Maximizing Operating Room Efficiency by Effectively Managing Case Cancellation

**Background:** Operating room efficiency is being incentivized now more than ever before with changing healthcare policies. Case cancellation can lead to significant inefficiency and waste. The purpose of this study was to critically and comprehensively evaluate case cancellation to define actionable ways to decrease the impact on operating room efficiency.

**Methods:** A retrospective review was completed of all patients who were scheduled for elective orthopaedic surgery over a 1 year period of time. Outcome measures included rate of cancellation, interval from time of cancellation to scheduled surgery date, risk factors for cancellation, re-schedule rate, re-cancellation rate and risk factors for re-cancellation.

**Results:** In the year studied, there were 7,215 elective cases, 13% of which were cancelled prior to surgery. On average the cases were cancelled 9 days out; however, 44% were cancelled within three days of surgery. Risk factors correlated with cancellation included patients with medicaid and those who were uninsured, patients who were unemployed, patients who underwent a pre-anesthesia evaluation, patients with a higher number of comorbidities, and patients who were scheduled for surgery on Thursday or Friday. For patients who had their procedure cancelled, 53% were rescheduled, 21% of which had a re-cancellation, which was significantly higher than the comparison group of first time cancellations. Those that cancelled without a correctable reason had significantly more re-cancellations and a lower procedure completion rate.

**Conclusions:** By critically evaluating case cancellations, it is possible to identify modifiable areas for improvement. Based on this data, when scheduling surgeries, it is more efficient to preference patients without a previous cancellation, and amongst previously cancelled cases, preference those with a correctable reason for cancellation.