NHS

Same Day Emergency Care & Acute Frailty

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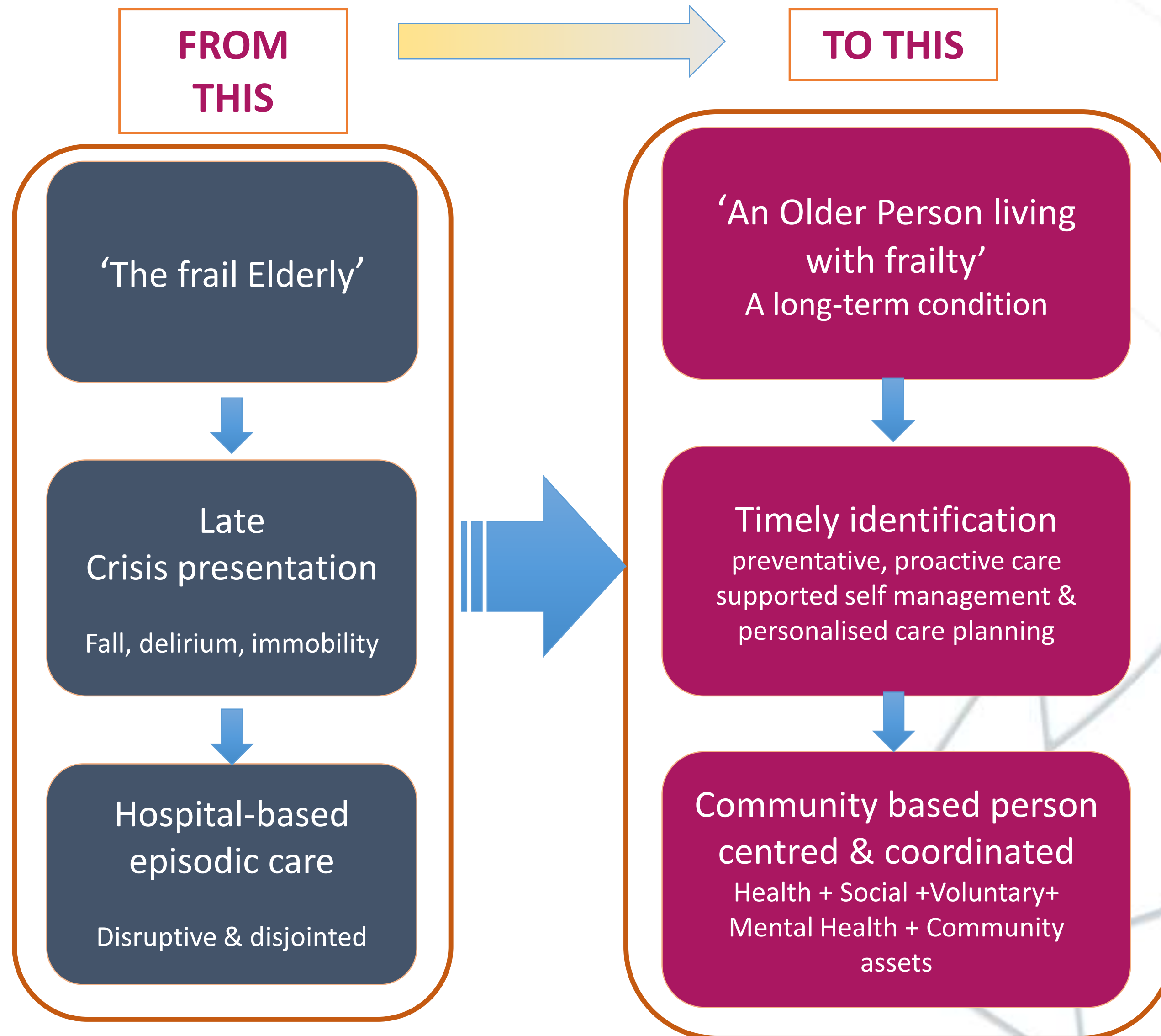
Delivered by
NHS England, NHS Improvement and the Ambulatory Emergency Care Network

Putting SDEC in policy context

What's the national approach?



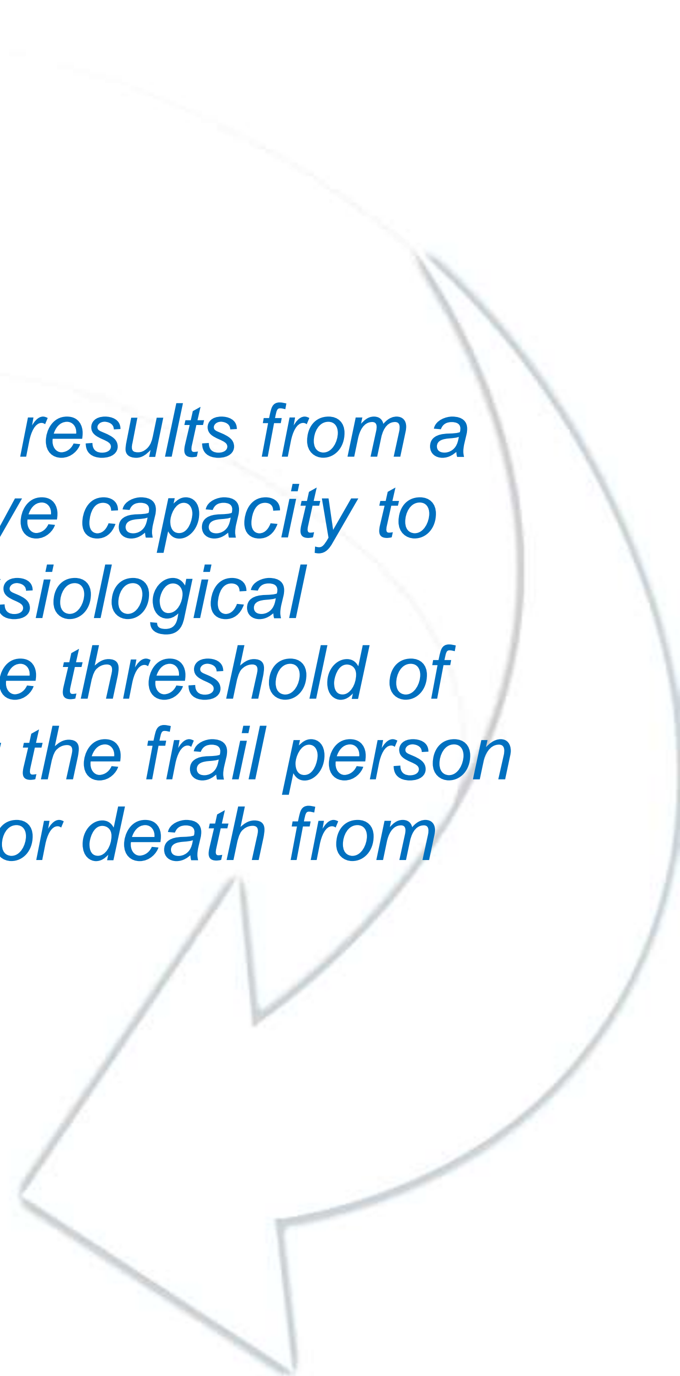
Slide courtesy of Martin Vernon and NHS England

Frailty and How to Measure it

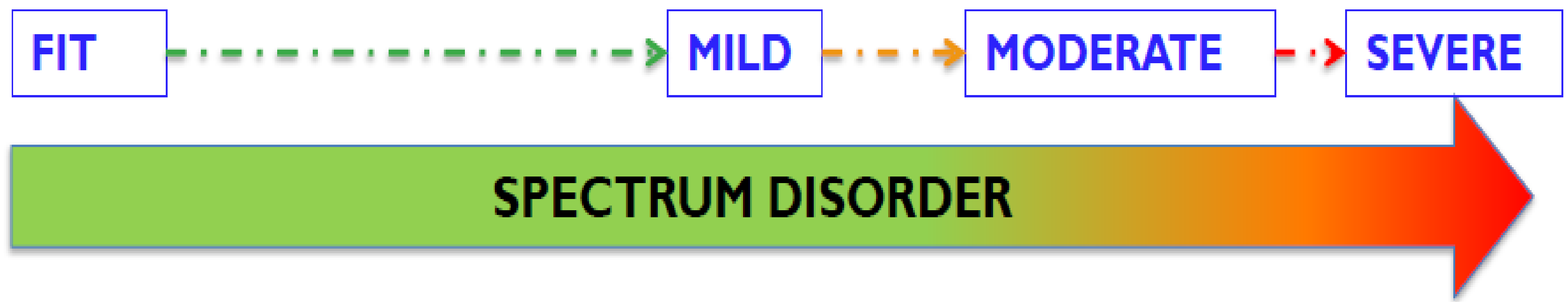
What is frailty?

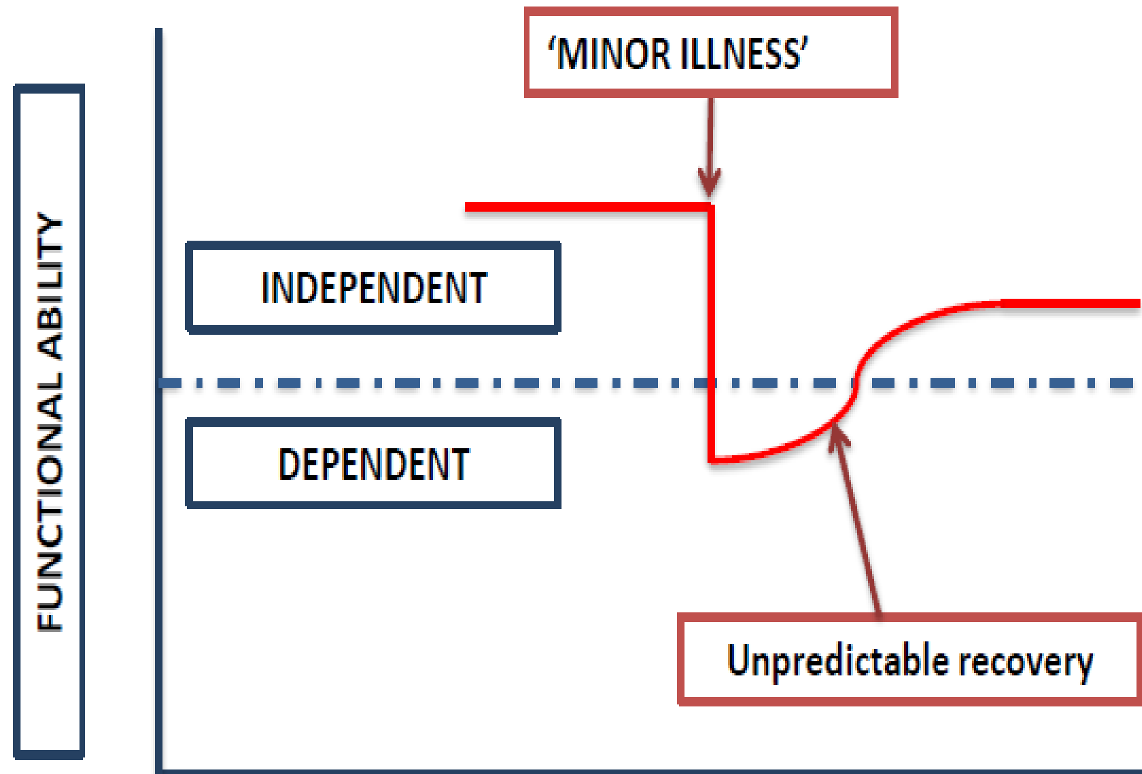
- *"a condition or syndrome which results from a multi-system reduction in reserve capacity to the extent that a number of physiological systems are close to, or past the threshold of symptomatic failure. As a result the frail person is at increased risk of disability or death from minor external stresses."*

(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

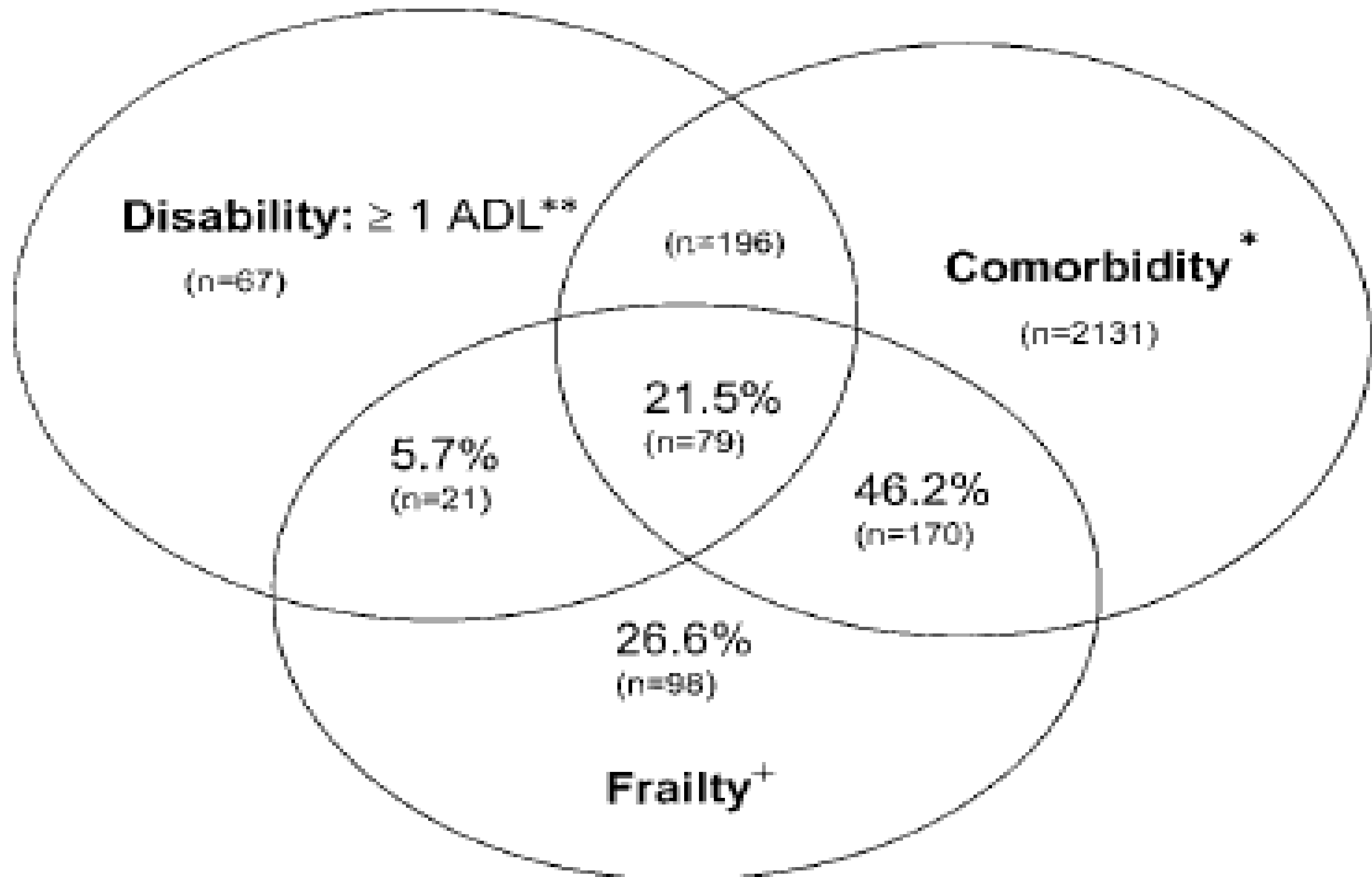
Fried LP et al J Gerontol A Biol Sci Med Sci 2001; 56: M146-56

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

Categories

Number of factors	
0	Not frail
1-2	Pre-frail
3-5	Frail

Overlap but distinct



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

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*

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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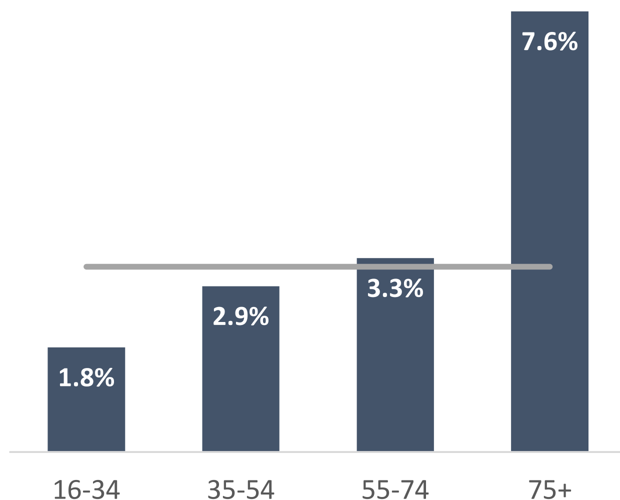
DALHOUSIE UNIVERSITY *Inspiring Minds*

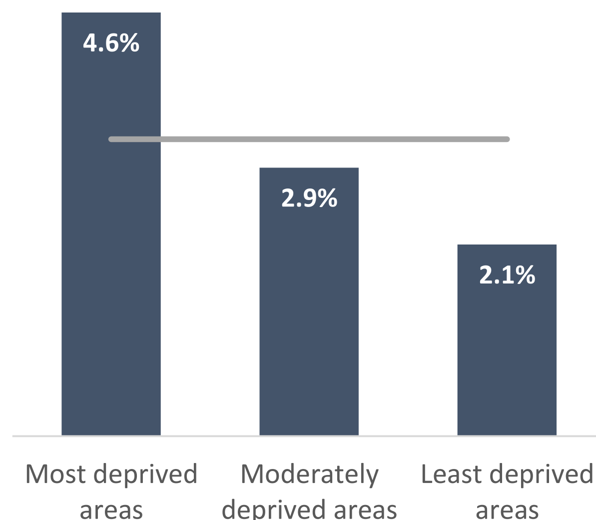
How common is frailty?

Who are the frail people?

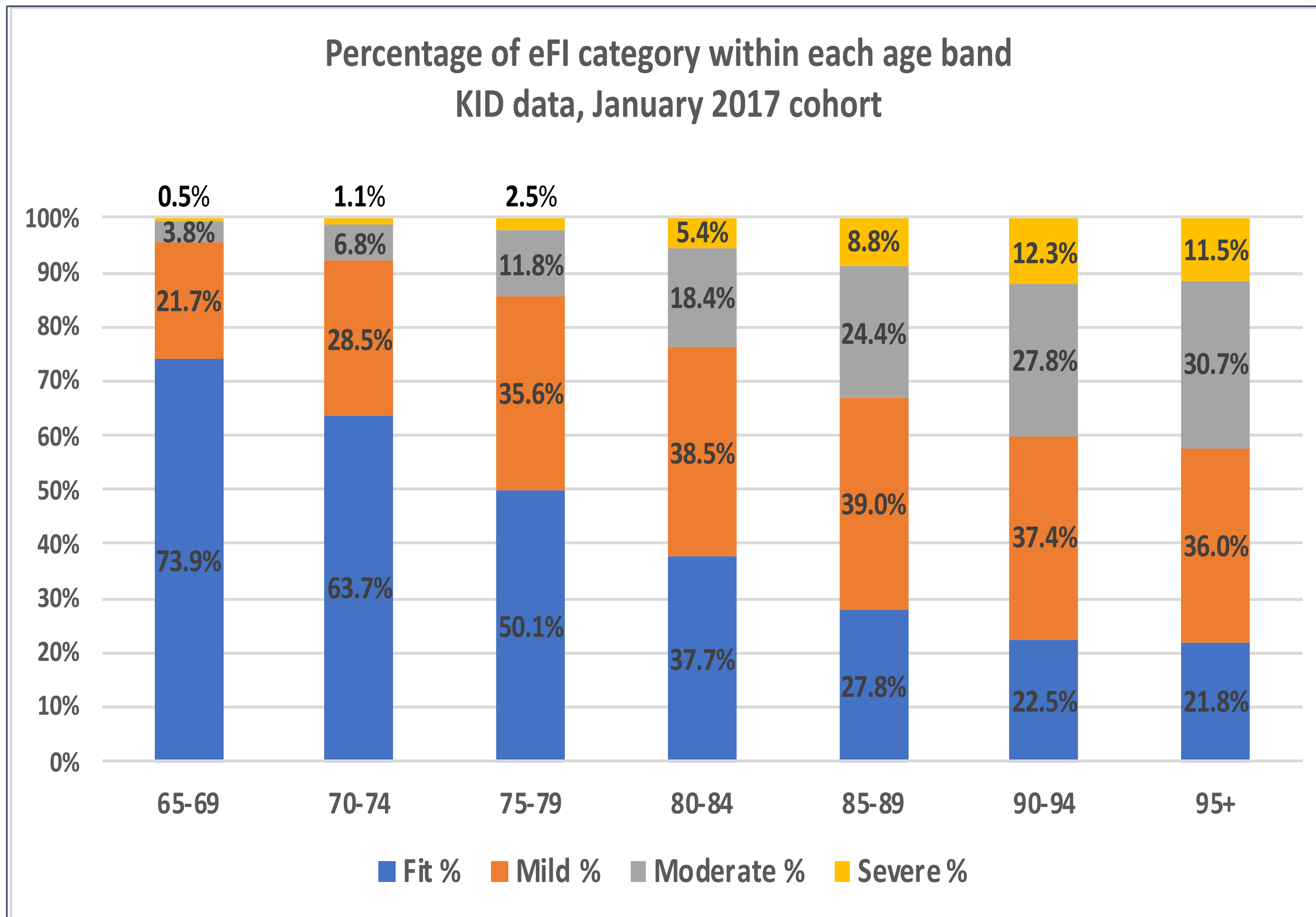
...much older than average (but a lot of 'frail' younger people too)

...more likely to live in deprived areas





Distribution of Frailty in old age (eFI)



NHS England analysis- KID 2017-18

Older people, frailty and health service use

Older people are core users of health & social care…in various ways

Healthcare Activity	Percentage of in England aged 75+
No hospital activity	25.8%
Outpatient activity only	30.9%
A&E activity, no admissions	6.8%
Only planned admissions	13.7%
Single emergency admission	14.6%
Two emergency admissions	4.9%
3+ emergency admissions	3.4%

A minority are frequently admitted

Slide courtesy of the Acute Frailty Network

20% of 75+ experience 80% of harm

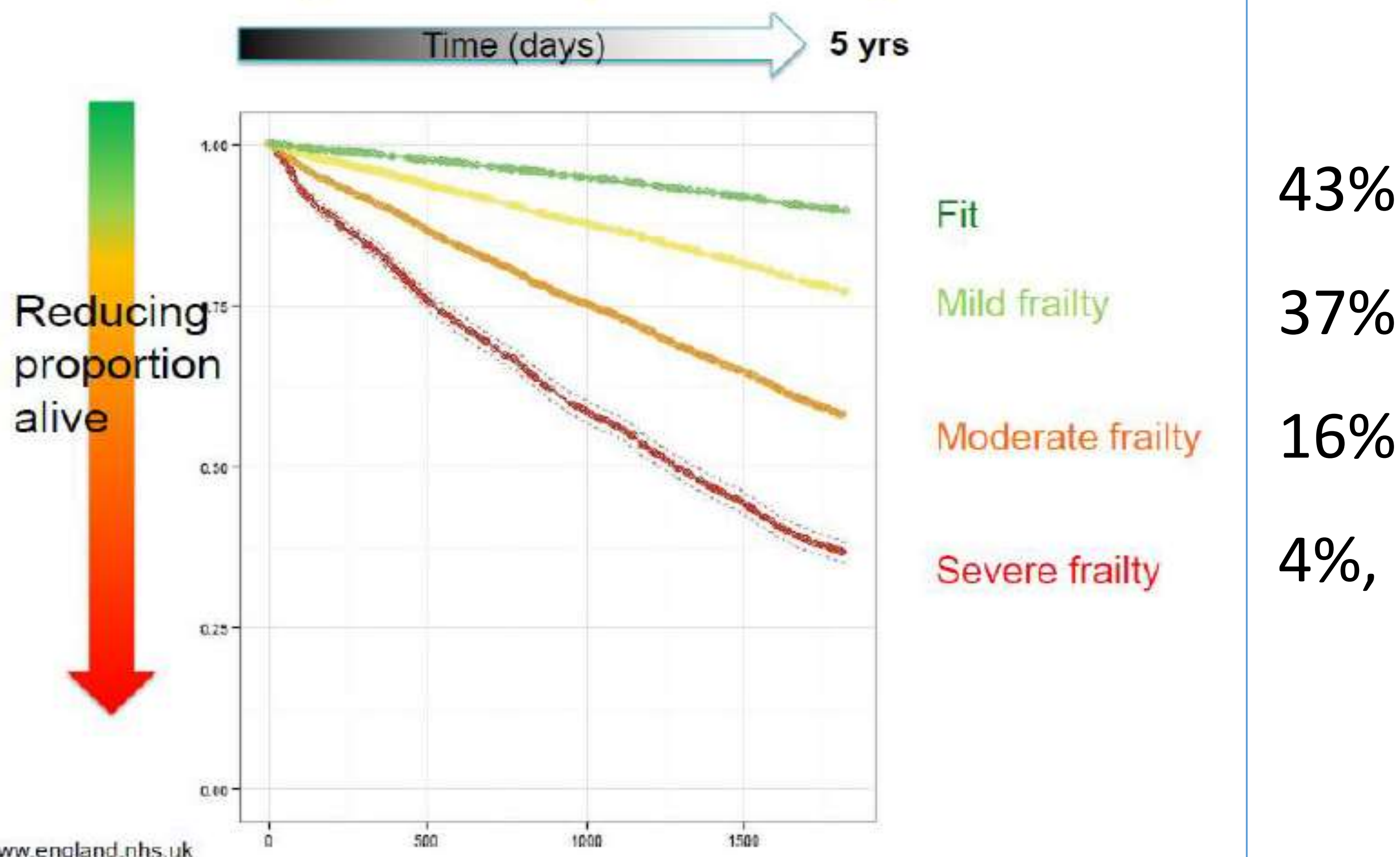
- Older People: HES codes to identify frailty:
  - - Unspecified protein-energy malnutrition
  - - Dementia+ or Incontinence+
  - - Somnolence, Very low level of personal hygiene
  - - Difficulty in walk Senility, Falls
  - - 'Z-codes' – functional limitations

Activity type (frail older people)	England
Percentage of total admissions	57%
Percentage of total bed days	87%
Percentage of emergency readmissions within 90 days	84%
Percentage of deaths within 90 days of admission	84%

Slide courtesy of the Acute Frailty Network

Frailty and clinical outcomes

eFI: the deficit approach from routine primary care data



43%

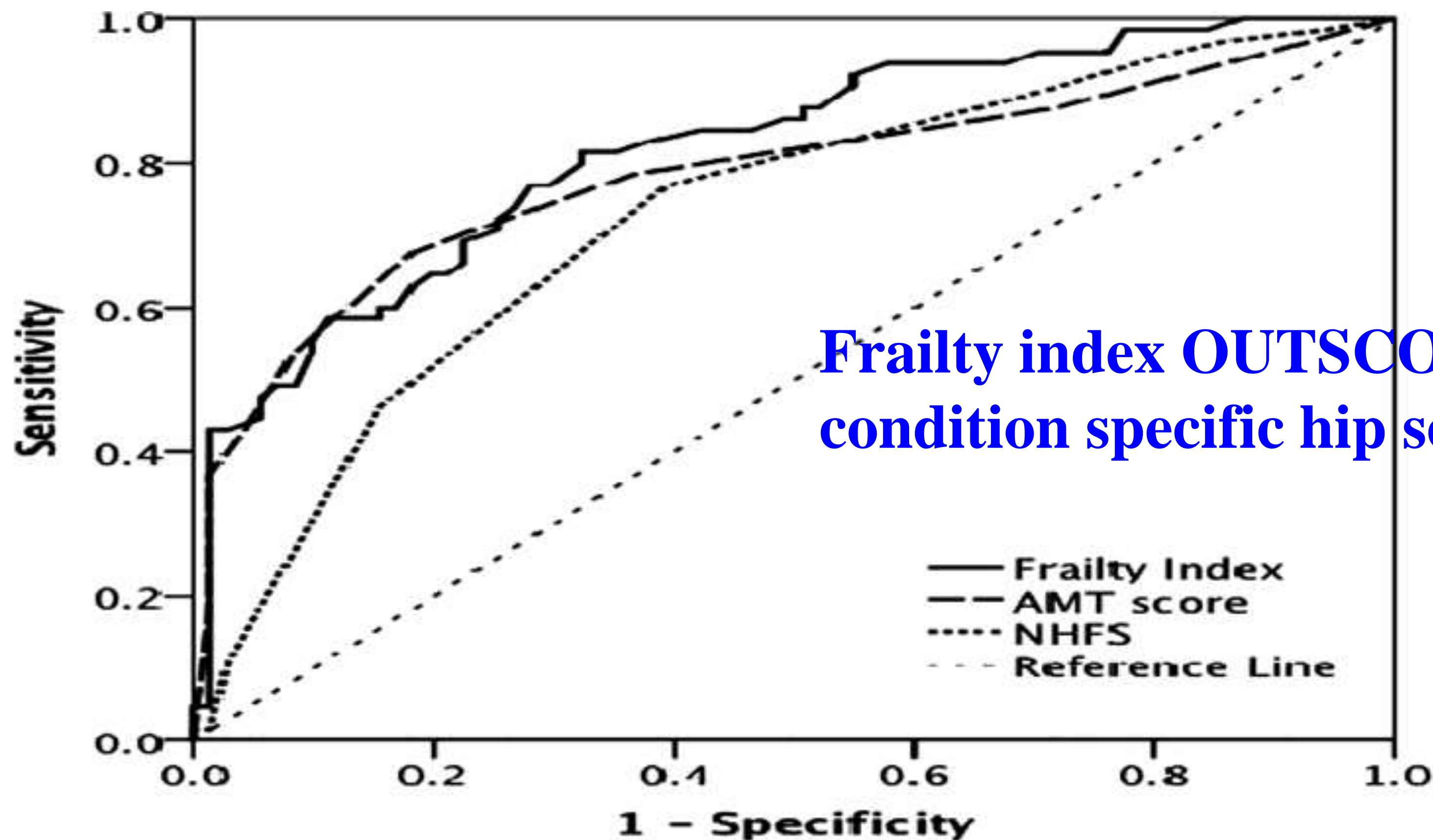
37%

16%

4%,

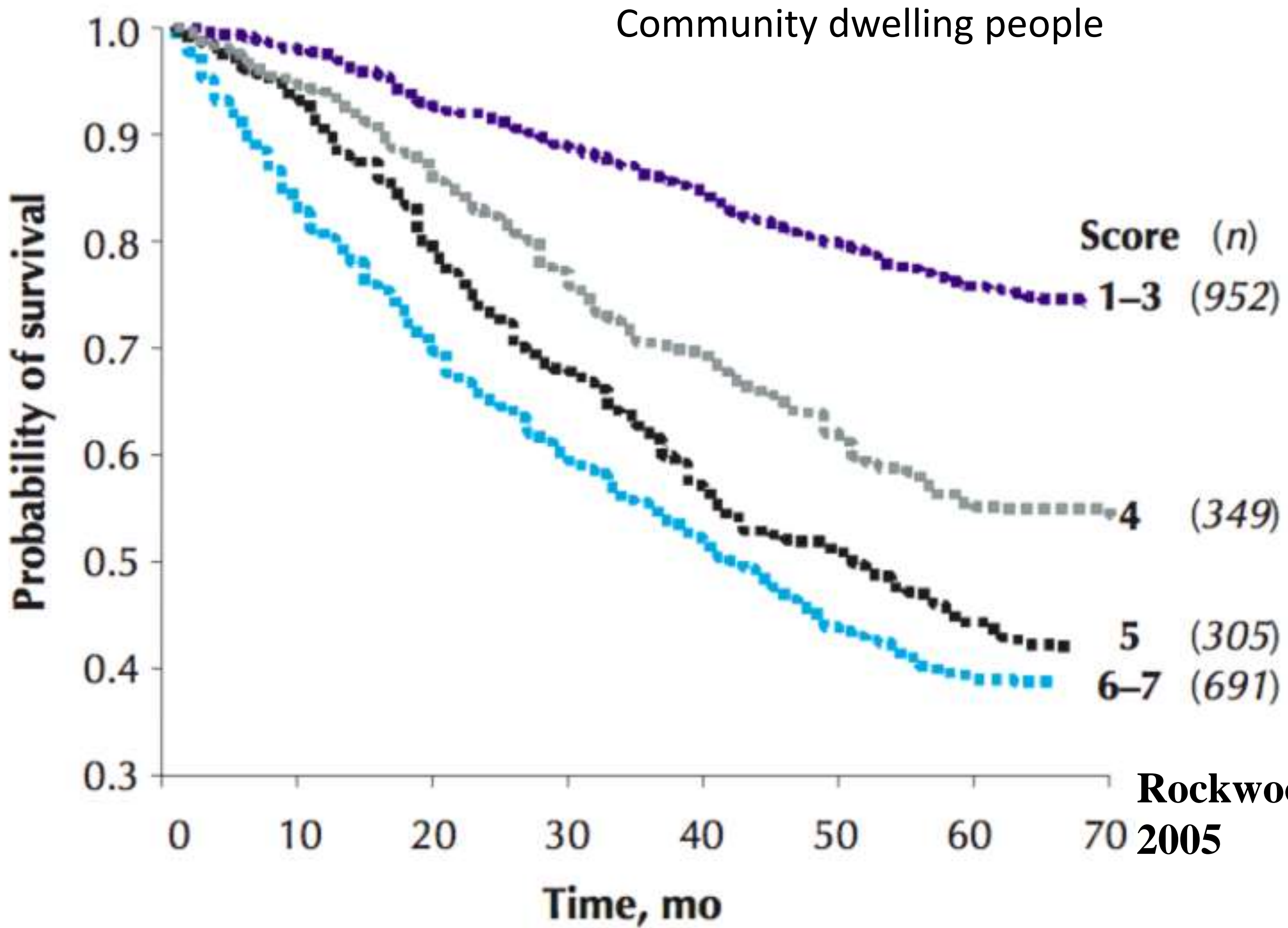
Prediction: frailty and getting home by 30 days – after a hip fracture

Manju Krishnan et al. Age Ageing 2014;43:122-12



Frailty index OUTSCORES condition specific hip score

Clinical Frailty Scale: mortality prediction



Rockwood CMAJ 2005

CFS Frailty & outcomes from acute admissions: bed days and LOS

WSHT: >65 with a Frailty Score & LoS (2017/18 M1 – M9)

- Of the 11,489 spells for 65+ with a frailty score:

Frailty and Ave LOS for the 65+ age groups:

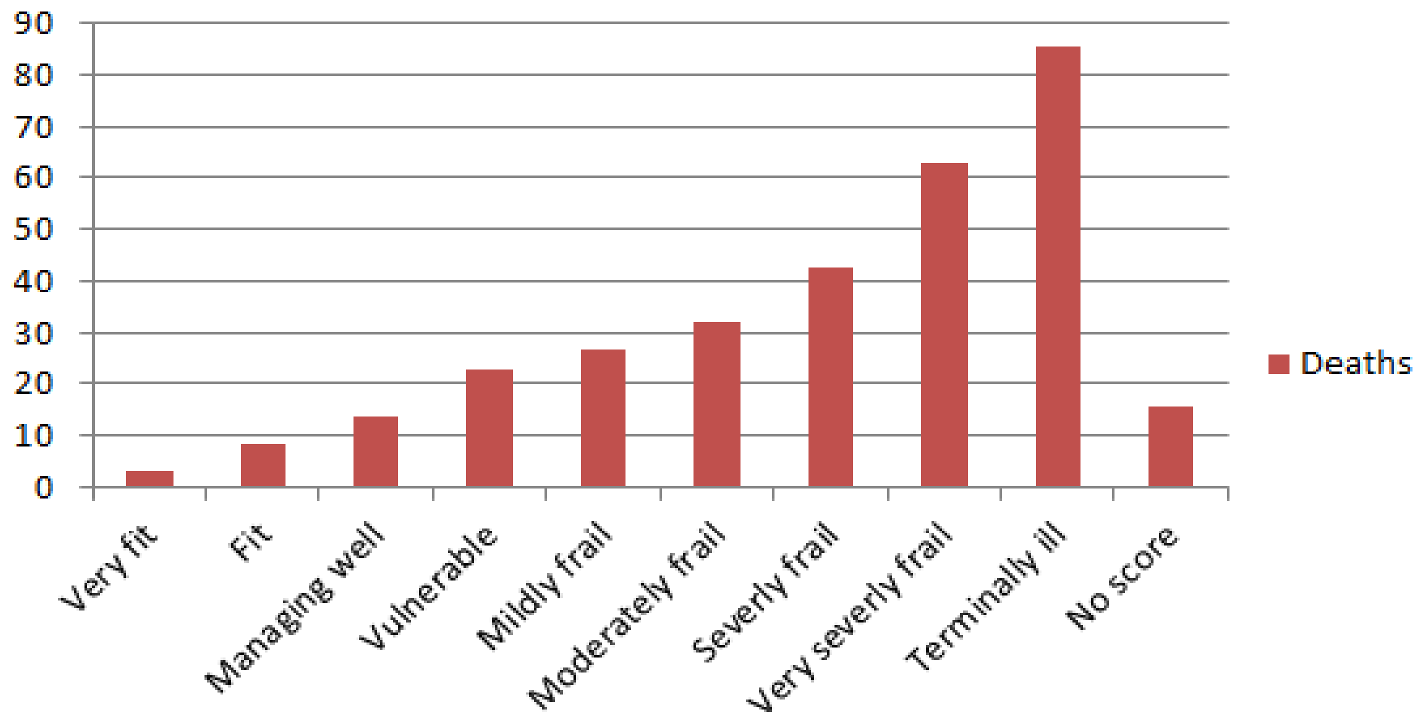
Frailty Index	Spells	Total Bed Days	ALOS
Frail1 - Very fit	99	771	7.79
Frail2 - Well	576	4,550	7.90
Frail3 - Managing Well	1,831	16,048	8.76
Frail4 - Vulnerable	2,200	26,465	12.03
Frail5 - Mildly Frail	1,908	28,367	14.87
Frail6 - Moderately Frail	2,445	42,075	17.21
Frail7 - Severely Frail	1,926	37,181	19.30
Frail8 - Very severely Frail	365	5,072	13.90
TFrail9 - Terminally Ill	139	1,188	8.55
Total (with a Frailty Score)	**11,489**	**161,717**	**14.08**
With no frailty Score	10,734	14,895	1.39
Total	**22,223**	**176,612**	**7.95**

30% were older frail patients and used 64% of OBDs

20% moderate or severely frail

occupied 45% OBDs

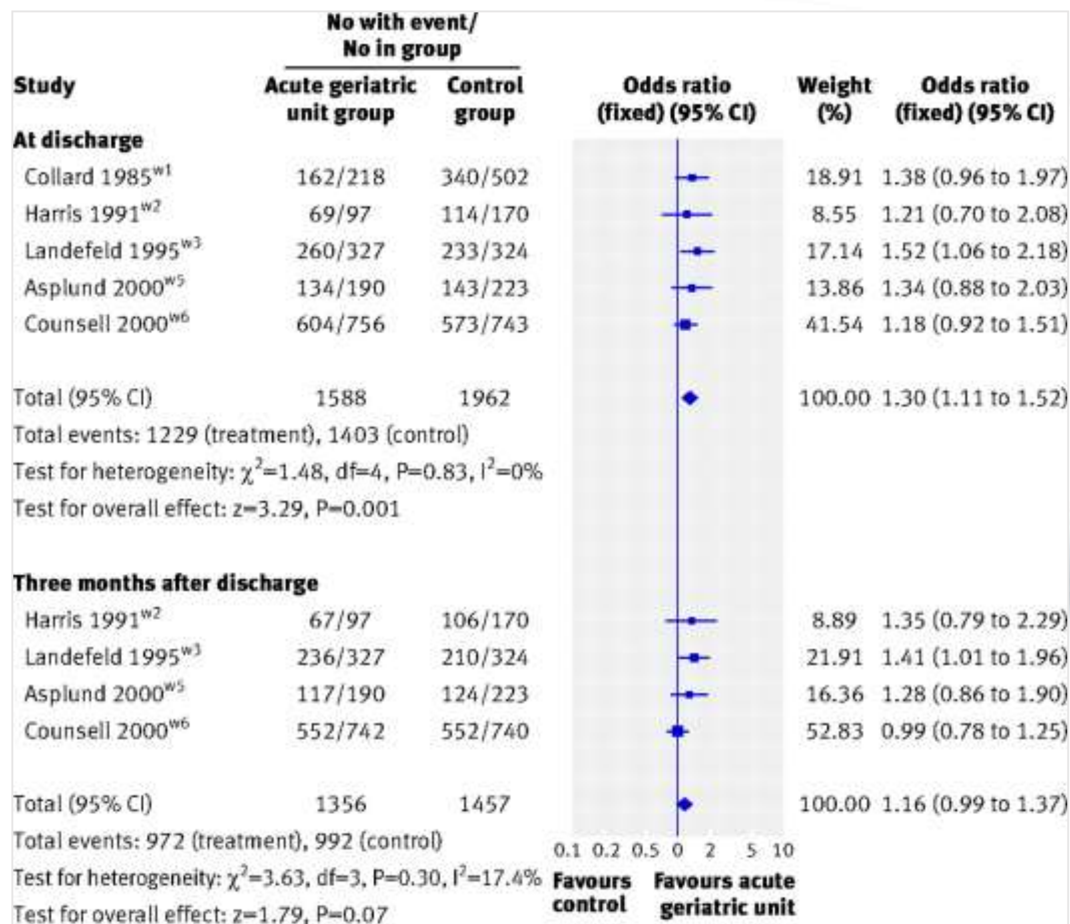
Courtesy of David Hunt from West Sussex Hospitals



Courtesy of David Hunt from West Sussex Hospitals

What we know what makes a difference

Living at home after discharge from hospital at 3 months in randomised trials comparing acute geriatric units with conventional hospital care



Study	No with event/No in group: Acute geriatric unit group	No with event/No in group: Control group	Weight (%)	Odds ratio (fixed) (95% CI)
At discharge				
Collard 1985[w1]	162/218	340/502	18.91	1.38 (0.96 to 1.97)
Harris 1991[w2]	69/97	114/170	8.55	1.21 (0.70 to 2.08)
Landefeld 1995[w3]	260/327	233/324	17.14	1.52 (1.06 to 2.18)
Asplund 2000[w5]	134/190	143/223	13.86	1.34 (0.88 to 2.03)
Counsell 2000[w6]	604/756	573/743	41.54	1.18 (0.92 to 1.51)
Total (95% CI)	1588	1962	100.00	1.30 (1.11 to 1.52)
Total events: 1229 (treatment), 1403 (control)				
Test for heterogeneity: χ^2=1.48, df=4, P=0.83, I^2=0%				
Test for overall effect: z=3.29, P=0.001				
Three months after discharge				
Harris 1991[w2]	67/97	106/170	8.89	1.35 (0.79 to 2.29)
Landefeld 1995[w3]	236/327	210/324	21.91	1.41 (1.01 to 1.96)
Asplund 2000[w5]	117/190	124/223	16.36	1.28 (0.86 to 1.90)
Counsell 2000[w6]	552/742	552/740	52.83	0.99 (0.78 to 1.25)
Total (95% CI)	1356	1457	100.00	1.16 (0.99 to 1.37)
Total events: 972 (treatment), 992 (control)				
Test for heterogeneity: χ^2=3.63, df=3, P=0.30, I^2=17.4%				
Test for overall effect: z=1.79, P=0.07				

Baztan, J. J et al. BMJ 2009;338:b50

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

	Intervention group n=91	Control group n=85	Significance of difference
Length of hospital stay (days)	3.3	5.5	P<0.001
Post operative delirium	9 (11%)	22 (24%)	P<0.05
All complications	7%	4.2%	P<0.05

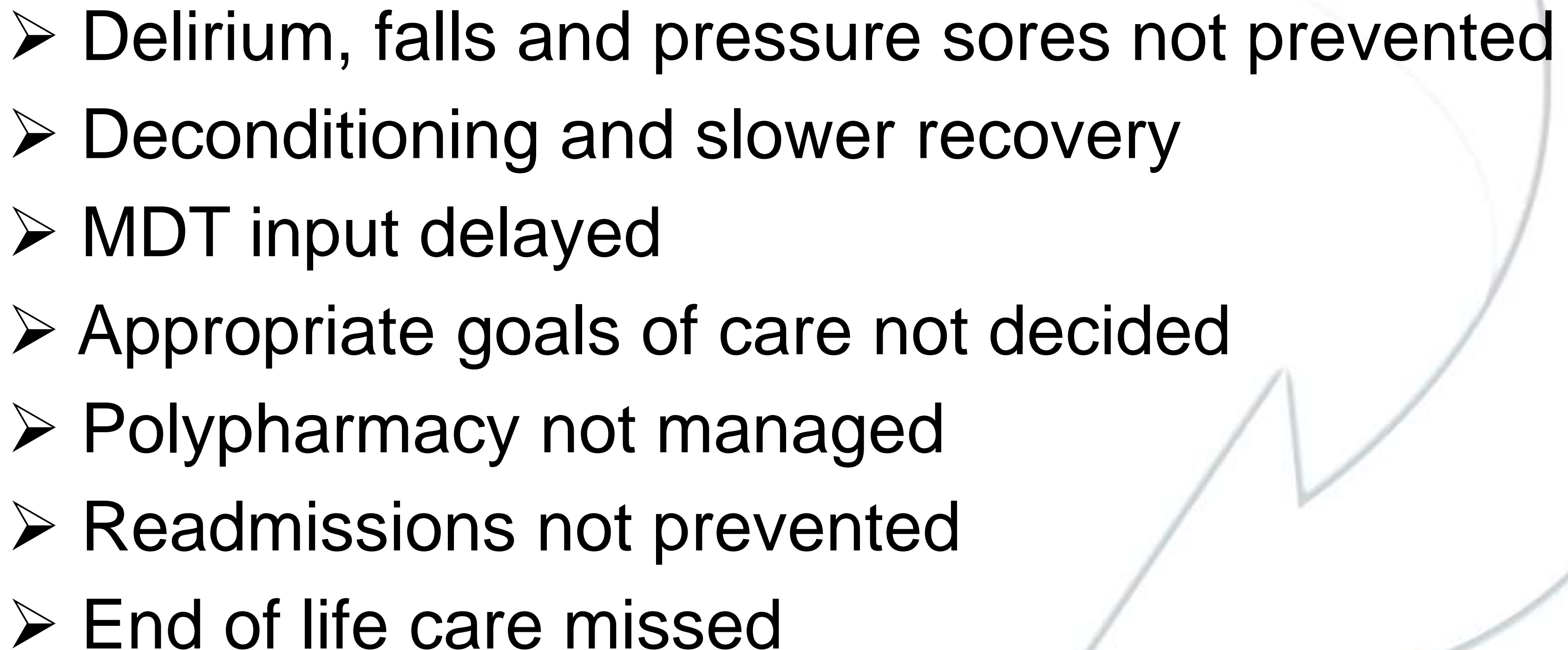
Partridge J et al, 2016; Br J Surg

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 days
- Patient experience of ED/AMU can improve

Summary points

Risks for patients if frailty is not recognised and taken into account



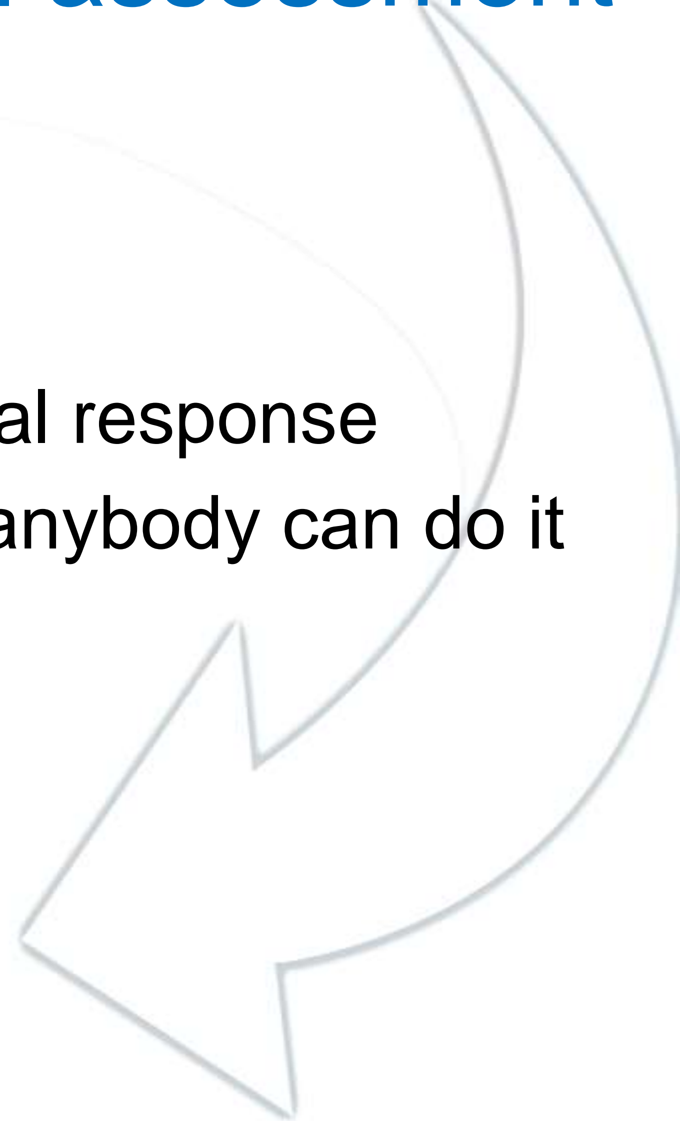
- Delirium, falls and pressure sores not prevented
- Deconditioning and slower recovery
- MDT input delayed
- Appropriate goals of care not decided
- Polypharmacy not managed
- Readmissions not prevented
- End of life care missed

Risks for patients if frailty is taken into account without individual assessment

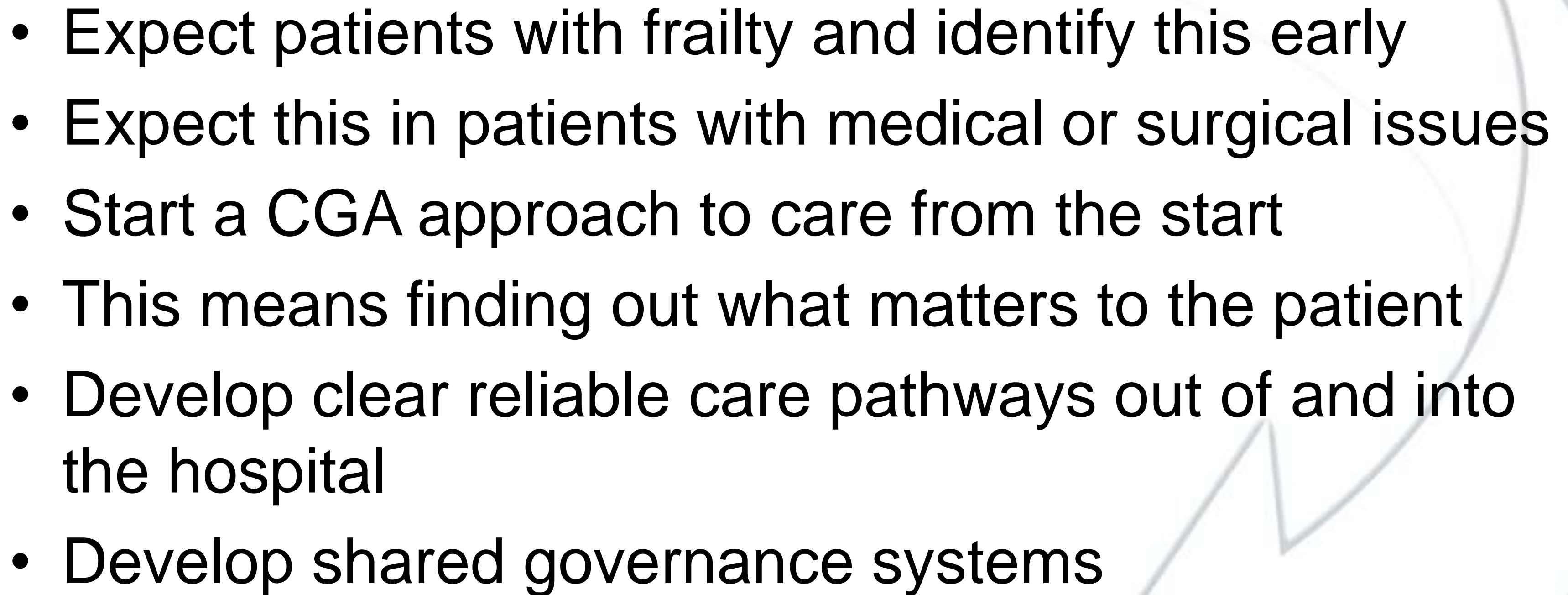
Frailty

- 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
- This means finding out what matters to the patient
- 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

Only £125 ~~£149~~
For members of AFN or NHS Elect
(or £400 ~~£496~~ for 4)

Only £149 ~~£189~~
For non-members
(or £500 ~~£596~~ 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