

BACKGROUND

Traditional concerns for primary regional anesthesia in high-BMI patients:

- Increased comorbidities
- Increased regional failure rate
- Increased unplanned admissions

Many ambulatory surgical centers have strict BMI criteria

METHODS

Epic SlicerDicer identified surgical cases of interest at a university ambulatory surgical center

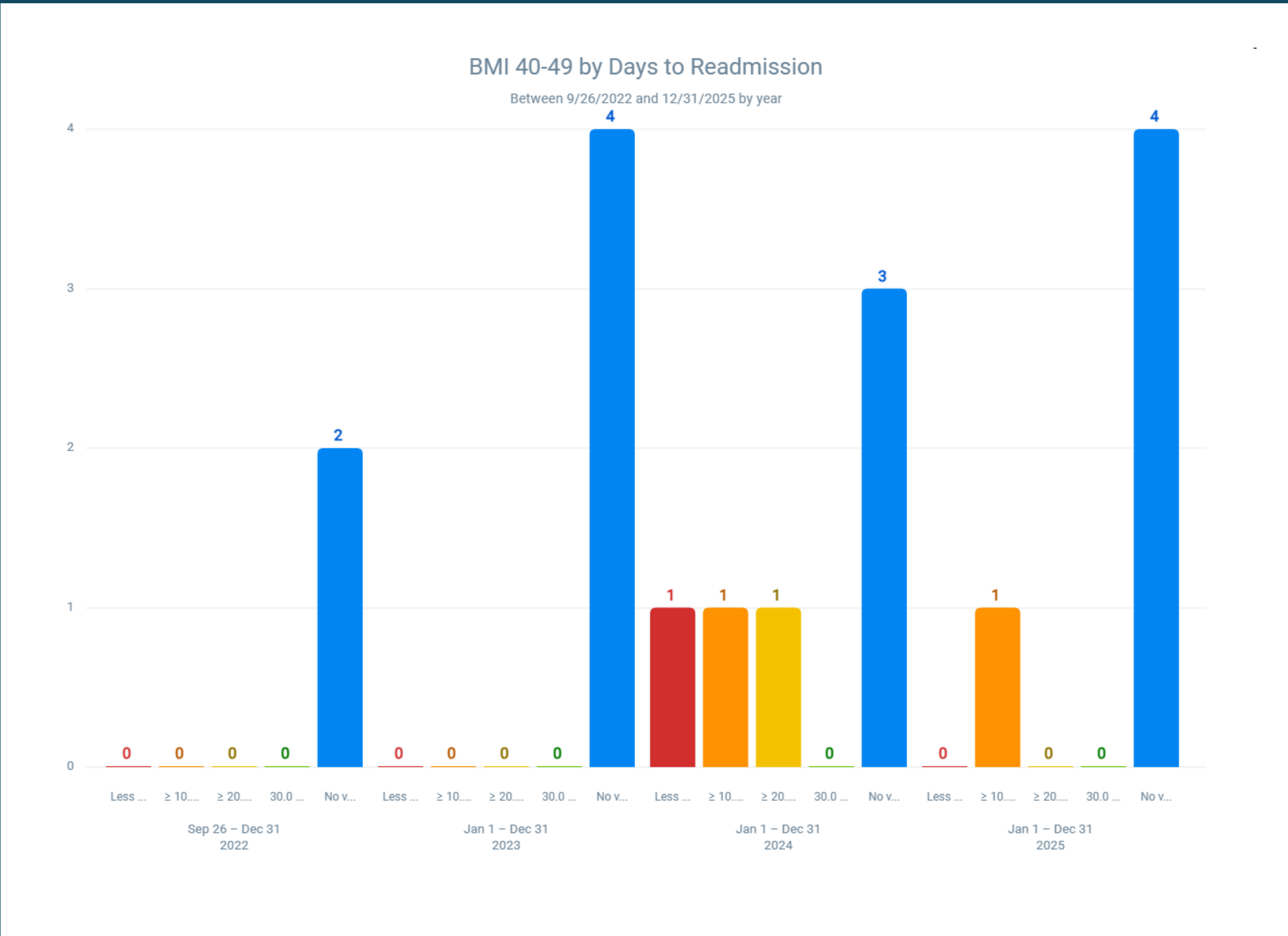
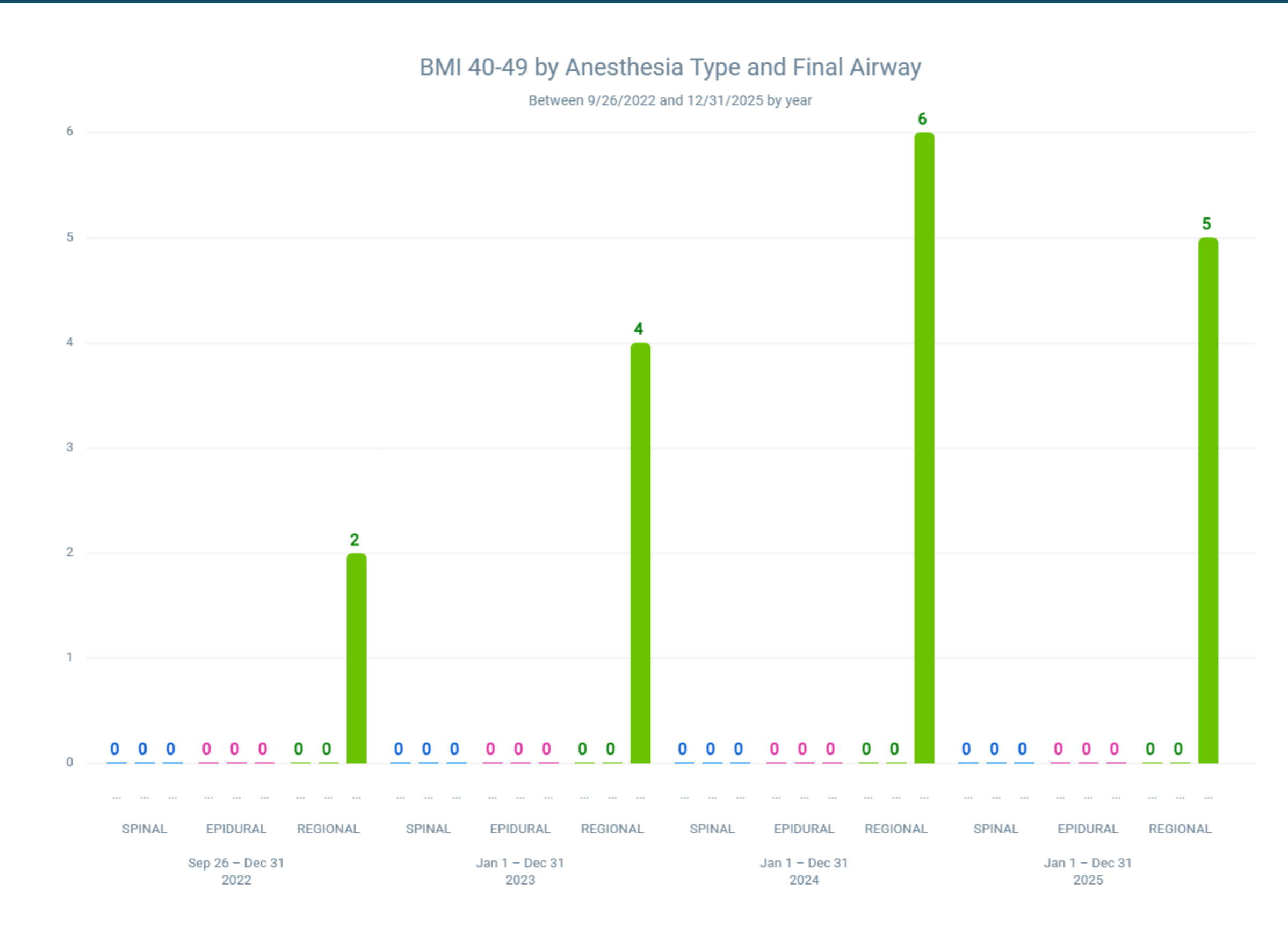
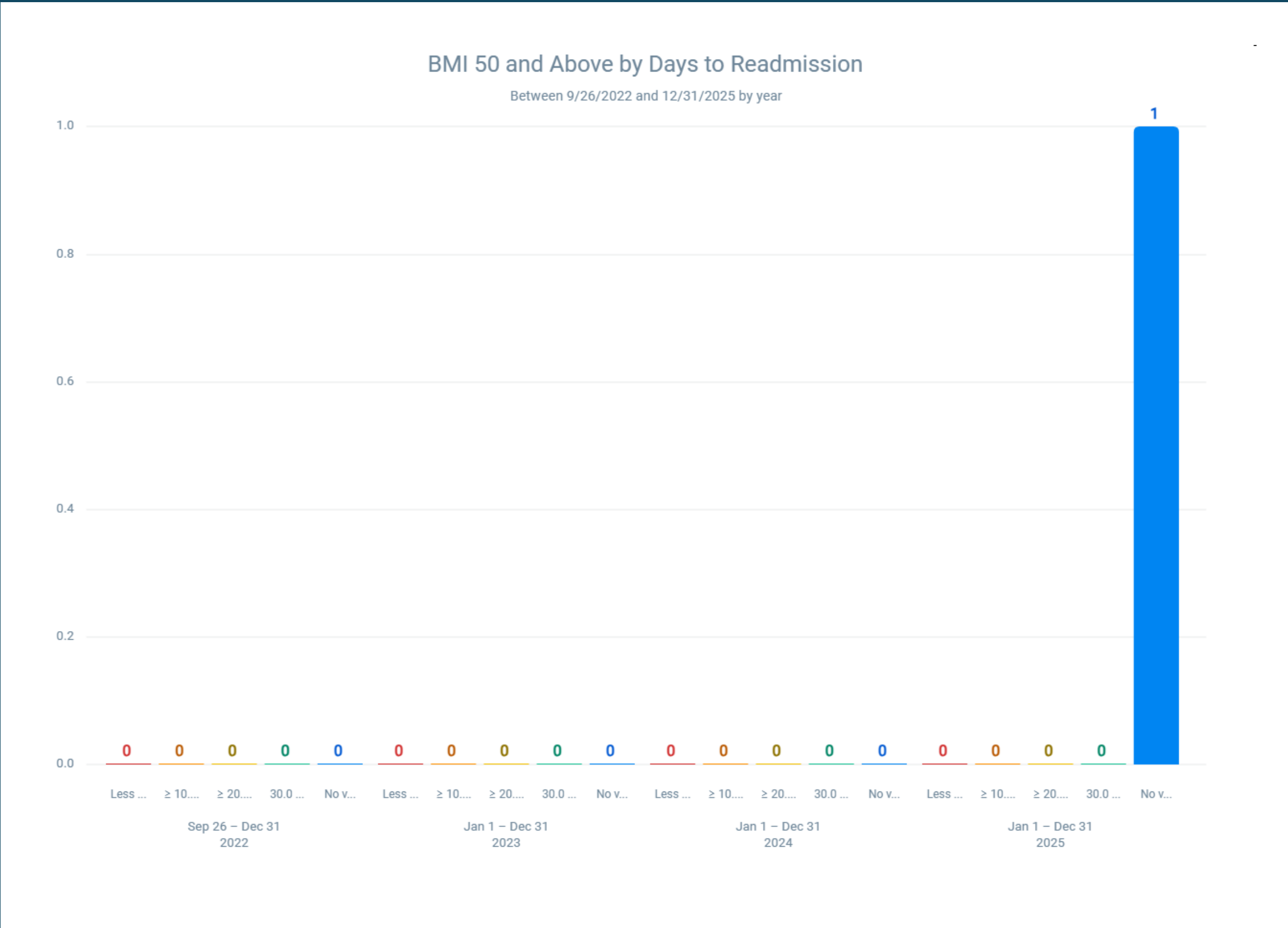
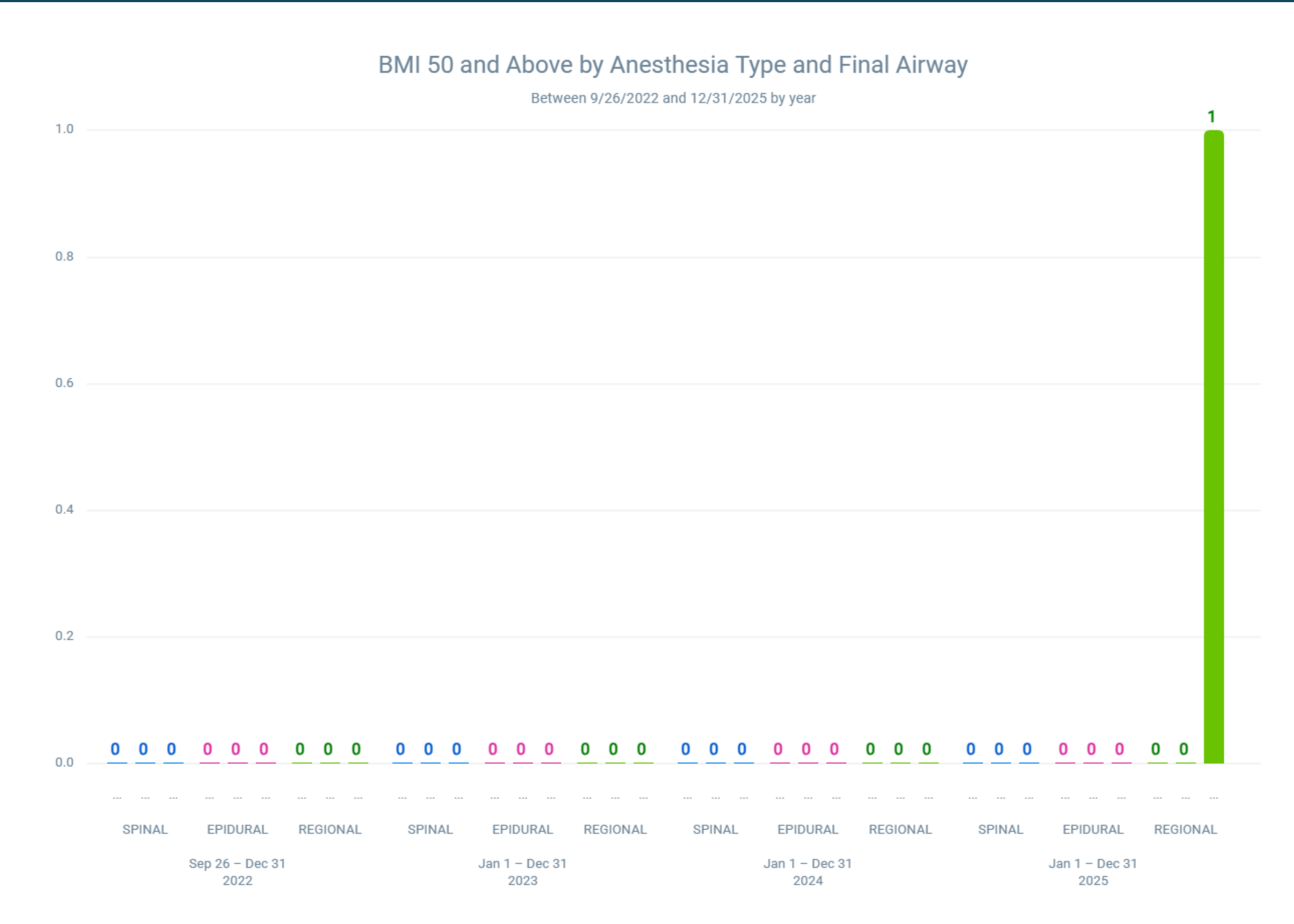
- Inclusion criteria:
- BMI 40-49 and BMI ≥50 at time of surgery
 - Primary regional, spinal, or epidural anesthesia

- Cases examined for:
- Notable events (Table 1)
 - Final airway (natural patent airway, ETT, or LMA)
 - Days to readmission (<10, 10-20, 20-30, 30+, or none)

Table 1. Notable events grouped by category		
Respiratory	Pulmonary edema, airway obstruction requiring support, aspiration, bronchospasm, hypoxia, pneumothorax, reintubation, unable to extubate, unplanned ventilation, wheezing requiring medical treatment	
Cardiac	Cardiac arrest, cardiogenic shock, myocardial infarction, myocardial ischemia, unanticipated need for hemodynamic support	
Neurological	Peripheral nerve injury, peripheral neurologic deficit, stroke	
Anesthesia and Drugs	Failed regional, insufficient regional analgesia, LAST, opioid reversal, other unexpected drug reaction	
Unplanned Admission	Unplanned hospital admit/23 hour stay, unplanned ICU admit	
PONV		
Death		

Reassessing strict BMI criteria in ambulatory surgery in the context of regional anesthesia for patients BMI ≥40

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BMI alone, even as high as ≥50, may not be as important an exclusion criterion for ambulatory surgical centers, especially for surgery performed under regional anesthesia.

RESULTS

- From September 2022 to December 2025:
- 17 cases in patients BMI 40-49
 - 1 case in patient BMI ≥50

No notable events or conversion to general anesthesia

All cases performed under peripheral nerve blocks as the primary anesthetic

- Four cases of readmission in patients BMI 40-49:
- 1 within 10 days (5.9%)
 - 2 within 10-20 days (11.8%)
 - 1 within 20-30 days (5.9%)
 - 13 did not require readmission (76.5%)

No readmission in the BMI≥50 case

Obesity alone should not be a disqualification from ambulatory surgical centers

