

# Highly Specialised Rectal Cancer Surgery Centres in the Czech Republic: Goals and Future Perspectives

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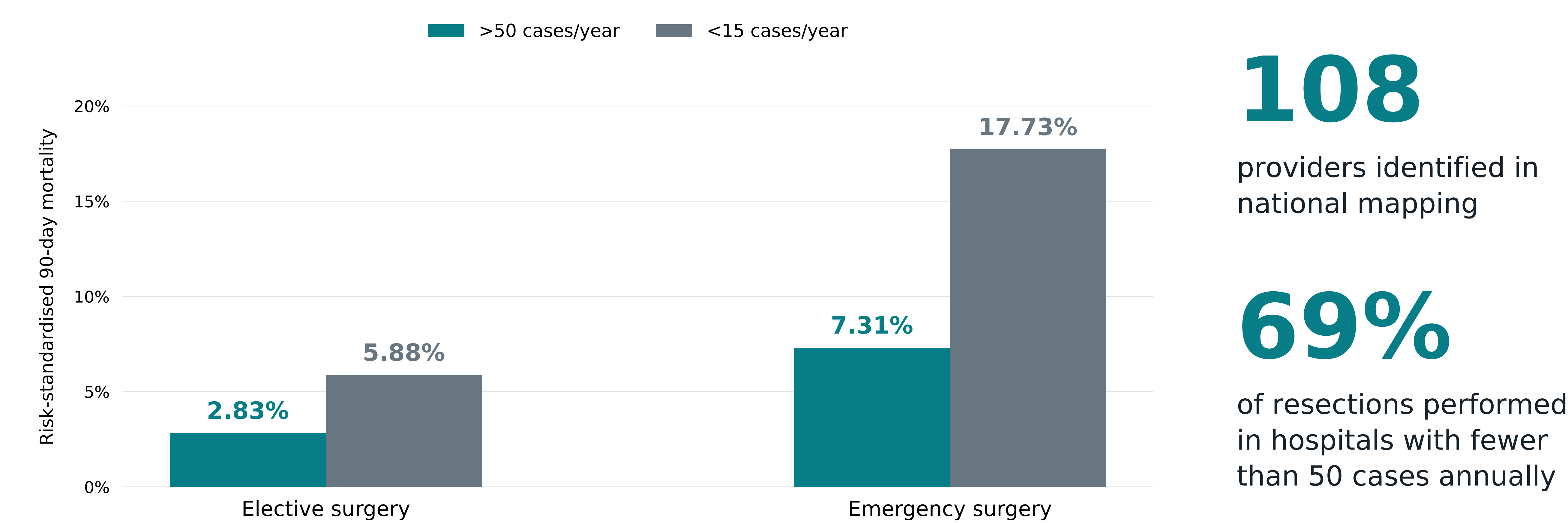
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## Lower-volume hospitals had more than twice the risk-standardised 90-day mortality.

National outcome indicators informed the criteria for specialised rectal cancer surgery centres.

### 01 NATIONAL EVIDENCE



Annual volume refers to rectal cancer surgery. Elective and emergency procedures were analysed separately.

### 02 BACKGROUND & METHODS

We evaluated whether routinely collected national data could identify outcome variation and support selective centralisation of rectal cancer surgery.

Administrative reimbursement data were linked with cancer-registry and mortality data. Hospitals were stratified by annual volume: >50, 30–50, 15–30 and <15 cases.

Endpoints included risk-standardised 90-day mortality, in-hospital mortality, complications, minimally invasive access and procedure profiles.

The national findings support selective centralisation of rectal cancer surgery, rather than a uniform centralisation strategy for all colorectal cancer surgery.

### 03 ACCESS TO MINIMALLY INVASIVE SURGERY

| Annual hospital volume | >50 cases | <15 cases |
|------------------------|-----------|-----------|
| Elective surgery       | 43.13%    | 21.08%    |
| Emergency surgery      | 36.29%    | 8.17%     |

Lower-volume hospitals also showed fewer sphincter-preserving resections and more palliative procedures.

### 04 CENTRE GOALS & FUTURE PERSPECTIVES

#### Specialised teams and coordinated pathways

Minimum surgical volume, staffing resilience, multidisciplinary decision-making and linkage to comprehensive oncology services.

#### Oncological quality and preserved function

High-quality total mesorectal excision, appropriate neoadjuvant treatment, lower morbidity and systematic assessment of survival and function.

#### Centralisation is already under way

Centres must absorb transferred surgical activity while maintaining timely access and sufficient capacity.

#### Accountability beyond centre designation

Regular outcome reporting and annual external evaluation should guide improvement. Future assessment should include long-term survival and patient-reported functional outcomes.

#### A PIONEERING NATIONAL INITIATIVE

Linking nationwide outcome data to centralisation and accountability: a distinctive model for safer surgery and preserved function.

Interpretation: observational volume–outcome associations do not establish a causal effect of centralisation.

Sources: Örhalmi et al., EFR 2026 abstract; Örhalmi, “Koncept péče o pacienty s kolorektálním karcinomem”, April 2026. National outcome-indicator data: KZP / ÚZIS. MDT = multidisciplinary team; TME = total mesorectal excision.