Redesigning Acute Frailty Care: Lower Mortality, Better Value

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@sheffielddoc
Sheffield

- Sheffield is the 5th largest city in the UK
- Borders the Peak District National Park – the UK’s first National Park
- The greenest city in Europe with the highest ratio of trees per person
Sheffield Teaching Hospitals

- Largest hospital site area in Europe
- Since 2011, merged with community care to form a vertically integrated provider
- Approximately 2000 beds
- More than 15,000 staff
Acute care setting death and severe harm incidents by age group: 2011-2012
Older, frail patients must be custom-tuned to their needs.

Roy Lilley, *The Guardian* 29th May 2013
A complex system problem
2003 Toyota Corolla
How do others design complex systems?

Toyota Oobeya (Big Room)
A place to meet
Physiotherapist gives an account of the test of change to get a patient home on the day they were discharged by the GSM consultant.
Let me introduce 'George'

- 82 years old
- Lives independently and wants to continue doing so
- Widowed 5 years ago
- Has mild dementia
- Daughter lives locally
- Losing weight + poor mobility
Implementation dates:

• April 2012
  • Consultant geriatricians ‘on take’ 7 days per week

• May 2012
  • Frailty Unit process initially virtually
  • Frailty Unit opens mid-May
Outcome measure: 34% increase in discharge within 1 day
Midnight bed occupancy dropped by over 60 beds  
(no similar change in previous 10 years)
Was reduction in bed usage due to reduced admissions? No
Balance measure:
No increase in readmissions
Balance measure: Would it have happened regardless?
In-hospital mortality dropped by over 13%
Discharge to Assess (D2A)

The future hospital will support a system of ‘discharge to assess’ in physiotherapy and occupational therapy.

Section 5.20 Future Hospital Report, Royal College of Physicians (September 2013)
Implementation dates:

- April 2012
  - Consultant geriatricians ‘on take’ 7 days per week
- May 2012
  - Frailty Unit process initially virtually
  - Frailty Unit opens mid-May
- September 2013
  - Testing of ‘discharge to assess’ from base wards
- October 2013
  - Implementation of ‘discharge to assess’ begins
Time waiting per patient

Rh6 Discharges to Usual Place of Residence - Excess days stay between Medically Fit and Discharge

<table>
<thead>
<tr>
<th>Date</th>
<th>Excess days stay</th>
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<tbody>
<tr>
<td>18/08/2013</td>
<td>U.C.L. = 23.0</td>
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<tr>
<td>04/09/2013</td>
<td>U.C.L. = 1.7</td>
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<tr>
<td>09/09/2013</td>
<td>Mean = -6.7</td>
</tr>
<tr>
<td>14/09/2013</td>
<td>Mean = 0.4</td>
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<tr>
<td>19/09/2013</td>
<td>L.C.L. = n/a</td>
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<tr>
<td>24/09/2013</td>
<td>L.C.L. = n/a</td>
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Consecutive patients by date medically fit

D2A starts
LESS

equal

MORE

VALUE
“If I had to reduce my message for management to just a few words, I’d say it all had to do with reducing variation.”

W. Edwards Deming
CONCLUSION

• Modern healthcare is complex
• Design by front line staff running iterative tests
• Measure
• Involve patients
• Timely specialist care is cheaper and safer
• BUT..to subspecialise requires volume to drive value
The Intervention
Test, implement and spread Frailsafe through a breakthrough collaborative
Thank you

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