Ageing Well

Quality Healthcare in Later Life

Using population sub-segmentation to promote tailored end of life care in later life

Dawn Moody

Associate National Clinical Director Older People

6th March 2018

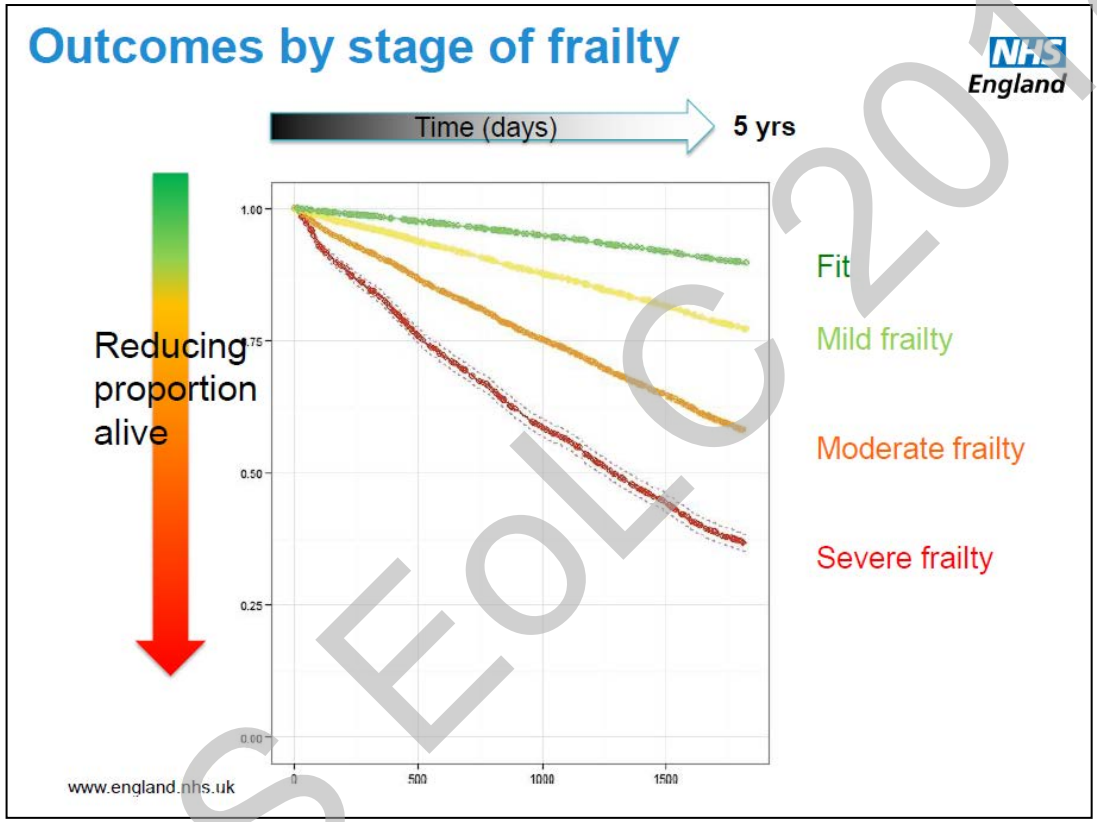
Context: Population

2015-2025: Age 65 and over

- **Number of people will increase by 19·4%**: from 10·4M to 12·4M
- **Number with disability will increase by 25·0%:** from 2·25M to 2·81M
- **Total life expectancy at 65 will increase by 1·7 yrs** (to 21·8 yrs)
- **Disability-free life expectancy at 65 increase by 1 yr** (to 16·4 yrs)
- **Life expectancy with disability** will **increase** from 4·7 yrs to 5·4 yrs

Forecasted trends in disability and life expectancy in England and Wales up to 2025: a modelling study: *Guzman-Castillo et al, Lancet Public Health 2017*

Context: Frailty & Mortality



1 year outcome (HR)	Mild	Moderate	Severe
Mortality	1.92	3.1	4.52
Hospitalisation	1.93	3.04	4.73
Nursing home admission	1.89	3.19	4.76

Describing the Challenge

Audit of End of Life Care

1. Was the person's death 'predictable'?
2. If 'predictable' had the person been recognised as approaching the end of their life?
3. If recognised, had the person's needs had been appropriately identified and provided for?
4. Was there any association between approaching end of life and certified cause(s) of death (Parts 1 & 2)?

Describing the Challenge

Audit of End of Life Care

1. Was the person's death 'predictable'? **69%**
2. If 'predictable' had the person been recognised as approaching the end of their life? **70%**
3. If recognised, had the person's needs had been appropriately identified and provided for? **87%**
4. Was there any association between approaching end of life and certified cause(s) of death (Parts 1&2)? **Yes**

Cause(s) of death

- **Cancer** as a main cause of death was associated with 100% recognition of approaching end of life.
- **Cancer** as a secondary cause of death also associated with very high recognition.
- People not recognised as approaching end of life were more likely to have **pneumonia**, **dementia**, and **cardiovascular disease** as main cause of death.
- People not recognised as approaching end of life were very much more likely to have secondary causes of death recorded, in particular **dementia** and **frailty**.

Opportunity for improvement

For people with non-cancer diagnoses, particularly dementia, frailty & multimorbidity:

- Better recognition of approaching end of life
- Better recognition of pneumonia as a last illness

‘Fit for Frailty’

The British Geriatric Society, 2014/2015

- Identifying frailty
- Managing frailty

- Managing services
- Developing & commissioning services

Frailty identification

Frailty identification

Managing Frailty as Long Term Condition

Managing frailty as a long-term condition FREE

Jennifer K. Harrison ✉; Andrew Clegg; Simon P. Conroy; John Young

Age Ageing (2015) 44 (5): 732-735. **DOI:** https://doi.org/10.1093/ageing/afv085

Published: 13 July 2015 **Article history** ▾

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Abstract

Frailty is a distinctive late-life health state in which apparently minor

BGS British Geriatrics Society Improving healthcare for older people

Age and Ageing

THE INTERNATIONAL JOURNAL OF THE BRITISH GERIATRICS SOCIETY

NHS England

About us Our work Resources Commissioning Get involved

Blog

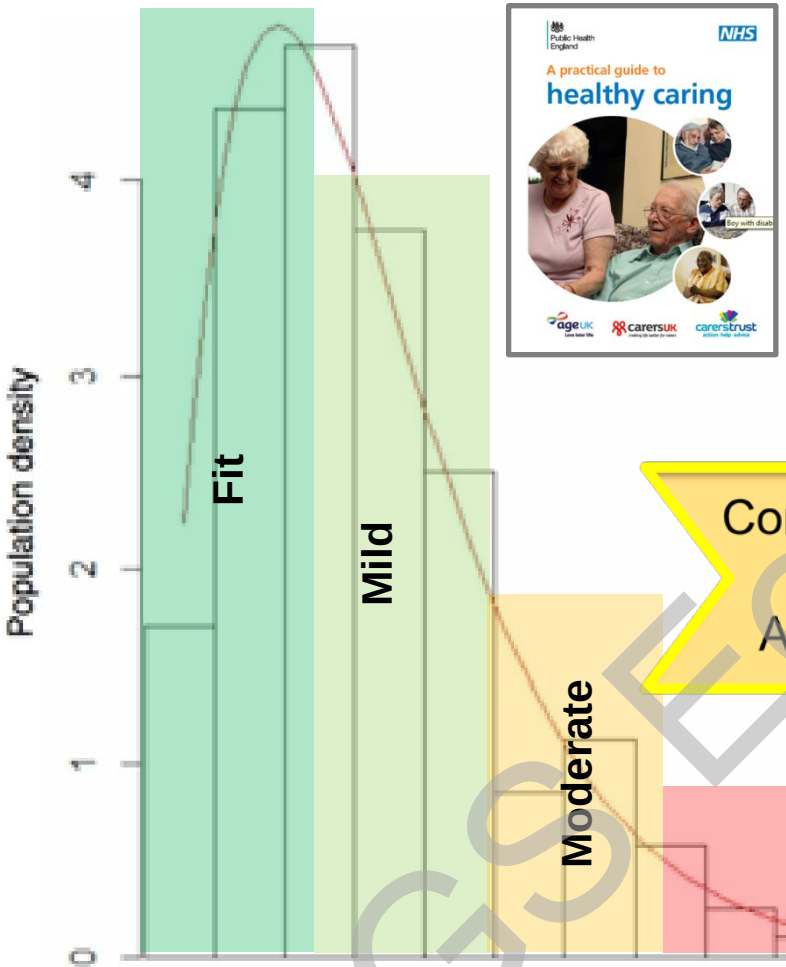
We must recognise frailty as a long term condition – John Young

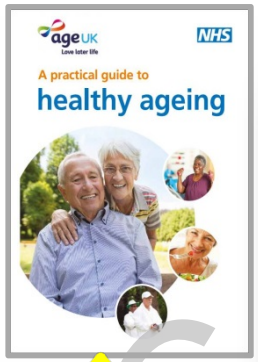
7 May 2014 John Young

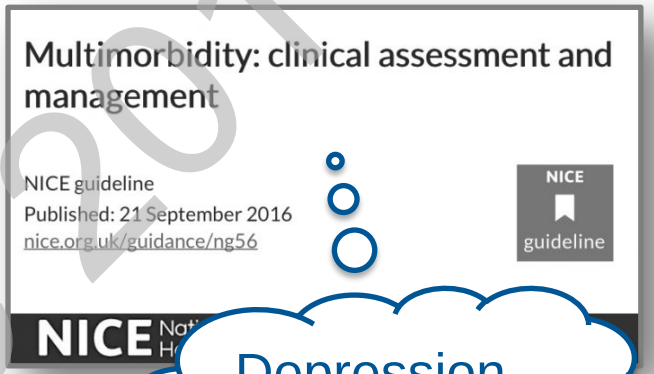
Long term conditions

Frailty as a Long Term Condition

NHS England







Comprehensive Geriatric Assessment

Depression / anxiety

Acknowledge the right time to support transition to End of Life Care

Managing Frailty as Long Term Condition

What can we do at a national level to support the changes needed to improve care for individuals?

Ageing Well

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Using population sub-segmentation to promote tailored end of life care in later life

Martin Vernon

National Clinical Director Older People

6th March 2018

Ambition for frailty..

'<u>Everybody</u> should know what to do next when presented with a person living with frailty and/or cognitive disorder'

In other words…

Its something we can all get around locally

Why is frailty so important right now?

- **Timely identification of people at risk** with **complex care needs**
- It permits **sub-stratification by needs**, not age
- It crosses health & social care, **so can drive integration**
- Its **predictive:** finding those who benefit from **active and healthy ageing**
- It will **guide & track commissioning, design & service delivery**
- It directs towards key outcomes: **maintained functional ability & wellbeing**
- It provides opportunity to **standardise care** for people with similar needs

Key Facts: Emergency Admissions

Cost £13.7Bn in 2015/16

5.8m in 2016-17.

Between 2015/16 & 2016/17 **increased by 2%**

82% of increase (2013/14 to 2016/17) caused by people who did not stay overnight.

65% of hospital emergency bed days occupied by **patients aged 65+** in 2016/17.

53% of growth in emergency admissions came from **people aged 65+** (2013/14 to 2016/17)

32% areas reported reduced emergency admissions by target set in BCF plans 2016/17

Emergency 30 day readmissions increased by 17% 2013/14 to 2016/17

NAO 2018

Impact of frailty on hospital mortality and LOS

- **Severe frailty adversely impacts mortality in acute care**
- **Severe frailty, acute illness, delirium & dementia all lead to longer LOS**

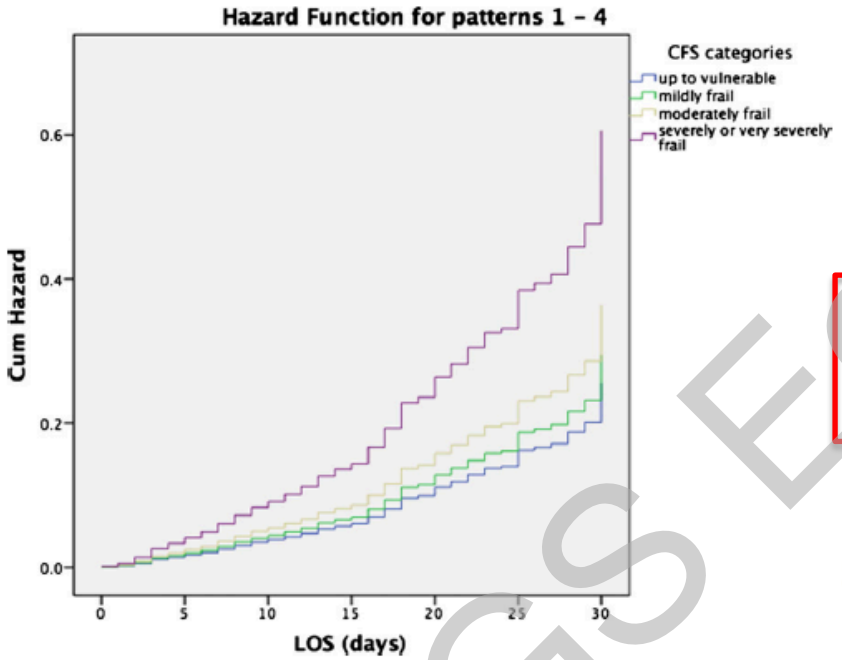


TABLE 4. Results of Multivariate Regression Models

Dependent variable: LOS ≥10 d (n = 5546); chi-square = 708.1; $P < 0.001$; AUC = 0.71)

	Unstandardized coefficients			95% CI for OR		
	B	Std. error	OR	Lower bound	Upper bound	*P*
Age	0.01	0.01	1.01	1.00	1.03	0.009
Gender	0.07	0.06	1.08	0.95	1.22	0.234
ED-MEWS	0.11	0.02	1.12	1.08	1.16	<0.001
CCI	0.09	0.01	1.09	1.07	1.11	<0.001
CFS ≥6	0.44	0.07	1.55	1.36	1.77	<0.001
HoD	0.77	0.10	2.16	1.79	2.61	<0.001
ACS	1.20	0.12	3.31	2.64	4.15	<0.001
Dc gen med	-0.87	0.09	0.42	0.35	0.51	<0.001
Dc geri med	0.00	0.10	1.00	0.83	1.21	0.995
Dc surgery	0.08	0.10	1.09	0.89	1.32	0.411

NOTE: The reference category for gender is male (male = 0; female = 1). Abbreviations: ACS, acute confusional state; AUC, area under the curve; CFS, Clinical Frailty Scale; CCI, Charlson Comorbidity Index; CI, confidence interval; Dc, discharge; ED-MEWS, Emergency Department Modified Early Warning Score; Gen Med, General Medicine; Geri Med, Geriatric Medicine; HoD, history of dementia; LOS, length of stay; n, number; OR, odds ratio.

Clinical frailty adds to acute illness severity in predicting mortality hospitalized older adults: An observational study☆

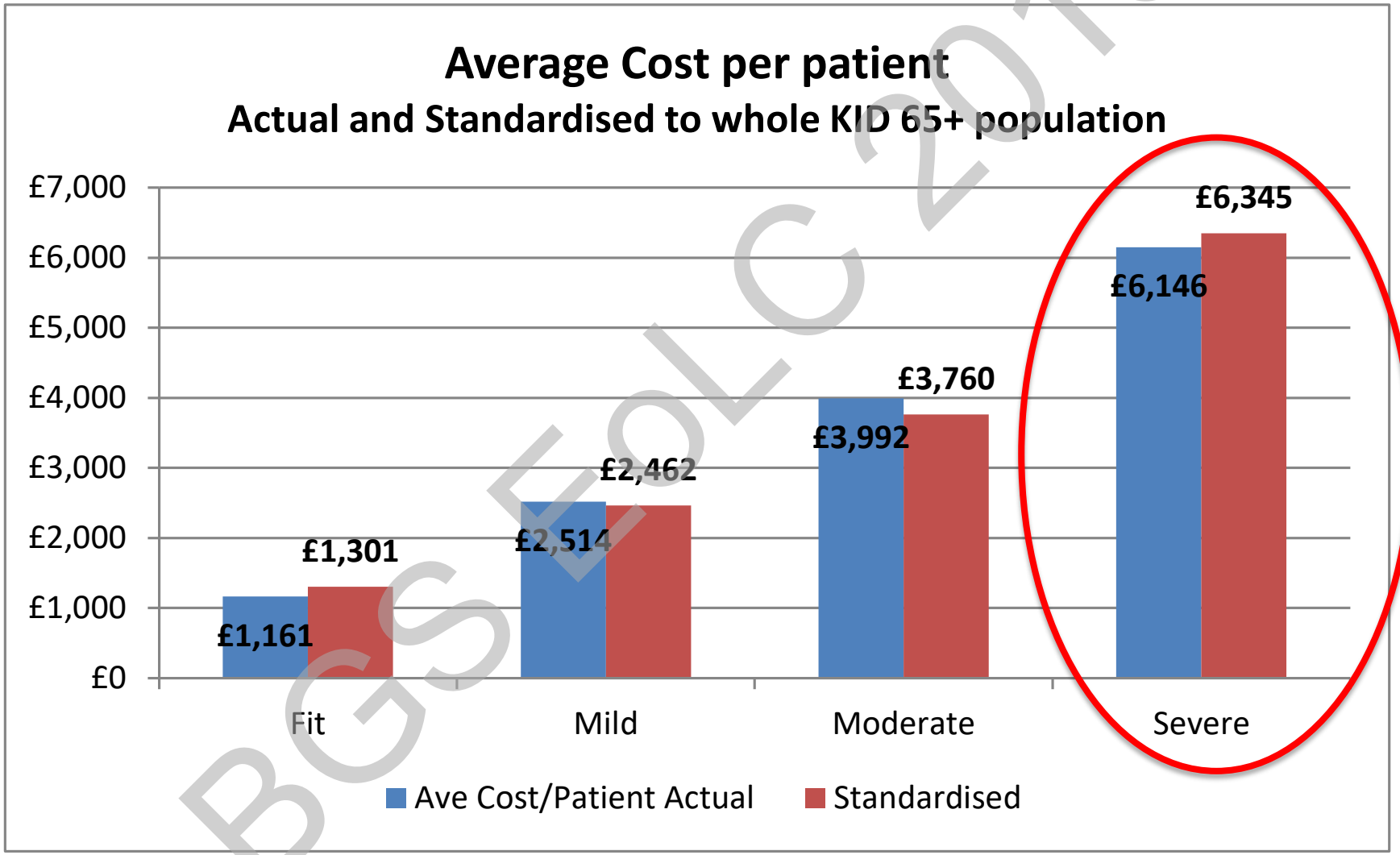
Roman Romero-Ortuno [a,b,*], Stephen Wallis [a], Richard Biram [a], Victoria Keevil [a,b]

[a] Department of Medicine for the Elderly, Addenbrooke's Hospital, Cambridge, United Kingdom
[b] Clinical Gerontology Unit, Department of Public Health and Primary Care, University of Cambridge, United Kingdom

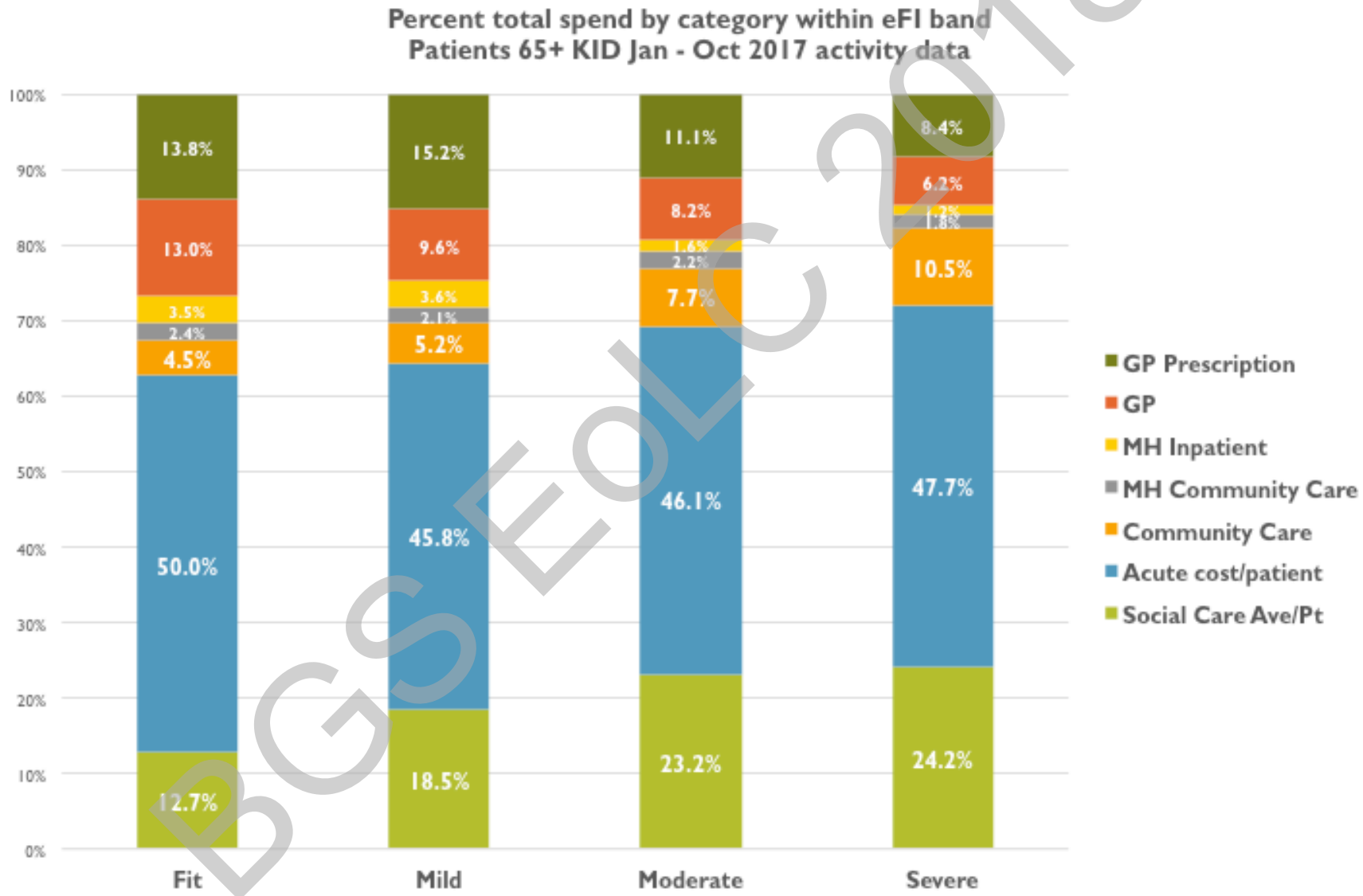
The Association of Geriatric Syndromes with Hospital Outcomes

Roman Romero-Ortuno, PhD[1,3*], Duncan R. Forsyth, MA[1], Kathryn Jane Wilson, MBBS[1], Ewen Cameron, MD[2], Stephen Wallis, MB BCh ir[1], Richard Biram, MBBS[1], Victoria Keevil, PhD[1,3]

Frailty is expensive when severe



Cost is distributed across the system



NHS England Next Steps-Priorities

'Health and high quality care –now and for future generations'

- **Urgent and emergency care 24/7**: **Admitting** sicker patients & **discharging** home promptly
- Next 2 years hospitals to free up 2-3K beds through **close community services working**
- **Cancer**: will affect 1 in 3 in lifetime: survival at record high (LTC)
- **Mental health**: loneliness, depression and anxiety in older people
- **Older people**: Help older people and those with frailty **stay healthy & independent.**
- **Integration**: GP, community health, MH & hospitals: **Integrated Care Systems**
- **Workforce development** & continue drive to **improve safety**
- **Technology & innovation**: enable patients to take greater role in **self care**

Three priorities for frailty

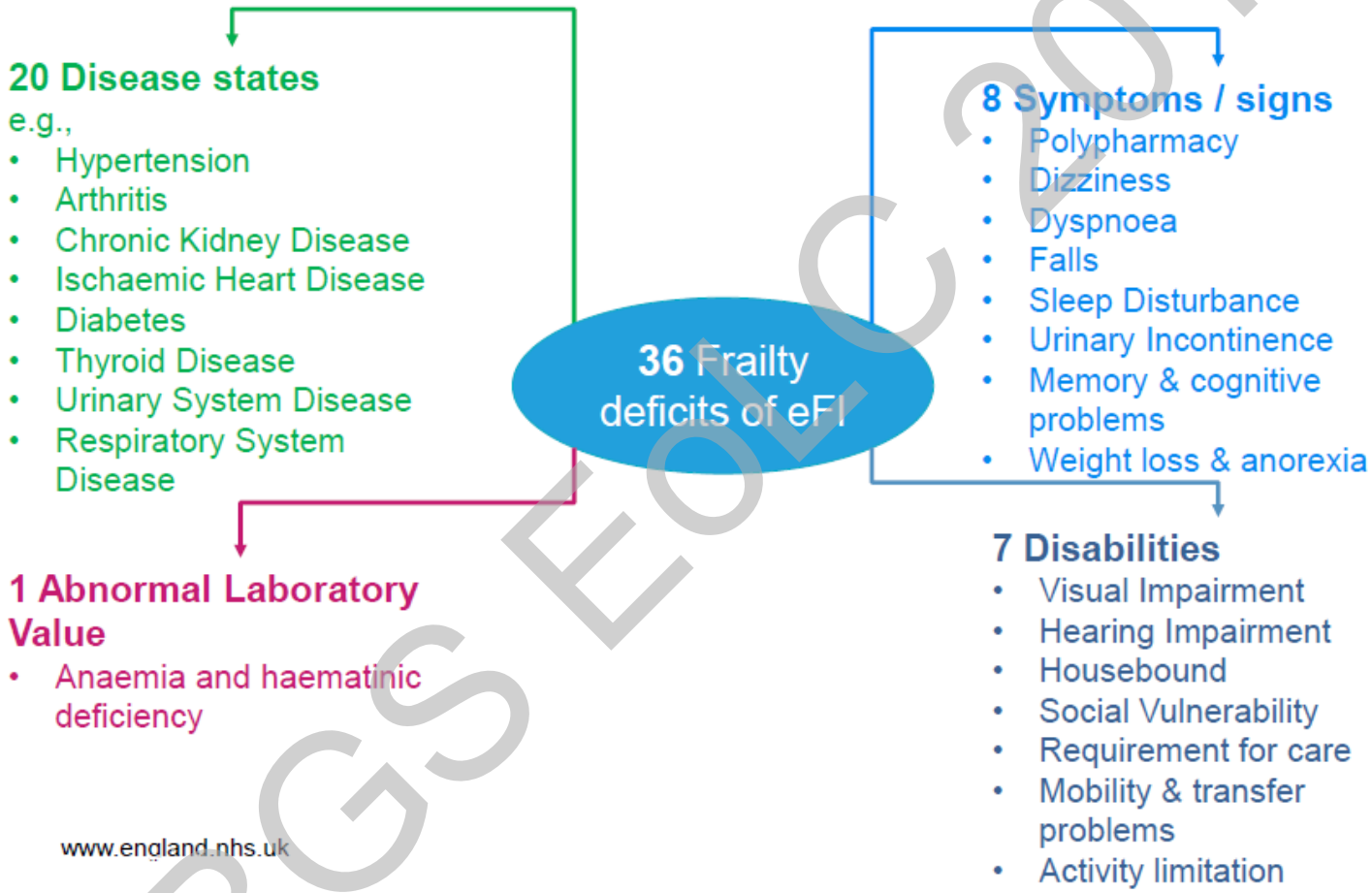
1. **Change in approach to health & social care for older people**
2. **Preventing poor outcomes through active ageing**
3. **Quality improvement in acute & community services**

Routine timely frailty identification

- Routine frailty identification in primary care has 2 potential merits:

1. **Population risk stratification**
2. **Targeted individualised interventions for optimal outcomes**

Electronic Frailty Index (eFI)



Clegg et al: Age Ageing2016: 45:353-360

Direct Clinical Verification

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.

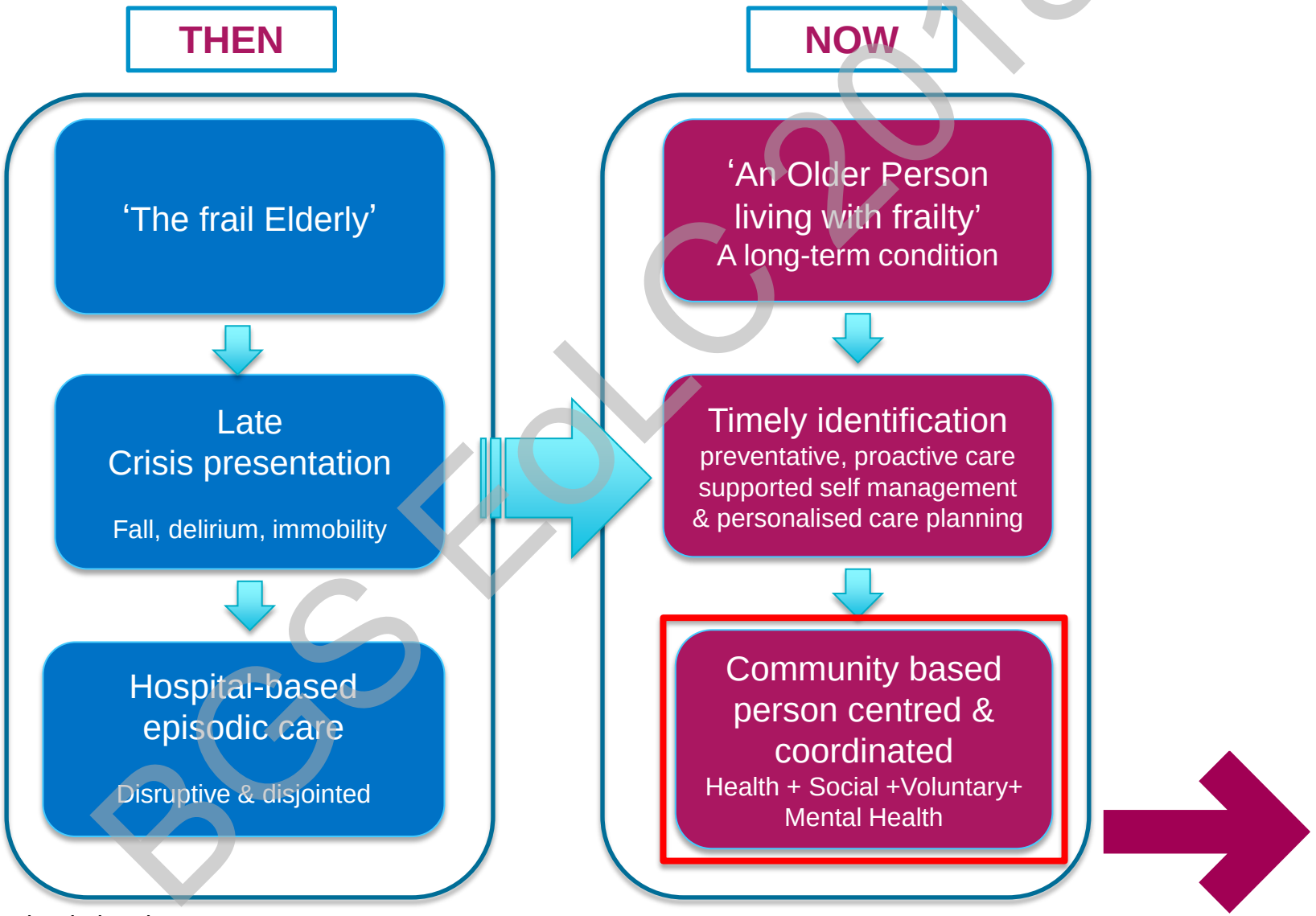
* 1. Canadian Study on Health & Aging, Revised 2008.
2. K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489-495.

DALHOUSIE UNIVERSITY *Inspiring Minds*

GP Contract 2017/18 Data [Q3]

Definition	Cumulative Q3 total	Cumulative Q3 %
Count 65+ with frailty assessment	2,302,355	23.48% 65+
65+ without frailty assessment	7,501,842	76.52% 65+
Total moderately frail	569,828	5.8% 65+
Total severely frail	295,180	3% 65+
Total moderate and severely frail	**865,008**	**8.82% 65+**
Severe frailty w/medication review	151,130	51.2% (severe frailty)
Moderate or severe frailty w/fall	71,142	8.22% (moderate/severe frailty)
Moderate or severe frailty w/falls clinic	18,024	2.1% (moderate/severe frailty)
Moderate or severe frailty w/consent to SCR	91,813	10.61% (moderate/severe frailty)

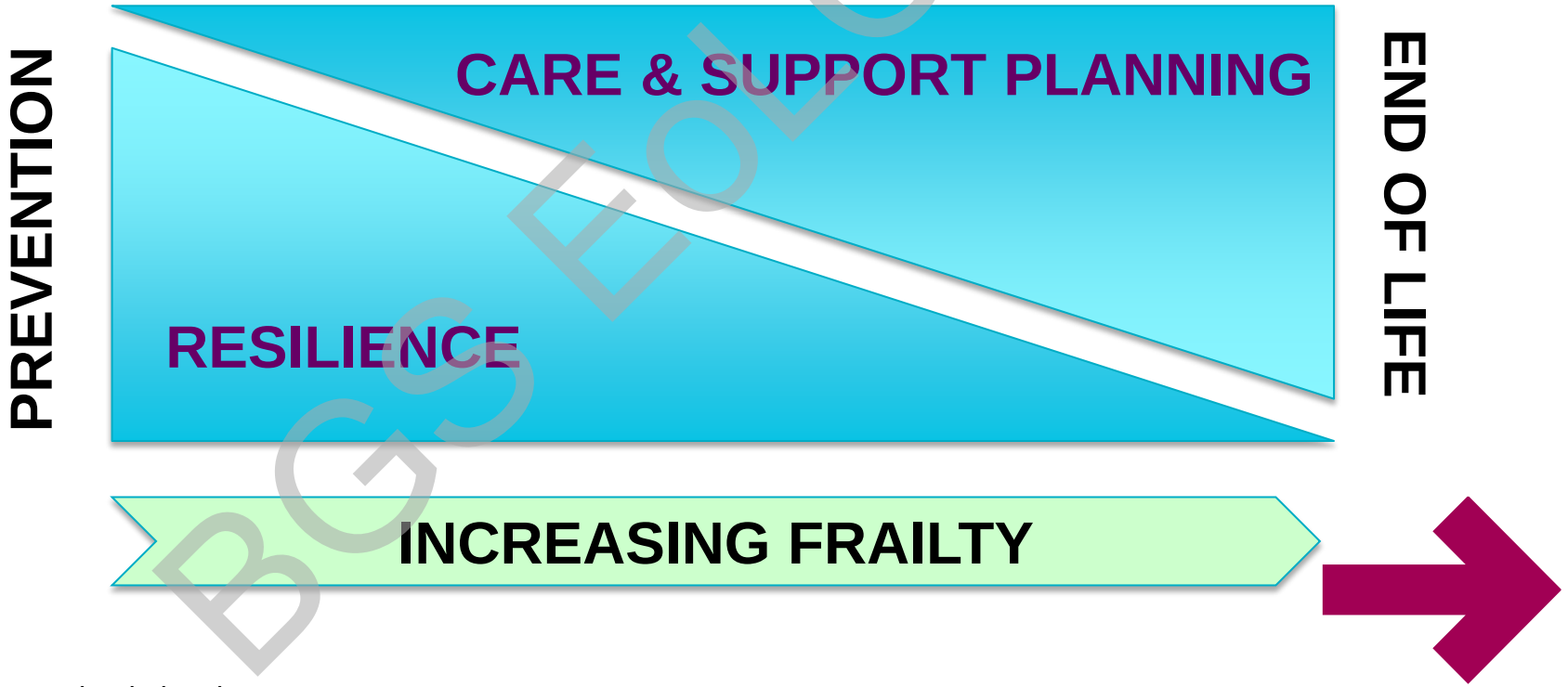
Paradigm shift



From: *'What's the matter with you?'*
To: *'What matters to me?'*

- Frailty is a long term condition: it can be **diagnosed**, is **not usually curable** but **can be managed** and **persists**

- As resilience is lost, **assessment, care and support planning** become more important through to the end of life



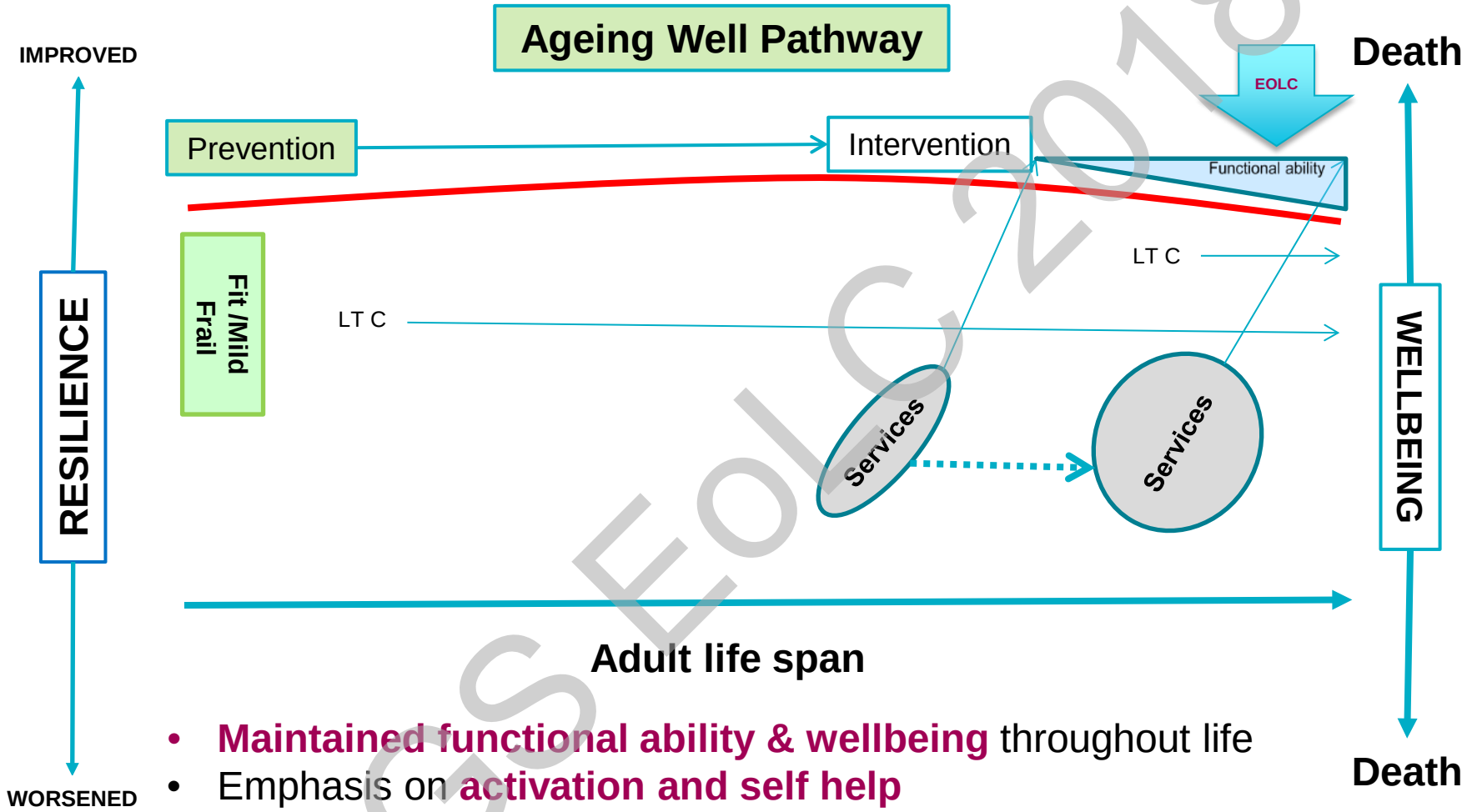
Key enablers to better EOLC

- **Population sub-segmentation** by need to guide planning
- Industrialising best practice through **national frailty standards**
- **Workforce development** (core skills, capability, competencies)
- **Data**: integrated, linked health and social care data
- **Existing best practice** models and frameworks
- **Community currencies**
- **Right care** (prevention & response pathways aligning key services)
- **GIRFT** for selected, linked **pathways**: up/downstream
- Devolution, **localised** strategic planning and delivery

So how do we get there?

We know what good looks like…
The task is how to deliver it at scale?

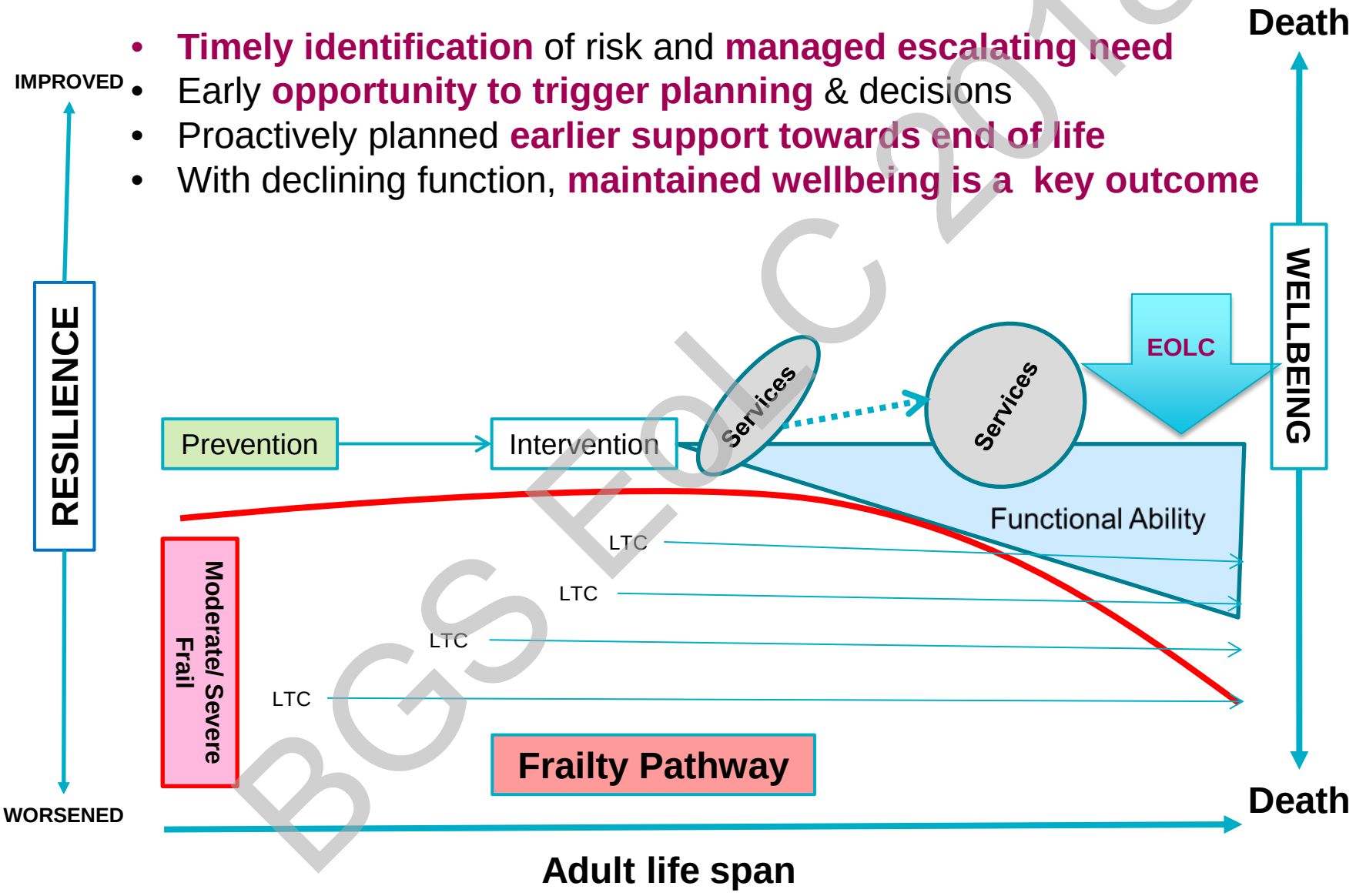
Population sub-stratification: Prevention



- **Maintained functional ability & wellbeing** throughout life
- Emphasis on **activation and self help**
- **Timely, well planned & proportionate** service support for needs
- **Later and planned support** towards end of life

Population sub-stratification: Intervention

- **Timely identification** of risk and **managed escalating need**
- Early **opportunity to trigger planning** & decisions
- Proactively planned **earlier support towards end of life**
- With declining function, **maintained wellbeing is a key outcome**



Integration: testable currency (moderate frailty)

NHS England

Moderate frailty cohort

FMO-01	Moderate – recoverable
FMO-02	Moderate – Stable
FMO-03	**Moderate – Progressive**

Suggested metrics

- Number recoverable=n_{1t} - n_1
- Number stable=n_{2t} – n_2
- Number progressive=n_{3t} – n_3
- Number community contacts
- Number outpatient attends
- Days spent in hospital in time t
- Days spent in own home in time t
- Patient wellbeing index

Time zero

FMO-01=n_1
FMO-02=n_2
FMO-03=n_3

Intervention A

Intervention B

Intervention C

Time t

FMO-01=n_{1t}
FMO-02=n_{2t}
FMO-03=n_{3t}

Baseline costs
Baseline characteristics

Incurred costs
Outcome metrics

Recoverable

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.

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Stable

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.

Progressive

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).

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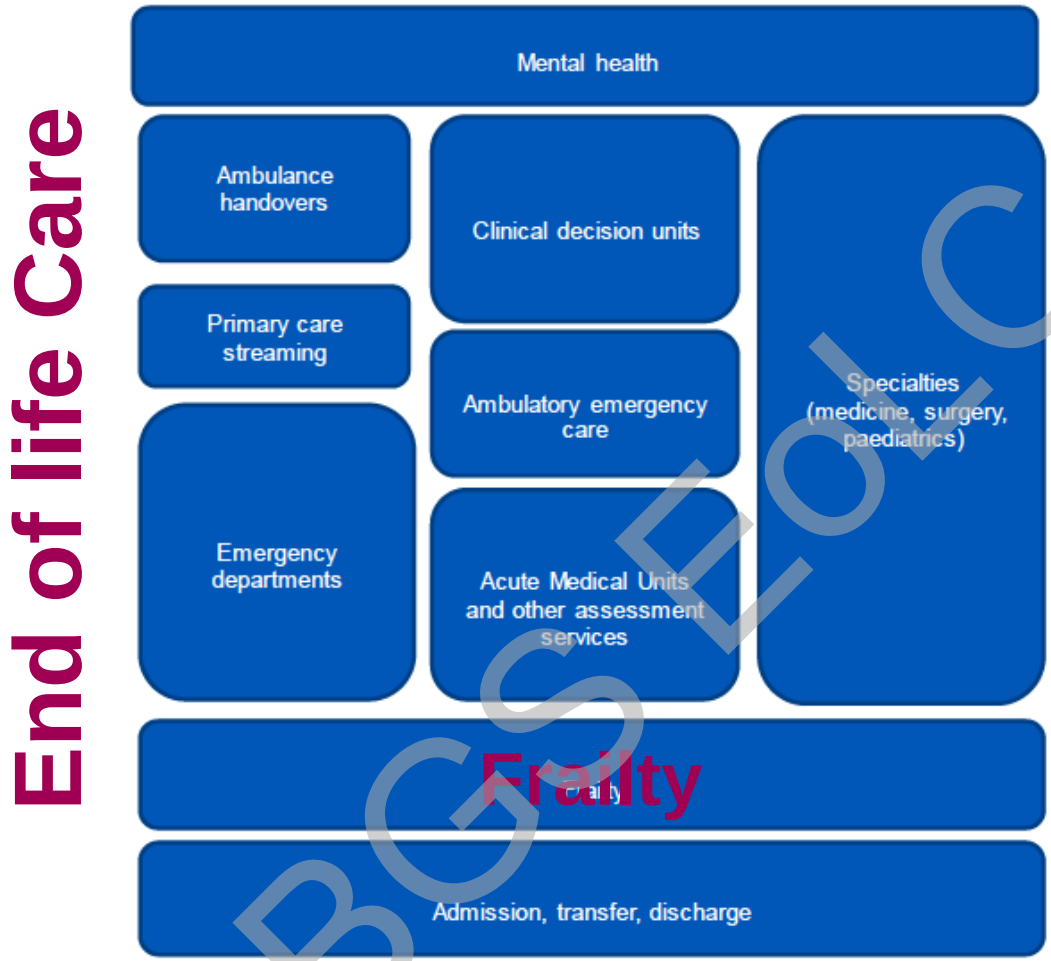
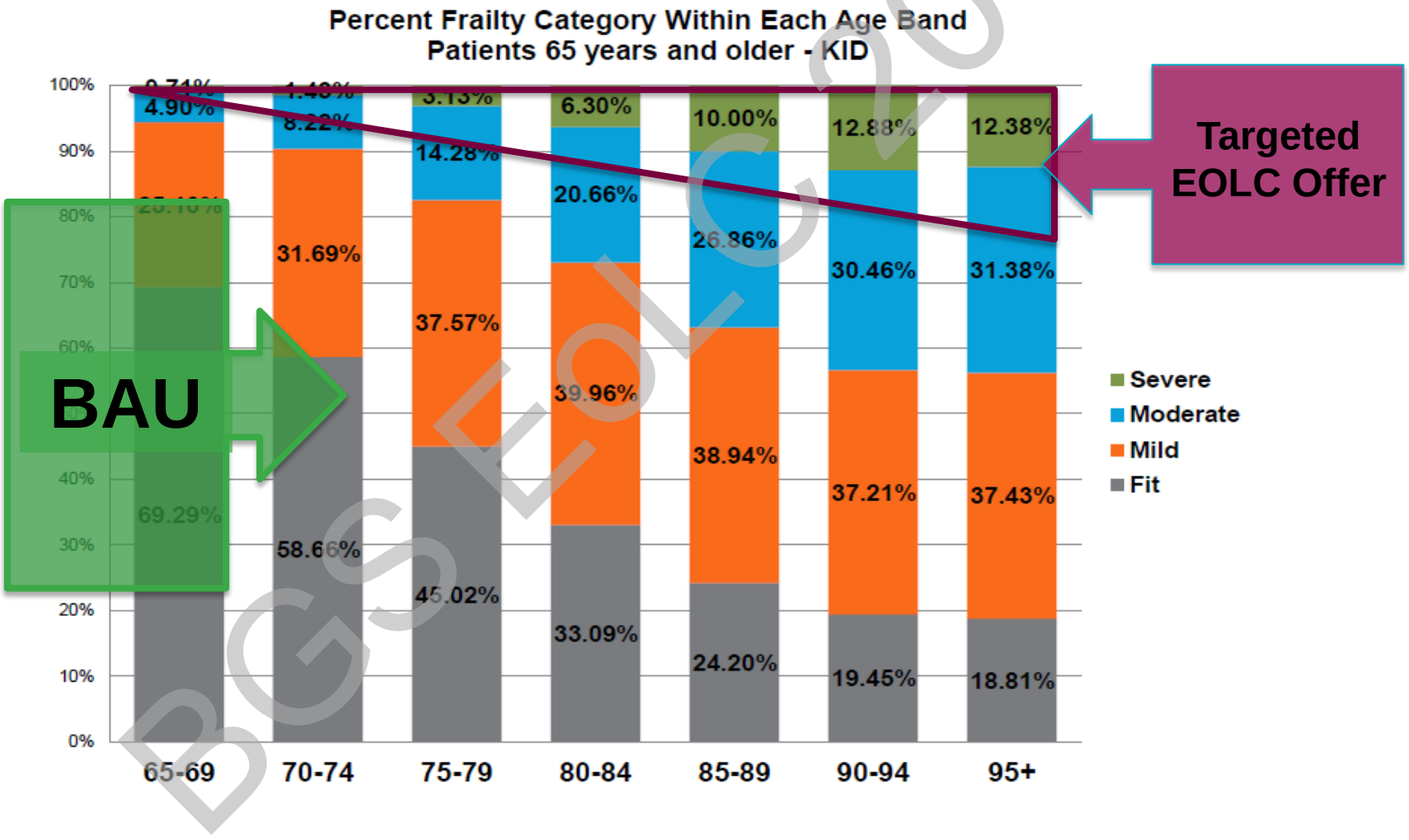
Getting it Right First Time (GIRFT)

10 key areas for acute care focus



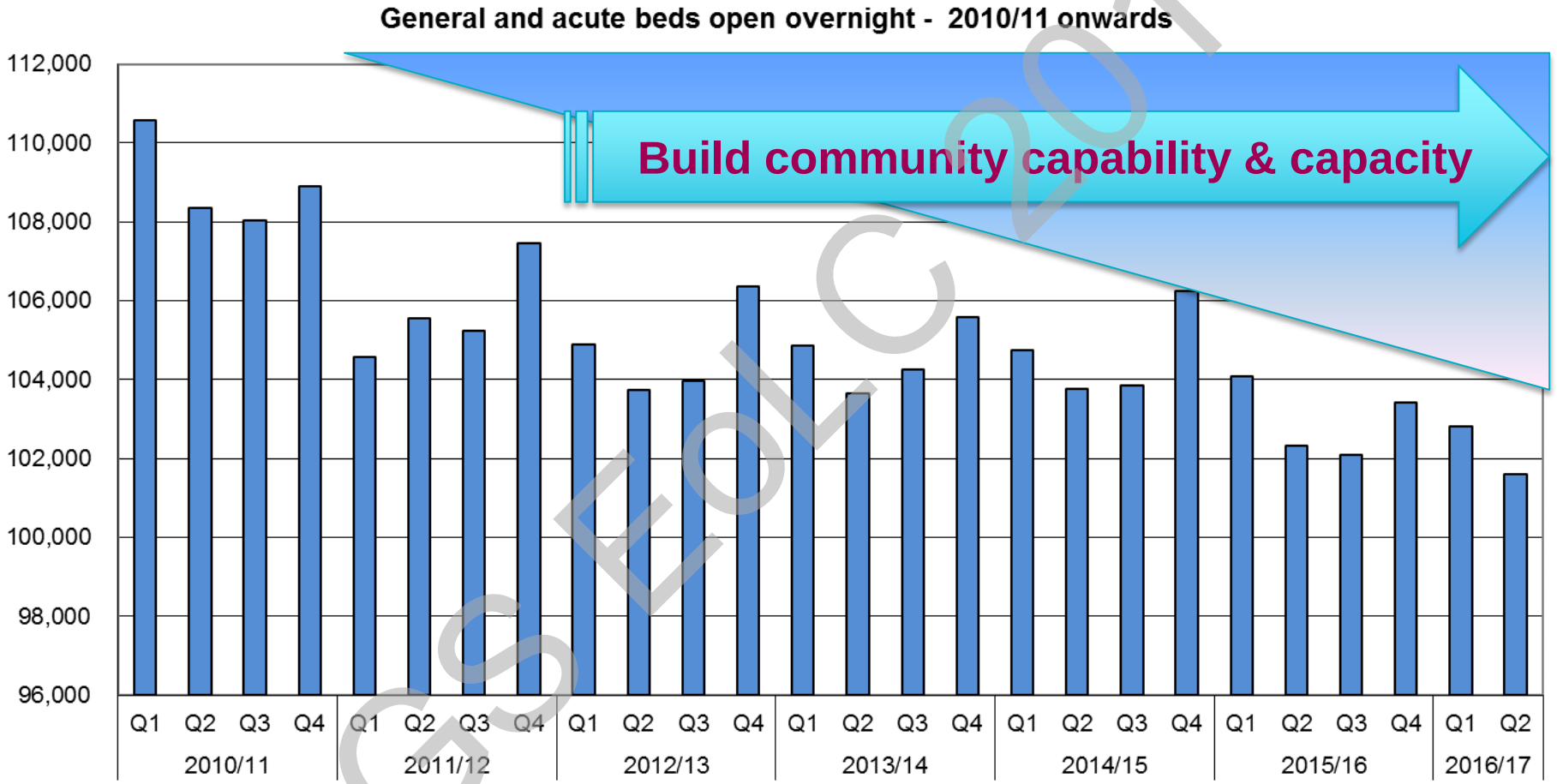
And in summary..

Frailty data to commission a new integrated personalised care offer for those NOT ageing well



Proactive & Reactive Community MDT care

Integrated care system offer provides the alternatives to hospital care



8% reduction in general and acute beds since 2010: NHSB 2017

What we're doing nationally

- Regional meetings
- Core Capabilities framework
- Economic frailty modelling
- A suite of national frailty products
- Research & Innovation

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www.england.nhs.uk/ourwork/ltc-op-eolc