# THE FRAIL ELDERLY, HOMECARE AND THE GP – A COMMON APPROACH

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## (I) INTRODUCTION

It is estimated that up to 5% of elderly require substantial help with basic self-care tasks[1]. In absolute numbers, this translates to about 12,000 elderly presently in Singapore[2].

The old-old (>75 years by WHO classification) form 2.5% of the population, or 82,200 in absolute numbers. The American Medical Association White Paper on Elderly Health states that "after age 85, 40% of those living in the community fall in group of frail elderly".

These figures therefore give an idea of the size of the target elderly population that will be most in need of health care, community support services and long term care.

## (II) THE FRAIL ELDERLY

Hazzard defines the frail older person as characteristically having one of the following:

1. extreme old age
2. disability i.e. having limitations in self-care activities and instrumental activities of daily living
3. presence of multiple chronic diseases and/or geriatric syndromes.

As a family physician, it is important to identify this group of frail older persons as they are at highest risk of adverse health outcomes ranging from:

1. dependency and risk of institutionalisation
2. falls
3. acute illnesses
4. hospitalisations
5. slow recovery from illnesses
6. mortality

## (III) WHAT IS HOME HEALTH CARE?

While most doctors are familiar with the term 'housecalls', which is essentially a medical consultation in the patient's home, home health care is on-going and continuing care at the patient's home. The patient is referred out only when more complex medical, nursing or rehabilitative care is needed.

With our ageing population, greater awareness is needed on the needs of the frail elderly and on maintaining them in the community.

Community geriatrics has its distinct emphases. It is important to know what is normal ageing, the preventive aspects of community geriatrics such as falls assessment and knowing when and how to refer for further assessment.

The Family Physician should be able to pick up the frail elderly with "failure to thrive" and "mobility problems" with the same confidence as that for the child.

## (IV) CONSULTING FOR THE FRAIL ELDERLY

Stott and Davis describes an *aide me moire* of potential in primary care consultation in 1979, organised into a framework of 4 ABCD tasks.

The potential of consultation for the frail elderly can be summarised as follows in a modified framework.

Operational tasks on potential in consultation of frail elderly:

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| | |
|---|---|
| **A** Management of presenting problems | **B** Modification of help-seeking behaviour |
| **C** Management of continuing problems | **D** Opportunistic health promotion |
| **E** Environment Assessment | **F** Function Establishment |

Stott and Davis 4 ABCD tasks are:
**A**cute problem management
**B**ehaviour modification of help-seeking behaviour
**C**ontinuing problem management
**D**isease prevention

With the frail elderly, I have incorporated 2 further tasks:
**E**nvironment assessment
**F**unction establishment

While the fullest of potential of consultation may only be seen in a home visit, the principles are worth keeping in mind in the office consultation. Also the spectrum of frail elderly ranges from the community walker to the home-bound to the bed-bound, and the consultation may well begin in the office.

### Task E:

The frail elderly is an organism in homeostasis with his environment.

The environment can be seen in 2 parts:

1. Physical environment – home setting
2. Social environment – presence of a caregiver as well as financial condition

For example, failure to thrive may be due to elderly being unable to access nutritious food either because of physical contraints or lack of finance.

### Task F:

Establishing function is important in the frail elderly. It allows for:

1. a baseline status
2. detecting of disease. E.g. any intellectual or functional decline may herald dementia / depression or other illnesses requiring further investigations. Functional decline may be the first indication of disease in the elderly.
3. monitoring of response to intervention. E.g. functional improvement after treatment of depression.

Function establishment looks at:

1. Cognition and mood
   A commonly used simple score used locally for cognition screening is the modified Abbreviated Mental Test (Table 1).

**Table 1: Modified Abbreviated Mental Test**

| | |
|---|---|
| Age (+2) | |
| Year of Birth | |
| Address | |
| Place | |
| Time (+1 hour) | |
| Current year | |
| Recognises 2 persons | |
| Prime Minister | |
| 3 Objects recall | |
| Serial 20-3 | |
| Total Score | /10 |

0-4 Probable cause; 5-6 Borderline; >7 Normal

2. ADL
   - activities of daily living
   - refers to self-care tasks that a person performs in the course of living to maintain cleanliness, hygiene, appearance, nutrition and mobility
   - ADL is the ability to feed, toilet, transfer (getting in and out of bed), bathe, dress, remain continent and walk.
3. IADL
   - instrumental activities of daily living
   - refers to the more complex tasks necessary to function in society and requires combination of physical and cognitive activities
   - easily remembered as SHAFT
     **S**hopping
     **H**ousehold chores
     **A**bility to take medications on own
     **F**inances – banking and handling money
     **T**ransport and telephone.

Assessing of function may be through simple reporting from patient or caregiver. Simple office test includes seeing patient " get up and go" to see his mobility status.

In a busy outpatient consultation, the tasks will need to be spread out over several sessions. This will make it less onerous and more manageable.

### (V) PROBLEM LISTING IN THE FRAIL ELDERLY

Most doctors are used to problem oriented medical records and used to a biomedical approach to diagnosis:

S : Subjective findings
O : Objective findings
A : Assessment
P : Plan

Traditionally, the assessment is often biomedical disease diagnoses. In the frail elderly, however, they have problems related to poor function that may not necessarily fit into a single biomedical diagnosis (if any). Similarly, they may have a biomedical diagnosis which may not need intervention as it does not impair function.

The family physician, in practising a patient-centred model, will therefore place as much emphasis on the traditional biomedical agenda (disease problem listing) as to understanding the meaning the illness has for the frail elderly patient (functional problem listing).

Example: Poor mobility may be due to multiple factors.

Example: having cataract does not mean surgery if the vision is adequate for reasonable quality of life.

An approach to problem listing in the frail elderly is to bear in mind:
Disease Vs Impairment Vs Disability Vs Handicap

*Definitions:*

1. Impairment is the loss of an organ
2. Disability is the loss of function as a result of impairment
3. Handicap is the net effect of impairment and disability in the context of environment.

Bearing this in mind will allow not only for traditional biomedical problem listing but also functional problem listing. This can be done after doing task E and F mentioned above.

*Example 1:*
Mrs Lim may have painful OA knees (loss of proper functioning knee joint). She then has decreased mobility (loss of ADL function as a result of impairment). Because she does not stay

on a lift-landing flat, she is unable to go downstairs for her marketing and to meet her friends. (IADL/SHAFT function loss-net effect of impairment and disability in the context of environment).

So a problem list for her may be:
1. Hypertension
2. Hypercholesterolemia
3. Decreased mobility secondary to
   - painful OA knees
   - poor access to community
4. Depression from loss of social interactions.

Other examples of functional problem listing include:
1. decreased vision
2. geriatric syndromes:
   - Instability (Falls)
   - Immobility (Bed-bound/chair-bound/ home-bound patient)
   - Inanition (Poor feeding or failure to thrive)
   - Incontinence
   - Intellectual decline.

## (VI) MANAGEMENT PLANS FOR THE FRAIL ELDERLY

For functional problems, using above example 1 as illustration:

Aim is to:
1. reduce *impairment* through promoting recovery e.g. physiotherapy
2. reduce *disability* through restoration of function e.g. TKR
3 reduce *handicap* through use of aids and appliances and environment modification e.g. W/F or shifting to flat with lift landing.

Clearly forming a careplan for the frain elderly may involve referral to and working with other disciplines e.g orthopaedic surgeon, physiotherapist, community agencies.

## (VII) A CASE STUDY TO ILLUSTRATE HOME HEALTH CARE DELIVERY TO FRAIL HOME-BOUND ELDERLY

*Case Study:*

Madam Leong is an 85-year-old lady who suffered a stroke in February this year. She is a Malaysian staying with her Singaporean daughter and son-in-law who are both in their late sixties. For the past 10 years, she had been seeing her family doctor 2 blocks away for hypertension and diabetes mellitus. Before her stroke, she was still able to go downstairs and do simple marketing.

She presented with difficulty walking and had a fall, sustaining a hip fracture. She was admitted to TTSH for 3 weeks, had hip surgery and discharged thereafter because daughter was afraid of incurring further cost. She declined the case manager's offer to have a trial of rehabilitation at the community hospital. The case manager subsequently referred her to home medical services for continuing medical care as well as the support of a multi-disciplinary home medical team.

During the home care doctor's home visit done a week after discharge, the daughter was visibly stressed. Madam Leong was now dependent on her for activities of daily living. She was wheel-chair bound and not for full weight-bearing as yet. She needed moderate assistance with transfers. She was easily agitated and teared easily. She was not sleeping at night.

**Applying consultation model over the next months:**

1. Acute care – after diagnosing depression as contributing to agitation, patient was treated with anti-depressants
2. Behaviour modification – involved educating daughter on dementia care and how to manage behaviour
3. Chronic care – follow up of hypertension and diabetes mellitus
4. Disease prevention/ opportunistic health promotion – fall advice and home modifications, also identified daughter as caregiver and advice on how to manage caregiver stress
5. Environment assessment – physical and social environment
6. Function establishment – periodic reviews on the function status.

The multi-disciplinary team comprising occupational therapist, nurse and nurse-aides were able to provide home rehabilitation, caregiver training and advice on assistive devices and home modifications.

Over the next 4 months, Mdm Leong improved. Her mood and sleep patterns improved. She is currently ambulant with walking frame and less dependent for self-care activities.

## (VI) CONCLUSION

The care of the frail elderly in the community needs a concerted effort from family physicians whether practising in their own clinics, polyclinics or in specialised multi-disciplinary teams. With greater awareness and a common framework, primary health care for the frail elderly will keep the majority aging in place, where they should rightly belong.

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