



Monitoring Outcomes for Procedural Overlap Surgeries at MGH

The MGH performed 36,747 surgical cases in CY 2014. Less than 1% had 30 minutes or more of procedural overlap time, and were electively scheduled. 92.6% of cases had no overlap with another case or had only overlap with non-procedural portion of cases. Of the remaining 7.4% of cases, with procedural overlap, multidisciplinary and emergent, urgent or non-elective cases were excluded from this outcomes review – leaving 2.7% of cases that are electively scheduled and have procedure overlap.

Quality outcomes were assessed for those elective cases with 30 minutes or more of procedure overlap time – in the entire Department of Surgery and Orthopedic Surgery. Less than 1% of all surgical cases had this degree of procedure overlap time and were electively scheduled. These 324 operations were reviewed, along with surgeon and procedure matched control cases that were not overlapping.

No difference was found in quality outcomes between the overlap and non-overlap groups, upon clinical chart review, using standard NSQIP definitions, by trained, audited, clinical nurse reviewers.

Quality Review of Procedural Overlap Cases with >=30 Minutes of Overlap Time – CY 2014 Vs. Non-overlapping Control Cases – matched for surgeon and procedure type

30-day Outcome	No Overlap # Occurrences	Overlap Procedures # Occurrences	Overall Occurrence Rate	No Overlap Occurrence Rate	Overlap Procedures Occurrence Rate
Mortality	1	1	0.5%	1.1%	0.3%
Overall Morbidity	5	16	5.0%	5.3%	4.9%
Unplanned Reoperation	4	7	2.6%	4.3%	2.2%
Unplanned Return to ICU	1	2	0.7%	1.1%	0.6%
Unplanned Readmission	3	12	3.6%	3.2%	3.7%
<i>Sample Size</i>	<i>94 cases</i>	<i>324 cases</i>			

For those overlapping procedures in which initial screening determined that a complication had occurred, an additional quality review was performed by a senior surgeon, uninvolved in any of these surgeries, and a national expert in surgical quality. There was no evidence that these complications were directly related to the fact that an overlapping case was also done.

Surgical quality and safety is continuously and closely monitored at MGH through

- National outcome registries – NSQIP, STS Cardiac, STS Thoracic, MBSA-QIP, ACS-NTDB, TRACS-Burns, SRTR, VSGNE and SVS-PSO,
- Morbidity and mortality conferences
- Safety event reporting and monitoring

Focused reviews of outcomes comparing non-overlapping and procedure overlap cases, have found NO differences.