Falls Injury Reduction in Residential Aged Care

Research Project 2005-2007

Funded by the DoH – Health Promotion Demonstration Research Grants Scheme

Prepared by Mandy Harden
Project Officer
HNEAHS
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• Hypothesis

- The aim of this research project is to test the hypothesis that the employment of a project officer to support aged care facilities to implement a best practice multi-strategy intervention to reduce falls injuries will significantly reduce hip fractures.
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• **Principal investigators**
  - Dr John Ward - HNEAHS
  - Prof Julie Byles - University of Newcastle

• **Advisory committee**
  - Key stake holder representatives
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• Methodology

- This study involves 88 facilities in the lower Hunter Valley area of New South Wales Australia.
- Facilities were randomly allocated into a control and intervention group.
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- Data Collected
  - Basic facility information and questionnaire
  - Monthly falls data
  - Resident profiles
  - Resident’s record audit after a fall resulting in a fractures neck of femur
  - Post intervention questionnaire
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- **Best Practice Strategies**
  - ‘Big Green Box’
  - Resource Folder for the Intervention Group

- **Multi-faceted intervention including**
  - Standard fall prevention strategies
  - Fall Alert Strategy for high risk falls
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• Best Practice Strategies
  - ‘Big Green Box’
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- **Best Practice Strategies**
  - ‘Big Green Box’
  - Resource Folder for the Intervention Group

- **Multi-faceted intervention including**
  - Standard fall prevention strategies
  - Fall Alert Strategy for high risk falls
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• Some challenges
  - Engaging RACF’s
    - Management
    - Link Person
    - Data collection
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• More challenges
  ▪ GPs
  ▪ Pharmacists
  ▪ RMMRs
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- **More challenges**
  - Difficulties in implementing strategies

- **Vitamin D and calcium**
  - All high care residents should receive vitamin D supplementation:
    - 1000 IU Vitamin D3 daily
    - 50,000 IU Vitamin D3 monthly

  • All low care residents should have their vitamin D level measured:
    - supplement as for high care if less than 80 (serum 25OHD nmol/L)
    - if less than 25, give 3000 IU daily or 50,000 IU weekly for one month then supplement as above

  • Unless there is a contraindication, calcium should be also given
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- Results - Vitamin D

Vitamin D supplements: All facilities
Number of residents taking supplements per 100 beds

Pre intervention vs Intervention period

Control vs Intervention
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• Results - Vitamin D

Vitamin D supplements: Trajectories for all intervention facilities
Number of residents taking supplements per 100 beds
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• More challenges
  - Difficulties in implementing strategies
  - Hip protectors
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• Results - Hip Protectors

Allocation of hip protectors to residents
Number allocated per 100 beds

Pre intervention  Intervention period

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<td>Intervention</td>
<td>Control</td>
<td>Intervention</td>
<td>Control</td>
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Control  Intervention
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- More challenges
  - Difficulties in implementing strategies

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### FALLS RISK ASSESSMENT TOOL

**HOW TO USE THIS FORM:** Complete Parts 1 & 2 of this FRAT to establish 'Fall Risk'. Using Parts 1, 2 & 3 document in the progress notes and care plan the appropriate fall prevention strategies for this resident.

#### PART 1

**AUTOMATIC HIGH RISK STATUS IF one of the following is ticked:**
- Dizziness
- Postural hypotension present
- Recent change in functional status and/or medications, which may affect safe mobility.

#### PART 2

**RISK SCORE ASSESSMENT**
Recent Falls History: Including number of falls and possible contributing circumstances.

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Level</th>
<th>Risk Score</th>
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<tbody>
<tr>
<td><strong>RECENT FALLS</strong> (To score this, complete recent falls history above)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>none in last 12 months</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>one or more between 3 - 12 months ago</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>one or more in last 3 months</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>one or more in last 3 months whilst inpatient/resident</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td><strong>MEDICATIONS</strong> (Sedatives, Anti-Depressants, Anti-Parkinson’s, Diuretics, Anti-hypertensives, hypnotics)</td>
<td>not taking any of these</td>
<td>1</td>
</tr>
<tr>
<td>taking one</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>taking two</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>taking more than two</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>PSYCHOLOGICAL</strong> (Anxiety, Agitation, Depression, Withdrawn, Decreased Cooperation, Decreased Insight or Decreased Judgement esp. re mobility)</td>
<td>does not appear to have any of these</td>
<td>1</td>
</tr>
<tr>
<td>appears mildly affected by one or more</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>appears moderately affected by one or more</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>appears severely affected by one or more</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>COGNITIVE STATUS</strong> (Align to cognitive assessment tool used for this resident)</td>
<td>PAS Cognitive Impairment Scale: PAS=0-3</td>
<td>Standardised Mini Mental Status: m-m score 24 or more impared</td>
</tr>
<tr>
<td>PAS=4-9</td>
<td></td>
<td>m-m score 15 - 9 mod impaired</td>
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<tr>
<td>PAS=10-15</td>
<td></td>
<td>m-m score 9 or less severely impaired</td>
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<tr>
<td>PAS=16-21</td>
<td></td>
<td>OR</td>
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<tr>
<td><strong>FALL RISK STATUS</strong> (Document Fall Status in the Care Plan)</td>
<td></td>
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- Low
- Moderate
- High

*Name:*  
*MRN:*  
*Address:*  
*DOB:*  
*M.O.*

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- More challenges
  - Difficulties in implementing strategies
    - Exercises
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• More challenges
  ▪ Difficulties in implementing strategies

Footwear
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• More challenges
  - Difficulties in implementing strategies
    - Footwear
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• More challenges
  ▪ Difficulties in implementing strategies
    Engaging the Executives to ‘see the light!!’
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Options for the future

1. Full-time project officer for falls injury prevention in ACFs

2. Liaison Nurse employed by AHS to work with ACFs on:
   - Falls injury prevention
   - Advanced care planning
   - Discharge planning
   - Acute and post-acute care in ACFs
   - Common referral forms to ED
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QUESTIONS