Vizient/AACN Nurse Residency Program

EBP Nurse Resident Guide

2023

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Group members

(Determine role: Team lead, communications lead, poster/presentation, documentation)

Name	Email	Role

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Topic brainstorming

Consider the following:

- Nursing strategic plan/goals, current care area or organization initiatives, nurse sensitive indicators, organization project idea list, previous nurse residency projects
- Discuss unit needs with peers and manager

Topic	How do you know this is a problem?

Topic selection

Top 3 project ideas
1.
2.
3.

Expand on your idea:

Is this topic centered on the patient and improving outcomes? Who will this initiative effect? Who can you include from the interprofessional team?
Does your topic selection have a rationale? Is someone already collecting data? Can you partner? Can your project save money? Does your intervention:
Impact patient outcomes? Improve healthcare efficiency or effectiveness? Reduce waste (e.g., supplies, time)

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Project approval form

Unit/care area:

Manager:

NRP cohort:

Group members:

Project topic:

PICOT question:

Unit/care area support needed:

☐ **Project approved** ☐ **Project denied** **Additional notes:** _____.

_____ _____

Manager signature **Date** **Nurse resident team lead signature** **Date**

_____

NRP coordinator **Date**

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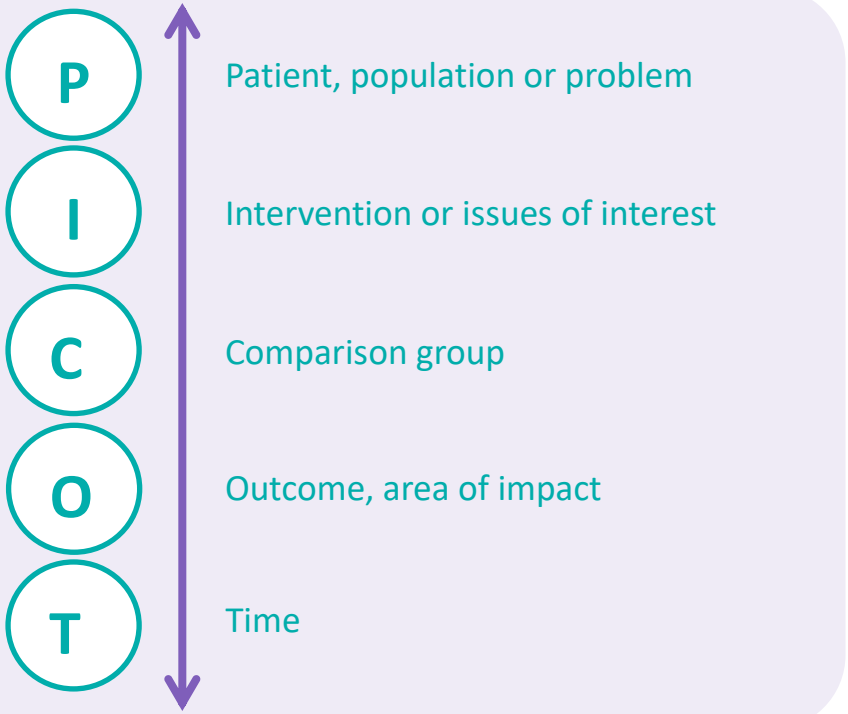
PICO(T) questions



In _____(P),
how does _____ (I)
compared to_____(C)
affect_____(O)
within_____(T)?

In _____(P),
how does _____ (I)
compared to_____(C)
affect_____(O)
within_____(T)?

In _____(P),
how does _____ (I)
compared to_____(C)
affect_____(O)
within_____(T)?

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Current state of project

What is the current state of your project? Are there organizational policies and/or procedures related to this topic?

Search criteria and process worksheet

Database used	Keywords/ subject headings	Date range	Additional limits (example: language, age)	Number of results	Number of articles selected	Notes

Rapid critical appraisal template

APA citation	Type of study	Level of evidence	Setting and population	Study variables and intervention	Findings and recommendations	Valid and reliable	Applicability and impact	Limitations and notes
Paste article citation here	*Quantitative, Qualitative, or Mixed*	*I,II,III, or IV*	*Where the study took place* *Sample size and selection* *How many participants?*	*Independent (IV) and dependent variables (DV)* *What was the intervention? Was there randomization?* *Did they utilize a tool to collect data?*	*Usually found in the discussion and interpretation sections. Include recommendations, strengths, weaknesses, limitations, and considerations* *Were the results statistically significant?*	*Are the study findings valid? Reliable?*	*Are the results applicable to your practice? What is the impact on practice?*	*Is the article published in a credible, peer reviewed journal?* *What limitations were identified?* *Are the results applicable to my area of practice?*

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Johns Hopkins EBP Model: Evidence level and quality guide[3]

<table>
<tr><th>Evidence levels</th><th>Quality guides</th></tr>
<tr><td>Level 1
Experimental study, randomized controlled trial (RCT)
Systematic review of RCTs, with or without meta-analysis</td><td rowspan="3">A. High quality: Consistent, generalizable results; sufficient sample size for the study design; adequate control; definitive conclusions; consistent recommendations based on comprehensive literature review that includes thorough reference to scientific Evidence
B. Good quality: Reasonably consistent results; sufficient sample size for the study design; some control, fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific Evidence
C. Low quality or major flaws: Little evidence with inconsistent results; insufficient sample size for the study design; conclusions cannot be drawn</td></tr>
<tr><td>Level II
Quasi-experimental study
Systematic review of a combination of RCTs and quasi-experimental, or quasi-experimental studies only, with or without meta-analysis</td></tr>
<tr><td>Level III
Non-experimental study
Systematic review of a combination of RCTs, or quasi-experimental and non-experimental studies, or non-experimental studies only, with or without meta-analysis
Qualitative study or systematic review with or without a meta-analysis</td></tr>
<tr><td>Level IV
Opinion of respected authorities and/or nationally recognized expert committees/consensus panels based on scientific Evidence
Includes:</td><td>A. High quality: Material officially sponsored by a professional, public, private organization, or government agency; documentation of a systematic literature search strategy; consistent results with sufficient numbers of well-designed studies; criteria-based evaluation of overall scientific strength and quality of included studies and definitive conclusions; national expertise is clearly evident; developed or revised within the last 5 years</td></tr>
</table>

Evidence levels	Quality guides
• Clinical practice guidelines • Consensus panels	B. **Good quality:** Material officially sponsored by a professional, public, private organization, or government agency; reasonably thorough and appropriate systematic literature search strategy; reasonably consistent results, sufficient numbers of well-designed studies; evaluation of strengths and limitations of included studies with fairly definitive conclusions; national expertise is clearly evident; developed or revised within the last five years. C. **Low quality or major flaws:** Material not sponsored by an official organization or agency; undefined, poorly defined, or limited literature search strategy; no evaluation of strengths and limitations of included studies, insufficient Evidence with inconsistent results, conclusions cannot be drawn; not revised within the last 5 years
Level V Based on experiential and non-research Evidence Includes: • Literature review • Quality improvement, program or financial evaluation • Case reports • Opinion of nationally recognized expert(s) based on experiential Evidence	**Organizational Experience;** A. **High quality:** Clear aims and objectives; consistent results across multiple settings; formal quality improvement, financial or program evaluation methods used; definitive conclusions; consistent recommendations with thorough reference to scientific Evidence B. **Good quality:** Clear aims and objectives; consistent results in a single setting; formal quality improvement or financial or program evaluation methods used; reasonably consistent recommendations with some reference to scientific Evidence C. **Low quality or major flaws:** Unclear or missing aims and objectives; inconsistent results; poorly defined quality improvement, financial or program evaluation methods; recommendations cannot be made **Literature review, expert opinion, case report, community standard, clinician experience, consumer preference:** A. **High quality:** Expertise is clearly evident; draws definitive conclusions; provides scientific rationale; thought leader(s) in the field B. **Good quality:** Expertise appears to be credible; draws fairly definitive conclusions; provides logical argument for opinions

Evidence levels	Quality guides
	C. **Low quality or major flaws:** Expertise is not discernable or is dubious; conclusions cannot be drawn

Synthesis table template

As a group, use these questions and tables to support the decision of the intervention for your EBP initiative. Everyone should summarize the article, and then the group should discuss the overall strength of the evidence.

PICOT question:

APA reference	Level of evidence and strength of evidence	Outcome and recommendations
Article 1:		
Article 2:		
Article 3:		
Article 4:		
Article 5:		

Do the articles have similar outcomes?

Do the articles support the intervention?

Do you feel confident in the evidence to support your EBP initiative?

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Outcomes

- What outcomes are you measuring?
- Where are you going to get your baseline data?
- If the intervention requires measurement using a tool, do you have a validated tool?
- Reflect on the individuals in your care areas. Identify the innovators and early adopters.

Implementation resources

- Access to electronic tools?
- Patient supplies (e.g., pamphlets, specific supplies)
- Office supplies (e.g., paper, badge cards, magnets)
- Help from other departments (e.g., pharmacy, IT)

Stakeholders and interdisciplinary team

Who will your change affect?

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Organize your team

- Who is responsible for data collection?
- Who will present the practice change?
- What meeting will the information need to be presented?
- Who will reinforce the practice change?
- How will the team stay connected?
- How will the team cover all the shifts?

Education plan

- What venue(s) will you use to disseminate education?
- What is the timeline for data collection and implementation of the intervention?
- What information will be included in your education?

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Reflection

- What is going well?

- Are you having any challenges?

ROI and cost avoidance worksheet[9]

1. Identify the baseline metric for evidence-based practice. What are you measuring? (e.g., CLABSIs per month)
2. Obtain the cost of the metric. How much is this issue costing your organization when it occurs? (e.g., cost of 1 CLABSI)
3. Identify the cost associated with the practice change (e.g., printed materials, staff education costs, intervention costs). If we implement something new, how much will it cost to roll out?
4. Collect data for three months post-intervention. (e.g., number of CLABSIs each month)
5. Compare pre-and post-intervention data. Did the intervention improve outcomes?
6. Calculate the cost associated with the difference between the metrics. Cost avoidance- implementation cost = Return on investment or cost avoided

(adapted from Sadler, Joseph, Keller, & Rostenberg, 2009)

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Outcome assessment[2]

Do the pre-implementation and post-implementation outcomes differ?

Do the outcomes support the EBP change?

Are they similar to the outcomes found in the literature?

How many individuals participated in the change?

Was there a high enough participation rate to see a meaningful difference?

What was the feedback from the staff?

Did the initiative flow well with the current workflow?

Did the initiative create an extra time burden?

Should this initiative be:

☐ Expanded and disseminated ☐Modified ☐Abandoned

Poster/presentation information:

Date:

Time:

Location:

Items needed:

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References:

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2. Cullen, L., Hanrahan, K., Farrington, M., DeBerg, J., Tucker, S., & Kleiber, C. (2018). *Evidence-based practice in action: Comprehensive strategies, tools, and tips from the University of Iowa Hospitals and Cinics.* Sigma Theta Tau International.
3. Dang, D & Dearholt, S. John Hopkins Nursing Evidence-Based Practice: Model and Guidelines (3rd ed.). Indianapolis, IN: Sigma Theta Tau, 2018.
4. Fineout-Overholt, E., Melnyk, B. M., Stillwell, S. B., & Williamson, K. M. (2010). Evidence-based practice step by step: critical appraisal of the evidence: part I. The American journal of nursing, 110(7), 47–52. https://doi.org/10.1097/01.NAJ.0000383935.22721.9c
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9. Sadler, B., Joseph, A., Keller, A., & Rostenberg, B. (2009). Using evidence-based environmental design to enhance safety and quality. *IHI Innovation Series White Paper.* Institute for Healthcare Improvement.
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Vizient, Inc.
290 E. John Carpenter Freeway
Irving, TX 75062-5146
(800) 842-5146

To learn more, please contact
NRPinfo@vizientinc.com

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