The correlation of workplace-based assessment with periodic performance assessment of EM residents

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Sept 27, 2019
I do not have an affiliation (financial or otherwise) with a pharmaceutical, medical device or communications organization.

Je n’ai aucune affiliation (financière ou autre) avec une entreprise pharmaceutique, un fabricant d’appareils médicaux ou un cabinet de communication.
EPA's and Milestones
Provide clear learning direction and explicit teaching assessment goals

Work Based Assessment
- Multiple observations
- Verbal feedback
- Quality documentation in WBA tools

ePortfolio

Decisions
Progression or remediation

Practice Expectancies Defined

Practice Environment

Competence Committee

http://www.royalcollege.ca/rcsite/cbd/competence-by-design-cbd-e
Workplace-based assessment (WBA)

- EPA-based point-in-time assessment, using entrustment score
- Threats to validity: difficulties in face-to-face feedback, halo effect, leniency, pressures of workplace, etc.

Periodic Performance Assessment (PPA)

- EPA-based **longitudinal** assessment over period of time
- Attempt to capture true faculty perception of trainee competence
- De-identified

How well does WBA entrustment correlate with PPAs of an EM resident?

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Methods

• Study populations:
  > FRCPC-EM residents, PGY1-5, N=21/21
  > Full-time EM faculty N=16/35

• Data:
  > 452 WBAs
  > 265 PPAs

C1 – Resuscitating and coordinating care for critically ill patients.

- ex altered level of consciousness, shock, cardiorespiratory arrest, respiratory failure, other

<table>
<thead>
<tr>
<th>Entrustment Decision</th>
<th>Observation Only</th>
<th>Direct Supervision</th>
<th>Indirect Supervision</th>
<th>Independent Performance</th>
<th>Supervision of Trainees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Observation Only</td>
<td>Direct Supervision</td>
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</tr>
</tbody>
</table>
Methods

WBAs Performed in Hospital Setting
Jan 1 - Jun 30

2018
Jan    Feb    Mar    Apr    May    Jun    Jul    2018

July 1, 2018
PPAs Distributed to Faculty

July 31, 2018
PPA Completion Deadline

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## Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>WBA (n=353)</th>
<th></th>
<th></th>
<th>PPA (n=265)</th>
<th></th>
<th></th>
<th>Spearman's rho</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Range</td>
<td>Mean</td>
<td>SD</td>
<td>Range</td>
<td></td>
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<tr>
<td>Individual Assessments</td>
<td>3.98</td>
<td>0.68</td>
<td>2-5</td>
<td>3.71</td>
<td>0.72</td>
<td>2.0-5.0</td>
<td>0.438</td>
<td>p=0.000</td>
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<tr>
<td>Averaged Across Faculty</td>
<td>4.05</td>
<td>0.55</td>
<td>3.0-5.0</td>
<td>3.65</td>
<td>0.50</td>
<td>2.6-4.8</td>
<td>0.538</td>
<td>p=0.000</td>
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<tr>
<td>Averaged Across EPA</td>
<td>3.97</td>
<td>0.64</td>
<td>2.0-5.0</td>
<td>3.78</td>
<td>0.72</td>
<td>2.1-5.0</td>
<td>0.557</td>
<td>p=0.000</td>
</tr>
<tr>
<td>Averaged Across Faculty &amp; EPA</td>
<td>4.06</td>
<td>0.42</td>
<td>3.4-4.8</td>
<td>3.72</td>
<td>0.54</td>
<td>2.9-4.7</td>
<td>0.856</td>
<td>p=0.000</td>
</tr>
</tbody>
</table>

![Graphs showing correlation between WBA and PPA](image-url)
Discussion

- Discrepancy between WBA and PPA scores across all faculty and EPAs suggests need for further faculty development to encourage critical feedback/assessment in workplace
- Limitations of individual WBAs for competence assessment
- Findings support aggregating WBAs across multiple assessors and EPAs for overall progression decisions
Thank you.

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