Improving patient outcomes through an evidence-based practice nursing boot camp (program evaluation)

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WIN Conference 2023 (4/21/23)

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Purpose

Program Evaluation:

- How an Evidence-based Practice & Research Bootcamp in improved nursing implementation and completion of quality improvement, evidence-based, and research projects
- & the impact those projects have on patient outcomes.
BACKGROUND (cont’d)

- “Systematically advance practice, education and leadership through rigorous inquiry and application of high-quality evidence.”
- Can be an overwhelming process for a nurse, with few nurses carrying this skillset beyond academia.
- Limited time
- One way to increase nurse-led projects is to provide a bootcamp that guides the participant throughout the process.
As the Institute of Medicine reasons, the nursing profession has the responsibility to engage its current and future workforce in shaping the quality and safety of health care by,

...ensuring that nursing care evolves through continuous clinical inquiry, research, and innovation.
The *Why* behind the Purposes

*Provision 3:* The nurse promotes, advocates for, and strives to protect the health, safety, and rights of the patient.

*Provision 4:* The nurse is responsible and accountable for individual nursing practice and determines the appropriate delegation of tasks consistent with the nurse’s obligation to provide optimum patient care.

*Provision 5:* The nurse owes the same duties to self as to others, including the responsibility to preserve integrity and safety, to maintain competence, and to continue personal and professional growth.

*Provision 6:* The nurse participates in establishing, maintaining, and improving health care environments and conditions of employment conducive to the provision of quality health care and consistent with the values of the profession through individual and collective action.

*Provision 7:* The nurse participates in the advancement of the profession through contributions to practice, education, administration, and knowledge development.
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And because…
Beginning in January 2021, two large hospitals in the Portland, Oregon metropolitan area collaborated on an Evidence-based Practice & Research Bootcamp.

Prior to 2021, boot camps were facilitated separately.

Synchronous virtual curriculum geared towards nursing.

Coinciding the participant-based bootcamp was a mentor-based curriculum over a 6-month period.

Participants were ushered through a six-part series of topics including:

1. Research methods and evidence-based practice fundamentals
2. Developing a PICOT question
3. Critically appraising the literature
4. Constructing a study design / IRB
5. Collecting and analyzing data
6. Designing professional posters (disseminating the findings).
Throughout these didactic courses, participants were mentored by:

- Medial librarians
- Nurse educators
- Nurse directors
- Nurse managers
- Clinical RNs & other past bootcamp participants

Mentors received preparation through a mentor-specific Evidence-based Practice & Research Bootcamp.
Evidence-based Practice Boot Camp

Mentor

Have experience with Research/EBP projects and would like to support others in their clinical inquiry projects.
Participants & Mentors (Cohort 2021)

- **Mentor** - Have experience with...
  - 5
- **Participant** - Interested in facilitating...
  - 16

![Pie chart showing the distribution of mentors and participants.]

**Educational Background:**
- RN: 15
- ADN: 1
- BSN: 13
- Master's Degree in Nursing: 3
- PhD or DNP: 2
- Other: 4

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At the end of the program, participants completed the implementation and evaluation of a project.

They also presented a poster at their local hospital and received help submitting abstracts to external conferences.
26 participants, among two separate annual bootcamps, completed the curriculum in 2019, 2021, and 2022.

2019, 2021 participants were all direct care nurses and grouped to form seven projects with four completing (57%) projects within the program timeline.
Potential Patient outcomes impacted by projects include:

- **Acute and Critical Care**: Decrease hospital acquired pressure injuries after implementing a turn team
- **PACU**: Decrease in dilaudid use, heart and respiratory rate in post-operative orthopedic patients after music therapy
- **Critical Care**: Shortened time period critical care patients receive sedation medications and time on a ventilator after standardizing spontaneous awakening and breathing trials
- **ED to Inpatient**: Improved door-to-antibiotic time in patients with cancer presenting with neutropenic fever in the emergency department after an evidence-based interprofessional educational intervention.

*Uncertain if these projects & outcomes have been sustained*
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Standardizing Spontaneous Awakening and Breathing Trials in Critical Care: A Pilot Project
Lynda Eltinga, BSN, RN, Deirdre McNally, BSN, RN, CCRN, Eddie Montes, BSN, RN, CCRN
September 10, 2023

The Effects of Music Intervention on Pain and Anxiety in the Immediate Total Hip Arthroplasty Postoperative Period in Adults Undergoing Total Knee Arthroplasty and Total Hip Arthroplasty
Principal Investigator: Peggy Olsen, RN, BSN, RN, CRNA
Co-Investigator: Mary Frenelus PhD, RN, CCNS-CP
September 10, 2023
Providing annual Evidence-based Practice & Research Bootcamps among two large hospitals has shown to be successful with implementation and completion of projects and improving patient outcomes in the hospital setting.

Future steps include evaluating nursing knowledge and confidence in clinical scholarship after completing each class.

In addition, evaluating sustainment of nursing and patient outcomes stemming from participant-led projects would further highlight the impact.
Practice Implications

- Get started!
  - 'One Pilot Study is worth 10 meetings'
  - Lean in to your EBP & Research Mentors (e.g., Research Council, Nurse Scientists, enthusiastic & willing participants!)
  - There's a nurse out there who has an idea for a clinical inquiry project...
  - "Infrastructures can help EBP projects be successful."
Acknowledgements

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AnneMarie West
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REFERENCES


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QUESTIONS?

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More information?
Please fill out our Form!
Thank you!