PAL and Reflective Practice in Portfolio Cover Letters

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BACKGROUND AND PURPOSE

- Peer Assisted Learning (PAL) strategies have been shown to improve learning. 6
- Critical self-assessment and reflection are essential to learning; previous research suggests that portfolio assessment may enhance these processes for resident physicians. 2
- The ACGME recommends that residency programs implement assessment tools such as portfolios in graduate medical education (GME) settings.
- There is limited evidence in the research to show that portfolios in GME encourage reflection.
- The UAMS psychiatry residency program has had a mature portfolio system in existence since 1999.
- Previous work has examined inter-rater reliability for scoring reflection of portfolio cover letters, and has found moderate agreement.

This study examines:
- 1. Reflection and critical thinking contained within portfolio cover letters
- 2. Whether a PAL educational intervention affected the degree of reflection in portfolio cover letters

METHODS

- The UAMS Psychiatry Department uses a showcase portfolio system which requires residents to write a cover letter explaining their portfolio entries.
- A PAL intervention was designed to improve the quality of cover letters. 6
- A 3-point ordinal scale was designed to rate the reflection in cover letters (see Table 1).
- Three psychiatry clinical educators were trained to rate reflection in the cover letters.
- 146 pre and post intervention cover letters were de-identified, blind coded, and then rated for reflective content by each of the three raters.

Table 1. Scoring to Rate Reflection

<table>
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<tr>
<th>Score</th>
<th>Description</th>
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<tr>
<td>1</td>
<td>No Reflection (The resident presents a straightforward narrative of the portfolio entry)</td>
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<tr>
<td>2</td>
<td>Reflection (The resident provides thoughtful analysis of the portfolio entry)</td>
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<tr>
<td>3</td>
<td>Reflection with Critical Thinking (The resident demonstrates practice-based learning and improvement based on thoughtful analysis of the portfolio entry)</td>
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RESULTS

- Consensus ratings were reached for 94% of all cover letters
- Intra-class correlation coefficient was equal to 0.74
- A higher consensus rate was noted on the post-intervention (97%) as compared to the pre-intervention cover letters (90%).
- The mean score for the cover letters increased from 1.60 (72) on pre-intervention to a mean of 1.85 (85) post-intervention.
- Resident self-assessment scores improved from a mean of 4.89 (pre-intervention) to 5.00 (post-intervention).
- Ratings of reflective content in the portfolio cover letters are shown in Figure 1.
  - “1” No Reflection
  - 54% Pre and 44% Post
  - “2” Reflection
  - 32% Pre and 27% Post
  - “3” Reflection with Critical Thinking
  - 14% Pre and 29% Post

DISCUSSION

- While not statistically significant, the increase in mean scores from pre to post cover letters suggests that the intervention may have impacted the quality of reflection.
- An increase in inter-rater consensus on post-intervention cover letters might be suggestive of intervention influence on reflection.
- Because residents were not explicitly instructed to be reflective in the cover letters, this study may not capture all aspects of reflection by the resident.

FUTURE DIRECTION

- Investigate the correlation between cover letter reflection ratings and overall portfolio entry scores.
- Design an intervention in which the concept of reflection is the focus of a self-directed learning didactic.