Frailty and deconditioning; risks and opportunities.

Look at the patient lying alone in bed
What a pathetic picture he makes.
The blood clotting in his veins.
The lime draining from his bones.
The scybola stacking up in his colon.
The flesh rotting from his seat.
The urine leaking from his distended bladder
and the spirit evaporating from his soul.
Teach us to live that
we may dread unnecessary time in bed.
Get people up and we may save
patients from an early grave.

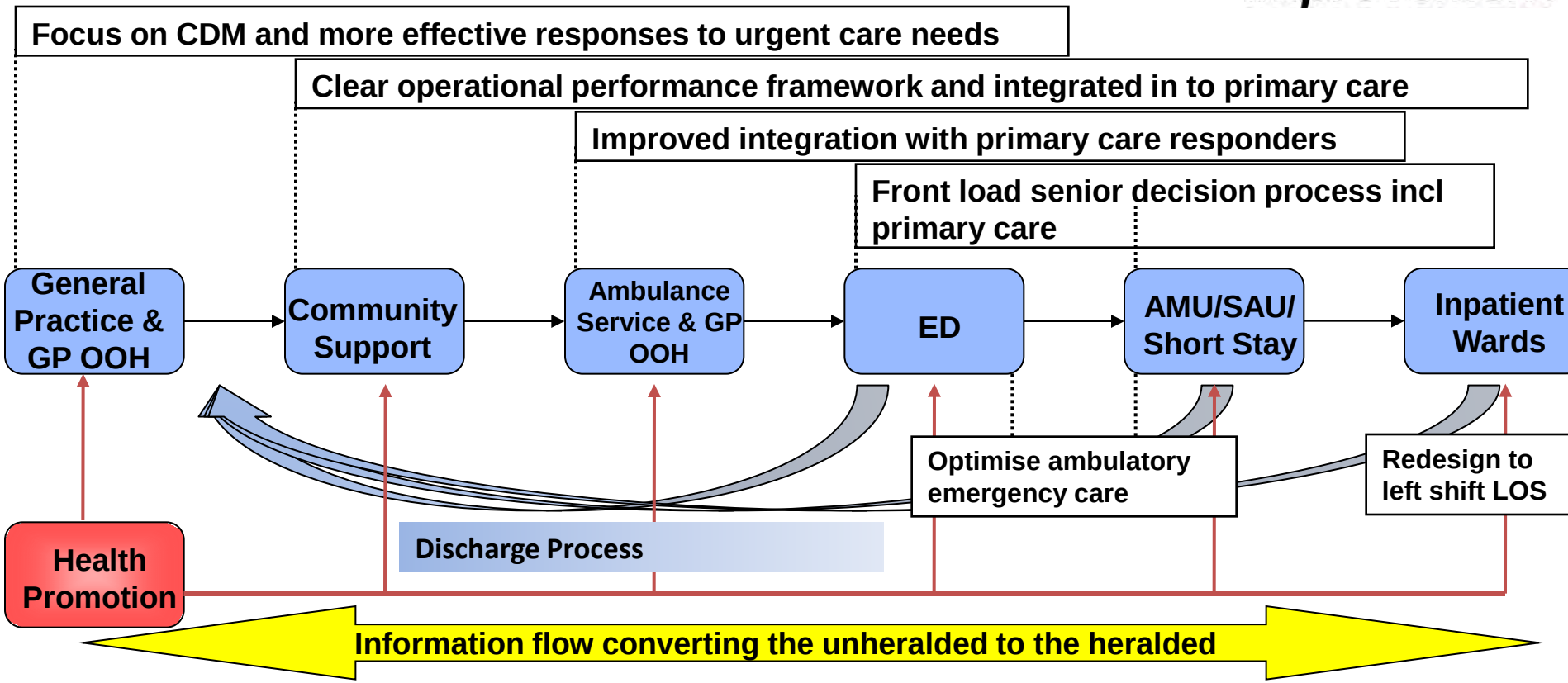
Dr. Richard Asher, 1942

Dr Ian Sturgess
Associate MD
Improvement Directorate
NHS Improvement

Urgent care – a whole system perspective

A Complex Adaptive System

NHS Improvement



Preventative/ Predictive care Disease management Managed populations	Alternatives to acute admission settings	Alternative access for diagnosis	Alternative settings for therapy (Home First)	'Home First' Principle	Alternative processes for 'readmission'

Frailty - an important clinical syndrome

Journal of Gerontology: MEDICAL SCIENCES
2001, Vol. 56A, No. 3, M146–M156

Frailty in Older Adults: Evidence for a Phenotype

Linda P. Fried,[1] Catherine M. Tangen,[2] Jeremy Walston,[1] Anne B. Newman,[3] Calvin Hirsch,[4] John Gottdiener,[5] Teresa Seeman,[6] Russell Tracy,[7] Willem J. Kop,[8] Gregory Burke,[9] and Mary Ann McBurnie[2] for the Cardiovascular Health Study Collaborative Research Group

Research
Recherche

A global clinical measure of fitness and frailty in elderly people

Kenneth Rockwood, Xiaowei Song, Chris MacKnight, Howard Bergman, David B. Hogan, Ian McDowell, Arnold Mitnitski

Seminar

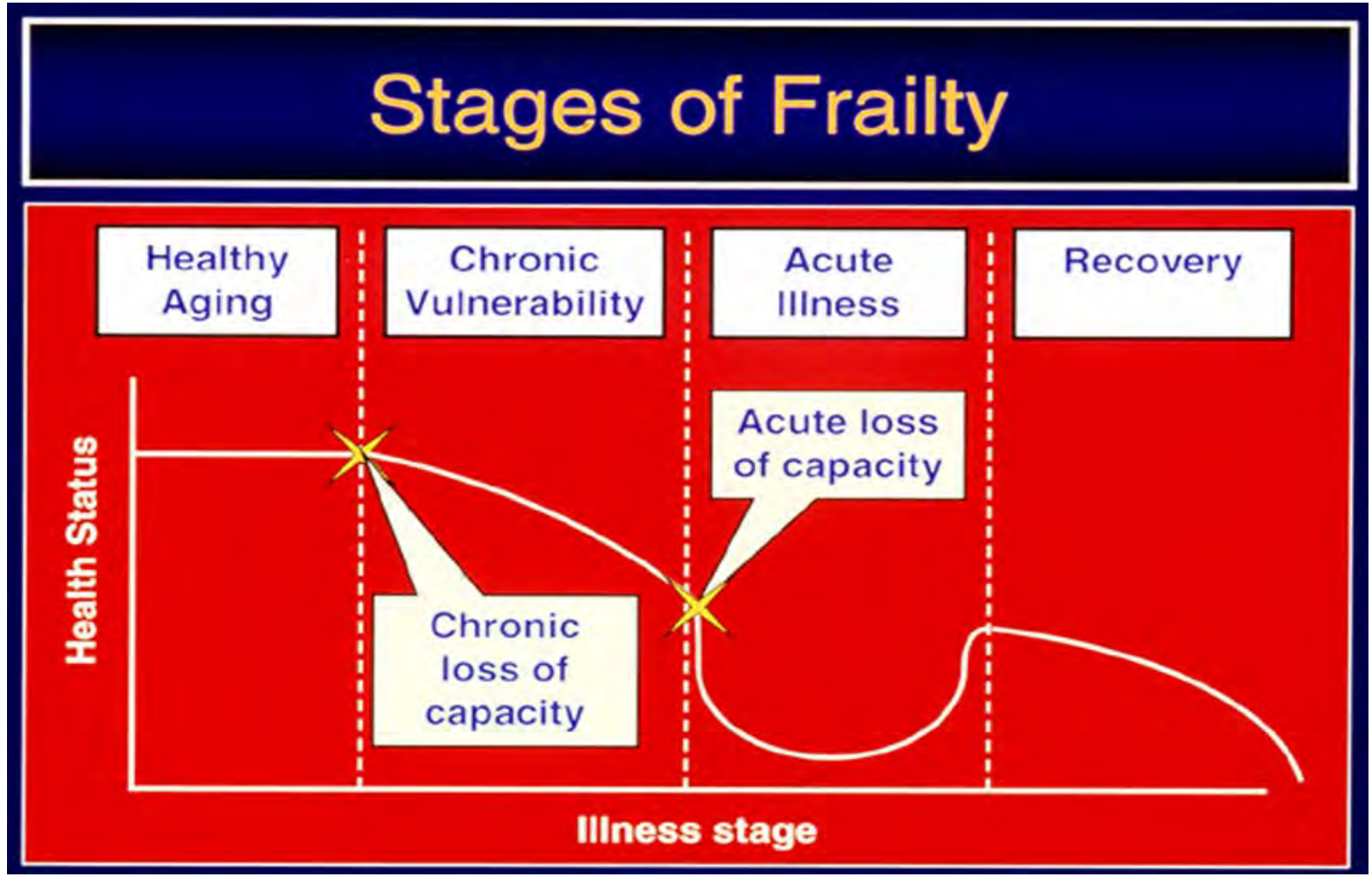
"A medical syndrome with multiple causes and contributors that is characterized by diminished strength, endurance, and reduced physiologic function that increases an individual's vulnerability for developing increased dependency and/or death."

Lancet 2013; 381: 752–62

Frailty in elderly people

Andrew Clegg, John Young, Steve Iliffe, Marcel Olde Rikkert, Kenneth Rockwood

NHS Improvement



Fried 1999

Royal College of Physicians

Setting higher standards

Acute care toolkit 3

Acute medical care for frail older people March 2012

Future Hospital Commission

Future hospital: Caring for medical patients

A report from the Future Hospital Commission to the Royal College of Physicians

September 2013

The King's Fund

Ideas that change health care

Making our health and care systems fit for an ageing population

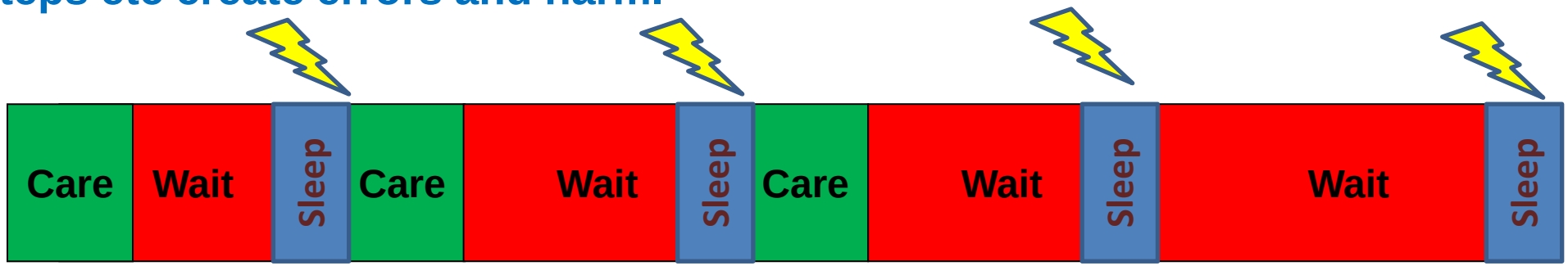
Authors
David Oliver
Catherine Foot
Richard Humphries

QUALITY CARE FOR OLDER PEOPLE WITH URGENT & EMERGENCY CARE NEEDS

Care Coordination – Enhanced Recovery
'No Wasting of Patient's Time'

Admitted emergency care is a series of dependent steps with some parallel processes.

Unnecessary waits/variation in lead times, addition of additional unnecessary steps etc create errors and harm.



Red bed days vs Green bed days

Unnecessary Waiting + Sleep Deprivation = Deconditioning

Physical **Psychological**

Cognitive **Social**

By reducing the waiting time overall LOS is reduced without changing the clinical care received by the patient

Risks of Hospital based De-conditioning Habitual Inactivity

Impact of Bed Rest in Older People

In first 24 hours

- ↓ Muscle power – 2-5%
- ↓ Circulating volume by up to 5%

In first 7 days

- ↓ Circulating volume by up to 20%
- ↓ VO_2 Max by 8-15%
- ↓ Muscle strength – 5-10%
- ↓ FRC – 15-30%
- ↓ Skin integrity

The compelling story

- **48% of people over 85 die within one year of hospital admission**

Imminence of death among hospital inpatients: Prevalent cohort study

David Clark, Matthew Armstrong, Ananda Allan, Fiona Graham, Andrew Carnon and Christopher Isles, published online 17 March 2014 *Palliat Med*

If you had 1000 days left to live how many would you chose to spend in hospital?

- **10 days in a hospital bed (acute or community) leads to the equivalent of 10 years ageing in the muscles of people over 80**

Gill et al (2004). studied the association between bed rest and functional decline over 18 months. They found a relationship between the amount of time spent in bed rest and the magnitude of functional decline in instrumental activities of daily living, mobility, physical activity, and social activity.

Kortebein P, Symons TB, Ferrando A, et al. Functional impact of 10 days of bed rest in healthy older adults. J Gerontol A Biol Sci Med Sci. 2008;63:1076–1081.

Set Intent - ‘Home First’

‘The Home Address I came from is the address to which I will return’

NHS Improvement

Principles

1. People spend the vast majority of their life at home
2. People should make long term living arrangements from their usual home not from ‘hospital’.
   - Discharge to Assess at home
3. Simple vs Complex discharge
   - Majority of discharges of older people with frailty can be kept simple
   - They become complex due to deconditioning and risk averse over assessment.
   - Most (over 80%) of admitted older people with frailty have ‘non-catastrophic illness’. The ‘catastrophes’ occur due to the ‘waiting’ in the system.

What does good look like for older people with frailty in acute care?

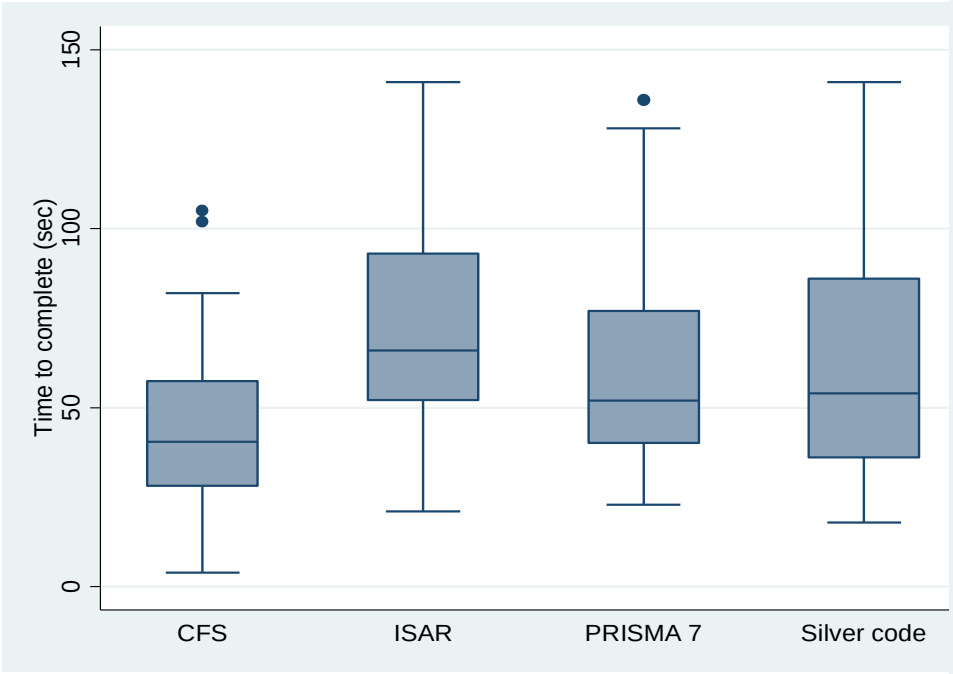
NHS Improvement

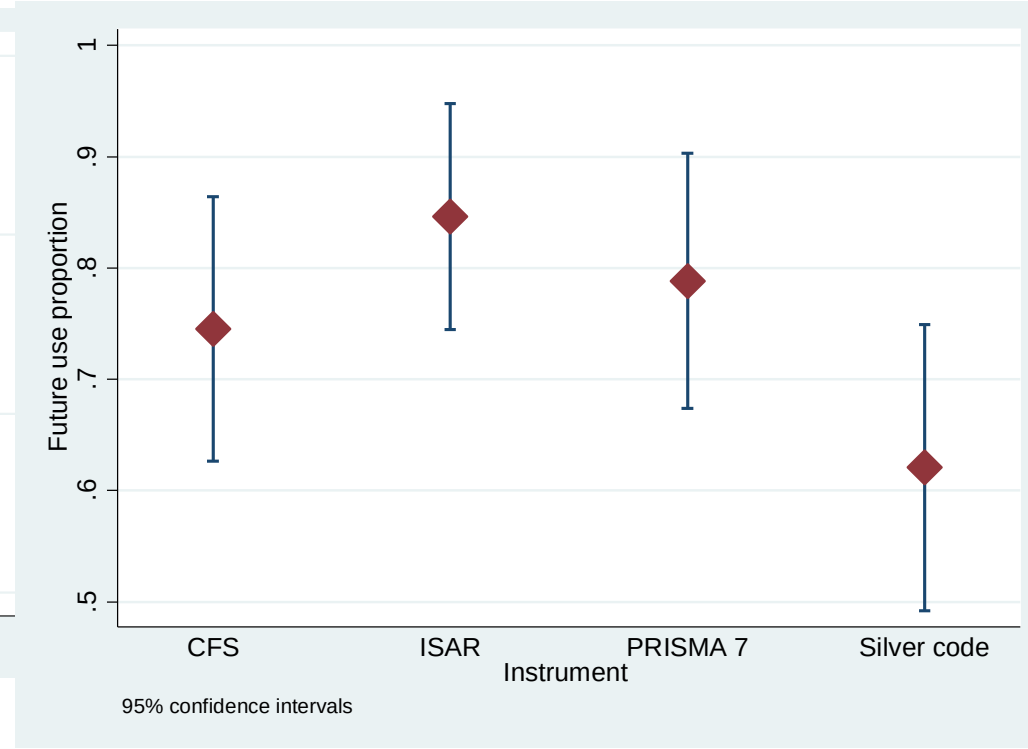
1. Identify frailty early
2. Commence Comprehensive Geriatric Assessment (“CGA”) within the first hour
3. Set up a rapid response system for frail older people in urgent care settings
4. Adopt clinical professional standards to reduce unnecessary variation
5. Develop a measurement mind-set
6. Strengthen links with services both inside and outside hospital
7. Put in place appropriate education and training for key staff
8. Identify clinical change champions
9. Patient and public involvement
10. Identify an Executive sponsor and underpin with a robust project management structure

Acute Frailty Network

What does good look like?

1. Establish a mechanism for early identification of people with frailty





What does good look like?

1. Establish a mechanism for early identification of people with frailty
2. Put in place a multi-disciplinary response that initiates Comprehensive Geriatric Assessment ("CGA") within the first hour

   Five domains of assessment (medical, cognitive/psychological, functional, social networks and home environment)
   Specific syndromes
   - Delirium
   - Falls
   - Polypharmacy
   - 'UTI'

Comprehensive Geriatric Assessment

‘a multidimensional, interdisciplinary diagnostic process to determine the medical, psychological, and functional capabilities of a frail older person in order to develop a coordinated and integrated plan for treatment and long-term follow-up’

What does good look like?

1. Establish a mechanism for early identification of people with frailty
2. Put in place a multi-disciplinary response that initiates Comprehensive Geriatric Assessment ("CGA") within the first hour
3. Set up a rapid response system for frail older people in urgent care settings

The SAFER Patient Flow Bundle

NHS Improvement

S - **Senior** Review. All patients will have a senior review before midday by a clinician able to make management and discharge decisions.

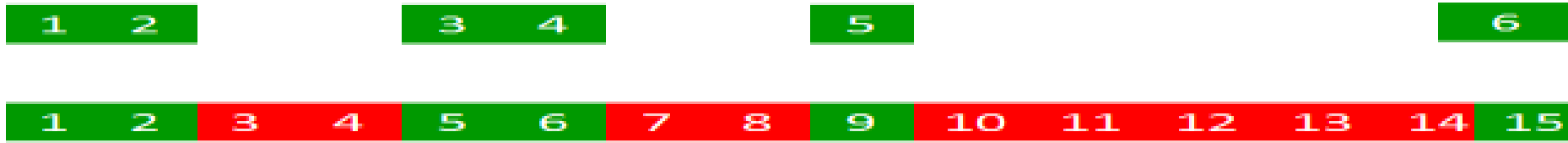
A – **All** patients will have an **Expected Discharge Date and Clinical Criteria for Discharge**. This is set assuming ideal recovery and assuming no unnecessary waiting.

F - **Flow of patients** will commence at the earliest opportunity from assessment units to inpatient wards. Wards that routinely receive patients from assessment units will ensure the first patient arrives on the ward by 10am.

E – **Early discharge. 33%** of patients will be discharged from base inpatient wards before midday.

R – **Review**. A systematic MDT review of patients with extended lengths of stay (> 7 days – 'stranded patients') with a clear 'home first' mind set.

Red and Green Days



A **Red** day is when a patient is waiting for an action to progress their care and/or this action could take place out of the current setting.

- Could the current interventions be feasibly (not constrained by current service provision) delivered at home?
- If I saw this patient in out-patients, would their current 'physiological status' require immediate emergency admission?

If the answers are 1. Yes and 2. No, then this is a 'Red bed day'.

Examples of what constitutes a **Red** Day:

- Medical management plans do not include the expected date of discharge, the clinical criteria for discharge and the 'inputs' necessary to progress recovery
- A planned diagnostic/referral is not undertaken the day it is requested
- A planned therapy intervention does not occur
- The patient is in receipt of care that does not require a hospital bed.

A RED day is a day of no value for a patient

A **Green** day is when a patient receives an intervention that supports their pathway of care through to discharge

A **Green** day is a day when all that is planned or requested happened on the day it is requested, equalling a positive experience for the patient

A **Green** day is a day when the patient receives care that can only be delivered in a hospital bed

A GREEN day is a day of value for a patient

NHS Improvement

BMJ

CGA for frail older people in acute care

RESEARCH

Effectiveness of acute geriatric units on functional decline, living at home, and case fatality among older patients admitted to hospital for acute medical disorders: meta-analysis

Juan J Baztán, consultant geriatrician,[1] Francisco M Suárez-García, geriatrician,[2] Jesús López-Arrieta, consultant geriatrician,[3] Leocadio Rodríguez-Mañas, chief of department,[4] Fernando Rodríguez-Artalejo, professor of preventive medicine and public health[5,6]

WHAT IS ALREADY KNOWN ON THIS TOPIC

The effect of geriatric assessment has been evaluated in hospital and community settings

In older people admitted to hospital with acute disorders, the intervention of consultation teams has not shown clinical or administrative benefits

WHAT THIS STUDY ADDS

Care of older people with acute disorders in acute geriatric units reduces the risk of functional decline at discharge and increases the probability of returning home

This benefit is not accompanied by an increase in case fatality, readmissions, or hospital costs

NHS Improvement

CGA for frail older people in acute care

Age and Ageing 2013; doi: 10.1093/ageing/aft087

A controlled evaluation of comprehensive geriatric assessment in the emergency department: the 'Emergency Frailty Unit'

Simon Paul Conroy[1], Kharwar Ansari[2], Mark Williams[2], Emily Lathwaite[3], Ben Teasdale[2], Jeremey Dawson[4], Suzanne Mason[4], Jay Banerjee[2]

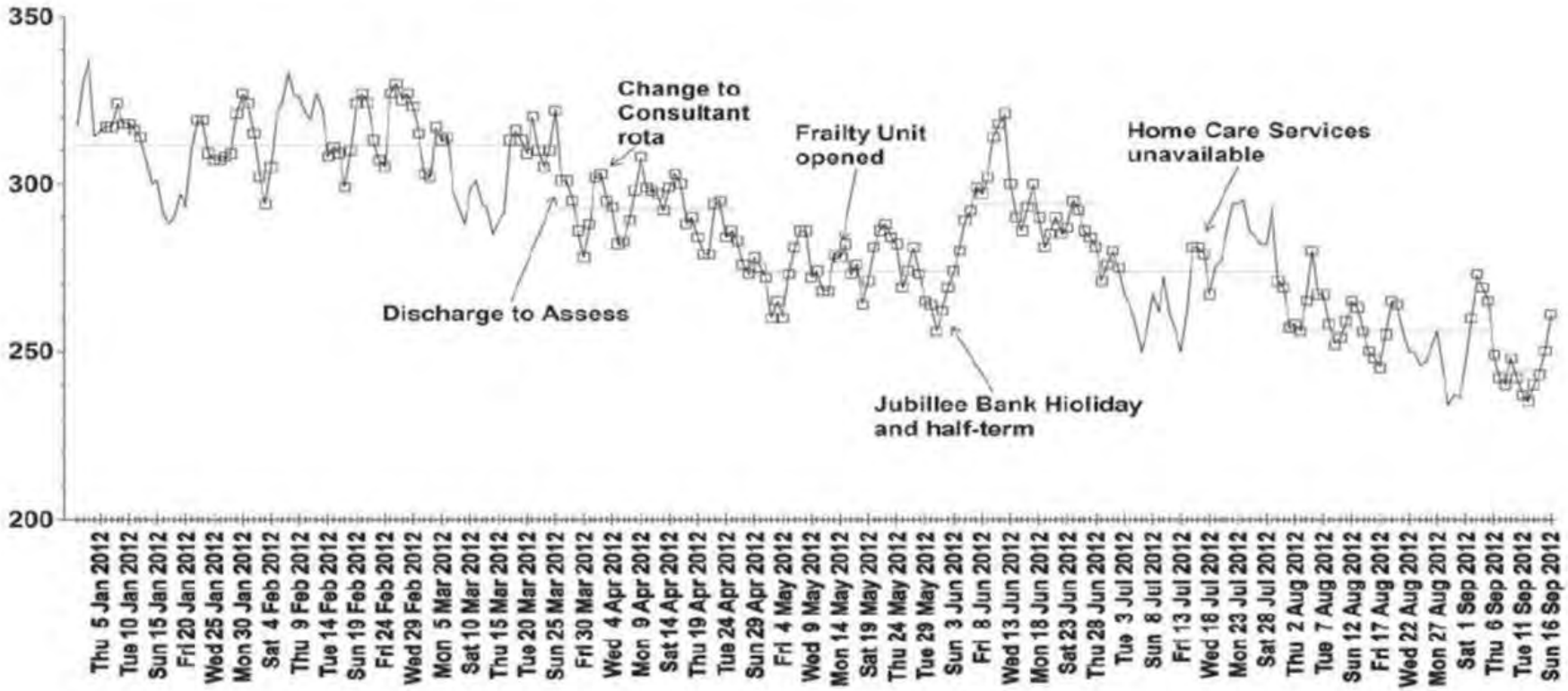
Key points

- Emergency attendances in older people will continue to increase.
- CGA can be delivered within the ED.
- CGA in the ED was associated with improved discharge rates and reduces readmission rates in older people; there may be additional related benefits for younger patients.

Age and Ageing 2013; 0: 1–6
doi: 10.1093/ageing/aft170

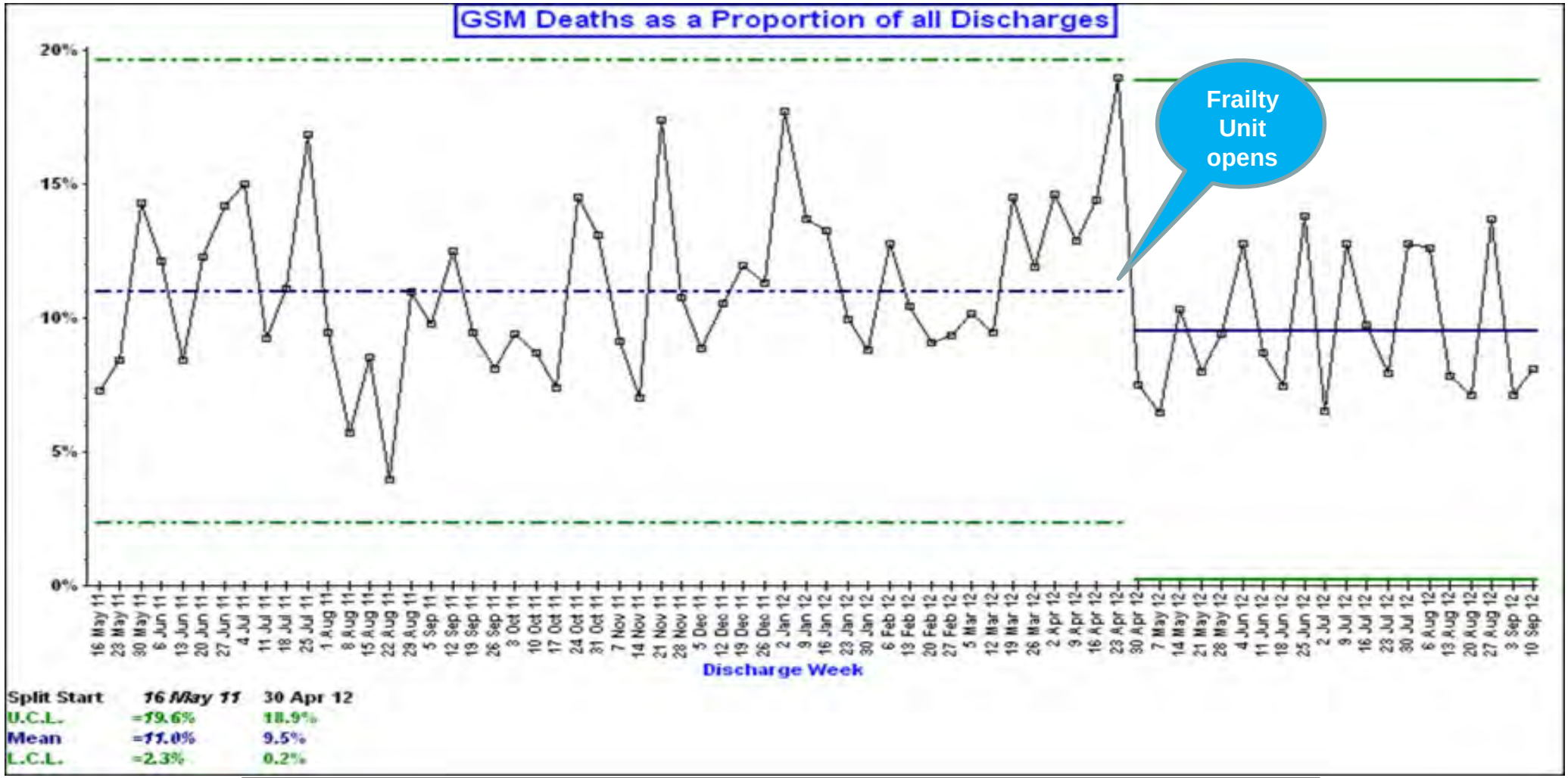
Timely care for frail older people referred to hospital improves efficiency and reduces mortality without the need for extra resources

Kate M. Silvester[1,2], Mohammed A. Mohammed[3], Paul Harriman[4], Anna Girolami[4], Tom W. Downes[5]



Improved Flow Reduces Mortality

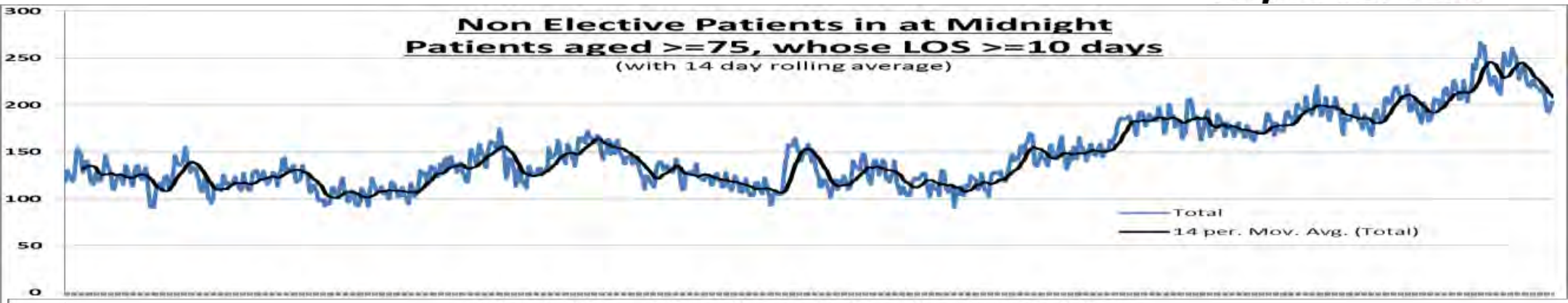
NHS Improvement

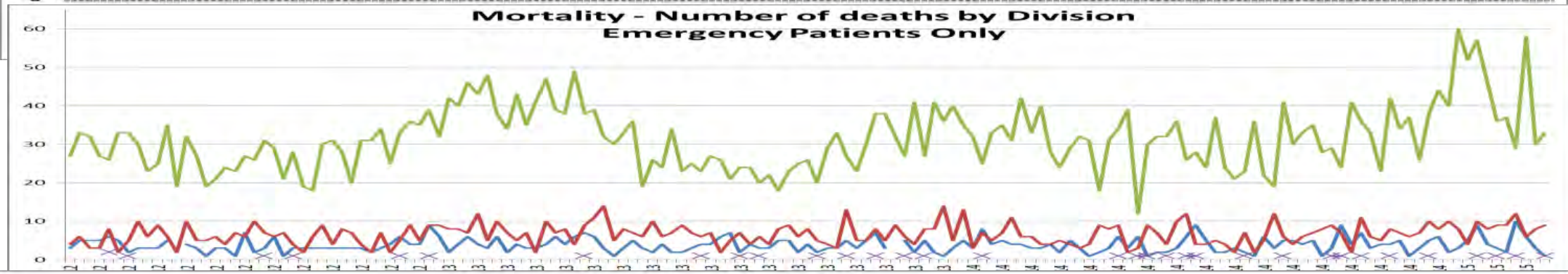


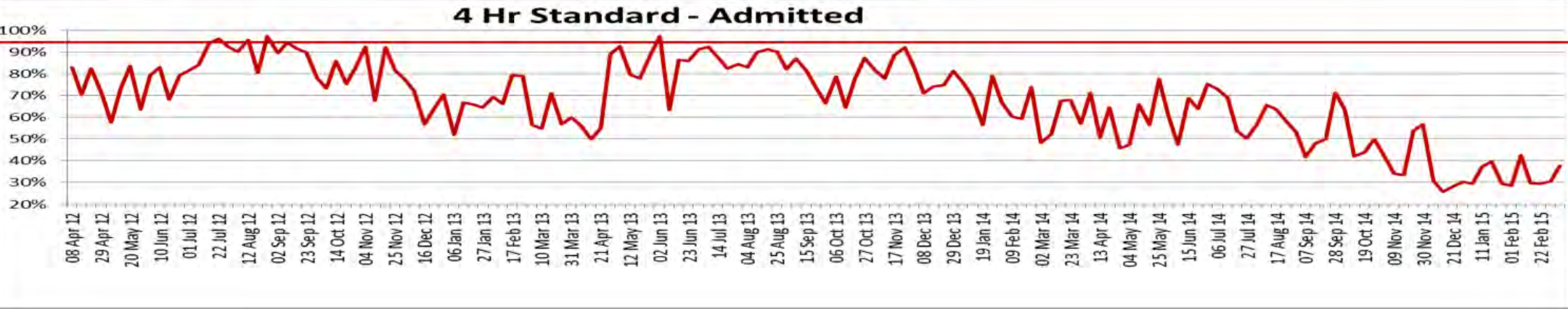
In-hospital mortality dropped by over 13%

Impact of Loss of Control of the Acute Frailty Pathway

NHS Improvement





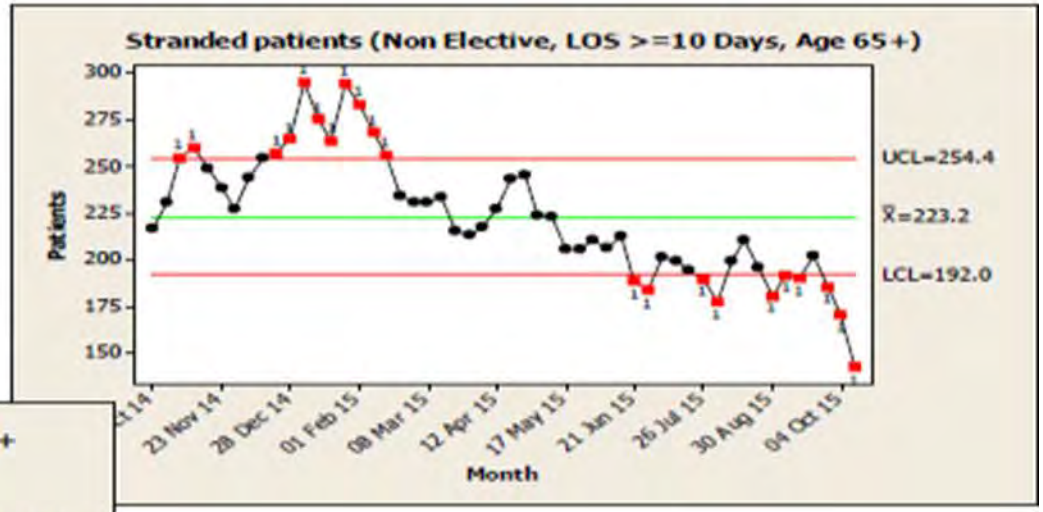


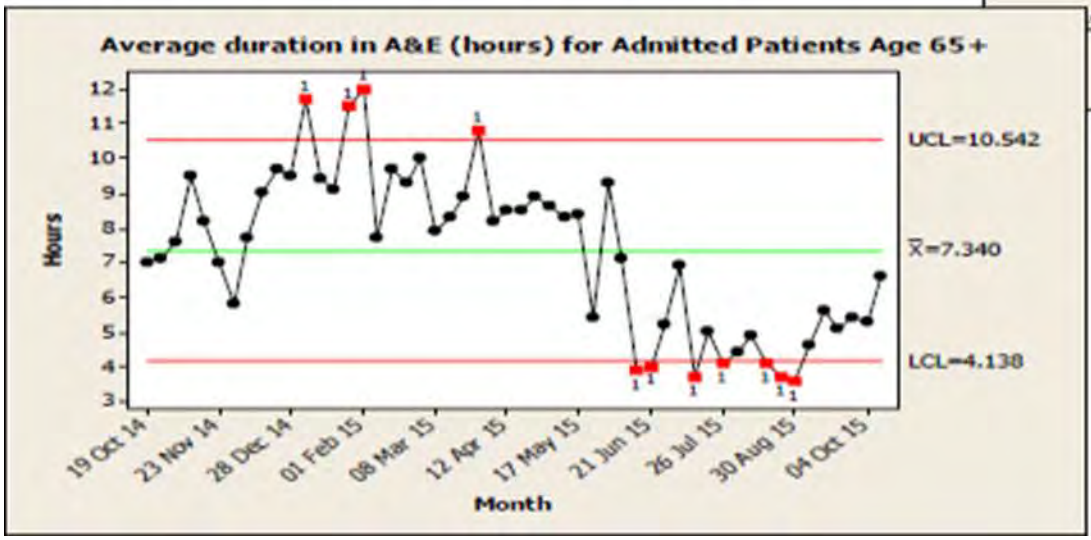
Regaining Control of the Acute Frailty Pathway

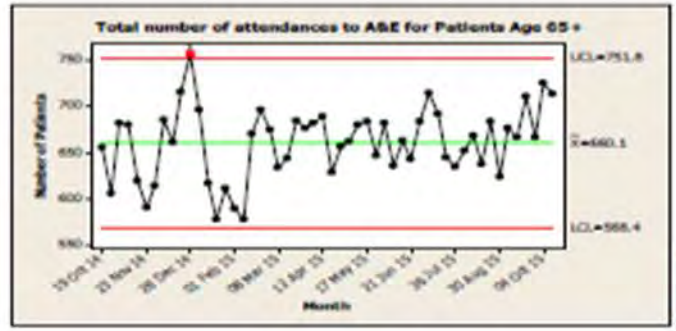
NHS Improvement

Acute Frailty Network

We use Statistical Process Control (SPC) charts as a part of the network, to display baselines, understand the effects of PDSA's and demonstrate sustained improvement







NHS Elect

Acute Frailty Network

NHS Elect

Acute Care for Frail Older People Toolkit