



Early Mobility: Partnering to Ensure Safety in the Med-Surg Environment

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Disclosures for Kathleen Vollman

- Consultant-Michigan Hospital Association Keystone Center
- Consultant/Faculty for CUSP for MVP—AHRQ funded national study
- Subject matter expert for CAUTI and CLABSI for CMS/HEN 1.0 & 2.0
- Consultant and speaker bureau for Sage Products LLC
- Consultant and speaker bureau for Hill-Rom Inc.
- Consultant and speaker bureau for Eloquest Healthcare
- Niveus medical



Cross Cutting Approach to Harm Reduction



Revaluing Fundamental Care Practices

Notes on Hospitals: 1859

“It may seem a strange principle to enunciate as the very first requirement in a Hospital that it should do the sick no harm.”

Florence Nightingale

Advocacy = Safety

Protect The Patient From
Bad Things Happening on
Your Watch



Implement
Interventional Patient Hygiene

Interventional Patient Hygiene

Hand Hygiene

Hygiene...the science and practice of the establishment and maintenance of health

**Catheter
Care**

Interventional Patient Hygiene....nursing action plan directly focused on fortifying the patients host defense through proactive use of evidence based hygiene care strategies

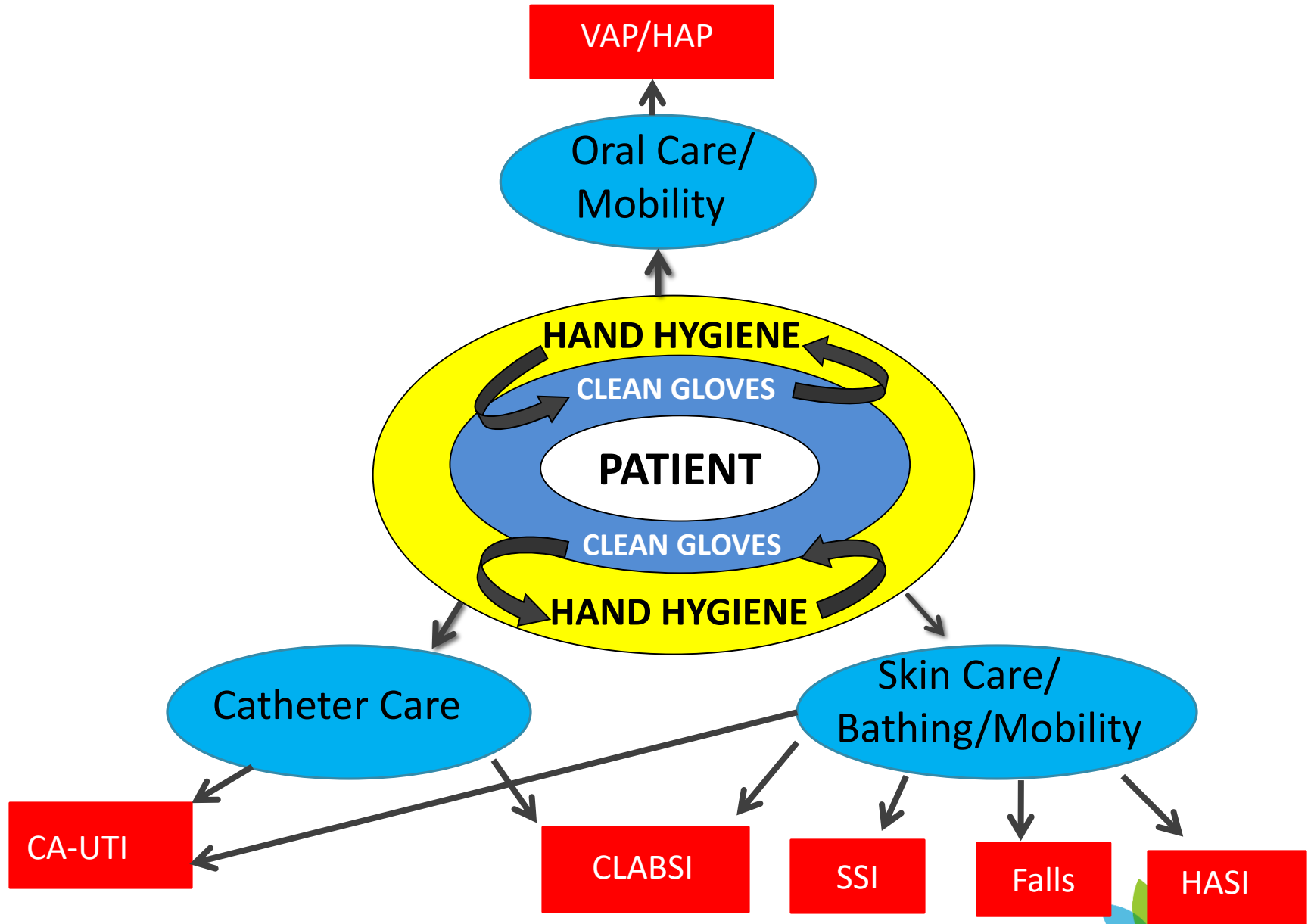
**Bathing &
Assessment**

**Comprehensive
Oral Care Plan**

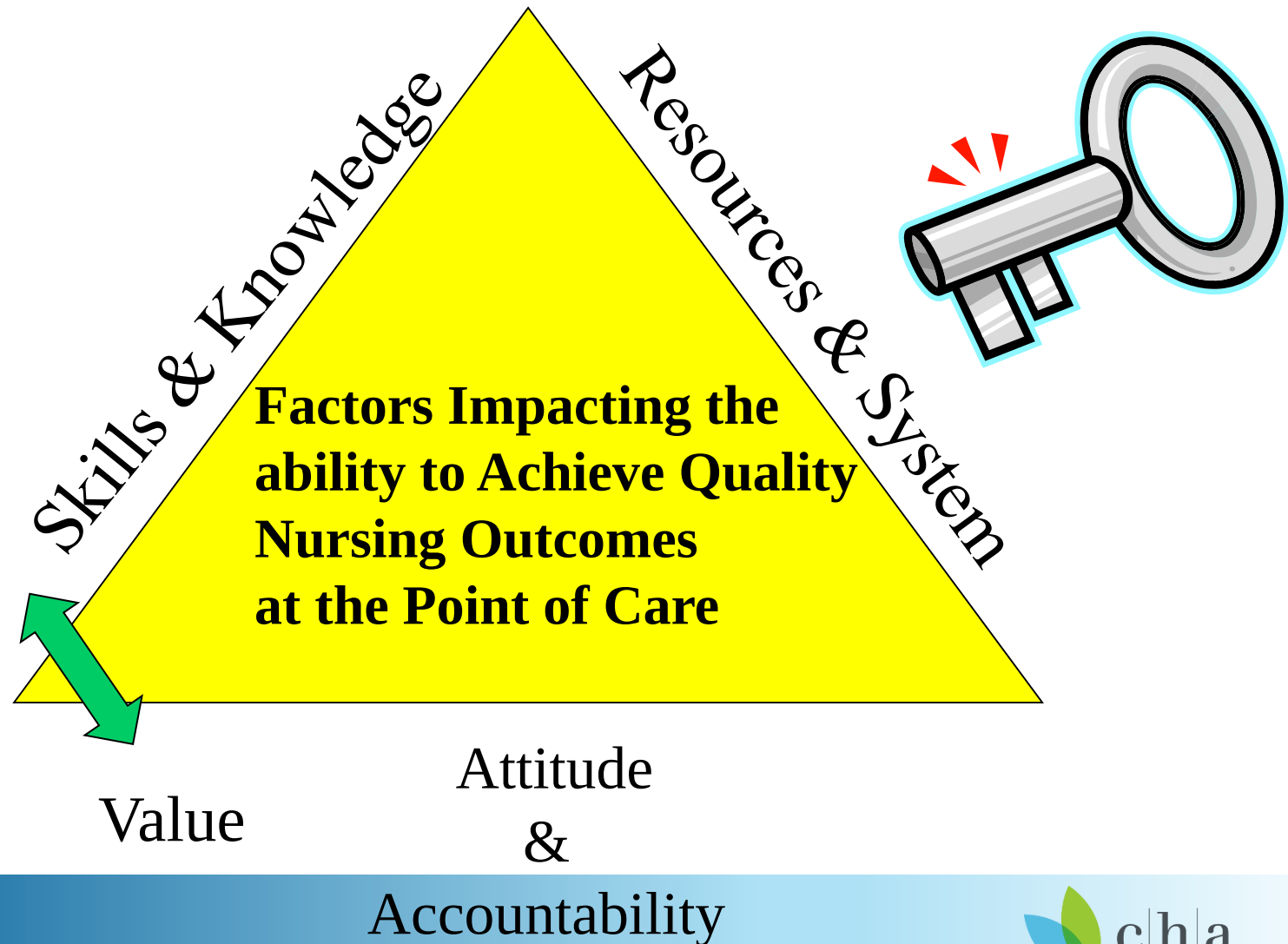
**Incontinence Associated
Dermatitis Prevention
Program**

**Pressure
Ulcer
Prevention**

INTERVENTIONAL PATIENT HYGIENE(IPH)



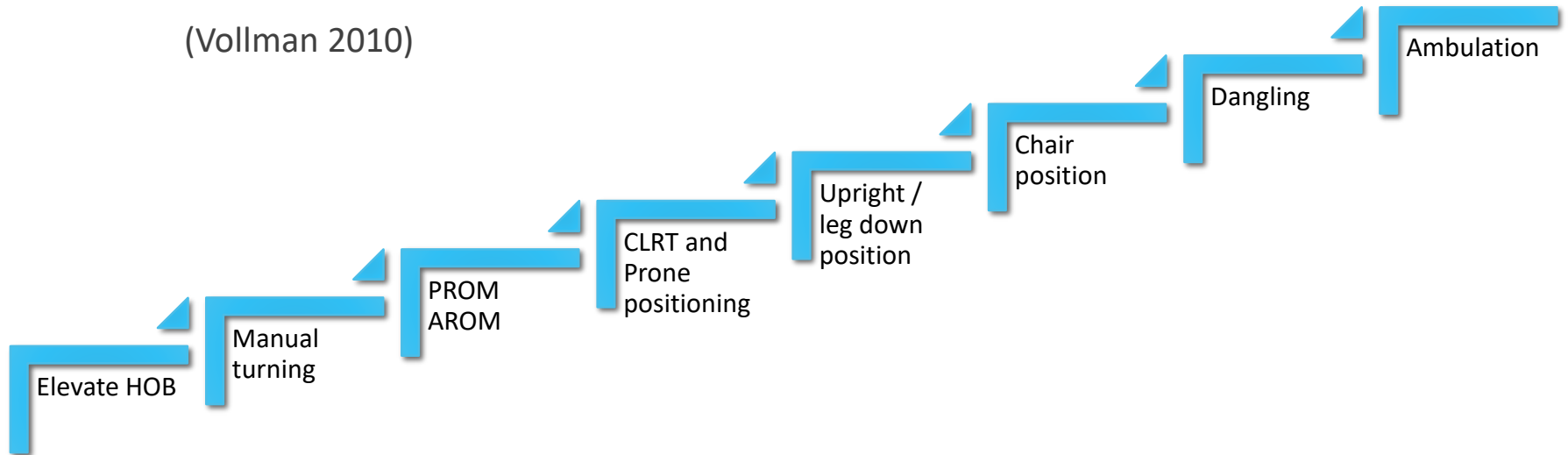
Achieving the Use of the Evidence



What is progressive mobility?

Progressive mobility is defined as a series of planned movements in a sequential matter beginning at a patient's current mobility status with goal of returning to his/her baseline

(Vollman 2010)



Vollman, KM. Introduction to Progressive Mobility. Crit Care Nurs. 2010;30(2):53-55.

Cumulative Impact on Quality of Life

“New Walking Dependence” occurs in 16-59% in older hospitalized patients (Hirsh 1990, Lazarus 1991, Mahoney 1998)

65% of patients had a significant functional mobility decline by day 2 (Hirsh 1990)

27% still dependent in walking 3 months post discharge (Mahoney 1998)



Missed Nursing Care

“Any aspect of required patient care that is omitted (either in part or whole) or significantly delayed.”

A predictor of patient outcomes

Measures the process of nursing care



**SORRY WE
MISSED YOU!**

Hospital Variation in Missed Nursing Care

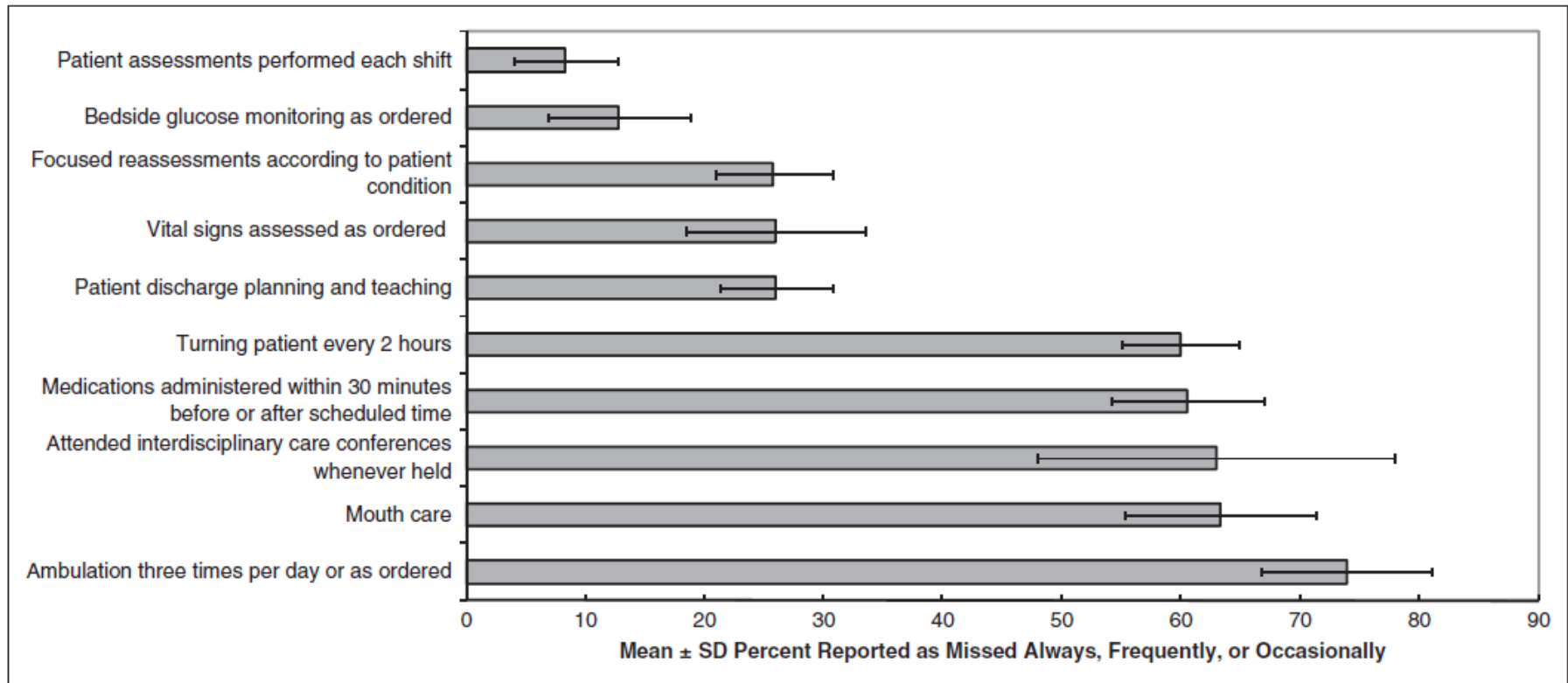


Figure 2. Elements of care most and least frequently missed. The solid bars represent the means across all 10 hospitals, and the range lines indicate the standard deviations.

Reasons for Missed Nursing Care

- Too few staff
- Poor use of existing staff resources
- Time required for nursing intervention
- Poor teamwork
- Communication problems
- An effective delegation
- Habit and denial

Systematic Review of Inpatient Mobilization

- Literature review of research studies that provides evidence to the consequences of mobilizing or not mobilizing hospitalized adult patients
- 36 studies were included, will study showed strong quality
- Finding in four theme areas:
 - Physical outcomes include pain relief, reduced deep vein thrombosis, less fatigue, less delirium, less pneumonia, improved physical function (no relationship to falls)
 - Psychological outcomes include less anxiety, ↓depressive mood, ↓distress symptoms, ↑comfort and ↑satisfaction
 - Social outcomes include ↑quality of life and more independence
 - Organizational outcomes include ↓length of stay, ↓mortality and ↓cost

Kalish BJ, et al. Journal of Clinical Nursing, 2013;23:1486-1501

Evidence to Support Success

- Implement and evaluate evidence based intervention targeting staff to promote early mobility in the med-surg area
- Pragmatic quasi experimental interrupted time series design: 3 periods pre-invention (10weeks), intervention (8 weeks), post-intervention (20 weeks)
- 14 academic center in Ontario Ca, 12, 490 patients
- Targeted patients > 65yrs of age & admitted between Jan 2012 to Dec 2013
- Intervention: Multidisciplinary team, multimodal strategies, tools provided including, education modules, checklist, mobility algorithms.
- Three consistent messages
 - Assessed for mobilization status within 24hr of admission
 - Mobilization should occur 3x daily
 - Mobility should be progressive and scaled to patients abilities

Lu, B, et al. Age and Aging, 2017;0:1-7

Results of MOVE ON Study

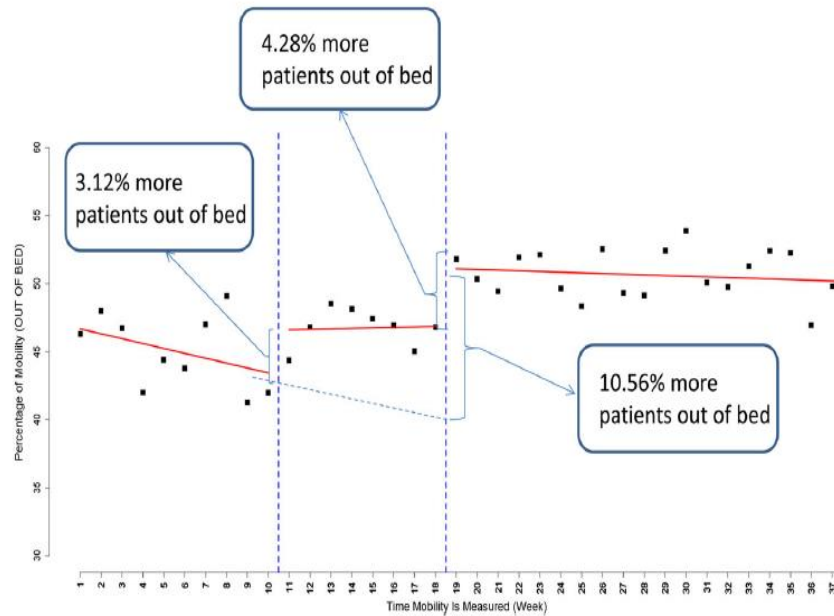
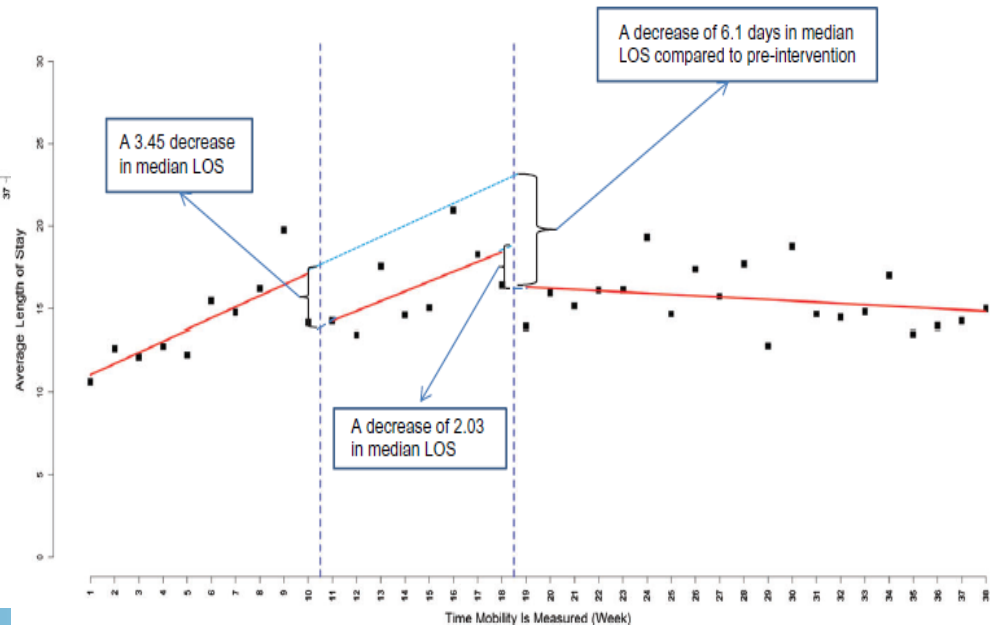


Figure 1. Overall weekly visual audit results for proportion of patients out of bed.



Facing the Facts about Mobility

Mobility interventions are regularly missed

- Nursing perceptions
 - Lack of time
 - Ease of omission
 - Belief it is PTs responsibility
- Survey results
 - Concern for patients level of weakness, pain and fatigue
 - Presence of devices – IVs and Urinary Catheters
 - Lack of staff to assist

Doherty-King, B Bowers, B. How nurses decide to ambulate hospitalized older adults: development of a conceptual model. Gerontologist. 2011 Dec;51(6): 786-97

Complication Related to Immobility in Medical-Surgical Patient

- Bedrest contributes to;
 - delirium
 - pressure injuries
 - Pneumonia
 - muscle atrophy
 - increase risk for falls
- Bedrest-1-5% daily loss of muscle strength

Creditor MC. Ann Intern Med, 1993;118:219-223

Assessing Readiness:

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; <i>may use bedrail</i> . 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; <i>default to powered sit-to-stand lift if no stand aid is available.</i> • 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.

Consider a Physiological Safety Screen

GET-UP MUST DO'S!

1. Walk in, walk during, walk out!
2. Grab and Go Mobility Aids!
3. (3) laps a day keeps the nursing home at bay!

Tips for Promoting Mobility

Order Modifications

- Delete orders for
 - Bedrest
 - Ad lib
- Replace with specific orders
 - Times, activities, distance

Promote Team Mobility Management

- Delegation of patient mobility
 - Replace sitters with a mobility aide
- Define patients mobility abilities on whiteboard
- Rehab and Nursing face-to-face bedside handoffs



Developing our Culture of Mobility: A Journey by Franciscan Health Michigan City, Indiana

PRESENTED BY: BROOKE NACK, PT
INPATIENT THERAPY MANAGER
MOBILITY PROGRAM MANAGER



Our Mobility Committee

“We have an idea...”

Motivation to move... our lit review

“A study of 45 elderly patients on a general medical unit, who had neither delirium or dementia and were able to walk prior to admission, found that they spent 20 out of every 24 hours in bed over the mean 5.1 days they were in the hospital.”

Wood et al. A mobility program for an inpatient acute care medical unit. AJN. 2014; 114(10)34-40.

What does a Culture of Mobility look like?

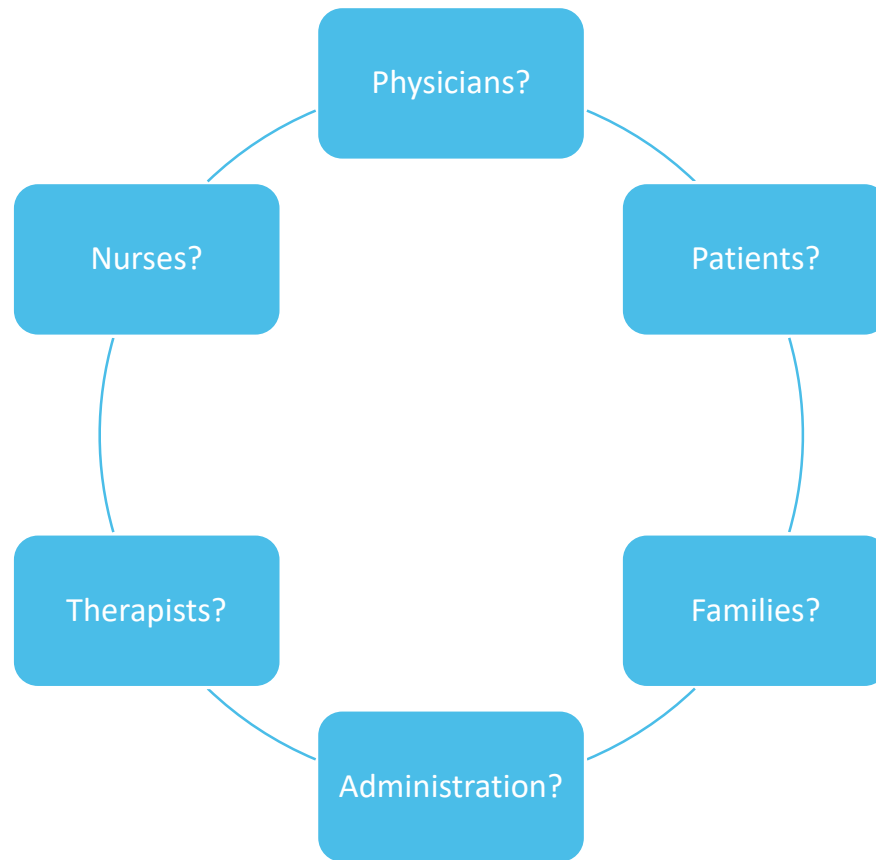
THE PROVIDER APPROACH

- All providers set patient/family expectations to MOVE
- Barriers to mobility are recognized and removed
- Providers hold each other accountable to achieve highest level of mobility
- Providers help each other mobilize patients
- All providers advocate for patient mobility
- Systematic use of mobility data and language
- Direct care providers know pre-admission and current mobility levels
- Medical and pharmacological management supports mobility

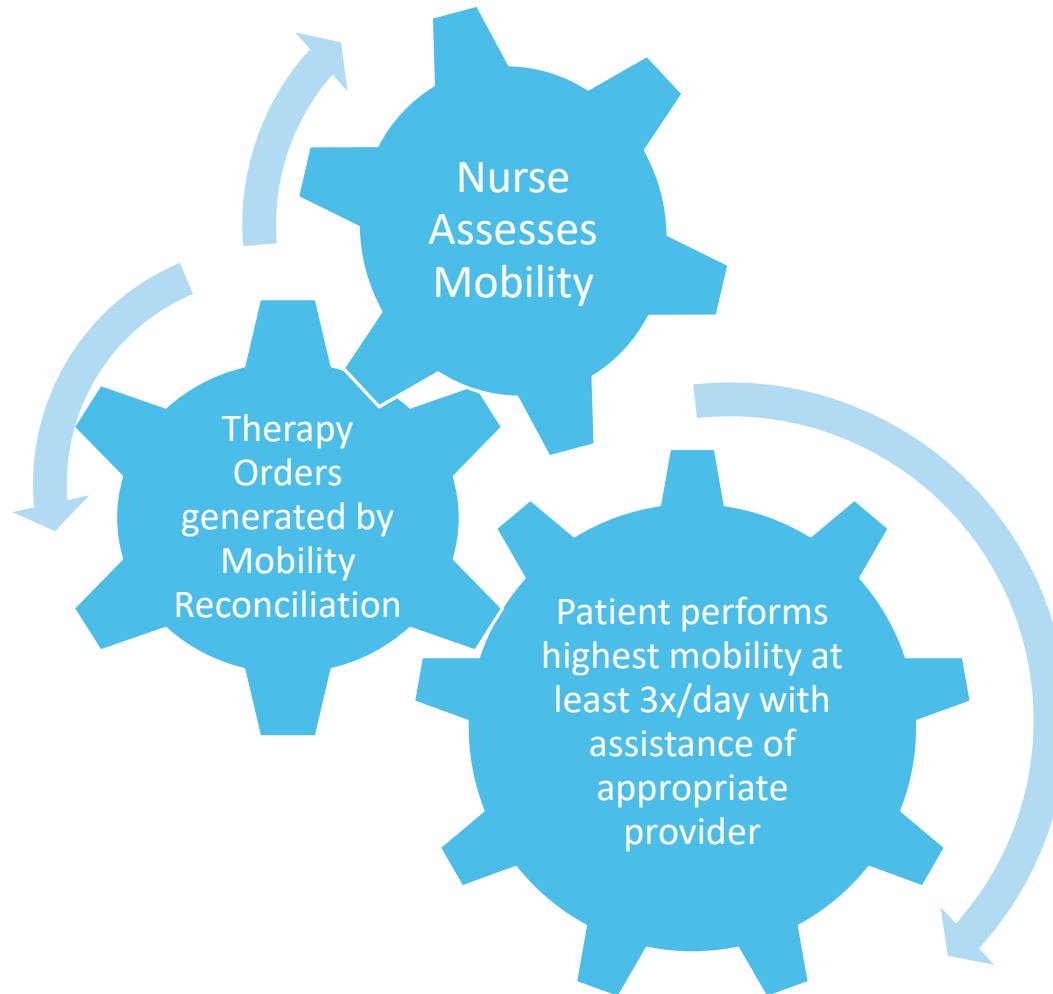
THE PATIENT EXPERIENCE

- Patients eat all meals in a chair unless they can't
- Mobile patients walk out of their room every day, including day of admission
- Necessary mobility equipment is at every bedside
- Families participate in patient mobility
- Mobility status, precautions, and projected discharge date is visible at bedside

Who owns mobility?



What a team approach to mobility looks like



Common early mobility scales and team goals

Level One

- Description: Minimally Conscious/Bedbound
- Team Goal: Stability and Range of Motion

Level Two

- Description: Bed Mobility
- Team Goal: Trunk strength and Readiness to bear weight

Level Three

- Description: Mobility in Room
- Team Goal: Weight bearing and Transfers to a chair

Level Four

- Description: Ambulation and Self Care
- Team Goal: Increase gait distance and Resume ADL's

Rate your patient's Mobility Level

Level Zero (0):

Vital signs unstable, patient may not be conscious

Level One (1):

Needs two assist to sit patient on edge of bed

Level Two (2):

Dangles on edge of the bed with assist x 1; holds at least one leg up, indicating strength to stand

Level Three (3):

Stands with assist or device for 2 minutes *OR* walks in room with assist or device

Level Four (4):

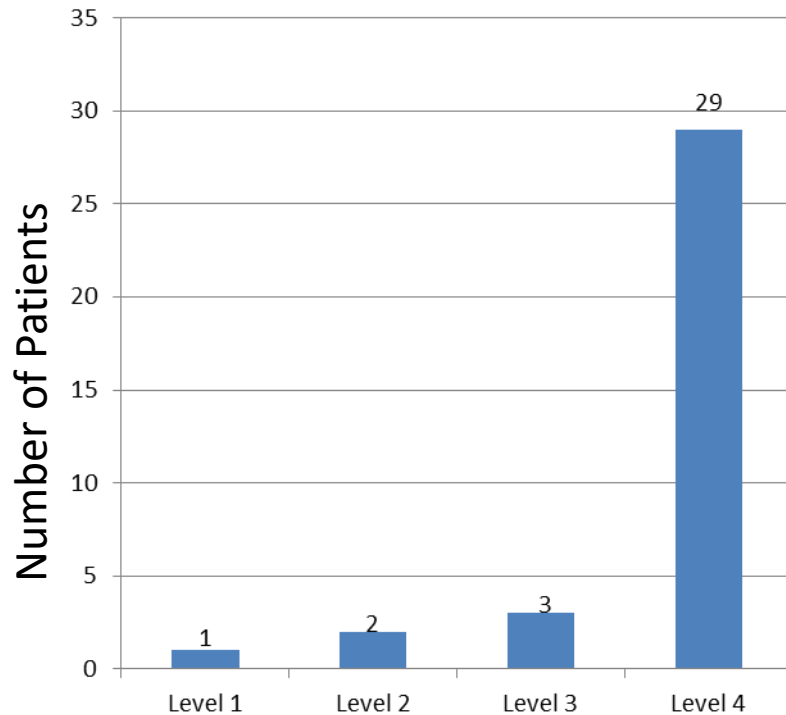
Walks in the hallway ("**out the door**") with or without assistance or a device



Mobility scale trial data

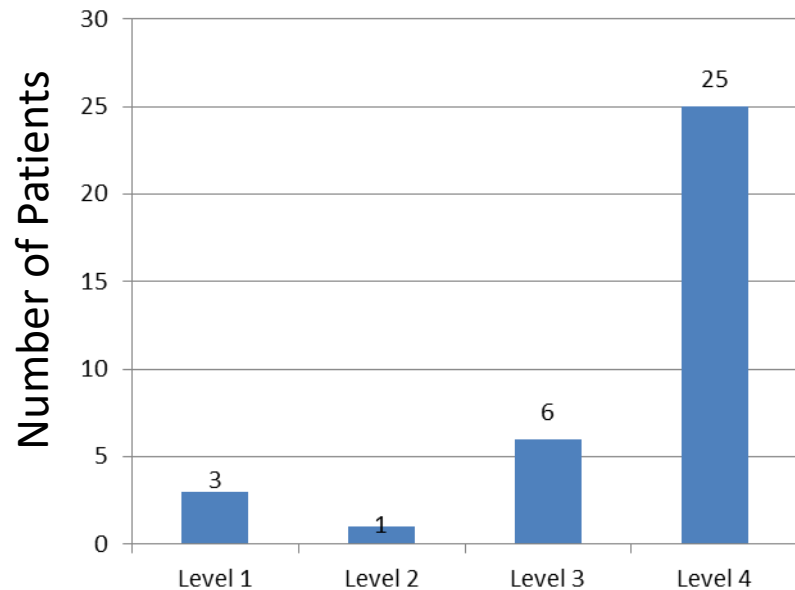
ACTIVITY LEVEL AT HOME

Home Function by Self-Report



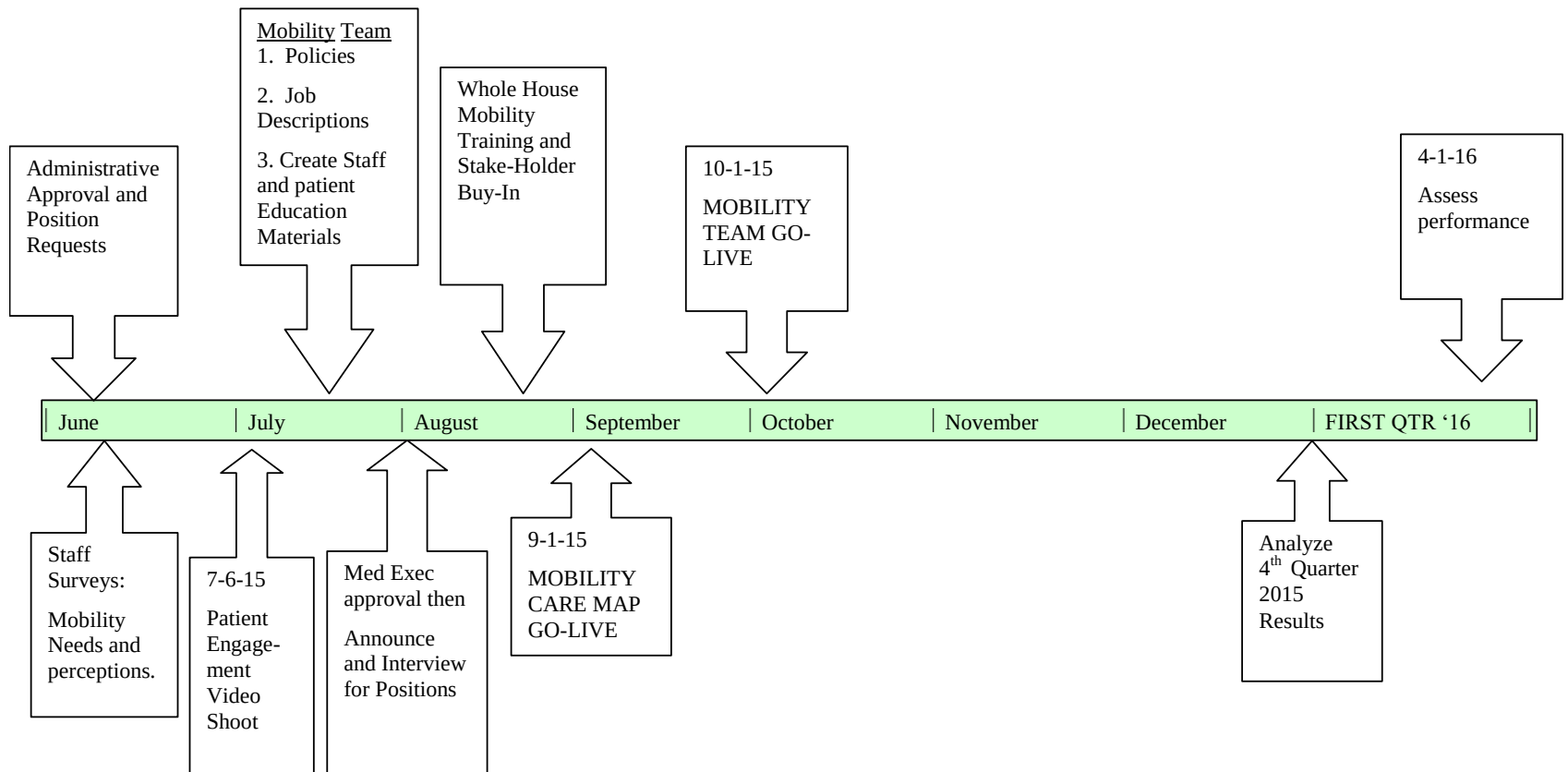
ACTIVITY LEVEL USING CARE MAP

Current Function by Nursing Assessment Using Care Map



Implementation Timeline

Culture of Mobility



Cost savings through reduced adverse events

Adverse Event	Current Rate	Target (every year for 5 years)	Cost per Event	Cost Savings
Pressure Ulcers	Per 1000 patients	↓ 10%	Facility Specific	
Hospital- Acquired pneumonia	Per 1000 patients	↓ 10%	Facility Specific	
DVT	Per 1000 patients	↓ 10%	Facility Specific	
Falls	Per 1000 patients	↓ 10%	Facility Specific	

“If he has a bedsore, it’s generally not the fault of the disease, but of the nursing”

-Florence Nightingale, 1859

Nightingale F. Notes on nursing . Philadelphia: Lippincott; p. 1859

Cost savings through employee safety and engagement

Metric	# of Employees	Target (every year for 5 years)	Cost per Event	Cost Savings
Workers' Compensation: Low Back Pain	Facility Count per targeted unit(s)	↓ 10%	Facility Specific stratified by event type	
Worker Retention Rate (RN/CNA/other)	Facility Count per targeted unit(s)	↑ retention by 5%	Replacement of position cost	

Evidence-based goals for mobility program ROI

Factor	Early Mobility in ICU	Medical-Surgical Culture of Mobility
Length of Stay	↓ ICU LOS by 22% ↓ Total LOS by 20%	↓ Total LOS by .4 days
30 Day Readmissions		↓ probability 10—20%
Hospital Mortality Rate	↓ 10%	
Sources:	Lord K, et al. ICU Early Physical Rehabilitation Programs: Financial Modeling of Cost Savings. <i>Critical Care Medicine</i> 2013;41:717-724	Friedman M & <u>Stilphen</u> M. Creating value by establishing a culture of mobility in the hospital setting. <i>APTA Learning Center Webinar</i> . Available at: http://www.apta.org/learningCenter . Accessed 5/14/14.

Evidence-based goals for mobility program ROI

Factor	Early Mobility in ICU	Medical-Surgical Culture of Mobility
Fall rate	Early mobility is not associated with higher risk of adverse events	Reduced fall rate from 6 falls to 1 fall every 2 months on a <u>Gero-psych</u> unit
Source		<u>Kuehnlenz D & Jezierski M</u> . A mobility team: making a move to reduce hospital falls in the older adult. <i>Advocate Lutheran General Hospital</i> . Available at: http://nicheconference2012.s3.amazonaws.com/uploads/File/%202012%20Conf%20Poster%20-%20Advocate%20Lutheran%20updated.pdf . Accessed 2/10/15.

Nursing opinion survey

Please rate your response about the CURRENT barriers related to patient mobility:

1. I always get enough information about how each patient moves

Strongly Disagree	1	2	4	5	Strongly Agree
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2. I have had enough training in safe mobilization techniques

Strongly Disagree	1	2	4	5	Strongly Agree
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3. I have enough equipment to move patients safely

Strongly Disagree	1	2	4	5	Strongly Agree
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4. I believe that if I help patients get up more they are more likely to fall

Strongly Disagree	1	2	4	5	Strongly Agree
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Nursing survey results

Question	1	2	Neg Response	4	5	Pos. Response	
I always get enough information	3	11	14	20	4	24	Inade
I have had enough training	0	10	10	18	10	28	Mobil
I have enough equipment	2	15	17	16	6	22	Gait b
I believe patients are more likely to fall	17	15	32	4	1	5	
I believe patients are resistant, so low satisfaction	17	16	33	5	1	6	
Mobility Masters = higher job satisfaction	0	3	3	15	17	32	
Schedule	8-4:30	11-7:30	10-6:30	write in 9-5:30			later :
	8	20	12	1			cover:
Best result of Mobility Team:	Job satisfaction	Teamwork	Pt satisfaction	Healthcare Org	Hope	All of the above	
	2	10	8	2	10	8	

“Move Me”: Engaging our peers and our patients...

<https://www.youtube.com/embed/e6BOqd0JPwc?rel=0>

Move Me: Team Approach to Patient Activity in Hospital-Setting



Key messages within mobility competence programs

NURSING

- Promote patient activity level “*within your nursing care*”
- Only rate what actually occurred/what the body experienced
- Keep the patient informed of the mobility goal and the current level
- A mobile patient makes nursing easier
- Apply what you know about one diagnostic group (CABG) to all others
- Trust your clinical decision making using the Care Map

THERAPY

- Stop owning mobility
- A team approach to mobility supports therapy, this is not a competition
- Address mobility from a laymen’s perspective
- Use your skills to equip others
- Don’t forget patient lift assist devices (Sara Steady)
- Provide specific examples of skilled vs. unskilled mobility services



Skills-development for progressive mobility...

Having a Little Fun

Nursing mobility skills assessment



Method of Instruction Key: P = Policy/Procedure Review C = Classroom/Lecture D = Demonstration R = Role-Play/Simulation		Method of Evaluation Key: O = Observation (in clinical setting) RD = Return Demonstration T = Written Test V = Verbalized Understanding			Method of Instruction (Use Instruction Key on Left)	Validation of Competency		
		Never Done	Needs Review/ Practice	Competent		Able to Perform Without Cueing or Prompts	Evaluation Method (Use Evaluation Key on Left)	Referred to CNS or Educator for Remediation
Mobility Program:		√	√	√		Date and Initials		Date notified and Initials
Provides verbal education about benefits of mobility								
Explain procedure to the patient/family								
Applies gait belt and uses it safely								
Selects medical equipment appropriate for Mobility Level								
Recognizes and complies with mobility precautions								
Utilizes safe lifting techniques for patient								
Utilizes appropriate body mechanics for staff safety								
Progresses mobility to highest level on Care Map								
Accurately rates mobility on the 1-4 Mobility Scale								
Recommends appropriate activity for Mobility Level								
Documents mobility appropriately on white board in room								
Documents mobility appropriately in medical record (EPIC)								
Sets up the patient safely upon completion of mobility								
Establishes the patients expectation for next mobility episode								
Provides a verbal report including Mobility Level and time								
		Signature					Date	
Employee								
Preceptor/Mentor								
Nurse Manager								

From an idea to reality...introducing our mobility team



Day One Results

Expectation	Compliance
Mobility Level reported in Interdisciplinary rounds	96%
Mobility Level written on Board in Room	53%
Mobility Documentation by nursing matches reported Levels and is completed during day shift	63%

Methods to Promote Compliance

1. Feedback of performance provided to unit managers
2. Transparency of performance across units
3. Celebration of nurses with 100% compliance
4. Leadership presence and rounding on the units
5. Mobility Committee attends interdisciplinary rounds

MOBILITY PROGRAM RESULTS

Measure	Target	Pilot Results		
		IMCU	Med/Onc	Ortho
Length of Stay (in days)	-0.2	-0.25	-0.21	0.06
Hospital Aquired Pressure Ulcers	-10%	-70%		
Fall Rate	-10%	12.5%		
Worker Back Injuries	-10%	-40%		
Nursing Turnover Rate	-5%	-45%		
CNA Turnover Rate	-5%	-9%		
Readmission Rate	Unspecified	-42.9%		
Discharge to SNF	Unspecified	-39%		

Mobility Program Survey Results

Question	NURSING STAFF		NON-NURSING PROFESSIONALS	
	Agree/ Strongly Agree (n = 38-41)	Disagree/ Strongly Disagree (n = 1-3)	Agree/ Strongly Agree (n = 14-19)	Disagree/ Strongly Disagree
Patients receive more opportunities to move since Mobility Team	100%	0%	100%	0%
My patients are satisfied with the Mobility Team	100%	0%	100%	0%
The Mobility Team safely mobilizes patients	97%	3%	100%	0%
Parts of my job are easier because we have a Mobility Team	95%	5%	100%	0%
The Mobility Team has contributed to my job satisfaction	92%	8%	100%	0%
The Mobility Team contributes positively to DC planning	93%	7%	100%	0%

Mobility Program Survey Results

April 2016

- *I see so many more patients now up in chairs and walking the halls. Great job! I think as the Mobility Team continues to work with our patients the need will increase even more. It will become the norm which is wonderful. Great program! (CNA)*
- *Early Mobilization and discharge... Patients do get better with early ambulation. (RN)*
- *Best results are decreased decubiti, decreased aspiration and overall reduced LOS. Excellent idea. Well managed and standardized. Easy to follow process. One of my favorite projects that helped my patients tremendously. (Hospitalist)*

Conclusion

It is feasible and effective for both community and university based healthcare organizations to make great strides in developing a Culture of Mobility.

A systematic team approach to mobility is key to a sustainable value and values based approach to preventing hospital acquired conditions.

Franciscan Health Michigan City's Mobility Program is recognized as the Innovation Award winner by the Indiana Hospital Association at the Safety Summit on June 6, 2017.

For further information on Franciscan's Mobility Program, contact

Brooke Nack, Inpatient Therapy Manager

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219-877-1133

Resources

1. Brown CJ, Redden DT, Flood KL, Allman RM. The under recognized epidemic of low mobility during hospitalization of older adults. 2009. J Am Geriatric Soc;57, p. 1660.
2. Donald et al. (2012) Eliminating waste in US Healthcare. JAMA 307(14):1513-1516.
3. Krumholtz. post-hospital syndrome. Patient physical functioning is associated with their risk for hospital readmission. NEJM. 2013; Jan 10;368(2):100-102.
4. Elliot et al. Exploring the scope of post-intensive care syndrome therapy and care: engagement of non-critical providers and survivors in a second stakeholders meeting. Critical Care Med. 2014 Jul 31.
5. Jezierski et al. A mobility team: Making a move to reduce hospital falls. Accessed 2/5/15. Available at: <http://nicheconference2012.s3.amazonaws.com/uploads/File/%202012%20Conf%20Poster%20-%20Advocate%20Lutheran%20updated.pdf>.
6. Friedman M, Stilphen M. Establishing a Culture of Mobility in the Hospital Setting. Presented at APTA Combined Sections Meeting Indianapolis, IN. 2015 Feb 4-7.

The Sky is the Limit!



Thank You

