

# Hospital Readmission Following Pancreaticoduodenectomy: A Single-Center, Retrospective Review, 2008-2018



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**Research area:** Surgical Oncology

**Background:** Hospital readmission rates have been used as a quality measure for decades. It is therefore incumbent upon surgeons to establish expected readmission norms for complicated procedures with potentially high complication and readmission rates. Additionally, variables such as center volume and readmission reason after these procedures can be useful for institution specific evaluations and intra-facility comparison to nationally accepted statistics, commonly published by large, urban teaching centers. This study aims to evaluate rate and reasons for hospital readmission following pancreaticoduodenectomy at a high-volume, rural tertiary care center.

**Methods:** Patients with pancreaticoduodenectomy between 2008 and 2018 were identified using CPT codes 48150 and 48152-4. Records were reviewed and information regarding demographics, 30 and 90 day readmission, readmission reason, and other outcomes were abstracted. Operative characteristics were compared between patients readmitted within 90 days and those not readmitted using t-tests. Readmission rates were compared to those reported in the literature.

**Results:** Over 10 years, 112 patients underwent pancreaticoduodenectomy. 22% (n=26) of patients were readmitted within 90 days. The most common reason for readmission was deep space infection (23%), followed by delayed gastric emptying/nausea/vomiting (15%), wound infection (12%), pain (12%) and malnutrition/dehydration (12%). Demographic characteristics among patients readmitted were similar to those not readmitted. There were no significant differences between patients readmitted and not readmitted in mean hospital length of stay (11.1 vs 10.7 days) or mean estimated blood loss (669.2 vs 490.1cc), though readmitted patients tended to have a longer length of stay and higher estimated blood loss. Mean operation time was significantly higher for patients readmitted than not readmitted (392.1 vs 343.9 minutes,  $p=0.04$ ).

**Conclusions:** Pancreaticoduodenectomy continues to be a complex procedure but can be carried out successfully with a skilled surgical team. Rates of readmission and complication in this high-volume, rural tertiary care center are comparable to nationally reported statistics.