Reducing falls

High priority interventions

Preparation for Hester Davis

A new way to think about falls
Objectives

– Examine negative effects related to patient falls in the hospital
– State rationale for identified interventions to prevent falls
– Compare current falls risk assessment with new falls risk assessment program
– Apply interventions to prevent falls in the hospitalized patient
– Distinguish patient conditions which may result in orthostatic hypotension and the need for assessment
Minnesota Hospital Association (MHA) falls definition

“An unplanned descent to the floor (or extension of the floor) with or without injury to the patient. All types of falls are to be included whether they result from physiological reasons (fainting) or environmental (slippery floor).”

Also included are assisted and controlled falls (when a staff member attempts to minimize the impact of the fall).
Significance of falls

- Falls are one of the five top sentinel (aka=never) events for health care facilities
- Falls are the among the most common and costly threat to patient safety
- Up to a third of older people 65 years and older in the community fall each year resulting in injury, hospitalization or death
Consider this...

– Within HealthPartners hospitals
  • January 2017-June 2017
    o 31 patients experienced a major injury or death due to a fall
    o 335 patients experienced a fall

– Hospital fall-related fractures result in
  • Higher mortality rates
  • Increased length of stay
  • Poorer rehab outcomes compared to injury in the community

– A single fall may result in a fear of falling and begin the spiral of reduced mobility
# Falls risk assessment tools

<table>
<thead>
<tr>
<th><strong>Current:</strong> Johns Hopkins</th>
<th><strong>New:</strong> Hester Davis</th>
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</thead>
<tbody>
<tr>
<td>Risk assessments:</td>
<td>Risk assessments:</td>
</tr>
<tr>
<td>Low, medium, high</td>
<td>Based on specific patient assessments of conditions such as medications, mobility, cognitive status</td>
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<tr>
<td>Interventions</td>
<td>Interventions</td>
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<tr>
<td>Identical interventions</td>
<td>individualized based on</td>
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<tr>
<td>according to the level of</td>
<td>the assessed risk</td>
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<td>risk</td>
<td>categories</td>
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*HealthPartners*
All falls are due to the same factors

Patient falls are usually a result of several factors—most of which are individualized.

The Hester Davis risk assessment tool offers individualized interventions based on the assessed risks.
Hester Davis--A new falls risk scale & care plan

Hester Davis fall risk factors influencing patient

- Age
- Toileting
- Communication/Sensory
- Behavior/Cognition
- Fluid/Electrolytes
- Medications
- Mobility
Not a one-size fits all approach

Example:
• 60 year old female has total knee replacement surgery
  › Patient has hypertension & asthma, is independent, and works full time
  › Patient wears eyeglasses and has a mild hearing deficit
  › After surgery the patient needs assistance to get out of bed and ambulate
  › The patient has a bedside commode for toileting needs and needs an assist of one
  › The patient’s medication regimen includes opiates, CNS medications, and antihypertensive medications
Individualized risk assessment

- Hester Davis changes the mindset of low-medium-high concept to using nursing judgment for interventions

- Using the previous example of the female after total knee replacement

  - 60 yrs old
  - Independent in ADLs
  - Wears glasses, mild hearing deficit
  - Needs assist of one for bedside commode use
  - Needs assist of one for ambulation
  - Takes antihypertensive medication, opioids, and CNS medication (Neurontin)
Initial interventions to prevent potential falls

- Staying within arm’s reach
- Scheduled toileting
- Gait belt usage
- Orthostatic hypotension assessments/measurement
Stay within arm’s reach
Stay within arm’s reach

- Nursing staff *stays within* an arm’s reach when patient out of bed or chair (examples: toileting, transfers, and ambulation)
Minimal patient criteria for staying within arm’s reach

- **Cognitive** changes (ex: dementia, delirium or other impairment)
- Blindness or recent change in vision
- Receiving chemotherapy, diuretics, cardiovascular or CNS medications
- Lower extremity weakness
- **Impulsivity**, poor judgment or agitation
- Balance/gait impairment or neuropathy
- Behavior noncompliance
- **Alcohol/substance abuse** or withdrawal
But the patient wants privacy or independence…

“You could lose your balance or become light-headed when up. I will stay within arm’s reach for your safety to prevent a fall”

“Your dignity and privacy are important to us. However, about one third of patient falls occur in the bathroom”
Scheduled toileting
Scheduled toileting

Many falls occur when toileting, walking to/from bathroom, using a commode or urinal or showering—data from studies in 2005 & 2007 indicate 38-47% of falls occur with toilet-related activities.

### Included in intentional rounding

<table>
<thead>
<tr>
<th>Regions, Valley Hospitals (5Ps)</th>
<th>Methodist/Lakeview</th>
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<tbody>
<tr>
<td>Position</td>
<td>Position</td>
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<tr>
<td>Potty</td>
<td>Toileting needs</td>
</tr>
<tr>
<td>Pain</td>
<td>Pain</td>
</tr>
<tr>
<td>Pickup</td>
<td>Reduce clutter &amp; personal items within reach</td>
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<tr>
<td>Perception</td>
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Toileting & autonomy

- Part of independence & autonomy results in toileting without assistance
  - Elderly patients may feel that dependence on health care staff signals a decline in autonomy
  - Estimates that 20%-30% of falls result in reduced mobility and independence and increased risk of mortality
Scheduled toileting

- **Minimal** patient criteria for scheduled toileting
  
  - Incontinence
    - Have diarrhea, frequency, or urgency
    - Need commode, bedpan or urinal
    - Has nausea/vomiting
    - Receive IV fluids
    - Receive diuretics
  
  - Proactive approach to toileting – recommend that patient toilets on a schedule, if possible
  
  - Assist patient to toilet vs. waiting for call light

*Look at the patient—use your nursing judgment!*
Gait belt
Gait belt use

– Gait belts available in every patient room to use when needed

– Gait belts are not intended to help lift a patient but to guide and add stability during mobility!

– Use appropriate lifting equipment to assist with getting out of bed
Gait belt use

- The use of a gait belt is part of universal falls precautions.
- Use a gait belt to help guide and assist the patient while in motion.
  - When using to help patient stand, the gait belt guides the patient’s center of gravity forward instead of straight up.

Don’t use a gait belt to pick a patient up off the floor!
Gait belt position & use

- Place the belt LOW on the patient’s trunk—should be around the waistline, or where a belt would be worn
  - Be aware of surgical incisions!

- With a larger abdomen, place below the belly to prevent sliding to axilla when lifting

- Tighten to prevent sliding upwards

- Hold from the bottom of the belt to ensure that the belt is easily supported if the patient stumbles
  - The belt should slide into your hand

Incorrect gait belt use may result in injuries to the patient or staff member(s)
Gait belt training video

1. Open Facets and open Clinical Skills (Mosby)

2. After Clinical Skills opens, search and open “Fall Prevention”

3. Under Demos, select the “Assisting with Ambulation Using a Gait Belt” video and open to view video

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Fall Prevention

- Click here to view: Fall Prevention
- Click here to view: Video: Assisting with Ambulation Using a Gait Belt
Guiding patient to floor

Stand with feet apart to provide a broad base of support and to protect your back. Extend one leg to allow patient to slide to floor.

Bend your knees and lower your body with good body mechanics as patient slides to floor.

Protect the patient’s head!

Call for help!
Orthostatic blood pressure
What is orthostatic hypotension?

Orthostatic hypotension is a significant reduction in blood pressure when standing or sitting up rapidly after being supine for a period of time.
Orthostatic blood pressure

Due to a significant reduction in blood pressure due to impairment of autonomic reflexes—*or*—with depleted intravascular volume

May also be due to

- **Medication side effects** from opioids, antihypertensives, and some CNS medications

- Fifteen to 90 minutes **after a meal** the patient may have hypotension due to the shift of blood helping with digestion (post-prandial hypotension-PPH)
Symptoms the patient may experience

- Orthostatic blood pressure may result in
  - Angina
  - Stroke

- Lightheaded
- Dizzy
- Feeling faint
  - Possible syncope
- May be asymptomatic
Indications to measure orthostatic blood pressures

- Patients at-risk for hypovolemia (vomiting, diarrhea, bleeding)
- Patients recently started on cardiovascular, pain/sedating, or diuretic medications
- Patients who are NPO for greater than 24 hours
- Patients who may have post-prandial* hypotension (PPH)

*Post-prandial = after meal
Determining orthostatic hypotension

1. Patient rests quietly in a supine position for at least five minutes

2. The patient changes position from supine to sitting or standing and
   • Within two to five minutes
     o The patient has a decrease of at least
       ▪ 20 mm Hg in systolic blood pressure
       ▪ 10 mm Hg in diastolic blood pressure
     o Heart rate increases greater than or equal to 20 bpm

Measure blood pressure and heart rate!
Who should do the orthostatic measurements?

ORTHOSTATIC BLOOD PRESSURE MEASUREMENTS
RN VS. NURSING ASSISTANT?

DOES THE PATIENT MEET THESE CRITERIA?
- TAKING PAIN MEDICATION
- NEWLY-ORDERED BLOOD PRESSURE MEDICATIONS
- SUBSTANCE ABUSE WITHDRAWAL
- TAKING SEDATING MEDICATIONS
- HAS AFTER-MEAL HYPOTENSION

ORTHOSTATIC BLOOD PRESSURES
CONSIDER THAT THE RN MAY NEED TO DO
FOR PATIENT SAFETY

HealthPartners
Orthostatic video

1. Open Facets and open Clinical Skills (Mosby)

2. After Clinical Skills opens, search “Assessment Orthostatic Vital Signs”

3. Under Demos, select the “Assessment: Orthostatic Vital Signs” video and open to view
In preparation for a new way to think about assessing fall risk and applying interventions—start with these initial interventions

» Staying within arm’s reach
» Scheduled toileting
» Gait belt usage
» Orthostatic hypotension measurements
References


