

# INCREASING REFERRAL TO HOSPITAL-INITIATED REMOTE PATIENT MONITORING: A QUALITY IMPROVEMENT PROJECT

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## Introduction

- Hospital readmissions are associated with costs to the
  - Health system
  - Economy
  - Patient and their family.
- Readmission is highest among those with chronic conditions, especially those with cardiovascular disease, chronic respiratory disease, and diabetes.
- Remote Patient Monitoring (RPM) is an effective intervention for patients with chronic conditions that benefits overall health and reduces hospital readmissions.
- The hospital conducted an internal review and concluded that they were underutilizing their RPM program.

## Purpose & Aims

**Purpose:** To determine whether providing education would increase the knowledge and sense of self-efficacy among members of the interdisciplinary care coordination services and lead to increased referrals to RPM.

**Aim 1:** Increase knowledge of RPM.

**Aim 2:** Increase self-efficacy in ordering RPM.

**Aim 3:** Increase the rate of referrals for RPM.

## Methods:

**Design:** Pre-post-intervention design

**Setting:** Campus of a 420-bed teaching hospital in the Mid-Atlantic region of the United States of America

**Participants:** Members of the interdisciplinary care coordination services who worked with patients with diagnoses of HF, COPD, and/or DM

## Measures

**Knowledge:** 5 True/False questions assessed knowledge of RPM for a total score of 0-5.

**Self-Efficacy:** 5 statements assessed self-efficacy of referring patients for RPM. Each statement was rated on a scale from 1 = strongly disagree to 5 = strongly agree for a total score of 5 to 25.

Pre- and post-surveys were identical, except that the pre-survey was followed by a 6-minute educational video.

**Referral Rate:** Dashboard report comparison data

## Intervention

This QI project was planned to be delivered as an educational intervention at staff meetings. Due to the COVID pandemic, the educational intervention was changed to a 6-minute video, delivered via the internet.

[www.youtube.com/watch?v=Mkusa9Mc0S0](https://www.youtube.com/watch?v=Mkusa9Mc0S0)

## Sample

11 participants responded to the pretest.

Of those 11, 4 completed the posttest and were included in our sample. N = 4

Because our sample was too small, we decided not to pursue Aim 3.

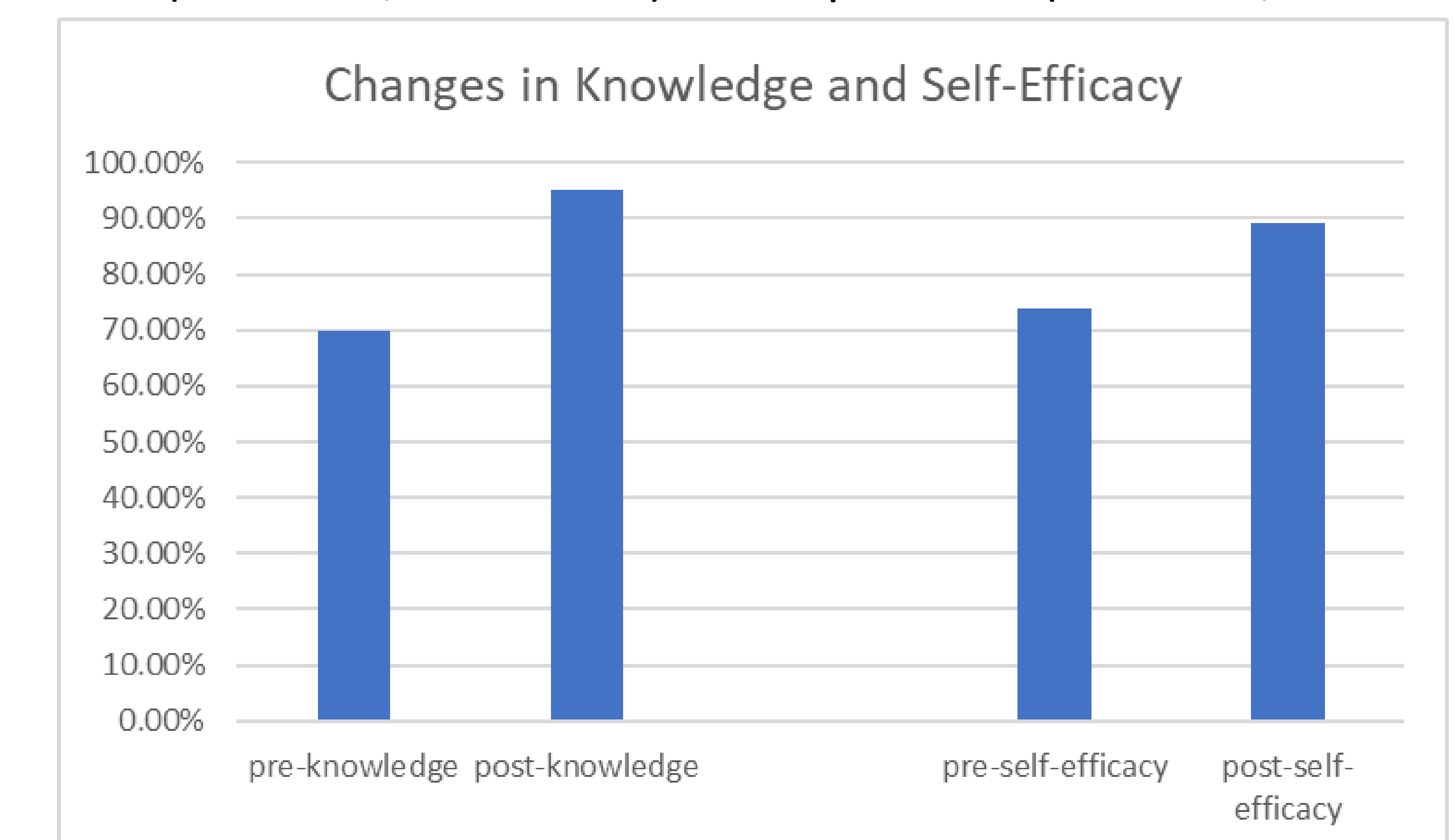
## Statistical Analysis

SPSS 25 (IBM) was used to evaluate pre-post-intervention changes in Aim 1 & 2. The intent was to use paired t-tests to analyze the results. Because of the small sample, descriptive statistics were used.

## Results

**Aim 1:** The mean **knowledge** score increased by 1.25 points (or 25%) from the pre-test ( $\bar{x}$  = 3.50, S.D. = 0.57) to the post-test ( $\bar{x}$  = 4.75, S.D. = 0.50).

**Aim 2:** The mean **self-efficacy** score increased by an average of 3.75 points (or 15%) from the pre-test ( $\bar{x}$  = 18.50, S.D. = 2.08) to the post-test ( $\bar{x}$  = 22.25, S.D. = 1.71).



## Conclusion

Despite unexpected limitations brought upon by the COVID-19 pandemic, two of the three aims were achieved. The educational intervention of a 6-minute informative video increased learner knowledge and self-efficacy regarding making referrals to RPM. The project required flexibility to help the participants complete the survey and receive the educational intervention. Despite best efforts to recruit participants, staff felt overwhelmed by demands on their time during the project implementation and the sample size remained small. Because of the small sample, no conclusions could be drawn regarding whether this increased the rate of patients with HF, COPD and/or DM who were referred to RPM post-hospitalization by interdisciplinary care coordination services.

It is important to note that during the COVID-19 pandemic, a time when we have felt a loss of control and influence over the things that happen around us, especially in a hospital setting, participants' self-efficacy scores increased after watching a brief video. This speaks to the effectiveness of this educational intervention.