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## Staff Education to Internal Medicine Clinic

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# Walden University

College of Nursing

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Executive Summary: Staff Education Project

Staff Education to Internal Medicine Clinic

by

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## Summary

This is a staff education project. The practice problem addressed was the lack of standardized orientation on the electronic health record (EHR) system for rotating students, which impacted documentation quality and workflow efficiency. Prior to the intervention, students received no formal training on the clinic's EHR system, resulting in documentation errors, workflow disruptions, and dependence on administrative staff. The educational session, tailored to the clinic's EHR platform, aimed to promote student knowledge and confidence through structured, site-specific training. The practice-focused question was: How does structured education on site-specific EHR use impact knowledge and documentation confidence among rotating medical and nurse practitioner students?

Nine students participated in the project, completing pre- and post-surveys consisting of eight identical questions on essential EHR functions. Training was delivered via a PowerPoint presentation with EHR screenshots and a printed checklist. Descriptive statistics were used to compare results. The average number of correct answers per student increased from 3.33 to 7.78. Students reported greater confidence, demonstrating the training's effectiveness.

Structured EHR education supports patient safety and digital competence among future providers. Recommendations include mid-rotation refreshers, expanded content, and multilingual materials to promote inclusion and equity. This initiative reinforces the importance of integrating informatics skills into nursing practice, supports positive social change by addressing disparities in digital literacy, and aligns with goals to prepare a culturally responsive and competent workforce.

## **Background**

The use of EHRs in clinical practice has become a cornerstone of modern healthcare. However, students rotating through clinical sites often receive little to no formal training on how to use the specific EHR system in their assigned location. The practice problem identified was the lack of formal and standardized onboarding related to EHR use among rotating students in a primary care clinical setting. This lack of standardized onboarding can lead to inconsistencies in documentation, workflow delays, and increased reliance on support staff. At the project site, students frequently required assistance from the secretary to complete notes and navigate the system. This gap revealed the need for an educational intervention to enhance EHR proficiency and promote autonomy among trainees. The project question was: Will the implementation of a structured educational session improve EHR documentation knowledge and confidence among rotating students in a primary care clinic? Structured EHR education has been shown to improve documentation accuracy, user confidence, and health informatics competencies among healthcare trainees (Kim, 2025). Simulation-based training has also demonstrated significant improvements in user navigation and data collection skills among residents using EHR systems (Miller et al., 2021).

Documentation accuracy is essential not only for legal compliance but also for care coordination, interdisciplinary communication, and billing accuracy. Inadequate EHR training has been linked to incomplete documentation, errors, and inefficiencies in the clinical setting. Tailored, hands-on EHR training significantly improved knowledge, practical competencies, and user satisfaction among healthcare staff (Musa et al., 2023). Students entering their clinical rotations often face a steep learning curve, which can be

compounded by a lack of clear instruction or support. In the absence of a structured orientation, documentation practices vary widely, hindering consistency and potentially affecting patient outcomes. Standardized documentation within the EHR has been shown to improve the quality, clarity, and completeness of clinical notes, supporting both safety and efficiency (Ebbers et al., 2022).

To address this gap, a staff education intervention was developed using principles of adult learning and quality improvement. The educational strategy included a PowerPoint-based training session tailored to the EHR system used at the site, focusing on key functions such as navigating the interface, documenting SOAP notes, and locating diagnostic results. Students were assessed before and after the intervention using a structured survey to measure changes in knowledge and confidence. The same questions were used in both the pre- and post-surveys to ensure comparability. The training session was implemented during the summer term, aligning with the student rotation schedule. Students also received a printed checklist to support independent completion of patient documentation. Feedback from the practice team indicated a desire to reduce dependency on administrative staff for documentation tasks. The education project was approved by the site and integrated into the workflow with minimal disruption.

The intervention aligns with national recommendations for enhancing digital literacy among healthcare trainees. The ultimate goal of this initiative was to create a replicable and sustainable onboarding model that could be offered to all future students rotating at the site. In doing so, the clinic aimed to foster a culture of documentation excellence, student accountability, and operational efficiency. Addressing usability and workflow barriers within EHR systems can also help reduce documentation burden and

improve user satisfaction (Olakotan et al., 2025). Targeted interventions have been shown to reduce EHR-related workload and improve workflow efficiency for trainees, thereby enhancing both learning and patient care (Levy et al., 2025). By combining evidence-based strategies with context-specific training, the project addressed a critical educational need while supporting operational goals.

A targeted literature search was conducted in PubMed and Google Scholar for the years 2021 through 2025. Search terms included “simulation-based EHR education,” “EHR training documentation accuracy,” and “structured EHR documentation.” Inclusion criteria were peer-reviewed articles in English that reported objective outcomes relevant to documentation quality, knowledge, skills, or usability. Titles and abstracts were screened, and full texts were reviewed to confirm alignment with the project’s scope. The final selection included six studies: one Level II, three Level III, and two Level IV. These sources informed the design and evidence-based rationale for the educational intervention.

### **Staff Education Project Development**

Sources of evidence included literature on EHR training best practices, results from a pre-education survey conducted at the project site, and feedback from faculty and administrative staff. The participants in this project were rotating nurse practitioner students and medical students completing their clinical training at the primary care site during the summer term. These sources guided the development of a context-specific training program tailored to the needs of rotating students. The survey results provided baseline data on knowledge gaps, while faculty feedback highlighted workflow issues caused by inconsistent documentation. Literature sources emphasized the importance of

early integration of digital literacy into clinical education. The combination of local data and peer-reviewed evidence ensured that the intervention addressed both site-specific and generalizable challenges. This approach supported the alignment of project goals with national standards in nursing informatics education. The integration of multiple evidence sources strengthened the rationale and structure of the intervention.

Analytical methods included descriptive statistics to evaluate changes in knowledge between pre- and post-survey responses. Each survey question was scored as correct (1) or incorrect (0), and average scores were calculated per student and per item. Data were entered into an Excel spreadsheet and analyzed to determine trends in performance. Comparisons were made between individual scores before and after the intervention to assess effectiveness. The analysis focused on the number of correct responses to identify specific areas of improvement. Trends in question-level responses were also used to evaluate content areas that may require reinforcement. This simple but effective approach provided clear, actionable insights into the impact of the educational program.

The evaluation process included a comparison of pre- and post-education survey results to measure changes in student knowledge and EHR proficiency. Faculty and staff provided informal feedback on student performance, independence, and accuracy in documentation following the training. Improvements were observed in both survey scores and workflow efficiency within the clinic. Survey data were used to validate the effectiveness of the training content and format. Additionally, anecdotal observations from the clinical staff supported the quantitative findings, reinforcing the program's utility. Students also expressed increased confidence and appreciation for the training

materials, particularly the printed checklist. The combination of survey data and qualitative feedback provided a comprehensive assessment of the intervention's success.

After the pre-survey, the educational session was delivered using a PowerPoint presentation that included screenshots of the actual EHR interface and explained each workflow step. The session emphasized HIPAA compliance, efficient charting, and accurate documentation. Once training was completed, the same survey was re-administered to measure changes in knowledge. The education took place according to the dates outlined in the action plan and followed the order of implementation as originally proposed.

Data from both surveys were collected and compiled into an Excel sheet. Each response was coded as correct (1) or incorrect (0). The average number of correct answers for each question was calculated and compared between pre- and post-education surveys. These comparisons showed consistent improvement across all eight questions, with post-education scores reflecting higher accuracy and greater understanding of the EHR functions.

The evaluation process demonstrated the effectiveness of the intervention. The structured training reduced variability in student performance and helped align expectations for documentation and clinical workflow. Faculty and staff reported improved efficiency and fewer interruptions during clinical activities. The positive feedback from learners and observable performance gains supported the utility of this focused and standardized onboarding education.

## Results

The educational intervention aimed to improve the documentation knowledge and EHR navigation skills of nine rotating students. The effectiveness of the program was evaluated through pre- and post-education surveys composed of eight identical questions. Each question assessed knowledge or understanding of key components of electronic documentation. The results demonstrated a substantial improvement in overall knowledge and confidence after the education was delivered.

The average number of correct responses per student increased from 3.33 to 7.78 out of a possible 8. When analyzed by question, the average number of correct answers rose from 3.25 to 8.25, confirming a consistent improvement across both individual and item-level performance. Pre-survey scores ranged from 2 to 5 correct answers, while post-survey scores ranged from 6 to 8, indicating a consistent upward shift across all participants. All nine students demonstrated individual improvement, with most of them achieving nearly perfect scores in the post-test. These results support the hypothesis that structured EHR education enhances both understanding and confidence among novice users.

The following table summarizes the average number of correct responses per question:

**Table 1***Data Taken From Pre and Post Survey*

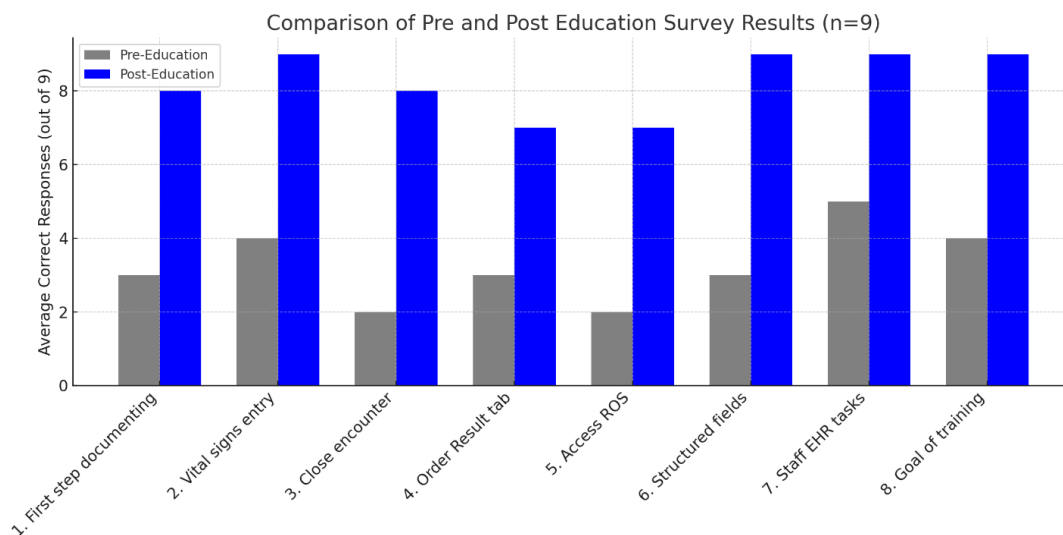
Item	Pre-education avg ( <i>n</i> = 9)	Post-education avg ( <i>n</i> = 9)	Change
1. First step when documenting a visit	3	8	↑ +5 (+166.7%)
2. Where to enter vital signs	4	9	↑ +5 (+125.0%)
3. Button to close an encounter	2	8	↑ +6 (+300.0%)
4. Purpose of "Order Result" tab	3	7	↑ +4 (+133.3%)
5. How to access Review of Systems	2	7	↑ +5 (+250.0%)
6. Importance of using structured fields	3	9	↑ +6 (+200.0%)
7. Tasks that staff can complete in the EHR	5	9	↑ +4 (+80.0%)
8. Primary goal of the training program	4	9	↑ +5 (+125.0%)
Overall average (8 items)	3.25	8.25	↑ +5 (+153.8%)

Graphical representation of these findings was prepared in Excel to visualize knowledge gains per question. Every item showed improvement, with some questions reflecting more than double the number of correct responses after the session. This

supports the efficacy of targeted educational programs when implemented in clinical settings using real-life tools and scenarios.

**Figure 1**

*Comparison Graphic*



In addition to knowledge improvement, anecdotal feedback collected during the debrief session showed increased student confidence and appreciation for the checklist used during training. The staff also reported fewer inquiries from students about EHR navigation, supporting improved independence. These outcomes reinforce the sustainability and value of ongoing EHR education for all future student cohorts.

One limitation of the project was the small sample size, which included only nine students. Although the intervention showed consistent improvements, the results may not be generalizable to larger or more diverse clinical settings. Additionally, the lack of long-term follow-up limits the ability to assess knowledge retention over time. Future implementations should consider longitudinal assessment and replication in varied clinical environments to strengthen external validity.

The findings of this project revealed a significant improvement in students' EHR skills following the training intervention. The average number of correct answers per student rose from 3.33 to 7.78 out of 8, demonstrating the effectiveness of the education strategy. These improvements support more efficient workflows, fewer interruptions for staff, and greater student confidence during clinical rotations. The structured nature of the intervention supported consistent documentation practices, reduced variability among trainees, and promoted better alignment with clinic protocols. These outcomes highlight the value of targeted onboarding for rotating students, especially in busy outpatient settings. The evidence also supports the scalability of this model for other clinics and training environments. Improved digital literacy among students can lead to safer, more accurate care delivery and support broader institutional goals for quality improvement.

Major products of this project include a structured EHR training session, an evaluation survey, and a documentation checklist that guided students through charting procedures. These tools supported the transition to a more consistent and independent documentation process for students during clinical rotations. Based on project results, it is recommended to offer a mid-rotation refresher, expand the curriculum to cover more advanced EHR functions, and replicate the training model across similar clinical sites. Consideration should also be given to adapting materials into multiple languages to accommodate diverse learners. Clinic leadership has expressed interest in continuing the program for future cohorts, given its impact on workflow and student performance. These conclusions align with evidence showing that targeted education improves digital readiness, which promotes patient safety. The model is feasible, sustainable, and

adaptable, making it a valuable tool for enhancing onboarding practices in outpatient settings.

### **Conclusions**

The implementation of a structured EHR education program at the clinical site resulted in measurable improvements in students' documentation accuracy and confidence. The intervention reduced reliance on administrative staff, improved clinical workflow, and provided a consistent onboarding experience for incoming trainees. These outcomes demonstrate a clear benefit to the organization by enhancing efficiency and encouraging consistency in documentation practices.

Based on the results of this pilot project, future recommendations include incorporating refresher training midway through student rotations, expanding the training to include other clinical software functions, and evaluating long-term retention through follow-up assessments. Additionally, this education model can be adapted and implemented at other clinics that host students to ensure a standardized approach to EHR onboarding. Offering training in both English and Spanish may further enhance accessibility for diverse learners and promote inclusive education.

For nursing practice, this initiative reinforces the importance of integrating informatics competency into early clinical training. Nurses must be proficient not only in patient care but also in the digital documentation that supports safety and communication. Structured onboarding in EHR use contributes to nursing readiness, improves care continuity, and reduces documentation-related errors. This project also supports positive social change by promoting equitable access to educational resources regardless of the learner's background. By addressing disparities in digital preparedness and tailoring

training to the site's context, the intervention fosters a more inclusive and efficient clinical learning environment.

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