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Impacts of a Rehab Aide Mobility Program on Employee/Patient Satisfaction and Hospital Patient LOS

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PURPOSE

National Healthcare Expenditure has been growing each year in the United States, reaching $4.1 trillion in 2020[1] with hospital expenditure contributing $1.2 trillion of the total.[1] The average length of stay (LOS) is 4.6 days and costs $11,700 per stay.[2] LOS and acquired hospital disability are associated with low physical activity while admitted.[3] Shorter LOS can lead to greater patient satisfaction and increased likelihood to recommend the hospital to others.[4] Shortened LOS also has a positive impact on hospitals financially. In many hospitals, the ratio of observed LOS compared to expected LOS time is used to determine effectiveness and quality of care provided. With this ratio at 1:1, the expected LOS for a given ICD-10 diagnosis code matches exactly to the observed LOS.

Rehab Mobility Program (RMP) assigns rehabilitation aides to specific units which have been identified as having an observed LOS/Expected LOS ratio of greater than 1.0 and which have been identified by hospital leadership as having opportunity for improvement. Aides report to the Rehabilitation Department and collaborate closely with the nursing teams on the assigned units. The program provides up to 3 mobility sessions per day to patients who meet specific criteria. This project analyzes objective and subjective data regarding patient LOS, staff perceptions, and patient satisfaction. The purpose of this study is to understand the perspectives of patients, nurses, rehab team members, and caregivers who have interacted with Rehab Aides in the RMP.

METHODS AND SUBJECTS

This study was reviewed by UNC's IRB and deemed exempt. This project analyzes objective and subjective data at a major teaching hospital including patient LOS, staff perceptions, and patient satisfaction regarding the RMP. The purpose of this study is to understand the perspectives of patients, nurses, rehab team members, and caregivers who have interacted with Aides in the Rehab Mobility Program through surveys collected by authors.

Surveys were collected both via email and in-person in the acute care hospital. Units where data collection occurred included Upper and Lower Gastrointestinal Units, Cardiothoracic Step Down Unit, and General Surgery. QR codes and emails were utilized to distribute the survey information to nurses and rehab staff members. Surveys for patients were administered via interviews on 3 separate days in the patient's room. The interviewer recorded patient responses verbatim. Caregivers and family members, if present at the time of the patient interview, were asked to participate in the survey. Caregivers and family were asked to respond to the patient survey and answer the questions from their personal perspective. Inclusion criteria for patient subjects included: those selected and actively participating in the rehab mobility aide program, participated in at least 2 visits from the rehab mobility aide, English speaking, and 18 years of age or older. Exclusion criteria include: non-English speaking subjects, subjects who had worked less than 2 times with rehab mobility aides, those not selected for participation in the rehab mobility aide program, subjects younger than 18 years of age, subjects with documentation of altered mental status.

Data was collected and synthesized by authors with utilization of Qualtrics survey software and excel to provide descriptive statistics. The key intervention that was assessed was the non-skilled ambulation and physical activity that was facilitated by Rehab Aides, working within the Rehab Mobility Aide Program.

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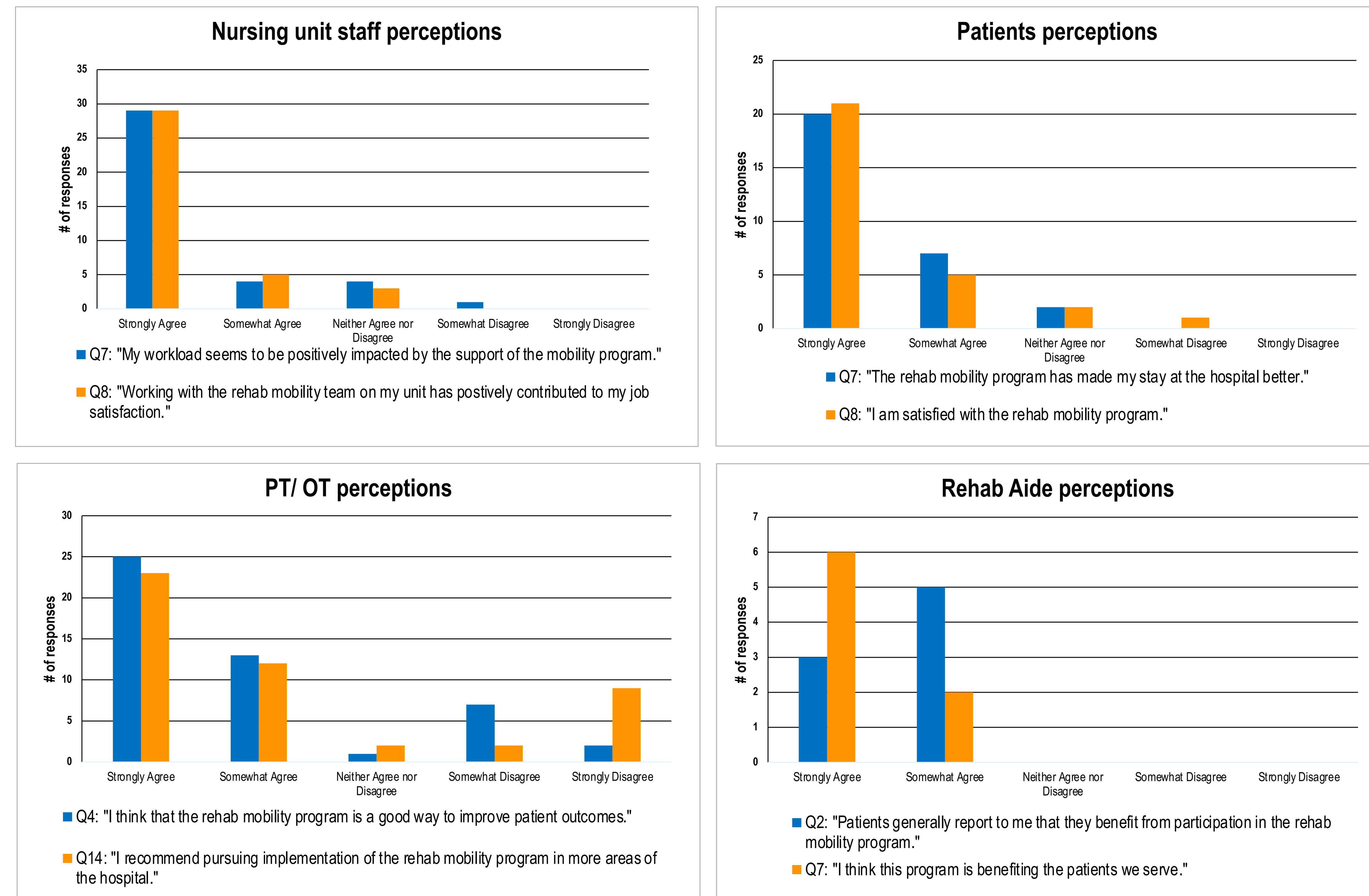
RESULTS

Staff and Patient Perceptions on the Rehab Mobility Program



Free Response Themes from Patient Survey

Rehab Mobility Program Units vs. Non-Rehab Mobility Program Units*

	Units **Without** Rehab Aides (n=280	Units **With** Rehab Aides (n=600)	Change
Avg. Observed LOS	9.18	7.96	**1.22 ↓**
Avg. Observed/ Expected LOS	1.34	1.15	**0.19 ↓**
Average CMI*	2.18	2.31	**0.13 ↑**

Case Mix Index (CMI) is correlated to the level of complexity and resources needed for a caseload.[5] Higher CMI's equate to more complex, resource intensive caseloads.[5]

Representative Comments:

From Nurses:
"It allows our post-op patients to ambulate more frequently and on a more routine basis."

"… There are several days where we are so busy it's hard to get patients up but thanks to the mobility program that has been less of an issue."

From PT/ OT's:
"Only allowing rehab aides to work alongside licensed physical therapists and not independently."

"A better screening process for identifying patients that are appropriate for the rehab mobility program."

From Patients:
"Being able to walk, but have someone walk with me. We have formed a personal bond… I don't feel like just a number."

"There is not enough nursing staff to do walking, so if I did not have them I wouldn't be able to get up and walk like I want to."

CONCLUSIONS

Of 38 nurses, 86% agree that the RMP positively impacts their workload and of 37 nurses, 91% agree the program positively impacted their job satisfaction on their units. 93% of patients and caregivers (n=29) perceive the RMP made their stay at the hospital better and 89% (n=29) agree they have had satisfaction with the services provided. When asked about the reasons patients like the RMP, the most common themes include: Getting up and Moving, Motivation, Kindness, and Personal Connection. All RMP rehab aides, 100% (n=8) agree, either strongly or somewhat, the RMP benefits patients and patients report benefitting from participation in the program. Physical and Occupational Therapists report more varied opinions on the utilization of the RMP. Of 48 PT's and OT's, 27% do not agree the RMP should be implemented in more areas of the hospital, and 20% do not agree that the RMP helps improve patient outcomes.

Objective data gathered from July, 2021 to November of 2022 found units that implemented the RMP saw a 0.30 reduction in average LOS and 0.09 lower of a LOS ratio when compared to units without support. Interestingly, despite the decrease in LOS, the patients on the supported units demonstrated a higher Case Mix Index indicating higher level of complexity and resource needs.[5]

CLINICAL RELEVANCE

A RMP can have a positive impact on the perceptions of nursing staff, patients, and the rehab aides that deliver the services. This supports that promoting mobility early, and often, in the acute care setting can improve patients perceived stay in the hospital. Nursing job satisfaction and perceived workload are also improved. Preliminary objective results suggest early and frequent mobility provided by rehab aides may also have a positive impact on patients average LOS and observed/ expected LOS ratio despite developing a greater level of acuity. Limitations of this study include: convenience sampling techniques, possible patient and therapist lack of clarity regarding the role of rehab aides in the RMP when answering survey questions, and no comparison of patient and nurse perceptions in other area of the hospital where the RMP was not implemented. Further research should determine optimal methods for implementation of rehab aide programs throughout the acute setting. Additional study should also explore the impacts of early mobility on LOS for specific acute patient populations.

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