

# Effect of Insurance Status on Perioperative Outcomes After Robotic Pancreaticoduodenectomy: A Propensity-Score Matched Analysis

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## Hypothesis & Methods

- Publicly insured patients have been shown to have worse outcomes than those with private insurance
- Our hypothesis was that patients undergoing robotic pancreaticoduodenectomy would have similar or increased disparities in outcomes
- 100 patients were 2:2:1 propensity-score matched by age, BMI, ASA class, pathology, staging, and tumor size

	Private	Medicare	Medicaid/Uninsured	P-Value
Number of Patients	40	40	20	100
Age (years)	63 (63±9.0)	68 (68±8.6)	63 (64±9.4)	p=0.07
Sex (M/W)	21/19	17/23	9/11	p=0.66
BMI (kg/m <sup>2</sup> )	27 (28±5.7)	26 (26±4.3)	26 (26±4.1)	p=0.22
ASA	3 (3±0.5)	3 (3±0.5)	3 (3±0.5)	p=1.00
Intraoperative Variables				
Operative Duration (min)	433 (446±95.3)	408 (405±85.8)	441 (439±150.7)	p=0.19
Estimated Blood Loss (mL)	200 (319±516.2)	200 (500±1124.4)	180 (285±322.3)	p=0.50
Conversions to Open (n)	2 (5%)	7 (18%)	2 (10%)	p=0.20
Intraoperative Complications (n)	0	0	0	p=1.00
Lymph Nodes Harvested (n)	14 (14±6.3)	11 (13±4.1)	13 (15±5.7)	p=0.32
R0 Margin Status	97%	93%	95%	-
AJCC Staging (%)	I (12%), II (18%), III (70%), IV (0%)	I (12%), II (18%), III (70%), IV (0%)	I (12%), II (18%), III (70%), IV (0%)	p=1.00
Tumor Size (cm)	3 (3±1.2)	3 (3±1.0)	3 (3±1.0)	p=0.49
Postoperative Variables				
Clavien-Dindo Score (≥III)	III (3), IV (1)	III (2), IV (1)	III (1), IV (1)	p=0.91
In-Hospital Mortality (n)	1 (2%)	3 (8%)	0	-
Length of Stay (days)	5 (7±5.1)	5 (8±7.2)	6 (11±5.1)	p=0.26
Readmissions within 30 days (n)	4 (10%)	0	4 (20%)	-
Received Adjuvant Therapy	16 (40%)	24 (60%)	7 (35%)	p=0.10
Time to Adjuvant Therapy (weeks)	6 (7±3.3)	7 (10±10.7)	8 (9±2.7)	p=0.62

## Conclusions

- Health insurance status does not impact patients' perioperative outcomes,
- Insurance status does not affect the cost-of-care burden assumed by the hospital for patients without Medicaid or insurance for robotic pancreaticoduodenectomy
- This is in contrast to previous studies that showed worse outcomes in patients with Medicare/Medicaid insurance

