

Table. Survey Results

Survey item	Private n=160 (34%)		Both n=92 (19%)		Academic n=225 (47%)		p Value
	n	%	n	%	n	%	
Work full time	150	94	87	95	211	94	0.693
Ever been pregnant	123	77	70	76	164	73	0.096
Paid leave available	56	35	40	43	134	60	<0.001
Required to pay practice expenses on leave	45	28	23	25	37	16	0.003
Required to pay own benefits on leave	74	46	35	38	54	24	<0.001
Return sooner due to financial pressure	103	64	55	60	115	51	0.035
Return sooner due to supervisor pressure	109	68	57	62	126	56	0.017
Elected to leave job	17	11	6	7	7	3	0.049
Unwanted loss or delay in advancement	26	16	21	23	54	24	0.045

private, 47% academic, and 19% both private and academic. There was no difference in marital status, work status, or number who reported having been pregnant among the 3 groups. Compared with academic surgeons, private practice surgeons were less likely to report having paid leave ($p < 0.001$) and more likely to continue to pay practice expenses ($p = 0.003$) and benefits ($p < 0.001$) while on leave. Private practitioners also returned to work sooner than desired due to financial ($p = 0.035$) and supervisor ($p = 0.017$) pressures, and were more likely to leave a job ($p = 0.049$). Academic surgeons were more likely to experience a delay in job advancement ($p = 0.045$). Responses from surgeons who reported working in both settings were within the range of responses from the academic and private groups (Table).

CONCLUSION: Parental leave policies and attitudes vary between academic and private practice, creating unique challenges for female surgeons and different issues for family planning depending on employment model.

System Factors in the Operating Room (OR): Measurement and Intervention with the OR Black Box®

Robert C Adams-McGavin, James J Jung, MD,
Marlies P Schijven, MD, PhD, MHSc,
Teodor P Grantcharov, MD, FACS

Amsterdam Gastroenterology and Metabolism, Amsterdam; Li Ka Shing Knowledge Institute of St. Michael's Hospital, University of Toronto, Toronto, ON; University of Toronto, Toronto, ON

INTRODUCTION: Adverse events occur commonly in the operating room (OR) and often result from system factors. Understanding how system factors contribute to intraoperative events is therefore critical to improving surgical quality. The operating room (OR) Black Box® was developed to provide standardized monitoring of intraoperative care, including the system factors influencing patient safety. The data can be used to develop targeted interventions that reduce intraoperative events.

METHODS: A total of 24 laparoscopic general surgery procedures were captured and evaluated using the OR Black Box®. System factor events were captured by trained surgical analysts. Events were identified as either a safety threat or resilience support. They were then categorized by OR system component. An educational intervention was then developed for knowledge translation. Audiovisual clips of events were packaged into a video report to facilitate a debriefing session with the surgical team after each case.

RESULTS: A median of 14 safety threats (interquartile range [IQR] 11-16) and 12 resilience supports (IQR 11-16) were identified per case. Safety threats were most prevalent in the person, organization, and tools and technology categories. The majority of resilience support was contributed by clinicians' preventative actions or responses to unexpected events. Debriefs performed using the video reports allowed structured discussions around safety threats and resilience supports. Changes in practice were observed after debriefs were performed, including mindful practices to prevent a break in sterility when handling devices.

CONCLUSION: The OR Black Box® allows for retrospective evaluation of system factors and their impact on intraoperative events. This information can be applied in interventions to change practice.

Time is Money: Can Punctuality Decrease Operating Room Costs?

William C Chapman, MD, MPHS, FACS, Xun Luo, MD,
Jackie Martin, MD, MBA, Jason Wellen, MD, MBA, FACS
Washington University in St Louis, School of Medicine, St Louis, MO

INTRODUCTION: Inefficient operating room (OR) use wastes resources. Studies have suggested higher frequency of "first case on-time starts" (FCOTS) saves time, yet no direct association between FCOTS and markers of OR efficiency like "last case on-time end" (LCOTE) have been reported. We performed this study to evaluate predictors of FCOTS and determine FCOTS effects on efficiency and costs.

METHODS: In April 2017, our medical center launched an FCOTS improvement initiative. Cases performed in the 6-month pre- (October 2016–March 2017) and post-intervention (October 2017–March 2018) periods were retrospectively analyzed. Elective, nontraumatic cases performed by orthopaedics, gynecology, urology, minimally invasive surgery, or colorectal surgery were eligible. Analyzed covariates included age, BMI, American Society of Anesthesiologists class, and preoperative origin (outpatient vs inpatient). Univariate analyses and logistic and linear regression were used to evaluate outcomes.

RESULTS: A total of 12,073 cases performed over 2,514 OR days were analyzed. Incidence of on-time starts increased (76.2% pre- vs 86.6% post-intervention, $p < 0.001$), and cases in the post-intervention era were twice as likely to start on time on multivariable regression (odds ratio: 2.08; 95% CI: 1.78-2.42, $p < 0.001$). Additionally, starting on time reduced the likelihood of OR overtime

