Systems approach to caring for older people

Simon Conroy
Head of Service/Honorary Senior Lecturer
Geriatric Medicine, Cardiovascular Sciences
University Hospitals of Leicester/University of Leicester
About Doris...

- Doris lives in her farm with her daughter and son-in-law, who farm her land in Belton

- Fall in the kitchen (Saturday)
  - Poor recall – doesn’t remember hitting the floor
  - Rapid recovery – alert when found by daughter in law a few minutes later
  - Small cut at the back of her head, a bruise above her left eyebrow and a small skin flap on her left forearm
Bank holiday weekend

- Put to bed over bank holiday as no major injuries, daughter dressed the wounds
- Bruising worsened & swollen/bruised left clavicle
- Daughter took her to Minor Injuries Unit in Loughborough
Loughborough Minor Injuries Unit

- Seen by nurse practitioner
- Noted extensive bruising and delayed presentation
- ?Abuse – contacted social services
- Sent to LRI as per vulnerable adult protocol – despite Doris’s protestations
- Doris felt betrayed by the ‘nice nurse’
LRI emergency department

- ‘Diagnosed’ syncopal falls
- Possible abuse
- No bony injury
- Hypotensive
- Urine dip positive
- Urosepsis diagnosed
- Catheter, fluids, antibiotics
- Admit medics
LRI acute medical unit

- Syncopal fall
- PMHx
  - AF
  - Previous hypertension
  - Previous stroke with residual dysarthria
- BP 100/50, wobbly on standing
- ECG AF, LAD

- Medications
  - Aspirin
  - Bendroflumethazide
  - Atenolol
  - Simvastatin
  - (Trimethoprim)
LRI - AMU

• Unable to contact social care

• Admit geriatrics – but no beds

• Outlied as ‘medically stable’ – needs ‘social sort out’
Outlying ward

- Developed catheter associated sepsis
- Given iv co-amoxiclav
- Developed clostridial diarrhoea
- Treated
- Slow recovery
- On list for community hospital
- In-patient stay 35 days
- Outcome?
What could have been different?

1. GP review of medications: how long had she been hypotensive and at risk of falling?
2. Over-zealous response to ‘delayed presentation’
3. Do not diagnose syncope (find the cause and treat)
What could have been different?

4. Nonsense diagnosis of urosepsis

5. No catheter (infection, detrusor instability, mobility, dignity)

6. Do not outly

7. Better social services response
Themes emerging

- Missed opportunities
- Lack of support for community decision makers
  - Diagnostics
  - Specialist advice
  - Fear of getting it wrong – medicolegal pressures
- Knowledge/skill/behaviours – training
- Silo working
- 5/7 working
Modern health and social care

• Ageing population, increasingly complex care

• More attending emergency care

• Generalist vs. specialist care
Why frailty challenges the system

- Non-specific presentations
  - Falls, delirium, immobility
- Functional decline
- Multiple co-morbidities
- Polypharmacy
  - Also under-prescribing
- Differential challenge
  - Sensory impairment, dementia, delirium
The Silver Book
Urgent care - standards

• The Silver Book
  – http://www.bgs.org.uk/campaigns/silver

• Membership
  – Age UK
  – National Ambulance Service Medical Directors
  – Association of Directors of Adult Social Services
  – British Geriatrics Society
  – Chartered Society of Physiotherapists
  – College of Emergency Medicine
  – College of Occupational Therapists
  – Society for Acute Medicine
  – Royal College of General Practitioners
  – Royal College of Nursing
  – Royal College of Physicians
  – Royal College of Psychiatrists
  – Community Hospitals Association
- Focus on Long Term Conditions (heart failure/frailty/dementia/ COPD)
- More effective responses to urgent care needs
- Advance care planning/end of life care plans
- Targeted input into Care Homes
- Access to integrated services through NHS Pathways (3DN) including health & social care

Clear operational performance framework integrated with GP processes
Ready access to specialist advice when needed

Improved integration with 1st & 2nd responders via NHS Pathways

Front load senior decision process including primary care, ED Consultants & Geriatricians

Objective: A left shift of activity across the system as a function of time; yesterday’s urgent cases are today’s acute cases and tomorrow’s chronic cases.

Optimise emergency care:
- Evidence based management
- Multidisciplinary input from PT/OT & case managers
- Access to intermediate and social care
- Front line geriatrician input
- Effective information sharing with primary care/secondary care/community
- Develop minimum data set

- Redesign to decrease LOS with social & multidisciplinary input using a “pull” system
- Effective Date of Discharge
- Ambulatory care (macro level) for falls/LTC
Standards (some)

- All older people accessing urgent care should be routinely assessed for:
  - Pain
  - Depression
  - Skin integrity
  - Falls and mobility
  - Continence
  - Safeguarding issues
  - Delirium and dementia
  - Nutrition and hydration
  - Sensory loss
  - Activities of daily living
  - Vital signs
  - End of life care issues
Frailty syndromes & urgent care

• The presence of one or more frailty syndrome should trigger a more detailed comprehensive geriatric assessment, to start within 4 hours (14 hours overnight)

• Frailty syndromes
  – Falls & immobility
  – Functional decline
  – UTI & incontinence
  – Pressure sores
  – Delirium and dementia
  – Polypharmacy (>4 items)
  – Carer strain
Training in Emergency Geriatric Medicine

Developing a frail friendly front door: a Fellowship in Geriatric Emergency Medicine

Patients over the age of 70 years currently make up 15% of emergency department attendances,[1] a figure that will increase significantly over the course of the next 20 years. High quality management of frail older people is challenging because they often present non-specifically (for example, with falls, immobility, delirium) which can make the immediate diagnosis obscure and management more challenging.

Emergency training of doctors, nurses and allied health professionals has not traditionally focused on the needs of older patients, thus there is a lack of confidence and expertise in managing older people and conditions associated with ageing.[2] Outside the knowledge of geriatric syndromes, there is a skill involved in geriatric medicine—history taking is challenging, for example, because of sensory impairment, dementia or delirium. Often a collateral history is needed which may

WHAT WAS INVOLVED?
The year was split into three parts: inpatient care, community care and emergency care of frail older people.

INPATIENT GERIATRIC MEDICINE
Four months was spent working on a geriatric base ward at the city’s main teaching hospital joining a team led by two consultants. The purpose of this was to develop an understanding of ‘comprehensive geriatric assessment’ (CGA) and lay down the principles for investigating and managing the non-specific presentations that bring older people into hospital. CGA is a geriatrician’s version of Advanced Trauma Life Support as it provides a common language and structured diagnostic assessment used by the whole multidisciplinary team (MDT). Medical, psychological and functional capabilities are evaluated to allow a co-ordinated and integrated treatment plan through to discharge from the rehabilitation ward. Half of TIA clinic referrals are found to have an alternative diagnosis, such as migraine or vertigo, so this clinic was particularly useful in learning how to elicit the subtleties to narrow down the differential diagnosis.

COMMUNITY GERIATRICS
The next block of training focused on what was possible outside the acute hospital setting. Placements included community hospital ward rounds, intermediate care and rehabilitation services. Accompanying consultants on domiciliary visits and nursing home visits provided an opportunity to find out what was involved in advance care planning.[3] Detailed discussions were observed taking place between frail older people, their families and a community geriatrician. Advance care planning provides an opportunity for people to make a statement about their preferences and wishes which would then be available to GPs, paramedics and hospital teams so that they lose capacity on becoming unwell, their opinions would be known and can be respected.

Locally, falls account for around 5% of attendances to the emergency department. Falls clinic provided excellent training on

Geriatric Emergency Medicine. another night in resus....

Thursday evening, 8 o’clock, I stand waiting. We have received a pre-alert call from the ambulance service. A 2-week-old baby is expected and they are pale, floppy and tachycardic. I knew that this could be a life threatening presentation of anything from sepsis to heart failure to metabolic disturbance, and breathe a sigh of relief when I see the paediatric emergency medicine consultant walk through the doors, knowing that I will be fully supported to navigate the physiological differences and non-specific presentations that are seen at this extreme of age.

In the next cubicle is May, a 92-year-old woman from a residential home. She is also pale, tachycardic and drowsy. The only history available is from the ambulance service patient report form telling us she is ‘off logs’ and today has not been eating. The presentation is equally vague, the differential diagnosis is just as wide and the patient just as vulnerable. Patients like May are a far more common sight in our resuscitation room than shocked neonates, yet our expertise and training in this group’s specific care needs is somewhat more variable and less formalised to effectively manage this extreme of age.
Why the ED is the most important part of the system...
Preventing ED attendances/admissions

• ‘Holy grail’
• Experience to date in UK disappointing
  – Community matrons
  – Intermediate care
  – Risk stratification
  – Urgent care centres
• Unlikely to ever be cost-effective...
• Older people will always attend ED!
The ‘transfer of care’

<table>
<thead>
<tr>
<th>Category</th>
<th>0-16 years</th>
<th>16-70 years</th>
<th>70+</th>
<th>70+ &amp; frail</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED attendance</td>
<td>25</td>
<td>57</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Transfer to AMU</td>
<td>25</td>
<td>66</td>
<td>40</td>
<td>15</td>
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<tr>
<td>Admission to base ward</td>
<td>25</td>
<td>75</td>
<td>49</td>
<td>40</td>
</tr>
</tbody>
</table>

- ED: Emergency Department
- AMU: Accident and Medical Unit

Legend:
- Gray: 0-16 years
- Red: 16-70 years
- Yellow: 70+
- Blue: 70+ & frail
Developing a frail friendly front door
Themes from the ED research literature

• 2008-2011
  – 163 RCTs: pain (28), orthopaedics (24), cardiovascular disease (13), pre-hospital (13)

• Some work on risk stratification

• Five controlled trials of geriatric interventions in the ED
Risk stratification in ED

- Physiological scores
  - Don’t predict admission or re-attendance

- Predictors of readmission at 12 months (Graf et al JAGS 2012)
  - Identification of Seniors At Risk AUC 0.70
  - Triage Risk Stratification Tool AUC 0.68
## Are there effective interventions?

<table>
<thead>
<tr>
<th>Trial</th>
<th>Population</th>
<th>Intervention</th>
<th>Mortality</th>
<th>Admission/Readmission</th>
<th>Functional decline</th>
<th>Admission to LTC</th>
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</thead>
<tbody>
<tr>
<td>Basic 2005, RCT</td>
<td>Frail older people</td>
<td>Nurse led CGA and referral onwards</td>
<td>N/A</td>
<td>↔</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Caplan 2004, RCT</td>
<td>75+ discharged home (excluding NH residents)</td>
<td>Nurse led CGA and referral onwards</td>
<td>↔</td>
<td>↓</td>
<td>↓</td>
<td>↔</td>
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<tr>
<td>McCusker 2003, RCT</td>
<td>Older people ISAR &gt;1</td>
<td>Nurse led CGA and referral onwards</td>
<td>↔</td>
<td>↔</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Mion 2003, RCT</td>
<td>65+ discharged from ED</td>
<td>Nurse led CGA and referral onwards</td>
<td>↔</td>
<td>↔</td>
<td>N/A</td>
<td>↔</td>
</tr>
<tr>
<td>Miller 1996, CCT</td>
<td>65+ discharged from ED</td>
<td>Nurse led CGA and referral onwards</td>
<td>↔</td>
<td>↔</td>
<td>N/A</td>
<td>↔</td>
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Should there be more studies?

Study

<table>
<thead>
<tr>
<th>ID</th>
<th>RR (95% CI)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>McCusker</td>
<td>1.30 (0.95, 1.79)</td>
<td>13.95</td>
</tr>
<tr>
<td>Close</td>
<td>0.82 (0.65, 1.04)</td>
<td>16.05</td>
</tr>
<tr>
<td>Davison</td>
<td>0.80 (0.41, 1.56)</td>
<td>12.65</td>
</tr>
<tr>
<td>Mion</td>
<td>1.04 (0.81, 1.34)</td>
<td>26.27</td>
</tr>
<tr>
<td>Caplan</td>
<td>0.88 (0.76, 1.02)</td>
<td>31.08</td>
</tr>
<tr>
<td>Overall (I-squared = 42.1%, p = 0.141)</td>
<td>0.95 (0.83, 1.08)</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Acute Medicine Interface Geriatrician Outcome Study (AMIGOS)

• East Midlands UK, 2010-12
• Liaison style specialist geriatric medical input to at-risk patients discharged from AMUs made no difference to measures of:
  - days at home
  - dependency in ADL
  - psychological well-being
  - quality of life
  - proportion of participants with a fall during the follow-up period
A practical example
Intermediate care

Frail older person in crisis

SPA – clinical discussion

Bed-based rehabilitation/reablement

MDT Triage Trajectory Transfer

EFU/AFU

Liaison?

Specialist care

In-patient CGA
ED performance 2010-13: people 85+
Summary

- Urgent care = older people
  - Needs to be whole system approach
  - Vertically integrated
  - Holistic & interdisciplinary
  - Underpinned by robust communication and cooperation
‘Geriatrics is too important to be left to geriatricians. We are all geriatricians now, and geriatric medicine should be like a caretaker government-self-appointed to instruct others how to do it, and then to preside over its own demise.’