How to best care for older people with cognitive impairment in ED

Dr Linda Schnitker
Overview Content Presentation

People with cognitive impairment in EDs:
1. Background
2. Quality Indicators
3. Care Challenges
4. Best Practices
5. Conclusion
1. Background
LITERATURE REVIEW

Negative health outcomes and adverse events in older people attending emergency departments: A systematic review

Linda Schnitker\textsuperscript{a,}\textsuperscript{*}, Melinda Martin-Khan\textsuperscript{a}, Elizabeth Beattie\textsuperscript{b}, Len Gray\textsuperscript{a}

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\textsuperscript{b} School of Nursing and Midwifery, Queensland University of Technology, Kelvin Grove, Queensland, Australia

\textsuperscript{1} Schnitker et al. 2011
1/5 Background

Functional Decline:
- Increased risk compared to younger ED patients
- The oldest are at highest risk

<table>
<thead>
<tr>
<th>Time since ED visit:</th>
<th>3 weeks</th>
<th>3 months</th>
<th>6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results:</td>
<td>10% – 52%</td>
<td>6% (ADL) &amp; 20% (IADL)</td>
<td>16%</td>
</tr>
</tbody>
</table>

1 Denman et al. 1989
4 Shapiro et al. 2001
5 McCusker et al. 1999.

How to best care for older people with cognitive impairment in ED
1/5 Background

ED Readmission:
- No significant differences between 65+ and 75+ group

<table>
<thead>
<tr>
<th>Time since ED visit:</th>
<th>14 days</th>
<th>1 month</th>
<th>3 months</th>
<th>6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results 75+:</td>
<td>5.6%(^1)</td>
<td>12% - 17.1%(^2)</td>
<td>6% - 24%(^4)</td>
<td></td>
</tr>
<tr>
<td>Results 65+:</td>
<td>10.3% - 19.3%(^3)</td>
<td>17.2% - 26%(^5)</td>
<td>42.9%(^6)</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Rowland et al. 1990
\(^2\) Bentley et al. 2004, Caplan et al. 1998
\(^4\) Richardson, 1992, McCusker et al. 1997
\(^6\) McCusker et al. 2000

How to best care for older people with cognitive impairment in ED
Hospitalisation:

<table>
<thead>
<tr>
<th>Time since ED visit:</th>
<th>7 – 14 days</th>
<th>1 month</th>
<th>3 months</th>
<th>6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results:</td>
<td>3% - 10.2%</td>
<td>10.9% - 14%</td>
<td>13.3 – 18.3%</td>
<td>17.6%</td>
</tr>
</tbody>
</table>

4 McCusker et al. 2000
Institutionalisation:

<table>
<thead>
<tr>
<th>INSTITUTIONALISATION RATE OLDER ED PATIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time since ED visit:</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1 month</td>
</tr>
<tr>
<td>3 months</td>
</tr>
<tr>
<td>6 months</td>
</tr>
<tr>
<td>Results 75+:</td>
</tr>
<tr>
<td>7.5%¹</td>
</tr>
<tr>
<td>13%¹</td>
</tr>
<tr>
<td>Results 65+:</td>
</tr>
<tr>
<td>1.4%²</td>
</tr>
<tr>
<td>2.6%²</td>
</tr>
<tr>
<td>3%³</td>
</tr>
</tbody>
</table>

1/5 Background

Mortality:

<table>
<thead>
<tr>
<th>MORTALITY RATE OLDER ED PATIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time since ED visit:</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1 month</td>
</tr>
<tr>
<td>3 months</td>
</tr>
<tr>
<td>6 months</td>
</tr>
<tr>
<td>Results 75+:</td>
</tr>
<tr>
<td>12.4%(^1)</td>
</tr>
<tr>
<td>1% - 14.8%(^2)</td>
</tr>
<tr>
<td>Results 65+:</td>
</tr>
<tr>
<td>1% - 2.2%(^3)</td>
</tr>
<tr>
<td>2.4% - 10%(^4)</td>
</tr>
<tr>
<td>10.2%(^5)</td>
</tr>
</tbody>
</table>

5 McCusker et al. 1999

How to best care for older people with cognitive impairment in ED
1/5 Background

Adverse Events¹:
1. Adverse medication-related events
2. Under triage of illness severity
3. Adverse communication-related events
4. Lack of recognition of geriatric syndromes

¹ Schnitker et al. 2010
1/5 Background

Adverse medication-related events:

- No routine screening\(^1\)
- Discordance medication lists\(^2\)

<table>
<thead>
<tr>
<th>Sub-optimal Pharmacotherapy(^3) Older ED Patients (≥ 65 Y)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In ED</td>
</tr>
<tr>
<td>Upon discharge</td>
</tr>
</tbody>
</table>

---

1 Beers et al 1990.

How to best care for older people with cognitive impairment in ED
1/5 Background

Under triage of illness severity:
• ‘Age’ independent factor influencing the process of care

<table>
<thead>
<tr>
<th>UNDER TRIAGE OF ILLNESS SEVERITY IN OLDER ED PATIENTS (≥65 Y)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missed diagnosis / unrecognised health issues</td>
</tr>
<tr>
<td>20% - 28%</td>
</tr>
</tbody>
</table>

2 Ray et al. 2006, Khan et al. 1996
Background

Adverse communication-related events:

• Missing essential patient information\(^1\)
• Emergency physicians experience communication problems\(^2\)

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\(^1\) Schumacher et al. 2006, Stiell 2003
\(^2\) McNamara et al. 1992

How to best care for older people with cognitive impairment in ED
1/5 Background

Lack of recognition of geriatric syndromes:

- **Cognitive Impairment:**
  - No routine screening
  - Poor documentation\(^1\)

### RECOGNITION OF CI IN OLDER ED PATIENTS ≥ 65.

<table>
<thead>
<tr>
<th></th>
<th>Not detected:</th>
<th>Not documented:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delirium</td>
<td>43.3% - 76%(^2)</td>
<td>40% - 83%(^3)</td>
</tr>
<tr>
<td>Cognitive functioning</td>
<td></td>
<td>88%(^4)</td>
</tr>
</tbody>
</table>

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1 Hustey, 2002.
4 Press et al. 2009
The Identification of Seniors at Risk (ISAR) tool: (ISAR)¹:

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Before the illness or injury that brought you to the Emergency, did you need someone to help you on a regular basis?</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2. Since the illness or injury that brought you to the Emergency, have you needed more help than usual to take care of yourself?</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>3. Have you been hospitalized for one or more nights during the past 6 months (excluding a stay in the Emergency Department)?</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>4. In general, do you see well?</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5. In general, do you have serious problems with your memory?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Do you take more than three different medications every day?</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

TOTAL:

The Triage Risk Screening Tool (TRST)²:

- History or evidence of cognitive impairment (poor recall or not oriented)
- Difficulty walking/transferring or recent falls
- Five or more medications
- ED use in previous 30 days or hospitalization in previous 90 days
- RN professional recommendation

¹ McCusker et al.1999
² Meldon et al. 2003

How to best care for older people with cognitive impairment in ED
People with dementia compared to older adults $^{1,2}$

- More frequent ED visits
- More frequently admitted
- Increased re-presentations
- Increased mortality rate

LaMantai MA, Stump TE, Messina FC, Miller DK, Callahan CM. Emergency Department Use Among Older Adults with Dementia. *Alzheimer Dis Assoc Disord*, 2016.

Australian Commission on Safety and Quality in Health Care. Evidence for the safety and quality issues associated with the care of patients with cognitive impairment in acute care, 2013.
2. Quality Indicators
Measuring Quality of Care of Older ED Patients with Cognitive Impairment: ‘the EDQI cognition Project’
2/5 Quality Indicators

Research Question

• What data reflects quality of care of older ED patients with cognitive impairment?
2/5 Quality Indicators

Methodology EDQI project – 3 phases

How to best care for older people with cognitive impairment in ED
2/5 Quality indicators

Results Phase 2

- Process and outcome data of 544 older ED patients
- Structural data of 8 Australian ED sites

<table>
<thead>
<tr>
<th>ED Population Characteristics (N=544):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age</td>
</tr>
<tr>
<td>80.5 ( SD 6.7) (Range, 70 – 99)</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>277 (51%)</td>
</tr>
<tr>
<td>Service urgency according to a five-level triage instrument</td>
</tr>
<tr>
<td>Level 1: n=0 (0%)</td>
</tr>
<tr>
<td>Level 2: n=92 (17%)</td>
</tr>
<tr>
<td>Level 3: n=318 (58%)</td>
</tr>
<tr>
<td>Level 4: n=124 (23%)</td>
</tr>
<tr>
<td>Level 5: n=10 (2%)</td>
</tr>
<tr>
<td>Subsequent hospital admission:</td>
</tr>
<tr>
<td>314 (58%)</td>
</tr>
</tbody>
</table>
2/5 Quality indicators

1) Process Quality Indicator: Cognitive screening

Proportion of older people who received cognitive screening in ED
2/5 Quality Indicators

- Proportion of older people who received cognitive screening in ED
Assessment of cognitive functioning

Clinically significant:

Delirium:
• Delirium is a preventable clinical syndrome\(^1\)
• Benefit from rapid diagnosis and treatment\(^2\)

Existing cognitive impairment:
• Benefit from early recognition\(^3\)
• Referrals to interdisciplinary teams to slow disease progression and support prolonged independence\(^3\)

\(^1\) Inouye 2000.
\(^2\) Sanders 2002.
\(^3\) Fillet et al. 2006, Geldmacher et al. 1996.
Assessment of cognitive status:

- If CI is not recognised clinical decisions may be based on incorrect or incomplete data
- Compliance discharge instructions
- Achieving optimal care\(^1\) and reducing risk of negative outcomes and adverse events.

\(^1\) Fillit et al. 2006
Older ED patients:

- Cognitive impairment prevalence: 26%-40%\(^1\)
- Delirium prevalence: ≈ 10%\(^2\)


http://www.medicarehomehealth.com/education-center/resources-for-seniors/aarp-8-treatable-conditions-mimic-dementia/
2/5 Quality indicators

2) Process Quality Indicator: Delirium screening

Proportion of older people who received a screen for delirium in ED

2/5 Quality Indicators

- Proportion of older people who received a screen for delirium in ED

![Bar chart showing the percentage triggered in different emergency departments.]
2/5 Quality Indicators

Structural Quality Indicators:

Picture 1: Assessment of the ED environment searching for elderly friendly structural elements

How to best care for older people with cognitive impairment in ED
### Structural Quality Indicators

<table>
<thead>
<tr>
<th>Domain</th>
<th>Quality Indicator: The ED has a policy outlining......</th>
<th>Triggered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Impairment</td>
<td><em>The management of older people with cognitive impairment during the ED episode of care</em></td>
<td>25% (2/8)</td>
</tr>
<tr>
<td>Carer friendly environment</td>
<td><em>Issues relevant to carers of older people with cognitive impairment, encompassing the need to include the (family) carer in the ED episode of care</em></td>
<td>12.5% (1/8)</td>
</tr>
<tr>
<td>Assessment and management of behavioural disturbances</td>
<td><em>The assessment and management of behavioural symptoms, with specific reference to older people with cognitive impairment</em></td>
<td>37.5% (3/8)</td>
</tr>
<tr>
<td>Delirium prevention</td>
<td><em>Delirium prevention strategies, including the assessment of delirium risk factors</em></td>
<td>43% (3/7)</td>
</tr>
<tr>
<td>Pain assessment and management</td>
<td><em>Pain assessment and management for older people with cognitive impairment</em></td>
<td>43% (3/7)</td>
</tr>
</tbody>
</table>
2/5 Quality Indicators

Process Quality Indicators Targeting Cognitive Impairment to Support Quality of Care for Older People with Cognitive Impairment in Emergency Departments

Linda M. Schnitker, MS, Melinda Martin-Khan, PhD, Ellen Burkett, MBBS, Elizabeth R. A. Beattie, PhD, Richard N. Jones, ScD, and Len C. Gray, PhD, The Research Collaboration for Quality Care of Older Persons: Emergency Care Panel


How to best care for older people with cognitive impairment in ED
3. Other Care Challenges
2/5 Quality Indicators

Rationale

• Increasing older ED population with cognitive impairment\(^1\)
  – Complex care needs
  – ED can be stressful and frightening\(^2\)
  – Responsive behaviour\(^3\)
  – Burden of care
  – Carer stress
  – Safety / Ethical issues
  – Increased risk delirium\(^4\)
  - Increased risk delayed pain assessment and treatment\(^5\)

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\(^1\) Ferri et al. 2005  
\(^2\) Cheston and Bender 1999  
\(^3\) Erel 2013  
\(^5\) Hwang 2006, Meldon et al. 2003, McCusker et al. 1999
4. Best Practices
Evidence

- Limited!
- Review by Schnitker et al. (2013)
- Review by Clevenger et al. (2012)

How to best care for older people with cognitive impairment in ED
4/5 Best Practices

Nursing issues: specific needs

• Longer waiting time and periods of immobility:
  • Position Change
  • Pressure Injury Prevention
  • Nutrition
  • Toileting
  • Orientation
# 4/5 Best Practices

## Pain Assessment IN Advanced Dementia

**PAINAD**

<table>
<thead>
<tr>
<th>Breathing Independent of vocalization</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occasional labored breathing, Short period of hyperventilation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noisy labored breathing, Long period of hyperventilation, Cheyne-stokes respirations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Negative Vocalization</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occasional moan or groan, Low level speech with a negative or disapproving quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeated troubled calling out, Loud moaning or groaning, Crying</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Facial expression</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smiling, or inexpressive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sad, Frightened, Frown</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facial grimacing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Body Language</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relaxed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tense, Distressed pacing, Fidgeting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rigid, Fists clenched, Knees pulled up, Pulling or pushing away, Striking out</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consolability</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>No need to console</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distracted or reassured by voice or touch</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unable to console, distract or reassure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| TOTAL |   |   |   |       |

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1. Herr et al. 2006
2. Hurley et al. 1992
3. Snow et al. 2004
4. Kovach et al. 1999
5. Warden et al. 2003
6. Abbey et al. 2004

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How to best care for older people with cognitive impairment in ED
4/5 Best Practices

Delirium Symptoms according to DSM-V¹

A. Disturbance in attention and awareness
B. The disturbance develops over a short period of time, represents an acute change from baseline attention and awareness, and tends to fluctuate in severity during the course of a day.
C. An additional disturbance in cognition
D. The disturbances in Criteria A and C are not better explained by a pre-existing, established or evolving neurocognitive disorder and do not occur in the context of a severely reduced level of arousal such as coma.
E. There is evidence from the history, physical examination or laboratory findings that the disturbance is a direct physiological consequence of another medical condition, substance intoxication or withdrawal, or exposure to a toxin, or is due to multiple etiologies.

4/5 Best Practices

DELIRIUM

I. HYPERACTIVE: hallucinations, repetitive behaviours, aggression, delusions (30%)
II. HYPOACTIVE: lethargic, quiet, withdrawn (25%)
III. MIXED (45%)

## Cognitive Screening Tools Tested in ED:

<table>
<thead>
<tr>
<th>Screening Tool</th>
<th>Diagnostic Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation Memory Concentration Test&lt;sup&gt;1&lt;/sup&gt;</td>
<td>95% sensitive, 65% specific</td>
</tr>
<tr>
<td>Six Item Screener (SIS)&lt;sup&gt;2&lt;/sup&gt;</td>
<td>63-94% sensitive, 77-86% specific</td>
</tr>
<tr>
<td>Mini-Cog&lt;sup&gt;3&lt;/sup&gt;</td>
<td>75% sensitive, 85% specific</td>
</tr>
<tr>
<td>Cognitive Performance Scale (CPS)&lt;sup&gt;4&lt;/sup&gt;</td>
<td>82-85% sensitive, 85.1-87.6% specific</td>
</tr>
<tr>
<td>Brief Alzheimer’s Screen (BAS)&lt;sup&gt;1&lt;/sup&gt;</td>
<td>95% sensitive, 52% specific</td>
</tr>
<tr>
<td>Ottawa 3DY5</td>
<td>93.8-95% sensitive, 51-72.8% specific</td>
</tr>
<tr>
<td>AD8&lt;sup&gt;1&lt;/sup&gt;</td>
<td>63-83% sensitive, 63-79% specific</td>
</tr>
</tbody>
</table>

1 Carpenter et al. 2011  
2 Carpenter 2011, Wilber et al. 2008 & 2005  
3 Wilber et al. 2005  
4 Boyd et al. 2008  
5 Wilding et al. 2015, Carpenter et al. 2001
Delirium screening tools tested in ED:

<table>
<thead>
<tr>
<th>Delirium tool:</th>
<th>Diagnostic Performance:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delirium Triage Screen(^1)</td>
<td>98% sensitive, 55% specific</td>
</tr>
<tr>
<td>(Brief) Confusion Assessment Method(^1)</td>
<td>78-86% sensitive, 95.8-100% specific</td>
</tr>
<tr>
<td>CAM-ICU(^2)</td>
<td></td>
</tr>
<tr>
<td>mCAM-ED(^3)</td>
<td>68-72% sensitive, 98.6% specific</td>
</tr>
<tr>
<td>Richmond Agitation Sedation Scale (RASS)(^4)</td>
<td>82-85% sensitive, 85.1-87.6% specific</td>
</tr>
</tbody>
</table>

\(^1\) Han et al. 2013, Monette et al. 2011
\(^2\) Han et al. 2014
\(^3\) Grossmann et al. 2014
\(^4\) Han et al. 2015
### CAM - Confusion Assessment Method

The diagnosis of delirium by CAM requires the presence of BOTH features A and B AND the presence of EITHER feature C or D.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Acute onset</td>
<td>Is there evidence of an acute change in mental status from patient baseline? &lt;br&gt; and &lt;br&gt; Fluctuating course</td>
</tr>
<tr>
<td>B. Inattention</td>
<td>Does the patient: &lt;br&gt; - have difficulty focusing attention? &lt;br&gt; - become easily distracted? &lt;br&gt; - have difficulty keeping track of what is said?</td>
</tr>
<tr>
<td>C. Disorganized thinking</td>
<td>Is the patient’s thinking &lt;br&gt; - disorganized &lt;br&gt; - incoherent &lt;br&gt; For example does the patient have &lt;br&gt; - rambling speech/irrelevant conversation? &lt;br&gt; - unpredictable switching of subjects? &lt;br&gt; - unclear or illogical flow of ideas?</td>
</tr>
<tr>
<td>D. Altered level of consciousness</td>
<td>Overall, what is the patient’s level of consciousness: &lt;br&gt; - alert (normal) &lt;br&gt; - vigilant (hyper-alert) &lt;br&gt; - lethargic (drowsy but easily roused) &lt;br&gt; - stuporous (difficult to rouse) &lt;br&gt; - comatose (unrousable)</td>
</tr>
</tbody>
</table>

Other Delirium Tools:

• Delirium severity tools:
  - DRS, Delirium index, delirium assessment scale and delirium severity scale

• Delirium risk tools:
  - Delirium Risk Assessment Tool (DRAT)1

Delirium risk factors:

- Systemic illnesses
  (http://www.icudelirium.org/terminology.html)
- Medications
- Presence of other risk factors

4/5 Best Practices

http://healthh.com/erysipelas/

http://www.huffingtonpost.com/david-belk/health-care-costs_b_4066552.html

How to best care for older people with cognitive impairment in ED
4/5 Best Practices

Delirium risk factors:
- Older age
- Cognitive Impairment
- Visual and hearing impairment
- Functional dependence
- Dehydration
- Impaired nutritional status
- Pain
- Sleep deprivation
- Surgery

4/5 Best Practices

5P’s Delirium Screen

- Pee: UTI, dehydration, urine retention
- Poo: constipation
- Pus: infection
- Pain: unidentified, unmanaged
- Pills: Interactions, adverse events, new medication

How to best care for older people with cognitive impairment in ED
### 4/5 Best Practices

<table>
<thead>
<tr>
<th>Nurse Management of Delirium:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Cognitive assessment, use reality orientation and cognitive activities&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
<td>2) Employ noise reduction strategies and prevent day and night reversal.</td>
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<tr>
<td>3) Basic observations</td>
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<tr>
<td>4) Pain assessment and management&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>5) Involve and inform family, education</td>
</tr>
</tbody>
</table>

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<sup>1</sup> Kellie et al. 2013, Naughton et al. 2005, Milisen et al. 2001

<sup>2</sup> Milisen et al. 2001

<sup>3</sup> Inouye et al. 1999

<sup>4</sup> Price et al. 2005


How to best care for older people with cognitive impairment in ED
4/5 Best Practices

DARe-ED Intervention

Building delirium care for people with dementia into the emergency department (ED): Systematic development of the Delirium Action Response Response in ED (DARe-ED) intervention

To develop a valid multi-component delirium prevention intervention, the Delirium Action in ED (DARe-ED) intervention, for older people with dementia presenting to Emergency Departments (ED).
4/5 Best Practices

ED Delirium Prevention
A delirium prevention intervention to optimise the support provided to people with dementia entering ED that are at risk of developing delirium
4/5 Best Practices

Screening tool to identify patients ‘AT RISK’\(^1\)
- The Identification of Seniors at Risk (ISAR) tool\(^2\)
- BRIGHT\(^3\)
- Triage Risk Screening Tool (TRST)\(^4\)

Risk Factors:
- Cognitive impairment
- Functional issues
- Polypharmacy
- Vision problems
- Decreased independence
- ED use / Hospitalisation

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\(^2\) McCusker et al. 2003
\(^3\) Boyed et al. 2008
\(^4\) Meldon et al. 2003

How to best care for older people with cognitive impairment in ED
Geriatric interventions in ED

- Comprehensive geriatric assessment (CGA) AND Multidisciplinary care coordination teams

  - Reduce hospital admission
  - Reduce nursing home admission
  - Reduce ED readmission
  - Greater levels of physical and mental functioning
  - Improved patient satisfaction

3 McCusker et al. 2001.
4/5 Best Practices

Models of care:
- Hand to Home Response Team (H2HRT)
- Aged-care Services in Emergency Team (ASET)\(^1\)

- Provide a comprehensive plan of care / discharge plan
- Refer patients to services
- Act as a resource for patients on aged care issues
- Act as a resource for ED staff

\(^{1}\) Shanley et al. 2009

How to best care for older people with cognitive impairment in ED
4/5 Best Practices

Focused Communication¹:

- Involvement of family, carer, GP and agencies²
- Information provided must compensate for their disabilities²
- Effective communication²
- Identification of staff³

¹ Clevenger et al. 2012
³ Goldsmith et al. 1997

How to best care for older people with cognitive impairment in ED
4/5 Best Practices

Nursing care:
- Identify a key worker
- Reduce relocations
- Choose the safest area

1 Archibald 2002

How to best care for older people with cognitive impairment in ED
4/5 Best Practices

Nursing care:
- Provide access to and offer food and fluid regularly\(^1\)
- Use fall\(^2\) and pressure injury prevention guidelines
- Avoid physical restraints\(^3\) and catheterisation\(^4\)
- Pay attention to caregiver burden\(^5\)

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\(^1\) Archibald 2002
\(^2\) The National Ageing Research Institute 2007
\(^3\) Price et al. 2005
\(^5\) Moons et al. 2002
4/5 Best Practices

Review medication list¹

- Beers criteria²
- STOPP START tool kit³
- Prescribing with electronic decision support⁴

² Beers et al. 2003
³ Gallagher et al. 2008
⁴ Terrell et al. 2009

How to best care for older people with cognitive impairment in ED
Mr Clarkson, a 86 year old married male, presents to ED on a Friday evening

- Fall at home
- Mild cognitive impairment
- Vision and hearing impaired
- # Humerus (right)
Ambulance ramping

How to best care for older people with cognitive impairment in ED

Environmental strategies that may reduce delirium risk on ED arrival

1. Geriatric streaming
2. Geriatric-friendly waiting areas

How to best care for older people with cognitive impairment in ED
1. Avoid ED in high delirium risk
2. Reduce access block
3. Early screening for delirium and risk factors
4. Triage pain assessment and NIA

Environmental strategies that may reduce delirium risk on ED arrival

How to best care for older people with cognitive impairment in ED
How to best care for older people with cognitive impairment in ED
Walk-in triage

How to best care for older people with cognitive impairment in ED
How to best care for older people with cognitive impairment in ED
ED acute area: structural environment

How to best care for older people with cognitive impairment in ED
You are in the PAH Emergency Department

Date:

Your nurse is:

Your doctor is:

You are currently awaiting:

How to best care for older people with cognitive impairment in ED
4/5 Best Practices

How to best care for older people with cognitive impairment in ED
4/5 Best Practices

How to best care for older people with cognitive impairment in ED
4/5 Best Practices

Education resources:

4/5 Best Practices

Confused older person in ED – Clinical Guide:

4/5 Best Practices

Further Reading

- [https://www.acep.org/geriedguidelines](https://www.acep.org/geriedguidelines)
5. Conclusion
KEY POINTS:

• Cognitive impairment (CI) is common in the ED population (26% - 40%)\(^1\)
• Cognitive impairment may go undetected\(^2\)
• Recognition of cognitive impairment is critical
• ED patients with CI have an increased risk of negative outcomes and adverse events\(^3\)
• Evidence based practice
• Increased role of aged care in emergency medicine

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\(^3\) Hastings et al. 2007, McCusker et al. 1999.
Thank You!

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How to best care for older people with cognitive impairment in ED