

Increasing ED Throughput through the Implementation of a Nursing Bundle Intervention

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Problem

Prolonged emergency department (ED) wait times have significantly increased stemming from:

- inefficiencies in patient placement
- Staffing shortages
- Surges in patient volumes
- Communication breakdowns between the ED and receiving units.

A major teaching hospital in Maryland reported an average of 617 minutes between the decision to admit and actual inpatient transfer in 2023, which is over 10 hours.

Over time, ED wait times have worsened, impacting hospital efficiency, patient satisfaction, and financial outcomes.

Purpose

Purpose: To reduce ED patient length of stay among patients being admitted to the medical-surgical (MS) unit through the implementation of bundled nursing interventions that include a new charge nurse workflow and electronic messaging.

Process Goal: 100% usage of the bundled intervention

Clinical Goal: 100% of patient transfers to be less than 617 minutes from the ED to the receiving unit.

Methods

Setting: Medical-Surgical unit and the Administrative Coordinator (AC) in a medium sized hospital in Maryland.
Eligible Participants: Any patient admitted from this ED to the MS unit.

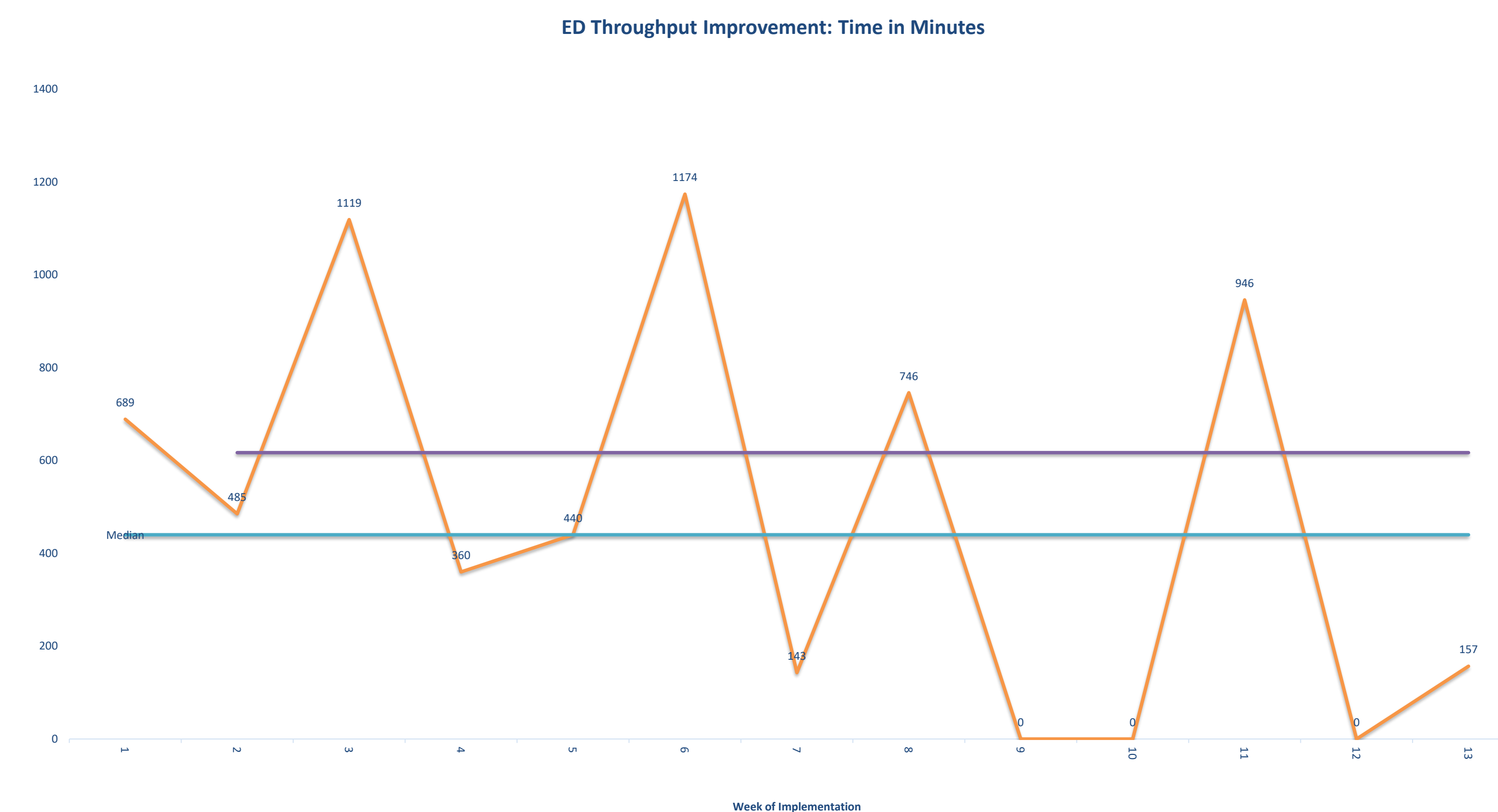
Interventions:

- Development of handoff tool and nursing bundle.
- Continuous assessment of readiness, barriers, and facilitators.
- Organizing meetings, emails, and offering incentives.
- 14-week implementation process.
- Foster guidance and collaboration.

Data Collection: Through self-completed surveys after each admission.

Analysis: Descriptive statistics and run charts were used.

Results



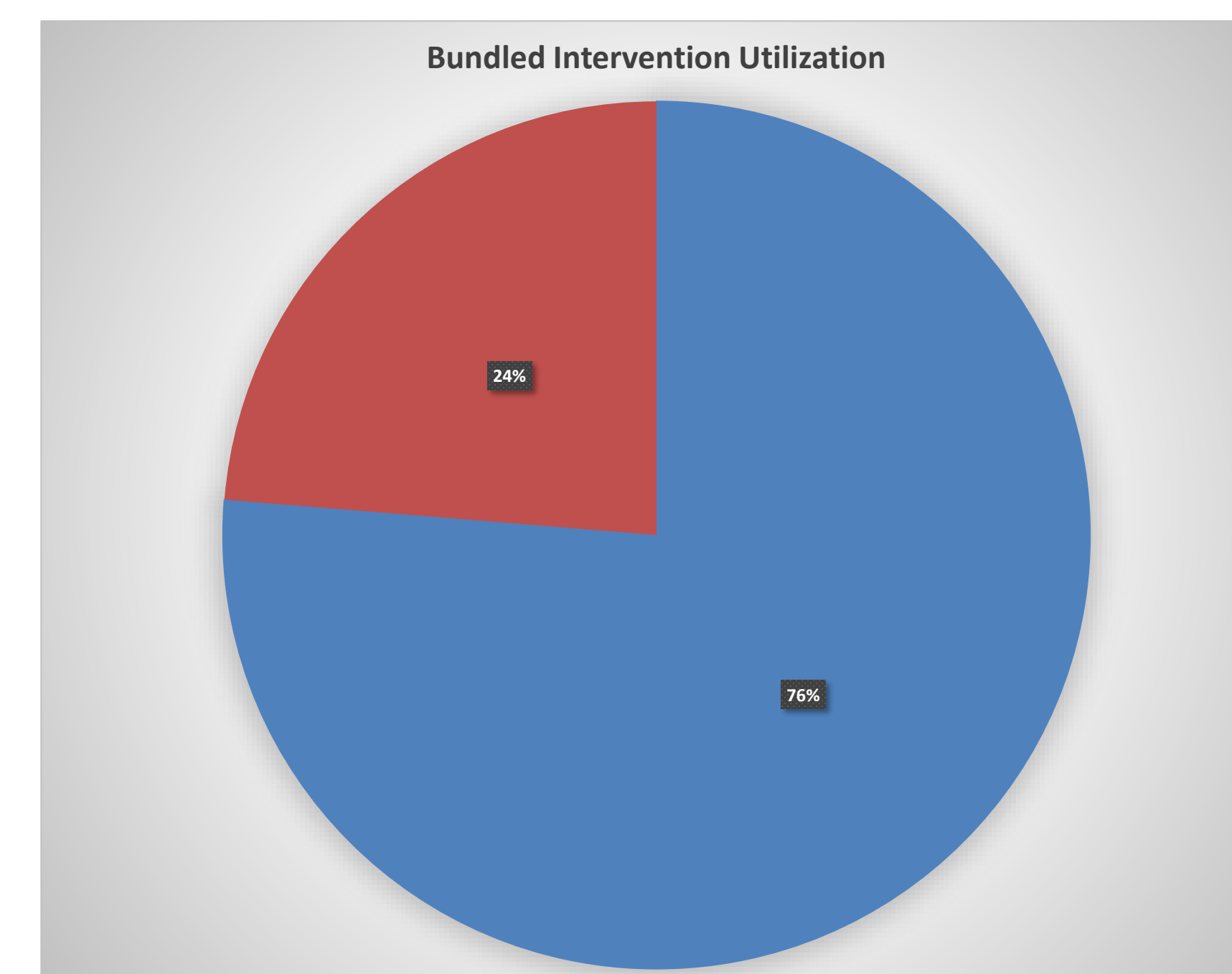
❖ (62/100) 62% of patients were eligible.

❖ Participation was measured by self-reported surveys daily over the 14 weeks.

❖ (33/62) 53% of pts had a mean transfer below the goal of 617 minutes

✓ Process Goal Results: (71/93) 76% usage of the bundled intervention completed.

✓ Clinical Goal Results: (5/13) 38% of the mean transfer times were 440 minutes, which is below the goal of 617 minutes.



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Discussion

Key Takeaway: The bundled nursing intervention was used 76% of the time, which led to increased ED throughput 38% of the time compared to the previous fiscal year of 2023. The interventions shows promise, however addressing additional factors may influence overall effectiveness.

Future Recommendations:

- Improve interdisciplinary communication and standardize handoff protocols to enhance ED admission efficiency.
- Optimize bed management and inpatient boarding strategies to reduce wait times.
- Leverage predictive analytics and address staffing shortages for better resource allocation and sustainability.

Limitations:

- ❖ Inconsistent staff participation may have negatively impacted the effectiveness of the intervention.
- ❖ Variations in patient acuity impacted the standardization of outcomes.
- ❖ Inappropriate floor admissions created barriers in assessing the intervention's true impact on its efficiency.

Conclusions

Contribution to Practice: Targeted interventions can improve efficiency through the reduction of admission wait times. By addressing persistent outliers and mitigating systemic constraints will help optimize ED throughput.

Sustainability: Ensure sustainable improvements through targeted interventions, continuous monitoring and addressing key delay factors. Enhance operational efficiency with streamlined communication procedures and ongoing data tracking for continuous process refinement.

References

