

improved survival (1.7% vs. 2.7%, $P < 0.001$). In multivariate analysis, stent use was not associated with a significantly lower risk of a revascularization procedure on readmission to the same institution [OR 0.95, 95% CI (0.87–1.04), $P = 0.28$]. From the health care system's perspective, 106 patients would need to be treated with a stent to prevent one death on sentinel admission. **CONCLUSION:** Stent use decreased in-patient mortality by 1% without impacting length of stay or readmission rates. At \$149,354 per life year saved, stents would need to increase a person's life expectancy by a minimum of three years over that which is gained from PTCA alone to remain a cost-effective alternative.

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RESTENOSIS AND MEDICAL COSTS FOLLOWING PERCUTANEOUS TRANSLUMINAL CORONARY ANGIOPLASTY (PTCA) WITH AND WITHOUT STENT

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Data is available on stent PTCA restenosis rates in RCTs but little data is available on restenosis rates and medical costs in actual practice. **OBJECTIVES:** To compare restenosis rates (repeat PTCA or stent, coronary artery bypass grafting, or myocardial infarction) and medical care costs during one year post-PTCA for patients with and without stents. **METHODS:** A total of 1756 patients with index PTCA during 1995 and no PTCA in the prior 1 year were identified from a medical claims database of large self-insured plans covering 1.7 million lives. Stents were received by 373 of 1756 PTCA patients during the index PTCA. **RESULTS:** Restenosis occurred in 316 (22.8%) of 1383 non-stent patients versus 62 (16.6%) of 373 ($P = 0.001$) stent patients. For the one-year period following index PTCA, ischemic heart disease (IHD)-related medical costs were not significantly different between stent (mean = \$5898,) and non-stent (Mean = \$7018) groups ($P = 0.18$) nor did total medical costs differ among stent (Mean = \$14,128) and non-stent (Mean = \$13,621) groups ($P = 0.71$). Logistic regression (including: age, gender, comorbidities, prior year hospitalizations, percent of IHD hospitalizations in prior year, PTCA length of stay, and inpatient-PTCA) revealed lower probability of restenosis (odds ratio = 0.7, $P = 0.02$) in stent patients. Cost regressions using the same covariates revealed no significant difference in IHD related costs or total medical costs for the one year period following index PTCA. **CONCLUSIONS:** Although stented patients had lower restenosis rates, 1-year medical costs following PTCA were not significantly different based on stenting.

PSG 11 COST ANALYSIS OF INHALED AGENTS IN CANADIAN PEDIATRIC HOSPITALS

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Inhaled agents and propofol are used to sedate patients for surgical interventions. Economic analysis of these agents is complex and includes acquisition cost, wastage, adjuvants, flow rate of fresh gas, equipments, and patient-specific factors. **OBJECTIVES:** The study purpose was to benchmark annual costs of halothane, isoflurane, desflurane, sevoflurane, enflurane, thiopental and propofol in Canadian pediatric institutions. **METHODS:** A written survey was sent to 9 major hospital pharmacy departments in 1999 with 2 recalls regarding the 1997–98 and 1998–99 fiscal years. **RESULTS:** Response rate was 78% (7/9). Our cohort includes a total 1005 beds, 48,659 admissions/year and 64,552 surgical procedures/year. Day surgery represents 31% of total cases. Inhaled agents and propofol represented 47.4% ($n = 7$, $sd = 8.1$) of total drug costs in operating room (OR) and recovery room (RR). Anesthetic agents costs were on average \$0.18 CAN/min of surgery ($n = 4$, $sd = 0.05$) in 1997–98 and \$0.21 CAN/min ($n = 3$, $sd = 0.13$) in 1998–99. Total costs/patient of all drugs used were \$430.26 CAN ($n = 4$, $sd = 8.8$) in 1997–98 and \$26.11 CAN ($n = 4$, $sd = 6.28$) in 1998–99. Total costs/patient for anesthetic agents were \$13.54 CAN ($n = 4$, $sd = 2.7$) in 1997–98 and \$12.48 CAN ($n = 4$, $sd = 1.98$) in 1998–99. Costs reduction seems to be mainly caused by price reduction of isoflurane for 1998–99 which went from 1st position in 1997–98 (\$171,610 CAN, $n = 5$) to 3rd position in 1998–99 (\$116,700 CAN, $n = 5$) even with a 10% increase in consumption. Total costs of these agents increased by 3.5%. Sevoflurane has taken the 1st position in 1998–99. **CONCLUSION:** There are little data available in the literature to allow benchmarking in the pediatric OR. Further studies are required to identify the best ratio useful to monitor such costs as well as relevant outcomes.

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HOSPITAL COST SAVINGS FROM SEVERITY-ADJUSTED LENGTH OF STAY FOLLOWING SURGERY FOR INTRA-ABDOMINAL INFECTION AND TREATMENT WITH PIPERACILLIN/TAZOBACTAM OR IMIPENEM/CILASTATIN

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BACKGROUND: Treatment of intra-abdominal infections (IAI) has important health economic components including hospital stay and the cost and administration of pharmaceuticals. **METHODS:** From the hospital's perspective, time-to-discharge (TTD) was evaluated for 258