PaCT: Use of the Patient-centered Communication Tools to measure pharmacy student communication skills

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**BACKGROUND**

The PaCT is a new rubric developed at St. Louis College of Pharmacy specifically designed to assess student pharmacist communication skills during patient encounters. Prior work shows PaCT has face and content validity. The objective is to assess PaCT’s ability to measure communication skills in student pharmacists.

**METHODS**

The PaCT rubric includes 23 skills grouped into five tools:

- **(A) Establish a Connection**
- **(B) Explore & Integrate the Patient’s Perspective**
- **(C) Demonstrate Interest and Empathy**
- **(D) Collaborate and Educate**
- **(E) Communicate with Finesse**

Each skill is measured on the following scale:

- 0 = Poor
- 1 = Fair
- 2 = Good
- 3 = Average
- 4 = Strong
- 5 = Excellent

Third year student pharmacists (N=140) received instruction about interviewing, reviewed the PaCT rubric, and practiced in lab prior to the first standardized patient (SP) interview. Faculty trained in using PaCT observed student performances via live video-feed and provided formative feedback. Students completed a different SP interview three weeks later. Summative feedback was provided by the same group of faculty.

Scores improved for 21 of 22 analyzed skills; significantly improving for 18 skills (p<0.05). Correlations between first and second interview scores were significant for all five tools and for 16 of 22 analyzed skills (p<0.05). Tools A, B, C, and E showed significant improvement (p<0.05). In order to determine overall scores, each skill was weighted equally. Overall scores for each student on the second SP interview showed a significant improvement, averaging 80.7% for the first SP interview, and 90.0% for the second SP session (p<0.001).

**RESULTS**

<table>
<thead>
<tr>
<th>Tool</th>
<th>Scores improved</th>
<th>Significant improvement in skill (p&lt;0.05)</th>
<th>Significant improvement in overall tool (p&lt;0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Establish a Connection</td>
<td>21/22</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>B. Explore &amp; Integrate Patient’s Perspective</td>
<td>21/22</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>C. Demonstrate Interest &amp; Empathy</td>
<td>21/22</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>D. Collaborate and Educate</td>
<td>21/22</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>E. Communicate with Finesse</td>
<td>21/22</td>
<td>*</td>
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</tr>
</tbody>
</table>

**DISCUSSION**

Tool D and certain skills will likely benefit from revision and refinement. Tool D emphasizes student collaboration with the patient in the decision making process. This is a high level skill that takes practice. The scores for “complete the visit” decreased during the second SP interview. This interview included different, more complex issues and more students ran out of time.

**IMPLICATIONS**

These results support PaCT’s ability to identify improvement in student pharmacist-patient communication skills both overall and in four of the five individual tools.

**ACKNOWLEDGEMENTS**

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