

# Mobility Deep Dive: A focus on the Hospital



**Michael Friedman, PT, MBA**  
**Assistant Professor**  
**Director Activity and Mobility Promotion (JH-AMP)**  
**Senior Director Strategic Programs**  
**Physical Medicine and Rehabilitation**  
**Johns Hopkins Medicine**



SAVE THE DATE

Johns Hopkins 8<sup>th</sup> Annual  
Hospital Activity and  
Mobility Conference

VIRTUAL – APRIL 8 & 9

IN-PERSON – MAY 12 & 13



[hopkinsAMP.org](https://hopkinsAMP.org)



RIGHT  
PATIENT

RIGHT  
MOBILITY GOAL

RIGHT  
PLAN

# Johns Hopkins Activity and Mobility Promotion (JH-AMP)



[HopkinsAMP.org](https://HopkinsAMP.org)

## Mobility

**Aim:** Ensure that each older adult moves safely every day to maintain function and do What Matters.

### Screen / Assess:

Check the tool used to screen for mobility limitations for all older adults.

Minimum requirement: One box must be checked. If screening/assessment is done by physical therapy, please identify the tool used. If only "Other" is checked, will review.

- Timed Up & Go (TUG)
- Johns Hopkins High Level of Mobility (JH-HLM)
- Tinetti Performance Oriented Mobility Assessment (POMA)
- Screening and assessment forms per physical therapy
- Other

### Frequency:

Minimum frequency is once per stay and upon change of condition.

- Once per stay
- Upon change of condition
- Daily
- Other

### Documentation:

One box must be checked; preferred option is EHR. If "Other," will review to ensure documentation method is accessible to other care team members for use during the hospital stay.

- EHR
- Other

### Act On:

Minimum requirement: Must check first box and at least one other box.

- Mobilize 3 times a day and/or as directed (walking, unless bed or chair-bound or otherwise directed to promote the highest practicable level of mobility)
- Out of bed or leave room for meals
- Physical therapy (PT) intervention (balance, gait, strength, gate training, exercise program)
- Avoid restraints (physical or chemical)
- Remove catheters and other tethering devices
- Avoid high-risk medications
- Other

### Primary Responsibility:

Minimum requirement: One role must be selected.

- Nurse
- MD / PA / Nurse Practitioner
- Physical Therapist / Occupational Therapist
- Other

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- Timed Up & Go (TUG)
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- Tinetti Performance Oriented Mobility Assessment (POMA)
- Screening and assessment forms per physical therapy
- Other

### Frequency:

Minimum frequency is annually and upon significant change of condition.

- At least annually
- Upon significant change of condition
- Other

### Documentation:

One box must be checked; preferred option is EHR. If "Other," will review to ensure documentation method is accessible to other care team members for use during the hospital stay.

- EHR
- Other

### Act On

Minimum requirement: Must check first box or at least 3 of the remaining boxes.

- Multifactorial fall prevention protocol (e.g., STEADI)
- Educate older adult and caregivers
- Manage impairments that reduce mobility (e.g., pain, balance, gait, strength)
- Ensure safe home environment for mobility
- Identify and set a daily mobility goal with older adult that supports What Matters, and then review and support progress toward the mobility goal
- Avoid high-risk medications
- Refer to physical therapy
- Other

### Primary Responsibility

Minimum requirement: One role must be selected.

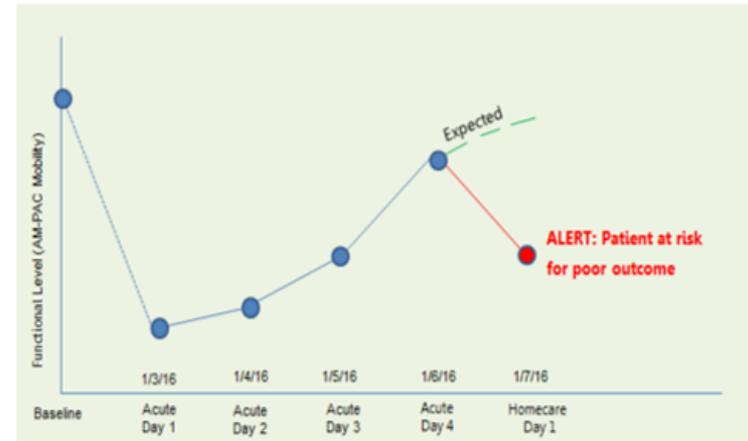
- Nurse
- MD/PA/ Nurse Practitioner
- Physical Therapist / Occupational Therapist
- Other

# Functional Reconciliation: Emergency Room, Hospital, Post-Acute, Home

## Guiding Principles

- Practical and Feasible
- Generalizable across populations
- Interdisciplinary
- Reduce documentation burden
- Meaningful across settings
- Drive clinical decision
- Small training burden

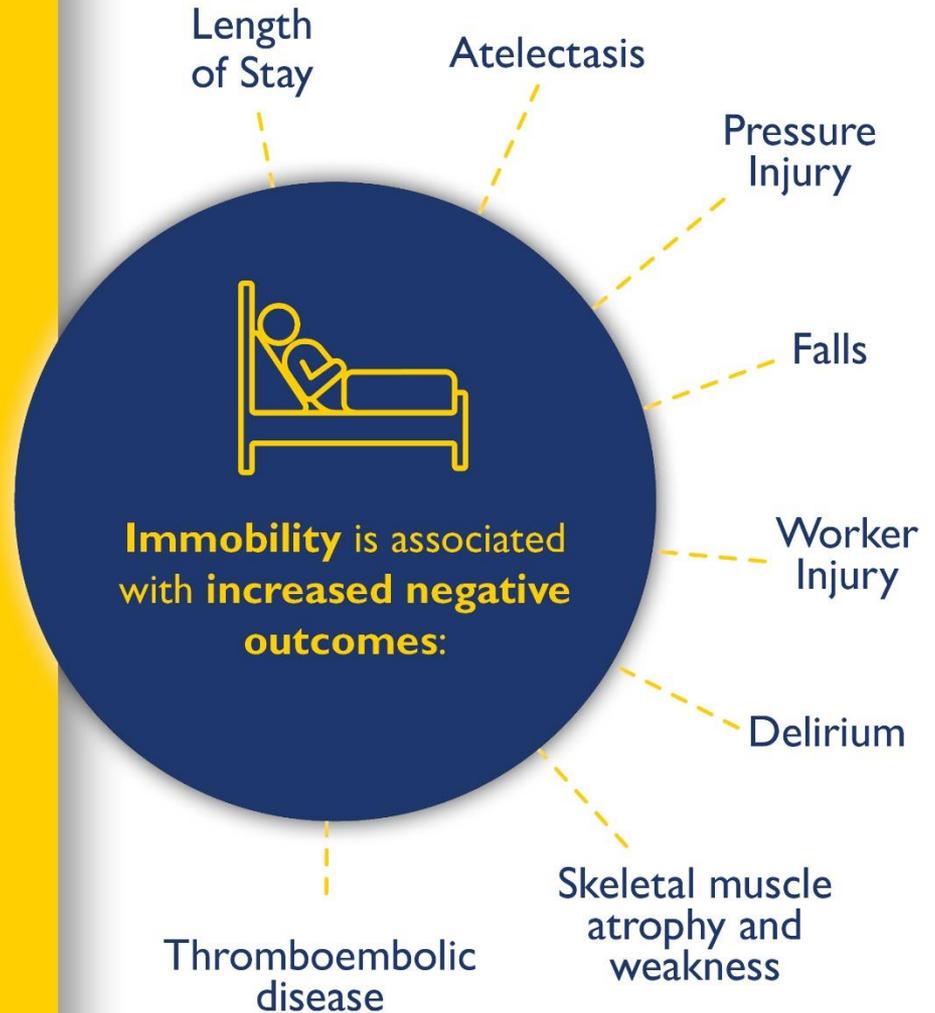
## Functional Reconciliation Vision



*Monitoring function no different than blood pressure.*

*Reconciling function no different than medications.*

# Bed Rest is Bad



# Barriers and Facilitators

> Age Ageing. 2022 Jul 1;51(7):afac159. doi: 10.1093/ageing/afac159.

## Barriers and facilitators to mobility of patients hospitalised on an acute medical ward: a systematic review

Hugo Mani <sup>1</sup>, Charlotte Möri <sup>2</sup>, Martina Mattmann <sup>2</sup>, Fabian Liechti <sup>3</sup>, Jennifer Inauen <sup>3</sup>, Drahomir Aujesky <sup>4</sup>, Jacques Donzé <sup>1 3 4</sup>, Carole E Aubert <sup>3 5</sup>

Affiliations + expand

PMID: 35796134 DOI: 10.1093/ageing/afac159

- **415** barriers identified by healthcare professionals



## Effects of Implementation of a Supervised Walking Program in Veterans Affairs Hospitals

### A Stepped-Wedge, Cluster Randomized Trial

Susan N. Hastings, MD, MHSc; Karen M. Stechuchak, MS; Ashley Choate, MPH; Courtney Harold Van Houtven, PhD; Kelli D. Allen, PhD; Virginia Wang, PhD; Cathleen Colón-Emeric, MD, MHS; George L. Jackson, PhD; Teresa M. Damush, PhD; Cassie Meyer, BS; Caitlin B. Kappler, MSW; Helen Hoenig, MD; Nina Sperber, PhD; and Cynthia J. Coffman, PhD

Implementation of the STRIDE hospital walking program under real-world settings in 8 VA hospitals was low and variable with participation of potentially eligible patients ranging from 0.6% to 22.7% and 2 hospitals pausing implementation of the program.

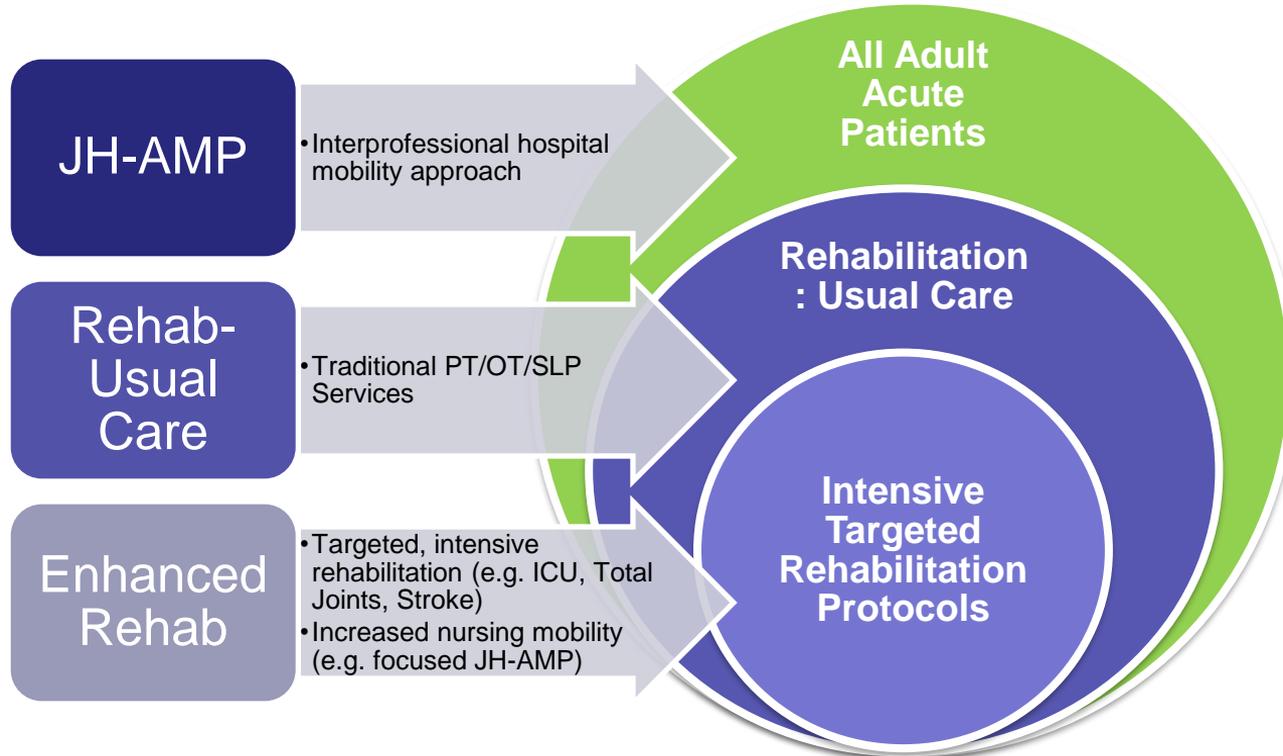
Despite this low reach, hospitalizations during the randomized period when STRIDE was implemented had a lower likelihood of discharge to a SNF among hospitalized, community-dwelling older adults. There was no observed effect on LOS or our exploratory outcome of inpatient falls.

Participating hospitals received structured guidance to help plan and launch their programs but were responsible for identifying and training their clinical personnel to assess patients and conduct walks.



Evidence NOT Translating to Sustainable Scale

# Johns Hopkins Delivery of Care Model: Setting a Mobility Standard



# The JH-AMP 8 Step Framework



# JH-AMP Program Outcomes

- **Academic Hospital - Medicine**
  - Patients ambulating on daily basis **increased: 43% to 70%** (p<0.001)
  - For all, LOS **reduced 0.4 day**;
  - for expected LOS >7 day, **reduced 1.1 day**
  - Falls did NOT increase
- **Academic and Community Hospitals**
  - 18 units
  - Increased **nursing mobility assessment** correlates to **increase in patient goal achievement**
- **Neurology Units**
  - **27% increase** in patients meeting daily mobility goals
  - **42% decrease** in “low value” PT/OT referrals
  - LOS **reduced by 0.2 day**
- **Community Hospital**
  - LOS **reduced 0.6 day** for project unit
  - 30-day readmission **reduced: 15% to 12%**
- **Dissemination**
  - **1000+** hospitals utilizing JH-AMP mobility assessment tools globally
  - **800+** hospitals/health systems attending JH-AMP conferences

# Opportunity: Higher Mobility = Better Outcomes



- Falls:

- 50% reduction in falls for patients walking  $\geq 25$  feet/day (JH-HLM  $\geq 7$ ), compared to patients laying or sitting (JH-HLM  $\leq 4$ ).

- Discharge Rates:

- 90% home discharge for patients walking  $\geq 25$  feet/day (JH-HLM  $\geq 7$ ) vs. 60% for sedentary patients (JH-HLM  $\leq 4$ ).

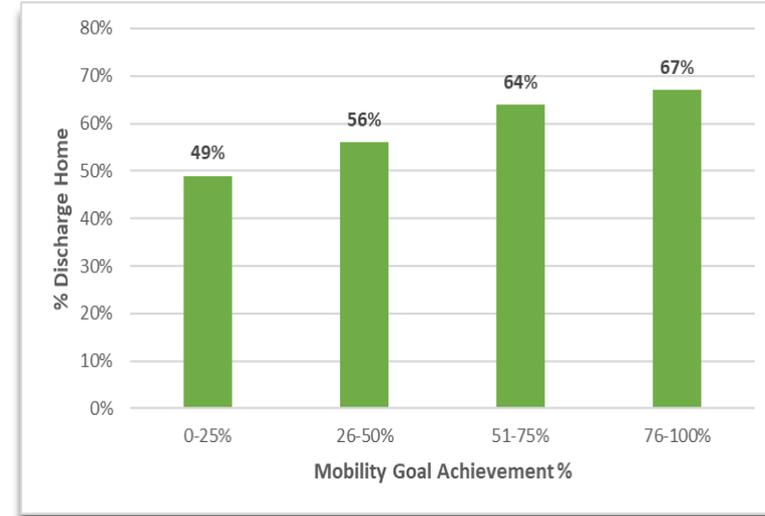
- Length of Stay (LOS):

- 33% shorter LOS for patients walking (JH-HLM  $\geq 7$ ), compared sedentary patients (JH-HLM  $\leq 4$ ).

# Lets Work Backwards from Mobility Goal Achievement is Good

## Highlights:

- JH-AMP was implemented at 5 non-JHM hospitals across the US.
- 15,107 unique patient admissions were evaluated
- Examined relationship between mobility goal achievement, measured as a proportion of days meeting goal over the patient's LOS, and discharge home rates.
- **Higher mobility goal achievement was significantly associated with increased rates of discharge home** independent of age, sex, hospital, unit type, admission AM-PAC score.
- The effect size larger for patients with more mobility limitations (lower AM-PAC scores)



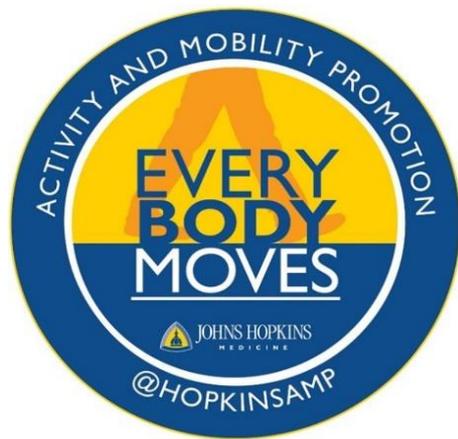
# Leveraging Data Examples

- Ileus prediction - In our institutional cohort, a first AM-PAC score of <13, corresponding to a JH-HLM of 5, inability to walk or stand for more than 1 minute, was associated with the development of ileus for patient undergoing Adult Spinal Deformity Surgery. Early identification of patients who cannot walk or stand after surgery can help determine which patients would benefit from prophylactic management.
- Discharge prediction - Our model, the Johns Hopkins Early Discharge Planning Calculator (JH-EDPC) uses data available in the EMR: day of hospitalization, age, home living situation, daily AM-PAC scores to predict a daily probability of needing Post-Acute care services.
- VTE Prevention: JH-HLM scores identified a higher percentage of patients with reduced mobility (19.1%) compared to initial assessments (6.5%), indicating the potential for improved VTE prevention and reduced patient morbidity and mortality.

*Olson, et al. Clinical Spine Surgery 2024.*

*Hoyer, et al. Journal of the American Medical Directors Association 2024.*

*Hoyer, et al. The American Journal of Medicine 2024*



**BOTTOM LINE**

**WHAT IS JH-AMP?**

**MOBILITY GOAL EVERY DAY EVERY PATIENT**

# The JH-AMP 8 Step Framework





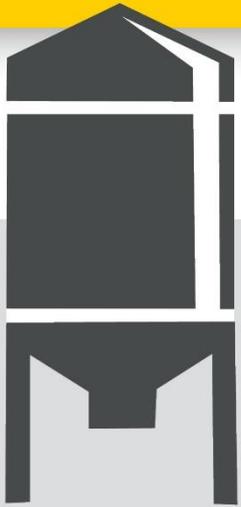
# Step 1: Organizational Prioritization

Why is this important?

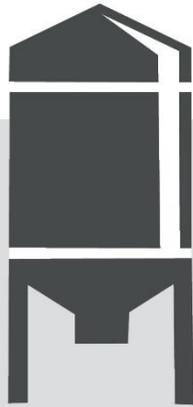
- To you
- The Unit
- The Service
- The Hospital
- The Health System



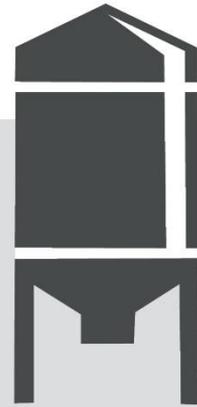
# Safety and Quality Initiatives in Hospitals



Fall  
Prevention



Safe  
Patient  
Handling



Pressure  
Injury  
Prevention



Delirium



Mobility  
Promotion

# Unintended Consequence

Zero Clinician Lift Injury  
Zero Fall Environment



# Proposed Model of Care



# How Loud Is Mobility

## OVERALL UNIT SAFETY SCORE RATING

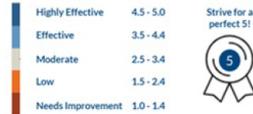
3.910  
Effective

## UNIT SAFETY SCORE REPORT

Medicine 1 OLOL (2028)

November 2023, December 2023, January 2024

## EFFECTIVENESS RANGE



HARM EVENT DOMAINS	3 MONTH SCORE	PATIENTS IMPACTED
C.DIFF (Clostridium Difficile)	5	0
CAUTI (Catheter Associated Urinary Tract Infection)	5	0
CLABSI (Central Line Associated Bloodstream Infection)	5	0
FALLS (Falls with Injury)	5	0
HAPI (Hospital Acquired Pressure Injuries)	1	5
MRSA (Methicillin-Resistant Staphylococcus Aureus)	3	1
HOBSI (Hospital-Onset Bloodstream infection)	4	1
SSE (Serious Safety Events as Determined by RLDatix)	4	1
BEST PRACTICE DOMAINS	3 MONTH SCORE	REPORTED EVENTS
HAND HYGIENE (Number of Hand Washing Events)	5	880
SAFETY REPORTING (RLDatix All Events)	3	56
Activity and Mobility Promotion (AMP)	3	53.0%

- Incorporation into core patient centered safety reporting
- Elevation to best practice essential

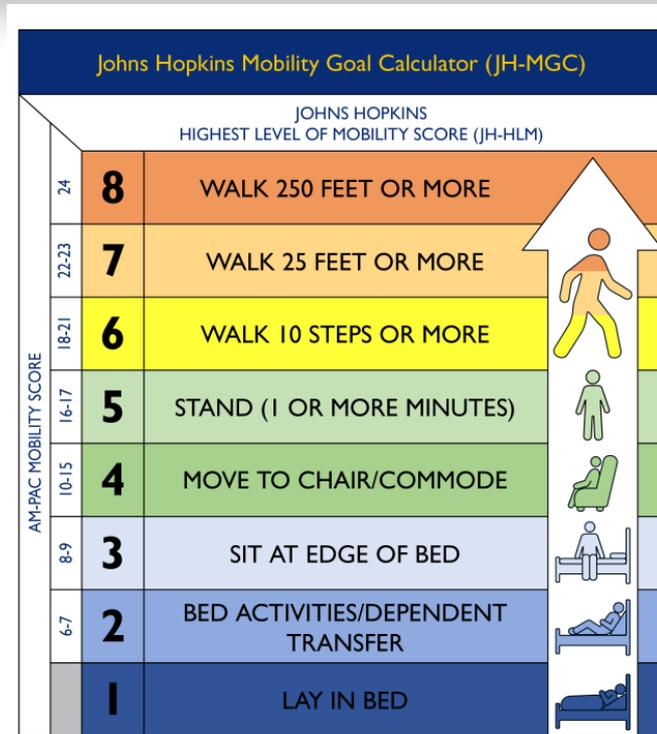
\*\*slide courtesy of Chris Thomas, Our Lady of the Lake Regional Medical Center

The Unit Safety Score summarizes safety performance measures in an effort to help inpatient units identify preventable patient safety issues. The Unit Safety Score is calculated on a rolling three-month basis. Each of the ten domains is weighted as a fixed percentage of the final score, and includes eight harm events and two events that encourage best practices.

# Step 2: Systematic Measurement & Daily Mobility Goal



1. Functional assessment
2. Daily goal target
3. Mobility performance
4. Variance and action
5. Mobility plan



[hopkinsAMP.org/tools](https://hopkinsAMP.org/tools)



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Version 1.2.22



# Capacity to Mobilize

## Boston University AM-PAC®

### Basic Mobility Inpatient Short Form (6-Clicks) Version 2\*

Please check the box that reflects your (the patient's) best answer to each question.

How much HELP from another person do you currently need... (If the patient hasn't done an activity recently, how much help from another person do you think he/she would need if he/she tried?)	Total	A Lot	A Little	None
1. Turning from your back to your side while in a flat bed without using bedrails?	1	2	3	4
2. Moving from lying on your back to sitting on the side of a flat bed without using bedrails?	1	2	3	4
3. Moving to and from a bed to a chair (including a wheelchair)?	1	2	3	4
4. Standing up from a chair using your arms (e.g., wheelchair, or bedside chair)?	1	2	3	4
5. Walking in hospital room?	1	2	3	4
6. Climbing 3-5 steps with a railing?	1	2	3	4

Raw Score: Standardized t scale score:

\*The AM-PAC® Inpatient Short Form (6-clicks) was developed in collaboration with the Cleveland Clinic Department of Rehabilitation Medicine.

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Total	Requires total assistance, or cannot do at all.
A lot	Requires a lot of help (maximum to moderate assistance). Can use assistive devices.
A little	Requires a little help (supervision, minimal assistance). Can use assistive devices.
None	Does not require any help and does the activity independently. Can use assistive devices.

Frequency at JHHS\*:

**RN – Each Shift**

**PT - Each Visit**

\*AM-PAC activity (ADL) short form also performed by RN and OT

Table 1. Promising Mobility Assessments for Hospital Use

Measure	Intended User or Assessor	Population or Setting	Description
Activity Measure for Post-Acute Care 6-Clicks <sup>35</sup>	PTs, OTs, nurses	Hospital	Assesses need for assistance with bed mobility, sitting and standing from chair, transfer from bed, moving from chair, climbing stairs, walking in hospital room; takes minutes to complete
Banner Mobility Assessment Tool <sup>27</sup>	Nurses	Hospital	Assesses ability to move from lying in bed to sitting, raise arm across midline, raise leg and extend kneed, bend ankle and point toes, stand, walk in place, step forward and back; includes recommendations for safe patient handling based on observed mobility level and individual environment
de Morton Mobility Index <sup>36,52</sup>	Staff	Older adults in acute care	Assesses bed mobility, chair, static balance, walking, dynamic balance
Hierarchical Assessment of Balance and Mobility <sup>57</sup>	PTs, OTs, nurses	Frail older adults	Assesses balance while sitting, standing, and walking; independence for transfers; maximal distance patient can walk; assistance needed while walking; rating criteria too complex to memorize
Johns Hopkins Highest Level of Mobility <sup>58</sup>	Multiple disciplines, including nurses, rehabilitation therapists, physicians	Hospital	Assesses lying in bed, movement in bed, sitting, transferring to a chair, standing, walking $\geq 10$ steps, walking $\geq 25$ feet, and walking $>250$ feet; nurses record mobility over course of their shifts
Minimum Data Set 3.0 version 1.14, Section G <sup>59</sup>	PTs, OTs, nurses	Skilled nursing facility	Assesses level of independence in bed mobility, transferring, walking in room, walking in corridor, locomotion on and off unit; not developed for acute care
Minimum Data Set 3.0 version 1.14, Section GG <sup>60</sup>	PTs, OTs, nurses	Post-acute-care settings	Assesses level of independence in sitting to lying, lying to sitting, sitting to standing, transferring, walking 50 feet, walking 150 feet, self-propelling in a wheelchair; will replace Section G; not developed for acute care

## The Case for Mobility Assessment in Hospitalized Older Adults: American Geriatrics Society White Paper Executive Summary

Heidi L. Wald MD, MSPH, Ravishankar Ramaswamy MD, MS, AGSF, Michael H. Perskin MD, Lloyd Roberts MD, MHA, Michael Bogaisky MD, MPH, Winnie Suen MD, MSc, AGSF, Anna Mikhailovich BA, for the Quality and Performance Measurement Committee of the American Geriatrics Society

First published: 01 October 2018 | <https://doi.org/10.1111/jgs.15595> | Cited by: 1

# Toward a Common Language for Measuring Patient Mobility in the Hospital: Reliability and Construct Validity of Interprofessional Mobility Measures

Erik H Hoyer<sup>1</sup>, Daniel L Young<sup>2</sup>, Lisa M Klein<sup>3</sup>, Julie Kreif<sup>4</sup>, Kara Shumock<sup>4</sup>, Stephanie Hiser<sup>4</sup>, Michael Friedman<sup>5</sup>, Annette Lavezza<sup>4</sup>, Alan Jette<sup>6</sup>, Kitty S Chan<sup>7</sup>, Dale M Needham<sup>8</sup>



Original Research

# Interrater Reliability of the AM-PAC 6-Clicks Basic Mobility Short Form Between Nurses and Physical Therapists

Nicholas J. WILLIAMS<sup>1</sup>, Stephanie LIEBERT<sup>1</sup>, Yadi LI<sup>2 3 \*</sup>, Kim KALO<sup>4</sup>, Brittany LAPIN<sup>2 3 \*</sup>, Joshua K. JOHNSON<sup>5 6</sup> ✉



**Joshua Johnson** • 1st  
Assistant Professor & Clinical Research Lead | Duke U...  
1d • 🌐

Even while hospitalized, people still need to be up and moving. Our hospitals' systems should support that. Here is more evidence to support those systems: The AM-PAC(TM) 6-Clicks mobility short form shows reliability between nurses and physical therapists regardless of score timing, hospital, or unit type.

RESEARCH ARTICLE | [Full Access](#)

# Inter-rater reliability of activity measure for post-acute care '6-Clicks' inpatient mobility short form in the intensive care unit

Stephanie Hiser ✉, Amy Toonstra, Lisa A. Friedman, Elizabeth Colantuoni, Dale M. Needham

First published: 24 May 2020 | <https://doi.org/10.1002/pri.1849> | Citations: 9



Short Communication

# Inter-rater reliability of the Johns Hopkins Highest Level of Mobility Scale (JH-HLM) in the intensive care unit

Stephanie Hiser<sup>a b 1</sup>, Chi Ryang Chung<sup>b c d 1</sup>, Amy Toonstra<sup>e</sup>, Lisa Aronson Friedman<sup>b d</sup>, Elizabeth Colantuoni<sup>b f</sup>, Erik Hoyer<sup>a b g</sup>, Dale M. Needham<sup>a b d</sup> ✉

# Efficient EHR Design

## Build Request

After determining the best location in the Flowsheet (Daily Cares or otherwise), removing any redundant documentation, and obtaining copywrite licensing for AM-PAC and JH-HLM/JH-MGC, build as below.

### 1. Build Nursing Flowsheet entries for

- AM-PAC Mobility (6-clicks)
- JH-HLM Goal (calculated) (JH-MGC)
- JH-HLM Performed

#### AM-PAC Basic Mobility Inpatient

Turning in bed without bedrails		Total	1
Lying on back to sitting on edge of flat bed		A Lot	2
Moving bed to chair		A Little	3
Standing up from chair		None	4
Walk in room			
Climbs 3-5 stairs			
Mobility Inpatient Raw Score (calculated)			
JH-HLM Goal (calculated)			

#### Mobility

Highest Level of Mobility Performed (JH-HLM)-RN ...

- From Turning in bed to Climbs 3-5 stairs, the selection list is as shown, 1-4.  
- Raw Score is a sum total  
- Goal (Calc) see 2. below

- JH-HLM Goal Calculation Logic (1b.) – can create a row that calculates in the background and can be used in multiple places such as here



Where the most recent in the last 72 hours AM-PAC Mobility raw score...

- = 0, result a JH-HLM Goal (calculated) of a 1;
- = 6-7, result a JH-HLM Goal (calculated) of a 2;
- = 8-9, result a JH-HLM Goal (calculated) of a 3;
- = 10-15, result a JH-HLM Goal (calculated) of a 4;
- .....
- = 24, result a JH-HLM Goal (calculated) of an 8

### 3. Highest Level of Mobility Performed (JH-HLM)(1.c)

Highest Level of Mobility Performed (JH-HLM)-RN

- 1=Lying in bed (1)
- 2=Turn self in bed/Bed activity/Dependent transfer
- 3=Sit on edge of bed (3)
- 4=Transfer to chair (4)
- 5=Stand for 1 minute (5)
- 6=Walk 10+ steps (6)
- 7=Walk 25+ feet (7)
- 8=Walk 250+ feet (8)

### 4. Build Nursing Flowsheet for AM-PAC Activity (6-clicks)

#### AM-PAC Daily Activity Inpatient

Lower body dressing		Total	1
Bathing		A Lot	2
Toileting		A Little	3
Upper body dressing		None	4
Grooming			
Eating			
Daily Activity Inpatient Raw Score (calculated)			

- From Lower Body Dressing to Eating the selection list is as shown, 1-4.  
- Raw Score is a sum total

- Notate all Data Field IDs for Analytics Build and Multiple Views for Mobility/Activity – for example for the daily JH-MGC in Patient Lists

Row ID: 3043055600'

# Capable to Walk but Non-Ambulatory

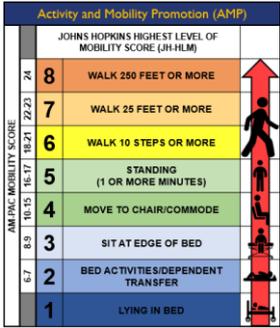
	<b>48-hr Fall Risk</b>	<b>Odds Ratio (95% CI)</b>
High mobility capability (AM-PAC 18-24)	High vs Mod	1.51 (1.29,1.77)
	High vs Low	4.31 (3.52,5.27)
	Mod vs Low	2.86 (2.58,3.16)

**Patients capable to ambulate categorized as Moderate to High Risk for falls were approximately **3 to 4 times more likely to be Non-Ambulatory** than those categorized as low risk for falls**

# Connecting Dots: Moderate/High Fall risk can SAFELY achieve mobility goals

JHFRAT category (fall risk)=Moderate

JH-HLM goal met		
Goal met	Frequency	Percent
No	3	3%



**A strategy that considers a patient’s individualized capability may be an effective strategy to help overcome barriers to mobility associated with Fall Risk designation**

No	7	7%
Yes	92	93%

# Connecting Dots: Safe Patient Handling

Activity and Mobility Promotion (AMP) Safe Patient Handling Equipment Recommendations for Daily Mobility Goal Achievement		
JOHNS HOPKINS HIGHEST LEVEL OF MOBILITY SCORE (JH-HLM)		SAFE PATIENT HANDLING EQUIPMENT RECOMMENDATIONS* <i>Always use clinical judgment based on individual patient's clinical presentation and needs</i>
24	<b>8</b> WALK 250 FEET OR MORE	CANES CRUTCHES WALKERS
22-23	<b>7</b> WALK 25 FEET OR MORE	
18-21	<b>6</b> WALK 10 STEPS OR MORE	SIT TO STAND LIFT DEVICE WITH AMBULATION OPTION
16-17	<b>5</b> STAND (1 OR MORE MINUTES)	STAND PIVOT DEVICES
10-15	<b>4</b> MOVE TO CHAIR/COMMODE	
8-9	<b>3</b> SIT AT EDGE OF BED	SITTING SUPPORT DEVICE
6-7	<b>2</b> BED ACTIVITIES/DEPENDENT TRANSFER	MECHANICAL TOTAL ASSIST LIFTS LATERAL TRANSFER DEVICES REPOSITIONING DEVICES
	<b>1</b> LAY IN BED	

\*Gait belt utilization per institutional practice and policy

[bit.ly/everybodymoves](http://bit.ly/everybodymoves)



The Johns Hopkins Daily Mobility Goal Calculator, created by Johns Hopkins Activity and Mobility Promotion ([bit.ly/HopkinsAMP](http://bit.ly/HopkinsAMP)), is licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License. To view a summary of license, please access <http://creativecommons.org/licenses/by-nc-nd/4.0/>



## AM-PAC Basic Mobility Inpatient

Turning in bed without bedrails	4
Lying on back to sitting on edge of flat bed	4
Moving bed to chair	3
Standing up from chair	3
Walk in room	3
Climbs 3-5 stairs	1
<b>Mobility Inpatient Raw Score (calculated)</b>	<b>18</b>

## Mobility Plan

JH-HLM Goal (calculated)	6
Safe Patient Handling Equip Recommend. (calc)	Assistive Device..
Contraindications for JH-SPHM	None

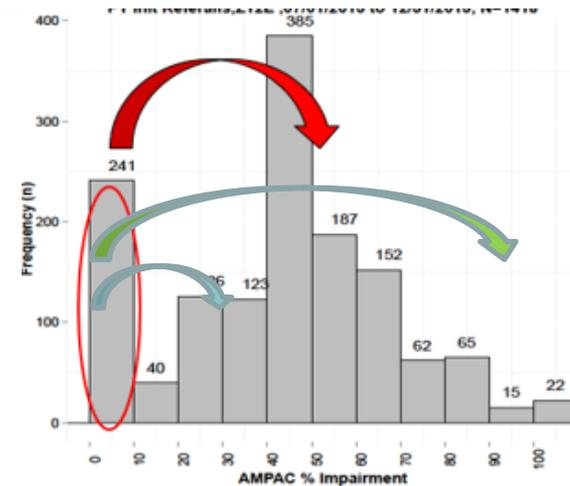
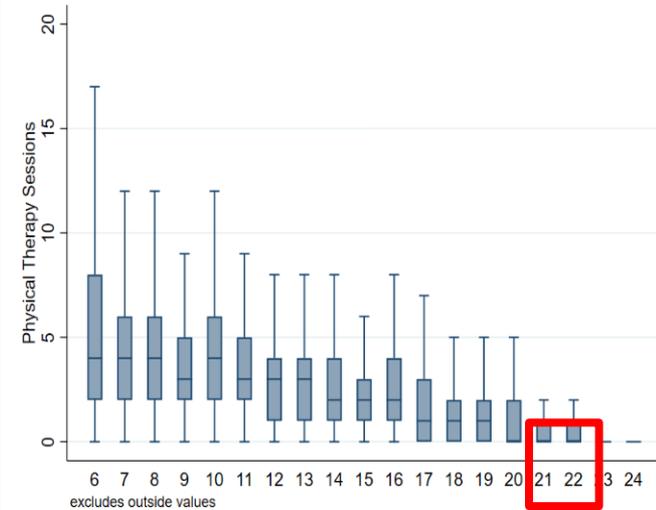
## Mobility Performed

Highest Level of Mobility Performed (JH-HLM)-RN ...	8
Level of Assistance	Minimal assist,...
Number of assistive personnel	1
Safe Patient Handling Equipment Used	Walker

Kumble S, et al. Development of a New Tool to Combine the Promotion of Patient Mobility With Safe Patient Handling Equipment: The Johns Hopkins Safe Patient Handling Mobility (JH-SPHM) Guide. Workplace Health & Safety. 2024;72(11):503-513.

# Using Nursing Assessments of Mobility and Activity to Prioritize Patients Most Likely to Need Rehabilitation Services

- Lower Value = 1 or less therapy visits per stay
- Using an AM-PAC cutoff value of  $\geq 23$  correctly identified **92.5% and 98.7% of lower-value physical therapy and occupational therapy visits**, respectively. (n=47696 patients, 47 acute units)
- Using a **cutoff value of  $\geq 23$  on the AM-PAC** would have **eliminated**:
  - 3482 (36%) of lower-value physical therapy consults
  - 4076 (34%) of lower-value occupational therapy consults.





# Step 3: Barrier Mitigation

ORIGINAL RESEARCH ARTICLE

## Barriers to Early Mobility of Hospitalized General Medicine Patients

Survey Development and Results

### ABSTRACT

Hoyer EH, Brotman DJ, Chan K, Needham DM: Barriers to early mobility of hospitalized general medicine patients: survey development and results. *Am J Phys Med Rehabil* 2014;00:00-00.

## Barriers



Attitude and beliefs



Time



Patient refusal



Lines, tubes, drains



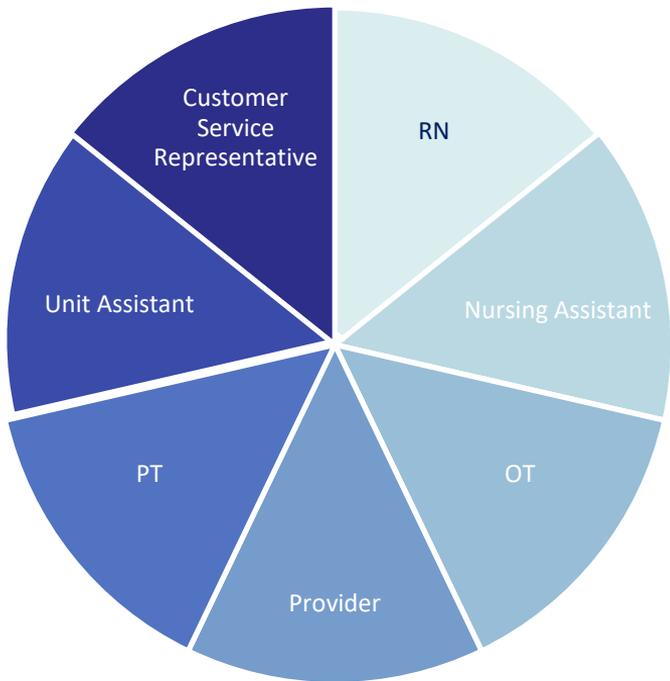
Equipment



Utilizing team



# Step 4: Interdisciplinary Roles





# Step 5: Education & Training

## Course Curriculum

### Module 1: Combating the Immobility Harm – An Introduction

The purpose of this module is to highlight the consequences of immobility harm in hospitalized patients, and introduce Activity and Mobility Promotion (JH-AMP).

### Module 2: Activity and Mobility Assessment – Using the AM-PAC Tool

The purpose of this module is to learn to assess, score and interpret the AM-PAC Inpatient Basic Mobility and Daily Activity Short Forms.

### Module 3: Scoring Mobility Performance – Using the JH-HLM Scale

The purpose of this module is to explain and demonstrate how to use the Johns Hopkins Highest Level of Mobility (JH-HLM) Scale.

### Module 4: Setting Goals with the Johns Hopkins Mobility Goal Calculator

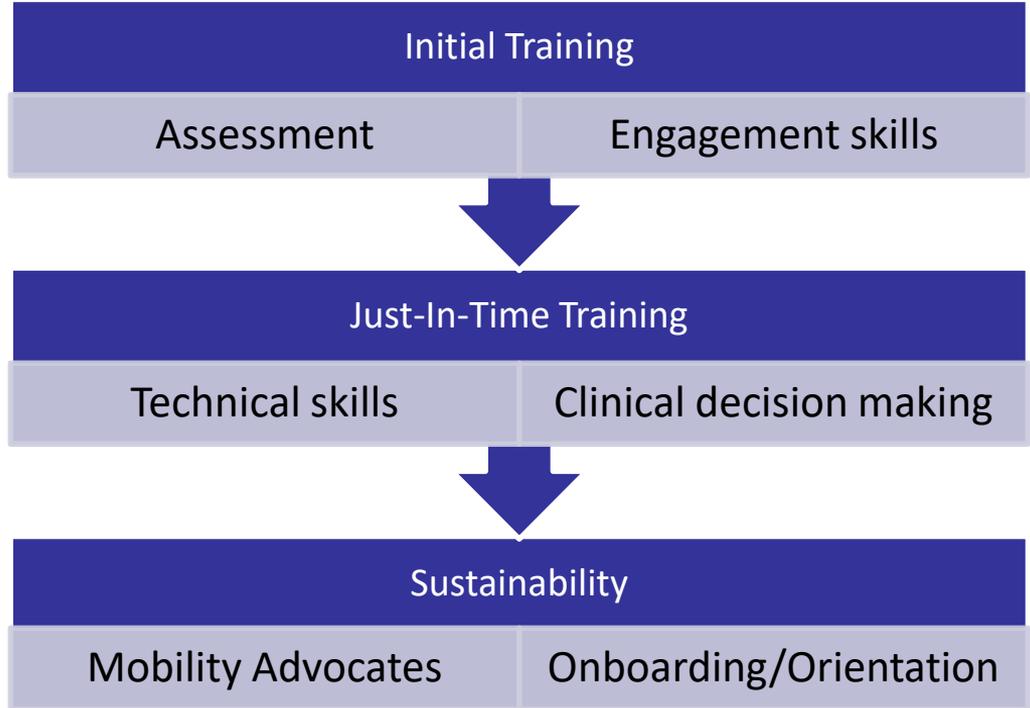
The purpose of this module is to explain and demonstrate how to use the Johns Hopkins Daily Mobility Goal Calculator to set mobility goals that maintain and improve patient mobility.

### Module 5: Moving Safely - Using the JH-SPHM Guide

The purpose of this module is to ensure staff are aware of the importance of progressing patient mobility while utilizing safe patient handling equipment to prevent staff injuries and harm to the patient.

### Module 6: Engaging Patients in Mobility - Overcoming Refusal

The purpose of this module is to demonstrate techniques that healthcare professionals can use to engage patients and families in activity and mobility.





# Signs on Walls

## PATIENT GOAL

Current JH-HLM: 8

Goal JH-HLM: 9

Date: 10/20 AM / PM



JOHNS HOPKINS HIGHEST LEVEL OF MOBILITY SCORE (JH-HLM)	
24	8 WALK 250 FEET OR MORE
22-23	7 WALK 25 FEET OR MORE
18-21	6 WALK 10 STEPS OR MORE
16-17	5 STAND (1 OR MORE MINUTES)
10-15	4 MOVE TO CHAIR/COMMUNE
8-9	3 SIT AT EDGE OF BED
6-7	2 BED ACTIVITIES/DEPENDENT TRANSFER
1	1 LAY IN BED

Goal met!



# Workflow: Huddle Board

- Communication at AM and PM change of shift huddles
- Mid-afternoon and after midnight huddle

UNIT: Meyer 8

Charge/Date: Colleen 10/29 AM Rounding Time: 0330/1530

CENSUS		ANNOUNCEMENTS	
ADMITTS	Ø	* Flu vaccine due 11/19 * open enrollment ends tomorrow 10/29!! * Joint Commission coming anytime ~ please review a fast fact! * Please MAKE sure RNs are coming to rounds everyday! * Trach patients must be on continuous pulse ox!	
DISCHARGES	12, 23, 24		
EARLY DISCHARGES	High Fall 5, 6, 7, 9, 14, 19, 21		
Immobility	8, 16, 25		
READINESS	STATUS	CONCERNS	FOLLOW-UP
SAFETY:		COVID (+) RN [redacted] DNR/DNI: RN [redacted] Visitor Restriction + Behavior Contract R [redacted]	
METHODS:		Keep rooms tidy Empty med box in room at discharge Place safety bands on patients Return oxygen tanks	
EQUIPMENT:		Reminder: Check pink tele adapters after DICs	
SUPPLIES:			
STAFF:		Ashley 7-7 Chantell & Stanica 7-3	

# EHR Patient Lists

Name:

Owner:

Available Columns 1 match for 'mobility goal'

X

Caption	Description
Nursing Mobility Goal (calculated)	Daily mobility goal based on the most recent AM-PAC taken by nursing in the last 72 hours (using the AM-PAC to JH-HLM crosswalk)

Patient Name	MRN	Admission Date	Nursing Mobility Goal (calculated)	Unit	New PT Order	PT
Ab[REDACTED]	[REDACTED]76	5/27/20	7	HCGH 2S JAS		—
Ab[REDACTED]	[REDACTED]10	5/22/20	8	JHH MEYER 7	—	—
Ag[REDACTED]	[REDACTED]34	5/21/20	2	HCGH 2P SURGERY	—	—
Al[REDACTED]	[REDACTED]68	2/10/20	2	JHH ZAYED 12W BRU	—	—

# Enhanced EHR Care Plans to Drive Physician Engagement

Patient Receiving Oncology Treatment.

**Immobility Risk Alert: Advance patient ambulation distance**

**Patient Goals**

**Print**

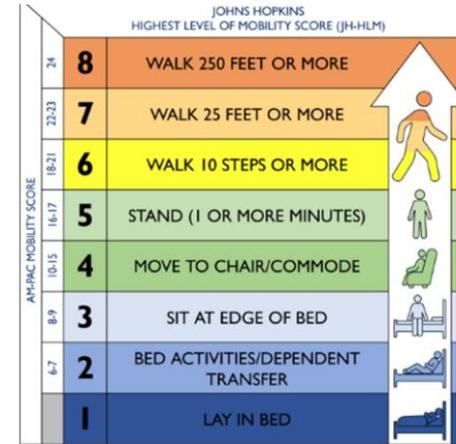
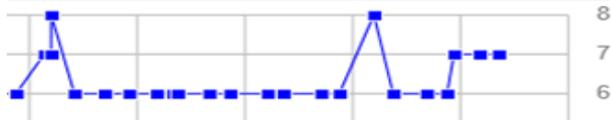
## Mobility recorded

Last documented AM-PAC score: 24  
 Current mobility goal: 8 : Walk 250+ feet  
 Met mobility goal?: No

### Support mobility progression by:

- **Review mobility goal/plan with patient and clinical team**
  - Assess and progress mobility
  - **Encourage the patient** to mobilize
  - Investigate and treat variance from plan
  - Ensure accessible mobility equipment
- Confirm **activity orders** and restrictions
- **Manage pain**
- **Consider early discharge of lines, tubes, and drains**
- Assess for **delirium/impaired cognition/mood**

01/17	01/18	01/19	01/20	01/21
0000	0000	0000	0000	0000





# Step 7: Data Feedback

Team Culture

- ✓ Incorporate in daily practice
- ✓ Common language
- ✓ Huddles, onboarding, workflow
- ✓ Patient centered

KPI 2:  
Goal Achievement

- ✓ Patient engagement
- ✓ Mobility goal audits
- ✓ Nursing workflow

KPI 1:  
Documentation Compliance

- ✓ Back to basics
- ✓ % JH-HLM and AM-PAC compliance
- ✓ Documentation audits



# KPI 1 – Documentation Compliance

## JH-HLM & AM-PAC Nursing Documentation Compliance

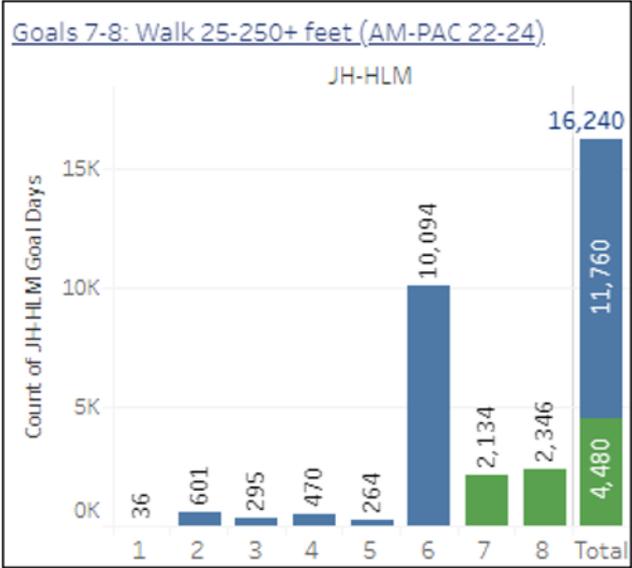
Legend: ■ Below 69.5% ■ Between 69.5% and 89.5% ■ Above 89.5%

Unit	JH-HLM			AM-PAC Mobility Daily		
	November 2024	December 2024	January 2025	November 2024	December 2024	January 2025
All Units Total	98.23%	97.98%	97.56%	99.63%	99.76%	99.61%
JHH MEYER 6	86.98%	82.35%	82.60%	98.97%	98.45%	93.85%
JHH MEYER 7	99.75%	99.80%	100.00%	99.01%	100.00%	99.16%
JHH MEYER 8	99.83%	99.84%	100.00%	99.85%	100.00%	100.00%
JHH MEYER 9	99.81%	100.00%	99.82%	99.84%	99.69%	100.00%
JHH NELSON 3	99.42%	99.82%	99.65%	99.51%	99.70%	99.61%
JHH NELSON 4	99.82%	100.00%	100.00%	99.49%	99.83%	100.00%
JHH NELSON 5	99.77%	100.00%	99.56%	100.00%	100.00%	100.00%
JHH NELSON 6	99.12%	98.44%	98.78%	99.68%	99.84%	99.78%
JHH NELSON 7	97.24%	97.35%	94.63%	99.52%	99.69%	99.59%
JHH NELSON 8	99.46%	99.33%	99.49%	100.00%	99.85%	99.79%

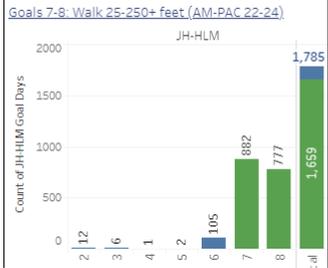


# KPI 2 – \*\*\*Goal Achievement\*\*\*

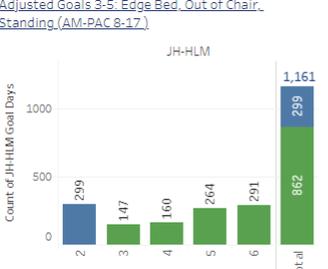
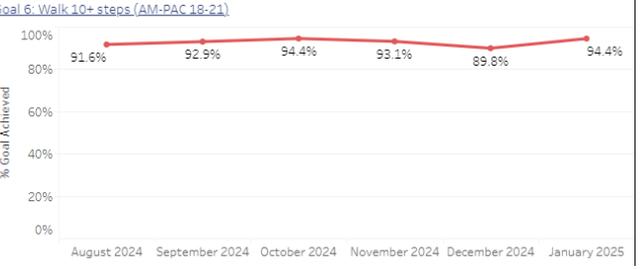
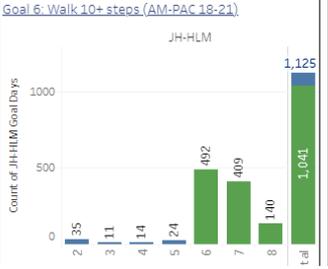
## JH-HLM Daily Goal Achieved



### JH-HLM Daily Goal Achieved



### % JH-HLM Daily Goal Achievement Trend





# Step 8: Promotion & Awareness

Keep the message fresh and ever present

## #everyBODYmoves MOBILITY-A-THON



NOVEMBER 12 – 14, 2024

JOIN THE CELEBRATION



## Download Our #everyBODYmoves Materials

Available in English and Spanish



Visit [hopkinsAMP.org](https://hopkinsAMP.org) to download



# What does success look like?

Every patient every day has a calculated mobility goal as part their care plan and integrated as part of every handoff.

1. **Adopt a systematic interdisciplinary functional assessment strategy.**
2. Establish immobility and fund as a patient centered safety-quality priority no different than VTE, CLABSI or medication reconciliation.
3. Integrate with key strategic initiatives (e.g. surgical pathways, LOS, etc.)

And most important:

**Measure, measure, measure...feedback data, data, data**

SAVE THE DATE

Johns Hopkins 8<sup>th</sup> Annual  
Hospital Activity and  
Mobility Conference

VIRTUAL – APRIL 8 & 9

IN-PERSON – MAY 12 & 13



[hopkinsAMP.org](https://hopkinsAMP.org)

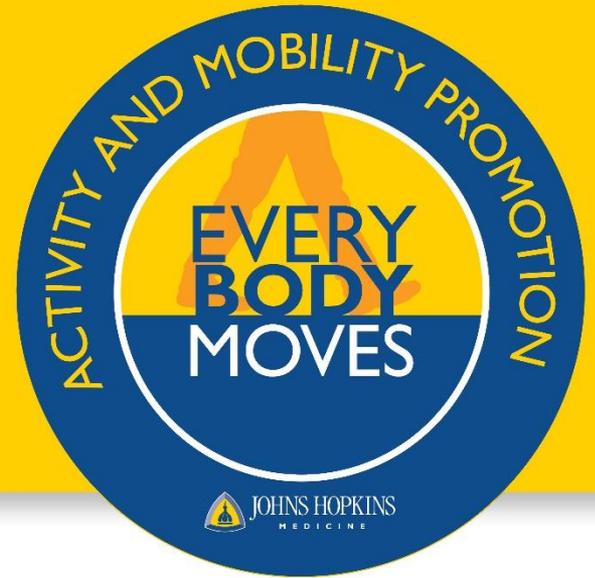


RIGHT  
PATIENT

RIGHT  
MOBILITY GOAL

RIGHT  
PLAN

# Johns Hopkins Activity and Mobility Promotion (JH-AMP)



[HopkinsAMP.org](https://HopkinsAMP.org)