Using Safe Patient Handling to Facilitate Early and Safe Mobilization

Presented by
Lynda Enos, RN, BSN, MS, COHN-S, CPE
Ergonomist/Human Factors Specialist,
HumanFit, LLC., Email: Humanfit@aol.com

1

2

Objectives

- Identify the benefits to caregivers and patients of using SPH to promote early mobilization
- Identify tools that can be used to assess patient mobility status
- Define at least 3 ways safe patient handling equipment and best practices can be used facilitate early mobilization of patients

2

3

Background

Assumptions for this session:

You know:

- Why manual handling is so dangerous
- About the components of a sustainable Safe Patient Handling and Mobility (SPHM) program
- The basic categories of SPHM equipment

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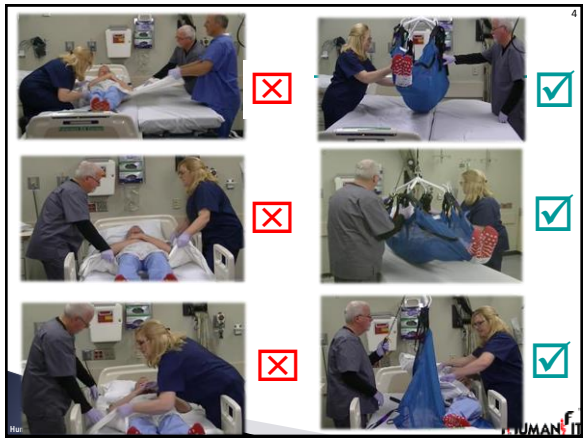

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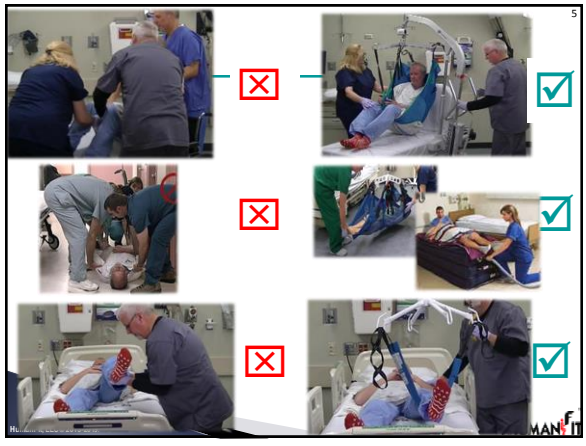

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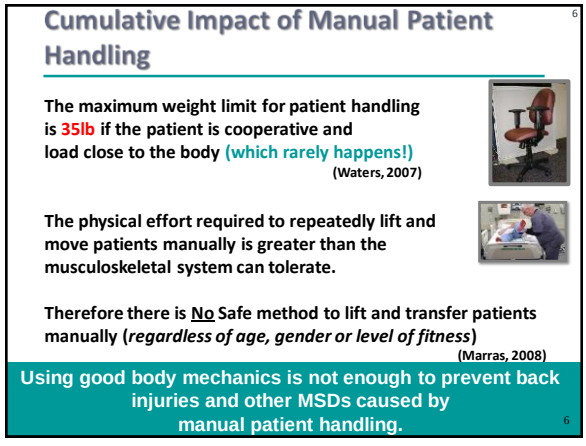

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Consequences of Manual Handling for Patients

- Increase risk of:
  - Skin and joint damage
  - Falls
  - Pain
  - Combative behaviors
  - Loss of dignity
  - Bowel & bladder dysfunction

7

The Full Cost of Worker Injuries Related to Manual Patient Handling

Direct Costs (Medical care/time away from work)

Indirect Costs

(e.g. temp and permanent staff replacement costs)

Operational Losses/Costs

- Increased sick leave & staff turn over
- Decreased Efficiency *(Impact of fatigue, presenteeism, burnout, etc.)*
- Reduced Quality of Care/Service (Omission in Care)
- Cost of Compensating Actions (e.g. Training)
- 'Human' Error& Accidents (related to worker fatigue)
- Decreased Regulatory Compliance (worker and patient safety related)
- Increased Insurance/Litigation Costs

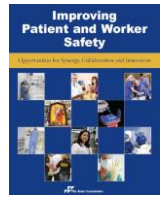
8

Creating a Culture of Worker & Patient Safety in Health Care

(The precondition to effective SPHM programs)

"Workforce safety is inextricably linked to patient safety. Unless caregivers are given the protection, respect, and support they need, they are more likely to make errors, fail to follow safe practices and not work well in teams."

Through the Eyes of the Workforce: Creating Joy, Meaning, and Safer Health Care. The Lucian Leape Institute at the National Patient Safety Foundation Feb 2013
http://www.ihi.org/Topics/Joy-In-Work/Pages/default.aspx



- The Joint Commission 2012
- OSHA; NIOSH; ANA; The JC; IHI working together

9

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Effective, Sustainable SPHM Programs – A Systems Approach

Culture (Behavior) Change & Program Sustainability

- Management Commitment (visible program champion)
- Employee Involvement (inc. labor)
- A Business Plan
- Program Management (program facilitator)
- SPHM policy and protocols
- Identify Patient Handling Hazards
- Hazard Prevention & Control (accessible, appropriate, equipment – esp. ceiling lifts, safe work practices, SPHM patient assessment, proactive design)
- Education & Training (inc. company based training, ongoing coaching, clinical expert resource)
- Disability Management ('after action' review)

Multifaceted programs are more effective than any single intervention

(NIOSH, 1997; OSHA 1991 & 2003; VAH 2014)

10

11

Patient Safety & Early Mobilization

11

12

Early Mobilization

- ***Early mobility*** **definition:**
  Planned movement in a sequential manner beginning at a patient's current mobility status and returning them to baseline **(Vollman KM, 2010)**
- **Importance of Early Mobility**
  - **Decreased time on ventilator**
  - **Decreased length of stay in the ICU and the hospital**
  - **Mitigates the short-term complications of critical illness: delirium and muscular weakness**
  - **Mitigates the long-term disabilities of critical illness: physical, cognitive, and psychological**
  - **Decreased mortality**

12

13

Early Mobilization

- Role and benefit of SPHM in early mobilization
  - Little published research
  - Lack of overhead lifts is a barrier to early mobilization
    Bassett et al, 2012
  - Safe patient handling programs and policies and procedures around use of mechanical lifting devices can improve patient mobility outcomes by up to 12%.
    Gibson et al, 2017

13

14

Early Mobility & Missed Nursing Care

Definition: Any aspect of required patient care that is omitted (either in part or in whole) or delayed by nursing staff.

What's being missed? (Kalisch et. Al 2012; Wegmanm, 2011, AHRQ, 2015)

- Ambulation
- Turning (over 227kgs not moved – Gallagher 2009)
- Patient surveillance
- Delayed or missed feedings
- Patient education
- Discharge planning
- Emotional support
- Hygiene
- Input and output documentation

Missed care or rationing of care associated with higher likelihood of patient death
This is a world wide phenomenon in nursing

14

15

Missed Nursing Care

Why does it occur?

- Labor resources available to provide patient care
- Time to complete task
- Material resources accessible to assist in patient care activities
- Communication and various relationship factors that have an impact on nurses' ability to provide care.
  Kalisch et. al. 2009

Consider extra resources needed to care for bariatric, combative, complex/special needs patients

Can SPHM assist to reduce the rate of Missed Nursing Care?

15

16

Early Mobilization & Falls Prevention

In the 2013 Agency for Health Care Research and Quality's (AHRQ) *Preventing Falls in Hospitals Toolkit,*

Safe patient handling is considered "a critical element of universal falls precaution and especially important for patients who require assistance with transfers".

Recommend use of clinical pathways that is, the VA SPHM algorithms.

http://www.tampavaref.org/safe-patient-handling/Enc4-2SPHMAlgorithms.pdf

16

17

Effective use of SPHM in Promoting Early & Safe Mobility

17

18

Effective use of SPHM in Promoting Early & Safe Mobility

SPHM equipment/assistive device (and sling) & mobility continuum
Promoting staff safety & patient safety & independence

Dependent (Passive) — **Semi-Dependent** — ***Cueing & Training*** — **Supervised** — **Independent (Active)**

Lifts & Friction Reducing Devices | Stand Assist Aids | Gait/Ambulation Aid/Fall Arrest Systems | Walker/Crutches/Cane | No Device/Assist

18

19

Key to Effective Early & Safe Mobility = SPHM Patient Assessment

An evidence based tool to:

- Determine what SPHM equipment or assistive devices are needed to safely lift, reposition, transfer or mobilize a patient
  - On admission
  - During a shift and
  - When their condition changes
- Quickly check a patient's ability to stand and mobilize safely before each out of bed activity (fall prevention)
- Determine when to perform Mobility Safety Screen M.O.V.E (ICUs)
- Determine when to place a PT consult
- Promote early and safe mobilization

Standardized Communication & Documentation Processes needed

19

20

Why SPHM Patient Assessment is Needed?

- Patients physical/cognitive abilities change quickly in acute care
- Reliance on Therapy assessment of patient abilities, or notes in patient chart - 1 or 2 hours previously, or what patient tells us they can do is not reliable
- No common language between professions and order set variability creates confusion
  - Therapy - Min; Mod; Max assist; % weight bearing etc.
  - Physicians - Out of bed with assist; bathroom privileges with assist; up ad lib
- Some tests do not adequately determine patients weight bearing capabilities before having them stand and walk

20

21

SPHM Patient Assessment

Considers:

- Patient dependency (physical and cognitive abilities) and clinical/rehab needs

Pear Adduction & Abduction

Apple Pannus

Source DME NZ

- The type of lift, transfer or movement
- Facility and medical equipment design
- The number of staff available

21

21

22

SPHM Patient Dependency Assessment

Dependent:

- Not able to consistently follow simple activity commands or is unable or unwilling to assist
- Requires nurses or caregivers to lift more than 35lbs of a patient's weight or is unpredictable in the amount of assistance offered

- Not able to get to edge of bed (EOB) or chair or crib with minimal assist
- Cannot sit unsupported at EOB/chair/toilet/crib with good trunk control
- In seated position at EOB/chair/toilet/crib, is not able to straighten and lift *at least* one leg a few inches from the floor and hold for 5 seconds (count to 5)

22

SPHM Patient Dependency Assessment

Semi Dependent ***(partial weight bearing):***

- Is able to follow simple activity commands
- Requires nurse or caregiver to lift no more than 35lbs of patient's weight
- Is able to get to EOB/chair/crib with minimal assist,
- Is able sit at the EOB/chair/toilet/crib with good trunk control
- Is able to straighten and lift *at least* one leg a few inches from the floor and hold for 5 seconds (count to 5)
- Not able to stand with balance on at least one leg or perform mini-march (step in place) with verbal cues or, stand-by assist, or assistive device

23

24

SPHM Patient Dependency Assessment

Supervised:

- Meets criteria required to be *Semi Dependent*

  and is

- Able to stand with balance on at least one leg or perform mini-march (step in place) with verbal cues or, stand-by assist, or assistive device
- While walking, not able to step forward and back and side to side with balance and strength to maintain body weight *with or without* assistive devices

24

25

SPHM Patient Dependency Assessment

Independent:

- Meets criteria required to be *Supervised*

  and is

- While walking, is able to step forward and back and side to side with balance and strength to maintain body weight *with or without* assistive devices.

Source: VHA 2008; Dionne, 2004, ONA 2010, OHSU, 2010, Enos 2014

25

Example of SPHM Mobility Check

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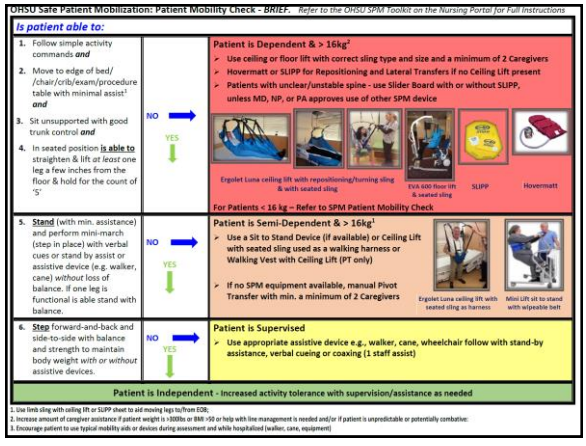

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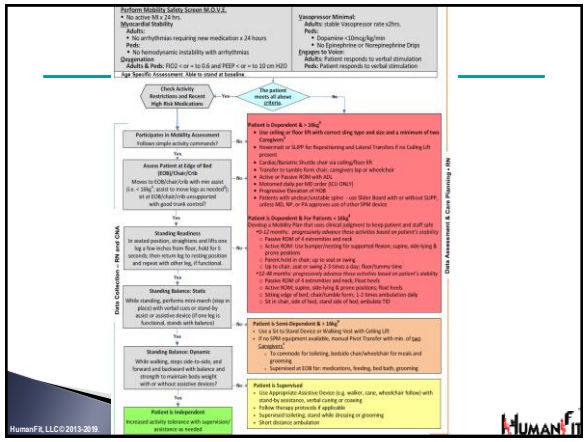

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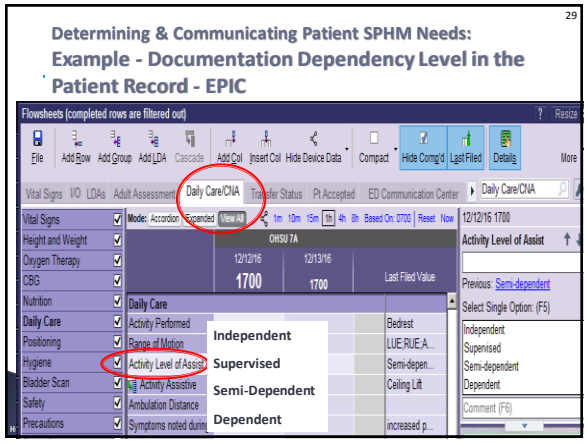

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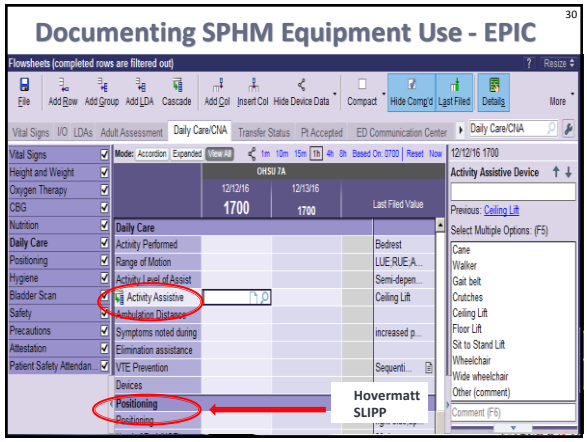

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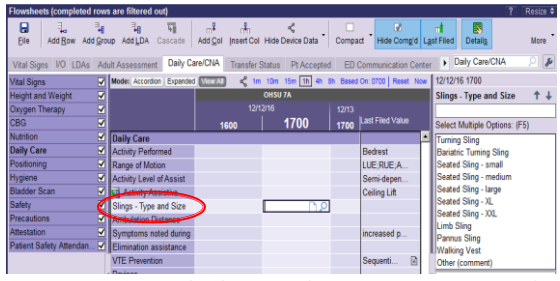
Documenting SPHM Sling Use - EPIC



All other needs in Sticky Notes- for information that's does not need to stay in the patient's chart e.g. non-use of slings or hovermatt if patient has an 'uncleared' spine; use of a flat sling with fractured C-Spine & C-Collar; flat sling use with Ortho/spine patients (especially those with TLSO braces); those in traction; or with HALO brace etc., (if device does not tear the sling); Patients with pelvic fractures – use of flat sling as tolerated but no use of seated sling
Otherwise document in the Notes section of the patient's chart

32

10D SAFE PATIENT MOBILIZATION

Date _____

Time _____

Dependency Level:

- ☐ **D** Dependent
- ☐ **S** Supervised
- ☐ **SD** Semi-Dependent
- ☐ **I** Independent

EQUIPMENT

- ☐ Ceiling/Floor lift
- ☐ Hovermatt
- ☐ SLIPP
- ☐ Sit to Stand
- ☐ Walker/Gait Belt
- ☐ Other _____

SLING TYPE

- ☐ Flat Turning
- ☐ Seated Size _____
- ☐ Limb
- ☐ Other

BOOSTING PATIENT IN BED

SPM MOBILITY CHECK—Abbreviated version

RESOURCES

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33

SPHM Assessment and Communication

- Should be:
  - Effective, ***usable/***functional and concise e.g., well defined dependency levels (e.g., Dependent, Semi-Dependent, Supervised, Independent)
  - Developed or customized by nursing, therapy and physicians (as applicable)
  - Standardized facility wide
  - Integrated with Falls prevention assessment

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34

SPHM Assessment and Communication

Patient assessment and communication

Examples:

- VAH Assessment Criteria and Care Plan for Safe Patient Handling and Movement (Algorithms) Revised 2014
  https://www.publichealth.va.gov/employeehealth/patient-handling/index.asp
- Bedside Mobility Assessment Tool for Nurses
  (Boynton, et. al., 2014)
  http://www.americannursetoday.com/wp-content/uploads/2014/09/ant9-Patient-Handling-Supplement-821a_Implementing.pdf
- SPH Mobility Check – Enos, 2008-2018 www.hcergo.org
- Email Lynda Humenfit@aol.com for other tools

34

35

Using SPHM Equipment to Promote Early & Safe Mobilization

35

36

In-Bed Mobility

- Ceiling Lifts with turning/repositioning slings (ceiling, wall mount/gantry)
- Friction Reducing Devices
  - Air Assist mats (powered):Reusable/Disposable
  - Single use & reusable friction reducing sheets
- Trapeze frames
- Beds with lateral rotation therapy; chair conversion & standing



37

Can You Leave a Sling Under a Patient?

The National Pressure Ulcer Advisory Panel (NPAUP), European PUAP, AHRQ, and Pan Pacific Clinical Practice Guidelines for Prevention and Management of Pressure Injuries 2012

'Use lift sheets or lift equipment to reposition or transfer patients and to avoid pulling or dragging, which can cause friction injuries'


38

Can You Leave a Sling Under a Patient?

- No evidence it will cause skin damage - NPUAP 2015 *'Do Lift Slings Significantly Change the Efficacy of Therapeutic Support Surfaces?'*
- Depends:
  - Patient condition
  - Fabric, design of the sling and fit on patient
  - Input from Wound Care staff
- May facilitate use of ceiling lifts and thus increase patient repositioning and mobility
- Ask manufacturer/vendor if their slings can be left under patients when in bed and/or in a chair without compromising a patient's skin? If yes, does the manufacturer provide evidence (as tested by a third-party) to support this claim?

39

40

In-Bed Mobility

- Limb sling(s) with ceiling or powered floor lift for passive and active range of motion
- Bari trapeze; ceiling lift hanger bar; hanger bar with seated sling at edge of bed




Courtesy of Oregon Health and Science University (OHSU) Hospital

41

Transfers Out of Bed
Non-Weight Bearing (Dependent)

- Ceiling or Floor lift with repositioning or seated sling
- Friction Reducing Devices – lateral supine transfer to supine chair with powered controls


Seating Matters

Sizewise


Alphamodalities



Courtesy of Oregon Health and Science University (OHSU) Hospital

42

Standing Transfers
(Partial - Full Weight Bearing)

- Powered sit-stand assist devices *with single use or reusable slings/belts (Semi-Dependent)*
- Non-powered sit-stand assist devices *(Supervised)*


Courtesy of HandyCare/AlphaModalities

Lumex

Standing Transfers (Semi-Dependent)

Patients under approx. 600lb:ceiling lift (2 or 4-pt hanger bar) with universal high back toileting seated sling



43

Standing Transfers (Semi-Dependent)

- 800lb cap. powered sit to stand with/without harness


Courtesy of Oregon Health and Science University (OHSU) Hospital/EZWAY

44

Ambulation

- Ceiling lift systems & some floor lifts with walking harness/sling
- Some powered and non powered stand assist equipment (multi-function)
- Gait belts with ergonomics handles

Note: Adding 'handles' to the patient does not reduce the risk of injury for caregivers; cannot safely control falls






45

46

Proning

- Ceiling lift technique with 2 repositioning slings
- Hovermatt
- SLIPP


Courtesy of Oregon Health and Science University (OHSU) Hospital

46

47

SPHM Work Practices – Tips & Tricks

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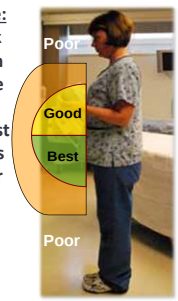
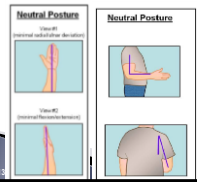
48

Ergonomics Tips

Neutral Posture: Standing/Work height: Position bed/exam table etc., between knuckles to waist (accommodates 90% of the user population)





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Ergonomics Tips



Turning a Patient:

Don't reach past midline of the patient

Use "tip and tuck" - tip the patient slightly on their side (vs. full log roll) and tuck slippery sheet, air assist matt, sling or linens etc. under the patient.

49

Ergonomics Tips

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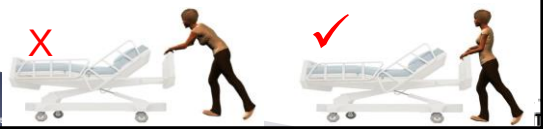
- Push vs. pull a load
- Use two hands
- Power vs. pinch grip
- When attaching/removing a sling –lift hanger bar at chest height or just below
- Work smarter not harder



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Tips for Success for any Program

- Have a plan, set measurable goals and evaluate them often
- Use economic modeling to show program return on investment
- Start small, test pilot and demonstrate successes
- Choose evidence-based interventions and use existing resources.....*don't reinvent the wheel*
- Don't forget to involve all stakeholders including patients & families
- Plan for program sustainability - proactive building design & incorporate leading measures to solicit leadership support and employee engagement
- Combine SPHM with patient safety initiatives e.g. fall prevention
- Market & communicate the program and your successes
- Treat patient and employee safety with equal emphasis

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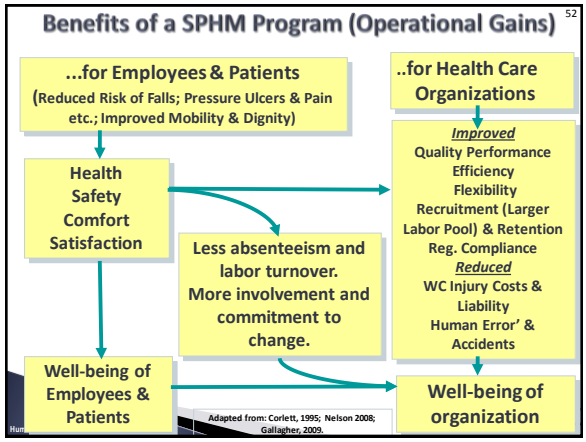

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