

The Health Care Improvement Foundation
2018 Delaware Valley Patient Safety and Quality Award
Entry Form

1. Hospital Name

Temple University Hospital

2. Title Of Initiative

Utilizing an Alternative Care Site for Low Acuity Emergency Department Visits

3. Abstract (Please limit this description to 250 words.)

The purpose of this initiative was to reduce low acuity Emergency Department (ED) utilization by referring stable patients to a Federally Qualified Health Center (FQHC) located on the hospital campus. Beginning in May 2017, patients seen in the ED triage area who met the low acuity criteria were medically screened. If the assessment confirmed the patient met low-acuity criteria and was stable, they were discharged for follow-up care by their primary care provider or the FQHC. Through May, 2018, 5555 patient visits were screened and seen in the FQHC. These visits represented approximately one-half of the 10,000 low acuity ED visits identified at baseline. Monthly data on the proportion of low acuity ED visits were plotted in a graph pre- and post-program initiation. Low acuity was defined as levels 1 and 2 using the Emergency Severity Index scores. Using a piece-wise linear regression model to compare the slopes between the two time periods revealed a significant reduction in low acuity visits ($p < 0.0005$). The Cohen's d test was used to compare a secondary outcomes measure of ED wait times pre- (mean 83.08 minutes, $SD \pm 12.7$) and post- (mean 73.8 minutes, $SD \pm 11.6$) program initiation, showing a strong effect size ($d = 0.75$). Of the patients discharged and received follow-up care at the FQHC, 141 returned for additional care directly to the FQHC, rather than the ED. In conclusion, an ED discharge program is effective in reducing low acuity ED visits and wait times, and changing patient behavior.

4. What were the goals of your initiative?

The primary goal of this quality improvement initiative was to reduce low acuity ED visits by referring patients to a more appropriate and low cost care setting. Secondary goals included reducing ED wait times and changing patient behavior by choosing the appropriate care setting.

5. What were the baseline data and the results of your initiative?

Examining ED acuity data using the Emergency Severity Index scores (ESI) revealed that 12 months prior to the program initiation there were 10,000 patient visits that scored as low acuity (levels 1 & 2 ESI). Additionally, of the 50,913 unique patients seen in the ED during that year, 3,036 had 4 or more visits. This translates to 6% of the population accounting for 22.5% of visits. Nearly 80% of these patients were discharged to home.

Results of the ED referral initiative revealed a statistically significant reduction in low acuity ED visits after program initiation ($p < 0.0005$). The graph of this reduction is in the

next section. Additionally, there was a strong effect on reducing ED wait times ($d=0.75$), and 141 patients returned to the FQHC for future care rather than choosing the ED.

6. Describe the interventions that were instrumental in achieving the results for your initiative.

The primary intervention involved a collaboration between the Center for Population Health, the ED and the FQHC. A multidisciplinary team worked on the facility design for the FQHC within the hospital, developed care pathways, workflows and protocols, provided education for the providers in the FQHC regarding care of minor injuries, and created a mechanism to regularly review quality improvement data. Meticulous attention to a well developed implementation and evaluation plan was key to achieving positive results.

Collaborating with an experienced FQHC to provide strong primary care and mental health services was instrumental for success. The Health Resources and Services Administration (HRSA) under section 330 of the Public Health Service Act funds FQHCs with the appropriate wrap around services to meet the objective of providing low acuity care for an array of patient problems. The patient population served by our catchment area is culturally diverse, with many patients living at or below the poverty limit, and having multiple unmet health related social needs and behavioral health problems. Our FQHC has enhanced funding needed to service an underserved population, offers a sliding fee scale, and provides comprehensive services, along with an ongoing quality assurance and its own governing board.

7. Describe the key steps required to successfully replicate this initiative throughout the region. (Please limit this description to 100 words.)

Replication would require analyzing the organization's ED data to assess the current state and identify areas for opportunity, followed by engaging key stakeholders within and external to the organization. External key stakeholders might include third party payers who would benefit from the initiative and the leadership of the FQHC. In the absence of a local FQHC the organization could consider establishing one using HRSA funding. Other similar models have engaged an urgent care center in the same manner. The ED diversion initiative described in this application can be translated to other organizations with modifications as needed based on organizational needs.

8. Explain how the initiative demonstrates innovation (Please limit this description to 100 words.)

There are multiple publications describing the problem of low acuity ED visits and the impact on ED overcrowding, increased wait times, poorer quality of care, and decreased patient satisfaction. Yet, there are limited published papers on solutions to this problem. This initiative offers an innovative intervention using a medical screening to provide an alternative location of care at the time a patient is seeking care. This process in real-time teaches patients when to use alternative care resources in the community. The early results demonstrate success in patients redirecting themselves to the FQHC and reducing the frequent use of the ED.

9. How does this initiative demonstrate collaboration with other providers within the continuum of care? (Please limit this description to 100 words.)

The collaboration between the FQHC and ED providers has been highlighted as a critical factor in this program. In addition to this collaboration, we collaborated with the primary care community at large to assure that patients who were referred to the FQHC who already had established primary care providers in the community were returned to those providers. Communication with affiliated primary care providers was ongoing throughout the planning and implementation processes.

10. Explain ways in which senior leadership exhibited commitment to the initiative (Please limit this description to 100 words.)

After a review of ED patient and financial data, the Chief Executive Officer requested solutions to reducing low level acuity ED visits be explored. After careful evaluation of the options available to address this problem, senior leaders made the decision on the design of the referral program. Senior leaders were engaged in the project plan and weekly progress reports. Additionally, senior leaders supported the time for medical leaders to develop the protocols and invested in FTEs to provide medical screening.

11. Appendices (i.e., tables and graphs)

