ROLE OF COMMUNITY HOSPITALS IN CARE OF THE ELDERLY IN SINGAPORE

Dr David Yong

One of the great challenges of modern societies in the 21st century is the greying population. Notwithstanding that most older people will continue to live robust lives in communities, there will be a group of elderly who will have chronic diseases, succumb to functional impairments and disabilities who will consume health care resources. These frail elderly will present in an atypical manner and have multiple co-morbid medical conditions. During an acute illness, they will be at increased risk for iatrogenic complications like medication effects/side-effects and susceptible to rapid functional decline causing dependency and therefore reliance on caregivers.

Acute hospitals are driven by technologies and concentrate on specialities (disease model). In general, there is less attention to psychological, social and functional aspects of illness. There is also constant and persistent pressure to discharge the elderly once 'medical fitness' is defined. Furthermore, they are costly. Problems associated with immobility (e.g. pressure sores) are not uncommon and other prevalent disorders in older people like falls and fall risk, malnutrition and cognitive and affective disorders may not be properly elucidated or attended to. Discharge is premature if the patient has not been given time to regain function, carers to be identified and educated and/or safe suitable environments prepared. The discharge may lead to another adverse recurrent event or further complications. This may result in a downward spiral e.g. repeated falls and injuries with further worsening of function or even death – adverse events which are costly not only to the patient and family but also to the health care system. Discharge is inappropriate if the patient is admitted to a nursing home instead of a facility for trial of rehabilitation.

Community hospitals are transitional or step-down care facilities which function to address some of these issues in health care of the elderly. The bulk of its patients comprise referrals from acute hospitals. They are frail elderly of advanced age with recent functional deterioration from an acute event, commonly on a background of prior functional limitation and who now face prospect of difficulty going home.

The main functions of the community hospitals therefore are to provide geriatric assessment and rehabilitation, ongoing continuation of medical or nursing treatment (subacute care) and respite care. The patients for rehabilitation are admitted following stroke, falls and fractures, deconditioning and lower limb amputation. Deconditioning refers to transient loss of function related to immobility or lack of exercise (therefore reversible through physical therapy). It often occurs in frail older people who have diminished physiological reserves and often occur after acute illnesses such as infection or even after surgery when they are immobilised in the acute wards.

The five main causes of disabilities in older people are neurological disorders (CVAs, spinal stenosis, neuropathies etc.), musculoskeletal disorders (arthritis, fractures etc), cardiovascular disorders (e.g. IHD, peripheral arterial disease etc.), sensory impairments (vision, hearing) and mental disorders (depression, dementia). Hence, these diseases are prevalent in community hospital patients. Multiple problems (active and chronic,

DAVID YONG, MBBS(S'pore)
Head Medical Services, Ang Mo Kio Hospital

overt and covert) with multiple etiologies which interact, mask, confound and impact on each other in the one patient is the rule rather than exception. Hence the challenge in management of the frail elderly patient (and not treatment alone of the disease).

The key aspects of care in these facilities include:

a. multidisciplinary teams comprising the therapist, social worker and even volunteers besides the usual doctor and nurse with support by geriatricians, orthopedics, rehab physicians, geriatric psychiatrists, infectious disease physicians, orthotists, prosthetists, dietician etc.
b. a holistic multidimensional approach to assessment including functional and psychosocial
c. goal setting , progress monitoring and review and discharge planning including timely discharge date, competent caregiver, appropriate place with the links to the various necessary and relevant healthcare and social support agencies
d. preventative – through opportunistic and targeted screening for prevalent reversible co-morbidities (e.g. depression, effects of polypharmacy, cataract, carer stress etc).

Admissions are elective or planned. Upon arrival the patients would be reviewed by the entire team comprising the doctor, nurse, therapist and social worker. The goals are discussed at the team meeting as early as possible(usually within a week of admission).

At Ang Mo Kio Hospital for example, there are about 2000 admissions per year. 15-25% of patients would be subacute and require active treatments and close surveillance by medical and nursing staff. Cases such as these include hypotension, cardiac failure, hyponatremia, dehydration, uncontrolled diabetes, fevers and infections, wounds, DVTs and other 'symptoms' like drowsiness, pain, behaviours ('agitation' or 'refusal to eat' etc). These conditions either result from progression of the underlying disease or develop as a new complication. 15-18% of admissions will have to be referred back to the acute hospitals for worsening status.

Medical stabilization is needed before embarking on rehabilitation. Complications associated with bedfast state are treated early or prevented if possible. The patient's progress is carefully monitored and goals reaffirmed and new care issues highlighted and discussed at weekly team conferences. Caregivers are identified, resources and plans discussed, confidence instilled through education and ongoing support. Contrary to popular opinion, the community hospitals are not 'high class nursing homes' (except for a few who run chronic sick units). For example at AMKH, the average LOS for past 4 years has consistently been 28 days, and only 12-15% are awaiting nursing home placements.

Besides medical care, other features include:

a. *Teaching Programmes*
Most have regular inhouse lectures which are CME point accredited for their staff as well as GPs. Some also provide clinical attachment teaching to undergraduates and postbasic nursing students from Nanyang Polytechnic and Institute of Technical Education, and the Family Medicine and DGM programmes for doctors. Certain community hospitals run

special educational programmes every now and then for the carers, professionals and the public (e.g. rehabilitation, wound care etc.)

b. *Quality Assurance Programmes*
Since mid 2001, the Ministry of Health has included community hospitals under the Framework for Integrated Health Services for the Elderly. The effect of this initiative has been increased clinical support by acute hospital specialists (especially geriatrician, orthopedics, rehabilitationists and psychiatrist) as well as a drive towards quality improvement in these facilities. There are recommended audit parameters and standards to maintain or work towards to. At AMKH for example, there is a fall prevention team which has been effective in reducing inpatient falls. Other quality assurance issues being addressed include unplanned discharges, use of physical restraints, infection control, pressure sores etc. The LOS for hip fracture has been shortened by almost 40% through implementation of care pathways.

c. *Community Involvement*
The staff visit nursing homes and day care facilities for medical consults, assessments as well as receive suitable referral cases for treatments from these community agencies (including home care agencies) for hospitalization. For example at AMKH, 1% of our referrals are from the community and these achieve reasonably good outcomes. There also exists opportunities to work in partnerships with community in health promotion and disease prevention projects e.g. falls in older people

d. *Day Services*
Many of the CHs have day services (e.g outpatient medical clinic, day rehabilitation and care). This is a key area of service that is not fully realized. Many older people who are frail need ongoing close surveillance, besides active as well as maintainence physical and occupational therapy. Majority are accompanied by their caregivers – carer issues like burden, practical needs etc. can be reassessed. The CHs with its multidisciplinary team (including the current geriatrician support), availability of laboratory services and pharmacy, in-patient beds and staff who work round-the-clock in shifts is a unique and ideal one-stop health centre for these frail elderly at risk of subtle functional decline. The establishment of day services might also help in reducing the inpatient LOS of these CHs. These facilities also permit geriatric assessments for new referrals.

e. *Other co-located Services*
These facilitate networking and efficiency. For example, at AMKH, there is a satellite NKF Dialysis Centre, GP clinics, the Singapore Diabetic Society and acupuncture clinic. In-patients with end-stage renal failure use the NKF facilities, patients with diabetes are referred to the Diabetic Society for retinal screening and podiatry counseling and suitable patients receive also acupuncture treatment together with our standard western medicine.

Community hospitals in the future would evolve and undergo further changes to meet the needs of the sick frail elderly. There would be an enhancement and expansion of these current

services. For example the level of subacute care would increase and the standards improve(with co-location to and increased support from acute hospitals). Since the two biggest caseloads for rehabilitation is musculoskeletal and neurological, there would be a move to specialization in these two fields. The day facilities are uniquely poised to offer more intense medical-nursing inputs than just merely rehabilitation or social care.

Other new initiatives need to be looked into especially closer collaboration with general practitioners, polyclinics, home care, nursing homes and other community services for older people. 'Outpatient multidisciplinary teams' based in community hospitals, for example could help provide care and treatments at homes and even nursing homes thereby reducing hospitalizations or readmissions. The new Family Medicine Aged Care Fellowship training aims to train primary care physicians to lead and fill the niche in the community. Although community hospitals share many commonalities, historically they have developed at different rates and have even evolved from and to different models. Opportunities abound for sharing resources e.g. in areas of best practices and other QA programmes. Besides vertical integration upwards to acute hospitals and downwards to community step-down services, there seems to be wisdom for community hospitals in integrating horizontally with one another. With moves towards clustering, these facilities are likely to foster closer ties with the acute hospitals and perhaps even develop own unique services based on caseloads and acute hospital support. Lastly, the time is also ripe for research in community hospital not only as regards to its role but also diseases and outcomes in these facilities.

Studies overseas have shown that transitional/ step down care facilities simply increase LOS for each disease. There is also expressed concern that older people may be disadvantaged or even disciminated against by acute hospital system with establishment of these step down care facilities, and that older people may not receive appropriate care if standards in these facilities are lacking. Furthermore in this day of increasing accountability for the health dollar, the question we ask 'Is it cost-effective'? Intuitively we perceive the benefits or effectiveness of a step-down care facility: the pressure on acute hospitals to discharge is relieved, patients are given time and help to recover (especially functionally), carer issues clarified before the older patient is discharged to appropriate and safe environments. Cost-effectiveness studies however, are complex and may be difficult to undertake. We can use the goals of caring for elderly which have often been stated as: to improve function, to prevent disability and to enhance quality of life. Using that criteria, community hospitals are possibly or even probably desirable in that they help achieve these goals. In the end, it is about a confident elderly with a competent carer in a conducive environment of hope and love.