Using Digital Assessment Tools in Competence by Design
...and beyond

Michele Farrugia, PD
Lisa St. Amant, PGME
Anand Lakhani, PGY1
Objectives

• **When** and **How** to use our digital assessment tools
  
  • Elentra
  
  • DOC
Which When?

• Elentra
  – University wide
  – For EPA assessment
  – CBD residents only
  – PGY-1 (and PGY-2)
  – UTorID

• DOC
  – Our department only
  – DEEF
  – O-Score
  – Case Log
  – Any PGY
Adding a Digital tool to your handheld device

1. Scan QR Code

Aim your camera here to go to Elentra
Non-completion of assessments

Only 70% of requested assessments are completed by the assessor
Elentra Tip....

• Tableau allows us to identify faculty who are asked for an assessment but do not complete/submit one....
<table>
<thead>
<tr>
<th>D501</th>
<th>Performing the preoperative preparation of patients for basic surgical procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>D502</td>
<td>Recognizing and initiating early management for critically ill surgical patients</td>
</tr>
<tr>
<td>D503</td>
<td>Documenting clinical encounters</td>
</tr>
<tr>
<td>D504</td>
<td>Demonstrating handover technique</td>
</tr>
</tbody>
</table>
Select Assessor
Farrugia, Michele (mfarrugia@mtsinai.on.ca)

Select Program
Obstetrics & Gynecology

Select Date of Encounter
2019-04-08

Select Assessment Method
- Complete now
  Complete the assessment now on this device. The assessor will receive a confirmation email upon submission.
- Complete and confirm via email
  Complete an assessment using the selected tool. Upon completion, the assessor will receive an email notification asking them to review/edit and confirm the assessment.
- Email blank form
  The assessor will receive an email notification to complete an assessment based on the selected tool.

Stage of Residency
F: Foundations of Discipline

Assessment tool
Assessment & Pre-Op Planning

Start Assessment
Complete the assessment now on this device. The assessor will receive a confirmation email upon submission.

<table>
<thead>
<tr>
<th>Assessor</th>
<th>Assessee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michele Farrugia</td>
<td>Anand Lakhani</td>
</tr>
<tr>
<td>Faculty • ObsGyn • ObsGyn</td>
<td>PGY1 • Obstetrics &amp; Gynecology</td>
</tr>
<tr>
<td><a href="mailto:mfarrugia@mtsinal.on.ca">mfarrugia@mtsinal.on.ca</a></td>
<td><a href="mailto:anand.lakhani@mail.utoronto.ca">anand.lakhani@mail.utoronto.ca</a></td>
</tr>
</tbody>
</table>

**F503: Assessing and performing risk optimization for preoperative patients in preparation for surgery**

This tool assesses the following EPA

- EPA-FOD-SF-3: Assessing and performing risk optimization for preoperative patients in preparation for surgery

**Demographics**

**Type of Assessor / Role**

- University appointed faculty

**Type of Assessment**

- Direct observation

**Rotation Service**

- Core Obs/Gyn

**Site**

- MSH
Assessment

Completed by assessor
- Indicate the rating that best applies
- NOTE: If unable to assess, indicate NO RATING

Performs focused clinical assessments with recommendations that are well-documented

Selects and/or interprets approp investigations and/or imaging w sufficient attention to clinical details

Develops and implements plans for pre-op optimization of patients

Uses appropriate prophylaxis (eg antibiotics, PE prophylaxis)

Considers urgency and potential for deterioration, in advocating for timely execution of a procedure or therapy
Incorporates disease prevention, health promotion & health surveillance into interactions w pts

Indicate the OVERALL entrustment in this EPA at this time

Entrustment of this professional activity implies that the resident demonstrated an autonomous performance of the activity/task in a safe and effective manner at this time

Assessing and performing risk optimization for preoperative patients in preparation for surgery

- **Excellence**: Demonstrated leading practice, acted as a role model
- **Autonomy**: Supervisor didn't need to be there
- **Support**: Required some minor advice
- **Direction**: Required major instruction
- **Intervention**: Somebody else had to complete all or almost all
Feedback & Comments

Describe 2-3 strengths and actions or areas for improvement

2 - 3 Strengths

2 - 3 Actions or areas for improvement

Other comments

Save as draft & email assessor a link  Submit
Tasks & Results Dashboard

Assessment Tasks

You currently have no Assessments to complete.
Adding a Digital tool to your handheld device

2. Upload website

3. Add to homescreen

4. Logo on homescreen
Introducing DOC
HELP! What's an O-Score?
https://www.dropbox.com/s/qv5g2ftkwcu6n5u/OSCORE.pdf?dl=0

* Required

1. Which form would you like to submit? *

- Case log to track my procedures
- DEEF to assess a non-technical encounter
- O-Score to assess a technical skill

Submit

Never give out your password. Report Abuse
DOC

• Ideally
  – Resident asks assessor ahead of time
  – Part of coaching! Establish goals…..
  – Verbal feedback provided and form completed immediately after an encounter
  – Completed on resident’s device
  – Can be emailed to faculty member too
  – Faculty can also initiate on their own device
  – Results collated at 123 Edward St. and provided to faculty supervisors and residents
DEEF

• To assess non-technical skills
• Narrative comments provide residents with the most information that allows them to learn and improve
• Intended to be FORMATIVE
• Low stakes assessment
1. Which form would you like to submit? *
   - Case log to track my procedures
   - DEEF to assess a non-technical encounter
   - O-Score to assess a technical skill

2. Date of encounter *
   4/5/2019

3. PGY-Level *
   - 1
   - 2
   - 3
   - 4
   - 5

4. Select a PGY1 resident from the list below *
   LAKHANI, Anand
6. What did you observe the resident doing? *

- Preconception/antenatal care
- OB Triage
- Management of labour
- Managing intrapartum complication
- Routine postpartum care
- Complex postpartum care
- Management of OB emergency
- Early pregnancy concern
- Common GYN office concern (e.g., fibroids, AUB)
- Contraception
- Menopause
- Prolapse/incontinence
- Infertility
- Chronic pelvic pain
- Diagnosis/triage GYN neoplasm
- Post-op complications
- Other
5. Supervisor (Last, First) *

Farrugia, Michele

6. What did you observe the resident doing? *

OB Triage

7. Rate the resident’s overall performance *

1. Intervention - requires others’ action
2. Direction - requires supervision and others’ guidance
3. Support - requires minimal supervision or guidance
4. Autonomy - does not require guidance or supervision
5. Excellence - demonstrates excellence; is a good role model

8. Feedback

Discuss the resident’s strengths/weaknesses/suggestions for improvement. Try to comment on several CanMEDS Roles, as appropriate.

Enter your answer

Lots of narrative!
O-Scores

- Tool to assess surgical competency
- Simple to understand and use
- Widely used in surgical specialties
- In our context, intended to be FORMATIVE and low stakes
The Ottawa Surgical Competency Operating Room Evaluation (O-SCORE): A Tool to Assess Surgical Competence

Wade T. Gofton, MD, MEd, FRCSC, Nancy L. Dudek, MD, MEd, FRCPC, Timothy J. Wood, PhD, Fady Balaa, MD, MEd, FRCSC, and Stanley J. Hamstra, PhD

Abstract

Purpose
Most assessment of surgical trainees is based on measures of knowledge, with limited evaluation of their competence to actually perform various surgical procedures. In this study, the authors evaluated a tool they designed to assess a trainee's competence to perform an entire surgical procedure independently, regardless of procedure type or postgraduate year (PGY).

Method
In phase 1, the Ottawa Surgical Competency Operating Room Evaluation (O-SCORE) was piloted in the University of Ottawa's Division of Orthopaedic Surgery. In phase 2, the refined 11-item tool (8 items rated on a 5-point competency scale, 1 item assessing procedural competence, 2 feedback items) was used in the Divisions of Orthopaedic Surgery and General Surgery to assess residents' performance on 11 common procedures. Quantitative and qualitative analyses were conducted.

Results
In phase 2, 34 orthopaedic and general surgeons assessed the performance of 37 residents in 163 procedures. ANOVA demonstrated an effect of PGY. Post hoc analysis found that total procedure scores for PGYs 1 and 2 were lower than those for PGY 3 (P < .001), and PGY 3 scores were lower than those for PGYs 4 and 5 (P < .02). Analysis of qualitative data indicated that the rating scale was practical and useful for surgeons and residents.

Conclusions
This novel evaluation tool successfully discriminated between junior and senior residents and identified surgical competency across various PGY levels regardless of procedure type. Multiple sources of evidence support the O-SCORE as a valid tool for the assessment of trainee operative competency.
1. Which form would you like to submit? *

- Case log to track my procedures
- DEEF to assess a non-technical encounter
- O-Score to assess a technical skill

2. Date of procedure *

Please input date in format of M/d/yyyy

3. PGY-Level *

- 1
- 2
- 3
- 4
- 5
5. Supervisor (Last, First) *
   
   Farrugia, Michele

6. Gyne Office Procedures
   
   Select your answer

7. Hysteroscopy
   
   Select your answer

8. Laparoscopic Surgery
   
   Select your answer

9. Abdominal Surgery
   
   Select your answer

10. Vaginal Surgery
14. Procedure complexity *

- Low
- Medium
- High

15. Rate the resident’s performance *

- 1 - Intervention (requires others’ actions for completion)
- 2 - Direction (requires supervision and others’ guidance for completion)
- 3 - Support (requires minimal supervision or guidance for completion)
- 4 - Autonomy (does not require guidance or supervision for completion)
- 5 - Excellence (demonstrates excellence; is a good role model)

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<thead>
<tr>
<th></th>
<th>N/A</th>
<th>1</th>
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<tbody>
<tr>
<td>Pre-op Plan</td>
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<td>Case Preparation</td>
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<td>Technical Performance</td>
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<td>Efficiency and Flow</td>
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<td>Communication in OR</td>
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<td>Post-op Plan</td>
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</table>
16. Is the resident able to perform this procedure independently? *

- Yes
- No

17. Who initiated this assessment? *

- The resident
- The faculty

18. Feedback

*Discuss the resident’s strengths/weaknesses/suggestions for improvement. Try to comment on several CanMEDS Roles, as appropriate*

Enter your answer

Narrative is very helpful

Submit
Conclusions

• Please use Elentra and DOC to document meaningful feedback to our residents