

Frailty & the ICU

Kathy Dalley & Jane Roe



St. George's Hospital SW17



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What is Frailty?

- Multi-dimensional syndrome characterized by loss of physical & cognitive reserves and increasing vulnerability to disease and death
- Correlates strongly with age



Frailty in healthcare

- 2016
 - NICE guideline 56 “Multimorbidity: clinical assessment and management”
 - How to assess frailty (1.4)
- 2016
 - CQUIN – Frailty identification & Care planning
- 2017 CQUIN Physical Health
 - 1st July GP to identify moderate and severe frailty in patients > 65 years, using appropriate tool e.g. eFI
 - Those with severe frailty must have their diagnosis recorded in patient's record



Frailty as a Long Term Condition

- Long Term Condition:
 - Can be diagnosed
 - Is not curable
 - Can be managed
 - Persists
- Frail people often have > comorbidities

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Meta analysis on impact of frailty on ICU outcomes

Intensive Care Med (2017) 43:1105–1122
DOI 10.1007/s00134-017-4867-0

SYSTEMATIC REVIEW



The impact of frailty on intensive care unit outcomes: a systematic review and meta-analysis

John Muscedere^{1,6*} , Braden Waters², Aditya Varambally³, Sean M. Bagshaw⁴, J. Gordon Boyd¹,
David Maslove¹, Stephanie Sibley¹ and Kenneth Rockwood⁵

Meta analysis results

- **30% adult** ICU admissions involve **frailty**
- Frailty is associated with increased risk of hospital & long term mortality
- Frail ICU patients are less likely to be discharged home (more likely to go to a care facility)
- People identified as frail have longer hospital stay

BUT

- No difference in mechanical ventilation days
- No difference in receipt of vasoactive drugs
- No difference in ICU stay

Is this because non-survivors die earlier?

Expertise matters!

- For surgical patients, outcomes (30 day survival) are better in hospitals that deal with
 - More complex surgery
 - Larger numbers of frail patients

PERIOPERATIVE MEDICINE

Association of the Hospital Volume of Frail Surgical Patients Cared for with Outcomes after Elective, Major Noncardiac Surgery

A Retrospective Population-based Cohort Study

Daniel I. McIsaac, M.D., M.P.H., F.R.C.P.C., Duminda N. Wijeyesundera, M.D., Ph.D., F.R.C.P.C., Allen Huang, M.D., F.R.C.P.C., Gregory L. Bryson, M.D., F.R.C.P.C., M.Sc., Carl van Walraven, M.D., F.R.C.P.C., M.Sc.

Frailty as syndrome or phenotype

- Frailty phenotype proposed in 2001 (Fried et al 2001)
- 3 or more of following 5 symptoms –
 1. SLOWNESS
 2. WEIGHT LOSS
 3. IMPAIRED STRENGTH
 4. EXHAUSTION
 5. LOW PHYSICAL ACTIVITY / ENERGY EXPENDITURE
- People aged > 60: 14% & those > 90: 65%
- More common in women (16% v 12%)
- 93% have mobility problems
- 63% need a walking aid
- 71% receive help
-

Frailty Scale – 9 points

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.

* 1. Canadian Study on Health & Aging, Revised 2008.

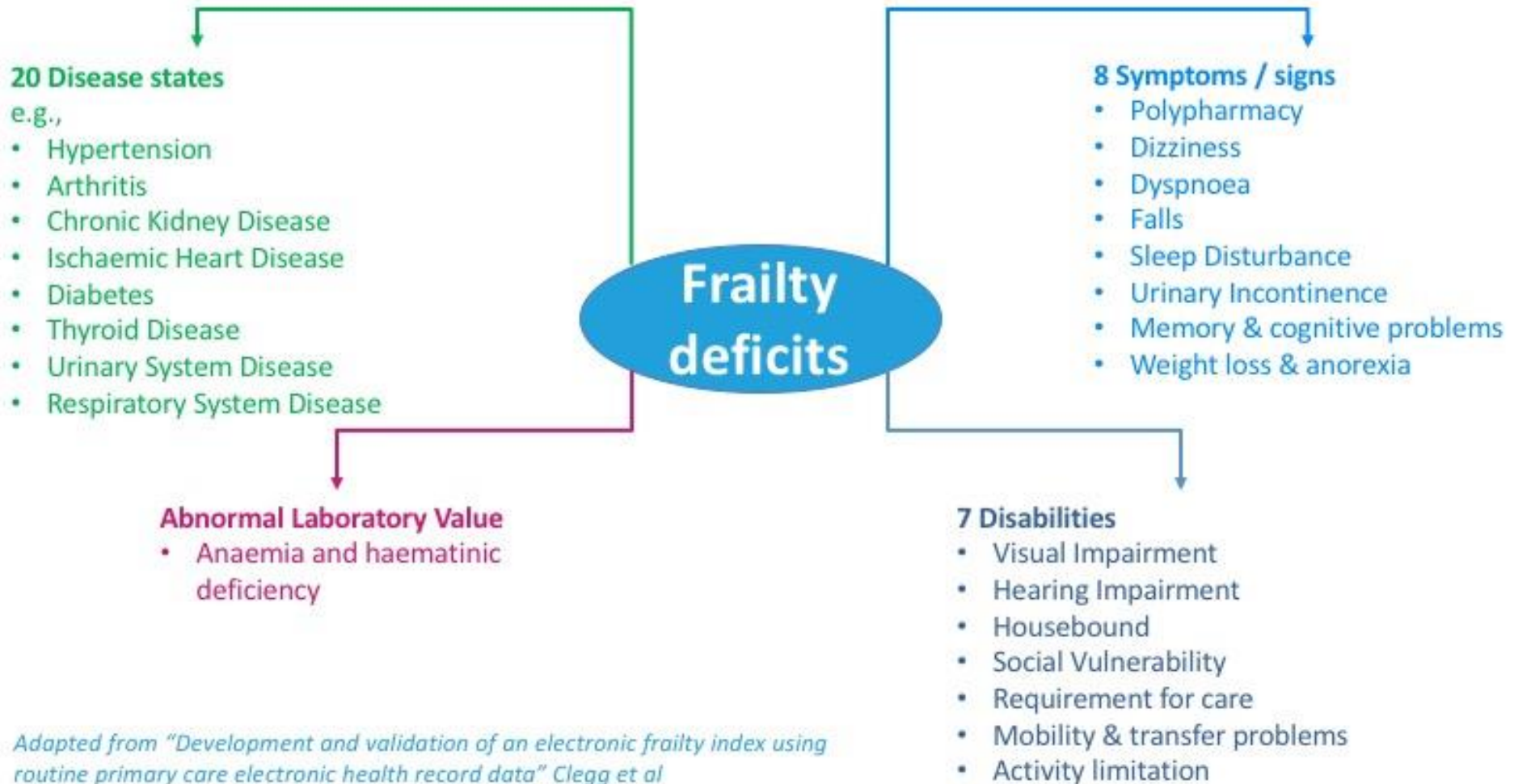
2. K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489-495.

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Frailty as a State

- The Frailty Index (FI)
- Contrasting view to frailty as a syndrome
- Frailty is a state of vulnerability arising from an accumulation of health deficits.
 - Few deficits = relatively FIT
 - Many health deficits = relatively FRAIL
- Electronic Frailty Index
- 36 items
- Classify as mild, moderate or severe frailty

Electronic Frailty Index (eFI)



Measuring Frailty?



Relevance in Critical Care

- Functional status & chronic health status are important baseline characteristics of ICU patients
- Frailty identification & assessment on admission to ICU may provide objective, prognostic information
- Prehabilitation for elective surgery

Prognostic implications

- Frailty is recognised determinant of
 - Mortality
 - Hospitalisation
 - Institutionalization
- Frailty outperforms chronological age
- Frailty may represent surrogate for
 - Pre hospital state of ICU patients
 - Pre hospital functional status
 - Severity of comorbid illness, disability or frailty
- Include in scoring systems in future

Targeted Interventions for frail

NHSE community approach:

- Good foot care
- Home safety checks
- Vaccinations
- Annual review of medications & falls
- Keeping warm
- Readiness for winter

Possible critical care approach:

- Get going on foot care
- Rehab checklist
- Reinstating polypharmacy
- Wearing own clothes when possible
- Engage with carers

Nicholson et al (2017) Supportive care for older people with frailty in hospital:
An integrative review
Int J Nursing Studies 66(1):60-71

Love
your feet



Change the Script

“What’s the matter with you?”

to

“What matters to you?”

Future implications

- What system for frailty identification is your hospital using?
- In whom is it completed?
- When?
- How do you find out about it?
- How long until our commissioners/health boards start to show an interest the recognition and adaptation required for frail people?
- What can we do to increasing or causing frailty in our older patients?

References

- Clegg et al (2016) Development and validation of an electronic frailty index using routine primary care electronic health record data *Age & Ageing* 45(3):353-60
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Frailty



August 29th 2017



La Vita Bella Nursing Home, Texas (assisted-living facility)

August 28th 2017



La Vita Bella Nursing Home, Texas (assisted-living facility)