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Institutional Pilot Changes Lead to a Reduction in Emergency Department Boarding Patients

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BACKGROUND

Crowding and boarding in a pediatric emergency department (ED) is an ongoing problem and can result in:

- Mismatch of resources for patient care needs
- Adverse events and increased mortality

Few studies address the impact of inpatient strategies on ED boarding

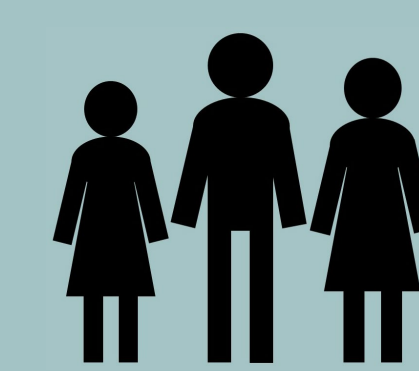
METHODS



Urban, academic, tertiary-care level 1 trauma center



Retrospective analysis of ED boarding times over two years



Total and boarding patient volume



Patient length of stay (LOS)



Institutional changes and interventions Jun 2022 to Nov 2023

Institutional Pilot Changes Lead to a Reduction in Emergency Department Boarding Patients

The objective of our study was to evaluate hospital-based strategies within a single institution and their effect on ED boarding times.

Hospital-based changes are achievable and can be implemented quickly to decrease ED Boarding

RESULTS: ED volume ranged from 6,800-8,000 patients per month with a peak of 12,000 in November 2023 (Figure 1). Boarding volume decreased from 142 patients in November to zero from January onwards.

There was an increase to 40 patients boarded in March 2023, but data up to December 2023 show a sustained reduction in boarding while controlling for total ED volume. Boarding length of stay echoed the boarding volume with a slight uptick in December 2023 (Figure 2).

Figure 1. ED Patient Volume and ED Boarding

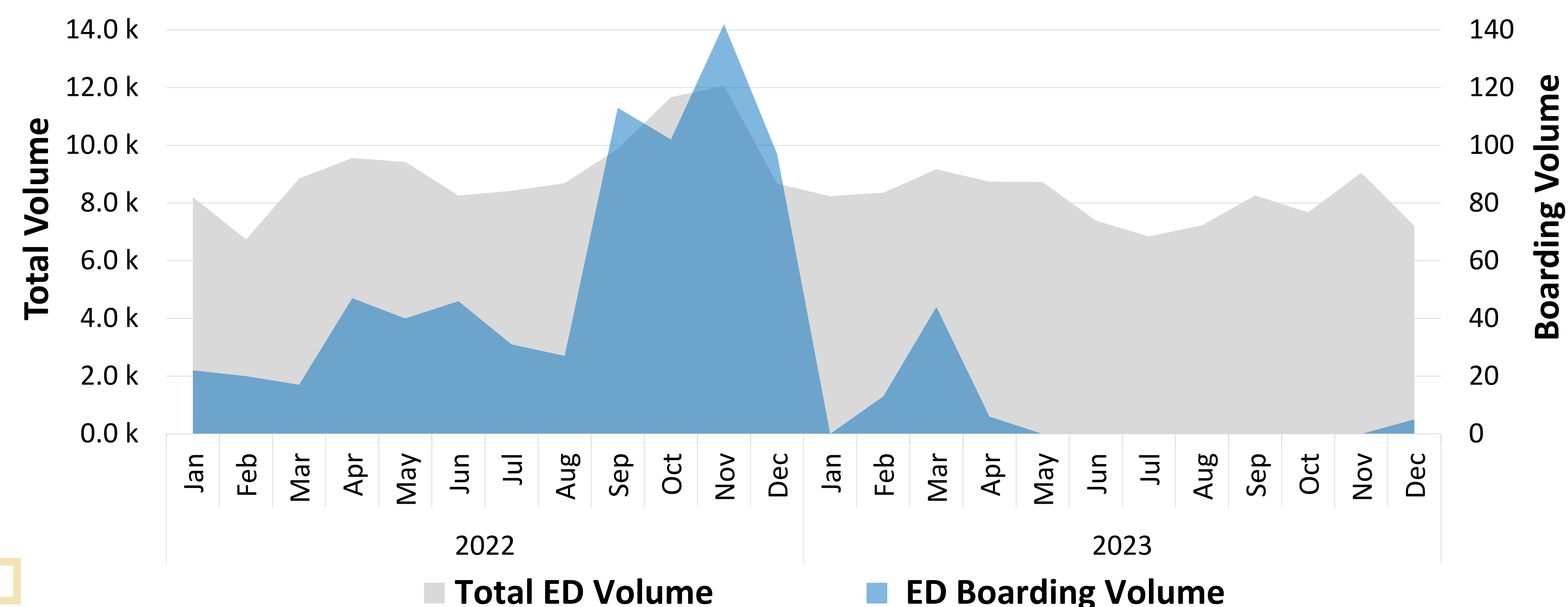
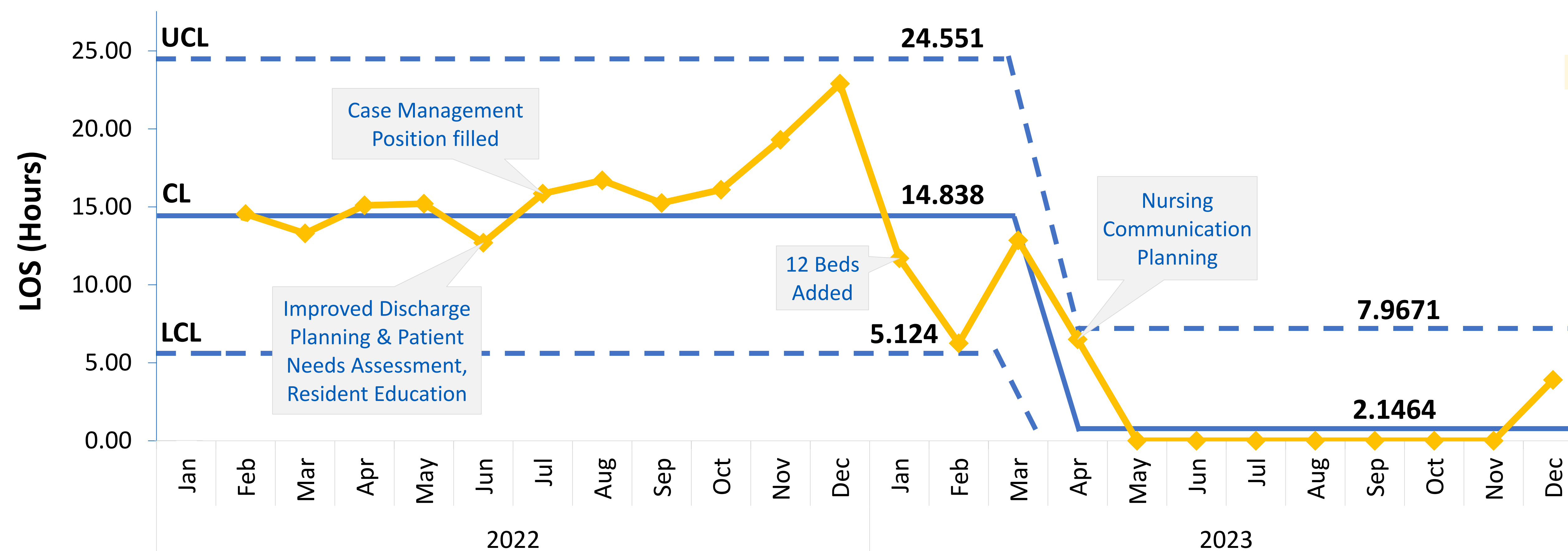


Figure 2. Average ED Boarding Length of Stay - X Chart



CONCLUSION

HOSPITAL-BASED CHANGES

- Successful in decreasing boarding volume

INPATIENT-BASED SYSTEM CHANGES

- Improved communication
- Improved planning
- Improved room availability

ALL CHANGES

- Achievable
- Quick to implement

The study is limited in its evaluation as more data is needed to compare peak ED visit months and to more closely analyze the impact of the changes.

