



# Implementation of a Modified Early Screening for Discharge Planning Tool to Optimize Case Manager Efficiency and Impact Length of Stay

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# Background

- The post-acute landscape is facing challenges from staffing shortages and a decline in post-acute bed availability (American Healthcare Association/ National Center for Assisted Living [AHA/NCAL], n.d.; American Hospital Association, 2022; Schoenberg, 2020).
- This decreased capacity results in longer lengths of stay (LOS) with case managers (CMs) overseeing increasingly complex discharge plans (Chen et al., 2021; Chovanec & Howard, 2021).
- One effective strategy to improve discharge efficiency and reduce LOS is the use of standardized discharge planning decision tools (Holland et al., 2017; Moosa & Khoja, 2022).
- Discharge planning tools improve discharge efficiency and reduce LOS by supporting a smooth transition for patients from acute care to other facilities or to home with services (Chen et al., 2021; Holland et al., 2017; Moosa & Khoja, 2022).

# Setting

- 171-bed Magnet® designated community teaching hospital
- Member of an integrated health care system in the Northeast U.S.

# Purpose

 To design and implement a modified early screening for discharge planning (ESDP) tool, to support prioritizing patients with complex discharge needs, with the primary outcome of decreasing (LOS).

# Project Design

- Two 36 bed medical-surgical units selected as intervention and control units
- Implemented over a 90-day intervention period (September 1, 2021- November 30, 2021)
- Included patients admitted Monday through Friday
- Met the healthcare system's IRB criteria as a quality improvement project

### **Modified ESDP Tool**

- ESDP is based on four criteria: self-rated walking limitation, age, prior living status, and the Rankin Disability Scale (Holland et al., 2017);
- High ESDP score ≥10 indicates patients in need of discharge planning
- A decision was made to substitute the Modified Rankin Disability Scale with the BWFH Mobility Level of Assist (MLA) scale present within the institution's version of Epic

## Results

### Demographics

- Total patient population = 718 (Intervention = 376; Control = 342)
- No significant demographic differences between the two cohorts for age, gender, ethnicity, race, or primary language spoken

# Objective 1: Determine ability of the modified ESDP to correctly identify patients with discharge planning needs

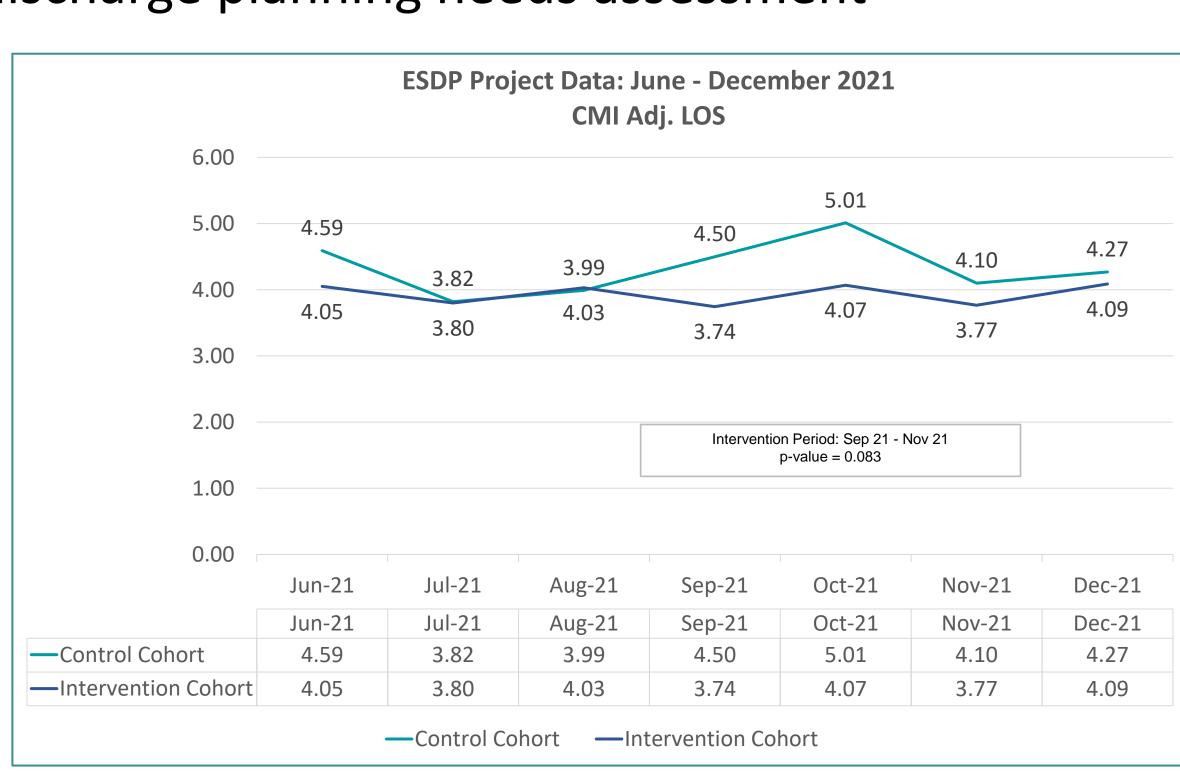
• The modified ESDP performed comparably to the standard ESDP in identifying low-risk patients, not requiring CM services

### Objective 2: Improve resource efficiency of case management services

• On the intervention unit, 53.5% (n=201) of patients had an ESDP score <10 and were screened out of requiring a full CM discharge planning needs assessment

### **Objective 3: Decrease length of stay**

 There was a decreased LOS on the intervention unit, unadjusted and adjusted for case mix index (CMI)



# Implications for Case Management Practice

- CMs were able to adapt their workflow to review the ESDP scores to prioritize patients for assessment.
- Concerns about patients being "missed," were addressed through the audit process with validation that daily interdisciplinary rounds were successful in ensuring that patients with evolving conditions were consistently identified in follow up.
- Organizations considering implementation of a modified ESDP should identify specific patients who may benefit from CM assessment regardless of a low ESDP score, due to standardized care pathways.

# Next Steps

- The Modified ESDP tool is in use on all medical-surgical units in the organization
- The plan is to implement the tool within the integrated healthcare system

### Conclusion

• The implementation of a modified ESDP is a successful, valid, and costeffective strategy that can identify patients with complex discharge planning needs early in the hospitalization.

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### **Title**

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### Author(s)

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### **Unit/Practice Area**

Adult Medical-Surgical Units

### **Background and Significance**

The post-acute landscape is facing challenges from staffing shortages and a decline in post-acute bed availability. This results in longer lengths of stay (LOS) with case managers (CMs) overseeing increasingly complex discharge plans (Chen et al., 2021; Chovanec & Howard, 2021). One effective strategy to improve discharge efficiency and reduce LOS is the use of standardized discharge planning decision tools (Holland et al., 2017; Moosa & Khoja, 2022).

### Method

This project involved designing and implementing a modified early screening for discharge planning (ESDP) tool, to support prioritizing patients with complex discharge needs, with the primary outcome to decrease (LOS). The modified ESDP score included self-rated walking limitation, age, prior living status and mobility level of assist. A modified ESDP score  $\geq$ 10 indicated patients who would benefit from ongoing CM support; patients with an ESDP <10 score were unlikely to have discharge planning needs.

### Results

The project included 718 patients (intervention cohort =376; control cohort = 342). The modified ESDP performed comparably to the standard ESDP (14% discrepancy, with all

patients appropriately identified for CM services). Implementation of the modified ESDP led to 53.5% of patients screening out of CM services, thereby increasing the time CMs were able to spend on complex discharge planning and was associated with a trend in LOS reduction (0.55 days).

### **Conclusion and Nursing Impact**

Findings demonstrate that implementation of a modified ESDP can improve CM efficiency and hospital throughput. Given the capacity challenges in the acute and post-acute settings, it is essential to implement CM workflow strategies to optimize the effectiveness of critical resources, while ensuring patients' complex discharge needs are met.

### References

- Chen, H., Hara, Y., Horita, N., Saigusa, Y., & Kaneko, T. (2021). An early screening tool for discharge planning shortened length of hospital stay for elderly patients with community-acquired pneumonia. *Clinical Interventions in Aging*, *16*, 443–450. https://doi.org/10.2147/CIA.S296390
- Chovanec, K., & Howard, N. R. (2021). Acute care management during a pandemic. *Professional Case Management*, 26(1), 11–18. https://doi.org/10.1097/NCM.0000000000000467
- Holland, D. E., Brandt, C., Targonski, P. V., & Bowles, K. H. (2017). Validating performance of a hospital discharge planning decision tool in community hospitals. (2017). *Professional Case Management*, 22(5), E1–E2. <a href="https://doi.org/10.1097/NCM.0000000000000246">https://doi.org/10.1097/NCM.00000000000000000246</a>
- Moosa, L., & Khoja, A. (2022). Impact of a standardized discharge planning process on patients' length of stay. *MEDSURG Nursing, 31*(5), 301-302, 322. <a href="https://www.thefreelibrary.com/Impact+of+a+Standardized+Discharge+Planning+Process+on+Patients%27...-a0725083464">https://www.thefreelibrary.com/Impact+of+a+Standardized+Discharge+Planning+Process+on+Patients%27...-a0725083464</a>