



# Major Trauma and the Clinical Frailty Score

Dr Fionna Lowe  
ED Consultant and Trust Trauma lead  
EMTN Frailty Trauma Group Chair

 @lowe\_fionna

# What is Frailty?

A multidimensional loss of reserves- energy, physical ability, cognition and health (Rockwood et al)

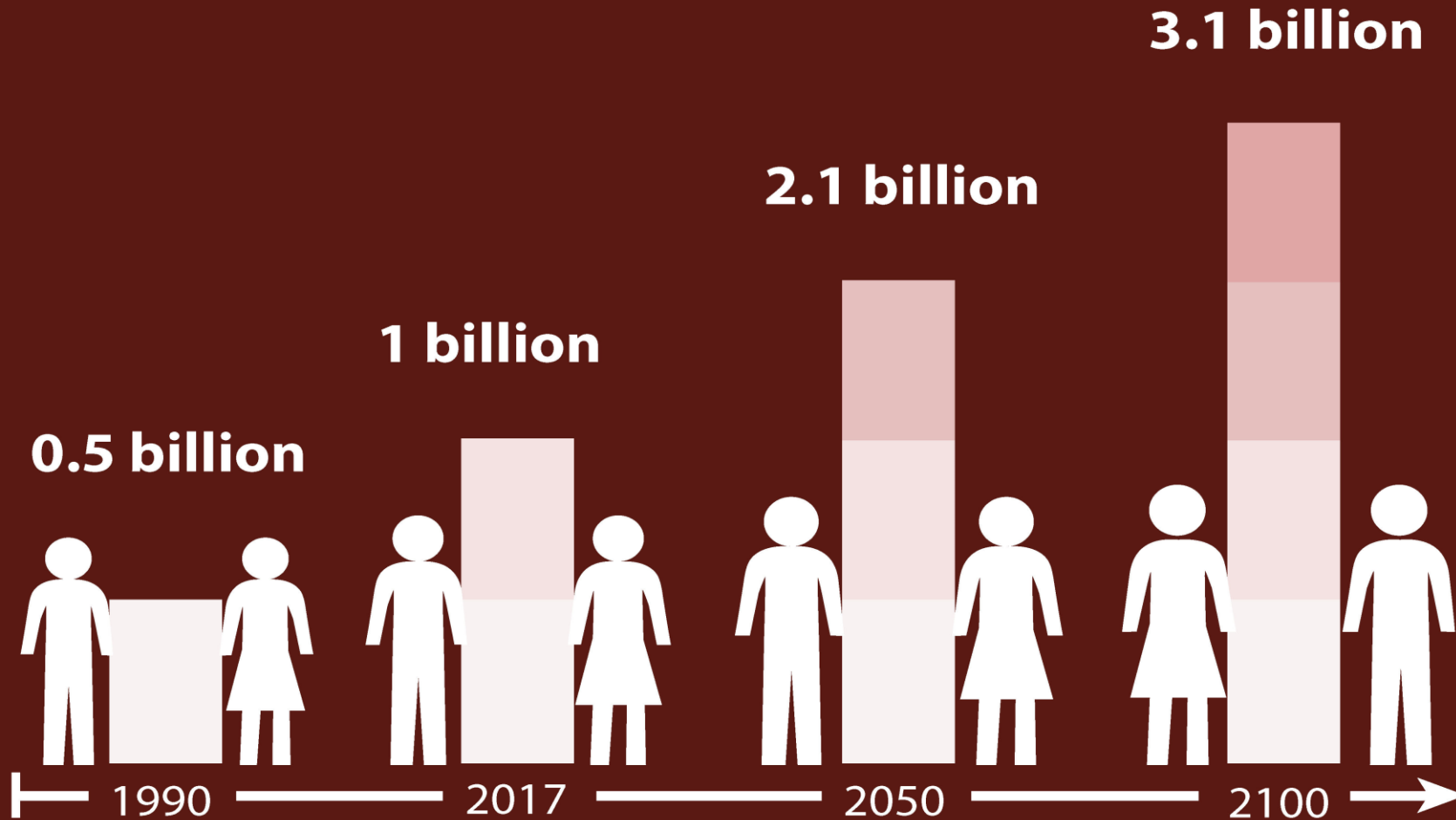


# Ageing Population

*Projected global population aged 60 years or over*



University Hospitals of  
Derby and Burton  
NHS Foundation Trust



Source: United Nations Department of Economic and Social Affairs,  
Population Division, *World Population Prospects: The 2017 Revision*  
Produced by: United Nations Department of Public Information





# TARN

## **Frailty screening and a frailty pathway decrease length of stay, loss of independence, and 30-day readmission rates in frail geriatric trauma and emergency general surgery patients**

Engelhardt, Kathryn E., MD; Reuter, Quentin, MD; Liu, Jessica, MD; Bean, Jonathan F., MD; Barnum, Joliette, MD; Shapiro, Michael B., MD; Ambre, Allison, DPT; Dunbar, Amanda; Markzon, Mara; Reddy, Tara N., MD; Schilling, Christine, MFS; Posluszny, Joseph A. Jr., MD

[JAMA Surg.](#) 2014 Aug;149(8):766-72. doi: 10.1001/jamasurg.2014.296.

## **Superiority of frailty over age in predicting outcomes among geriatric trauma patients: a prospective analysis.**

[Joseph B<sup>1</sup>](#), [Pandit V<sup>1</sup>](#), [Zangbar B<sup>1</sup>](#), [Kulvatunyong N<sup>1</sup>](#), [Hashmi A<sup>1</sup>](#), [Green DJ<sup>1</sup>](#), [O'Keeffe T<sup>1</sup>](#), [Tang A<sup>1</sup>](#), [Vercruysse G<sup>1</sup>](#), [Fain MJ<sup>1</sup>](#), [Friese RS<sup>1</sup>](#), [Rhee P<sup>1</sup>](#).

[+ Author information](#)

## 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.

Where dementia is present, the degree of frailty usually corresponds to the degree of dementia:

- **Mild dementia** – includes forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.
- **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.
- **Severe dementia** – they cannot do personal care without help.

# How do we use CFS?

### Clinical Frailty Scale

	1. <b>Very Fit</b> – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.		7. <b>Severely Frail</b> – 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).
	2. <b>Well</b> – 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.		8. <b>Very Severely Frail</b> – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.
	3. <b>Managing Well</b> – People whose medical problems are well controlled, but are not regularly active beyond routine walking.		9. <b>Terminally Ill</b> – Approaching the end of life. This category applies to people with a life expectancy < 6 months, who are not otherwise evidently frail.
	4. <b>Vulnerable</b> – 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.	<div>Where dementia is present, the degree of frailty usually corresponds to the degree of dementia:</div> <ul style="list-style-type: none"><li>• <b>Mild dementia</b> – includes forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.</li><li>• <b>Moderate dementia</b> – recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.</li><li>• <b>Severe dementia</b> – they cannot do personal care without help.</li></ul>	
	5. <b>Mildly Frail</b> – 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. <b>Moderately Frail</b> – 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.		

K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005; 173:489-495© 2011, 2012 Version 1.3. All rights reserved. Video Canada.



# Frailty Trauma Triage Tool

FT<sup>3</sup>

Age > 60 with history of TRAUMA (including falls from standing/  
collapse)

## FEATURES INDICATING A HIGH RISK OF SIGNIFICANT INJURY

Severe Pain

Acute SOB

>=2 Central Body areas affected

Anticoagulated

NEWS >3 in single domain

Sats <94% or new oxygen  
requirement

GCS <15

Cognitive impairment (through  
alcohol/ drugs/ dementia etc)

Seizure

Neurological deficit

Clinical Frailty Score >=4

### Move to RESUS

Consider activating  
Trauma Team or Frailty  
Trauma Team  
If Resus not available  
activate Frailty Trauma  
team

Activate Frailty Trauma  
Team via the Attending  
consultant phone  
0800-0000, or the  
Blepholder 0000-0800

#### Clinical Frailty Scale

<p><b>1 Very Fit</b> - People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.</p>	<p><b>7 Severely Frail</b> - 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).</p>
<p><b>2 Well</b> - 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.</p>	<p><b>8 Very Severely Frail</b> - Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.</p>
<p><b>3 Managing Well</b> - People whose medical problems are well controlled, but are not regularly active beyond routine walking.</p>	<p><b>9 Terminally Ill</b> - Approaching the end of life. This category applies to people with a life expectancy &lt; 6 months, who are not otherwise evidently frail.</p>
<p><b>4 Vulnerable</b> - While not dependent on others for daily help, often symptoms limit activities. A common complaint is being "knocked up", and/or being tired during the day.</p>	<p><b>Scoring frailty in people with dementia</b> 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.</p>
<p><b>5 Mildly Frail</b> - These people often have more evident slowing, and need help in high order tasks (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.</p>	
<p><b>6 Moderately Frail</b> - 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 (cane, standby) with dressing.</p>	

# Future Work



CFS PREDICTING  
MAJOR TRAUMA



USE OF CFS IN  
TRIAGE TOOLS



USING CFS TO  
DECIDE WHEN  
TO PALLIATE



CFS TO DECIDE  
ADMISSION TO  
MDT TRAUMA  
WARD?