

Title of project:

Providing Post Emergency Care (ProPEr Care) Virtually

For Medical Student, Resident, or Fellow projects, please enter the name, role, and contact information of the project sponsor.

Category of submission (select as many as apply):

Reducing Disparities
Resident/Fellow Project

IOM Domains that this project addresses (select as many as apply)

Safety
Patient Centered
Effective
Equitable

Please share how you defined your project. Consider addressing the questions below. (Max 500 Words)

What was the identified Quality Gap? - What was the improvement target? - What was the timeline of the project? - Who were the stakeholders? - What was the stakeholders' input? - What was the method for collecting stakeholder input? - What was the potential for significant impact to the institution? - What was the potential for significant impact to society?

Providing access to primary care after an Emergency Department (ED) visit can reduce hospital admissions, improve chronic disease management and reduce repeat (ED) visits. A significant number of patients presenting to our institution either do not have a Primary Care Provider (PCP) or are unable to obtain a timely follow-up with their PCP after ED discharge. The COVID pandemic provided an opportunity to fill this gap by integrating tele-health. We implemented a pilot program called ProPEr Care to provide rapid ED based follow-up in a virtual clinic. This clinic was staffed by either Emergency Medicine (EM) or dual trained Emergency Medicine (EM) and Internal Medicine (IM) physicians with the goal of improving patient outcomes. In addition to addressing medical needs, the clinic physician utilized existing hospital resources such as care coordination and outreach workers to help patients obtain medical insurance and establish long-term primary care. To our knowledge, this program is novel in Emergency Medicine.

Please describe how you measured the problem. Consider addressing the questions below. (Max 500 Words)

What data sources were used? - Was a numeric baseline OUTCOME measure obtained? - What defined the sample size? - What counterbalance measures were identified? - What numeric baseline COUNTERBALANCES were obtained? - Was the outcome measure clinically relevant? - Was the outcome measure a nationally recognized measure?

From September 2020 through July 2021, 916 patients have been seen in the virtual clinic. The age range has been from 18-92 with an average age of 45 years. The distribution in ethnicity includes 65% Black or African American (595/916), 25% White (230/916), 10% Other (including Hispanic or Latino or Spanish Origin, Asian, American Indian-Alaskan). The primary diagnosis include hypertension 13%(116/916), diabetes 7% (66/916), COVID-19 5% (45/916), abdominal pain 4% (40/916), chest pain 4% (35/916), upper respiratory infection 3% (28/916), cellulitis/abscess 3% (24/916), asthma/COPD 2% (19/916), and venous thromboembolism 11/916. There were 32% of patients with Medicaid, 21% of patients were uninsured and 20% of patients were Medicare. The remainder were composed of managed care and commercial health insurance. At the time of discharge, the ED physician, at their discretion, can schedule a patient for a ProPEr care clinic visit within the next 7-14 days. An EM or EM-IM trained physician provides the virtual follow-up visit using the Doximity™ platform with video or phone call only options. The goal is to provide a bridge while the patient is in the process of establishing a PCP.

Please describe how you analyzed the problem. Consider addressing the questions below. (Max 500 Words)

What was one factor contributing to the gap? - Were multiple factors contributing to the gap? - Was a structured root cause analysis undertaken? - What was the appropriate QI method or tool used for root cause analysis? - Was a root cause analysis performed prior to identifying potential solutions? - What was the rationale for selecting intervention(s)? - Did the project use a QI method or tool for selecting intervention(s)?

We contacted patients via a phone call at least 30 days after their ProPEr care clinic visit and asked a series of 10 follow-up questions. Survey questions were developed based on similar studies from other medical specialties. Data was collected and stored in Microsoft Excel™. Basic demographic data was reported from Tableau™, and survey results were calculated in Microsoft Excel™. We also were able to evaluate demographic information on our clinic patients to analysis for age, ethnicity, insurance status, and diagnosis.

Please describe how you improved the problem. Consider addressing the questions below. (Max 500 Words)

What was the implementation of intervention(s) (date/time of go live)? - Was the target measure re-measured afterwards with comparison graph? - Was a structured plan for managing change used? - Was the project counterbalance re-measured with a comparison graph? - Was the counterbalance adversely affected? - Is the improvement in target outcome measure shown? - Was a statistical significance demonstrated in the outcome measure?

The majority of our patients felt they were seen quickly (88%) and that the virtual visit was more convenient than a traditional in-person visit (94%). 72% felt that ProPER care prevented them from coming back to the ED for the same reason. The ProPER care clinic was able to arrange referrals for all the patients who needed specialty care (100%) and provided electronic prescriptions for all of the patients who needed refills for their long-term medications (100%).

Please describe the control phase of your project. Consider addressing the questions below.

What were the lessons learned from the project? - Was there communication to stakeholders of the summary of the project, and lessons learned? - Was a process owner identified? - Did the process owner acknowledge ownership of ongoing monitoring? - What control measures were identified? - What was the reaction plan for deficiencies identified in the control measure? - Was there at least one year of sustained monitoring demonstrated? - Was the project successfully diffused in scholarly form (i.e. poster, manuscript, etc)?

A post ED discharge virtual clinic visit provided by an EM or dual trained EM-IM physicians ensures rapid follow-up care, facilitates specialty referrals and potentially reduces return ED visits. Ongoing analysis is undergoing with goals to demonstrate that we were able to help previously uninsured patients establish medical insurance with the help of our ancillary staff as well as obtain long term primary care providers. We are completing 1 year of our clinic. Our next phase of analysis is to evaluate the potential impact of cost benefit of the implementation of our clinic in reducing return ED visits and hospital admissions. We are presenting our data at the upcoming ACEP national conference October 2021.