Advanced Practice Provider in Triage Impact on Emergency Department Crowding Metrics

Laurie Scheid, MSN, FNP-C, ENP-C
Vanderbilt University School of Nursing

SCHOOL OF NURSING
VANDERBILT UNIVERSITY

Introduction

Emergency department (ED) crowding is a concerning trend seen nationally and locally that negatively impacts:
- Patient morbidity and mortality
- Patient and staff satisfaction
- Cost of Care

Problem

- Worsening trends in free-standing ED crowding metrics over past 6 months.
- High length of stay (LOS)and left without being seen metrics (LWBS)
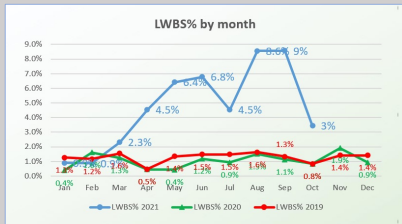- Current system limited interaction between providers and triage staff to facilitate front-end flow.

Figure 1: Left without being seen trends from 2019 to October 2021

Aim & Objectives

Aim:
- Positively impact ED crowding metrics utilizing a provider in triage (PIT)

Objectives:
1. Measure impact of PIT on LWBS rate by comparing 2 weeks pre- and post-implementation LWBS rates.
2. Measure impact of PIT on LOS for discharged patients by comparing pre- and post-implementation daily median LOS.

Methods

Plan
- Develop front-end process
- Present evidence for change
- Daily huddle/coaching
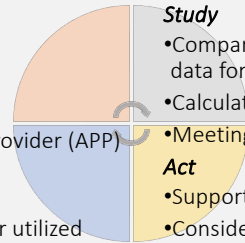- Increase advanced practice provider (APP) coverage

Do
- PIT advanced practice provider utilized
- Retrospective data collection for 2 weeks

Study
- Compared pre- and post-implementation data for each metric
- Calculate daily median LOS & LWBS rate
- Meetings to discuss project performance

Act
- Support for adoption
- Consider implementation at other sites

Results
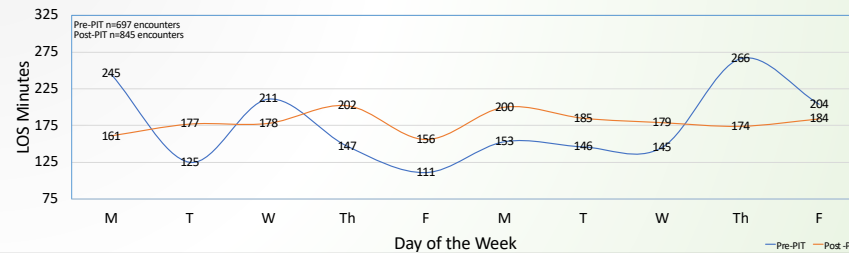

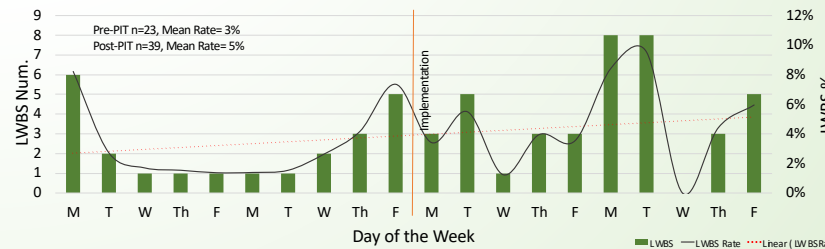Figure 2: Pre- and post-implementation median LOS trends

Figure 3: Pre- and post-implementation left without being seen trends.

Implications for Practice

- Daily census averaged 15 patients higher during pilot

Figure 4: Daily patient census representing 2 weeks pre- and post-PIT

- COVID-19 surge

Figure 5: Spokane County Covid Cases Dec. 12, 2021 – Jan. 18,2022

- *Discharge Median LOS* increased
  - Average Median Pre: 175 min
  - Average Median Post: 180 min
- *LWBS* rate increased by 2%
- No prior studies for similar departments

STRENGTHS:
- Strong stakeholder buy-in
- Metrics did not significantly worsen with census increase

LIMITATIONS:
- Not able to control for surge in census
- Single site
- Short duration
- Raw data convoluted due to constraints of PowerBi and EPIC
- Physical department limitations

Data Table   References

Take a picture on your phone to use the QR code