

# CULTIVATING CONFIDENCE: Using Entrustable Professional Activities as a Blueprint for Continuing Professional Development

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## WHAT WE LEARNED

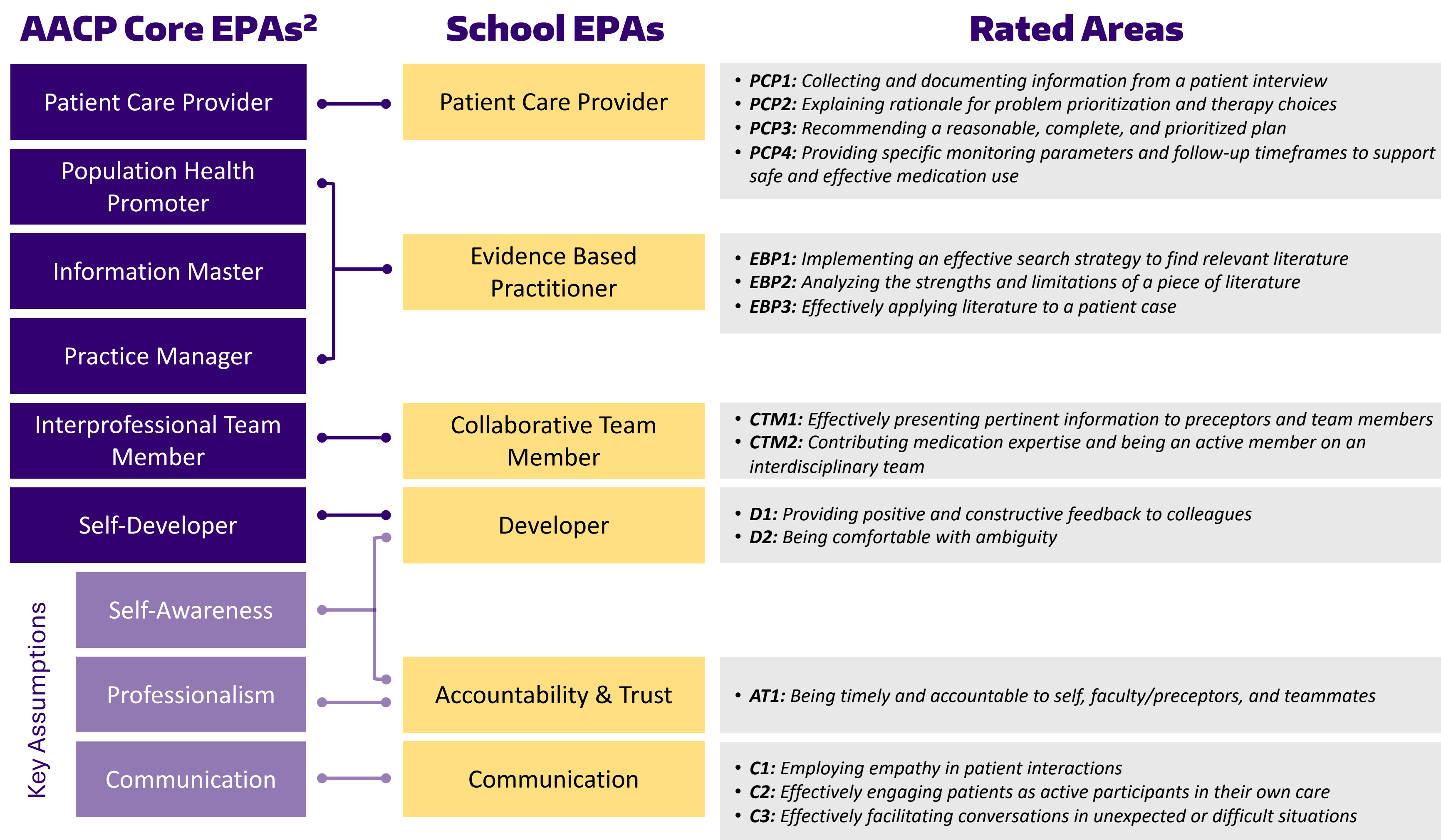
- Students were most confident in their Accountability skills and least confident in their Evidence Based Practitioner skills.
- An EPA-based CPD plan allowed for reflection and development of individualized plans, as students selected a wide array of EPA areas on which to focus their continuous professional development.
- This CPD approach can help schools explore areas of strength and growth at an individual student and curricular level.
- It was important to use a retrospective pre-post design at the end of Fall Quarter to control for response shift bias.

## OBJECTIVE

To evaluate the use of an Entrustable Professional Activities (EPA)-based Continuing Professional Development (CPD) approach by analyzing students' confidence levels and self-perceived areas of improvement from their CPD plans.

## BACKGROUND

The Pharmacist Provider Series integrates skill development, practice readiness, and experiential education with a focus on achievement of competency milestones across EPA-based domains. Accurate self-assessment and identifying gaps in knowledge are challenging for both students and providers. The CPD process allows for self-assessment and reflection skills to be practiced and improved upon, which can lead to more impactful learning over time.<sup>1</sup>



## METHODS

In AY2022-2023, as part of the 'Developer' EPA domain, 87 PY2 students completed CPD plans at the end of Fall and Spring quarters.

Students retrospectively rated their confidence in 15 areas under 6 EPA-based domains from 'never' (0) to 'all the time' (4) and self-identified the domains in which they saw the most improvement and needed the most growth.

Ratings were analyzed across domains for Pre-Fall, Post-Fall, and Post-Spring quarters and a Wilcoxon signed rank test was used for comparison. A qualitative assessment of themes was performed on student responses regarding areas for continued growth.

## RESULTS

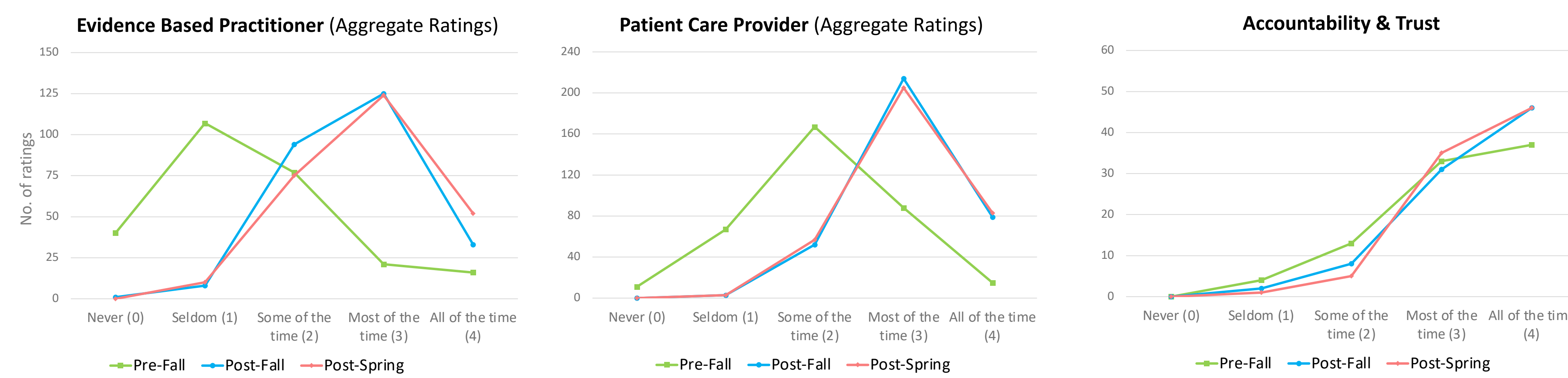
All students who completed the CPD plans were PY2s enrolled in the Pharmacist Provider Series from Fall 2022 through Spring 2023 (n=87). Students experienced the **largest shift in confidence in the EBP domain**, with a median rating of 'some of the time' (1) increasing to 'most of the time' (3) by the end of Spring quarter, and the **smallest shift in confidence in the Accountability domain**.

Table 1. Median Confidence Ratings by EPA Domain

School EPA Domain	Pre-Fall Rating (median)	Post-Fall Rating (median)	Post-Spring Rating (median)	p Value		
				Post-Fall v. Pre-Fall	Post-Spring v. Pre-Fall	Post-Spring v. Post-Fall
Patient Care Provider	2	3	3	p<.001	p<.001	p=.943
Evidence Based Practitioner	1	3	3	p<.001	p<.001	p=.009
Collaborative Team Member	2	3	3	p<.001	p<.001	p=.009
Developer	2	3	3	p<.001	p<.001	p=.094
Accountability & Trust	3	4	4	p=.001	p<.001	p=.363
Communication	2	3	3	p<.001	p<.001	p=.321

N=87, where 0 = "Never", 1 = "Seldom", 2 = "Some of the time", 3 = "Most of the time", 4 = "All of the time"

Figure 1. Point-in-Time Confidence Ratings

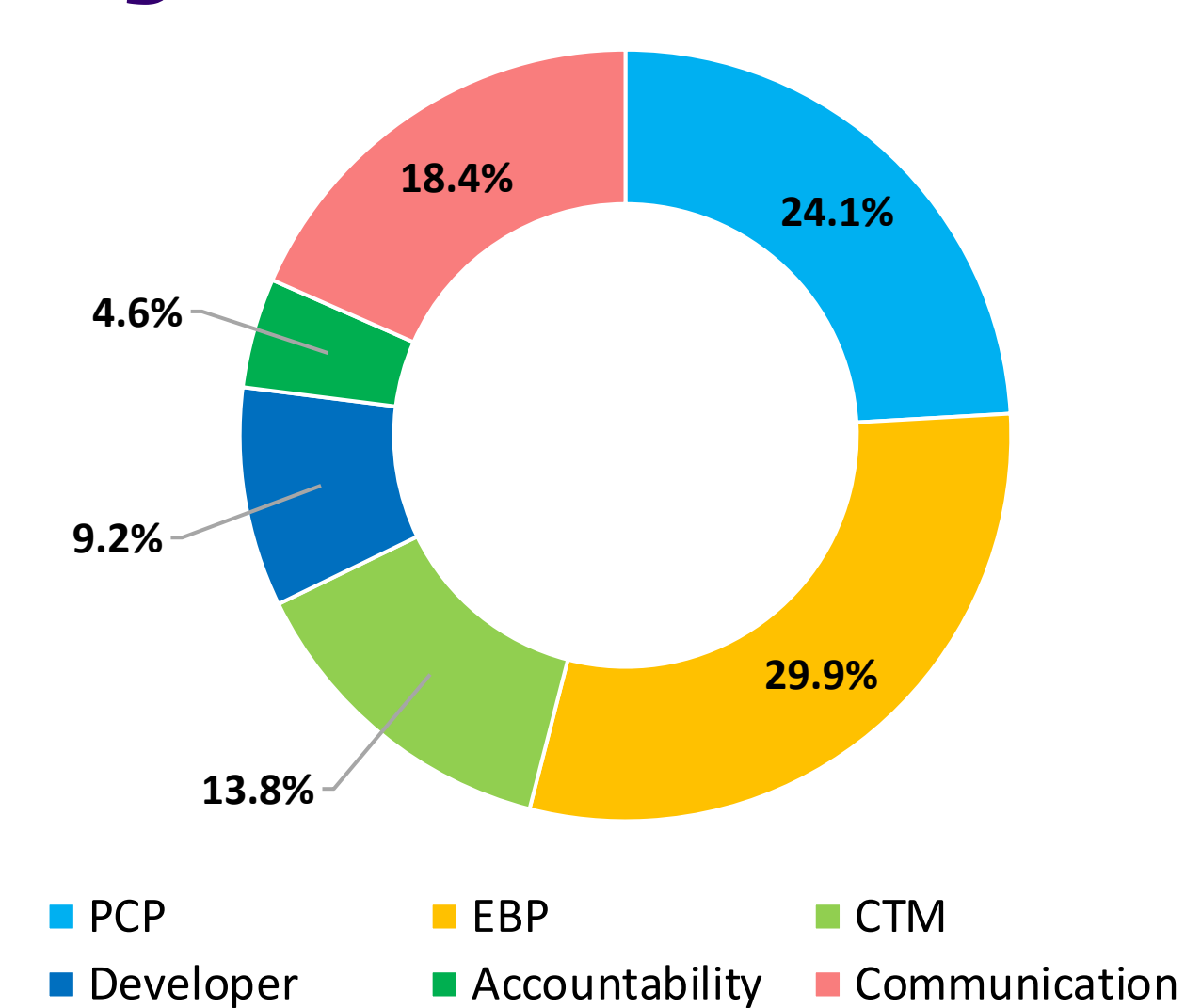


Rated across three areas (EBP1, EBP2, & EBP3). Students received 6 sessions on Medication Literature Evaluation and applied evidence to SOAP documentation throughout the year.

Rated across four areas (PCP1, PCP2, PCP3, PCP4). Students practiced patient interviews, case work-ups, and SOAP documentation throughout the academic year.

Students received transparent documentation when they exhibited actions that were not congruent with qualities that foster accountability and trustworthiness.

Figure 2. Self-Identified Area of Growth



Students' self-identified areas for continued growth were spread across all six domains, with the most students selecting **EBP (29.9%)** followed by **PCP (24.1%)** at the end of Spring quarter.

## REFERENCES

- Wheeler JS, Chisholm-Burns M. The Benefit of Continuing Professional Development for Continuing Pharmacy Education. *Am J Pharm Educ.* 2018 Apr;82(3):6461. doi: 10.5688/ajpe6461. PMID: 29692444; PMCID: PMC5909876.
- Haines ST, Pittenger AL, Stolte SK, et al. Core entrustable professional activities for new pharmacy graduates. *Am J Pharm Educ.* 2017;81(1):Article S2.

Table 2. Qualitative Themes and Student Quotes

Students responded to the question: "Based on your own assessment of the threads above, please reflect on one thread you think that you could improve the most and state why."

Patient Care Provider (PCP)	
Review Foundational Knowledge	"I think as we continue to gain clinical knowledge, I need to be sure I'm <b>implementing that knowledge and reviewing it!</b> "
Prioritization of Problems	"I don't have trouble identifying problems, just in <b>prioritizing them</b> with 100% accuracy."
Monitor & Follow Up	"I would like to be able to locate <b>[monitoring] parameters</b> that are pertinent only to that patient, instead of listing out every possible side effect and labs that needs to be looked at."
Evidence Based Practitioner (EBP)	
Identify Relevant Literature	"Since we have so many different resources available to us, it can be <b>overwhelming on where and what to search to answer questions.</b> "
Analyze & Interpret Literature	"I... still have uncertainties about <b>analyzing the strengths and limitations</b> in an article."
Apply Evidence	"Another way to help me improve in this is by reading more literature and <b>practicing in how to apply the information to a patient's care.</b> "
Efficiency	"I still have a hard time with literature review and analysis and <b>couldn't catch up</b> with team members during the classes."
Collaborative Team Member (CTM)	
Imposter Syndrome	"I often times <b>lack confidence</b> to interject and can feel <b>really out of place on a team</b> . I think I could work on being more confident in my knowledge and remind myself that I am a student who is learning and <b>do not always have to be perfect or have the right answer.</b> "
Increase Knowledge & Medication Expertise	"I do not feel very confident in my <b>current knowledge</b> and hesitate to contribute information when in an interdisciplinary team."
Practice & Exposure	"My goal going into third year is to <b>get as much practice as possible</b> presenting patients and learning new ways of organizing my thoughts, so the presentations are brief yet complete."
Developer	
Comfort with Ambiguity	"As I go into my third year, I believe I'll have <b>more exposure [to] complicated cases with diverse patients and problems</b> , and this should help me improve my comfortability and ability to address ambiguity".
Give Meaningful Feedback	"...be <b>comfortable with providing feedback to colleagues or peers or even preceptors</b> when I notice an error. I tend to doubt myself and overthink if the recipient will view me differently..."
Open Conversations	"I just want to be able to be more comfortable in having <b>open conversations</b> where opinions may differ and being able to <b>build off of different perspectives or thoughts</b> to come up with the more appropriate treatment plan..."
Accountability & Trust	
Timeliness	"I have a very bad habit of entering a procrastination cycle when I do not enjoy doing something. I <b>will be more accountable by getting things done right as I think about them</b> and not pushing them off for a more "convenient" time that will never come."
Develop Habits	"For the most part I try to remain on time with <b>proper notice in advance</b> of absences and lateness but there's room to improve and make sure I also <b>take preventative measures</b> to avoid these things."
Communication	
Conversational Communication	"I think that I could... find my <b>own style</b> within each interaction so that it does not feel forced or disingenuous."
Empathy with Patients	"I will continue to practice using reflective statements as this is a tool that will help with <b>expressing empathy</b> to the patient."
Think on Feet	"I still feel uncomfortable in some scenarios, especially when I am caught off guard by something said by a patient. I hope to gain more experience in this area to be able to <b>'think on my feet'</b> more effectively."

## ACKNOWLEDGMENTS

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