Acute Hospital Care and the National Dementia Strategy

S O’Keeffe

Galway University Hospitals
Consultation?

“We want to include you in this policy without letting you affect it.”
Implementation?

“I’d like to stall this project — hand it over to one of our action committees”
Exciting Times…

• Irish National Dementia Strategy

• Irish National Audit of Dementia Care in Acute Hospitals

• Dementia in Acute Cork Hospitals Study

• HSE National Consent Policy
  – Consent
  – Resuscitation, advance care planning

• Assisted Decision Making (Capacity) Bill
Why Does Cognitive Impairment Matter in Acute Hospitals?

• Common

• Atypical presentation of illness in later life

• Unpleasant

• Serious consequences
Outcomes of Delirium
(adjusted for confounding variables)

Even worse if... Delirium superimposed on dementia: a systematic review. Fick et al. JAGS 2002
Dementia in the acute hospital: prospective cohort study of prevalence and mortality

Elizabeth L. Sampson, Martin R. Blanchard, Louise Jones, Adrian Tookman and Michael King

Table 4  Cox proportional hazard models for death during index admission associated with cognitive impairment and dementia in people over 70 years of age during acute hospital admission

<table>
<thead>
<tr>
<th>MMSE score</th>
<th>Median survival, days</th>
<th>Deaths, % (n=75)</th>
<th>Mortality during index admission</th>
<th>Unadjusted</th>
<th>Adjusted&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Hazard ratio (95% CI)</td>
<td>χ² (d.f. = 1)</td>
</tr>
<tr>
<td>24-30 (n = 321)</td>
<td>18</td>
<td>7.5</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>16-23 (n = 141)</td>
<td>12</td>
<td>10.0</td>
<td></td>
<td>1.57 (0.73-3.39)</td>
<td>22.50</td>
</tr>
<tr>
<td>0-15 (n = 155)</td>
<td>11</td>
<td>24.0</td>
<td></td>
<td>4.02 (2.24-7.36)</td>
<td>22.50</td>
</tr>
</tbody>
</table>
Why Do People with Cognitive Impairment Do Badly in Hospital?

- Dementia and delirium have adverse physical and mental consequences
- Acute illness as a stress test for the brain - delirium a marker for physical and mental frailty
- Failure of hospital systems and design
- Failure of ‘health care professionals’
  - Poor recognition and delayed treatment
  - Preventative and environmental measures not used
  - Misuse of medications, restraints
- Failure of the ‘experts’
  - Limited evidence base
  - Poorly taught
Cognitive impairment

Incontinence/Catheter

Falls, instability

Poor nutrition

Restraints/Psychoactive meds

Nosocomial infections

Poor hydration

Skin breakdown

Functional decline

Institutional care

Prolonged stay

Mortality
Is Cognitive Impairment Missed?

• Dementia: 50% acute hospitals (Bynum, JAGS 2004)

• Delirium
  – General wards: 40-60%
  – Hip fracture patients: 90% missed (Milisen, J Geront Nurs 2002)
Why Is Cognitive Impairment Missed?

• Cognition, except orientation, not assessed

• Style of interaction by staff minimises chance of detecting problems (Treloar & MacDonald, J R Soc Med 1995)

• Hypoactive delirium easily misdiagnosed as depressed

• Hyperactive delirium difficult to miss but labelled as ‘confused’ / ‘agitated’
How to Miss Cognitive Impairment

• Keep any talk with patients to a minimum and do not assess cognitive function

• If by bad luck you identify cognitive impairment, assume it is long-standing

• Never talk to nurses, especially night staff

• If patient is withdrawn, start an antidepressant

• If patient is noisy, start a benzodiazepine
Pejorative labels instead of diagnosis?
(O’Keeffe Eur Ger Med 2011)

<table>
<thead>
<tr>
<th></th>
<th>‘Vague’</th>
<th>‘Poor motivated’</th>
<th>‘Poorly historian’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dx</td>
<td>(N=28)</td>
<td>(N=76)</td>
<td>(N=21)</td>
</tr>
<tr>
<td>Cognitive</td>
<td>16 (57%)</td>
<td>44 (58%)</td>
<td>8 (38%)</td>
</tr>
<tr>
<td>Depressed</td>
<td>3 (11%)</td>
<td>10 (13%)</td>
<td>14 (67%)</td>
</tr>
<tr>
<td>Either</td>
<td>17 (61%)</td>
<td>51 (67%)</td>
<td>18 (86%)</td>
</tr>
</tbody>
</table>
PHILADELPHIA, PA--COPD sufferer Hank Spencer was found to be an extremely poor historian by admitting house staff.

Dr. Karen Filmer, a junior doctor, was one of the first to evaluate Spencer in the Emergency Department.

"He knew something about post-Civil War American history. But when it came to the ancient civilizations of Egypt, Greece, and Rome, he simply didn't have a clear grasp of the basic principles underlying the important events in those eras."
# Delirium: A Useless Differential Diagnosis

## TABLE 3. Putative causes of delirium

<table>
<thead>
<tr>
<th>Medications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychotropics (anxiolytics, sedative-hypnotics, barbiturates, antidepressants, antipsychotics, lithium)</td>
</tr>
<tr>
<td>Anticonvulsants</td>
</tr>
<tr>
<td>Analgesics</td>
</tr>
<tr>
<td>Anticholinergics (antihistamines, antispasmodics, antiparkinsonian agents)</td>
</tr>
<tr>
<td>Antiarrhythmics</td>
</tr>
<tr>
<td>Antihypertensives</td>
</tr>
<tr>
<td>Aminoglycoside antibiotics</td>
</tr>
<tr>
<td>Miscellaneous (clindamycin, steroids, nonsteroidal anti-inflammatory drugs, salicylates)</td>
</tr>
<tr>
<td>Drugs of abuse (phenylcyclidine and hallucinogenic agents)</td>
</tr>
<tr>
<td>Alcohol</td>
</tr>
<tr>
<td>Poisons (heavy metals, organic solvents, methyl alcohol, ethylene glycol, insecticides, carbon monoxide)</td>
</tr>
<tr>
<td>Withdrawal syndromes</td>
</tr>
<tr>
<td>Alcohol</td>
</tr>
<tr>
<td>Sedatives and hypnotics</td>
</tr>
<tr>
<td>Cardiovascular</td>
</tr>
<tr>
<td>Congestive heart failure</td>
</tr>
<tr>
<td>Cardiac arrhythmia</td>
</tr>
<tr>
<td>Myocardial infarction</td>
</tr>
<tr>
<td>Neurologic</td>
</tr>
<tr>
<td>Head trauma</td>
</tr>
<tr>
<td>Space-occupying lesions: tumor, subdural hematoma, abscess, aneurysm</td>
</tr>
<tr>
<td>Cerebrovascular diseases: thrombosis, embolism, arteritis, hemorrhage, hypertensive encephalopathy</td>
</tr>
<tr>
<td>Degenerative disorders: Alzheimer disease, multiple sclerosis</td>
</tr>
<tr>
<td>Epilepsy</td>
</tr>
<tr>
<td>Infection</td>
</tr>
<tr>
<td>Intracranial: encephalitis and meningitis (viral, bacterial, fungal, protozoal)</td>
</tr>
<tr>
<td>Systemic: Pneumonia, septicemia, subacute bacterial endocarditis, influenza, typhoid, typhus, infectious mononucleosis, infectious hepatitis, acute rheumatic fever, malaria, mumps, diphtheria, AIDS</td>
</tr>
<tr>
<td>Metabolic</td>
</tr>
<tr>
<td>Hypoxia</td>
</tr>
<tr>
<td>Hypoglycemia</td>
</tr>
<tr>
<td>Acid–base imbalance: acidosis, alkalosis</td>
</tr>
<tr>
<td>Electrolyte imbalance: elevated or decreased sodium, potassium, calcium, magnesium</td>
</tr>
<tr>
<td>Water imbalance: inappropriate antidiuretic hormone, water intoxication, dehydration</td>
</tr>
<tr>
<td>Failure of vital organs: liver, kidney, lung</td>
</tr>
<tr>
<td>Inborn errors of metabolism: porphyria, Wilson disease, carcinoid syndrome</td>
</tr>
<tr>
<td>Remote effects of carcinoma</td>
</tr>
<tr>
<td>Vitamin deficiency: thiamine (Wernicke encephalopathy), nicotinic acid, folate, cyanocobalamin</td>
</tr>
<tr>
<td>Endocrine</td>
</tr>
<tr>
<td>Thyroid: thyrotoxicosis, myxedema</td>
</tr>
<tr>
<td>Parathyroid: hypo-and hyperparathyroidism</td>
</tr>
<tr>
<td>Adrenal: Addison disease, Cushing syndrome</td>
</tr>
<tr>
<td>Pancreas: hyperinsulinism, diabetes</td>
</tr>
<tr>
<td>Pituitary hypofunction</td>
</tr>
<tr>
<td>Hematologic</td>
</tr>
<tr>
<td>Pernicious anemia</td>
</tr>
</tbody>
</table>
Delirium: A Useful Differential Diagnosis

- Meds
- Meds
- Infection
- Hypoxia
- Metabolic problems
- Some combination
- Something else

| Acute disturbance in dementia |
|-------------------------------|-----------------------------|
| +Pain                        |
| +Full bladder                |

Rockwood & MacKnight, 2001
Real Life Pharmacotherapy

● Antipsychotics: Too much, too late
  ● Intermittent ‘chemical cosh’ rather than regular low-dose treatment in suitable cases
  ● No dose titration, and disregard of age, weight, sex

● Overuse of benzodiazepines
  ● Routine use of sleeping tablets on prn sheet
  ● Primary use to treat delirium
Perils of Diagnosing Dementia in Acute Hospitals

• Lumpening and Labelling
  – The ‘Alzheimer patient’
  – ‘His MMSE is only ....’

• Us and Them
“Because of your age, I’m going to recommend doing nothing.”
“It says here that you’d prefer someone with regular bowel movements.....”

“Does it matter if they’re involuntary?”
Dementia friendly wards
• “They shouldn’t be here’
• Geriatric medicine as a ‘take-away’ service

Advance care planning
• “They should have a DNAR’

Assisted decision making/ capacity
• “Have they capacity to make their own decisions’
• “Are they safe to go home’
A (hyper)cognitive view of capacity...

• Define important (cognitive) aspects of capacity

• Standardize assessment of these aspects of capacity

• Empirical research shows there’s a lot of unsuspected incapacity about
  – Maintain a high level of suspicion if people make decisions you don’t agree with!
  – Might be worth ‘screening for incapacity’ in ‘vulnerable’ populations before accepting their consent or refusal of consent
Prevalence of mental incapacity in medical inpatients and associated risk factors: cross-sectional study

Vanessa Raymont, William Bingley, Alec Buchanan, Anthony S David, Peter Hayward, Simon Wessely, Matthew Hotopf

Summary
Background Although mental incapacity is becoming increasingly important in clinical practice, little information is available on its frequency in medical inpatients. We aimed to estimate the prevalence of mental incapacity in acutely admitted medical inpatients; to determine the frequency that medical teams recognised patients who did not have mental capacity; and to identify factors associated with mental incapacity.

Methods Over an 18-month period, we recruited 302 consecutive acute medical inpatients. Participants were assessed with the MacArthur competence tool for treatment and by clinical interview. Cognitive impairment was measured by the mini-mental state examination.

Findings 72 (24%) patients were severely cognitively impaired, unconscious, or unable to express a choice and were automatically assigned to the incapacity group. 71 (24%) refused to participate or could not speak English. Thus, 159 patients were interviewed. Of these, 31% (95% CI 24–38) were judged not to have mental capacity. For the total sample (n=302), we estimated that at least 40% did not have mental capacity. Clinical teams rarely identified patients who did not have mental capacity: of 50 patients interviewed, 12 (24%) were rated as lacking capacity. Factors associated with mental incapacity were increasing age and cognitive impairment.

Interpretation Mental incapacity is common in acutely ill medical inpatients, and clinicians tend not to recognise it. Screening methods for cognitive impairment could be useful in detecting those with doubtful capacity to consent.
• 231 consecutive acute medical inpatients
• 72 (31%) patients had clear incapacity (coma, severe dementia or aphasia, etc.)
• 159 patients were asked using MacCAT-T about the main treatment or investigation for which they were hospitalised
  – 50 (31%) lacked capacity
  – Only one-quarter of the those judged to lack capacity were identified as such by their treating clinical teams or their relatives.
  – Those lacking capacity:
    • Older: 76y vs 59y
    • Lower MMSE: 22 vs 29
    • No difference in psychiatric diagnoses
England and Wales Mental Capacity Act 2005: Deprivation of Liberty

Deprivation of Liberty Safeguards:

• lack capacity
• deprived of liberty
• in a hospital or care home

Required by ECHR following the Bournewood case
Common Scenario

- Consult to old age medicine/psychiatry
- Tx of acute illness in older person completed
- Residual physical/cognitive problems
- Family/doctors/social worker want long-term care
  - ‘Best interests’
  - ‘At risk’
  - ‘Can’t cope’
  - Family ‘won’t take her home’
  - ‘MMSE is only......’
- Person wants to go home
Capacity Bill 2013

• No specific protections – yet...

• Account must be taken of a person's past and present wishes, where ascertainable?
  – “Don’t put me in a home” probably the commonest advance directive!

• Decisions should be the least restrictive of the person's rights and freedom of action
  – Involuntary detention for life?
England, January 16th 2014

Monitoring the use of the Mental Capacity Act Deprivation of Liberty Safeguards in 2012/13

Thousands more elderly care home residents subject to restraints
Steep rise in attempts by care homes to restrain and lock up the elderly, figures show
Social workers took out court order to stop couple going on HOLIDAY because wife had dementia

By EMMA REYNOLDS
UPDATED: 17:39 GMT, 21 January 2012

An elderly couple were banned from going on holiday together after their local council said it was too risky.

In an astonishing example of the nanny state at work, Norman Davies and Peggy Ross were told by Cardiff Council that they could not go on the planned Mediterranean cruise, just days before they were due to leave.

Over-zealous social workers claimed Mrs Ross, who suffers from dementia, was in danger of wandering off or falling overboard.
Laws of the House of God

• At a cardiac arrest, the first procedure is to take your own pulse.

• There is no body cavity that cannot be reached with a 14 needle and a strong arm.

• If the radiology resident and the medical student both see a lesion on the chest x-ray, there can be no such lesion there.

• The delivery of good medical care is to do as much nothing as possible.

• The patient is the one with the disease.
Not Them - Us!

• At 55 years of age, lifetime risk of developing dementia (Seshadri Lancet Neurol 2007)
  – 21% (1/5) for women
  – 14% (1/7) for men

• Delirium – ‘Everyman’s Psychosis’
<table>
<thead>
<tr>
<th>Category</th>
<th>Count (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complex</td>
<td>149 (96%)</td>
</tr>
<tr>
<td>‘Presence’/’Passage’</td>
<td>18 (12%)</td>
</tr>
<tr>
<td>People</td>
<td>104 (67%)</td>
</tr>
<tr>
<td>Animals</td>
<td>62 (40%)</td>
</tr>
<tr>
<td>Hybrids</td>
<td>5 (3%)</td>
</tr>
<tr>
<td>Body parts</td>
<td>11 (7%)</td>
</tr>
</tbody>
</table>
Animals (N=62)

• Dogs (12)
  – 3 familiar

• Cats (5)
  – 2 familiar

• Cattle (15)

• Sheep (8)
  – 1 familiar
• Rats (8)
• Snake (5)
• Bats (4)
• Spiders (3)
• Ants (2)
• Birds (2)
• Frogs (1)
• Tiger (1)
• Giraffe (1)
• Monkey (1)
• Zoo/farm scene (6) – ‘like Noah’s Ark’

General themes

• Fighting
• Fornicating
• Eating
  o Other patients
  o Each other
Where do we go?

• Attitudes towards dementia
  – Societal
  – Hospital staff - all

• Research into how to achieve
  – No innovation without evaluation and monitoring
  – Improve evidence base