



Enhancing Patient Portal Enrollment for Improved Quality of Post-Discharge Care at an Academic Medical Center

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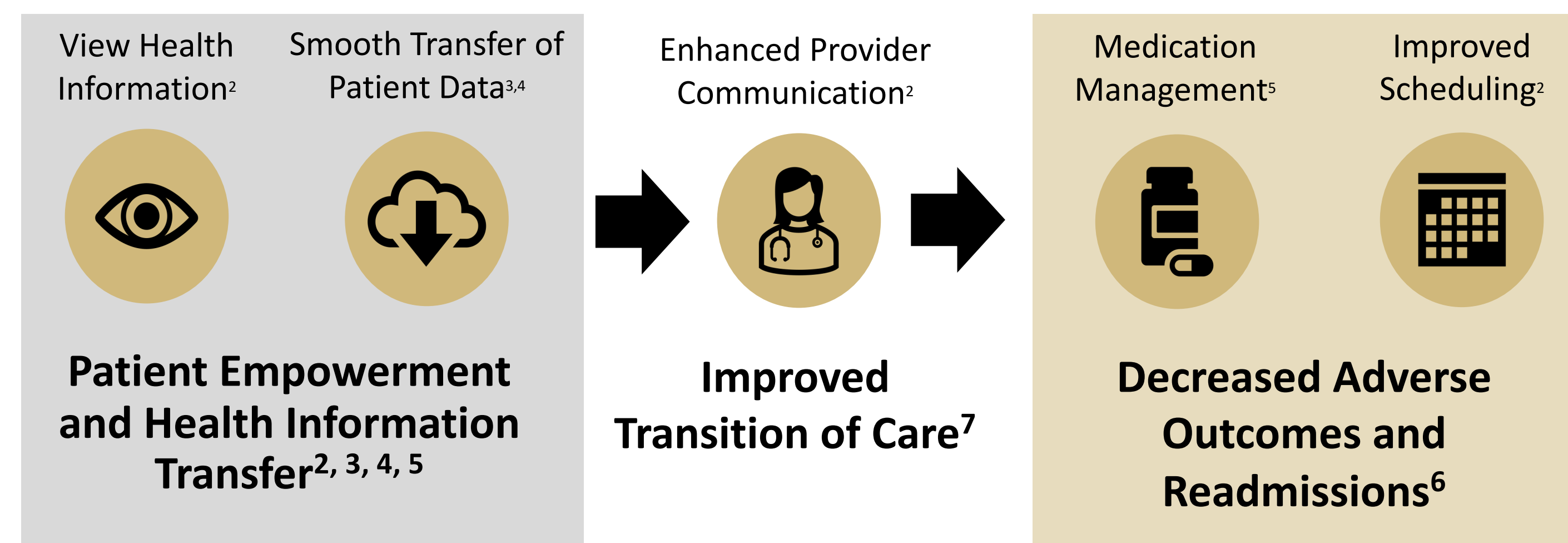
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Background

A comprehensive literature reviews demonstrate the benefits of patient portals on post-discharge care, specifically a **41% decreased chance of readmittance within 30 days**.¹

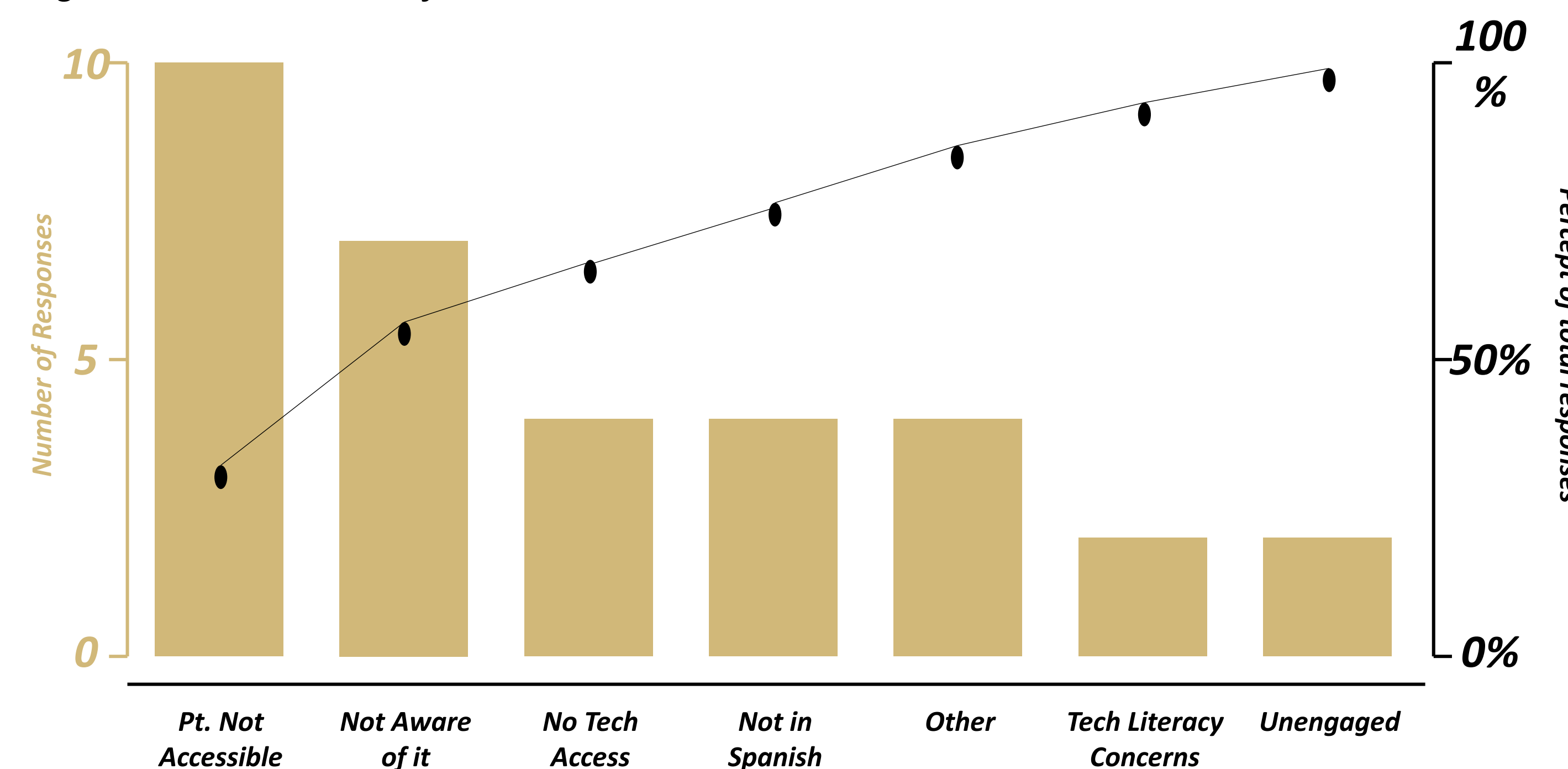
Figure 1: Post-Discharge Patient Portal Benefits



Barriers

Inpatient interviews at the University of Colorado Hospital (UCH) allowed us to understand the reasons patients were not enrolling in My Health Connection (MHC), the patient portal used by UCH ($n=40$).

Figure 2: Pareto Chart of Greatest Barriers to Patient Enrollment Based on Patient Interviews



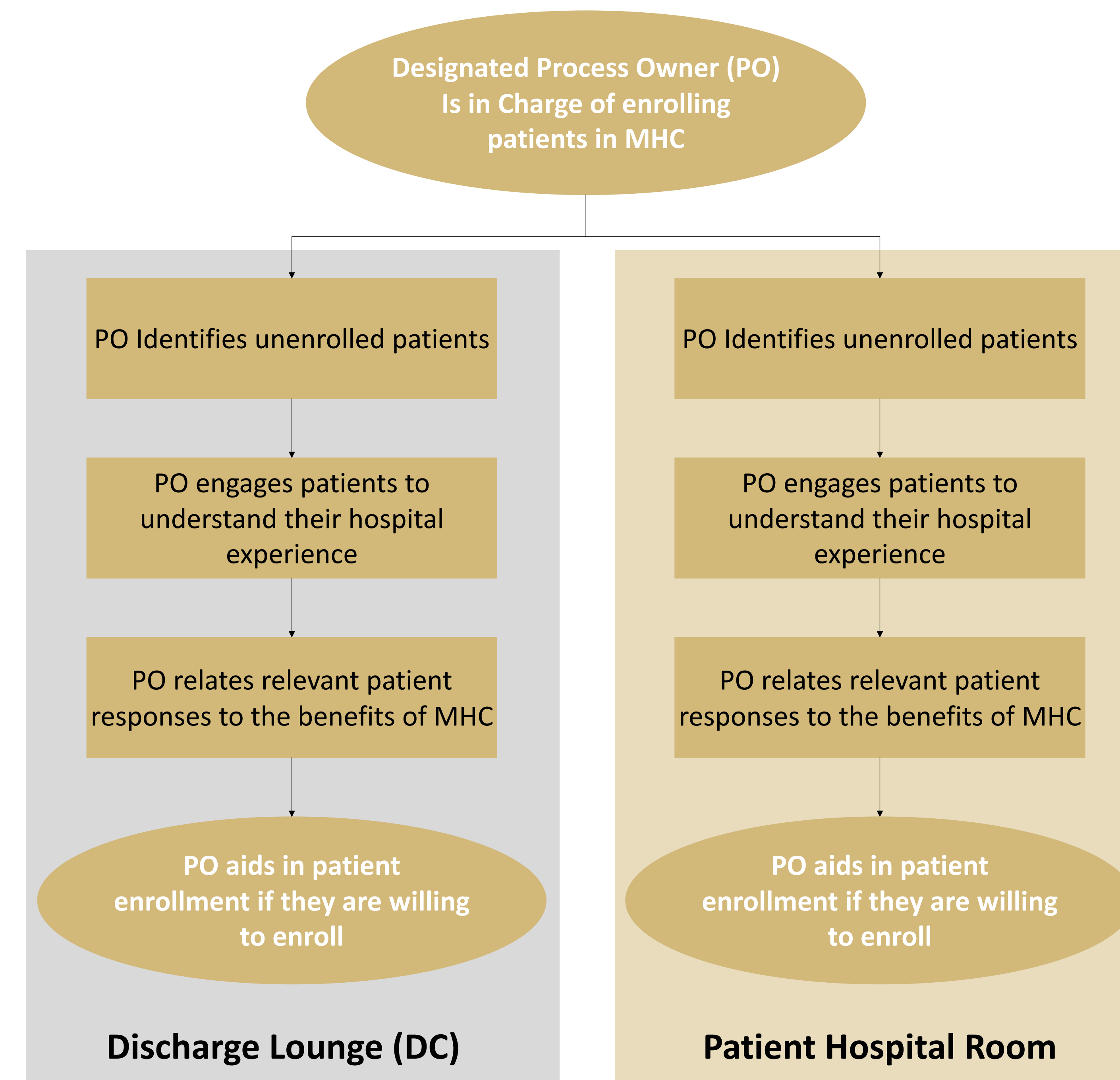
Hypothesis & Specific Aims

Hypothesis Implementing a framework for patient portal enrollment that addresses barriers (Fig. 2) will increase the number of patients who enroll.

Aim 1: Develop a standardized method to enhance enrollment

Aim 2: Improve MHC enrollment by 40%

Methods



The process owner for this method of intervention was a volunteer medical student. Interventions were focused at two points in the hospital:

1. Patient's hospital room or
2. The Discharge Lounge (DC)

The DC is an area of the hospital that allows newly discharged patients to depart their inpatient rooms while awaiting completion of the discharge process or for transportation.

Results

Table 1: Patient Room Intervention Results

Patients Receiving Intervention (n)	Patients Enrolled, Post-Intervention	Enrollment Rate
16	0	0.00

Table 2: Discharge Lounge Intervention Results

Patients Receiving Intervention (n)	Patients Enrolled, Post-Intervention	Enrollment Rate
9	6	0.67*

*p-value less than 0.05

Discussion & Implications

Addressing Aim 1: A process with a designated owner was developed to accommodate the needs of patients based on barriers discovered from patient interviews. Walking patients through the enrollment process proved to overcome the challenges of lack of awareness, tech access, tech literacy, and engagement (Fig. 2).

Addressing Aim 2: It was necessary to perform this intervention in a space for optimal patient accessibility. At UCH, this space was the Discharge Lounge (Table 2). The same intervention yielded a 0% success rate in the patients' hospital room, however, there was a 67% success rate in the discharge lounge ($p<0.05$, Tables 1&2). This highlights the necessity of enrolling patients when they are in an appropriate state to accept this kind of information. We found that the discharge lounge filtered for patients who were alert, oriented, and aware enough with sufficient free time to enroll in MHC.

Table 3: Projected Annual Enrollment Increase Using Discharge Lounge Intervention

Unenrolled Patients (DC)	Enrollment Rate	New Patients Enrolled (DC)	Current Patients Enrolled (UCH)	Total New Patients Enrolled (DC+UCH)	Percent Increase
729	0.67	488	1092	1580	45%

Implications: The results of our intervention yielded a projected 45% increase of inpatient enrollment at UCH. While only 6% of the annual hospital census enters the discharge lounge, the effectiveness of this intervention is still consequential due to the projected avoided readmissions and associated cost savings (Tables 3&4). This demonstrates the necessity for growing the discharge lounge program to capture a greater percentage of eligible hospital census which in turn can improve MHC enrollment and avoid further readmissions.

Table 4: Projected Annual Readmissions Avoided

Readmissions Avoided	Cost per Readmission	Cost Savings
41	\$10,000	\$410,000

Conclusions & Next Steps

Conclusions:

- Patient portal enrollment reduces readmissions¹.
- The discharge lounge is an effective place to enroll patients

Next Steps:

- Continue intervention to increase sample size (Table 2)
- Grow discharge lounge program to capture greater eligible census