

Evaluating the Proficiency of PharmD Students in Utilizing Electronic Health Record (EHR) Systems During Advanced Pharmacy Practice Experience (APPE) Rotations

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Background/ Purpose

Electronic Health Record (EHR) systems have become an integral part of modern healthcare delivery. The ability of pharmacists to use EHR systems effectively is essential for providing high-quality patient care. Therefore, it is imperative for the PharmD curriculum to adequately prepare student pharmacists on using EHR systems prior to and during their rotations. This study describes student pharmacist EHR proficiency, preceptor expectations, and student preparedness and confidence in EHR use.

Methods

Utilizing Qualtrics software, a questionnaire consisting of 20 questions for students and 16 questions for preceptors was distributed to 4th-year student pharmacists and APPE preceptors through an anonymous link sent via email. The questionnaire was opened in mid-January for two weeks for participants to complete. During this period, participants were sent two reminder emails. Students received an additional reminder via their class GroupMe. The analysis focused on descriptive statistics of survey responses, including frequency distribution in percentages, central tendency measures (mean, median), and variability.

Results

The study received participation from 28 students and 79 preceptors resulting in a response rate of 14% and 12% respectively, revealing that 62% of students received on-site EHR training with 80% finding it most helpful in improving their proficiency. Only 10% of students indicated they received training through the didactic curriculum. Overall, 71% of students felt somewhat confident in approaching a new EHR system within a 6-week time frame and 53% rated their competency in using EHR systems as “very good”. Overall, 84% of preceptors concluded that students face challenges finding and interpreting EHR data. When asked about the importance of EHR training, 58% of preceptors agreed that training is very important to students, and 25% agreed that students should be taught how to interpret and create a problem list/SOAP note utilizing EHR data before rotations.

Conclusion

This study revealed that although students were able to navigate and utilize a rotation site’s EHR system efficiently, most were only comfortable/confident in doing so after receiving training through the rotation site. It highlighted the lack of exposure to EHR systems in the comprehensive pharmacy curriculum and proposes the necessity of incorporating it. The study helped to determine the areas of knowledge and experience expected of students by the preceptors. The overall conclusion of the study suggests curriculum enhancements to bridge the gap in learning, to ensure that student pharmacists are better prepared to utilize EHR systems in the provision of direct patient care during rotations and ultimately practice.