Same Day Emergency Care & Acute Frailty

Regional Event, Taunton: April 29th 2019

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SDEC Frailty Sub-Group Lead

Delivered by
NHS England, NHS Improvement and the Ambulatory Emergency Care Network
Putting SDEC in policy context
What’s the national approach?

FROM THIS

‘The frail Elderly’
Late Crisis presentation
Fall, delirium, immobility
Hospital-based episodic care
Disruptive & disjointed

TO THIS

‘An Older Person living with frailty’
A long-term condition
Timely identification preventative, proactive care supported self management & personalised care planning
Community based person centred & coordinated
Health + Social +Voluntary+ Mental Health + Community assets

Slide courtesy of Martin Vernon and NHS England
Frailty and How to Measure it
What is frailty?

• “a condition or syndrome which results from a multi-system reduction in reserve capacity to the extent that a number of physiological systems are close to, or past the threshold of symptomatic failure. As a result the frail person is at increased risk of disability or death from minor external stresses.”

(Campbell and Buchner, 1997)
“A long-term condition characterised by lost biological reserves across multiple systems & vulnerability to decompensation after a stressor event”
Operationalising frailty

Phenotype
- specific measurable impairments
- distinct from co-morbidity

Deficit accumulation model
- risk prediction using symptoms, diagnoses, disability + impairments + behaviours
## Fried’s phenotype approach


<table>
<thead>
<tr>
<th>Phenotype</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weight loss</strong></td>
<td>Self-reported weight loss of more than 4·5 kg or recorded weight loss of &quot;5% per year</td>
</tr>
<tr>
<td><strong>Exhaustion</strong></td>
<td>Self-reported exhaustion on US Center for Epidemiological Studies depression scale73 (3–4 days per week or most of the time)</td>
</tr>
<tr>
<td><strong>Low energy expenditure</strong></td>
<td>Energy expenditure &lt;383 kcal/week (men) or &lt;270 kcal/week (women)</td>
</tr>
<tr>
<td><strong>Slow gait speed</strong></td>
<td>Standardised cut-off times to walk 4·57 m, stratified by sex and height</td>
</tr>
<tr>
<td><strong>Weak grip strength</strong></td>
<td>Grip strength, stratified by sex and body-mass index</td>
</tr>
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</table>
## Categories

<table>
<thead>
<tr>
<th>Number of factors</th>
<th>Frailty Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Not frail</td>
</tr>
<tr>
<td>1-2</td>
<td>Pre-frail</td>
</tr>
<tr>
<td>3-5</td>
<td>Frail</td>
</tr>
</tbody>
</table>
How does this help?

• Establishes frailty as a potential target for intervention as well as an indicator of vulnerability
• Community based treatment programmes can focus on strength, balance, nutrition, physical activity etc
  *in addition to*
• the current emphasis on function
Deficit accumulation approach

- Each “deficit” has equal weighting
- Each dichotomised (0/1) or trichotomised (0, 0.33, 0.66, 1.0)
- Add all individual item scores
- Divide by number of items
- Thus the Frailty Index score is between 0 and 1
- Predictive ability improves with more parameters, >30 is enough!
- Good evidence for all outcome prediction

Rockwood et al JAGS 2006; 54:975-979
eFI: the deficit approach from routine primary care data

Frailty is not good for you

Reducing proportion alive

Fit
Mild frailty
Moderate frailty
Severe frailty

43%
37%
16%
4%
How does this help?

• Enables targeting in primary and community care for issues such as
  ➢ Medication reviews and de-prescribing
  ➢ Advance care planning

(What matters to you)
Case finding – a simple tool

- **CFS** based on how the patient was **TWO** weeks ago
- **Ask them,** families or carers. Can the ambulance service help?

### Clinical Frailty Scale*

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Very Fit</strong> – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.</td>
</tr>
<tr>
<td>2</td>
<td><strong>Well</strong> – 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.</td>
</tr>
<tr>
<td>3</td>
<td><strong>Managing Well</strong> – People whose medical problems are well controlled, but are not regularly active beyond routine walking.</td>
</tr>
<tr>
<td>4</td>
<td><strong>Vulnerable</strong> – 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.</td>
</tr>
<tr>
<td>5</td>
<td><strong>Mildly Frail</strong> – 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.</td>
</tr>
<tr>
<td>6</td>
<td><strong>Moderately Frail</strong> – 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.</td>
</tr>
<tr>
<td>7</td>
<td><strong>Severely Frail</strong> – 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).</td>
</tr>
<tr>
<td>8</td>
<td><strong>Very Severely Frail</strong> – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.</td>
</tr>
<tr>
<td>9</td>
<td><strong>Terminally Ill</strong> – Approaching the end of life. This category applies to people with a life expectancy &lt;6 months, who are not otherwise evidently frail.</td>
</tr>
</tbody>
</table>

**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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Clinical Frailty Scale: mortality prediction

Community dwelling people

Rockwood CMAJ 2005
How common is frailty?
Who are the frail people?

...much older than average (but a lot of ‘frail’ younger people too)

% of frail patients by age band

- National average (all ages 16+)

- 16-34: 1.8%
- 35-54: 2.9%
- 55-74: 3.3%
- 75+: 7.6%

...more likely to live in deprived areas

% of frail patients by deprivation

- National average (all areas)

- Most deprived areas: 4.6%
- Moderately deprived areas: 2.9%
- Least deprived areas: 2.1%
Distribution of Frailty in old age (eFI)

Percentage of eFI category within each age band
KID data, January 2017 cohort

- 65-69:
  - Fit: 73.9%
  - Mild: 63.7%
  - Moderate: 50.1%
  - Severe: 37.7%

- 70-74:
  - Fit: 63.7%
  - Mild: 62.5%
  - Moderate: 50.1%
  - Severe: 37.7%

- 75-79:
  - Fit: 50.1%
  - Mild: 35.6%
  - Moderate: 38.5%
  - Severe: 39.0%

- 80-84:
  - Fit: 37.7%
  - Mild: 38.5%
  - Moderate: 39.0%
  - Severe: 39.0%

- 85-89:
  - Fit: 27.8%
  - Mild: 27.8%
  - Moderate: 37.4%
  - Severe: 37.4%

- 90-94:
  - Fit: 22.5%
  - Mild: 22.5%
  - Moderate: 36.0%
  - Severe: 36.0%

- 95+:
  - Fit: 21.8%
  - Mild: 21.8%
  - Moderate: 36.0%
  - Severe: 36.0%

NHS England analysis - KID 2017-18
Older people, frailty, hospital use and outcomes
<table>
<thead>
<tr>
<th>Healthcare Activity</th>
<th>Percentage of in England aged 75+</th>
</tr>
</thead>
<tbody>
<tr>
<td>No hospital activity</td>
<td>25.8%</td>
</tr>
<tr>
<td>Outpatient activity only</td>
<td>30.9%</td>
</tr>
<tr>
<td>A&amp;E activity, no admissions</td>
<td>6.8%</td>
</tr>
<tr>
<td>Only planned admissions</td>
<td>13.7%</td>
</tr>
<tr>
<td>Single emergency admission</td>
<td>14.6%</td>
</tr>
<tr>
<td>Two emergency admissions</td>
<td>4.9%</td>
</tr>
<tr>
<td>3+ emergency admissions</td>
<td>3.4%</td>
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A minority are frequently admitted

*Adapted slide, courtesy of the Acute Frailty Network*
• Older People: HES codes to identify frailty:
  • - Unspecified protein-energy malnutrition
  • - Dementia+ or Incontinence+
  • - Somnolence, Very low level of personal hygiene
  • - Difficulty in walk Senility, Falls
  • - ‘Z-codes’ – functional limitations

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<th>Activity type (frail older people)</th>
<th>England</th>
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<tr>
<td>Percentage of total admissions</td>
<td>57%</td>
</tr>
<tr>
<td>Percentage of total bed days</td>
<td>87%</td>
</tr>
<tr>
<td>Percentage of emergency readmissions within 90 days</td>
<td>84%</td>
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<td>Percentage of deaths within 90 days of admission</td>
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*Slide courtesy of the Acute Frailty Network*
Their bed use and outcomes

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- Frailty associated with delirium, inpatient falls and deconditioning
- **20% experience 80% of harms (75+patients)**
• It's not just about numbers
• Non-specific presentations can be underestimated
• It takes time to identify key issues

**Three part challenge for all concerned**
• Age attune in community to prevent deterioration if possible
• Provide alternatives
• Age attune the hospital to optimise the approach to the expected modern patient
Percentage of deaths by CFS score post discharge for NEL >65 admissions who had a death date recorded by 4 April 2018

(Admissions between April – Dec 2017)

Courtesy of David Hunt from West Sussex Hospitals
Frailty and ED attendance
Why is identifying frailty useful?

- **For those admitted**, rapid access to MDT approach to minimise harms etc
- **For the uncertain ones**, to factor in frailty to clinical decisions about priorities and discharge plans etc
- **For those who go home**, to flag up need for interventions to
  - reduce the frailty factors
  - reduce frailty associated risks (eg falls)
What we know is what makes a difference
Lessons from the Acute Frailty Network

• Early identification of frailty with the Clinical Frailty Scale can become as routine as early identification of acuity with the NEWS

• Any trained staff member can do this

• Reliable timely responses need clear professional working standards

• *A flexible multi-disciplinary approach works and helps address staffing gaps*

• Improving responses to frail older people can avert unnecessary admissions and reduces bed use

• Patient experience of ED/AMU can improve
Individualise the focus – What matters?

- Domains:
  - Symptoms, functioning, quality of life
  - Disutility in care
  - Care
  - Healthcare responsiveness
  - Clinical status
  - Quality of death

http://www.ichom.org/medical-conditions/older-person/
Comprehensive Geriatric assessment for the older or frail patients

Cochrane Review 2017 of CGA for older people admitted to acute hospital vs usual care

• 29 trials recruiting 13,766 participants across nine, mostly high-income countries.
• alive and at home in 3-12 months: risk ratio (RR) 1.06, 95% confidence interval (CI) 1.01 to 1.10
• Reduced likelihood of being in a nursing home at 3 to 12 months follow-up: RR 0.80, 95% CI 0.72 to 0.89
• Small increase in costs: very likely is cost-effective

Ellis G et al 2017
Single site RCT of CGA before Vascular Surgery in London

<table>
<thead>
<tr>
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<th>Intervention group n=91</th>
<th>Control group n=85</th>
<th>Significance of difference</th>
</tr>
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<tr>
<td>Length of hospital stay (days)</td>
<td>3.3</td>
<td>5.5</td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td>Post operative delirium</td>
<td>9 (11%)</td>
<td>22 (24%)</td>
<td>P&lt;0.05</td>
</tr>
<tr>
<td>All complications</td>
<td>7%</td>
<td>4.2%</td>
<td>P&lt;0.05</td>
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Partridge J et al, 2016; Br J Surg
Preventing future admissions

• Functional rehabilitation
• Building psycho-social resilience
• Adapt LTC programmes
• Medications modification
• Falls and fracture prevention
• Advanced care planning (especially care homes)
Summary points
Risks for patients if frailty is not recognised and taken into account

- Delirium, falls and pressure sores not prevented
- Deconditioning and slower recovery
- MDT input delayed
- Appropriate goals of care not decided
- Polypharmacy not managed
- Readmissions not prevented
- End of life care missed
Risks for patients if frailty is taken into account without individual assessment

Frailty

- becomes a nihilist connotation
- obscures need for prompt medical response
- everybody’s business becomes anybody can do it

*Frailism* takes the place of ageism
Key actions

• Expect patients with frailty and identify this early
• Expect this in patients with medical or surgical issues
• Start a CGA approach to care from the start
• Develop clear reliable care pathways out of and into the hospital
• Develop shared governance systems
New Frontiers in Frailty conference
Book your place 27th June 2019

An international conference provided by the Acute Frailty Network supported by NHS Improvement.

27th June 2019
9am – 4.30pm, Central London

“The essential event for anyone interested in improving care for older people”
Professor Simon Conroy
University Hospitals of Leicester

Early Bird Rate

For members of AFN or NHS Elect
(£125 £149 for 4)

For non-members
(£149 £189 for 4)

Early bird available until 30th April 2019

Places are limited so please book soon:
www.acutefrailtynetwork.org.uk

To book your place follow this link: https://www.eventsforce.net/acutefrailtyconference2019
If you have any questions, please email the AFN team at frailtyevents@nhselect.org.uk or call 020 7520 9091