

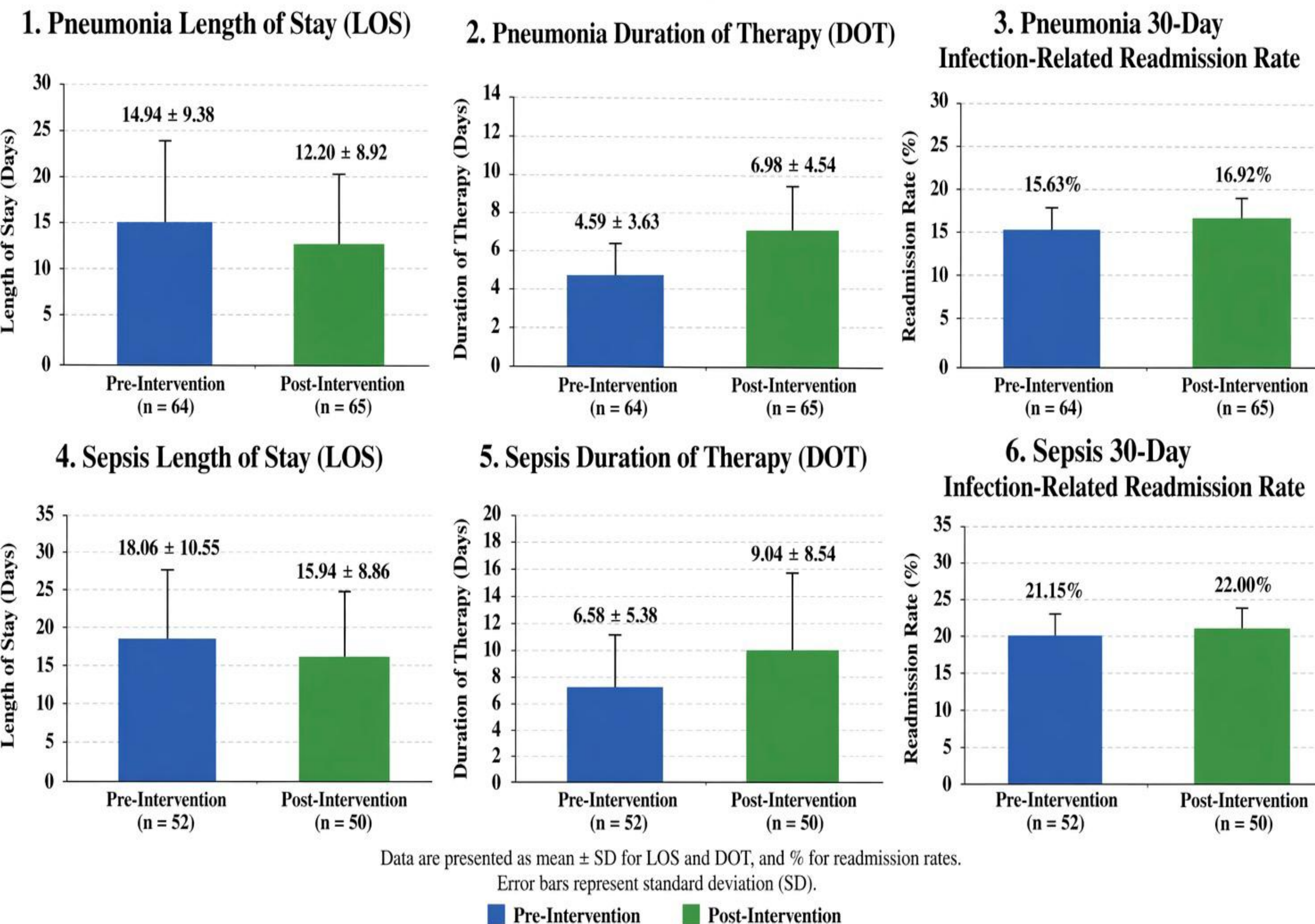
BACKGROUND

- Pneumonia and sepsis are major contributors to hospital morbidity and mortality.
- Antimicrobial stewardship programs promote guideline-concordant therapy.
- Order sets are designed to standardize empiric antibiotic prescribing.
- Prior studies have shown ↑ adherence, ↓ variability in prescribing
- Strict Empiric Antibiotic prescribing for Pneumonia and Sepsis may lead to a reduction in length of hospital stay, duration of therapy and 30-day infection related readmission.

METHODS

- **Design:** Retrospective pre–post study
- **Setting:** Community hospital (Single Center)
- **Duration:** June 2025 – February 2025
- **Data Collected:**
 - Pneumonia (CAP/HAP) diagnosis
 - Empiric Antibiotic Regimens
 - Duration of Therapy (DOT)
 - Length of Hospital Stay (LOS)
 - Admission and Discharge dates.
- **Inclusion Criteria:**
 - Adult patients ≥18 years old, Received Empiric Antibiotics, Pneumonia and Sepsis
- **Exclusion Criteria**
 - Pregnancy, Transfer from outside hospital, Documented allergy, Incomplete Clinical Data
- **Primary Endpoints:**
 - 30-Day Infection Related Readmission
 - Total Duration of Therapy
 - Length of Hospital Stay
- **Secondary Endpoint:**
 - Prescriber Adherence to updated empiric order sets

RESULTS



- **Pneumonia Outcomes**
 - **LOS**
 - Pre: 14.94 ± 9.38 days
 - Post: 12.20 ± 8.92 days
 - **DOT**
 - Pre: 4.59 ± 3.63 days
 - Post: 6.98 ± 4.54 days

- **Sepsis Outcome**
 - **LOS**
 - Pre: 18.06 ± 10.55 days
 - Post: 15.94 ± 8.86 days
 - **DOT**
 - Pre: 6.58 ± 5.38 days
 - Post: 9.04 ± 8.54 days

DISCUSSION

- No improvement in clinical outcomes.
- Increased antibiotic duration post-intervention.
- Decreased adherence observed in pneumonia cohort
- Suboptimal provider utilization of order sets.
- EHR usability and workflow barriers
- Mid-study change in ED Physician Group

CONCLUSION

- Updated order sets did not improve outcomes or adherence and were associated with increased duration of therapy, highlighting an implementation gap; effective improvement requires workflow integration, provider engagement, and active stewardship interventions.

FUTURE PLANS

- Address provider & workflow barrier to order set utilization.
- Strengthen stewardship (Education + Audit/Feedback)
- Expand to multi-center evaluation

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