Services for Frailty or Services for Dementia?

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Do we have to decide?

• How Common are they?

  – Frailty up to 25% of those over 75, 40% of those over 85
  – Dementia – one in 6 people over 80 – 16%, 30% over 85 (source ADS website)

• Are they the same people?
Relationship Between Dementia and Frailty

N= 654

From Kulmala et al 2013
Gerontology 60(1) 16- 21

Cross Sectional Community Based study
(MCI figures omitted)
Criteria for Frailty (from Fried)...

- Weight loss
- Exhaustion
- Sarcopenia
- Slow Gait Speed
- Low energy expenditure

- Some say cognitive decline should be another criterion
Rockwood CFS 2004

Clinical Frailty Scale*

1. Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

2. Well – People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.

3. Managing Well – People whose medical problems are well controlled, but are not regularly active beyond routine walking.

4. Vulnerable – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being “slowed up” and/or being tired during the day.

5. Mildly Frail – These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

6. Moderately Frail – People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.

7. Severely Frail – Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).

8. Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

9. Terminally Ill – Approaching the end of life. This category applies to people with a life expectancy <6 months, who are not otherwise evidently frail.

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common symptoms in mild dementia include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In moderate dementia, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In severe dementia, they cannot do personal care without help.


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But there is another link...

Frailty Syndromes;
• Immobility
• Falls
• Incontinence
• Delirium
Outcomes of delirium....

OR, 12.52 [95% CI, 1.86-84.21]; Incident dementia only

Delirium in Elderly Patients and the Risk of Postdischarge Mortality, Institutionalization, and Dementia A Meta-analysis
Witlox et al 2010 JAMA
Coexistence of Delirium and dementia

Jackson et al 2016 Age and Ageing

Prospective cohort study of older people (over 70) admitted to DGH.

17% diagnosed with delirium (using DSM-IV-TR criteria)

125 of these pts recruited – only 36% had a previous diagnosis of dementia

82 seen at 3 months (of others 20% died, 8% declined, 6% not contactable)
Follow up Results
Jackson et al 2016 Age and Ageing

Undiagnosed long-term cognitive impairment in patients with delirium

Available

Total Followed up
82

Cognitive outcomes at 3 month follow-up

Persistent delirium
5
6.1% (0.9-11.3%)

MCI
14
17.1% (9.0-25.3%)

Dementia
47
57.3% (46.6-68.0%)

No Cognitive impairment
16
19.5% (10.9-28.1%)

Undiagnosed cognitive impairment
31
37.8% (27.3-48.3%)

Dementia
Previously undiagnosed
17
20.7% (11.9-29.5%)

Dementia
Previously diagnosed
30
36.6% (26.2-47.0%)
How do we know who has unrecognised dementia at time of admission?

<table>
<thead>
<tr>
<th></th>
<th>Dementia – not previously recognised</th>
<th>No previous dementia diagnosis</th>
<th>OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Years, mean, SD</td>
<td>87.2±7.0</td>
<td>82.6±6.2</td>
<td>1.12 (1.01-1.25) *</td>
</tr>
<tr>
<td>Gender % female</td>
<td>64.7</td>
<td>57.6</td>
<td>1.35 (0.40-4.50)</td>
</tr>
<tr>
<td>Co-morbidity (Charlson co-morbidity index)</td>
<td>2 (2)</td>
<td>1 (3)</td>
<td>1.18 (0.84)</td>
</tr>
<tr>
<td>Frailty (Rockwood clinical frailty scale)</td>
<td>6 (2)</td>
<td>4 (2)</td>
<td>2.58 (1.34)</td>
</tr>
</tbody>
</table>

Jackson et al 2016 Age and Ageing
How does this relationship develop?

We need to consider the issue of shared risk factors;
Frailty Index from CSHA

• Based on the Cumulative Deficit model of Frailty
  – The more symptoms, signs and diseases you have, the more likely you are to have frailty
  – Developed into a frailty index- FI

– Many of the predictive ‘deficits’ are traditional risk factors- eg HT, IHD, Stroke
How does this relationship develop?

We need to consider the issue of shared risk factors which are not ‘typical for dementia’;

Using CSHA data

Use Frailty Index with only NTRF

Still possible to predict Alzheimers disease – $r^2=0.75$

Song et al Neurology 2011
**What are the NTRF?**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Present %</th>
<th>OR (AR)</th>
<th>95% CI</th>
<th>Present %</th>
<th>OR (AR)</th>
<th>95% CI</th>
<th>Present %</th>
<th>OR (AR)</th>
<th>95% CI</th>
<th>Present %</th>
<th>OR (AR)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>How good is your health?</td>
<td>2</td>
<td>3</td>
<td>1.4-6.6</td>
<td>2</td>
<td>2.7</td>
<td>1.4-5.2</td>
<td>6</td>
<td>14.2</td>
<td>10.1-19.9</td>
<td>1</td>
<td>2</td>
<td>5.0</td>
</tr>
<tr>
<td>How good is your eyesight?</td>
<td>4</td>
<td>10</td>
<td>2.4-9.8</td>
<td>9</td>
<td>4.3</td>
<td>2.4-7.6</td>
<td>12</td>
<td>5.6</td>
<td>4.1-7.5</td>
<td>3</td>
<td>9</td>
<td>6.6</td>
</tr>
<tr>
<td>How good is your hearing?</td>
<td>3</td>
<td>7</td>
<td>2.1-8.6</td>
<td>7</td>
<td>4.4</td>
<td>2.5-7.9</td>
<td>7</td>
<td>3.4</td>
<td>2.5-4.6</td>
<td>3</td>
<td>6</td>
<td>3.8</td>
</tr>
<tr>
<td>Does the denture fit?</td>
<td>11</td>
<td>16</td>
<td>1.0-23</td>
<td>15</td>
<td>1.3</td>
<td>1.0-1.9</td>
<td>15</td>
<td>1.3</td>
<td>1.1-1.6</td>
<td>11</td>
<td>12</td>
<td>1.2</td>
</tr>
<tr>
<td>Arthritis or rheumatism?</td>
<td>56</td>
<td>55</td>
<td>0.7-12</td>
<td>55</td>
<td>0.9</td>
<td>0.7-1.2</td>
<td>57</td>
<td>1.0</td>
<td>0.9-1.2</td>
<td>56</td>
<td>1.1</td>
<td>0.9-1.3</td>
</tr>
<tr>
<td>Eye trouble?</td>
<td>25</td>
<td>43</td>
<td>1.7-30</td>
<td>37</td>
<td>1.8</td>
<td>1.4-2.3</td>
<td>38</td>
<td>1.9</td>
<td>1.6-2.1</td>
<td>22</td>
<td>37</td>
<td>2.1</td>
</tr>
<tr>
<td>Ear trouble?</td>
<td>23</td>
<td>38</td>
<td>1.5-26</td>
<td>37</td>
<td>1.9</td>
<td>1.5-2.4</td>
<td>34</td>
<td>1.7</td>
<td>1.5-1.9</td>
<td>20</td>
<td>31</td>
<td>1.8</td>
</tr>
<tr>
<td>Trouble with your stomach?</td>
<td>25</td>
<td>23</td>
<td>0.9-6.1</td>
<td>24</td>
<td>1</td>
<td>0.7-1.3</td>
<td>28</td>
<td>1.2</td>
<td>1.0-1.4</td>
<td>24</td>
<td>23</td>
<td>1.0</td>
</tr>
<tr>
<td>Kidney trouble?</td>
<td>9</td>
<td>6</td>
<td>0.3-1.1</td>
<td>1</td>
<td>0.8</td>
<td>0.5-1.2</td>
<td>14</td>
<td>1.8</td>
<td>1.3-1.9</td>
<td>8</td>
<td>8</td>
<td>0.9</td>
</tr>
<tr>
<td>Loss control of your bladder?</td>
<td>13</td>
<td>18</td>
<td>1.0-2.0</td>
<td>16</td>
<td>1.2</td>
<td>0.9-1.7</td>
<td>18</td>
<td>1.4</td>
<td>1.2-1.7</td>
<td>12</td>
<td>15</td>
<td>1.3</td>
</tr>
<tr>
<td>Loss control of your bowels?</td>
<td>3</td>
<td>4</td>
<td>0.5-2.3</td>
<td>4</td>
<td>1.3</td>
<td>0.7-2.3</td>
<td>7</td>
<td>2.1</td>
<td>1.8-2.7</td>
<td>3</td>
<td>3</td>
<td>1.2</td>
</tr>
<tr>
<td>Trouble with your feet or ankles?</td>
<td>30</td>
<td>30</td>
<td>0.9-1.4</td>
<td>32</td>
<td>1.1</td>
<td>0.9-1.5</td>
<td>39</td>
<td>1.5</td>
<td>1.4-1.7</td>
<td>26</td>
<td>37</td>
<td>1.6</td>
</tr>
<tr>
<td>Nose stuffed up or sneezing?</td>
<td>15</td>
<td>18</td>
<td>0.8-1.7</td>
<td>16</td>
<td>1.1</td>
<td>0.8-1.5</td>
<td>19</td>
<td>1.3</td>
<td>1.1-1.5</td>
<td>14</td>
<td>20</td>
<td>1.6</td>
</tr>
<tr>
<td>Any fracture?</td>
<td>5</td>
<td>5</td>
<td>0.5-1.9</td>
<td>5</td>
<td>1</td>
<td>0.6-1.7</td>
<td>7</td>
<td>1.3</td>
<td>1.0-1.7</td>
<td>4</td>
<td>6</td>
<td>1.4</td>
</tr>
<tr>
<td>Chest problems?</td>
<td>15</td>
<td>11</td>
<td>0.4-1.1</td>
<td>13</td>
<td>0.9</td>
<td>0.6-1.3</td>
<td>25</td>
<td>2.0</td>
<td>1.7-2.3</td>
<td>12</td>
<td>10</td>
<td>0.8</td>
</tr>
<tr>
<td>Have you had a cough?</td>
<td>11</td>
<td>12</td>
<td>1.1</td>
<td>12</td>
<td>1.0</td>
<td>0.7-1.5</td>
<td>15</td>
<td>1.4</td>
<td>1.2-1.7</td>
<td>10</td>
<td>12</td>
<td>1.2</td>
</tr>
<tr>
<td>Skin problems?</td>
<td>18</td>
<td>21</td>
<td>0.8-1.6</td>
<td>21</td>
<td>1.2</td>
<td>0.9-1.5</td>
<td>20</td>
<td>1.1</td>
<td>0.9-1.3</td>
<td>18</td>
<td>20</td>
<td>1.2</td>
</tr>
<tr>
<td>Dental problems?</td>
<td>19</td>
<td>20</td>
<td>0.7-1.5</td>
<td>18</td>
<td>1.1</td>
<td>0.9-1.3</td>
<td>21</td>
<td>1.1</td>
<td>0.9-1.3</td>
<td>18</td>
<td>20</td>
<td>1.2</td>
</tr>
<tr>
<td>Have you had other problems?</td>
<td>23</td>
<td>21</td>
<td>0.9-1.3</td>
<td>22</td>
<td>1</td>
<td>0.7-1.3</td>
<td>25</td>
<td>1.1</td>
<td>1.0-1.3</td>
<td>22</td>
<td>23</td>
<td>1.0</td>
</tr>
<tr>
<td>High blood pressure</td>
<td>33</td>
<td>32</td>
<td>0.7-1.3</td>
<td>34</td>
<td>1.1</td>
<td>0.8-1.4</td>
<td>37</td>
<td>1.2</td>
<td>1.0-1.3</td>
<td>31</td>
<td>31</td>
<td>1.1</td>
</tr>
</tbody>
</table>
Yet Another link

Spouses of people with dementia have increased risk of frailty.

Dementia Spousal Caregivers have;
40% inc risk of increased frailty at time of death (of care recipient)
90% inc risk 2 years after death is reported

Compared with non dementia care givers

Health and Retirement Longitudinal Study
Dassel et al 2016. Gerontologist
Finally......

The issue of ‘Cognitive Frailty’

Physical Frailty with cognitive impairment in the absence of a full dementia syndrome

Is it real?

How does it relate to MCI?.

Potential for reversibility?
There is overlap...!

• Suggests that;

• OPMHT should look for frailty in those with cognitive problems (using history and brief physical examination – TUGT and timed walk)

• Geriatricians should look for cognitive problems in those with frailty (using history and cognitive function tests)
What do you do if you do find frailty?

• Local Agreement..........


Treating Frailty;

• **Changing Severity (in due course)**
  – with nutrition?
  – exercise programmes to address the sarcopenia-details unclear but definite evidence for intensive resistance exercise (which is hardly available)
  – Multi faceted approach to target the characteristics
    – Eg Cameron et al 2013.

• **Managing the Effects of Frailty;**

  ‘Frailty marks the point at which disease based guidelines are no longer the priority’.

Comprehensive Geriatric Assessment (a process of care)
How Geriatricians do it

Assessment

Creation of stratified problem list

Identification of Goals

Bespoke Care Plan

Regular Planned Review

Interventions

Mental/ Psychological

Functional

Social

Physical

Environmental

Comprehensive Geriatric Assessment - CGA/COAA
For Example

BP management

Ogliari G et al
Age and Ageing 2015; 44: 932–937
75 yrs + cohort study N=1587
Old Age Psychiatrists also do it..

Care Programme Approach

The Care Programme Approach (CPA) is a way that services are assessed, planned, co-ordinated and reviewed for someone with mental health problems or a range of related complex needs.
CPA and CGA

• CPA probably looks at risk better than CGA, but there are many risks associated with frailty which we address less formally!...

• Could we have a common process for a joint approach to an older person with frailty or with dementia or both?
• What could we learn from each other?
What does a whole Frailty/Dementia service look like?

How long is a piece of string?!
Fit for Frailty Part 1 – Recognising and Managing Frailty in Individuals

Part 2– Designing, commissioning and managing services for frailty

BGS.org.uk
Pathways;

We need to underpin our strategy with joint pathways for:

1] Recognising Frailty/Dementia and defining health and non health streams
2] Designing and Managing Health Streams for
   – Mild Frailty/Dementia
     Community programmes, Leisure, surveillance and education eg Trigger Tool and Memory Matters
   – Moderate F/D – HMR, CGA and Care/Wellbeing Planning
   – Advanced F/D – advanced care planning, palliative care.
   – And then pathways for particular problems eg falls/continence/low mood

3] Pathways to manage crises – in and out of hospital (each easily accessible)
4] Pathways for Recovery, Rehabilitation and Reablement
Frailty Hub is a multiagency, multiprofessional high level group (including Older People) with a ‘We can fix it’ mentality. Responsible for evolving and nurturing the Frailty Service.
But....

• Investment in Community /OPMH Services has not followed the increase in NHS Budget
  – Numbers of DN’s fell by 38% between 2001 and 2011 (RCN 2013)

• ‘Primary care in crisis’

• ‘The staff we will have are the staff we already have’ Imison C, Kings Fund 2014
  – So we need to work differently and where the patients are – aligning the workforce to the work-
In Summary ........
Services for Dementia or Services for Frailty?

It's not services for either alone, but flexible services for both which is needed.
A thought

‘We’ve been wrong about our job in medicine…..it is (not to treat individual disease but) to enable wellbeing. And wellbeing is about the reasons one wishes to be alive.’