

Reinforcement and Application of the Pharmacists' Patient Care Process Using Educational Simulation

Authors:

Olga Hilas, PharmD, MPH, BCPS, BCGP, FASCP

Professor
St. John's University
College of Pharmacy and Health Sciences
Queens, New York
Telephone: 718-990-1887
Email: hilaso@stjohns.edu

Tina Caliendo, PharmD, BCGP, BCACP

Assistant Professor
St. John's University
College of Pharmacy and Health Sciences
Queens, New York
Telephone: 718-990-1889
Email: caliendt@stjohns.edu

ABSTRACT

Objective: To determine the value of a simulated electronic health record (EHR) as learning tool to reinforce and apply principles of the Pharmacists' Patient Care Process (PPCP) among Doctor of Pharmacy students in their first professional (P1) year of study. **Methods:** An online survey was developed to assess students' perceptions of a simulated EHR as a PPCP learning tool, and to determine student confidence levels in identifying health- and medication-related problems after completing a Transitions of Care educational module. **Results:** A total of 153 of 230 students (67%) voluntarily and anonymously completed the electronic survey distributed among P1 students. More than 90% of students strongly agreed or agreed that a simulated EHR is an important, realistic and valuable learning tool for P1 pharmacy students to perform and document pharmacist activities, communicate with other healthcare professionals, and recommended the continued use of a simulated EHR for applying principles of the PPCP during the P1 year. Over 80% of students also reported increased confidence in identifying health-related problems and medication-related problems. **Recommendations:** Evidence supporting the use of technology in early coursework as a learning tool for the reinforcement and application of the principles of PPCP is lacking. The results of this study support early curricular exposure to a simulated EHR as a valuable learning tool for the PPCP is demonstrated in this study. This supports the development of additional educational activities during the P1 year as a foundation to deliberate PPCP practice in subsequent coursework and experiences.

Keywords: Electronic Health Record, Pharmacists' Patient Care Process, Simulation Education

INTRODUCTION

In 2015, the Accreditation Council for Pharmacy Education (ACPE) published the *Accreditation Standards and Key Elements for*

the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree, emphasizing the need for "active learning pedagogy, content integration, knowledge acquisition, skill development, and the application of knowledge and skills

to therapeutic decision-making” (Accreditation Council for Pharmacy Education, 2015). In addition, the Pharmacists’ Patient Care Process (PPCP) was identified as a key curricular component to prepare students for the provision of patient-centered and collaborative care. This educational approach has also been endorsed by the *Joint Commission of Pharmacy Practitioners* and recognized within the *2013 Center for the Advancement of Pharmacy Education (CAPE) Educational Outcomes* (Joint Commission of Pharmacy Practitioners, 2014; Medina, Plaza & Stowe, 2013).

As a result, educational activities aimed to assess students’ ability to apply the principles of PPCP have been incorporated into curricula across the country. These efforts have primarily focused on advanced coursework in the later years of the Doctor of Pharmacy programs and have not included comprehensive assessments of student perceptions and confidence levels after completing PPCP activities (Lee, Cooley, Tanner, Hanauer, Schiefer & Herrier, 2014; Cooley & Lee, 2018; Alsharif & Faulkner, 2019; Bowar & McCarthy, 2019). Therefore, studies are needed to determine the potential for increased development of student skills and confidence with the PPCP using innovative pedagogical approaches introduced earlier within the curricula to create a foundation for deliberate practice in order to achieve higher levels of performance and competence (Campitelli & Gobet, 2011).

The purpose of this study was to determine the value of a simulated electronic health record (EHR) as a learning tool to reinforce and apply principles of the PPCP among first professional year (P1) Doctor of Pharmacy students in a simulated introductory pharmacy practice experience course. The researchers focused on student perceptions of this PPCP teaching approach as previous educational research has demonstrated that these perceptions are important determinants of student motivation, learning and behavior, and also support the connection between early reinforcement of academic principles and the enhancement of student learning and acquisition of skills (Vnoučková, Urbancová & Smolová, 2017; Ahmed, Taha, Alneel & Gaffar, 2018). To date, we are not aware of any studies with these research priorities during the early portion of the pre-advanced pharmacy practice experience (pre-APPE) curriculum. Prior to the implement-

ation of a simulated EHR to teach and apply the principles of PPCP, the researchers utilized paper charts that required a more time-intensive and labor-intensive educational approach.

METHODS

Participants

All P1 students (≥ 18 years of age) enrolled in our Doctor of Pharmacy program were offered the opportunity to participate in this study. These students are required to complete a simulated introductory pharmacy practice experience (SimIPPE), which fulfills 52 of the 300 IPPE hours of the pre-APPE curriculum. The aim of this course is to effectively transition students from didactic learning to introductory experiential training by using simulation to mimic “real-world” patient care activities in various areas of pharmacy practice. Over the course of an academic semester, these simulation activities help students develop skills necessary to become an empathetic, culturally-responsive and competent pharmacist.

Procedure

Faculty members facilitating a SimIPPE course during the P1 year of study developed a Transitions of Care (TOC) module to meaningfully connect community, institutional and ambulatory care pharmacy practice activities. A patient case was created using a commercially available, interactive, web-based, simulated EHR (SimEMR®, KbPort LLC) to reinforce and apply principles of the PPCP, which were introduced to students in their *Essentials of Pharmacy Practice* course during the previous semester. The TOC module was purposefully completed towards the end of the semester in order for students to adequately prepare for the application of the PPCP and effectively navigate the EHR after use in previous SimIPPE modules. The PPCP was reinforced in the preceding SimIPPE modules through the incorporation of its principles and key steps (Collect, Assess, Plan, Implement, and Follow-up) into simulation activities such as collecting and assessing patient information, interpreting laboratory values, assessing health literacy and cultural factors affecting health, performing medication reconciliation, composing interprofessional communication, preparing for patient counseling, and documenting pharmacist activities and plans. The simulated EHR was reviewed with all students and faculty members to emphasize the importance of each of its

components when evaluating a patient case using a comprehensive and individualized approach.

The TOC patient case was embedded within the simulated EHR and involved an older adult who presented to the emergency department (ED) with signs and symptoms of cellulitis. The case presented the patient's 3-day hospital stay after admission to the general medicine unit for treatment. Students were responsible for assessing and addressing the patient's daily health status changes, as well as healthcare needs by collecting pertinent information from the different sections of the simulated EHR (e.g. medical history, allergies and intolerances, progress notes, laboratory values, vital signs, review of systems, medication orders, etc.). In addition, students performed medication reconciliation upon patient presentation to the ED, admission to the hospital, discharge from the hospital, and at the post-discharge ambulatory care follow-up visit.

Students worked independently and in small groups to review the patient's findings and progress notes during the hospital stay and at the subsequent ambulatory care clinic visit. The learning objectives of the TOC patient case activity/practice experience were for students to: (1) reconcile medications at every transition / level of care (home to ED, ED to general medicine unit, general medicine unit to home, home to ambulatory care clinic, ambulatory care clinic to home); (2) identify and address health- and medication-related problems at every transition / level of care; (3) develop, implement and follow-up with patient care plans at every transition / level of care.

To demonstrate competency, students composed written communications to other healthcare professionals regarding recommendations for patient care using the SBAR (Situation, Background, Assessment, Recommendation) technique, verbally communicated their recommendations to standardized healthcare professionals (i.e. faculty members), prepared, presented and documented discharge counseling and patient care instructions within the simulated EHR, and authored a note for the ambulatory care clinic follow-up visit. Students were assessed on their active participation and submissions of the aforementioned activities via the simulated EHR and the university's Learning

Management System (LMS). Simulation activities focused on the *collect* and *assess* steps of the PPCP, as these students were P1 pharmacy students. Faculty members utilized peer-reviewed assessment rubrics to determine student competency and set a minimum passing score of 80% for all simulation activities. All students achieved this pre-determined level of competency after their first submission or upon remediation and a second submission.

Instruments

A survey consisting of 30 questions was developed and reviewed by three content experts on PPCP and simulation education. It was electronically sent to all P1 pharmacy students enrolled in the SimIPPE course at the end of the semester via the LMS roster. Students were given a four-week period to complete the electronic survey, with weekly reminders sent to student emails. Ten of the 30 survey questions were specifically focused on the students' perceptions of using a simulated EHR as a learning tool to reinforce and apply principles of the PPCP, as well as its effects on student confident levels in identifying health- and medication-related problems. Completion of the survey was voluntary, and the information collected was done so anonymously using an online survey tool. All items included a 5-point Likert-scale rated from *strongly agree* to *strongly disagree*. This study was reviewed and granted an exemption by the University Institutional Review Board.

Data Analysis

Tables 1 and 2 present the data collected from the P1 pharmacy students who completed any of the 30 survey questions. A descriptive analysis was conducted, with a focus on the 10 survey questions that involved the use of a simulated EHR to apply the principles of the PPCP. For open-ended qualitative questions, researchers reviewed all student responses to determine issues or themes that would reveal potentially helpful information to use as a benchmark for future research, along with the quantitative data.

RESULTS

A total of 153 of 230 students (67%) completed all survey questions. In regards to the five steps of the PPCP: (1) 96% of students (n=147) *strongly agreed or agreed* that using a simulated EHR was an effective tool for

collecting patient information; (2) 94% of students (n=144) *strongly agreed or agreed* that using a simulated EHR was an effective tool for **assessing** patient findings; (3) 93% of students (n=142) *strongly agreed or agreed* that using a simulated EHR was an effective tool for **developing** a patient care plan; (4) 90% of students (n=138) *strongly agreed or agreed* that using a simulated EHR was an effective tool for **implementing** a patient care plan; and (5) 94% of students (n=143) *strongly agreed or agreed* that using a simulated EHR was an effective tool for developing a **follow-up** plan including monitoring and evaluation.

After using the simulated EHR, 98% of students (n=150) also *strongly agreed or agreed* that the simulated EHR was useful for performing and documenting pharmacist activities. Eighty-two percent of students (n=126) reported increased confidence in identifying health-related problems, and 84% (n=128) reported increased confidence in identifying medication-related problems. Overall, 90% of students (n=138) recommended the continued use of a simulated EHR for applying principles of the PPCP.

Furthermore, $\geq 90\%$ of student respondents *strongly agreed or agreed* that the simulated EHR is an important, realistic and valuable learning tool for P1 pharmacy students to prepare for their subsequent coursework and experiences, allows for effective communication among healthcare professionals, is effective for learning about a pharmacist's role in transitions of care activities, should continue to be used in the current course and also be incorporated into other courses in the future. A summary of key survey results is presented in Table 1.

In regard to qualitative data, certain students responded to the following open-ended questions of the survey: (1) what aspects of simulated EHR did you find most useful?; (2) what aspects of simulated EHR did you find least useful?; and (3) other comments. Eighty-two students provided responses to the aspects they found most useful when using the simulated EHR for educational purposes. Forty-seven of these students (58%) highlighted the simulated EHR's ease of use, 23 students (28%) emphasized their appreciation for the simulated EHR as a realistic learning tool that is relevant to contemporary pharmacy practice, and 12 students (14%) stated that "everything" about the simulated EHR was useful for applying

their health-related knowledge and skills. Seventy-five students provided responses to the aspects they found least useful, with the majority (46 students; 61%) revealing that connectivity and loading times were difficult and long, respectively. Twenty students (27%) stated that there was nothing they considered least beneficial about the simulated EHR, three students (4%) felt that everything was useful, 4 students (5%) would have liked the information within the simulated EHR to be organized differently, and 2 students (3%) would have liked a search button or function. Sixteen students provided additional comments including six students (38%) who reported that this question was "not applicable" to them, four students (25%) emphasized their satisfaction with the incorporation of a simulated EHR into their coursework for "real-life" practice, two students (12.5%) highlighted their dissatisfaction with loading times, two students (12.5%) welcomed more opportunities to use the simulated EHR in patient care educational activities, and two students (12.5%) would have like more training on how to navigate the simulated EHR prior to use.

DISCUSSION

The findings from this study reveal that the use of a simulated EHR within a SimIPPE course allows for the effective application of PPCP principles and practice of "real-world" patient care activities among P1 pharmacy students. Comprehensive reviews of patient cases within a simulated EHR challenges students to build upon foundational knowledge of patient care principles, skills needed for formulating evidence-based care plans, interprofessional communication skills, documentation skills, and patient counseling techniques. Furthermore, student performance and increased confidence in applying the PPCP principles in their first professional year of study are noteworthy and encourage the development of a deliberate practice framework throughout the Doctor of Pharmacy curricula. Thus, next steps will be to systematically incorporate similar teaching methods in other coursework utilizing technology to maximize student confidence and competency when applying the PPCP to patient care activities.

There are several limitations of this study that must be taken into consideration. Due to resource issues, a pilot study was not conducted with a

smaller subset of students prior to study implementation with all P1 pharmacy students. This may have been beneficial step in providing a foundation and greater insight for a larger assessment of student outcomes and goals. Utilization of pre- and post-activity student assessments may have also proven beneficial by providing data that could have been analyzed for statistical significance (in addition to current study's descriptive analysis and interpretation). Finally, a longitudinal study that compared student competency and confidence using paper charts versus a simulated EHR (with the same cohort of students) would have provided further evidence to support the educational approach that is more effective in reinforcing and applying the principles of the PPCP for optimal patient care.

CONCLUSION

Health care has become increasingly patient-centered with the integration of evidence-based approaches, interprofessional collaboration and technology. The education of health professional students must, therefore, incorporate these advancements in order to prepare future practitioners for effective engagement in healthcare delivery. Using a simulated EHR to reinforce and apply the principles of the PPCP is one way to enhance the development of patient care skills and increase confidence among P1 students in preparation for their subsequent coursework and clinical education. Furthermore, this study can be used to develop future studies exploring the potential benefits of using simulation education approaches to teach and apply patient care principles and interventions within other health professional programs (e.g. medical, nursing and physician assistant degree programs) prior to direct clinical experiences.

REFERENCES

Accreditation Council For Pharmacy Education. (2015). *Guidance for the accreditation standards and key elements for the professional program in pharmacy leading to the Doctor of Pharmacy degree*. <https://www.acpeaccredit.org/pdf/Standards2016FINAL.pdf>

Ahmed, Y., Taha, M. H., Al-Neel, S., & Gaffar, A. M. (2018). Students' perception of the learning environment and its relation to their study year

and performance in Sudan. *International Journal of Medical Education*, 9(1), 145-150. <https://doi.org/10.5116/ijme.5af0.1fee>

Alsharif, N. Z., & Faulkner, M. A. (2020). Implementation of the Pharmacists' Patient Care Process in a Medicinal Chemistry Course. *American Journal of Pharmaceutical Education*, 84(2), 7556. <https://doi.org/10.5688/ajpe7556>

Bowar, B., & McCarthy, B. C. (2019). Integration of the Pharmacists' Patient Care Process into a comprehensive disease management course series. *American Journal of Pharmaceutical Education*, 83(3), 7400. <https://doi.org/10.5688/ajpe7400>

Campitelli, G., & Gobet, F. (2011). Deliberate practice: Necessary but not sufficient. *Current Directions in Psychological Science*, 20(5), 280-285. <https://doi.org/10.1177/0963721411421922>

Cooley, J., & Lee, J. (2018). Implementing the Pharmacists' Patient Care Process at a public pharmacy school. *American Journal of Pharmaceutical Education*, 82(2), 6301. <https://doi.org/10.5688/ajpe6301>

Joint Commission of Pharmacy Practitioners. (2014). *Pharmacists' Patient Care Process*. <https://jcphp.net/wp-content/uploads/2016/03/PatientCareProcess-with-supporting-organizations.pdf>.

Lee, J. K., Cooley, J. H., Tanner, N. E., Hanauer, C. N., Schiefer, D. M., & Herrier, R. N. (2014). Development of a pharmacy capstone course from focus groups to advanced patient care. *American Journal of Pharmaceutical Education*, 78(8), 156. <https://doi.org/10.5688/ajpe788156>

Medina, M. S., Plaza, C. M., Stowe, C. D., Robinson, E. T., DeLander, G., Beck, D. E., Melchert, R. B., Supernaw, R. B., Roche, V. F., Gleason, B. L., Strong, M. N., Bain, A., Meyer, G. E., Dong, B. J., Rochon, J., & Johnston, P. (2013). Center for the Advancement of Pharmacy Education 2013 educational outcomes. *American Journal of Pharmaceutical Education*, 77(8), 162. <https://doi.org/10.5688/ajpe778162>

Vnoučková, L., Urbancova, H. & Smolova, H. (2017). Factors describing students' perception

on education quality standards. *Journal on Efficiency and Responsibility in Education and Science*, 10(1). 109-115. <https://doi.org/10.7160/eriesj.2017.100403>

Table 1. Student Survey Questions and Responses

Survey Question	Yes	No	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1. I have used a real patient EHR prior to this course. (N=172)	31 (18%)	141 (82%)	-	-	-	-	-
2. I have used a simulated EHR prior to this course. (N=165)	29 (17.6%)	136 (82.4%)	-	-	-	-	-
3. Using the simulated EHR provides an effective way to collect patient information. (N=153)	-	-	61 (39.9%)	86 (56.2%)	3 (2%)	2 (1.3%)	1 (0.6%)
4. Using the simulated EHR provides an effective way to assess patient findings. (N=153)	-	-	58 (37.9%)	86 (56.2%)	6 (3.9%)	3 (2%)	0
5. Using the simulated EHR provides an effective way to develop a plan for patient care. (N=153)	-	-	58 (37.9%)	84 (54.9%)	5 (3.3%)	6 (3.9%)	0
6. Using the simulated EHR provides an effective way to implement a plan for patient care. (N=153)	-	-	49 (32%)	89 (58.2%)	10 (6.5%)	5 (3.3%)	0
7. Using the simulated EHR provides an effective way to develop a follow-up plan for a patient. (N=153)	-	-	51 (33.3%)	92 (60.1%)	5 (3.3%)	5 (3.3%)	0
8. The simulated EHR was an effective tool for learning about the pharmacist's role in transitions of care. (N=153)	-	-	66 (43.1%)	76 (49.7%)	5 (3.3%)	6 (3.9%)	0
9. The simulated EHR helped me to develop skills needed to provide patient care as defined by the PPCP. (N=153)	-	-	50 (32.7%)	85 (55.6%)	13 (8.5%)	4 (2.6%)	1 (0.6%)
10. I recommend the continued use of a simulated EHR for applying principles of the PPCP. (N=153)	-	-	55 (36%)	83 (54.3%)	11 (7.1%)	3 (2%)	1 (0.6%)
11. Using an EHR allows for effective communication among healthcare providers / professionals. (N=153)	-	-	57 (37.3%)	86 (56.2%)	9 (5.9%)	1 (0.6%)	0
12. An EHR can be useful in documenting pharmacist activities and interventions. (N=153)	-	-	68 (44.4%)	82 (53.7%)	2 (1.3%)	1 (0.6%)	0

Reinforcement and Application of the Pharmacists' Patient Care Process

42

© The Author(s). 2021. This is an open-access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

13. An EHR is easier to use over a paper chart. (N=153)	-	-	61 (39.9%)	65 (42.5%)	19 (12.4%)	6 (3.9%)	2 (1.3%)
14. Exposure to / utilization of a simulated EHR is important for P1 students as they prepare for their P2 year and Introductory Pharmacy Practice Experiences. (N=153)	-	-	67 (43.8%)	78 (51%)	6 (3.9%)	1 (0.6%)	1 (0.6%)
15. I recommend the continued use of a simulated EHR in this course. (N=153)	-	-	60 (39.2%)	86 (56.2%)	4 (2.6%)	2 (1.3%)	1 (0.6%)
16. I recommend the continued use of a simulated EHR in other courses. (N=153)	-	-	57 (37.3%)	81 (53%)	11 (7.1%)	3 (2%)	1 (0.6%)
17. The simulated EHR program seemed like a realistic tool for simulating an actual EHR. (N=153)	-	-	52 (34%)	86 (56.2%)	9 (5.9%)	6 (3.9%)	0
18. Not including loading times, the simulated EHR program was user-friendly. (N=153)	-	-	46 (30.1%)	83 (54.3%)	13 (8.5%)	8 (5.2%)	3 (2%)
19. I enjoyed using the simulated EHR program for course activities involving the use of a simulated EHR. (N=153)	-	-	42 (27.5%)	84 (54.9%)	19 (12.4%)	6 (3.9%)	2 (1.3%)
20. Overall, the simulated EHR program is a valuable learning tool. (N=153)	-	-	52 (34%)	89 (58.2%)	9 (5.9%)	2 (1.3%)	1 (0.6%)
21. After using the simulated EHR program, I am more confident in my ability to locate subjective data in an EHR. (N=153)	-	-	42 (27.5%)	89 (58.2%)	15 (9.8%)	5 (3.3%)	2 (1.3%)
22. After using the simulated EHR program, I am more confident in my ability to locate objective data in an EHR. (N=153)	-	-	43 (28.1%)	86 (56.2%)	16 (10.5%)	6 (3.9%)	2 (1.3%)
23. After using the simulated EHR program, I am more confident in my ability to identify health-related problems in an EHR. (N=153)	-	-	42 (27.5%)	84 (54.9%)	21 (13.7%)	4 (2.6%)	2 (1.3%)
24. After using the simulated EHR program, I am more confident in my ability to identify medication-related problems in an EHR. (N=153)	-	-	40 (26.1%)	88 (57.5%)	19 (12.4%)	5 (3.3%)	1 (0.6%)
25. After using the simulated EHR program, I am more							

Reinforcement and Application of the Pharmacists' Patient Care Process

43

© The Author(s). 2021. This is an open-access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

confident in my ability to read and understand SOAP / progress notes in an EHR. (N=153)	-	-	43 (28.1%)	92 (60.1%)	15 (9.8%)	2 (1.3%)	1 (0.6%)
26. After using the simulated EHR program, I am more confident in my ability to read and understand discharge notes in an EHR. (N=153)	-	-	41 (26.8%)	91 (59.5%)	16 (10.5%)	4 (2.6%)	1 (0.6%)
27. After using the simulated EHR program, I am more confident in my ability to perform medication reconciliation using an EHR. (N=153)	-	-	38 (24.8%)	92 (60.1%)	17 (11.1%)	5 (3.3%)	1 (0.6%)
28. What aspects of the EHR did you find most useful?*(N=82)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
29. What aspects of the EHR did you find most useful?*(N=75)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
30. Other comments* (N=16)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Open-ended questions. Student responses for these questions are summarized in the results section.

Table 2. PPCP-Focused Questions and Responses from Student Survey (N=153)

Survey Question	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1. Using the simulated EHR provides an effective way to collect patient information.	61 (39.9%)	86 (56.2%)	3 (2%)	2 (1.3%)	1 (0.6%)
2. Using the simulated EHR provides an effective way to assess patient findings.	58 (37.9%)	86 (56.2%)	6 (3.9%)	3 (2%)	0
3. Using the simulated EHR provides an effective way to develop a plan for patient care.	58 (37.9%)	84 (54.9%)	5 (3.3%)	6 (3.9%)	0
4. Using the simulated EHR provides an effective way to implement a plan for patient care.	49 (32%)	89 (58.2%)	10 (6.5%)	5 (3.3%)	0
5. Using the simulated EHR provides an effective way to develop a follow-up plan for a patient.	51 (33.3%)	92 (60.1%)	5 (3.3%)	5 (3.3%)	0
6. An EHR can be useful in documenting pharmacist activities and interventions.	68 (44.4%)	82 (53.7%)	2 (1.3%)	1 (0.6%)	0
7. The simulated EHR helped me to develop skills needed to provide patient care as defined by the PPCP.	50 (32.7%)	85 (55.6%)	13 (8.5%)	4 (2.6%)	1 (0.6%)
8. After using the simulated EHR program, I am more confident in my ability to identify health-related problems in an EHR.	42 (27.5%)	84 (54.9%)	21 (13.7%)	4 (2.6%)	2 (1.3%)
9. After using the simulated EHR program, I am more confident in my ability to identify medication-related problems in an EHR.	40 (26.1%)	88 (57.5%)	19 (12.4%)	5 (3.3%)	1 (0.6%)
10. I recommend the continued use of a simulated EHR for applying principles of the PPCP.	55 (36%)	83 (54.3%)	11 (7.1%)	3 (2%)	1 (0.6%)