

# A Standardized Mobility Protocol for Hospitalized General Medicine Adult Patients

Rebecca Jenetopulos, BSN, RN



JOHNS HOPKINS  
SCHOOL of NURSING

## Background

- 1/3 of hospitalized adults on general medicine units are discharged below their baseline function<sup>3</sup>
- Low levels of physical activity while hospitalized is associated with increased fall risk, decline in functional autonomy, pneumonia, pressure ulcers, increased length of stay, venous thromboembolisms, delirium, and an increased need for a facility at time of discharge<sup>5</sup>
- Inpatient mobilization is one of the most omitted elements of inpatient nursing care, missed 76.1-88.7% of the time<sup>4</sup>
- 86% of patients that engage in low levels of activity during hospitalization experience a decline in their activities of daily living (ADLs)<sup>6</sup>
- Standardized mobility protocols help increase patient mobility while hospitalized and may improve patient outcomes<sup>1</sup>

## Purpose & Aims

- **Purpose:** To improve early mobility of hospitalized general medicine adult patients, through the implementation of a standardized mobility protocol.
- **Aim:** To increase the percentage of patient days that hospitalized adult general medicine patients meet (or exceed) their assigned daily mobility goal during admission, over a 12-week time period.

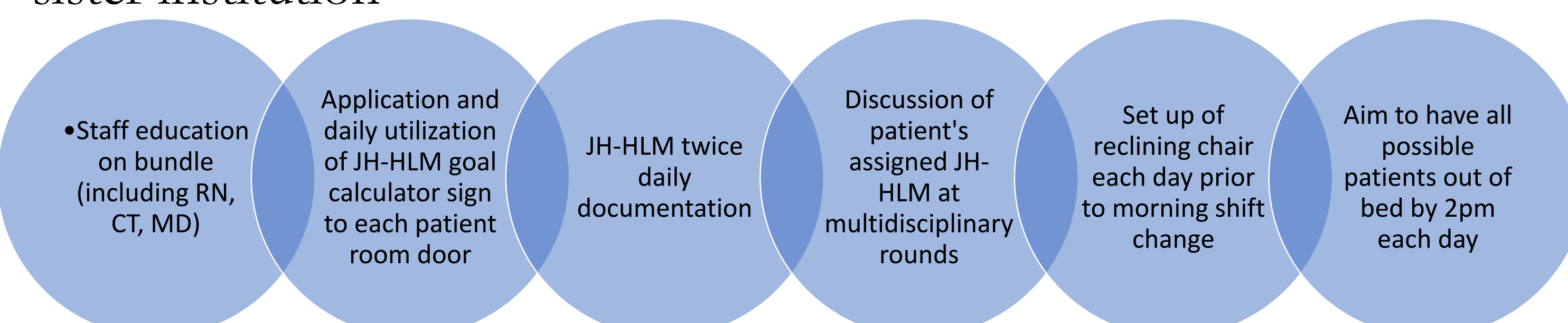
## Methods

**Design:** Pre- / Post- Intervention Design

**Setting:** A 23 bed adult general medicine unit at a large urban academic medical center in the mid- Atlantic United States

**Sample:** 8,134 days hospitalized adult general medicine patients could meet their assigned mobility goal, determined by the Johns Hopkins Daily Mobility Goal Calculator

**Intervention:** 6- point mobility bundle previously implemented at a sister institution



**Data Collection:** De-identified aggregate data provided by the institution over the 12-weeks of the intervention

## Results

**Table 1:** Comparison of percentage of patient days mobility goal was met, by mobility category P- value compares each percentage to the baseline month (February).

| Month     | Mobility 1 | P-Value Mobility1 | Mobility 2 | P-Value Mobility 2 | Mobility 3 | P-Value Mobility 3 |
|-----------|------------|-------------------|------------|--------------------|------------|--------------------|
| February  | 25.20%     |                   | 63.20%     |                    | 52.60%     |                    |
| September | 47.50%     | 8.23E-27          | 73%        | 1.6207E-03         | 63.30%     | 1.6590E-04         |
| October   | 44%        | 1.4457E-19        | 71.90%     | 4.1194E-03         | 53.20%     | 4.21E-01           |
| November  | 43.30%     | 4.19E-19          | 68.10%     | 4.10E-03           | 53.20%     | 4.21E-01           |
| December  | 47.60%     | 1.33E-18          | 62.40%     | 3.81E-03           | 62.20%     | 4.19E-01           |

Mobility 1 = JH-HLM goal 7-8; Mobility 2 = JH-HLM goal 6; Mobility 3 = JH- HLM goal 3-5

**Table 2:** Percentage of days patients met their mobility goal per month



Mobility 1 = JH-HLM goal 7-8; Mobility 2 = JH-HLM goal 6; Mobility 3 = JH- HLM goal 3-5

## Strengths

- The utilization of the Johns Hopkins daily mobility goal calculator at the target institution prior to implementation of this project
- Organizational support from upper management
- Implementation at the sister institution

## Limitations

- High nurse turnover → increased number of new nurses
- Poor staffing due to COVID-19 pandemic
- Inability for patients to ambulate in halls due to COVID- 19

## Conclusion

- Standardized mobility protocols are helpful in improving patient mobilization while hospitalized
- The implementation of this 6-point mobility bundle helped improve the percentage of patients that met their daily mobility goal on the adult general medicine unit

## Acknowledgements

Project Faculty Advisor: Dr. Nancy G. Russell, DNP, MSN, APRN, FNP- BC, CNE  
 Organizational Mentor: Eleni Flanagan, DNP, BMA, RN- BC  
 Organizational Mentor: Regina Hendrix, MSN, MPA, NPD- BC  
 Nelson 8 unit staff

## Discussion

- Re- education, on-going discussions, and an increased focus on patient mobility was pivotal in increasing the percentage of patients achieving their mobility goal while hospitalized
- Statistical and clinical significance were established.
- Except for December 2021 JH-HLM goal 3-5
- Findings from this quality improvement project were similar to those from the study conducted at the sister institution.
- Findings are consistent with the evidence – utilizing standardized multidisciplinary early mobility protocols improve patient outcomes and offer greater long- term success<sup>1</sup>

## References

- Bergbower, E., Herbst, C., Cheng, N., Aversano, A., Pasqualini, K., Hartline, C., Hamby- Finkelstein, D., Brewer, C., Benko, S., & Fuscaldo, J. (2020). A novel early mobility bundle improves length of stay and rates of readmission among hospitalized general medicine patients. *Journal of Community Hospital Internal Medicine Perspectives*, 10(5), 419-425. <https://doi-org.proxy1.library.jhu.edu/10.1080/20009666.2020.1801373>
- Dermody, G., & Kovach, C. (2017). Nurses' experience with and perception of barriers to promoting mobility in hospitalized older adults: A descriptive study. *Journal of Gerontological Nursing*, 43 (11), 22-29. DOI:10.3928/00989134-20170518-01
- Hoyer, E., Brotman, D., Chan, K., & Needham, D. (2015). Barriers to early mobility of hospitalized general medicine patients: survey development and results. *American Journal of Physical Medicine and Rehabilitation*, 94 (4), 304-312. doi:10.1097/PHM.0000000000000185
- Kalisch, B., Lee, S., & Dabney. (2013). Outcomes of inpatient mobilization: a literature review. *Journal of Clinical Nursing*, 23 (11-12), 1486- 1501. [https:// doi: 10.1111/jocn.12315](https://doi.org/10.1111/jocn.12315)
- Surkan, M., & Gibson, W. (2018). Interventions to mobilize elderly patients and reduce length of hospital stay. *Canadian Journal of Cardiology*, 34(7), 881- 888.
- Zisberg, A., et al. (2011). Low mobility during hospitalization and functional decline in older adult. *Journal of the American Geriatrics Society*, 59(2), 266- 273. <https://doi-org.proxy1.library.jhu.edu/10.1111/j.1532-5415.2010.03276>.