicine.⁵⁰ The HKGS also facilitated the establishment of the first overseas centre for the **Diploma in Geriatric Medicine (Glasgow)** examination in Hong Kong in June 2005.

30. While attempts have been made in recent years to enhance the knowledge of general practitioners on primary care of elders via formal and informal training programmes, there remains a pressing need to enhance the training of **family medicine trainees** in the module of geriatric medicine to meet the population challenge. Currently, the regulations of the Diploma of Geriatric Medicine (Glasgow) of the Royal College of Physicians and Surgeons of Glasgow stipulate that, to be eligible to sit for the examination, candidates have to complete at least 4-month full-time training (or part-time equivalent) in a department of geriatric medicine.

31. As the population grows and demands both on emergency acute take for elderly people grow and the care provided within the community develop this is likely to require an increase in **geriatric specialists**. The Royal College of Physicians (RCP) and the British Geriatrics Society recommend that the minimum requirement for any district is one consultant whole time equivalent dedicated to geriatric medicine per 4,000 elderly over 75 years of age.⁵¹ If geriatric departments take on more responsibilities for 'all-ages' acute take, assessing patients or providing continuing care for patients within community institutions, considerable extra manpower will be required. Survey within the Hospital Authority in 2004 showed that there were 54 full-time equivalents (FTE) of geriatric specialists in that year, a deficit of 31 FTEs as compared with the requirement of 85 FTEs when applying the RCP recommended ratio⁵¹ to the local 75+ population. The same survey of in-charges of geriatric services gave a projected overall need for 96 FTEs of geriatric specialists by 2006, which was close to that estimated from the RCP ratio (94 FTEs). However recruits of new geriatric trainees and fellows have been declining for the past 4 years (Figure 3), and it is likely that this deficit will widen if remedial actions are not taken.¹⁴

32. In 1990, the HKGS started certificate courses in geriatrics for nurses, and since 1994, the HKGS has been collaborating with the Institute of Advanced Nursing Studies of the Hospital Authority to conduct the **“Post-registration Certificate Course in Gerontological Nursing.”** However, there is increasing concern on the lack of acute geriatric wards to train geriatric nurses/ nurse specialists; the environment for training in acute geriatric medicine is suboptimal.

33. Since 2003, the HKGS has advised and monitored the standard of the **Skills Upgrading Scheme for Health Care Workers** of elderly care sectors, organized by the Education and Manpower Bureau of the Hong Kong SAR Government. It has been observed that recruitment of appropriate workers into the upgrading scheme is much affected by the prevailing economic status in Hong Kong, the elderly health care industry being not regarded as a particularly attractive field of work.

Conclusion and The Way Forward

34. The proposed care model in the Discussion Paper does not really serve the health care needs of elders well.

35. The HKGS proposes that **geriatric medical care should be explicitly considered in the context of hospital care and community geriatric care.**

36. The HKGS suggests that consideration be made to **facilitate geriatricians to contribute substantially to future hospital and community care of elderly people.**

37. The **HKGS is ready to contribute to the planning for the future health care of elderly people** and would be happy to see the establishment of a **communication channel** with the Health, Welfare and Food Bureau for future continuous consultation and dialogue. In this connection, we suggest the setting up of a special task group or working group under the Health and Medical Development Advisory Committee (HMDAC) to add flesh to the Government’s future blue print on health care.

38. **Inadequacies of acute care and rehabilitation services cause inefficient and expensive care.** Making progress will need action in many areas. It is important for the Government to have commitment in the care of elderly people on both the preventive and the remedial aspects.

39. Implementation of the proposed **acute geriatric care model** would be cost-neutral to start with, by striking a balance between geriatric commitments and non-geriatric commitments of geriatricians. There is potential for cost saving in terms of optimal use of hospital resources; improving flow between the acute, rehabilitation, and long-stay compartments; reducing iatrogenesis and multiple medication problems; reducing disability; and reducing institutionalization.

40. **Predictors of admission to RCHEs are overwhelmingly health-related (including undiagnosed medical conditions)**, rather than social. No individual elderly person should enter institutional care without prior exposure to an effective system of comprehensive geriatric assessment backed up by appropriate multi-disciplinary treatment and rehabilitation.⁵² By optimizing an individual’s health and functional capacity, their need of future expensive hospital and long term care services can be minimized. **Timely introduction of geriatric specialist assessment prior to care home entry** is particularly important for Hong Kong because its institutional rate is high when compared with other developed countries with high life expectancies, and has been rising for the past decade.

41. **Elderly people admitted to RCHEs** often have multiple chronic illnesses and complex medical problems. Management of these extremely vulnerable individuals with “geriatric” syndromes such as dementia, falls, incontinence, malnutrition and iatrogenesis, etc. **require the specialist input of geriatricians** in partnership with primary care doctors, nursing and allied health professionals. Augmentation of the current partnership and support back-up by community geriatric assessment teams (CGATs) led by geriatric specialists are required if these needs are to be met.

42. We will need **extra geriatricians** but numbers will not significantly increase in the years to come. We do need to **maximize the ‘division of labour’**, to including primary care doctors with the appropriate experience, competency and commitment, psychogeriatricians, geriatric nurse specialists and hopefully an increasing number of therapists in providing comprehensive services.
43. Pertinent questions on **health care financing** have to be solved in order to bring about reform for sustainability, affordability, accessibility and quality health care for elderly people. The majority of the present generation of low income and under-privileged elderly people in Hong Kong will continue to rely on social security or the good will of their children for subsidy of their health care services. Workable health care financing models for the “to-be” old, especially the baby-boomers, have to be explored to meet the future escalating health needs of the elders.
44. On the other hand, the Government should take on a proactive role to rekindle the Chinese virtue of **filial piety**: children living with and supporting their elderly patients, a cultural expectation embedded in the Chinese character for “longevity,” which symbolizes the younger generation offering their produce and paying tributes to the older generation, an indication of intergenerational harmony rather than tension. Only then will longevity be treasured or celebrated, rather than feared or viewed negatively as a burden. The Government should take on the lead to **uproot ageism** that is prevalent within the society and health care system.
45. These are some of the issues that must be confronted if we are to improve our present medical care of biologically aged patients and successfully negotiate the coming demographic changes. Or else, more and more patients might be hived off into residential care homes, nursing homes or infirmaries where they will spend their days in precisely the way that Marjory Warren in the 1940’s found patients in the chronic sick wards and which stimulated her to advocate the development of the specialty of geriatric medicine.

Dr. TK Kong on behalf of the Hong Kong Geriatrics Society

References

1. Health and Medical Development Advisory Committee, Health, Welfare and Food Bureau. Building a healthy tomorrow – Discussion paper on the future service delivery model for our health care system. Hong Kong SAR Government, July 2005. Online. Available: http://www.hwfb.gov.hk/hmdac/english/dis_papers/dis_papers.html Accessed 20 July 2005.
2. Kong TK. Glasgow and the development of geriatrics in Hong Kong. British Geriatrics Society Newsletter July 2005: 10-11. Online. Available: http://www.bgsnet.org.uk/July05NL/06_hkgs-glasgow.htm Accessed 29 June 2005.
3. Kong TK. Dr. Marjory Warren: the Mother of Geriatrics. Journal of the Hong Kong Geriatrics Society 2000; 10(2): 102-105. Online. Available: <http://www.hkgs.org.hk/JHKGS0007p102.pdf> Accessed 17 November 2003.
4. Mulley GP. Journals of geriatric medicine and gerontology. Age Ageing 1999; 28(1):1-2.
5. Brocklehurst JC. Foreword. In: Tallis RC, Fillit HM (eds). Brocklehurst’s Textbook of Geriatric Medicine and Gerontology. 6th edition. Philadelphia: Churchill Livingstone of Elsevier Science Limited, 2003: ix.
6. Kong TK. Development and practice of geriatric medicine. In: Kong TK(ed). Hong Kong Geriatrics Society Curriculum in Geriatric Medicine. Hong Kong: Hong Kong Geriatrics Society, 2005: 15-17.
7. Andrews K, Brocklehurst JC. The implications of demographic changes on resource allocation. J R Coll Physicians Lond 1985; 19:109-111.
8. Kong TK. Hospital service for the elderly in Hong Kong – present and future. Journal of the Hong Kong Geriatrics Society 1990; 1(1):16-20. Online. Available: <http://www.hkgs.org.hk/JHKGS9003p016.pdf> Accessed 29 June 2005.
9. Rockwood K, Hubbard R. Frailty and the geriatrician. Age Ageing 2004; 33(5): 429–430.
10. Rubenstein LZ. An overview of comprehensive geriatric assessment: rationale, history, program models, basic components. In: Rubenstein LZ, Wieland D, Bernabei R, editors. Geriatric assessment technology. Milan: Kurtis, 1995.
11. Rubenstein LZ, Josephson KR, Wieland GD, et al. Effectiveness of a geriatric evaluation unit. A randomized clinical trial. New Engl J Med 1984; 311(26):1664-1670.
12. Stuck AE, Siu AL, Wieland GD, et al. Comprehensive geriatric assessment: a meta-analysis of controlled trials. Lancet 1993; 342(8878):1032-1036.
13. Kong TK. Acute geriatric care model. Senior Management Meeting (Elderly Services), Hospital Authority, Hong Kong, 13 July 2004.

14. Kong TK. An acute geriatric model to meet population needs. Medical Service Development Committee Discussion Paper MSDC-P200, Hospital Authority, Hong Kong, 10 Aug 2004.
15. Kong TK. Comprehensive geriatric assessment: From research to practice. Abstract presented at the Plenary Session V – Improving the service organization and needs assessment of older people, Hospital Authority Convention, 10 May 2005. Online. Available: <http://www.ha.org.hk/haconvention/hac2005proceedings/doc/p5-2.pdf> Accessed 17 October 2005.
16. Kong TK. Comprehensive geriatric assessment: From research to practice. *The Hong Kong Medical Diary* 2005; 10(9): 5-6.
17. Kong TK. Iatrogenesis – still a geriatric giant. *Journal of the Hong Kong Geriatrics Society* 1997; 8(1): 3-5. Online. Available: <http://www.hkgs.org.hk/JHKGS9712p003.pdf> Accessed 15 July 2004.
18. Anonymous. Need we poison the elderly so often? *Lancet* 1988; ii: 20-21.
19. Beard K. Adverse reactions as a cause of hospital admissions in the aged. *Drugs Aging* 1992; 2:356-367.
20. Routledge PA, O'Mahony MS, Woodhouse KW. Adverse drug reaction in elderly patients. *Br J Clin Pharmacol* 2003; 57:2: 121-126.
21. Schmader KE, Hanlon JT, Pieper CF, et al. Effects of geriatric evaluation and management on adverse drug reactions and suboptimal prescribing in the frail elderly. *Am J Med* 2004; 16:394-401.
22. Onder G, Pedone C, Landi F, et al. Adverse drug reactions as cause of hospital admissions: Results from the Italian Group of Pharmacoepidemiology in the Elderly (GIFA). *J Am Geriatr Soc* 2002; 50(12):1919-2107.
23. Lindley CM, Tully MP, Paramosthy V, Tallis RC. Inappropriate medication is a major cause of adverse drug reaction in elderly patients. *Age Ageing* 1992; 21:294-300.
24. Tallis R. Biological ageing, illness in old age and geriatric services. *Journal of the Hong Kong Geriatrics Society* 1993; 4(1): 4-11. Online. Available: <http://www.hkgs.org.hk/JHKGS9303p004.pdf> Accessed 1 Nov 2004.
25. Hubbard RE, O'Mahony MS, Cross E, et al. The ageing of the population: implications for multidisciplinary care in hospital. *Age Ageing* 2004; 33: 479-482.
26. Ellis G, Langhorne P. Comprehensive geriatric assessment for older hospital patients. *Br Med Bull* 2004; 71: 1-15.
27. Sanders AB. Older persons in the emergency medical care system. *J Am Geriatr Soc* 2001; 49(10):1390-1392.
28. Currie C. Accident, emergency, or what? *Age Ageing* 2005; 34:6-7.
29. Caplan GA, Williams AJ, Daly B, Abraham K. A randomized controlled trial of comprehensive geriatric assessment and multidisciplinary intervention after discharge of elderly from the emergency department - The DEED II Study. *J Am Geriatr Soc* 2004; 52(9):1417-1423.
30. McCusker J, Jacobs P, Dendukuri N, et al. Cost-effectiveness of a brief two-stage emergency department intervention for high-risk elders: Results of a quasi-randomized controlled trial. *Ann Emerg Med* 2003; 41:45-56.
31. Close J, Ellis M, Hooper R, et al. Prevention of falls in the elderly trial (PROFET): a randomised controlled trial. *Lancet* 1999; 353(9147):93-97.
32. Davison J, Bond J, Dawson P, et al. Patients with recurrent falls attending Accident & Emergency benefit from multifactorial intervention—a randomised controlled trial. *Age Ageing* 2005; 34(2):162-168.
33. Close JCT. Prevention of falls - a time to translate evidence into practice. *Age Ageing* 2005; 34(2):98-100.
34. Leung MF. Hospital based preventive strategies. Abstract presented at the International Symposium on Fall and Fracture Prevention for the Elderly, Department of Orthopaedics and Traumatology, Chinese University, 17 September 2005.
35. Chan FHW, Luk JKH, Chu LW, Kwok T, Lam TP. A study of the response of primary care doctors and geriatricians to the discussion paper on the health service delivery model for residential care homes for the elderly. Abstract presented at the Hong Kong Geriatrics Society Interhospital Geriatric Meeting, 23 Sept 2005.
36. Challis D. Community care – are we heading in the right direction? Abstract presented at the Plenary Session IV – Community-oriented service models, Hospital Authority Convention 2004, 10 May 2004. Online. Available: http://www.ha.org.hk/haconvention/hac2004proceedings/Plenary/p4_challis.pdf Accessed 17 October 2005.
37. Kong TK. Are we prepared for community care? *The Hong Kong Geriatrics Society Newsletter*, Feb 2004. Online. Available: <http://www.hkgs.org.hk/HKGS-Newsletter-0402.pdf> Accessed 1 Nov 2004.
38. Leung JYY, Yu TTK, Cheung YL, et al. Private nursing home residents in Hong Kong – how frail are they and their need for hospital services. *Journal of the Hong Kong Geriatrics Society* 2000; 10(2): 65-69. Online. Available: <http://www.hkgs.org.hk/JHKGS0007p065.pdf> Accessed 17 October 2005.
39. Luk JKH, Chan FHW, Pau MML, Yu C. Outreach geriatrics service to private old age homes in Hong Kong West Cluster. *Journal of the Hong Kong Geriatrics Society* 2002; 11(1):5-11. Online. Available: <http://www.hkgs.org.hk/JHKGS0201p005.pdf> Accessed 17 October 2005.
40. Kong TK, Lum CM, Mo KK. Development of a hierarchical activities of daily living scale for Chinese stroke patients in geriatric day hospitals. *Aging Clin Exp Res* 1995; 7: 173-178.
41. Census and Statistics Department. 2001 Population Census: Thematic Report – Older Persons. Chapter 7, Living Arrangement and Household Characteristics, p. 45. Hong Kong SAR Government, 2002.
42. Brocklehurst JC, Carty MH, Leeming JT, Robinson JM. Medical screening of old people accepted for residential care. *Lancet* 1978; ii:141-143.
43. Challis D, Clarkson P, Williamson J, et al. The value of specialist clinical assessment of older people prior to entry to care homes. *Age Ageing* 2004; 33(1): 25-34.
44. Ramsey F, Horsfall R, Rudd A. Selection for long-term hospital care. *Age Ageing* 1987; 16:301-304.

45. Denham MJ and Lubel D. Peer review and services for elderly people. *Br Med J* 1990; 300:1635-1636.
46. Ribbe MW, Ljunggren G, Steel K, et al. Nursing homes in 10 nations: a comparison between countries and settings. *Age Ageing* 1997; 26(Suppl 2):3-12.
47. Bajekal M. Health Survey for England 2000: Characteristics of Care Homes and Their Residents. London: The Stationery Office, 2002.
48. Leung MF. The development of residential home accreditation in Hong Kong. Abstract presented at the Hong Kong Geriatrics Society Interhospital Geriatric Meeting, 24 Sept 2004.
49. Hospital Authority Geriatrics Subcommittee – Notes of the 52th Meeting paragraph 14 iv, 8 Oct 2004.
50. Lam TP, Kong TK, Chan FHW, Wong CP. A postgraduate diploma course in community geriatrics for primary care doctors: experience of first three years. *The Hong Kong Practitioner* 2004; 26(10): 441-446.
51. Royal College of Physicians. Consultant Physicians Working for Patients, 2004.
52. Luxton T. Assess first, admit second. *Age Ageing* 2004; 33(1): 3-4.

Appendix

Figure 1. Hospital utilization by Hong Kong population in 2001 by age groups and sex

a Hong Kong population age pyramid 2001 (Source: Census and Statistics Department, Hong Kong)

b Patient-days consumed in public hospitals by Hong Kong population in 2001 (Source: Hospital Authority, Hong Kong)

c Patient-days consumed in public hospitals by each person in Hong Kong in 2001 (derived by dividing figures in Fig. 1b by figures in Fig. 1a)

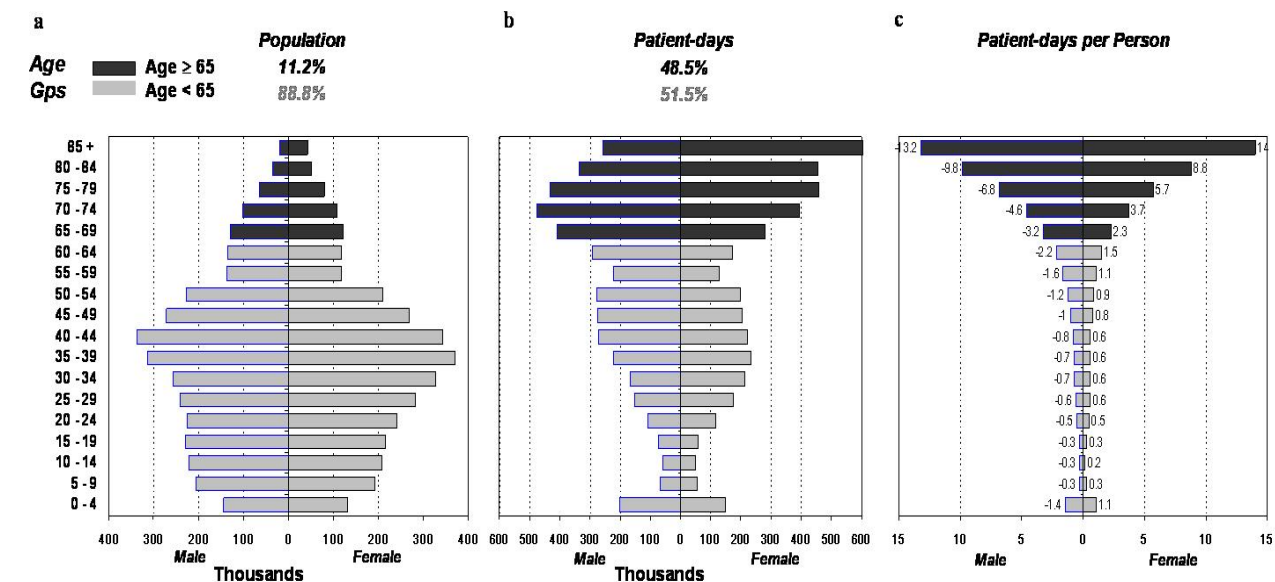


Figure 2. Rising institutional rate of elderly population (65+) in Hong Kong

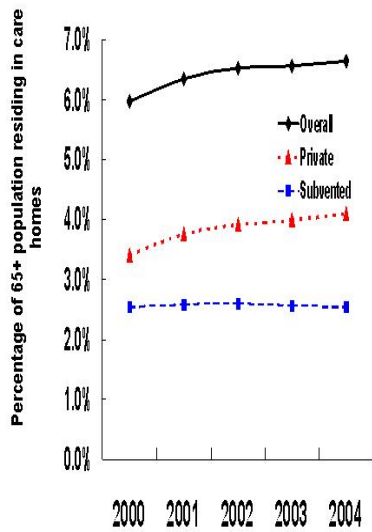


Figure 3. New fellows and trainees in Geriatric Medicine 1997 – 2004 (Source of data: Specialty Board in Geriatric Medicine, Hong Kong College of Physicians)

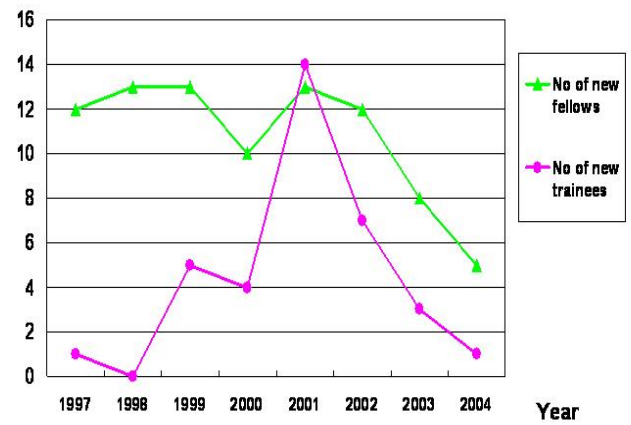


Table 1. Hospital utilization in Hospital Authority by frail elders for the period Jan 2003 to May 2004

Target Groups	Acute Beds per Day	Non-acute Beds per Day
Residents of care homes	880	184
Falls (aged 75+)	457	334
Stroke (aged 75+)	223	400
Delirium/Dementia (aged 75+)	12	32

Table 2. Acute geriatric beds of 14 acute hospitals in Hospital Authority as at July 2004

Cluster	Hospital	Number of designated acute geriatric beds	Number of designated acute geriatric wards
HKE	RHTSK	152	4
	PYNEH	6	0
HKW	QMH	0	0
KE	TKOH	10	0
	UCH	108	3
KW	PMH	12	0
	KWH	15	0
	CMC	0	0
	YCH	0	0
KCC	QEH	16	0
NTW	TMH	34	1
NTE	PWH	0	0
	NDH	0	0
	ANHN	0	0
	Total	353	8