Evaluating Patient Length of Stay: General Medicine vs. General Surgery

Descriptive statistics and data visualization

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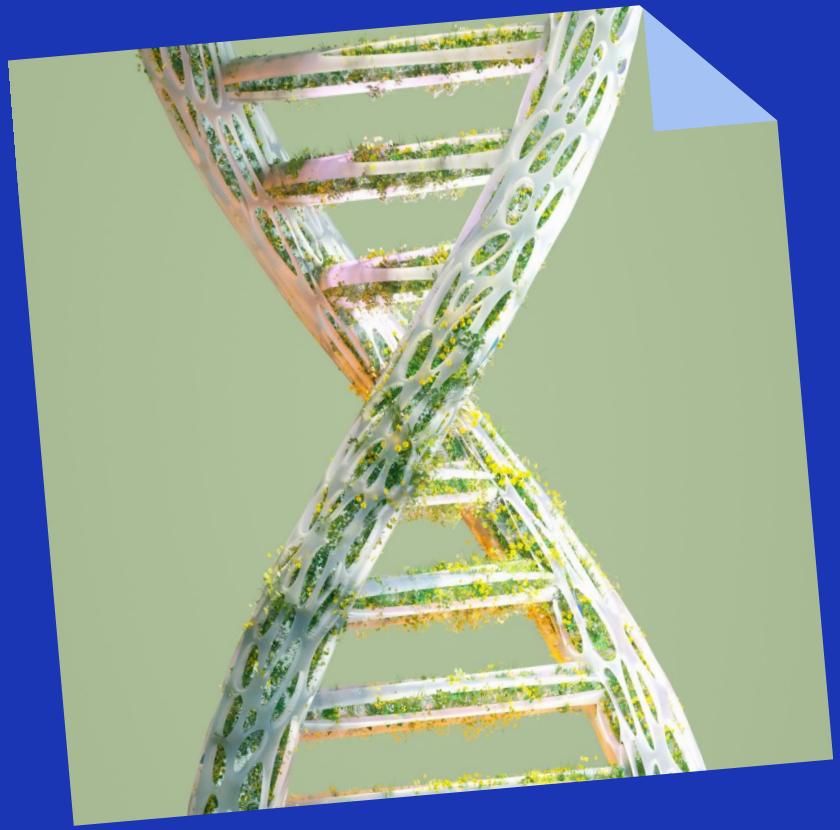


Background & Objective

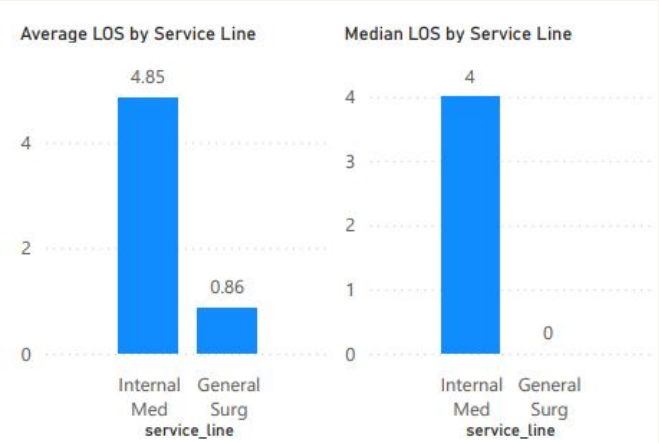
Background

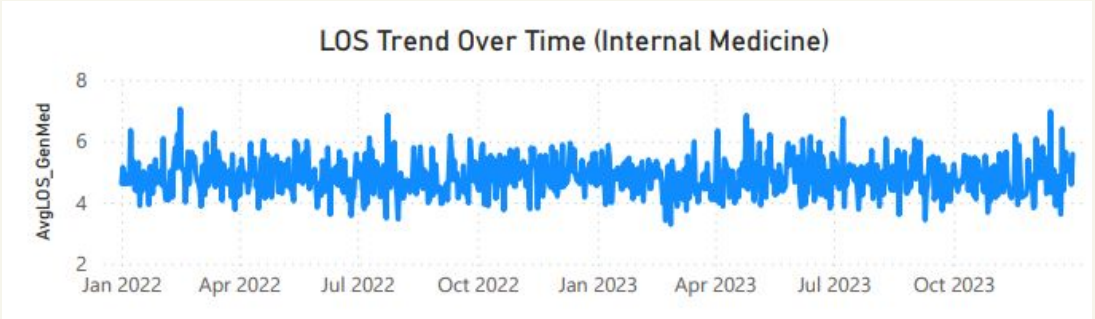
- General Medicine's length of stay (LOS) is being challenged by General Surgery.
- Surgical colleagues suggest reducing LOS to free up beds
- General Medicine argues their longer LOS does not imply inefficiency.

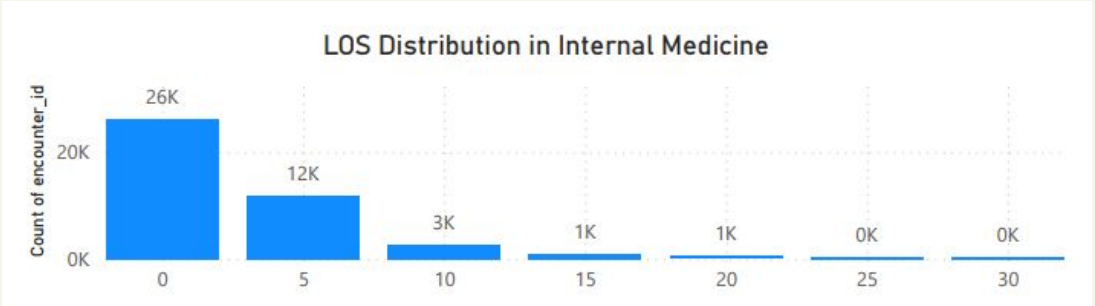
OBJECTIVE

- Conduct data analysis on LOS for both service lines.
- Determine whether disparities indicate poor performance.
- Provide data-driven recommendations.

Data Visualizations







Interpretation & Implications

Why is Internal Medicine LOS Higher Than General Surgery?

General Surgery patients typically follow **structured recovery protocols**, enabling **early discharges** after procedures. In contrast, **Internal Medicine patients** often present with **chronic or complex conditions**, requiring **longer hospital stays** for comprehensive management. The higher **LOS in Internal Medicine DRGs**, such as **sepsis and respiratory illnesses**, aligns with conditions that demand **extended monitoring and treatment** to ensure stability before discharge.

External Factors Affecting LOS

Several external factors influence **Length of Stay (LOS)** in Internal Medicine. **Patient complexity** plays a major role, as those with **heart failure, pneumonia, or sepsis** often require prolonged care. Additionally, **hospital resources**, including **ICU bed availability, specialist access, and discharge planning efficiency**, directly impact LOS. **Insurance and post-discharge planning delays**, such as waiting for **rehabilitation facility approvals, skilled nursing placements, or home care arrangements**, can further extend hospitalization beyond the necessary medical care period.

LOS by Diagnosis Group (DRG)

drg_title	AvgLOS_GenSurg	AvgLOS_GenMed
APPENDECTOMY WITH COMPLICATED PRINCIPAL DIAGNOSIS WITHOUT CC/MCC	1.02	
HERNIA PROCEDURES EXCEPT INGUINAL AND FEMORAL WITH CC	0.79	
MAJOR SMALL AND LARGE BOWEL PROCEDURES WITH CC	0.88	
MAJOR SMALL AND LARGE BOWEL PROCEDURES WITH MCC	0.87	
MAJOR SMALL AND LARGE BOWEL PROCEDURES WITHOUT CC/MCC	0.81	
O.R. PROCEDURES FOR OBESITY WITH CC	0.87	
O.R. PROCEDURES FOR OBESITY WITHOUT CC/MCC	0.85	
PERITONEAL ADHESIOLYSIS WITH CC	0.55	
PNEUMOTHORAX WITH CC	0.86	
POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS WITH O.R. PROCEDURES WITH MCC	1.04	
STOMACH, ESOPHAGEAL AND DUODENAL PROCEDURES WITH CC	0.63	
ESOPHAGITIS, GASTROENTERITIS AND MISCELLANEOUS DIGESTIVE DISORDERS WITHOUT MCC		4.715581203627
OTHER KIDNEY AND URINARY TRACT DIAGNOSES WITH MCC		4.72727272727272
GASTROINTESTINAL HEMORRHAGE WITH CC		4.746337379656
RESPIRATORY INFECTIONS AND INFLAMMATIONS WITH MCC		4.7944336797604
SIMPLE PNEUMONIA AND PLEURISY WITH MCC		4.8580398580398
HEART FAILURE AND SHOCK WITH MCC		4.8627232142857
SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITH MCC		4.8733722812697
ALCOHOL, DRUG ABUSE OR DEPENDENCE WITHOUT REHABILITATION THERAPY WITHOUT MCC		4.886424134871
SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITHOUT MCC		4.88704819277108
INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION WITH CC OR TPA IN 24 HOURS		4.951861360718
SIMPLE PNEUMONIA AND PLEURISY WITH CC		
Total	**0.86**	**4.85026657277939**

Recommendations & Next Steps

Short-Term Strategies (Immediate Impact)

- Improve **discharge planning** by reducing delays in **rehab placements, skilled nursing transfers, and home care coordination** to ensure timely patient transitions.
- **Streamline specialist consults** to avoid unnecessary inpatient days waiting for assessments.
- Utilize **step-down units efficiently** to free up higher-acuity beds for critical patients.

Long-Term Strategies (Sustained Improvement)

- Identify **Diagnosis-Related Groups (DRGs) with the highest LOS**, such as **sepsis, respiratory infections, and intracranial hemorrhage**, and develop targeted interventions.
- Implement **early intervention programs** to proactively manage high-risk patients and prevent prolonged hospital stays.
- Enhance **hospital resource allocation**, including staffing adjustments, ICU bed management, and technology-driven workflow improvements.

Conclusion

By combining **immediate process improvements** with **long-term strategic planning**, hospitals can effectively **reduce LOS** in Internal Medicine while maintaining **high-quality patient care**. A data-driven approach focusing on **efficient discharge planning, proactive interventions, and resource optimization** will ensure **better patient outcomes and improved hospital efficiency**.