Health Services Can't Cope with an Ageing Population: Fact or Fiction?

Professor Finbarr Martin, Geriatrician
Guys & St Thomas’ Hospital and King’s College London
Apocalypse now!! (or soonish)
Many of the cases in which patients and their families have reported concerns have involved elderly patients. The multiple needs of such patients in terms of diagnosis, management, communication and nursing care are in many ways distinct from those of younger patients. .."

"Older patients will often .....require a skilled and multi disciplinary team approach. ..Specialist advice will often be needed. .......

"the Trust had a service for the care of the elderly but there has been little evidence of its contribution in many of the cases of concern reported to the Inquiry"
Hospitals on the edge?

The time for action

A report by the Royal College of Physicians
September 2012
This concern is shared across Europe
Survey of 1113 Health Professionals

Do you agree or disagree with the following?
(% respondents)

Given the current standard of care of older patients, I am concerned about how I will be treated by the healthcare system when I am older.

Older patients in my country's healthcare system are less likely to have their complaints given full attention than younger ones.

Population ageing is regarded as a threat to the viability of my country's healthcare system.

A new vision for old age Rethinking health policy for Europe’s ageing society. © The Economist Intelligence Unit Limited 2012
So, the perfect storm

“The demographic timebomb”
“The tsunami of old people”
+ 
“The NHS in crisis”
“the staff don’t care”
So, the perfect storm

“The demographic timebomb”
“The tsunami of old people”
+ “The NHS in crisis”
“the staff don’t care”

Mostly wrong and unhelpful
But certainly there are challenges which we need to accept, understand and not panic.
6 uninvited guests on the acute medical intake

Death
Delirium
Dehydration ...(and malnutrition)
Disequilibrium ........falls
Disability compromising dignity
Delayed discharges (and readmissions)
Delirium - ~ 30% acute admissions

• Falls as inpatients: ~ 5-20% patients >80y
  ➢ resulting in 1700 hip fractures in England

• Functional decline at discharge in ~ 50% of >70ys

• These events have consequences for readmissions, institutionalisation or death
The acute admissions problem as usually portrayed

• Too many
• They stay too long
• Too many come back
• They are in the wrong bed
• Unsympathetic or unskilled staff
Solutions - 2 strategic options

• Carry on as we are and hope they go away
  ➢ NASTY version – barricade the front door
  ➢ NICE version – prevention in the community

OR.... The radical alternative
Change the service to suit the patients!
UK healthcare (and world) as it is now

- People aged 65+ use 2/3 of acute hospital bed-days
- > 50% of the patients having surgery, (> major)

- More older people
- Older people are older
- And today’s older people are different
Surviving into old age

<table>
<thead>
<tr>
<th>LE at birth</th>
<th>At 65 men, average will live to</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OECD</strong></td>
<td><strong>UK</strong></td>
</tr>
<tr>
<td>82.8</td>
<td>83.1</td>
</tr>
<tr>
<td>77.3</td>
<td>79.1</td>
</tr>
</tbody>
</table>
Around 18% of all deaths were before 65 in 2006 – same proportion as in 1991. This is now falling quickly. AND old live longer so many more old old.
As a result

- Most older people now live long enough
  - To have several long-term conditions
  - + multiple medications
  - + sensory impairments
  - + dementia
  - + sarcopenia and inflammaging
  - + homeostatic dysregulation

- Resulting in frailty and “geriatric syndromes”
As a result

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- Resulting in frailty and “geriatric syndromes”
The time has come to abandon disease as the focus of medical care. The changed spectrum of health, the complex interplay of biological and nonbiological factors, the aging population, and the interindividual variability in health priorities render medical care that is centered on the diagnosis and treatment of individual diseases at best out of date and at worst harmful. A primary focus on disease may inadvertently lead to undertreatment, overtreatment, or mistreatment. The numerous strategies that have evolved to address the limitations of the disease model, although laudable, are offered only to a select subset of persons and often further fragment care. Clinical decision making for all patients should be predicated on the attainment of individual goals and the identification and treatment of all modifiable biological and nonbiological factors, rather than solely on the diagnosis, treatment, or prevention of individual diseases. Anticipated arguments against a more integrated and individualized approach range from concerns about medicalization of life problems to “this is nothing new” and “resources would be better spent determining the underlying biological mechanisms.” The perception that the disease model is “truth” rather than a previously useful model will be a barrier as well. Notwithstanding these barriers, medical care must evolve to meet the health care needs of patients in the 21st century. Am J Med. 2004;116:179–185. ©2004 by Excerpta Medica Inc.
Clinical service implication

Assessment needs to be broad and systematic
- Disease diagnostic plus
- Functional capacity and reserve
- Mental health, attitudes and beliefs
- Social circumstances and resilience
......= ie. CGA, comprehensive geriatric assessment

leading to a mix of individualised
+ standardised interventions
Comprehensive Geriatric Assessment
(Ellis and Langhorne BMJ 2011)

- 22 trials. 10,000 + participants, 6 countries
- Patients more likely to be living at home at end of scheduled follow up (OR 1.16)
- 12 months later, compared to GIM
  - Less likely to be in care home (OR 0.78)
  - Less likely to die or deteriorate (OR 0.76)
  - More likely to have improved
- Specialist wards had better outcomes than liaison
What can Geriatric Medicine bring?

- **direct clinical care** for some
- **support the care of other specialists**
  - Clinical service design
  - Whole hospital approaches to support total patient care
  - Clinical advice on individuals via agreed pathways
  - Participate in shared clinical governance
- **co-design integrated systems** – clinical and services
- **Influence** those who plan, commission, evaluate, develop or deliver services used by older people
What does this mean in practice?

- **Front door** - between community and hospital in response to acute clinical change
  - support Emergency Departments
  - liaison with intermediate care (IC)

- Acute frailty units, eg Leicester
- “Inreach” eg TREAT at Royal Free
- Discharge to assess eg Sheffield

- But evidence of targeting, casemix and outcomes is mixed
What does this mean in practice?

- Take the right share of the acute medical admissions
  - proactive case finding in acute medicine
  - CGA approach with selected patients

**OPAL liaison teams**

**Challenges**

- Balance of general/specialty work
- Targeting
- Balance of urgent vs important things to find

Evidence is observational and pre-post comparisons
What does this mean in practice?

• Age attuning all services
  – Embed right habits and assumptions
  – design and delivery of services
  – leadership in quality improvement with geriatric syndromes
  – Support education and training of the workforce

Dementia and delirium

Falls
Ingredients for success

- Interprofessional collaboration
- Clinical leadership
- Data
- method as well as will
- and sometimes, incentives!
Interprofessional collaboration - BGS Silver Book 2012

**Quality Care for Older People with Urgent & Emergency Care Needs**

*Generic recommendations that apply to all settings in the first 24 hours:*

1. An acute crisis in a frail older person should prompt a structured medication review; this may require the support of pharmacists in some settings.

2. When suspecting lower urinary tract infections in people unable to express themselves, urine dipstick testing should only be considered in patients with unexplained systemic sepsis (which may manifest as delirium). A urine dip should not be used to diagnose a urinary tract infection in coherent patients without lower urinary tract symptoms, it can be misleading.

3. Older people should not be routinely catheterised unless there is evidence of urinary retention

4. End of life care at home should be encouraged and facilitated when appropriate and in keeping with the older person’s preferences

**Standards**

1. All older people accessing urgent care should be routinely assessed for:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Pain</td>
<td>Delirium and dementia</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>Nutrition and hydration</td>
<td></td>
</tr>
<tr>
<td>Skin integrity</td>
<td>Sensory loss</td>
<td></td>
</tr>
<tr>
<td>Falls and mobility</td>
<td>Activities of daily living</td>
<td></td>
</tr>
<tr>
<td>Continence</td>
<td>Vital signs</td>
<td></td>
</tr>
<tr>
<td>Safeguarding issues</td>
<td>End of life care issues</td>
<td></td>
</tr>
</tbody>
</table>
Building reliability in

- Segment - recognise higher risk (all staff)
- Standardise – assessments
- Simplify – generic responses
- Support a team approach
Examples of age attuned approaches

- Frailty recognition and responses - Frailsafe
- Delirium - bundle
- Clinical uncertainty with very sick - AMBER
Frilsafe - British Geriatrics Society Checklist

• Developed in 5 hospitals
• About to start spread
• Aiming to improve quality in a acute medicine admission unit setting
FRAILsafe (v6)

Phase 1 – Patient Identification

CONFUSED? REDUCED MOBILITY? CARE HOME RESIDENT?

If the answer is YES to any of these proceed to phase 2

Phase 2: Clinical Response

<table>
<thead>
<tr>
<th>Confusion</th>
<th>Circle</th>
<th>Action if YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there delirium?</td>
<td>Y / N</td>
<td>Follow local guideline</td>
</tr>
<tr>
<td>Is there a diagnosis of dementia?</td>
<td>Y / N</td>
<td>Follow local guideline</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Circle</th>
<th>Action if YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannula</td>
<td>Y / N</td>
<td>Is it still required?</td>
</tr>
<tr>
<td>Urinary Catheter</td>
<td>Y / N</td>
<td></td>
</tr>
<tr>
<td>Bed rail</td>
<td>Y / N</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reduced mobility</th>
<th>Circle</th>
<th>Action if YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y / N</td>
<td>Document a mobility plan for the next 24 hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Falls risk</th>
<th>Circle</th>
<th>Action if YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y / N</td>
<td>Follow local guideline</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pressure sore risk</th>
<th>Circle</th>
<th>Action if YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y / N</td>
<td>Follow local guideline</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advance care plan</th>
<th>Circle</th>
<th>Action if YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y / N</td>
<td>Consider if DNAR form needs completing.</td>
<td></td>
</tr>
<tr>
<td>Resuscitation status considered</td>
<td>Y / N</td>
<td></td>
</tr>
<tr>
<td>Escalation decision made</td>
<td>Y / N</td>
<td></td>
</tr>
</tbody>
</table>

Has a medication review been completed? ☐

Phase 3 – daily monitoring

<table>
<thead>
<tr>
<th></th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>New or worsening confusion?</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td>Equipment reviewed?</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td>Mobility plan documented?</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
</tbody>
</table>

Signature/Initials
FRAILsafe: A safety checklist for frail older patients entering acute hospital care

In brief

Led by Sheffield Teaching Hospitals NHS Foundation Trust on behalf of British Geriatrics Society, this project seeks to reduce harm to frail older people in acute hospital care through effective implementation of an evidence-based patient safety checklist.
This Patient has been assessed **HIGH RISK OF FALLS**

Follow Falls Guidance and pathway

Delirum Assessment completed (Y/N)

Repeat STRATIFY (in / on) –

Signed / Actioned by -
Example: Delirium

Think Delirium!

CONFUSION?

Changeable course
A2: acute onset + Attention poor
M: muddled thinking
S: shifting consciousness

Screen if positive (defined as CA2 plus either M or S)

Drugs (anticholinergics, benzodiazepines, alcohol withdrawal) / Dehydration
Electrolyte imbalance
Lots of pain
Infection/Inflammation
Respiratory failure
Impaction
Urinary retention
Metabolic disorder (renal/liver failure, hypoglycaemia) / Malnutrition

Drugs/dehydration
Electrolyte imbalance
Lots of pain
Infection/Inflammation
Respiratory failure
Impaction
Urinary retention
Metabolic disorder / Malnutrition

Think of Delirium

CONFUSION?
Delirium card for systematic approach

Confusion? Altered consciousness?

Think of delirium!

- Yes: Is CAM positive?
  - Yes: Diagnosis of delirium
  - No: Not delirium

- No: Not delirium

Search for medical precipitants and treat urgently:
- Drugs (anticholinergics, benzodiazepines, and alcohol withdrawal)
- Dehydration
- Electrolyte disturbance (esp. Na⁺ and Ca²⁺)
- Lots of pain
- Infection/Inflammation (post surgery)
- Respiratory failure (hypoxia, hypercapnia)
- Impaction of faeces
- Urine retention
- Metabolic disorder (liver/renal failure, hyper/hypo-glycaemia) / MI

Management – turn over

Don’t forget to document delirium diagnosis in notes/EDL!

Guy’s and St Thomas’ NHS Foundation Trust

Guy’s and St Thomas’ NHS

KING’S COLLEGE LONDON
Founded 1829

Guy’s and St Thomas’ NHS Foundation Trust
...and on the other side - keep it simple

<table>
<thead>
<tr>
<th><strong>Do’s</strong></th>
<th><strong>Don’ts</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>ALL MDT members</em></td>
<td>Have long delay to attend patients – high mortality!</td>
</tr>
<tr>
<td>STRATIFY – follow in-patient falls pathway</td>
<td>Argue</td>
</tr>
<tr>
<td>Orientate frequently</td>
<td>Have frequent bay/ward changes</td>
</tr>
<tr>
<td>Involve familiar family/friends and use familiar nursing staff</td>
<td>Catheterise unnecessarily</td>
</tr>
<tr>
<td>Use calming speech and manner</td>
<td>Perform unnecessary procedures</td>
</tr>
<tr>
<td>Hydrate</td>
<td>Use physical restraints routinely</td>
</tr>
<tr>
<td>Enable sleep</td>
<td>Haloperidol (as PRN medication): 0.5-1mg 1-2 hourly, max 5mg every 24hrs (po/IM)</td>
</tr>
<tr>
<td>Correct sensory impairment</td>
<td><em>Lorazepam</em> (as PRN medication) - if haloperidol contraindicated – QTc&gt;500ms; Parkinsonism/Lewy body dementia 0.5-1mg 1-2 hourly, max 4mg every 24hrs (po)</td>
</tr>
<tr>
<td>Encourage early supervised mobilisation</td>
<td></td>
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</table>
AMBER - a systematic approach to uncertainty

Trajectories in the final 12 months of life
# AMBER bundle

## Identification: is the patient AMBER?

1. Is the patient deteriorating, clinically unstable, and with limited reversibility?
2. Is the patient at risk of dying within the next 1-2 months?

Remember to apply the principles of the Mental Capacity Act (2005)

### ACTIVITY

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Activity</th>
</tr>
</thead>
</table>
| Action within 4 hrs | **Medical**  
|               | Medical plan documented in patient record  
|               | Including: current key issues, anticipated outcomes, resuscitation status  
|               | ☐ Yes ☐ No  
|               | Escalation decision documented  
|               | Including: ☐ Ward only ☐ Critical care  
|               | ☐ Yes ☐ No  
|               | Medical plan discussed and agreed with nursing staff  
|               | ☐ Yes ☐ No  
| Action within 12 hrs | **Nursing**  
|               | Patient ± carer discussion / meeting held and clearly documented  
|               | Which may include: discussion of uncertain recovery and medical plan, preferred place of care, any concerns or wishes and who was present  
|               | ☐ Yes ☐ No  

Death with dignity
Many of these examples are described in this recent pamphlet, 2014

Making our health and care systems fit for an ageing population

Authors
David Oliver
Catherine Foot
Richard Humphries
Summary

- We do indeed have a new situation
- **Old people are “core” users of the NHS**
- Staff in the NHS still want to do the right thing
- So we need to adapt services to help them do it
Maybe we can by age attuning healthcare

- Expect older people with problems
- Identify frailty and geriatric syndromes routinely
- Use comprehensive geriatric assessment (CGA)
- Predict “complications”
- Use experts judiciously – it needs us all to step up
- Up-skill general services
- Promote multidisciplinary clinical practice and clinical governance

Better care is often cheaper care in the end, so NHS must get better to survive economically
Thank you and good luck