

## Abstract

**Objectives:** Racial and ethnic minorities with socioeconomic disadvantages are vulnerable to 30-day hospital readmissions. A 16-week quality improvement project aimed to decrease readmissions of the vulnerable patient populations through tailored discharge planning. The project evaluated the effectiveness of using a 25-item checklist to increase patients' and caregivers' health knowledge, skills, and willingness for self-care and decrease readmissions. The project was conducted at a teaching hospital's General Medicine Unit.

**Methods:** The project used two methods: A casual comparative design compared readmissions of the before-intervention group (May 1-August 31, 2021) and the after-intervention groups (August 1-November 30, 2021). A pre-and post-intervention design evaluated the effectiveness of a 25-item checklist by analyzing the differences of Patient Activation Measure(PAM) pre-and post-survey scores and levels in the after-intervention group.

**Results:** Of 58 patients who did not receive the intervention, 11 readmissions occurred compared to one readmission out of 30 intervention patients. The readmission rate was decreased from 19% to 4% during the 16-week project (11(19%) vs. 1(4%),  $p=.038$ ). After receiving the intervention, patients' Patient Activation Measure scores were increased by 8.55 ( $t(22) = 2.67$ ,  $p < .014$ ), three patients had a lower post-survey level while 12 patients obtained a higher post-survey level ( $p=.01$ ). The increase in scores and levels supported that the intervention effectively improved patients' self-management knowledge, skill, and willingness for self-care.

**Conclusion:** The project increased patients' and caregivers' self-management knowledge and skills, reducing readmissions in succession. High patient activation measure levels were found to affect patients better maintain other health issues such as blood pressures and lipid levels.

Keywords: health disparity, readmissions, tailored discharge planning, patient engagement, self-care/management, patient activation