Cognitive Impairment – What does it mean?

A/Professor Mark Yates
Consultant Geriatrician

Meredith Theobald
Director of Nursing Subacute Services

Michelle Morvell
CNC Cognition

Sean MacDermott
Project Manager

June 2017
Cognitive Impairment – What does it mean?

• What do we mean when we say a patient has cognitive impairment?
• What does having cognitive impairment in hospital mean for the patient, staff and hospital?
• Knowing the impact of cognitive impairment in hospitals means the system has to change.
Cognitive Impairment (CI) is a functional description and does not make a diagnosis. It is an acknowledgment of potential risk and the opportunity to support the patient.

**Dementia**
- Pre-existing
- Behaviour more constant
- Rapid forgetting
- Word finding

**Delirium**
- New symptom
- Fluctuation of behaviour

**Dementia**
- Attentional deficit
- Disorientation
- Memory impairment
- Mood disturbance
- Hallucinations
- Delusions
- Speech disturbance

**Delirium**
- Pre-existing
- Behaviour more constant
- Rapid forgetting
- Word finding

CI a functional description and does not make a diagnosis. It is an acknowledgment of potential risk and the opportunity to support the patient.
## Cognitive Screening Measures

<table>
<thead>
<tr>
<th>Tool</th>
<th>Acronym</th>
<th>Criteria for positive CI screen</th>
<th>Used by Site</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbreviated Mental Test</td>
<td>AMT</td>
<td>Score ≤ 7</td>
<td>1</td>
<td>Hodkinson</td>
</tr>
<tr>
<td>Mini-Cog</td>
<td></td>
<td>Recall 1 or 2 of 3 items and abnormal Clock Drawing; or recall of 0 of 3 words.</td>
<td>4</td>
<td>Borson</td>
</tr>
<tr>
<td>Abbreviated Mental Test Score 4*</td>
<td>AMT4</td>
<td>Score of 3 or less</td>
<td>2 and 3</td>
<td>Swain</td>
</tr>
<tr>
<td>Clock Drawing Test^</td>
<td>CDT</td>
<td>Not all clock numbers present, spaced unevenly, or hands pointing to incorrect time.</td>
<td>2, 3 and 4</td>
<td>Scanlan</td>
</tr>
</tbody>
</table>

*Only used in conjunction with CDT

^Used in conjunction with either AMT4 or MiniCog
Total Participants: DCHP National Evaluation

(Positively Screened + Negatively Screened): 13271

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Intervention</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>1115 (46.87%)</td>
<td>3956 (36.32%)</td>
<td>5071 (38.21%)</td>
</tr>
<tr>
<td>Negative</td>
<td>1264 (53.13%)</td>
<td>6936 (63.68%)</td>
<td>8200 (61.79%)</td>
</tr>
<tr>
<td>Total</td>
<td>2379</td>
<td>10892</td>
<td>13271</td>
</tr>
</tbody>
</table>

Prospective observational study of dementia and delirium in the acute hospital setting – Travers et al 2013

- 29.4% of the population 70 and over in acute medical and surgical wards have cognitive impairment.
- 20.7% of the over 70s had dementia
Cognitive Impairment means increased costs

“The average cost of hospital care for people with dementia was higher than for people without dementia ($7,720 compared with $5,010 per episode, respectively).”

Cognitive Impairment means increased length of stay

- ALOS is 3.5 times longer when dementia is the principal diagnosis and 2.5 times longer when principal and additional diagnosis groups are combined.

AIHW Dementia in Australia 2012
Cognitive Impairment means increased risk for patients

- Odds ratio of acquiring a preventable complication in patients with dementia compared to age matched without dementia

<table>
<thead>
<tr>
<th></th>
<th>Medical Ward</th>
<th>Surgical Ward</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTI</td>
<td>1.79</td>
<td>2.88</td>
</tr>
<tr>
<td>Pressure Ulcer</td>
<td>1.61</td>
<td>1.84</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>1.37</td>
<td>1.66</td>
</tr>
<tr>
<td>Delirium</td>
<td>2.83</td>
<td>3.10</td>
</tr>
</tbody>
</table>

Cognitive Impairment means increased risk for patients

HAC Rates in Screen Positive and Negative Patients - Baseline

- Urinary Tract Infection: 24% Positive CI, 8% Negative CI
- Pressure Ulcer: 10% Positive CI, 8% Negative CI
- Pneumonia: 9% Positive CI, 6% Negative CI
- Delirium: 20% Positive CI, 7% Negative CI
- 1 or more complications: 46% Positive CI, 23% Negative CI
Cognitive Impairment means increased difficulty staff

- Staff difficulty
  - 80-90% of clinical staff perceived difficulty when caring patients with CI
  - 30-40% perceived difficulty with carers

DCHP Phase 3
The impact of cognitive impairment in hospitals means the system has to change.

- Screening for cognitive impairment because it is not easily identified
- Ensure all staff are aware of those with CI so support can be provided
- Ensure engagement with family/cares
- Change the care paradigm
Drivers for system change

• External
  – Dementia is a National Health Priority Area
  – ACSQHC – new standards
  – Consumers

• Internal
  – Costs
    • Patient related
      – Cost
      – Risk
    • Staff related
CABING FOR COGNITIVE IMPAIRMENT

Cognitive Impairment
is an important safety and quality issue for all Australian hospitals

- Patients with cognitive impairment such as dementia and/or delirium have more falls, pressure injuries and functional decline
- Dementia and delirium are poorly recognised
- 30-40% of delirium cases can be prevented

Learn how to recognise cognitive impairment
Prevent delirium
Act to keep people with cognitive impairment safe
We can all make a difference
A better way to care
Safe and high-quality care for patients with cognitive impairment (dementia and delirium) in hospital

A better way to care
Actions for consumers

A better way to care
Actions for health service managers

A better way to care
Actions for clinicians
• Introduce yourself
• Make sure you have eye contact at all times
• Remain calm and talk in a matter of fact way
• Keep sentences short and simple
• Focus on one instruction at a time
• Involve carers
• Give time for responses
• Repeat yourself… don’t assume you have been understood
• Do not give too many choices
Delirium Clinical Care Standard

Delirium Clinical Care Standard

1. Early screening
2. Assessing for delirium
3. Interventions to prevent delirium
4. Identifying and treating underlying causes
5. Preventing falls and pressure injuries
6. Minimising use of antipsychotic medicines
7. Transition from hospital care
CARING FOR COGNITIVE IMPAIRMENT

Join the campaign and make a difference

cognitivecare.gov.au  #BetterWayToCare

cognitive.impairment@safetyandquality.gov.au
What does cognitive impairment mean?

• Cognitive impairment is a functional impairment that puts patients at risk.
• It is an impairment easily identified by validated screening tools.
• When cognitive impairment is identified, the patient is twice as likely to have a hospital acquired complication.
• Hospitals will have to change to better care for cognitive impairment.
Thank you ........
Focus Groups Facilitated by Alzheimer’s Australia Victoria - People with Dementia and their Carers

Identifier Production and Marketing
- Image development based on key themes

Educational Learnings
- Content
- Key messages
- Development of teaching package

Identifier Learnings
- Acceptance
- Appearance

Hospital Wide Education
- Clinical Staff
- Non-clinical / Corporate staff

Educational Learnings

Pre Intervention Care
- Awareness of Cognitive Impairment
- Awareness of Communication Strategies
- Use of Cognitive Impairment Identifiers
- Patient and carer satisfaction

Post Intervention Care

DCHP