An Internal Review of the Rate of Intraoperative Transfer of Anesthesia Care and Associated Patient Quality Assurance Outcomes

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INTRODUCTION
Transfer of patient care among anesthesia providers is common and there is little evidence that these handovers worsen patient outcomes.

BACKGROUND
One center cites a near 8% increase in morbidity and mortality for each anesthetic handover. The WHO and JCAHO identified “communication failure as the cause of sentinel events in 2006.

OBJECTIVE
The purpose of this retrospective review is to assess the impact of a structured handover system on the rate of QA occurrences.

METHODS
➤ A handover was defined as a permanent change in the care team at any provider level
➤ Breaks ≤ 30 mins were not counted
➤ 5,103 anesthetic records were reviewed between May 2015 and October 2015
➤ QA event forms were collected at a > 88% capture of all cases performed
➤ A formal intraoperative handover tool was used for all breaks and permanent staff changes

RESULTS

<table>
<thead>
<tr>
<th></th>
<th>Negative QA</th>
<th>Positive QA</th>
<th>Total</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Handover</td>
<td>4474</td>
<td>162</td>
<td>4956</td>
<td>3.9</td>
</tr>
<tr>
<td>Handover</td>
<td>439</td>
<td>8</td>
<td>447</td>
<td>1.8</td>
</tr>
<tr>
<td>Total</td>
<td>4913</td>
<td>190</td>
<td>5103</td>
<td>3.7</td>
</tr>
</tbody>
</table>

• 447 of the 5103 anesthetic records reviewed had transfer of care at some level
• Only 8 of the 447 records with handovers also had QA events
• 3.9% of the cases without handovers had QA events while only 1.8% of the cases with handovers had QA events (p=0.026)

DISCUSSION
• The use of a structured handover appears to improve safety
• Less than half the number of expected handovers occurred
• Our results suggest that formal handovers improve communication

SUMMARY
• Duty-hour limitations and shift changes make handovers among anesthesia providers inevitable
• Our results suggest that formal handover processes improve the transfer of information with improved safety
• Having copies of the handoff tool readily accessible in each O.R. encourages compliance for a standardized handover practice.
• Future studies on the impact of scheduled breaks with structured handovers on relieving fatigue and the preservation of vigilance are indicated.

REFERENCES