Acute care for older people with frailty

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Geriatrician, University Hospitals of Leicester
CONFLICT OF INTEREST DISCLOSURE

I have the following potential conflicts of interest to report:
- Clinical lead, Acute Frailty Network
- Active researcher in the field
Worldview that will colour this talk

• Demography
• Specialist care driving longevity and comorbidities
• Specialist vs. whole person tension
• Eternal search for the fountain of youth
• Life, death and taxes
The reality...

Source: NHS England, 2017
Shifting the balance of care: great expectations.
Nuffield Trust, 2017
Opportunities within the hospital

<table>
<thead>
<tr>
<th>Activity Type</th>
<th>Total Leicester LA Activity</th>
<th>Activity per 1,000 over 75s England population</th>
<th>Total LA Cost</th>
<th>Cost per 1,000 over 75 (England population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective admissions</td>
<td>5,299</td>
<td>346.7</td>
<td>£5,110,148</td>
<td>£369</td>
</tr>
<tr>
<td>Non-elective admissions</td>
<td>9,318</td>
<td>388.1</td>
<td>£23,225,115</td>
<td>£1,037</td>
</tr>
<tr>
<td>First outpatient appointments</td>
<td>12,646</td>
<td>842.2</td>
<td>£2,012,718</td>
<td>£126</td>
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<tr>
<td>Follow-up outpatient appointments</td>
<td>29,837</td>
<td>2,220.0</td>
<td>£2,746,157</td>
<td>£213</td>
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<tr>
<td>Type 1 A&amp;E attendances</td>
<td>8,178</td>
<td>478.1</td>
<td>£1,115,699</td>
<td>£56</td>
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</tbody>
</table>

- Much of the current resource is tied up with urgent care – mainly in acute hospitals
21% of admitted patients are 75+ & frail, but:

Resource use in Leicester for older people with frailty

- Percentage of total beddays: 86.3%
- Percentage of emergency readmissions within 90 days: 85.4%
- Percentage of deaths within 90 days of admission: 86.5%
Is a different model required?

• Acute medical model does what it says on the tin very well
• But is it all just about medicine?
• Frail older people, 90 days post AMU discharge:
  – 76% had one or more adverse outcomes
    • 6% died
    • 20% increased dependency
    • 46% reduced mental well-being
    • 49% reduced quality of life
    • 42% had two or more individual adverse outcomes
Lots of variation in process measures
Clinician variability

<table>
<thead>
<tr>
<th>Study ID</th>
<th>ES (95% CI)</th>
<th>Weight</th>
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<tbody>
<tr>
<td>1</td>
<td>0.15 (0.13, 0.17)</td>
<td>4.56</td>
</tr>
<tr>
<td>2</td>
<td>0.24 (0.20, 0.28)</td>
<td>3.31</td>
</tr>
<tr>
<td>3</td>
<td>0.13 (0.10, 0.16)</td>
<td>3.88</td>
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<td>5</td>
<td>0.14 (0.11, 0.18)</td>
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<tr>
<td>7</td>
<td>0.16 (0.12, 0.20)</td>
<td>3.52</td>
</tr>
<tr>
<td>8</td>
<td>0.19 (0.17, 0.22)</td>
<td>4.29</td>
</tr>
<tr>
<td>9</td>
<td>0.15 (0.13, 0.17)</td>
<td>4.63</td>
</tr>
<tr>
<td>10</td>
<td>0.20 (0.17, 0.23)</td>
<td>4.14</td>
</tr>
<tr>
<td>11</td>
<td>0.17 (0.14, 0.20)</td>
<td>4.13</td>
</tr>
<tr>
<td>12</td>
<td>0.19 (0.17, 0.22)</td>
<td>4.12</td>
</tr>
<tr>
<td>13</td>
<td>0.17 (0.13, 0.20)</td>
<td>3.65</td>
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<td>14</td>
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<td>4.51</td>
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<td>15</td>
<td>0.20 (0.15, 0.25)</td>
<td>2.99</td>
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<td>16</td>
<td>0.12 (0.10, 0.14)</td>
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<td>28</td>
<td>0.19 (0.17, 0.21)</td>
<td>4.64</td>
</tr>
</tbody>
</table>

Overall (I-squared = 75.4%, p = 0.000)

NOTE: Weights are from random effects analysis
Clinical outcome variability
Why?

• Hospitals designed to do this:
When they need to be doing this:
Every system is exactly designed to deliver the result it gets......

- Paul Batalden, Founding Chair, Institute for Healthcare Improvement, Cambridge, MA, USA
IMPROVING ACUTE CARE
Acute Frailty Network

- Breakthrough series collaborative
- Focus on:
  - Frail older people
  - CGA
  - First 72 hours
  - Quality improvement
AFN principles

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
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 ALL 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 metrics

**Macro-level**
External comparisons – AFN sites vs. rest of NHS to determine benefits over & above usual care; using Nuffield & HES based algorithms to standardise assessment of frailty across the NHS

**Meso-level**
Internal service metrics based on HES data (age, conversion rates, bed-days; internal progress, local commissioners & benchmarking)

**Micro-level**
Internal service development metrics aligned to specific aims
AFN internal evaluation

- Reaction
  - The structured site interviews indicate high levels of satisfaction with the network, especially site visits, site support, national events to network, measurement support and meetings, validity given by being part of AFN, Executive level support.

  - Some themes about AFN needing to develop a more MDT and less geriatrician led approach, need for a ‘clinician day’ rather than a ‘nursing/therapies’ day, focusing less on first 72 hours and more on whole pathway, usefulness of sustainability tool, and not knowing about venues until too late.
AFN internal evaluation

• Learning
  – 7 more sites reported implementing frailty related training for staff, to varying degrees.
  – 9 out of 12 sites improved their sustainability scores during the programme,
  – Trusts reported critical success factors as being bravery, frailty identification, measurement, winning over hearts and minds, MDT approach, someone with a vision, time for key team members to commit, working together.
AFN internal evaluation

• Behaviours
  – 8 more sites now identify frailty than at the beginning of the programme
  – 6 more sites now have a rapid response system for frail older people in urgent care settings, including increasing the MDT available at the front door, better in reach in ED / MAU, relocation of services with fewer beds and more clinics. Future plans include 7 day services, developing more integrated working with partners
  – 6 more sites now adopt clinical standards to reduce unnecessary variation
  – 6 more sites believe they now have a measurement mind set
  – 3 more sites identify clinical change champions. Portsmouth has focused on ward accreditation
  – 8 more sites report having identified an executive sponsor for frailty services. For most, this has made a huge difference in raising profile and tackling ‘blocks’
Results

The Acute Frailty Pathway at Medway NHS Foundation Trust
Outcome

In March 2016 the new medical model was introduced to the trust, which provided a greater continuity in care. Two AAWs (Acute Assessment Wards) were opened, one male ward, one female ward. From this point Consultant Geriatricians directly manage and assess Frail patients admitted to the hospital. By the Consultant Geriatricians taking full management of Frail patients the stranded patient rate spiked as the new process was embedded and the patients still admitted under the previous medical model were assessed and discharged, this then dropped hitting more often than not below the lower limit average this then began to rise slightly then from August 2016 the stranded patient rate massively dropped and has stayed significantly below the lower limit consistently, resulting in less patients staying in hospital for over 7 days. Proving that managing Frail patients by Consultant Geriatricians from Day 1 of admission impacts hospital length of stay.
Results

Increase in early discharges has been essential to improve flow

Bournemouth ROI Calculations

<table>
<thead>
<tr>
<th></th>
<th>Weekly</th>
<th>LOS reduction</th>
<th>Discharges</th>
<th>Days saved (a week)</th>
<th>Based on Audit commission data (£59)</th>
<th><em>Based on Bed day rate (</em>£171)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Averages</td>
<td>4.05</td>
<td>88.50</td>
<td>358 bed days</td>
<td>£21,122</td>
<td>£61,290</td>
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</tr>
<tr>
<td>Using 80% Variation</td>
<td>3.87</td>
<td>108.08</td>
<td>418 bed days</td>
<td>£24,662</td>
<td>Not Available</td>
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</tr>
<tr>
<td>Using UCL</td>
<td>3.68</td>
<td>127.66</td>
<td>470 bed days</td>
<td>£27,730</td>
<td>Not Available</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Annual</th>
<th>Based on Audit commission data (£59)</th>
<th>*Based on Bed day rate</th>
</tr>
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<tbody>
<tr>
<td>Using Averages</td>
<td>£1,098344</td>
<td>£3,187115</td>
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</tr>
<tr>
<td>Using 80% Variation</td>
<td>£1,282424</td>
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<tr>
<td>Using UCL</td>
<td>£1,441960</td>
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*Bed day rate: Provided by Bournemouth, but only as an average figure
Not just geriatricians!

- Geriatric competence
  - Delirium vs dementia
  - Asymptomatic bacturia
  - Falls assessment
  - Medication reviews
  - Rehabilitation
  - Managing long term conditions
  - Palliation

- Generic competencies
  - Senior decision making
  - Situational awareness
  - Rapid assessment
  - Risk assessment
  - Communication skills
  - Team working
  - Leadership
Final thoughts

- Frailty in urgent care is THE issue
- Lots of opportunities to improve
- Whole system, patient centered, holistic approach
- Education and training for all
Acute Frailty Network
‘getting older people home sooner and healthier’

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