Fall Prevention is Everyone's Business

Part 3

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How should Identified Risk Factors be used for Fall Prevention

- Falls risks assessment shall identify the risk factors of falling
- It is not enough to know which patients are at risk of fall
  - Something about it must be done
- Care planning guides what you need to do to prevent fall
- Care planning should match identified risk factors
  - Such as mobility challenges, medications, mental status and continence needs
  - Care planning also includes planning around patient personal needs
    - these may not have been captured by the assessment tool

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Fall Prevention Care Planning

- Care planning is a process by which the patient's risk assessment information is translated into an action plan
- These are patient specific
  - Each patient has a unique risk profile
  - These are to be integrated with the care for the condition for which the patient is admitted
  - These are in addition to universal precautions
- Care plan is a written document
  - It ensures continuity of care by all care givers
  - It is an active document
  - It needs to incorporate patient's response to intervention

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Management Strategies for Common Falls Risk Factors

- Balance and Mobility Limitations
  - Intervention
    - A multifactorial falls prevention program to be used in a subacute hospital setting
      - The programme should include exercise and assessment of need for walking aids
    - To assess balance, mobility, and strength an assessment tool to be used
    - Purpose:
      - To quantify the extent of balance and mobility limitation
      - To guide exercise prescription
      - To measure improvements in balance, mobility and strength
      - To assess whether patients have a high risk of falling

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Management Strategies ……..

- Tools to test:
  - Mobility
    - Six-Meter Walk Test (1-2 Mins)
    - Timed Up and Go Test (1-2 Mins)
  - Strength
    - Sit-to-Stand test (1-2 minutes)
    - Spring balance (5 minutes)
- Composite Scales
  - Berg Balance Scale
    - It is a 14 item scale designed to measure balance of the older person in a clinical setting
    - Maximum total score is 56 points
    - Time 15-20 minutes
    - A score of ≤ 20 = high risk of falls
    - A score of ≤ 40 = moderate risk of falls

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Management Strategies for Common Falls Risk Factors

- Cognitive Risk Factors
  - Patients presenting to a hospital with an acute change in cognitive function should be assessed:
    - for delirium, and
    - the underlying cause of this change
  - Patients with gradual onset, progressive should undergo detailed assessment
  - Patients with delirium should receive evidence based intervention

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Management Strategies ……..

- Assessing Cognitive Impairment
  - Older people cognitive impairment increases the risk of falls
  - In older people with cognitive impairment, other fall risk factors are also more prevalent
    - Therefore, cognitive impairment in older people needs to be assessed
  - Several tools are available

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Management Strategies ……..

- Tools for Assessing Cognitive Status
  - Folstein Mini-Mental State Examination
    - It is an 11-question measure that tests five areas of cognitive function
      - Orientation
      - Registration
      - Attention and Calculation
      - Recall, and Language
    - Maximum score is 30
    - Time 5-10 minutes
    - A score of ≤ 23 indicates mild cognitive impairment
    - A score of ≤ 18 indicates severe cognitive impairment

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Management Strategies ……..

- Rowland Universal Dementia Scale
  - It is a simple method for determining cognitive impairment
  - Can be administered by primary health care clinicians
  - It uses six items to assess multiple cognitive domains
    - Memory
    - Praxis
    - Language
    - Judgment
    - Drawing, and
    - Body orientation
  - Time needed 10 minutes

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Management Strategies ……..

- Confusion Assessment Method
  - It is a comprehensive assessment that screens for clinical features of delirium
  - It comprises four features
    - An onset of mental status changes or a fluctuating course
    - Inattention
    - Disorganised thinking
    - An altered level of consciousness
  - Time needed 5 minutes
  - Patients are diagnosed as delirious if they have both the first two features, and either the third or fourth features

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Short Portable Mental Status Questionnaire

Question	Response			Error
What are the date, month, and year?*	Date	Month	Year	
What is the day of the week?				
What is the name of this place?				
What is your phone number?				
How old are you?				
When were you born?				
Who is the current president?				
Who was the president before him?				
What was your mother's maiden name?				
Can you count backward from 20 by 3s?				

Scoring : 0-2 errors: normal, 3-4: mild cognitive impairment, 5-7: moderate, 8 or more severe cognitive impairement

*A mistake on ANY part of this question should be scored as an error

Total Errors _____ J Am Geriatr Soc 1975;23:433-41

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Short Portable Mental Status Questionnaire

- SCORING*:
  - 0-2 errors: normal mental functioning
  - 3-4 errors: mild cognitive impairment
  - 5-7 errors: moderate cognitive impairment
  - 8 or more errors: severe cognitive impairment
- *One more error is allowed in the scoring if a patient has had a grade school education or less.
- One less error is allowed if the patient has had education beyond the high school level.

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Providing Interventions

- Falls prevention programme is multifactorial
  - Identified falls risk factors should be addressed
  - Injury minimization strategies may be instituted if required. Such as:
    - Using hip protectors, or
    - Vit D and calcium supplementation
  - The falls prevention strategies that are of relevance in older people include:
    - Addressing reversible causes of acute or progressive cognitive decline

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Providing Interventions

- Manage symptoms of cognitive impairment and delirium.
- Address and reduce or eliminate by identifying causes of :
  - Agitation
  - Wandering, and
  - Impulsive behaviour
- Behaviour management to be done as follows:
  - Avoid the risk of dehydration
  - Avoid extremes of sensory input (e.g., light, noise)
  - Promote exercise and activity programme
  - Promote companionship, if appropriate

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Interventions

- Specialised advise may be necessary to address the following issues:
  - Preventing dehydration
  - Promoting Continence
  - Syncope
  - Dizziness and vertigo
  - Vision
  - Environmental conditions
  - Improving Foot condition and footwear

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Behavioural Risk factors

- Behavioural Context
  - A person's behaviour is crucial in the consideration of risk
  - People can choose which tasks they undertake and how they undertake them.
  - Behaviour is likely to be influenced by
    - cognitive impairment, insight and level of support available.
    - Some individuals with a high physiological risk of falling may be able to avoid falling by increased awareness and use of assistance when required.
    - Individual variations in attitudes and behaviour probably explain the differences between measured fall risk and actual falls experienced.

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Universal Fall Precautions

- Guidelines:
  - Familiarize the patient with the environment
  - Have the patient demonstrate call light use
  - Maintain call light within reach
  - Keep the patient's personal possessions within patient's safe reach
  - Have sturdy handrails in patient bathrooms, room, and hallway

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Scheduled Rounding Protocol (1/3)

- Hourly rounds are an opportunity to ensure that:
  - Universal fall precautions are implemented
  - Patients' needs are being met
- Hourly rounding can be carried out by
  - a nurse alternating with a nursing assistant
    - (such as a certified nurse assistant, patient care technician, or nurse's aide).

Am J Nurs 2006;106(9):58-70

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Scheduled Rounding Protocol (2/3)

- The following items should be checked and performed for each patient
- To be done hourly between 6 AM and 10 PM and 2 hourly thereafter
  - Upon entering the room tell the patient you are there to do your rounds
  - Assess patient pain levels
  - Put medication as needed on staff nurses' scheduled list of things to do for patients and offer the dose when due

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Scheduled Rounding Protocol (3/3)

- Put the TV remote control and bed light switch within the patient's reach
- Put the bedside table next to the bed or across bed
- Put the tissue box and water within patient's reach
- Put the garbage can next to the bed
- Prior to leaving the room, ask,
  - "Is there anything I can do for you before I leave? I have time while I am here in the room."
- Tell the patient that a member of the nursing staff (use name on white board) will be back in the room in an hour to round again

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What makes a shoe safe?

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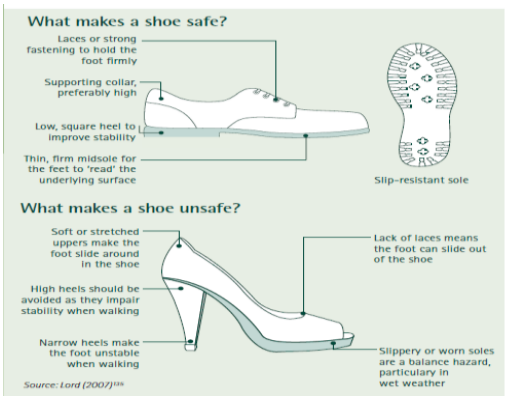

Interventions

- Restraints
  - Patients of agitation, wandering and other behaviour should be investigated
    - Reversible causes should be treated before restraint is considered
    - There is no evidence that restraint reduces the incidence of falls
    - There is evidence that they can
      - cause death
      - Injury
      - Infringement of autonomy
    - It should be considered the last option for patients with increased risk of falling

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Are bedrails restraint?

National Patient Safety Agency

NHS National Patient Safety Agency

'the intentional restriction of a person's voluntary movement or behaviour ....'

RCN 2008

'Stopping them from doing something they appear to want to do'

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Some very strong opinions on bedrails……

- 'a seemingly innocuous bed feature…has turned into a killer' - *Marcy-Edwards, 2005*
- 'not only unethical but….a type of physical abuse'
  - *Van Leeuwen M 2001*
- '..evidence is available to show raised side rails may cause falls…and may increase the degree of injury from a fall. - *' Capezuti, 2007*
- 'their continued use …..must be seriously questioned. - *'Hanger, 1999*

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Incompatibility between bed, bedrail, and mattress sizes

NHS National Patient Safety Agency

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Interventions - Medication

Point Value (Risk Level)	American Hospital Formulary Service Class	Comments
3 (High)	Analgesics ,* antipsychotics, anticonvulsants, benzodiazepines†	Sedation, dizziness, postural disturbances, altered gait and balance, impaired cognition
2 (Medium)	Antihypertensives, cardiac drugs, antiarrhythmics, antidepressants	Induced orthostasis, impaired cerebral perfusion, poor health status
1 (Low)	Diuretics	Increased ambulation, induced orthostasis,
Score ≥ 6		Higher risk for fall; evaluate patient

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Medication Fall Risk Evaluation Tools

Indicator	Comments
Medications	Beers criteria,* dose adjustment for renal functions or disease state, overuse of medications, IV access
Laboratory	Therapeutic drug levels (digoxin, phenytoin), international normalized ratio, electrolytes, hemoglobin/hematocrit
Disease states	Comorbidities, hypertension, congestive heart failure, diabetes, orthopedic surgery, prior fall, dementia, age 65 years or older
Education	Patient's ability/willingness to learn, patient's mental status

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End of Part 3

Thank you

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