Plastic Surgery residents’ perception of feedback in the operating room – a comparison of structured and non-structured approaches

Y Sardiwalla (BSc), N Joukhadar (MD), D Tang (MD)
Disclosure:

• No conflicts of interest to disclose
Background:

• Competence By Design (CBD)
• In-Training Evaluation Report (ITER)
• Quality of feedback limited
Background:

• Ottawa Surgical Competency Operating Room Evaluation (O-SCORE)
  • 11-item tool
  • 5-point scale
• Competence to perform procedures independently
Background:

• Junior and senior residents
• Internal consistency and evidence validity
• Paucity of evidence regarding residents’ experience with this evaluation
Purpose:

• To use this period of transition to more comprehensively study what benefits and disadvantages residents perceive in each of the feedback tools
Methodology:

- Dalhousie Plastic Surgery residents
  - PGY 2-5 levels
- Semi-structured focus group
- Exit survey rating
**Methodology:**

<table>
<thead>
<tr>
<th>Question 1</th>
<th>5 Strongly Disagree</th>
<th>4 Disagree</th>
<th>3 Undecided</th>
<th>2 Agree</th>
<th>1 Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback provided was detailed and descriptive enough to understand the competency of my technical skills in the OR</td>
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<tr>
<td>Question 2</td>
<td>5 Strongly Disagree</td>
<td>4 Disagree</td>
<td>3 Undecided</td>
<td>2 Agree</td>
<td>1 Strongly Agree</td>
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<tr>
<td>The feedback provided appropriately identified my knowledge level regarding the operation and what needed further studying</td>
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<tr>
<td>Question 3</td>
<td>5 Strongly Disagree</td>
<td>4 Disagree</td>
<td>3 Undecided</td>
<td>2 Agree</td>
<td>1 Strongly Agree</td>
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<tr>
<td>The feedback was well timed and provided at a good frequency (not overwhelming or too little)</td>
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<tr>
<td>Question 4</td>
<td>5 Strongly Disagree</td>
<td>4 Disagree</td>
<td>3 Undecided</td>
<td>2 Agree</td>
<td>1 Strongly Agree</td>
</tr>
<tr>
<td>The feedback was clear and did not require clarification with my supervisor to understand</td>
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<tr>
<td>Question 5</td>
<td>5 Strongly Disagree</td>
<td>4 Disagree</td>
<td>3 Undecided</td>
<td>2 Agree</td>
<td>1 Strongly Agree</td>
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<td>There was an opportunity to discuss the feedback with my supervisor</td>
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**Final Question – Comparison ITER vs O-SCORE**

Which of the two evaluation tools is more effective in providing useful feedback on your technical skills?
Analysis:

• Grounded theory
• Constant comparative analysis.
• Survey median values and interquartile ranges qualitatively assessed
Results

• 90% residents participated in focus group
• 60% fully completed survey.
Four Major Themes:

1. Traditional intraoperative feedback evaluation
   • Informal feedback
   • Faculty-dependent
   • Timing
RESULTS:

Four Major Themes:

2. O-SCORE strengths
   • Quality and timing
   • Specific
   • Longitudinal
Results

“I think the O-SCORE is definitely a step in the right direction. Since it has been introduced the staff and I actually sit down and review it. You actually talk about the case more. But what I found was even more useful, is when you pick a case that you’re doing your O-SCORE for and decide this a few days before, it encourages playing a more active part in the planning.”
Four Major Themes:

3. O-SCORE weaknesses
   • Selectivity
   • Generous evaluations
Results

“One thing to note with the O-SCORE is that because we only have 3 that are mandatory per rotation, you can pick which cases to use. I’m going to pick a very standardized case which will get you all 5s so then you look great on your piece of paper.”
Four Major Themes:

4. Considerations for the future
   • Standardized portion of O.R.
   • Surgery specific evaluations
Results

O-SCORE

ITER
Discussion:

• Resident satisfaction
• Concerns
• Adding to routine
• Training to how use O-SCORE
DISCUSSION:

Limitations and Interpretation:

• Lack of a validated survey
• Small sample
• Plastic surgery unique challenges
• Supervising surgeon preferences
Conclusion

• O-SCORE complemented traditional feedback.
• Residents state O-SCORE improves:
  • Opportune feedback
  • Comprehensive discussion
  • Improved progress tracking
References:


Thank You!
Registration and Ethics:

• Dalhousie Research Ethics Board (REB #: 2017-4322)
The Ottawa Surgical Competency Operating Room Evaluation (O-SCORE)

<table>
<thead>
<tr>
<th>Trainee #</th>
<th>Level</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Staff</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure</td>
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Relative complexity of this procedure to average of same procedure: Low  Medium  High

The purpose of this scale is to evaluate the trainee’s ability to perform this procedure safely and independently. With that in mind please use the scale below to evaluate each item, irrespective of the resident’s level of training in regards to this case.

Scale
1—“I had to do”—i.e., Requires complete hands on guidance, did not do, or was not given the opportunity to do
2—“I had to talk them through”—i.e., Able to perform tasks but requires constant direction
3—“I had to prompt them from time to time”—i.e., Demonstrates some independence, but requires intermittent direction
4—“I needed to be in the room just in case”—i.e., Independence but unaware of risks and still requires supervision for safe practice
5—“I did not need to be there”—i.e., Complete independence, understands risks and performs safely, practice ready

1. Preprocedure plan
   Gather/assesses required information to reach diagnosis and determine correct procedure required
   1  2  3  4  5

2. Case preparation
   Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications
   1  2  3  4  5

3. Knowledge of specific procedural steps
   Understands steps of procedure, potential risks, and means to avoid/overcome them
   1  2  3  4  5

4. Technical performance
   Efficiently performs steps, avoiding pitfalls and respecting soft tissues
   1  2  3  4  5

5. Viscuospatial skills
   3D spatial orientation and able to position instruments/hardware where intended
   1  2  3  4  5

6. Postprocedure plan
   Appropriate complete post procedure plan
   1  2  3  4  5

7. Efficiency and flow
   Obvious planned course of procedure with economy of movement and flow
   1  2  3  4  5

8. Communication
   Professional and effective communication/utilization of staff
   1  2  3  4  5

9. Resident is able to safely perform this procedure independently (circle)
   Y  N

10. Give at least 1 specific aspect of procedure done well
11. Give at least 1 specific suggestion for improvement

Signatures: Staff:

Trainee:
Scale

1 – “I had to do” – i.e. Requires complete hands on guidance, did not do, or not given the opportunity to do
2 – “I had to talk them through” – i.e. Able to perform tasks but requires constant direction
3 – “I had to prompt them from time to time” – i.e. Demonstrates some independence, but requires intermittent direction
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   3D spatial orientation and able to position instruments/hardware where intended

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7. Efficiency and Flow
   Obvious planned course of procedure with economy of movement and flow

8. Communication
   Professional and effective communication/utilization of staff
# DALHOUSIE UNIVERSITY PGY1 TRAINING PROGRAMS
## IN-TRAINING EVALUATION REPORT

### FUNDAMENTAL SKILLS & KNOWLEDGE

<table>
<thead>
<tr>
<th>Skill</th>
<th>Not Applicable</th>
<th>Failed to Meet Expectations</th>
<th>Needs Improvement</th>
<th>Met Expectations</th>
<th>Outstanding</th>
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</thead>
<tbody>
<tr>
<td>History Taking Skills</td>
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<td>Quality of Records</td>
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<td>Clinical Examination Skills</td>
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<td>Basic Science Knowledge</td>
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<td>Clinical Knowledge</td>
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<td>Technical/Procedural Skills</td>
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<td>Ability to Identify and Solve Problems</td>
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<td>Uses Ancillary Tests Appropriately</td>
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<td>Communicates with Patients &amp; Family</td>
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<tr>
<td>Communicates with Health Care Team</td>
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<td>Soundness of Judgment</td>
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<td>Performance Under Stress</td>
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<td>Use of Learning Resources</td>
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### ATTITUDES

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Not Applicable</th>
<th>Requires Improvement</th>
<th>Appropriate for Level of Training</th>
<th>Exceptional</th>
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<tr>
<td>Sense of Responsibility</td>
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<td>Team Relationships</td>
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<td>Motivation, Initiative &amp; Enthusiasm</td>
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<td>Punctuality &amp; Attendance</td>
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<td>Ethical Behavior</td>
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### DISCIPLINE SPECIFIC INFORMATION

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<tr>
<th>Participation in Academic Events</th>
<th>Not Applicable</th>
<th>Poor</th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
<th>Outstanding</th>
</tr>
</thead>
</table>

### HAS THE TRAINEE BEEN OBSERVED:

- **Taking a History:**
  - No
  - Yes

- **Using Technical Skills:**
  - No
  - Yes

- **Doing a Clinical Exam:**
  - No
  - Yes

- **Giving Oral Presentation:**
  - No
  - Yes