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## Critical Education for Critical Access Nurses Improving Nurse Preceptor Competence

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# Critical Education for Critical Access Nurses Improving Nurse Preceptor Competence

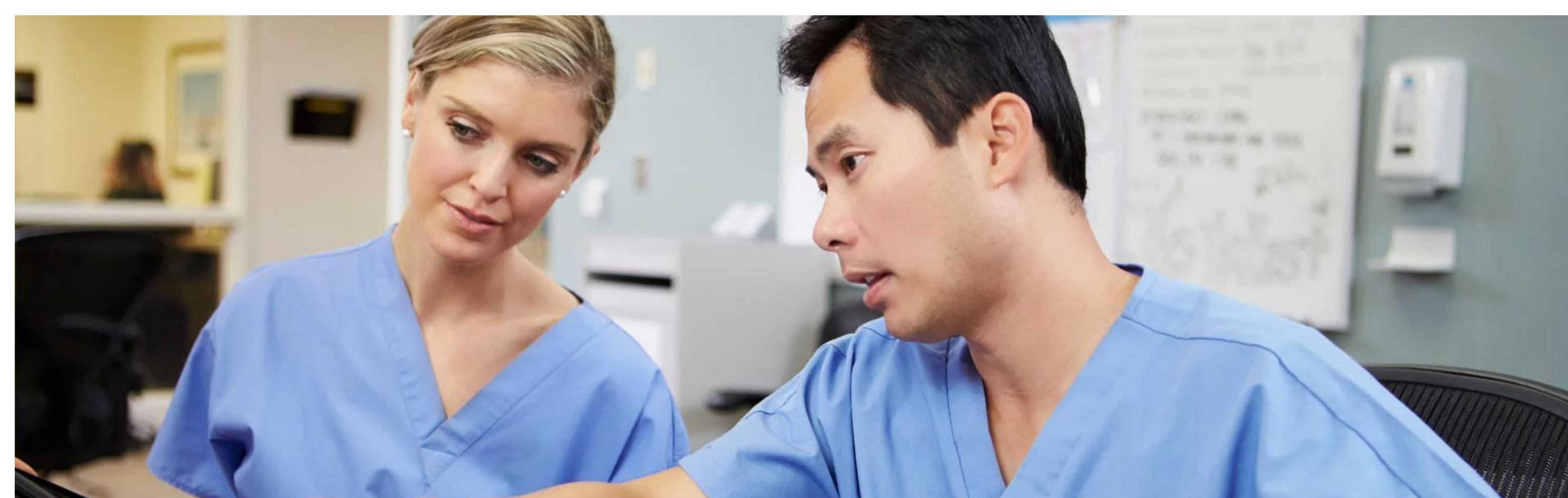
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## Background

- Healthcare systems nationally are experiencing high nursing turnover rates of more than 18%<sup>1</sup>
- A critical access hospital in south west Pennsylvania reported nurse turnover rates of more than 20% in 2021 and the first three months of 2022
- More than 50% of staff at this hospital have less than two years nursing experience
- Nurses who act as preceptors may feel more prepared for their role after completing preceptor specific education<sup>2,3</sup>

## Problem Statement

- Preceptors who are orienting nurses at a critical access hospital receive little to no education prior to orienting newly hired nurses
- Aim:** Improve experienced nurses competence to act as a nurse preceptor for newly hired staff
- Purpose:** To implement an online educational PowerPoint for experienced nurses thereby improving their competence and ability to precept and orient newly hired nurses in a rural, critical access hospital in southwestern Pennsylvania



Retrieved from <https://www.worldcampus.psu.edu/degrees-and-certificates/penn-state-online-nurse-administrator-graduate-certificate>

## Methods

**PICO:** For registered nurses (RNs) and licensed practical nurses (LPNs), does implementing an online preceptor educational PowerPoint at a critical access hospital improve staff perception of competence to orient newly hired nurses when compared to no education?

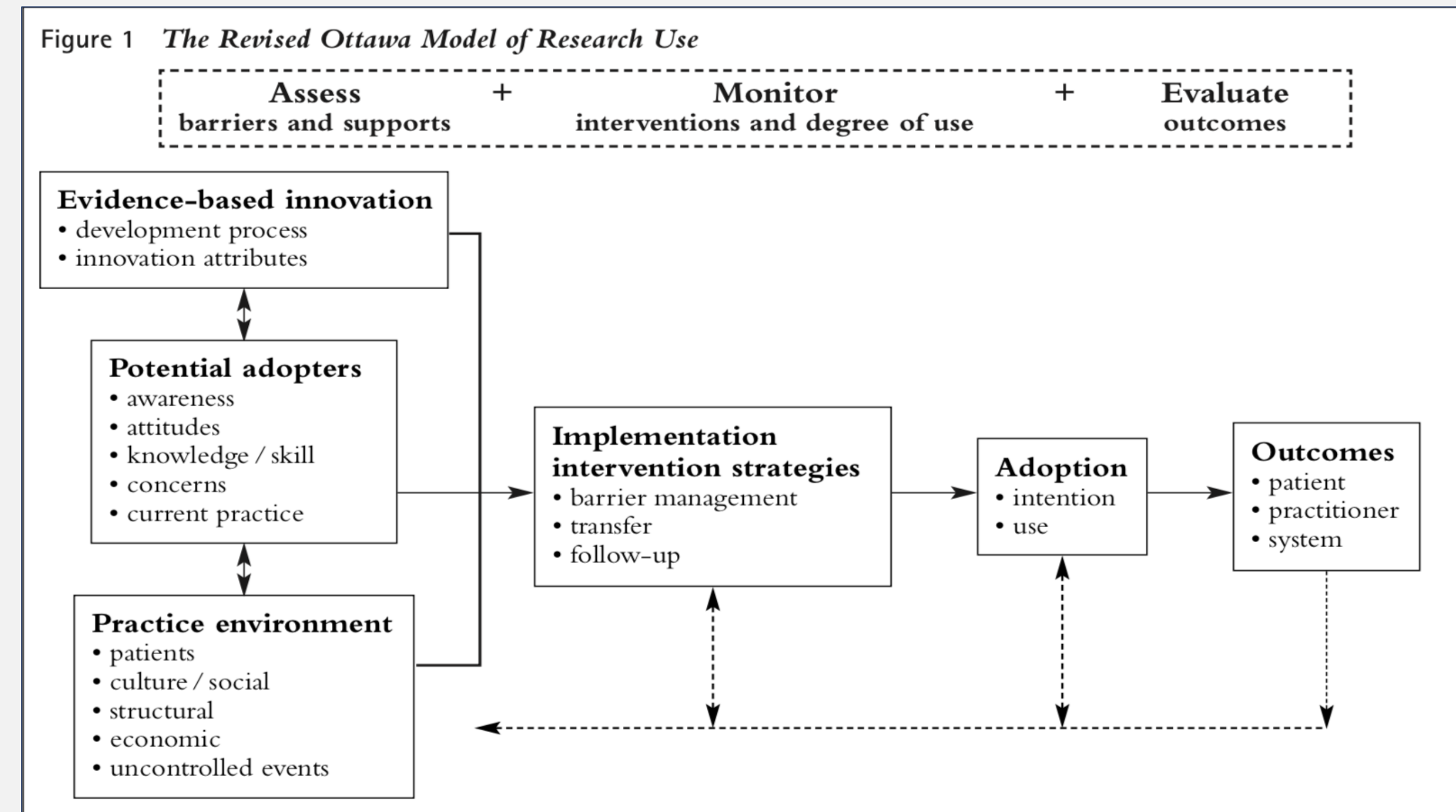
**EBP Model:** Johns Hopkins Nursing Evidence Based Practice Model (JHEBP)

**Literature Search Strategies:**

- Terms: preceptor, preceptorship, mentor, mentorship, nursing, nurse, competence and confidence
- Inclusion criteria: published prior to 2013, written in English, not including student nurse preceptorship
- Databases searched: PubMed, Medline Complete, CINAHL Complete, Cochrane Library, Google Scholar, Education Resources Information Center (ERIC), and Education Source

**Project Design:** Quality improvement project aim as to fill a gap in clinical practice at the local level. This project was designed to improve nurse preceptor competence to orient newly hired staff

## Translation Model: Ottawa Model of Research Use (OMRU)



Graham, I. D., & Logan, J. (2004). Innovations in knowledge transfer and continuity of care. *Canadian Journal of Nursing Research*, 36(2), 89-103. <https://pubmed.ncbi.nlm.nih.gov/15369167/>

Level of Evidence	# of Studies	Summary of Findings	Quality Rating
Level II	1	Participating in mentoring education increases mentor/preceptor self evaluation of mentoring competence <sup>4</sup>	A
Level III	7	<ul style="list-style-type: none"> <li>Lack of preparation for preceptors impacts their role as a preceptor<sup>2</sup></li> <li>Preceptors need to be given adequate support prior to assuming this role<sup>5</sup></li> <li>Preceptors feel more prepared for their role after completing education<sup>3</sup></li> </ul>	A/B
Level V	6	<ul style="list-style-type: none"> <li>Preceptor training has a positive effect on the quality of teaching or precepting<sup>6</sup></li> <li>Preceptors should partake in both initial and then regularly scheduled education and training to stay up to date on best practices<sup>7,8</sup></li> <li>More limitations for preceptors in rural settings due to lack of resources<sup>9</sup></li> </ul>	B

## Intervention

**Participants:** Nurses (RNs and LPNs) working at a critical access hospital for more than 9 months who work on the medical/ surgical unit, emergency department (ED) or surgical/procedural unit

- Total of 34 eligible participants
- Participants received invitation email containing information script
- Participants were asked to complete the Preceptors' Orientation Competence Instrument (POCI) survey in Qualtrics before viewing the educational PowerPoint
- Online preceptor PowerPoint was assigned as an educational module in e-learning platform
  - Slide show outlined preceptor definitions, expectations, role, responsibilities, orientation expectations and competencies
- PowerPoint was available to view for two weeks
- Two weeks following closure of PowerPoint, eligible participants were asked to complete the POCI survey a second time

## Results

**Sample:** Final sample included 5 participants with complete pre-post data

- Majority were female (n = 4) who had 16 years or more of nursing experience (n = 3), highest degree completed was either diploma/ associate (n = 3), participants worked full time or casual (n = 3, n = 2 respectively)

**Demographic Analysis:** No statistically significant differences ( $\alpha < 0.05$ ) were identified in groups including gender ( $p = 1.0$ ), years of nursing experience ( $p = .61$ ), education ( $p = .17$ ), employment status ( $p = .10$ ), education within the last year ( $p = .77$ ), and precepted at another facility ( $p = .12$ )

**Data Analysis:**

- The analysis focused on the difference scores of the pre- total score and the post- total score as well as the knowledge of the work unit's orientation subscale (POCI question # 33-37)

**Outcome Measure:**

- Knowledge of the work unit's practices demonstrated no difference = before ( $Mdn = 4.0$ ) or after ( $Mdn = 4.0$ ) the implementation of the educational PowerPoint ( $z = -.45, p = .66$ )
- Median total POCI score did demonstrate improvement after educational PowerPoint compared to before ( $Mdn = 4.0$  vs.  $Mdn = 3.87$  respectively), there were no statistically significant differences in the pre-and post- implementation scores ( $z = -1.60, p = .11$ )
- Effect size was not calculated due to non-statistically significant findings



Retrieved from <https://www.myamericannurse.com/become-successful-preceptor/>

## Conclusion

While the results of this QI project were not statistically significant, future practice at this site could include continuing to provide preceptors with the educational PowerPoint while making the pre-and post- POCI mandatory to further evaluate if there is an increase in competence, thus improving the orientation experience for newly hired nurses

**Limitations**

- High attrition rate (72%)
- Internal reliability of post knowledge subscale inadequate (Cronbach alpha = .44)
- Small sample size may cause Type II error
- POCI, while valid and reliable, is very long with 53 questions

**Practice Recommendations**

- Results not statistically significant, making it difficult to make recommendations in this setting
- For more participation, the pre-post POCI survey could be required, or another shorter valid and reliable tool to measure preceptor competence
- Additional research may be needed for improving preceptor competence