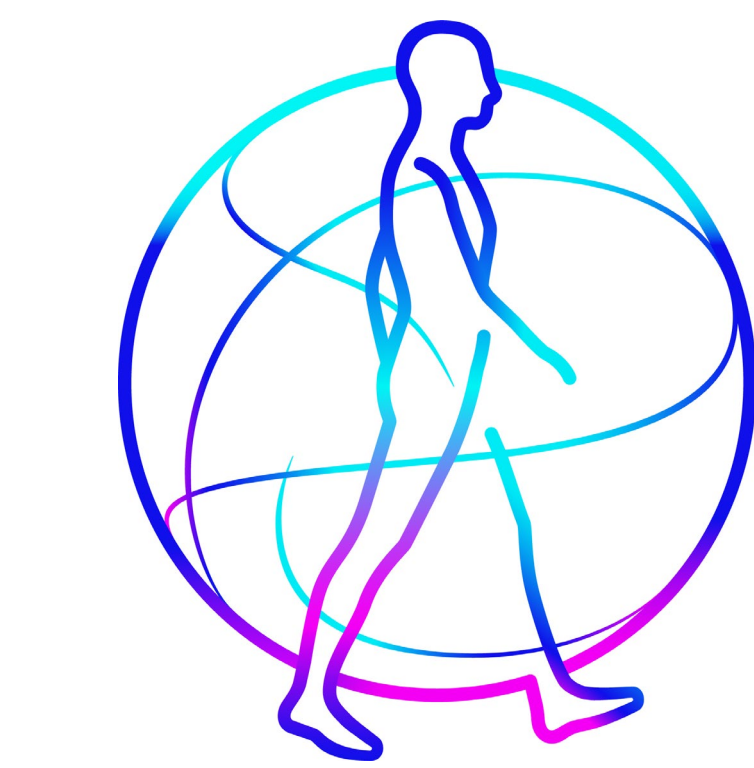


Evaluation of Bariatric Surgery trends in the Brazilian Public Health System (2018-2024): A real-world study evaluating the difference between the prevalence and adoption of laparoscopy



2045

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BACKGROUND & OBJECTIVE:

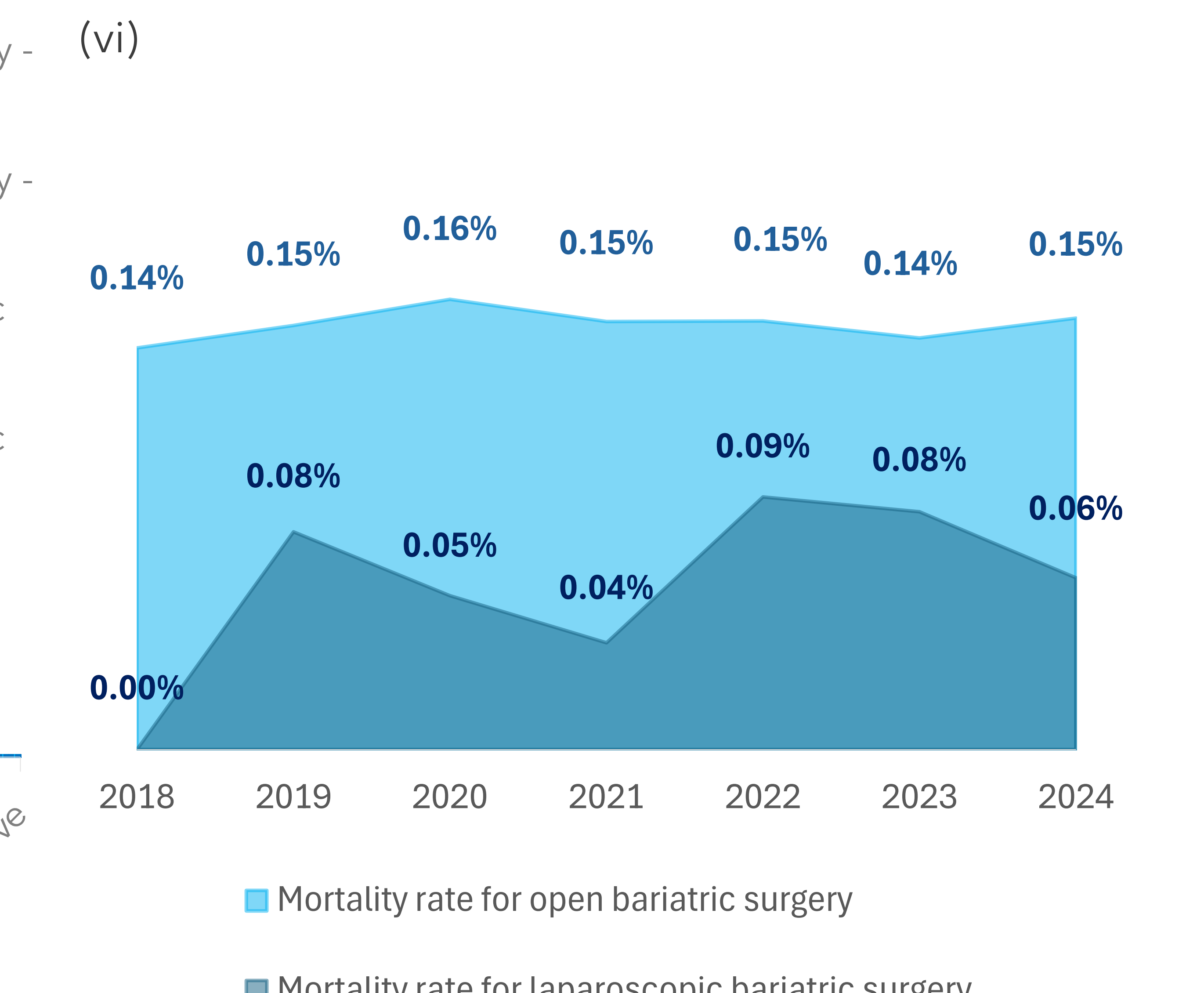
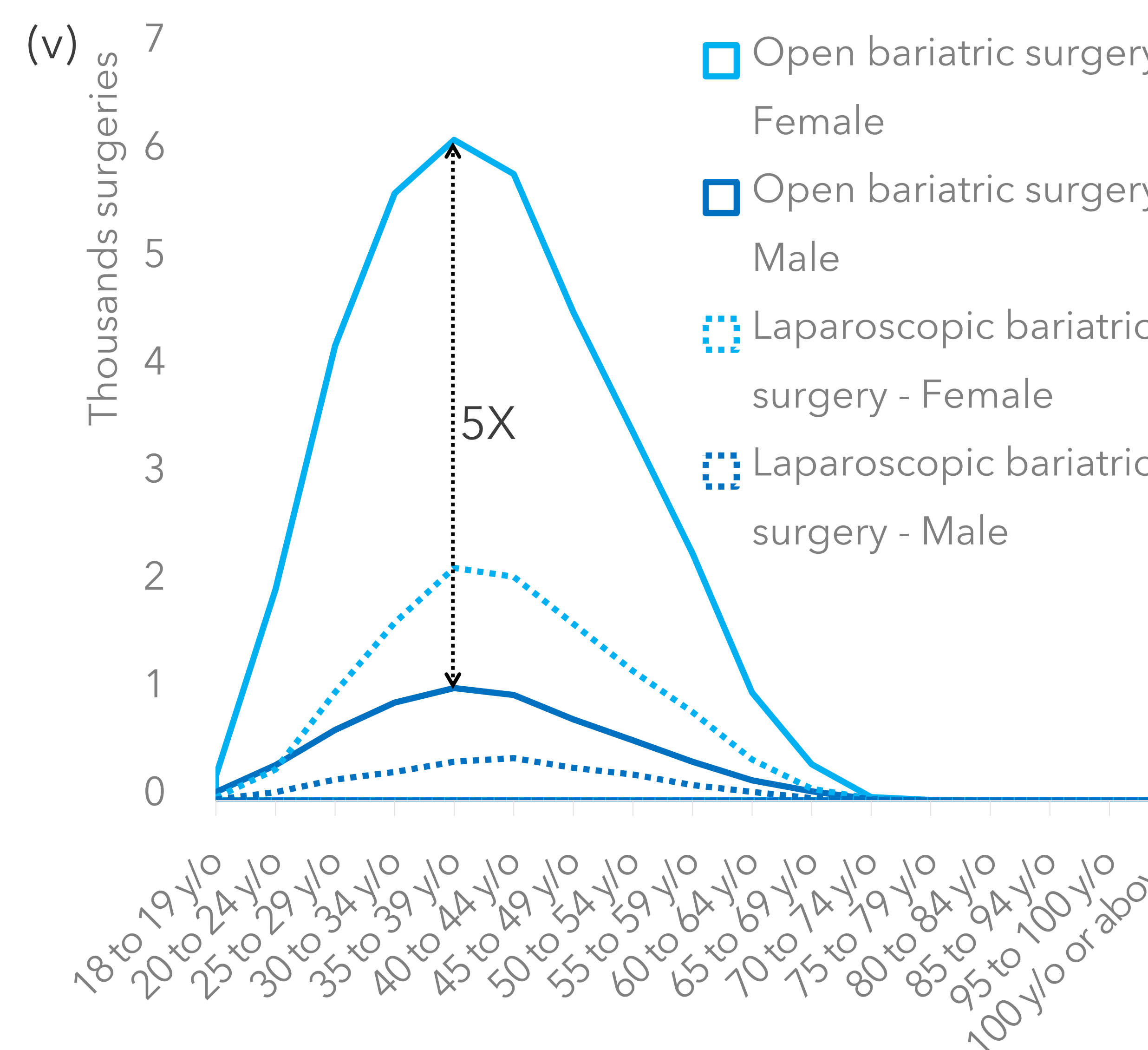
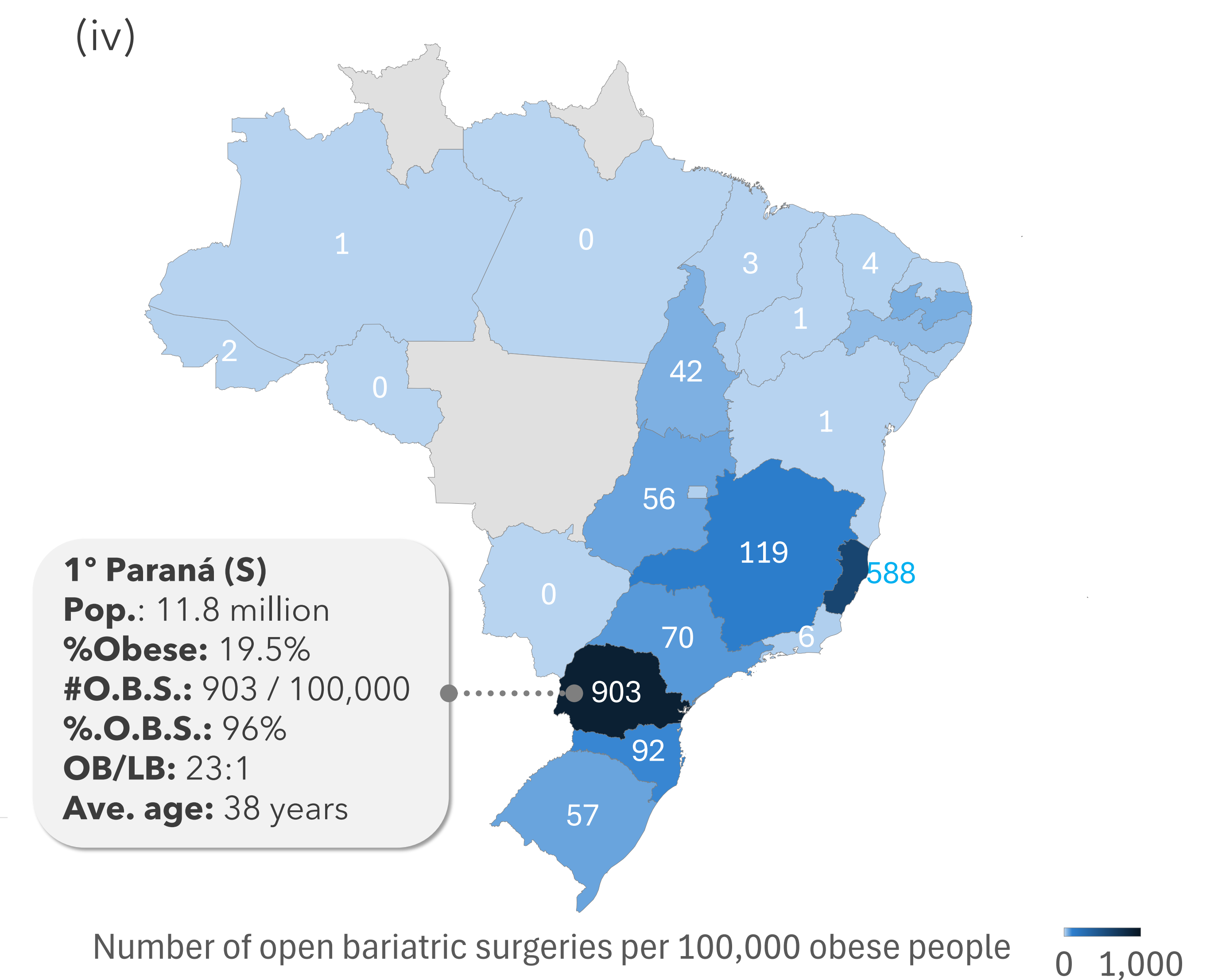
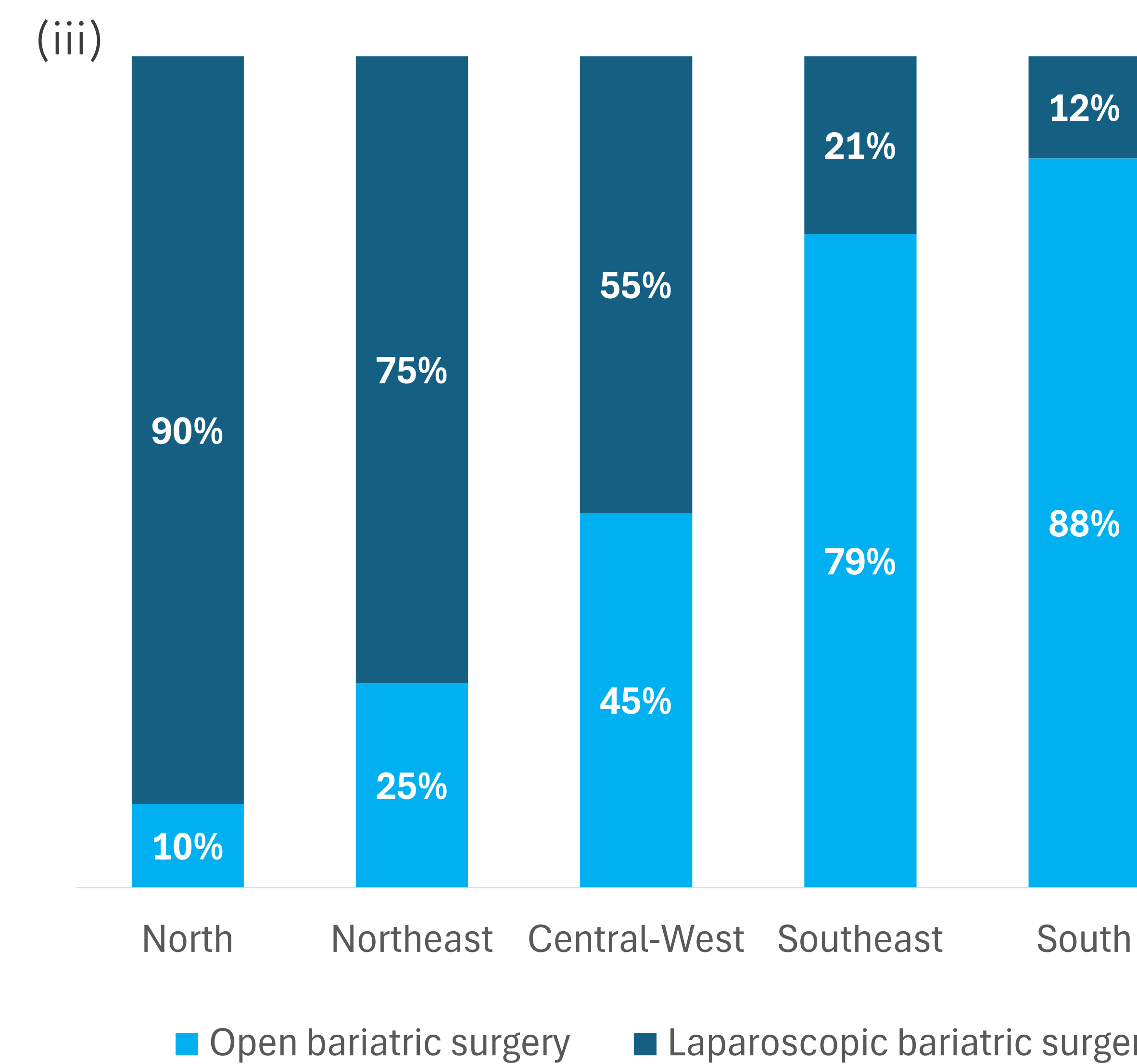
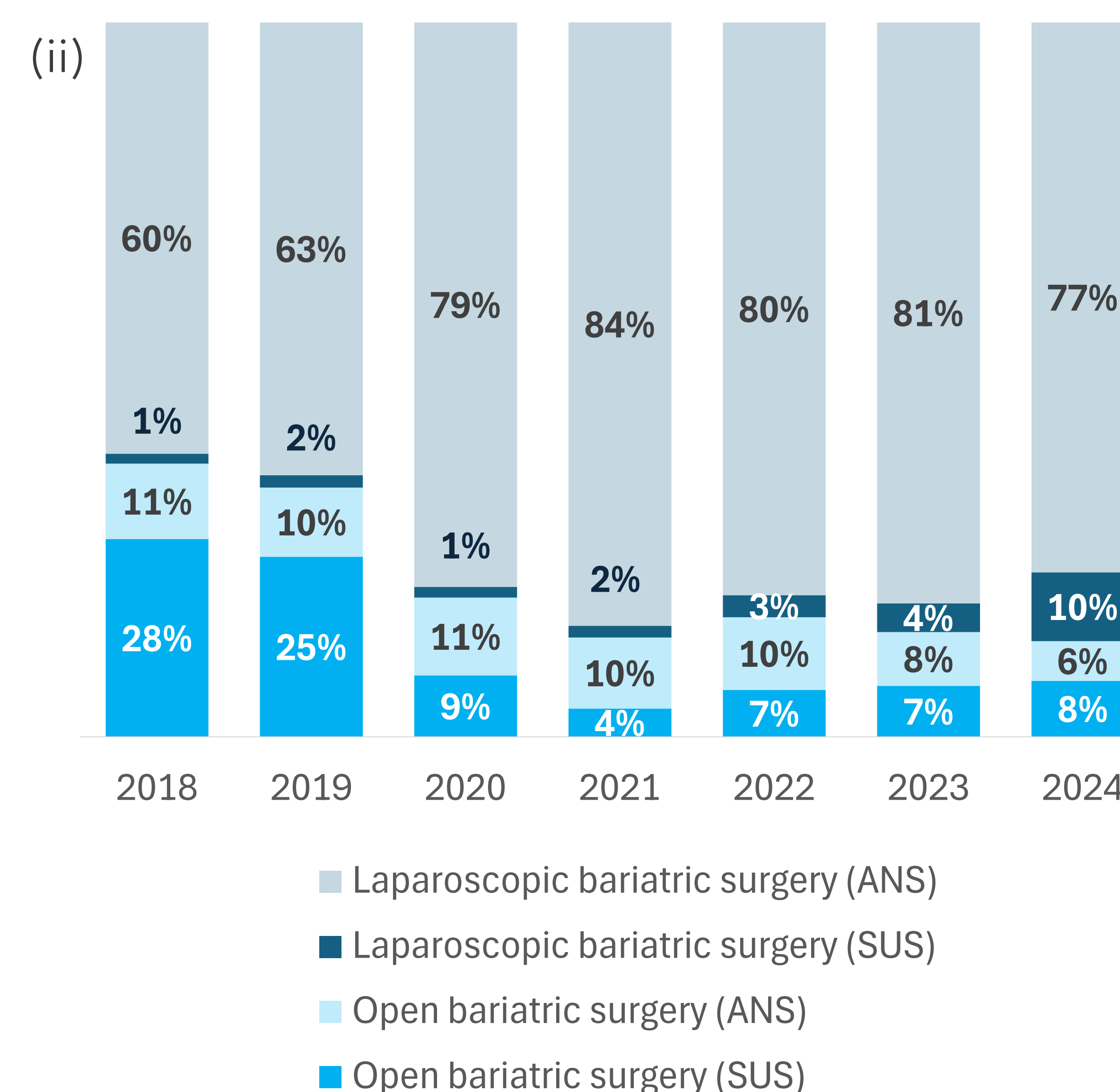
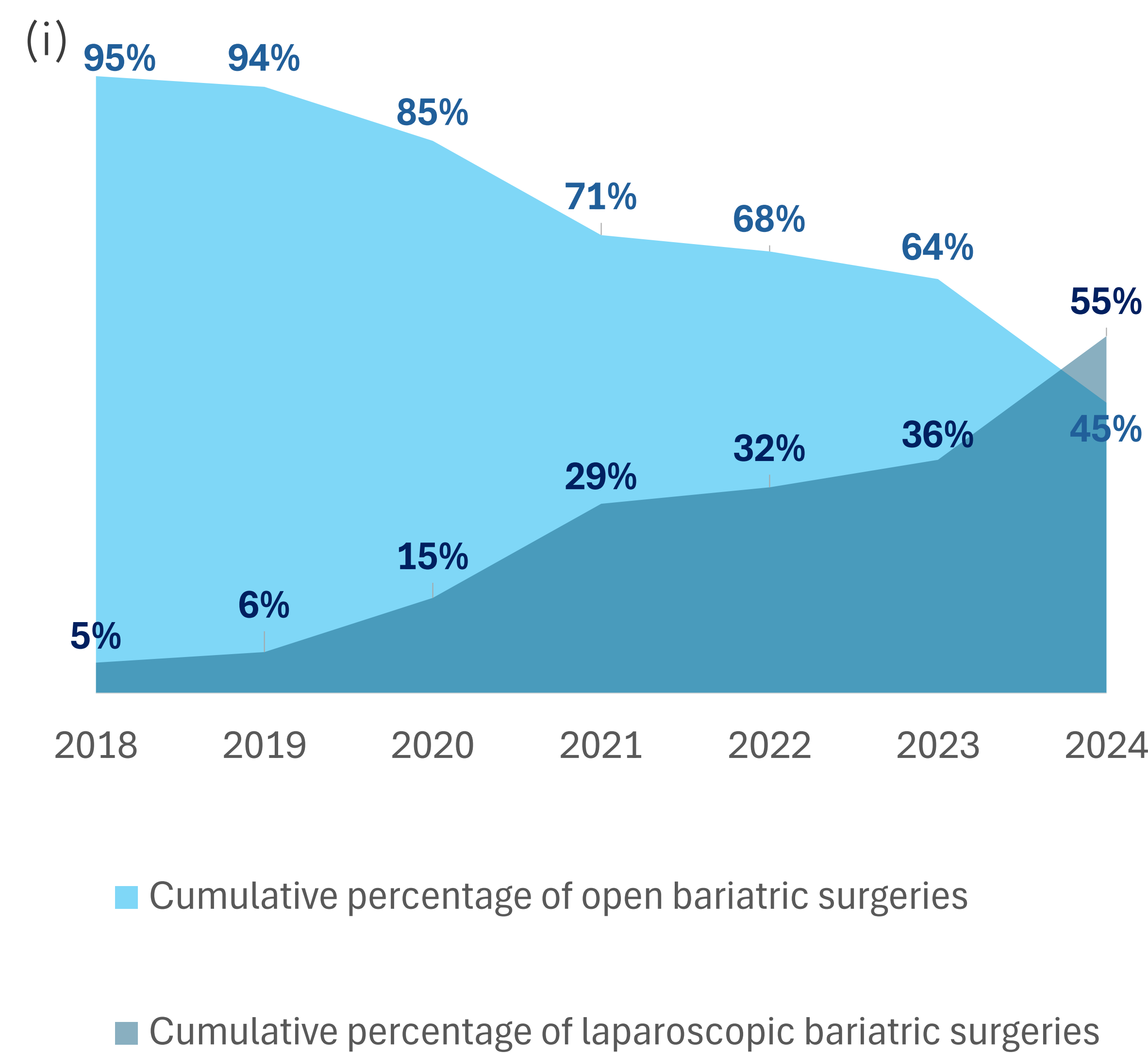
Bariatric surgery is an effective treatment for severe obesity and monitoring is essential to evaluate the effectiveness of obesity control policies and guide the allocation of public resources. In **Brazil's public health system (SUS)**, structural, financial, and regional factors may influence the adoption of minimally invasive techniques. This study investigates the volume of bariatric surgeries performed in the SUS and analyzes the adherence to laparoscopic surgery in the period from **2018 to 2024**.

METHODS:

A **retrospective observational** analysis was conducted using administrative data from DATASUS/SIH. The data was extracted using TABWIN software. Adult patients (≥18 years) undergoing bariatric surgery related with E66 ICD-10 code between **2018 and 2024** were included. Procedures were classified as open or laparoscopic. Outcomes were analyzed by year, region, state, age, sex, and mortality. Prevalence rates were calculated using obese population estimates. Results were analyzed using descriptive statistics.

RESULTS:

A total of **55,101** bariatric surgeries were identified. Adoption of laparoscopic surgery increased substantially, rising from **~5% in 2018 to ~55% in 2024** (i), with the most rapid growth occurring after 2023. Despite serving a larger population, the SUS accounted for only 10% of laparoscopic bariatric surgeries nationally, compared with the private sector (ANS) which performed ~279,000 (77%) (ii), predominated in the **North and Northeast**, reaching 90-75% of procedures, respectively (iii). In contrast, open surgeries were concentrated in the **South and Southeast**, particularly in **Paraná** (iv), which accounted for nearly half of all open procedures. **Women** represented most patients (up to a 6:1 ratio vs. men), particularly between **ages 20-59** (v). Mean age at surgery was approximately 40 years for open and 42 years for laparoscopic procedures. Mortality was **higher for open surgery** and among male patients, despite lower surgical volumes. In open surgery, mortality clustered in middle-aged groups, whereas in laparoscopy it increased with advancing age (vi).



DISCUSSION & CONCLUSIONS:
 Bariatric surgery within the Brazilian SUS is undergoing a transition toward minimally invasive techniques; however, access remains limited and highly uneven across regions. Financing mechanisms appear to play a central role in regional disparities. These findings highlight opportunities for targeted policy interventions, reimbursement reform, and surgical capacity expansion to improve equity and outcomes in bariatric care within the SUS.

Sources:
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