

NATIONAL DIFFUSION OF DAY SURGERY IN HUNGARY: REAL-WORLD TRENDS IN INPATIENT VS DAY-CASE BY DRG ACTIVITY 2014–2025

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OBJECTIVES

One-day surgery becomes an ever-reliable alternative of the expensive inpatient care in many developed countries worldwide. The aim of the study is to quantify the national diffusion of day-surgery in the publicly funded Hungarian healthcare system and the associated shift from inpatient to day-case care.

METHODS

The study database was derived from the National Directorate General for Hospitals and contained all the cases and DRG cost-weights which were eligible to be treated in one-day surgical form. The study database covered the period of 2014-2025. The data from each year was completed despite the year of 2025 (it was available until October month). Outcomes were annual cases, DRG cost-weights, day-surgery shares, and mean cost-weight per case; trend in day-surgery odds over 2014–2024 was estimated with a binomial logit model.

RESULTS

Across 2014-2025, 6,838,487 cases generated 6,760,373.85 DRG cost-weights. Day surgery accounted for 3,424,140 cases (50.07%) and 2,251,426 DRG cost-weights (+33.30%). Day-surgery turnover increased from 226,734 cases in 2014 to 338,289 in 2024 (+49.2%), while inpatient cases dropped from 382,762 to 250,353 (-34.6%). The day-surgery case share increased from 37.20% (2014) to 57.47% (2024) (+20.27 percentage points) and the DRG cost-weight share from 24.08% to 39.53% (+15.45 points). Odds of day surgery increased by 7.39% per year during the entire study period (OR=1.074; p<0.001). The university clinics (767,344 cases) and the county hospitals (1,089,899 cases) covered the 54% of the domestic, public-funded one-day surgical cases. The same ratio with DRG cost-weights was 55% (1,248,308 DRG cost-weights).

CONCLUSIONS

Day surgery diffusion in Hungary was substantial and sustained, with clear substitution from inpatient care to day-surgery in cases which are feasible to be treated in one-day surgical form. Due to the current DRG-based funding technique makes the most complex type of hospitals interested to deliver high number of one-day surgical cases.

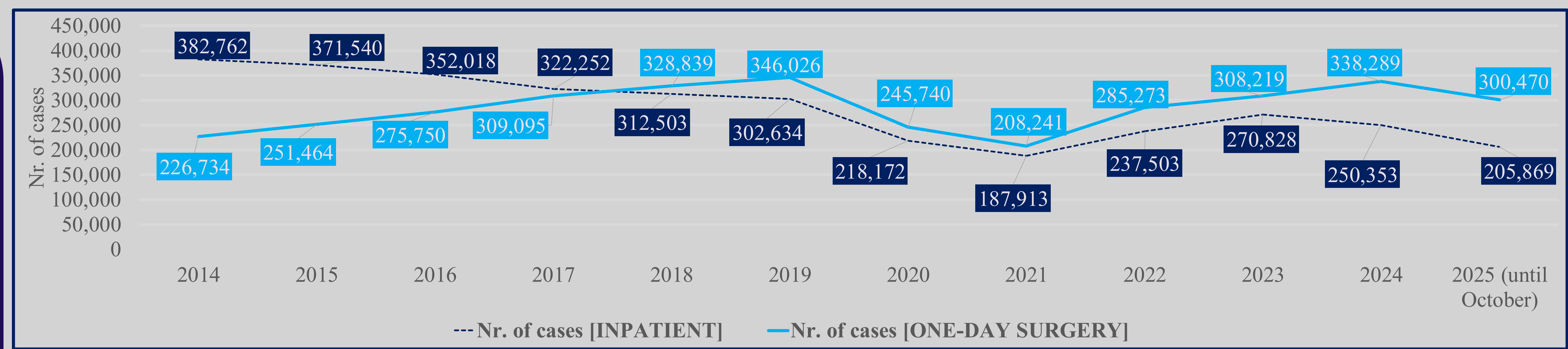


Figure 1: Annual number of cases in public-funded inpatient and one-day surgical care

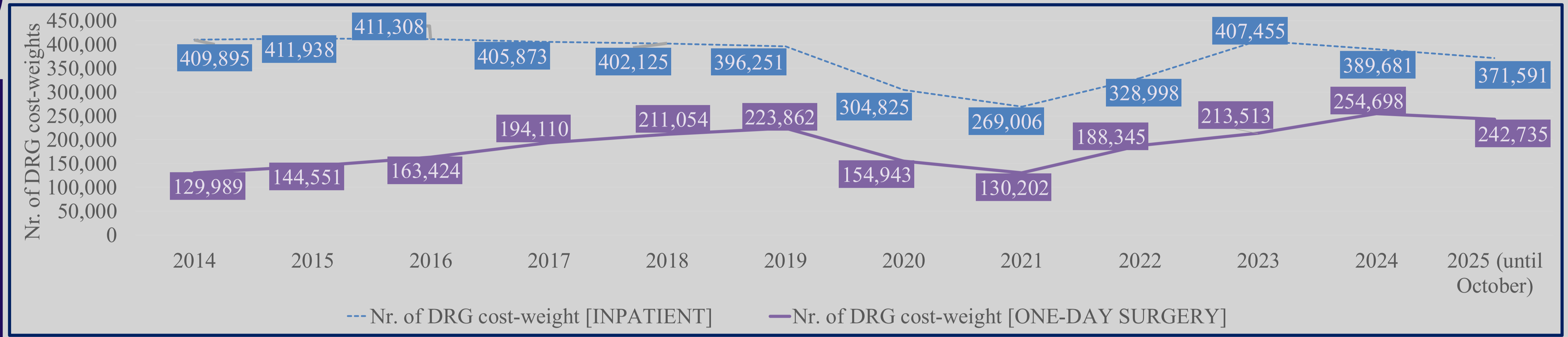


Figure 2: Annual DRG cost-weights in public-funded inpatient and one-day surgical care

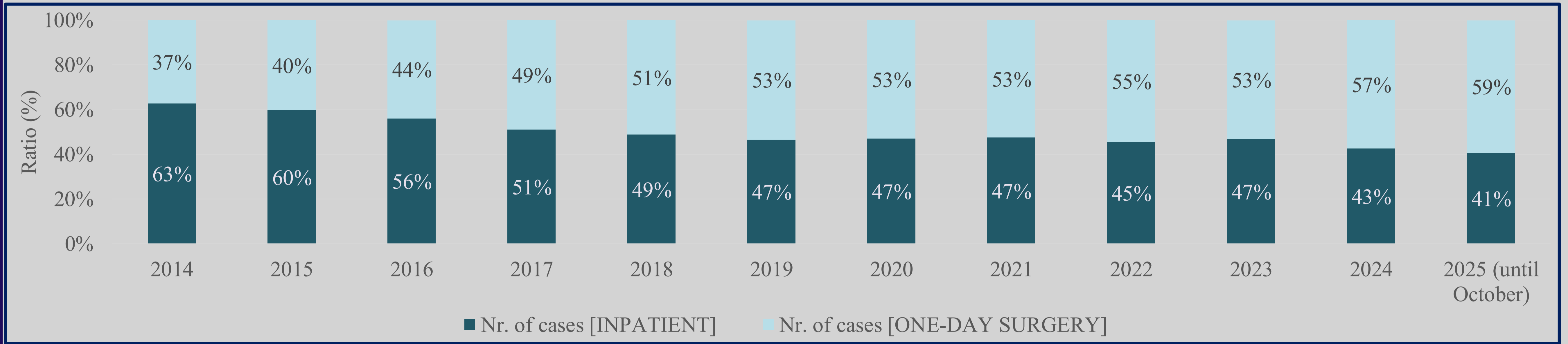


Figure 3: Annual ratio of one-day surgical care

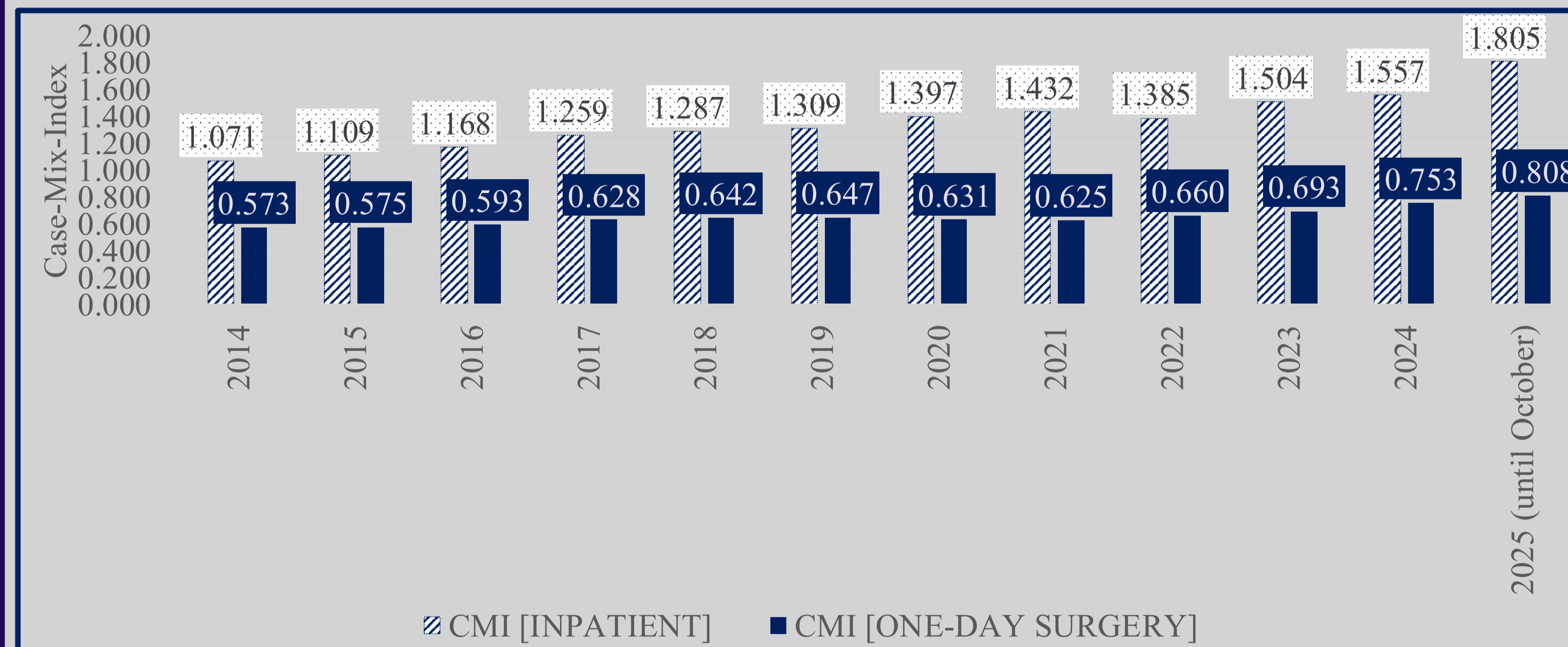


Figure 4: Changing of CMI in one-day surgical care

Indicator	Value	Interpretation
Total eligible activity, 2014-2025	6,838,487 cases; 6,760,373 DRG cost-weights	Day surgery represented half of the eligible cases
Day surgery: 2014-2025	3,424,140 cases (50.07%); 2,251,426 DRG cost-weights (49.2%)	
Inpatient: 2014-2025	341,417 cases (49.93%); 2,508,947 DRG cost-weights (50.8%)	
Change in cases, 2014-2024	Inpatient: 382,762-250,353 (-34.6%)	Clear substitution from inpatient to one-day surgery
Day surgery share 2014-2024	Cases: 37.2%-57.5% DRG cost-weights: 24.1%-39.5%	Diffusion was sustained on both volume and financing metrics
Binomial logit trend, 2014-2024	OR=1.074 per year (CI 95%=1.073-1.074); p<0.001	Odds of day surgery increased by 7.4% annually
Largest contributing provider types	County hospitals: 1,089,899 cases; University clinics: 767,344 cases	Together they delivered 54.2% of all one-day surgery cases
DRG cost-weights in those two provider types	County + university: 1,248,308 DRG cost-weights	these two provider groups represented 55.4% of one-day surgery cost-weights

Table 1: Main findings of the research

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