Acute Frailty Units – How to get an improvements/implementation focus.

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
Every system is perfectly designed to achieve the results it achieves

Delayed Transfer of Care
Disruptive Challenge:
Significant proportion due to:
1. Deconditioning
2. Risk averse over assessment
A whole system perspective
A Complex Adaptive System

Focus on CDM and more effective responses to urgent care needs

Clear operational performance framework and integrated in to primary care

Improved integration with primary care responders

Front load senior decision process incl primary care

Optimise ambulatory emergency care

Redesign to left shift LOS

Information flow converting the unheralded to the heralded

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’
Delivering New Initiatives and Change in an Organization

Eight Steps to Delivering Change *:

1. Establish a Sense of Urgency  
   *Building the Case ~ Resistance to change*
2. Build a Coalition  
   *Identify stakeholders and build alliances*
3. Create a Shared Vision
4. Communicate Vision Repeatedly
5. Empowering Others to Act on the Vision
6. Planning for and Creating Short Term Wins
7. Reinforce the Change
8. Institutionalizing New Approaches

*Leading Change, John P. Kotter, HBS Press, 1996*
Admitted emergency care is a series of dependent steps. 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*

- **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.

Set Intent
The ‘Goal’ – Deming and Goldratt

The ‘Goal’
- Error Free Throughput
  - = Quality productivity

- Reduced Inventory
  - = Lower bed occupancy

- Reduced ‘cost of operations’
  - = Increased ‘income/bed day’

Quality
- Reduced Deaths
- Reduced Harm

- Reduced Waiting
- Reduced ‘helplessness’

- Reduced Waste
- Reduced ‘error correction’

Older People with Frailty want to be at Home
The ‘quality’ of the whole patient journey is more important than individual teams’ efficiencies.
The Reliability Design Strategy – Acute Frailty

1. Segmentation
   • Identify target population – ‘Frailty score’ or AFN criteria

2. High level process map
   • identify the bottlenecks

3. Prevent initial failure using intent and standardization

4. Identify defects and mitigate
   • using ‘redundancy’ and contingency

5. Measure and then communicate learning from defects back into the design process
Use an Improvement and Change Methodology that Works for you!

Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

Evidence & Data

Implementation of Change

Test new conditions

Multiple PDSA Cycles -- Sequential Building of Knowledge – include a wide range of conditions in the sequence of tests before implementing the change

Hunches

Theories

Ideas

Small Scale Testing

Follow-up Tests

Learning and Improvement

Changes That Result in Improvement

A P S D

Changes That
Result in
Improvement

A P S D

A P S D

A P S D

A P S D

A P S D
Measurement for Improvement

1. Demand – from all routes
2. Capacity – space vs process vs decision etc
3. Understand variance – ‘real’ vs ‘added’
4. Impact
   - Increased short stay and reduced stranded
   - ‘Home First’ vs ‘multiple moves’
5. Process
   - CGA within 4 hours, EDD and CCD
   - SAFER implementation
   - Red:Green Bed Days
6. Balancing
   - Re-admission
   - Institutionalisation
The SAFER Patient Flow Bundle

**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.
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**
Beds are where patients ‘wait for the next useful thing to happen’
Focus on reducing occupied beds is a priority – EDD and CCD key
Zero LOS + Short Stay

0 Day LoS %

Short Stay LoS %
Acute Frailty Impact Metric

Stranded Patients (Over 75)

Impact opportunity for an Acute Frailty Process – Preventing ‘simple discharges’ becoming ‘complex’.

Aim – 50% reduction in 6 months
‘Home First’

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

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.