

Emergency Surgery by Season in Small Hospitals in Newfoundland and Labrador

Objective

To identify the volume and type of emergency surgeries provided in small hospitals by season.

Practice Points

1. Timeliness of emergency surgery can have impacts on patient outcomes, with patients who wait longer than urgency-based defined intervals experiencing worse outcomes.
2. Many factors can contribute to delays in emergency surgery, including travel time to a facility where the surgery can be performed. In Newfoundland and Labrador (NL), travel can be difficult in winter due to weather causing road closures or delays.

Methods

1. Data on inpatient procedures and emergency department visits for 2019/20 were provided by Newfoundland and Labrador Centre for Health Information (NLCHI) and analyzed by the Harris Centre.
2. Emergency surgery was defined as not-low-risk surgery for which there was an acute admission and the patient had an Emergency Department (ED) visit on the same date as the surgery. Procedures were classified as low-risk using predetermined codes that signify pre-operative testing is unnecessary, with the remaining defined as not-low-risk.

Results

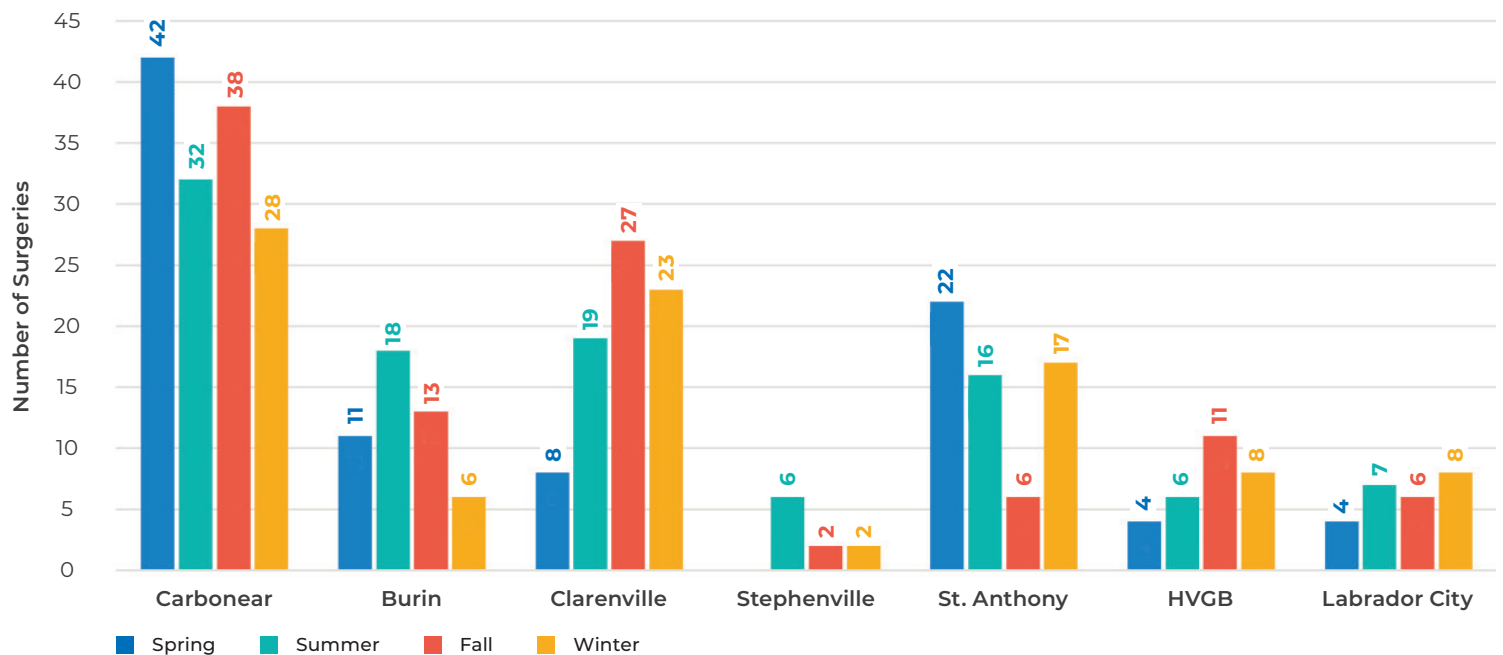


Figure 1. Number of Emergency Surgeries Performed in Small Hospitals During Each Season

- Over 4,000 emergency surgeries were performed in NL in 2019/20, with less than 10% in small hospitals.
- The number of emergency surgeries performed in small hospitals in the winter is low, with no increase compared to other seasons, even though transportation to another facility in winter may be more challenging.

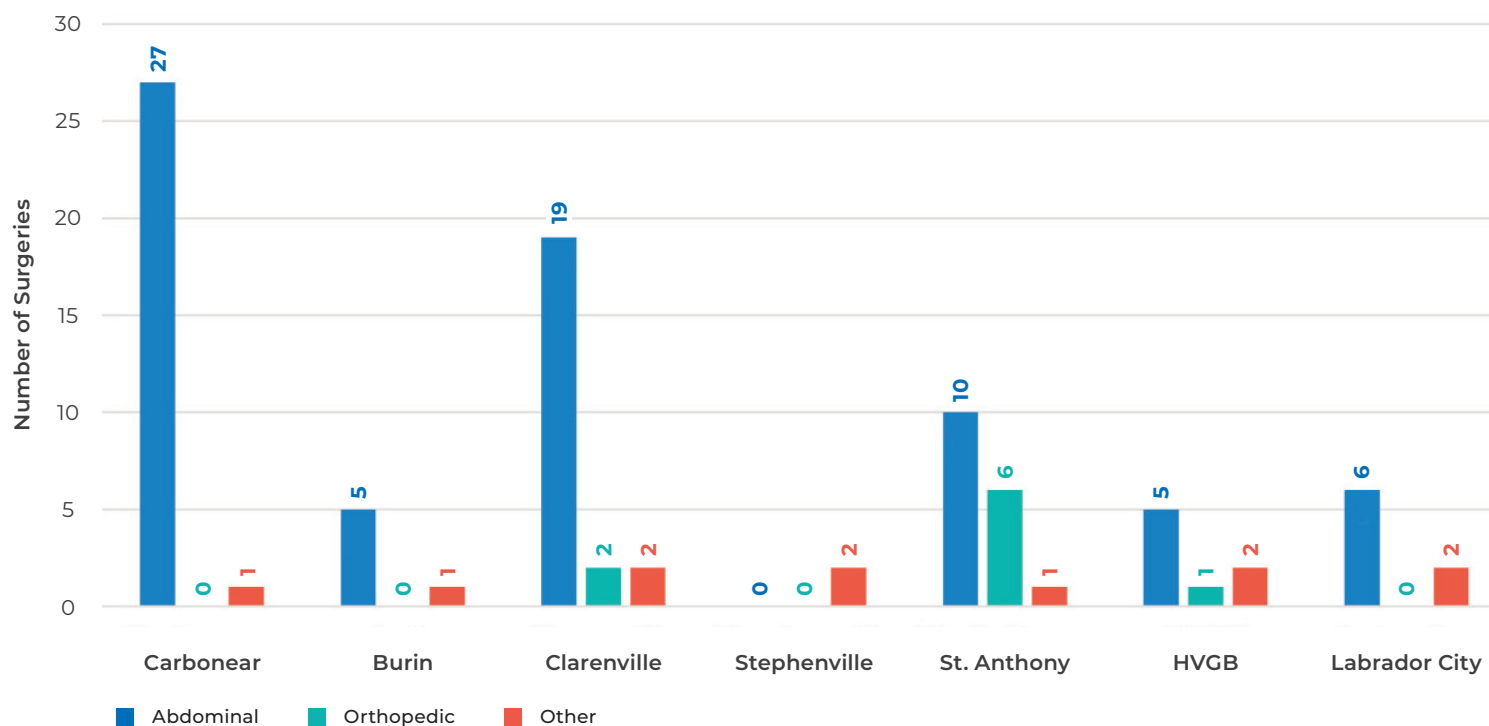


Figure 2. Number of Emergency Surgeries by Type Performed in Winter in Small Hospitals

- The majority of all emergency surgeries performed in small hospitals in winter are abdominal surgeries, which are generally less time-critical than other types of surgery that are performed on an emergency basis

Conclusions

1. Very few emergency surgeries are performed in small hospitals, and those that are, are primarily abdominal surgeries.
2. Patients requiring types of emergency surgery other than abdominal surgery, which can be more time-critical, are already being transported to larger regional or tertiary hospitals for care, as these are not currently being performed in small hospitals.
3. This suggests that transportation challenges, particularly due to winter weather, are not a critical factor for planning future locations of surgical services, as the few emergency surgeries currently conducted in small hospitals are less urgent and can usually be managed with a few hours delay before surgery without significant impact on patient outcomes.