Implementing Patient Mobility Assessments: Methods and Approaches

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Objectives:

- Identify 2 assessments of hospital readiness
- Identify 2 barriers to implementation
- Understand role of culture in implementation

I have no financial disclosures

Assessment of hospital readiness

The goal(s) of implementing a patient mobility assessment must be clear

What are the positive effects of early mobility for patients?

- Prevent decline in functional status
- Decrease morbidity and mortality
- Decrease in delirium
- Reduction in pressure injuries
- Reduction in deep vein thrombosis
- Decrease in hospital length of stay
- Decrease in ventilator dependent days

Mobility assessments are a collision of multiple key factors in a hospital setting

What are the competing priorities

- Fall prevention programs
- Safe patient handling and prevention of staff injuries
- Lack of consistent approach to mobilizing patients
- Cost of safe patient handling devices
- Agreement between Physical Therapy, Nurses and other clinical staff
- No mobility quality metrics required
- Time and staffing

How to reconcile the competing priorities

It all goes back to the assessment of hospital readiness and clear articulation of the goals of the mobility program.

How do you assess your organization

4 step assessment as recognized and outlined by OSHA

This is designed for safe patient handling but can translate to mobility assessment programs

I. Understand the magnitude of the problem

What is your reportable injury rate?

How many of these were from handling patients? ambulating, patient movement

What is your lost time cost?

What is your workers compensation claims data?

II. Identify who is getting hurt

What is the job category

What department or unit

What were they doing

III. Effects on Patient Care

Hospital acquired pressure injuries

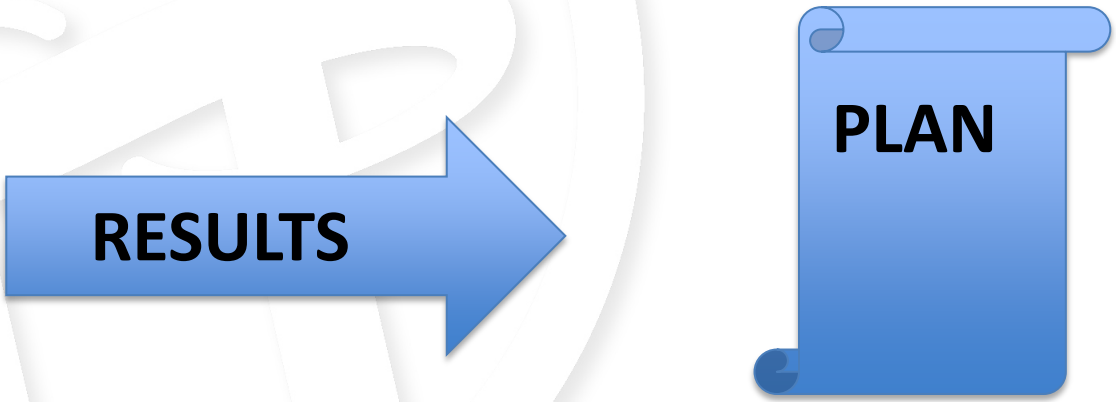
Rate of patient falls injuries/1000 days

How many patients were injured during lifting, transfer, repositioning, mobilizing

IV. Identify existing strengths and opportunities for improvement

Written safe patient handing plan?
Minimal lift policy in place?
Easy access to equipment?
Lift team?
Renovation plans in place?
Fall programs in place?

The results of the organizational assessment look in particular to assessing need and readiness for safe patient handling programs



What about mobility assessment programs?

Assessing for readiness and incorporating safe patient handling is a key to success to implement mobility assessment programs

Think of mobility assessments as a way to tie together:

* **Safe patient handling programs**
* **Fall risk assessments**
* **Skin risk assessment**
* **Staff injury reduction programs**

Getting the patients up and moving safely for everyone

Fall Risk Assessments

Johns Hopkins

Age-**fall history**-elimination-medication-patient care equipment-**mobility**-cognition

Morse Fall Scale

Fall history-secondary diagnosis-**ambulatory aid**-IV/saline lock-**gait/transferring**-mental status

Fall Risk Assessments

Hendrich II Fall Risk

Gender-altered elimination- depression-vertigo-confusion- **"Get-Up–and-Go test"**

Schmid Fall Risk Assessment

Fall history-current medications-**mobility**-mental status-elimination

Fall Risk Assessments

ALL of the widely used Fall Risk Assessments include some degree of mobility assessment as part of the determination of risk.

The Fall Risk must not be discounted when doing a mobility assessment, the risk must be mitigated by the mobility plan.

Braden Scale for predicting Pressure Injury Risk

Sensory perception

Moisture

Activity

Mobility

Nutrition

Friction and Shear

The Norton Pressure Sore
Risk-Assessment Scale Scoring System

The **Norton Scoring system**, shown below, and created in England in 1962, has been the first pressure sore risk evaluation scale to be created, back in 1962, and for this it is now criticized in the wake of the results of modern research. Its ease of use, however, makes it still widely used today.

To evaluate the Norton Rating for a certain patient look at the tables below and add up the values beside each parameter which apply to the patient. The total sum is the Norton Rating (NR) for that patient and may vary from 20 (minimum risk) to 5 (maximum risk).

(Indicatively, a Norton Rating below 9 means Very High Risk, 10 to 13 means High Risk, 14 to 17 medium risk and above 18 means low risk)

Physical Condition	Good	4
	Fair	3
	Poor	2
	Very Bad	1
Mental Condition	Alert	4
	Apathetic	3
	Confused	2
	Stuporous	1
Activity	Ambulant	4
	Walks with help	3
	Chairbound	2
	Bedfast	1
Mobility	Full	4
	Slightly Impaired	3
	Very Limited	2
	Immobile	1
Incontinence	None	4
	Occasional	3
	Usually Urinary	2
	Urinary and Fecal	1

Generally, the risk factor is coded this way:

Greater than 18	Low Risk
Between 18 and 14	Medium risk
Between 14 and 10	High Risk
Lesser than 10	Very High Risk

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Implementation of a Mobility Assessment

Baseline assessment

Change Theory

Education plan

Culture of Safety

Performance Improvement Activity

PATIENT MOBILITY ASSESSMENT TOOLS

These tools should be evaluated for their ability to bridge the gap between fall risk assessment tools and determining patient's mobility level and the proper equipment

Change Theory

Change theory can be combined with culture change theory to maximize the effect and impact on programs in todays acute care settings

Culture Change

Role of transforming culture is a leadership imperative that is a high priority in most organizations

Education Plan and Change in Organizational Culture can be linked

Four stages of learning model based on Maslow

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SUBCONSCIOUS UNSKILLED

Team members unaware of how little they know

- Unclear on goals
- Old paradigms and assumptions exist

CONSCIOUS UNSKILLED

Team members understand the importance or the why but they may still be apprehensive of change

CONSCIOUS SKILLED

Ready to put program into practice

Motivated by success stories

Learning is focused on implementing the change

Coaching, mentoring and maintaining engagement are critical

SUBCONSCIOUS SKILLED

Practice as well as culture change. This is the merging of education and culture to sustain change.

The change becomes the new norm but still requires coaching and mentoring to sustain.

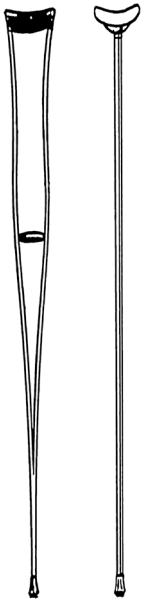
What mobility tool assessment to use

There are a number of tools available for use, many are for physical therapy and recently some additions for nursing to use

BMAT: Banner Mobility Assessment Tool

Developed at Banner Health to be used as a nurse driven protocol using a 4 step functional task list to identify the mobility level the patient can achieve

BMAT



The BMAT then guides the nurse to the recommended safe patient handling and mobility technology should be used

Banner Mobility Assessment Tool for nurses

Nurses have found that the Banner Mobility Assessment Tool (BMAT) is an effective resource for performing a bedside assessment of patient mobility.

Test	Task	Response	Fail = Choose most appropriate equipment/device(s)	Pass
Assessment Level 1 Assessment of: • Trunk strength • Seated balance	**Sit and shake:** From a semi-reclined position, ask patient to sit upright and rotate* to a seated position at side of bed; *may use bedrail.* Note patient's ability to maintain bedside position. Ask patient to reach out and grab your hand and shake, making sure patient reaches across his/her midline.	**Sit:** Patient is able to follow commands, has some trunk strength; caregivers may be able to try weight-bearing if patient is able to maintain seated balance longer than 2 minutes (without caregiver assistance). **Shake:** Patient has significant upper body strength, awareness of body in space, and grasp strength.	**MOBILITY LEVEL 1** • Use total lift with sling and/or repositioning sheet and/or straps. • Use lateral transfer devices, such as roll board, friction-reducing device (slide sheets/tube), or air-assisted device. ***Note:** If patient has **strict bed rest or bilateral non-weight-bearing** restrictions, **do not proceed** with the assessment; **patient is MOBILITY LEVEL 1.***	Passed Assessment Level 1 = Proceed with Assessment Level 2.
Assessment Level 2 Assessment of: • Lower extremity strength • Stability	**Stretch and point:** With patient in seated position at side of bed, have patient place both feet on floor (or stool) with knees no higher than hips. Ask patient to stretch one leg and straighten knee, then bend ankle/flex and point toes. If appropriate, repeat with other leg.	Patient exhibits lower extremity stability, strength and control. **May test only one leg and proceed accordingly (e.g., stroke patient, patient with ankle in cast).**	**MOBILITY LEVEL 2** • Use total lift for patient unable to weight- bear on at least one leg. • Use sit-to-stand lift for patient who can weight-bear on at least one leg.	Passed Assessment Level 2 = Proceed with Assessment Level 3.
Assessment Level 3 Assessment of: • Lower extremity strength for standing	**Stand:** Ask patient to elevate off bed or chair (seated to standing) using assistive device (cane, bedrail). Patient should be able to raise buttocks off bed and hold for a count of five. May repeat once. *Note:* Consider your patient's cognitive ability, including orientation and CAM assessment if applicable.	Patient exhibits upper and lower extremity stability and strength. **May test with weight-bearing on only one leg and proceed accordingly (e.g., stroke patient, patient with ankle in cast).** **If any assistive device (cane, walker, crutches) is needed, patient is Mobility Level 3.**	**MOBILITY LEVEL 3** • Use non-powered raising/stand aid; *default to powered sit-to-stand lift if no stand aid is available.* • Use total lift with ambulation accessories. • Use assistive device (cane, walker, crutches). *Note:* Patient passes Assessment Level 3 **but requires assistive device** to ambulate or **cognitive assessment** indicates poor safety awareness; ***patient is MOBILITY LEVEL 3.***	Passed Assessment Level 3 **AND no assistive device needed** = Proceed with Assessment Level 4. ***Consult with physical therapist when needed and appropriate.***
Assessment Level 3 Assessment of: • Standing balance • Gait	**Walk:** Ask patient to march in place at bedside. Then ask patient to advance step and return each foot. Patient should display stability while performing tasks. Assess for stability and safety awareness.	Patient exhibits steady gait and good balance while marching and when stepping forward and backward. Patient can maneuver necessary turns for in-room mobility. Patient exhibits safety awareness.	**MOBILITY LEVEL 3** If patient shows signs of unsteady gait or ***fails* Assessment Level 4**, refer back to **MOBILITY LEVEL 3; *patient is MOBILITY LEVEL 3.***	**MOBILITY LEVEL 4** MODIFIED INDEPENDENCE **Passed = No assistance needed to ambulate;** use your best clinical judgment to determine need for supervision during ambulation.

Always default to the safest lifting/transfer method (e.g., total lift) if there is any doubt about the patient's ability to perform the task.

Other Mobility Assessment Tools

Timed Get Up and Go Test: patient stands up, walks 3 meters, turn around and walks back, sits in chair.

CON: No guidance what to do when a patient can not stand, bear weight or walk

Quick 5 Bedside Guide (now known as the Quick 3)

Patient completes 3 functional tasks but doesn't fully address patient limitations.

CON: does not address weight bearing limits or issues and ability of patient. Limited recommendation for safe handling technology

Egress Test

Three repetitions of sit to stand, marching in place and set and return activities.

CON: Tailored to PT and doesn't address safe patient handling, getting the patient to standing and weight bearing limitations

Activity Measure for Post-Acute Care

2004 by Boston University

Assesses and measures activity limitation as defined as “difficulty in the execution of a task or action by an individual.”

Applications

Tracking improvement or decay in individual patient function

Benchmarking functional change across practice sites, networks, or across clinicians.

As a basis for reimbursement for services provided

Used for internal quality improvement activities

Used as an outcome measure in clinical trials and related research

Would be very beneficial for tracking of clinical outcomes and comparison reporting

De Morton Mobility Index

The DEMMI provides clinicians and researchers with a valid interval-level method for accurately measuring and monitoring mobility levels of older acute medical patients.

John Hopkins Highest Level of Mobility Assessment

A decline in functional status is common during acute care hospitalization. This decline can be mitigated through hospital-based early activity and mobility programs. An important component of such programs is the systematic measurement of patient mobility. We developed the Johns Hopkins Highest Level of Mobility (JH-HLM) scale to serve as a regular assessment of patient mobility.

This tool is a way to measure daily progress toward long and short term goals by nursing as well as rehab teams. Measured twice daily.

Johns Hopkins
Highest Level of Mobility (JH-HLM) Scale

MOBILITY LEVEL

		Score
WALK	250+ FEET	8
	25+ FEET	7
	10+ STEPS	6
STAND	≥1 MINUTE	5
CHAIR	TRANSFER to CHAIR	4
BED	SIT AT EDGE OF BED	3
	TURN SELF/BED ACTIVITY*	2
	ONLY LYING	1

BMAT has been individualized for a variety of other organizations

BMAT (Bedside Mobility Assessment Tool)

The BMAT is a tool designed for nurses to assess patient mobility in acute care. The BMAT allows nurses (and other healthcare workers) to determine the appropriate patient handling and mobility equipment or device to safely move or mobilize the patient.

(We would like to acknowledge and thank Banner Health in Colorado for developing, validating and sharing the original tool.)

Key Points for Implementation

Involve all key stakeholders

- Nursing
- Rehab Services
- Providers
- Quality Staff

Assure you think thru all the scenarios

- How to communicate assessment results between shifts
- Between care team members
- Outside the clinical staff

Did you mitigate the risks??

Risk of falls

Risk of staff injuries

Are safe patient handling devices convenient?

Performance Improvement Activities

Without this step, you really do not know about the successes or failures of the mobility assessment program.

What to measure?

Here is where you go back to the beginning.

- What were the goals of the program?
- What was your initial safety assessment?
- What is your fall rate?
- How about pressure injuries?
- Look at incident reporting trends

Keeping safety at the forefront

View mobilization along a continuum based on:
Patient Readiness
Progression to goals
Strategies to prevent complications
Assessment of activity tolerance

Evaluation of a Patient Mobility Assessment

- Need to look at your initial goals and review in context of the new program
- How to you hard wire the compliance to a zero defect concept?
- This is the subconscious skilled phase

Key to changing culture

Its all based on a simple equation to overcome latent causes

PERCEIVED BURDEN

PERCEIVED RISK + **CO-WORKER COACHING**

What is Perceived Burden?

How hard is it for the staff to complete the tasks or comply with the policy. This is the staff's assessment of the burden to perform as expected.

What is Perceived Risk?

This is how risky or unsafe the task in question is as viewed by the staff. If it is very risky, they are much more likely to comply. If the risk is low, they may be less likely to comply.

What is Co-Worker Coaching?

To some degree, this is a measure of your culture change. What are the other employees doing, are they setting a good example and reminding colleagues of the value and purpose or is everyone doing their own thing. Coaching can not just be the manager or supervisor.

Implementing a Mobility Assessment

- Real win for patients if implemented well
- Real win for staff if implemented well
- Culture and readiness are critical to success
- Incorporating the  forces: safety for patients, safety for staff, fall prevention strategies, safe patient handling and mobility technologies

QUESTIONS??