MOVE ON
Mobilization Of Vulnerable Elders In Ontario

- Interprofessional staff education
Goal and Objectives

Goal

- To support interprofessional team members in implementing early mobilization on their unit

**Learning Objectives:** After participating in this educational session, inter-professional team members will be able to:

- Describe the importance of mobility
- Describe the principles/purpose of the Early Mobilization
- Use the Early Mobilization Assessment Algorithm
- Describe the role of family in mobilizing in-patients
Outline

- Background and the Senior Friendly Hospital Strategy
- Rationale: Why focus on mobilization?
- Changes to Practice
- Standard of care
- Assessment of mobility status
- Care planning for each stage of mobilization
- Next steps to implementation – planning together
Background and SFH Strategy
Some Numbers to Think About:

- xx% of ED visits in Ontario are attributable to seniors
- Seniors account for 56% of acute hospital days, and 83% of acute ALC days in Ontario
- Older age groups are projected to have the fastest rate of population growth in the province

2010/11 DAD data from www.intellihealth.moh.gov.on.ca
So what is being done about it?

- The LHINs’ Provincial Senior Friendly Strategy
- Hospital Improvement Plans to focus on
  - Prevention of functional decline through early mobilization
  - Prevention of delirium
- The overall vision is to enable seniors to maintain optimal health and function while they are hospitalized so that they can transition successfully home or to the next appropriate level of care

*Senior Friendly Hospital care Across Ontario, Summary Report and Recommendations (K. Wong et al. Sep 2011)*
Senior Friendly Hospital Framework of the RGPs of Ontario

- Adopted by the 14 LHINs in Ontario

- Processes of Care
- Emotional & Behavioural Environment
- Ethics in Clinical Care & Research
- Organizational Support
- Physical Environment

What we do  How  Who  Why  Where
Why Focus on Mobility?
Why Focus on Mobility?

- Mobility is an essential life-skill, but it can be easily compromised by even brief periods of immobilization
- A decline in mobility can start within 2 days of hospitalization!

It is estimated that every day of immobility results in a 5% loss of muscle strength.
Why Focus on Mobilization?

Mobilization is known to prevent three serious complications of hospitalization that affect older people

- Delirium
- Functional Decline
- Falls
Hospitalization-Associated Disability
“She Was Probably Able to Ambulate, but I’m Not Sure”

Kenneth E. Covinsky, MD, MPH
Edgar Pierluissi, MD
C. Bree Johnston, MD, MPH

In older patients, acute medical illness that requires hospitalization is a sentinel event that often precipitates disability. This results in the subsequent inability to live in-

Factors Leading to Hospital Associated Disability:

- Environment that discourages mobility and exacerbates disorientation
- Restricted mobility, unclear mobility orders
- Enforced dependence
- Discharge planning

System Interventions to Help Reduce Hospitalization-Associated Disability:

- Geographically defined unit that encourages mobility and limits disorientation
- Collaborate as a team to encourage mobility, standing orders for all able patients to be out of bed and in a chair (rather than AAT)
- Protocols for each ADL to encourage patient independence, encourage street clothing
- Focus on planning for home early with explicit focus on patient and family needs at home

Case Example: where should this go?

A 75 year old woman lives alone. Her mobility is limited to 2 blocks due to arthritis but she is independent in activities of daily living. Yesterday, she fell while on the sidewalk in front of her apartment. She was taken to emergency and diagnosed with a vertebral compression fracture. She was in severe pain and unable to ambulate. She was admitted to a medical unit after spending several hours in emergency on a stretcher. In hospital a catheter was inserted and she was given narcotics for pain control. She has not been out of bed for 2 days due to poor pain control and drowsiness.
Complications of Immobility

- Respiratory System
- Gastrointestinal System
- Circulatory System
- Musculoskeletal System
- Psychological
- Genitourinary System
Complications of Immobility

Respiratory System
- Decreased lung volume
- Pooling of mucous
- Cilia less effective
- Decreased oxygen saturation
- Aspiration atelectasis

Gastrointestinal System
- Increased risk of aspiration
- Loss of appetite
- Decreased peristalsis
- Constipation

Musculoskeletal System
- Weakness
- Muscle atrophy
- Loss of muscle strength by 3-5%
- Calcium loss from bones
- Increased risk of falls due to weakness

Circulatory System
- Loss of plasma volume
- Loss of orthostatic compensation
- Increased heart rate
- Development of DVT

Psychological
- Anxiety
- Depression
- Sensory deprivation
- Learned helplessness
- Delirium

Genitourinary System
- Incomplete bladder emptying
- Formation of calculi in kidneys and infection
Is it feasible to mobilize frail older patients on medical units?
Yes it is feasible. And it is critical to seniors’ health
Yes it is feasible. And it is critical to seniors’ health

Intermountain Medical Center, Salt Lake City, Utah
Is it safe to mobilize frail older patients?

- Overall adverse event rate is very low: 14 in 1,449 activity events (0.96 %)
- Adverse events include:
  - Falling to knees without injury
  - Change in BP (SBP < 90 or >200 mm Hg)
  - O2 desaturation <80%
  - Accidental tube removal

Bailey et al, Crit Care Med 2007; 35:139-145
What does the research tell us about mobilizing older people on hospital wards?

Functional Decline: Occurs as early as Day 2 of hospitalization

- Patients who walk around their room and their wards shortened their length of stay by 1.5 days, even more so for those who walked around the ward on the first day of admission (Shadmi & Zisberg, 2011)
In other words .... It’s an ounce of prevention

Effects of acute illness

+ 

Inability to maintain function in hospital

= 

Loss of Function
Early Mobilization will enhance care by:

Effects of acute illness + Supporting ability to maintain function in hospital = Optimize Function
Standard of Care for Mobilization
Assess mobility A,B,C within 24 hours
Design plan of care
Monitor progress, update targets to support OPTIMAL mobilization
Interprofessional team collaboration
Goal: Progressive, scaled mobilization, at least three times daily
Assessment Algorithm

Refer to hand out
Mobility Assessment Algorithm

Environment Check:
- Chair/wheelchair is set-up beside the bed on patient’s stronger side (as applicable)
- Chair is against a firm surface
- Brakes are on the bed and the chair (if applicable)
- Lines and tubes are positioned properly

Patient position/set-up:
- Patient is seated at the edge of the bed with 1/3 of patient’s thigh on bed surface
- Bed height is high enough that patient’s hips are just above their knees with feet on the floor
- Patient’s feet are hip width apart and are behind their knees
- Patient is wearing appropriate footwear to prevent slipping
- Appropriate gait aid available (if necessary)
- Consider OT referral for cognitive, visual, perceptual and impaired ADL issues affecting mobility

Transfer to Chair:
- Have a firm hold on the patient – hands around patient’s buttock, hips, or holding their hand
- Avoid pulling up through patient’s shoulder
- Block patient’s weaker leg (if applicable) while transferring to chair to avoid knee giving out

Mobility Level C

Mobility Level B

Mobility Level A
Simplified Mobility Assessment Algorithm

1. Can they respond to verbal stimuli?
2. Can they roll side to side?
3. Can they sit at edge of bed?
4. Can they straighten one or both legs?
5. Can they stand?
6. Can they transfer to a chair?
7. Can they walk a short distance?

Develop an individualized mobility care plan
<table>
<thead>
<tr>
<th>Mobility level (A,B,C)</th>
<th>Staff Role</th>
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<tbody>
<tr>
<td><strong>A</strong></td>
<td><strong>B</strong></td>
</tr>
<tr>
<td>Able to Ambulate</td>
<td>Transfer Bed to Chair</td>
</tr>
<tr>
<td>• Ambulate 3x/day or more</td>
<td>• Ensure up to chair 3x/day</td>
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<tr>
<td></td>
<td>• Up to commode chair</td>
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<td>• Active ROM</td>
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Patients who can ambulate will be encouraged to:

- Ambulate 3 times per day
- Participate in personal care to greatest extent possible
- Use the bathroom for toileting
- Eat meals sitting in a chair
Patients who can transfer from Bed to chair will be encouraged to:

- Get up to chair 3x/day preferably at meals
- Commode for toileting
- Active Range of Motion 3x per day
- Participate in care to the greatest extent possible
Patients who Cannot stand to transfer:

- Hoyer to Chair at least 1x daily
- Upright or side of bed for meals, dangle legs
- Active Range of Motion 3x per day
- Encourage patient to be as active as possible in bed (personal hygiene, turning, self-feeding)
- Turn every 2 hours when unable to participate in care
Staff Roles and Responsibilities

- Daily assessment of mobility
- Determine mobility level (A, B, C)
- Set individual goals for patient
- Ensure activity at least TID
Care planning for each stage of mobilization
Where do I begin?
Mobility Assessment

- Important Questions to consider:
  - Can my patient respond/participate? C
  - Can my patient roll side to side? C
  - Can my patient sit at the edge of the bed? B
  - Can they straighten one or both legs while sitting at the edge of the bed? B
  - Can my patient stand (with or without a gait aid)? B
  - Can my patient transfer to a chair? B
  - Can my patient walk? How far? A
What care interventions would be appropriate for a patient who Cannot stand to transfer i.e. unable to get out of bed? (Mobility level C)

“Achieving 3 mobility activities per day”
What care interventions would be appropriate for a patient who is able to transfer bed to chair? i.e. Is able to sit in a chair (Mobility level B)

“Achieving 3 mobility activities per day”
What care interventions would be appropriate for a patient who can walk? (Mobility level A)

“Achieving 3 mobility activities per day”
Creating hospital norms that patients are expected to walk regularly if they are able

Covinsky, K. E. JAMA 2011
A Review of the ABC’s of Mobility

- **A** • Ambulates with or without assistance
- **B** • Bed to chair transfers
- **C** • Cannot stand to transfer
Next Steps

Joint Planning
Next Steps – Joint Planning

Implementation:
- Modules: ongoing support & training
- “Walk-about” sessions or one-to-one coaching
- Leaders of mobility on your floor

Assessment:
- How do we know how we are doing?
Questions?

Walk before you run

Recent studies have shown that patients who walked shortened their hospital stay by an average of a day and a half.

Studies show that patients who are mobile during their hospital visits get released earlier.
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