Why are people with dementia admitted to acute hospitals?

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A key message echoed by staff at all levels in the organisations involved in this study was that the acute hospital is not the ‘right place’ for older people.

This chapter examines how the prevalence of this view has resulted in the physical environment, staff skills and education and organisational processes acting as barriers to delivering dignified care to older people.
Problems for people with dementia

- Noisy busy environments
- Fast pace of work
- Intensive questioning
- Multiple new faces
- Moving through different departments and wards
- Inability to express wishes
- Taking account of other patients’ needs

RCN Guidelines 2010
“Toxic” environment

- Lack of exercise/movement
- Intermittent noise and light control
- Environmental manipulation
- Sleep deprivation/adjustment
- Controlled fear
- Disorientation
- Sensory deprivation (hearing and vision)

Thanks to Liz Sampson
“Toxic” environment

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- Intermittent noise and light control
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- Disorientation
- Sensory deprivation (hearing and vision)

Thanks to Liz Sampson and Amnesty International
There is a lot of it about

- 60% geriatric medical patients
- 30% general medical admissions
- 40% hip fractures
- 25% of hospital beds

RCPsych Who cares Wins 2005
Medical Crises in Older People

- Observational phase
  - Prevalence and follow up study
  - Diagnostic study
  - Patient/carer interviews
  - Workforce study
- Service development
- Evaluation and economic study

www.nottingham.ac.uk/mcop
Recruitment

- Approached 1578 acute admissions over 70y to 12 wards
  - 66 (4%) discharged
  - 285 (18%) repeatedly unavailable
  - 66 (4%) too ill
  - 79 (5%) declined
  - 78 (5%) other

- Screened 1004
  - 361 (36%) no MH problem (or anxiety alone)
  - 147 (23%) declined
  - 48 (7%) consultee declined
  - 61 (9%) no family/consultee, 108 (17%) unable to contact in time

- Recruited 250 with possible MH problem, not anxiety alone

- 53 diagnostic assessment by geriatrician
Presenting problems amongst patients over 70 with cognitive impairment admitted to a general hospital (n=53)

- Falls 34 (64%)
- Immobility 38 (73%)
- Pain 28 (54%)
- Incontinence 24 (46%)
- Breathlessness 12 (23%)
- Dehydration 11 (21%)
- Confusion 11 (21%)

Glover et al, 2014
Not just UTI

Final diagnoses amongst patients over 70 with cognitive impairment admitted to a general hospital (n=53)

**MEDICAL**
- pneumonia 4
- urinary tract infection 4
- multi-factorial fall 4
- multi-factorial functional problem 3
- AF with fast ventricular response 3
- dehydration/renal failure 3
- alcohol intoxication 2
- adverse drug reactions 2
- seizures 2 (alcohol excess, brain mets)
- unresponsive episode/syncope 2
- painful hip post fall 2
- unexplained delirium 2
- cancer 2 (gastric, lung)
- fractures 2

**ORTHOPAEDIC**
- infective exacerbation of COPD 1
- infected leg ulcer 1
- gastroenteritis 1
- stroke 1
- rheumatoid arthritis 1
- progression of vascular dementia 1
- acute urinary retention 1
- anxiety 1

• fractured neck of femur 7
• other fractures 4
• ruptured Achilles tendon 1

Glover et al 2014
Very physically dependent ...

Prevalence amongst patients over 70 with cognitive impairment admitted to a general hospital (n=195)

ON ADMISSION

• help to transfer 48%
  – hoist 13%
• help feeding 58%
  – unable 15%
• incontinent of urine 53%
• Barthel Index <5/20 31%

PRIOR TO ACUTE ILLNESS

• help to transfer 13%
• help feeding 23%
• incontinent of urine 23%
• Barthel Index <5/20 7%

Goldberg et al, 2012
... and mentally

Prevalence amongst patients over 70 with cognitive impairment admitted to a general hospital, of at least moderate severity (n=195)

- delusions 14%
- hallucinations 11%
- agitated 18%
- depressed 34%
- anxious 35%
- apathetic 38%
- disinhibited 10%
- sleep problems 34%
- MMSE <9/30 25%

Goldberg et al, 2012
Medical admissions over 70

- 9% delirium alone
- 19% delirium complicating dementia
- 23% dementia alone

- Total delirium  27%
- Total dementia  41%
- Previously diagnosed dementia  28%

Whittamore et al, 2013
## Cornell Scale for Depression in Dementia

<table>
<thead>
<tr>
<th></th>
<th>TOTAL</th>
<th>COGNITIVE IMPAIRMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>No depression</td>
<td>68%</td>
<td>49%</td>
</tr>
<tr>
<td>Possible major depression</td>
<td>24%</td>
<td>37%</td>
</tr>
<tr>
<td>Definite major depression</td>
<td>8%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Goldberg et al, 2012
## Intervention

<table>
<thead>
<tr>
<th></th>
<th>Recorded</th>
<th>Suggested</th>
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</thead>
<tbody>
<tr>
<td>Any assessment</td>
<td>100%</td>
<td>36 (68%)</td>
</tr>
<tr>
<td>Investigations</td>
<td>42 (79%)</td>
<td>17 (32%)</td>
</tr>
<tr>
<td>Collateral history</td>
<td>13 (35%)</td>
<td>17 (32%)</td>
</tr>
<tr>
<td>Any therapy</td>
<td>53 (100%)</td>
<td>40 (75%)</td>
</tr>
<tr>
<td>New drug</td>
<td>36 (68%)</td>
<td>18 (34%)</td>
</tr>
<tr>
<td>Drug review</td>
<td>21 (40%)</td>
<td>7 (13%)</td>
</tr>
<tr>
<td>PT</td>
<td>39 (74%)</td>
<td>21 (40%)</td>
</tr>
<tr>
<td>OT</td>
<td>8 (15%)</td>
<td>7 (13%)</td>
</tr>
<tr>
<td>Information giving</td>
<td>19 (36%)</td>
<td>9 (17%)</td>
</tr>
<tr>
<td>Planning</td>
<td>18 (34%)</td>
<td>20 (38%)</td>
</tr>
</tbody>
</table>
Poor outcomes six months later

- 27% did not return home
- 31% dead within 6 months
- 18% 30-day readmission, 42% 6-months readmission
- 42% recovered to pre-acute illness level of function
- 16% spent >170/180 days at home

Bradshaw et al, 2013
Carers

- 180 carers of participants with cognitive impairment
- 32% lived together, 40% apart, 28% care home
- 25% spouse, 50% son or daughter, 25% other
- 59% >60y; 73% sole carer
- 57% co-resident carers reported 24h supervision
- 30% carers had mobility or ADL problems
- 42% high carer strain, associated with BPSD
- Little change at 6 months follow up

Bradshaw et al, 2013
The cycle of discontent

Jurgens et al, 2012

Expectations,
Events,
Patient health and behaviours,
Treatment and the system.

Mistrust,
Anger, criticism,
Attempts at advocacy,
Complaints, removal of patient, alternative care giving.

Suspicion
Fear of what’s happening,
Helplessness,
Seeking information,
Bewilderment

Hyper-vigilant monitoring,
Confirmation of concerns by asking other visitors, patients, using internet for quality of hospital, withdrawal.

Jurgens et al, 2012
Communication

- I was shocked by the lack of communication to the family members
- If a family member is offering to help they don’t take it, maybe there's a policy
- Nobody will tell you ... so you just don’t know. I had no control and that bothered me
- I’ve spent most of my life in America, and dealt with hospitals there, and I used to be a nurse, but this is so foreign to me
Dementia in crisis

- Super-added delirium
- Physical illness in person with dementia
- Progression of dementia especially vascular
- Behavioural problem, disability, coping, misjudgment
- Carer and social crises

... physician role may be to exclude physical disease
Three trajectories of decline at the end of life.

Number of deaths in each trajectory, out of the average 20 deaths each year per UK general practice list of 2000 patients:
- Cancer (n=5)
- Organ failure (n=6)
- Physical and cognitive frailty (n=7)
- Other (n=2)
From: Palliative Care in Congestive Heart Failure

Goodlin S. J Am Coll Cardiol 2009; 54: 386
Prognostic indicators

• MMSE <18, hip fracture or pneumonia: 50% patients die <6m
• MMSE <12: median survival = 1.3y
• Care home admission: 71% die <6m
• Hospital admission, all dementia: 31% die <6m
• Appetite and swallow failure
• Immobile, no communication, dependent in ADL, weight loss
• Recurrent hospital admission, recurrent infections
MDS Mortality Risk Index

The MDS Mortality Risk Index – Revised (MMRI-R)

<table>
<thead>
<tr>
<th></th>
<th>Yes □ No □</th>
<th>Weighted points</th>
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</thead>
<tbody>
<tr>
<td>Admission to nursing home in the past three months</td>
<td>Yes □ No □*</td>
<td>(8)</td>
</tr>
<tr>
<td>Lost weight unintentionally in the last three months</td>
<td>Yes □ No □</td>
<td>(5)</td>
</tr>
<tr>
<td>Renal failure</td>
<td>Yes □ No □</td>
<td>(6)</td>
</tr>
<tr>
<td>Chronic heart failure</td>
<td>Yes □ No □</td>
<td>(4)</td>
</tr>
<tr>
<td>Poor appetite</td>
<td>Yes □ No □</td>
<td>(4)</td>
</tr>
<tr>
<td>Male</td>
<td>Yes □ No □</td>
<td>(5)</td>
</tr>
<tr>
<td>Dehydrated</td>
<td>Yes □ No □</td>
<td>(4)</td>
</tr>
<tr>
<td>Short of breath</td>
<td>Yes □ No □</td>
<td>(8)</td>
</tr>
<tr>
<td>Cancer (if yes – see Age and Cancer worksheet; if no continue)</td>
<td>Yes □ No □**</td>
<td>(8)</td>
</tr>
<tr>
<td>Age of patient/resident at last birthday</td>
<td></td>
<td>(2-9)</td>
</tr>
<tr>
<td>Age score without cancer</td>
<td>(13-20)</td>
<td></td>
</tr>
<tr>
<td>Deteriorated cognitive skills or status in the past three months</td>
<td>Yes □ No □***</td>
<td>(0-16)</td>
</tr>
<tr>
<td>Activities of Daily Living score</td>
<td>ADL score without cognitive decline</td>
<td>(-2-21)</td>
</tr>
<tr>
<td>(see ADL and cognitive decline worksheet)</td>
<td>ADL score with cognitive decline</td>
<td></td>
</tr>
</tbody>
</table>

Score 26: sensitivity and specificity about 70%
Candidacy

Figure 1. The Process of Recognising Dying and Transitioning to Comfort Care in Hospitalised Older Adults

Patient process

Responding
- Not responding – treatment becomes trial of treatment
- Candidacy for dying not quite dying
- Active dying

Health professional’s recognising dying process

Investigations and diagnosis for recovery
- Escalate or wait and see?
- Diagnosing dying
- Dying is diagnosed

Treatment – comfort process

Active Treatment
- Unpredictable, indeterminate, mixed care – leading to covert comfort care
- Comfort care

Admission

Death

TIME
What is hospital admission for?

- Acute medical care (rescue, cure)
- Rehabilitation
- End of life care
- Sanctuary, asylum
- Explanation, reassurance, risk management
- Decision making, care transitions
- ...
Medical model

- Diagnose
- Treat
- Discharge

Comprehensive Geriatric Assessment

- Diagnosis
- Function
- Mental Health
- Social
- Environmental

Recovery model

- Focus on hope
- Positive attributes and abilities
- Achievable goals
- Taking risks and accepting failure

Principals of palliative care

- Meticulous management of symptoms or problems
- Open communication
- Psychological, emotional and spiritual support of the patient and those close to them

Social model (disability movement)

Disability is an oppression by the majority in Society on those with different abilities

Brooker 2007

Oliver 1990
Clash of cultures

ACUTE
• Rescue, cure
• Safety
• Individuals
• Diagnosis
• Pathways
• Episodic

PERSON-CENTRED
• Palliation, experience
• Risk enablement
• Families, stakeholders
• Function, behaviour
• Individualisation
• Continuity, follow-on
Medical and Mental Health unit

• Environment
• Specialist mental health staff
• Training in person centred dementia care
• Purposeful activity
• New approach to family carers
• Medical staff interested and expert in delirium and dementia

www.nottingham.ac.uk/mcop
NIHR TEAM Trial: summary

- Care was different on MMHU
- Days at home 52/90 vs 46/90
- Patient experience better (mood, activity, staff interactions)
- Carer satisfaction better
- Small reduction care home placement
- Mortality, health status unchanged
- Length of stay, readmissions unchanged
- Cost-saving
## Process differences, from casenotes

<table>
<thead>
<tr>
<th></th>
<th>MMHU (n=110)</th>
<th>Standard care (N=95)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive assessment (MMSE)**</td>
<td>52%</td>
<td>26%</td>
</tr>
<tr>
<td>Delirium recorded</td>
<td>37%</td>
<td>28%</td>
</tr>
<tr>
<td>Collateral cognitive history**</td>
<td>64%</td>
<td>33%</td>
</tr>
<tr>
<td>Collateral function**</td>
<td>81%</td>
<td>42%</td>
</tr>
<tr>
<td>OT**</td>
<td>83%</td>
<td>37%</td>
</tr>
<tr>
<td>SLT**</td>
<td>18%</td>
<td>2%</td>
</tr>
<tr>
<td>Clear medical diagnosis*</td>
<td>92%</td>
<td>77%</td>
</tr>
<tr>
<td>Progress discussed with family*</td>
<td>86%</td>
<td>75%</td>
</tr>
<tr>
<td>Antipsychotic drugs</td>
<td>14%</td>
<td>20%</td>
</tr>
<tr>
<td>CMHT referral*</td>
<td>20%</td>
<td>9%</td>
</tr>
</tbody>
</table>

*p<0.05, **p<0.001
David Nicholson, chief executive of the NHS Commissioning Board, asserts that ‘Hospitals are very bad places for old, frail people’ and suggests alternatives must be found.

Here is a radical suggestion – make hospitals good places for older people....
• 1 in 3 acute hospital admissions is of a confused older person
• Presentations non-specific, most are admitted for good reason
• People with dementia often have super-added delirium, active psychopathology and new or worse disability
• Many are approaching the end of life
• EOLC and person-centred dementia care are almost identical
• Can we adapt the acute care model for this population?

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