The Educational Time-Out
A Model for Structured Perioperative Teaching and Learning
Resident: Will Dr. S let me explore the nerve today??
Objectives

1. Define current Otolaryngology operating room educational landscape at single University institution

2. Develop educational checklist framework to enhance perioperative learning
# The Briefing, Intraoperative Teaching, Debriefing Model for Teaching in the Operating Room

Nicole K Roberts, PhD, Reed G Williams, PhD, Michael J Kim, MD, Gary L Dunnington, MD, FACS

<table>
<thead>
<tr>
<th>Stage</th>
<th>Step</th>
</tr>
</thead>
<tbody>
<tr>
<td>Briefing (2 min)</td>
<td>• Set learning objectives for the encounter</td>
</tr>
</tbody>
</table>
1. Define current Otolaryngology OR educational landscape
Baseline Survey

Staff (n=29)
Residents (n=19)
Pre-op: How often do residents explicitly clarify their intra-operative role prior to incision?

- Never: 0.00%
- Rarely: 10.00%
- Every Once in Awhile: 20.00%
- Sometimes: 30.00%
- Almost Always: 40.00%

Residents vs Staff:
- Residents: [Bar chart showing distribution]
- Staff: [Bar chart showing distribution]
Pre-op: How often do **staff** explicitly clarify the resident’s intra-operative role prior to incision?
Post-op: How often do you have the opportunity to debrief following the completion of the OR?
Post-op: Would it be **beneficial** for the resident to debrief following the completion of the OR?
This is a problem in differences in surgical education perception not just at our institution.

Predictors of Surgery Resident Satisfaction With Teaching by Attendings
A National Survey

Clifford Y. Ko, MD, MSHS,*†† Josi J. Escarce, MD, PhD,** Lawrence Baker, PhD,§ Jennifer Sharp, MS,* and Cassandra Guarino, PhD*

Disparity Between Resident and Attending Physician Perceptions of Intraoperative Supervision and Education

Kimberly L. Levinson, MD, MPH
Joyce N. Barel, MD
Kristina Alman, MD
Andrew J. Satin, MD

A Comparison of Faculty and Resident Perception of Resident Learning Needs in the Operating Room

Carla M. Pugh, MD,* Debra A. DaRosa, PhD,* Dennis Glenn, MS,† and Richard H. Bell, Jr, MD‡

*Department of Surgery, Feinberg School of Medicine, and †School of Communication, Northwestern University, Chicago, Illinois; ‡American Board of Surgery, Philadelphia, Pennsylvania

Comparing resident measurements to attending surgeon self-perceptions of surgical educators

Jeffrey A. Claridge, M.D.*, J. Forrest Calland, M.D., Vinay Chandrasekhar, B.S., Jeffrey S. Young, M.D., Hillary Saney, M.D., Bruce D. Schirmer, M.D

Department of Surgery, University of Virginia, 1040 bunny creek Dr., charlottesville, Va 22903, USA
Manuscript received September 3, 2002, revised manuscript November 16, 2002
Why is there a disconnect?

There is **not enough dedicated direct discussion** of learning goals in the perioperative period

- No structure
- No time
- No expectation, culture

**GOAL:** Designated discussion time

Resident: Will Dr. S let me explore the nerve today??
2. Develop educational time-out framework
Clinical course

Anatomy

Relevant steps

Debrief

History  Work-up  Diagnosis

Major landmarks  Important structures

Incisions  Key operative steps  Closure

Feedback  Post-op care

Anesthesia Time!
Implementation: PDSA Cycles

- 2 two-week cycles
  - 1 site, 2 staff surgeons
- Final trial
  - Multi-centre (4), 1 staff surgeon per site
“ASC” to debrief:

- **Assessment of Operation**
  - Critical Steps
  - Unexpected Events

- **Surgeon Feedback**
  - Case Preparation
  - Operative Participation & Performance

- **Care (Post-Operative)**
  - Medication
  - Bloodwork
  - Relevant Complications
  - Discharge Planning

---

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.
Final Survey

• Multi-center with 1 primary surgeon at each
• Residents n = 4; Faculty n = 9
• E-timeout used 50-75% of the time

<table>
<thead>
<tr>
<th></th>
<th>Resident</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased resident preparedness</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Prolonged OR time</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
Conclusions

• The Educational Time-Out Intervention is successful
  ✔ Increased resident self-reported preparedness
  ✔ Did not prolong OR time
  ✔ Created opportunities for discussion of educational goals and role division
## Biggest challenge: Culture Change

<table>
<thead>
<tr>
<th>GOAL</th>
<th>BARRIERS</th>
</tr>
</thead>
</table>
| 1. Integrate the tool into the workflow | • Attending not present until incision, leaves before closure  
• Public feedback (RNs, anesthesia) |
| 2. **Want** dedicated perioperative discussion (all parties) | • ?Burdensome to attending surgeon  
• Resident feels unprepared |
Next steps

• **Scale up:**
  ◦ Multi-institutional implementation with laminated/printed cards
  ◦ Repeat baseline survey, data collection

• Further refinement for workflow integration, culture shift

• Implementation into CBD curriculum
Thank you

- Harry Barberian Scholarship Fund
- University of Toronto Otolaryngology-Head and Neck Surgery Residents and Faculty