Impact of Home Hospital Admissions on Surgical Patient Care: A Retrospective Analysis

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Background

- Patients undergoing surgery would traditionally be admitted to a hospital for their preoperative, operative, and postoperative care - HH offers an alternative care model
- This care model utilized surgical Advanced Practice Providers (APPs) as the HH clinicians managing the patients care in conjunction with the patient's surgeon

Methods

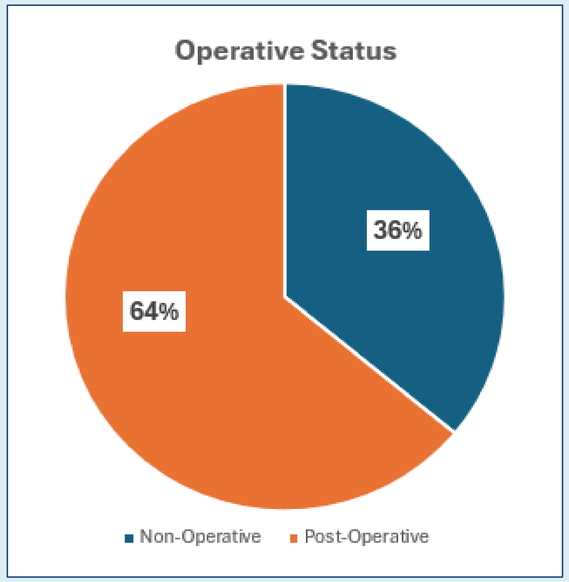
- Retrospective analysis was conducted on surgical HH admissions in the Greater Boston area across five hospitals.
  - Two academic medical centers
  - Three community hospitals
- Analyzed patient demographics, comorbidities, service line, length of stay (LOS), escalation rates, and post-discharge outcomes. NPS for patient satisfaction
- Descriptives statistics were used to present the results: mean and standard deviations (SD) for normally distributed continuous variables; median and interquartile ranges (IQR) for not normally distributed continuous variables, and percentages for categorical variables.

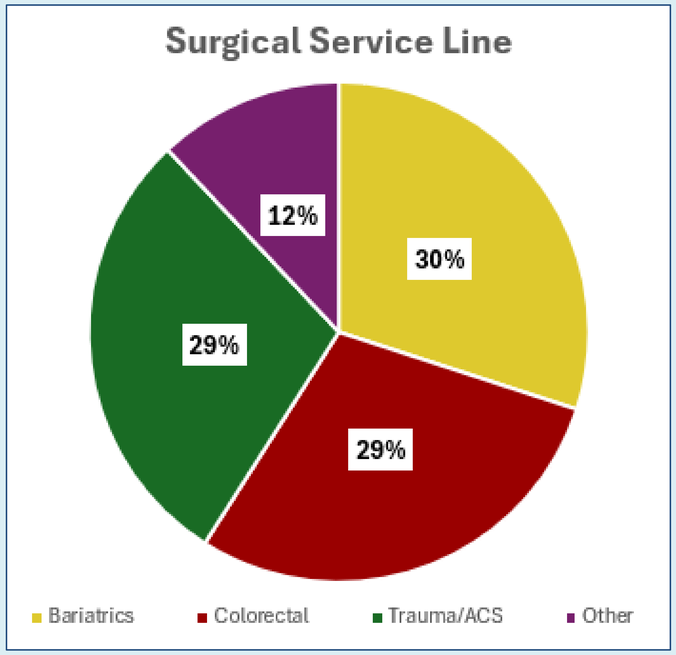
Discussion

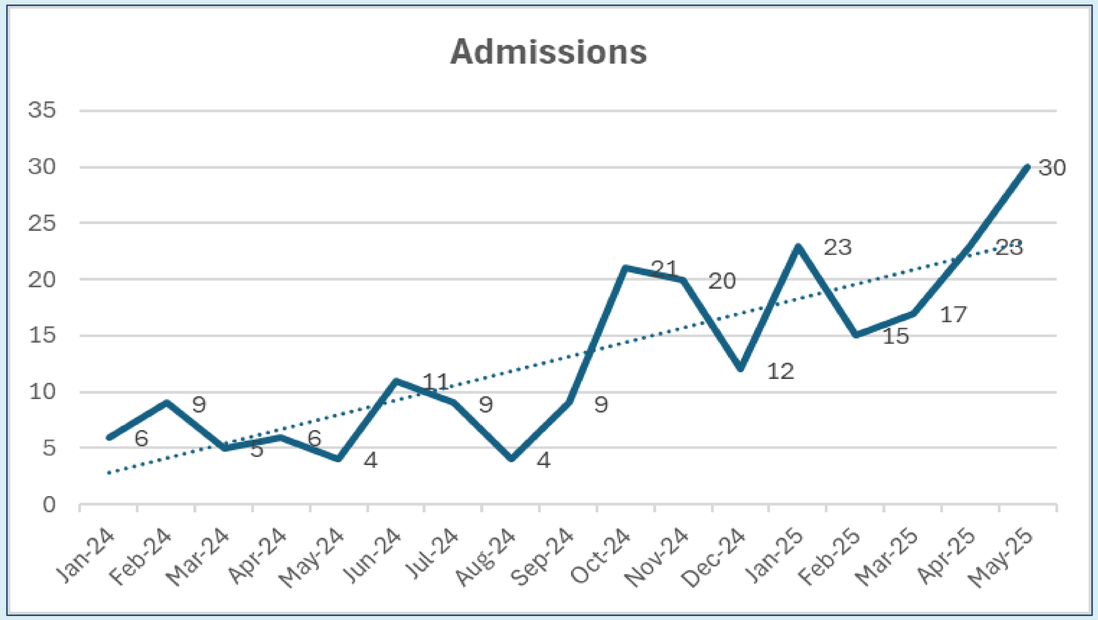
- Surgical HH admissions appear to be a viable alternative to traditional inpatient surgical care in select patients
- Overall good clinical outcomes with low rates of complications and escalation rates to higher level of care
- High NPS indicates high patient satisfaction with HH
- Utilization of surgical APPs is suspected to be a key component of this HH surgical service model's success
- This model could reduce hospital capacity burden by allowing surgical patients to recover in their homes, however quantifying that into capacity expansion for the surgical population (ie. more OR cases) is a limitation
- Further research to compare clinical outcomes to a brick & mortar cohort is needed to prove that care on a HH surgical service is not inferior to the traditional setting

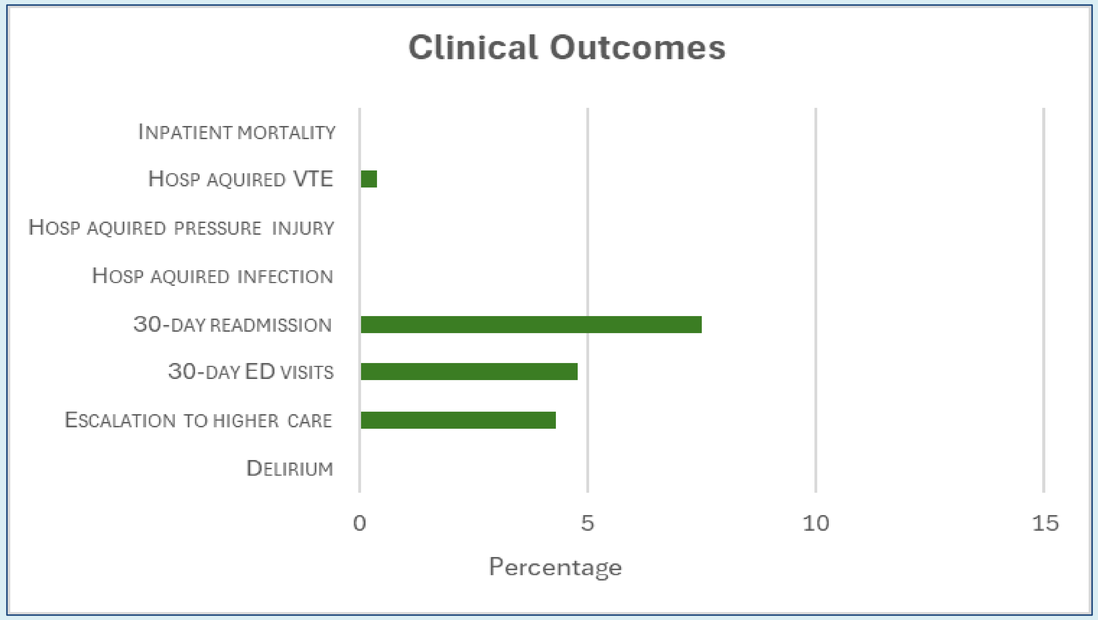
Results

- 228 patients were admitted to HH surgical service from Jan 2024-May 2025.
- The median patient age was 56 years
- Predominantly female (63.6%) and White (61.4%), English as primary language (86.4%).
- Charlson Comorbidity Index score of 3 (3.8±3.1).
- Mean LOS 2.5 days, Trauma/ACS 3.6 days.
- The NPS was 90%.









Conclusions

Surgical service HH admissions demonstrate:

- High safety
- Low escalation rates
- Good clinical outcomes
- High NPS reflects high patient satisfaction
- Utilization of surgical APPs is safe and effective for this model of care