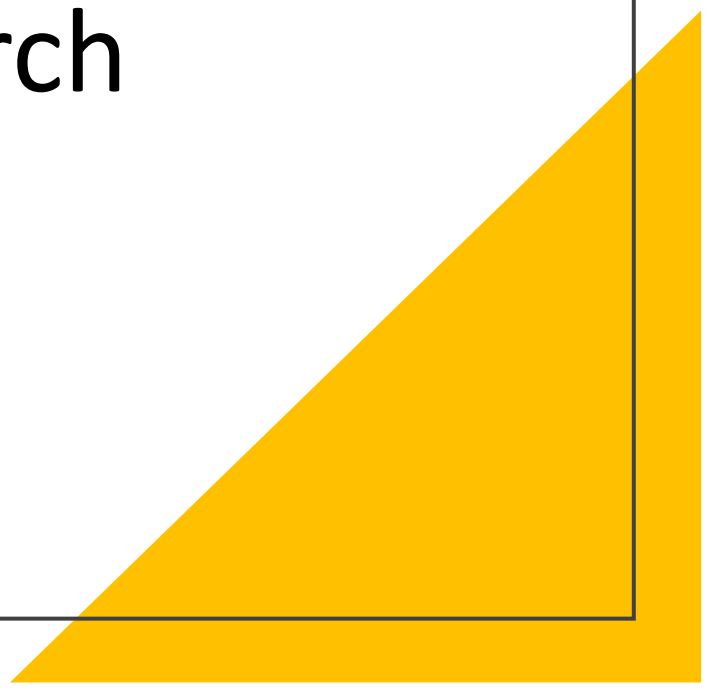


What to do with a good question: How to get started with research

Deborah Eldredge, PhD, RN

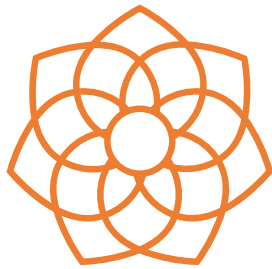
October 19, 2024

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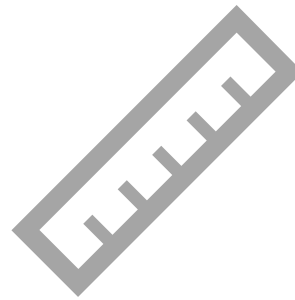
Goals

- My goal is to help nurses answer questions about their practice.
- The goal is to help you form questions about your practice that can be answered in a rigorous way.

Objectives



Describe the scientific method



Describe the continuum between
quality improvement, evidence-
based practice and research
(clinical inquiry)



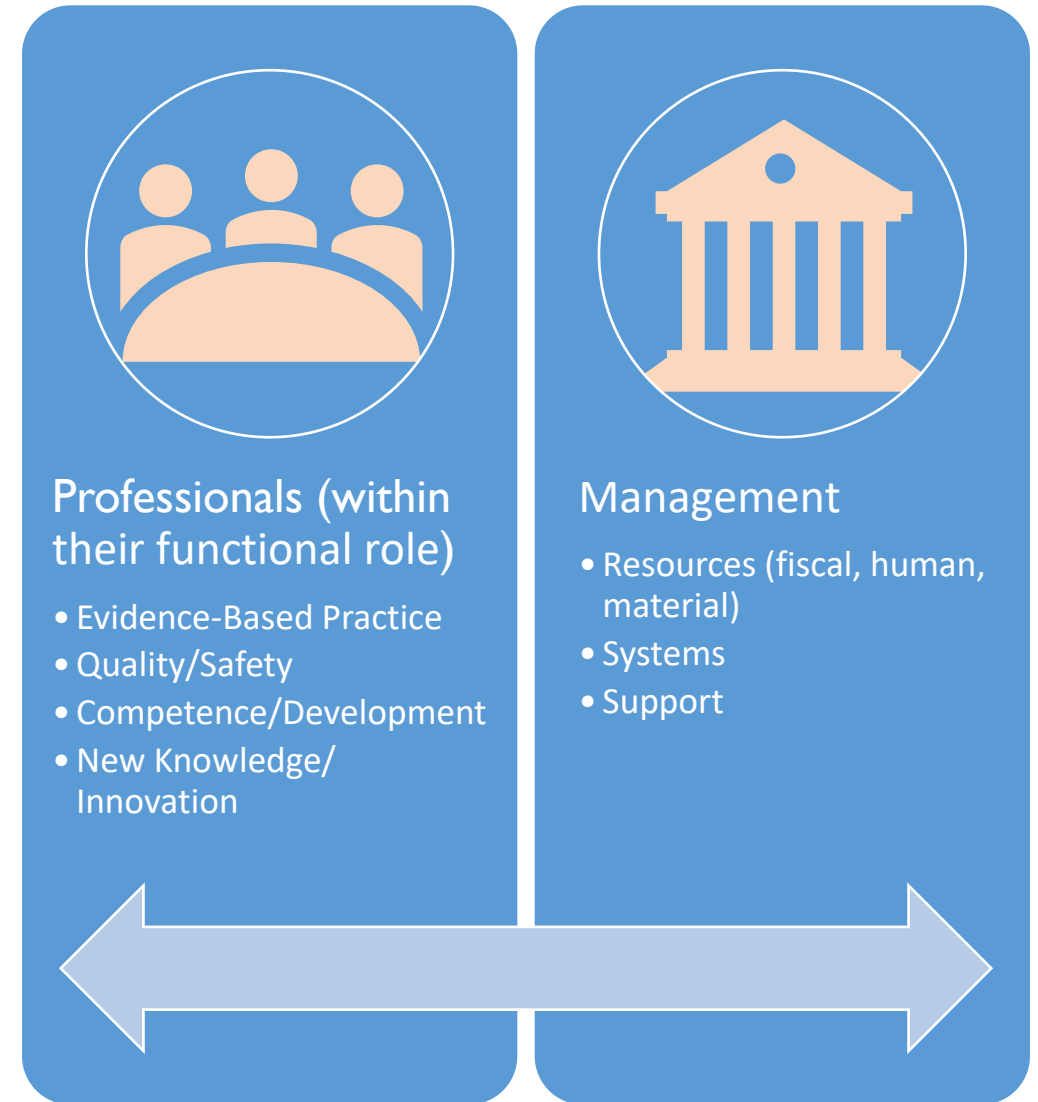
Identify 3 resources to support
clinical inquiry

Professional Governance

As a profession, nursing has a professional obligation to:

- Ensure the elements of **evidence-based practice** are in place
- Assess and improve **competence** through education and learning
- Ensure **quality of care**
- Advance **knowledge development** through research

All participate in Professional Governance by contributing from their own body of knowledge & expertise and are accountable for decision-making related to your practice and the demonstratable outcomes.



ANA Standards of Practice

14. Scholarly Inquiry:

Nurses are always learning, as the field advances. Therefore, RNs must help contribute to the profession through scholarly inquiry and research.

SCIENTIFIC METHOD



MAKE AN OBSERVATION

ASK A QUESTION

DEVELOP A HYPOTHESIS OR PREDICTION

TEST THE PREDICTION

ANALYSE RESULTS

RECORD THE RESULTS AGAINST HYPOTHESIS

MAKE A CONCLUSION

CURIOSITY

Strong desire to know
or learn something

Conscious effort to
approach the world
with a sense of wonder
and interest



CREATIVITY

Ability to make or
bring into existence
something new, such
as a solution, a
method, or an
artistic form

Fuel imagination and
make unique
connections

My curious journey into research

- How come some families are more challenging than others?



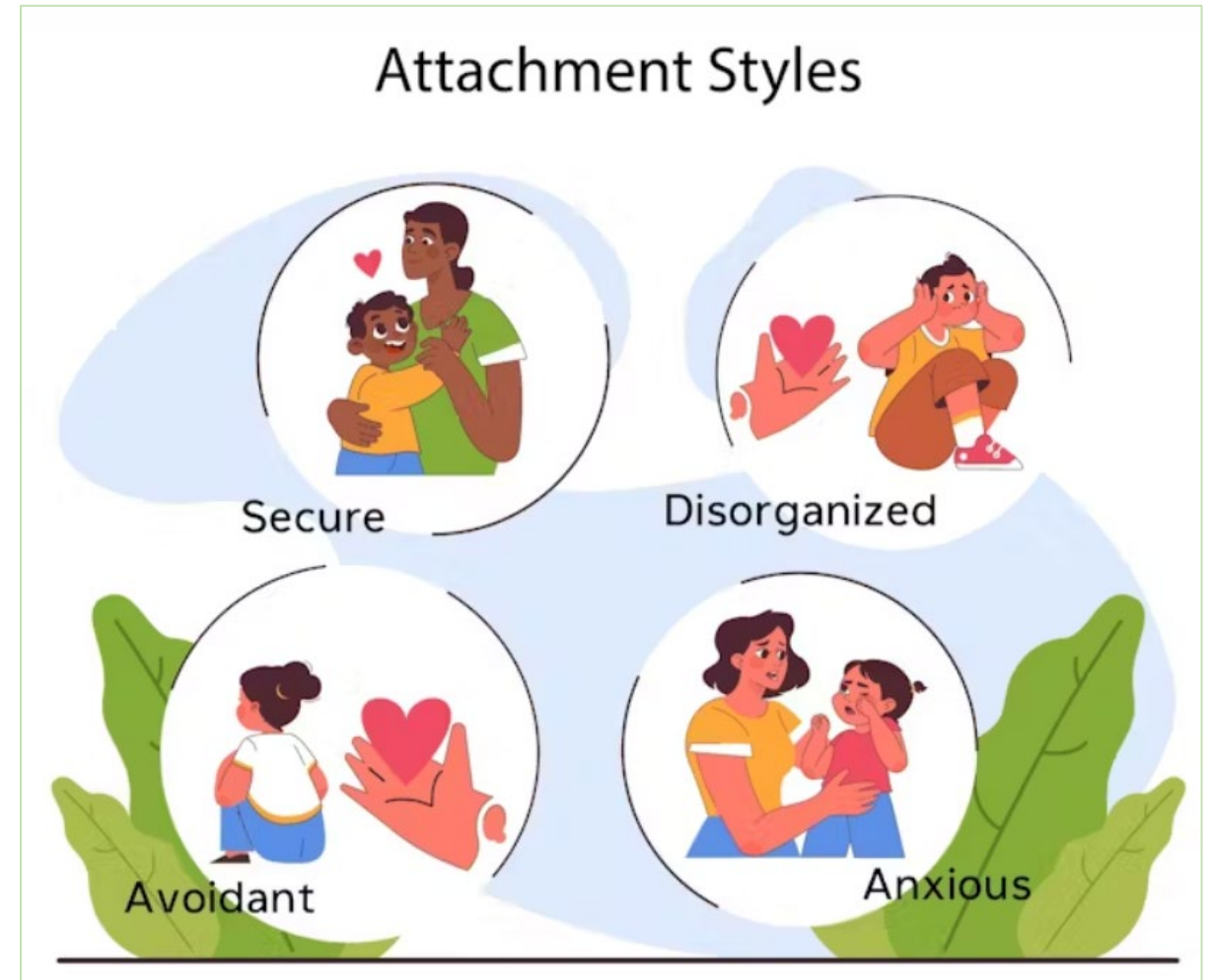
My curious journey into research

- Masters project: observe first-of-the-day interactions between nurses and family members
 - Sometimes satisfied / not other times (variation)
 - Different Expectations: Families wanted to be told and nurses wanted to be asked



My curious journey into research

- Dissertation: how do caregiving preferences vary by attachment style in spouses of critically ill adults
 - Caregiving style associated with caregiving activities.
 - Less emotional stress when caregiving matches style



My curious journey into research

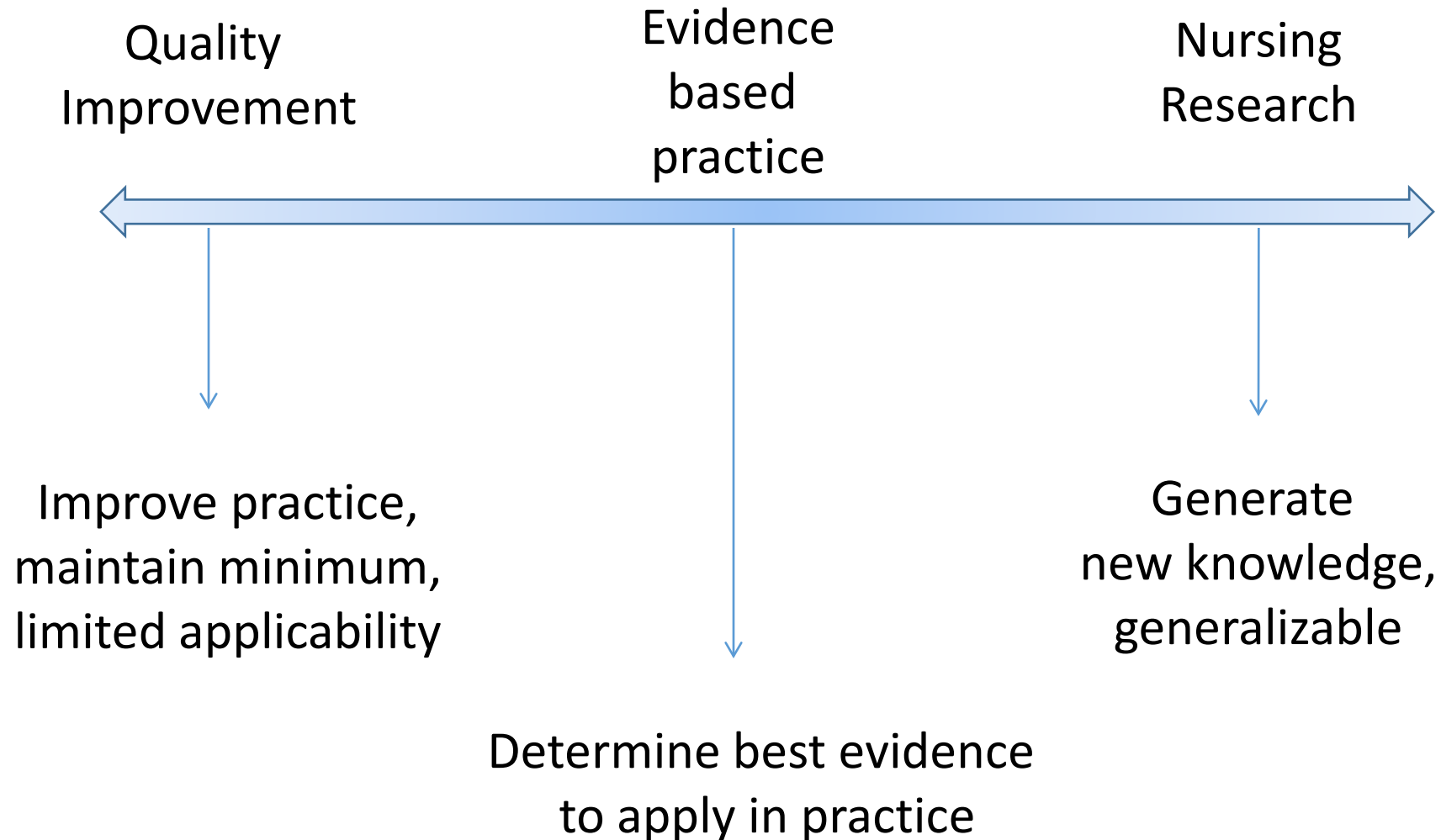
- Post doc: family caregiving with BMT
 - Interviewed to understand caregiving
 - Longitudinal study – caregiving over time, dyad measure
 - Role strain negatively associated with CG QOL
 - High predictability associated with high QOL
 - Level of predictability decreases, caregiver strain and problem-solving strain increase



What questions do you have about clinical practice?



Questions about practice



Quality Improvement

- The goal of quality improvement studies is to evaluate the effectiveness of nursing interventions and to provide direction for further improvement in the achievement of quality clinical outcomes and cost effectiveness

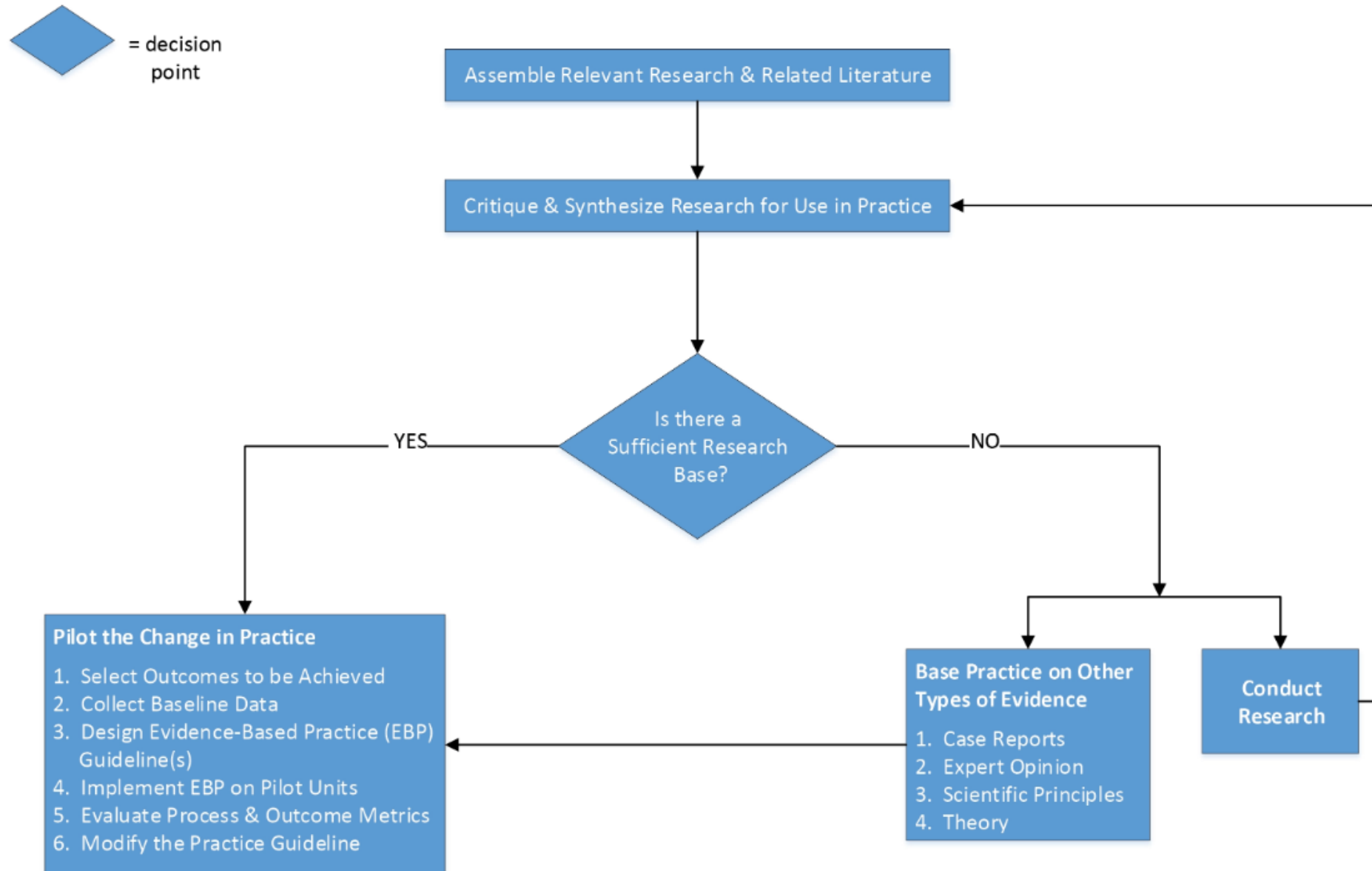
LoBiondo-Wood & Haber, 2002

Evidence-Based Practice

- Conscientious, explicit, and judicious use of theory-driven, research based information in making decisions about care delivery to individuals or group of patients and in consideration of individual needs and preferences.

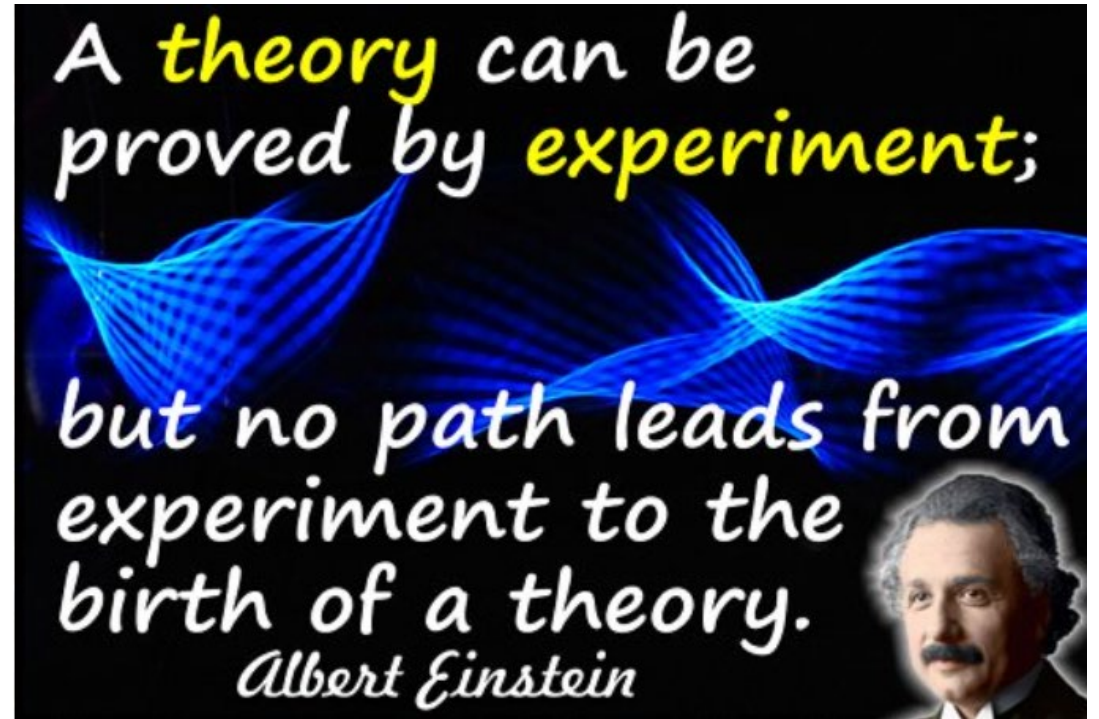
Ingersoll, 2000

The Iowa Model of Evidence Based Practice to Promote Quality Care



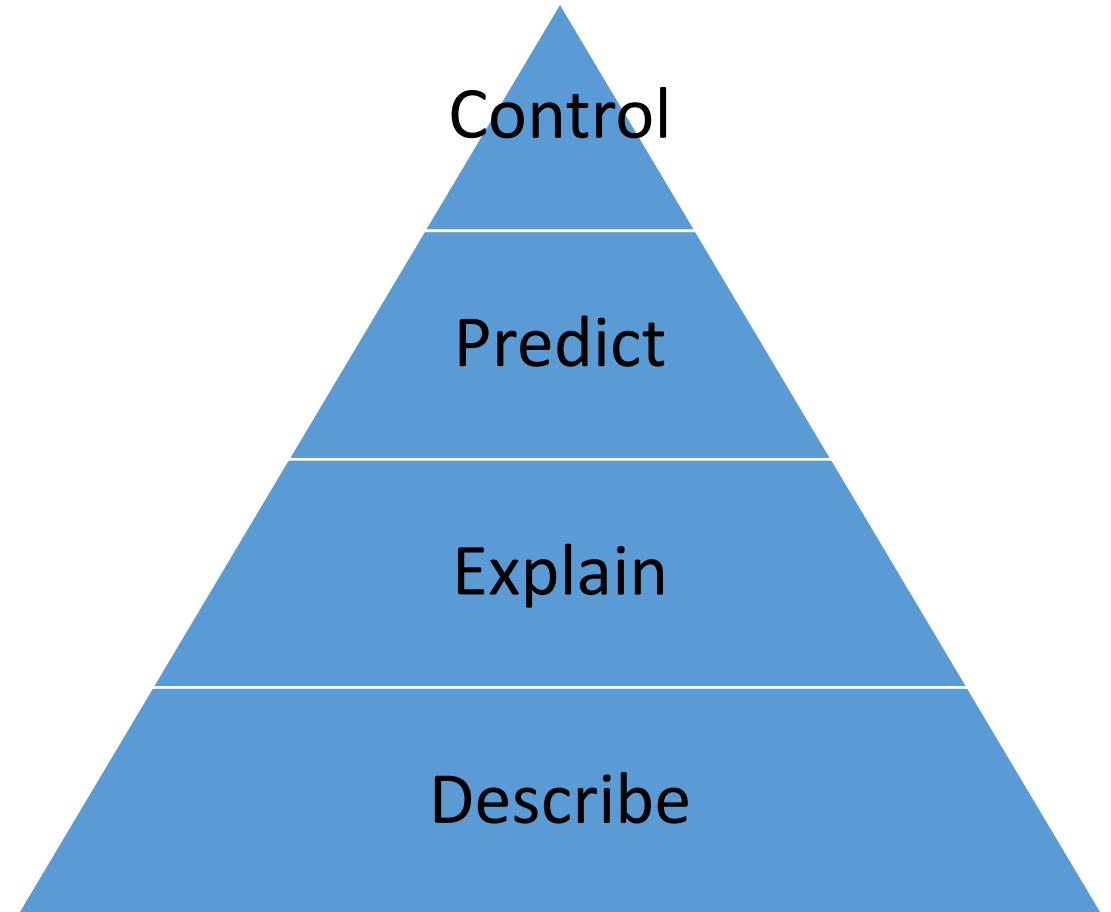
Scientific Research

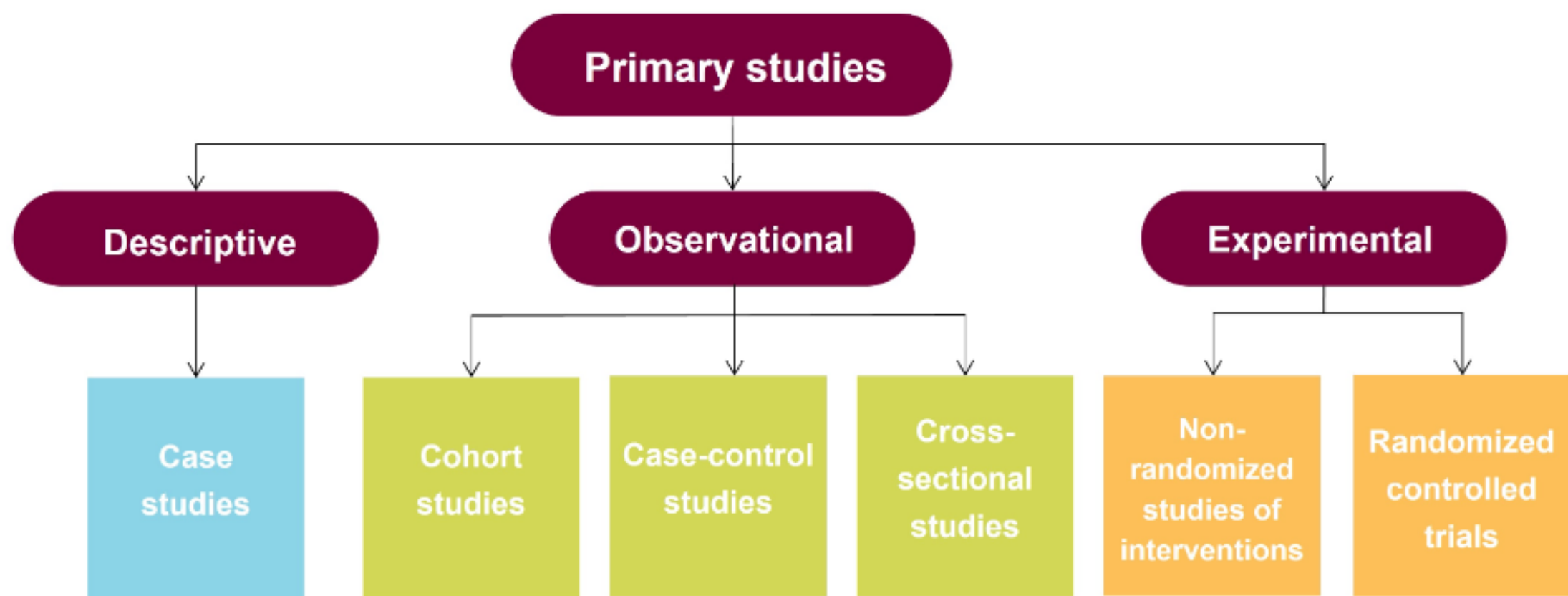
- Systematic, controlled, empirical, un-biased, public, critical evaluation of natural phenomena
- Science is guided by theory and hypotheses about the presumed relations among such phenomena



Purpose of Scientific Research

- Basic aim of SCIENCE is to explain natural phenomena with *generalizable knowing*





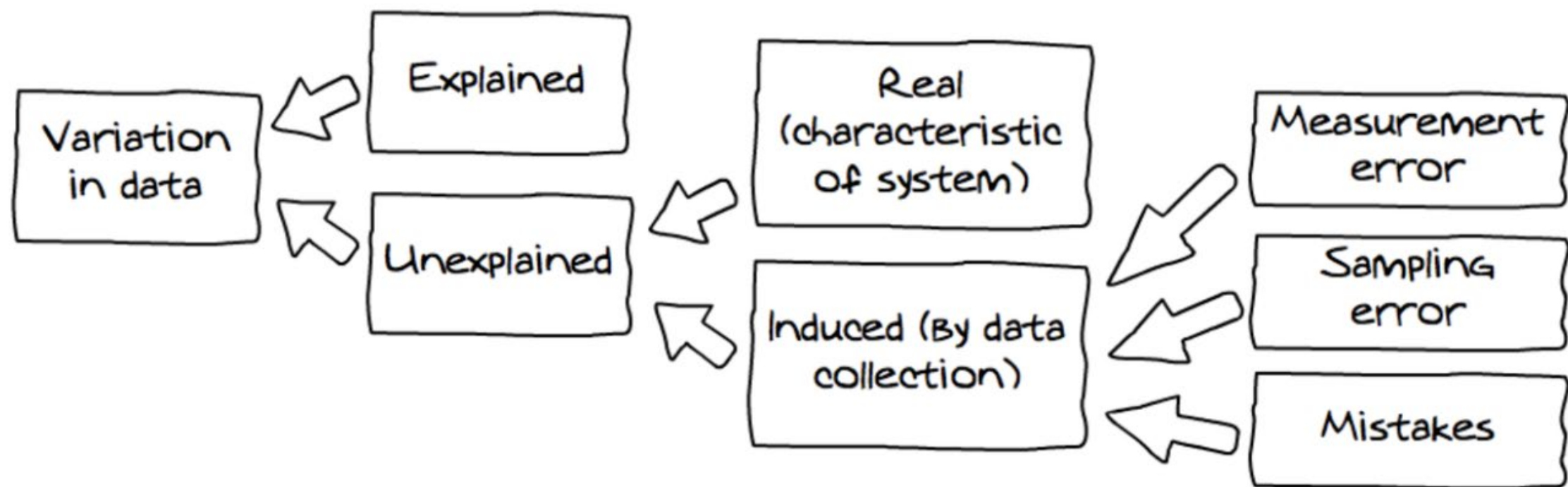
Nursing Research

- Nursing research is a formal, systematic, and rigorous process of inquiry used to generate and test theories about the health-related experiences of human beings within their environments and about the actions and processes that nurses use in practice.

Fawcett & Garity, 2009

Make an
observation





Ask a
question



P

Patient/Population/
Problem



I

Intervention
(variable)



C

Comparison



O

Outcome



T

Time



Process versus Outcome

PROCESS

What we do



VS.



OUTCOME

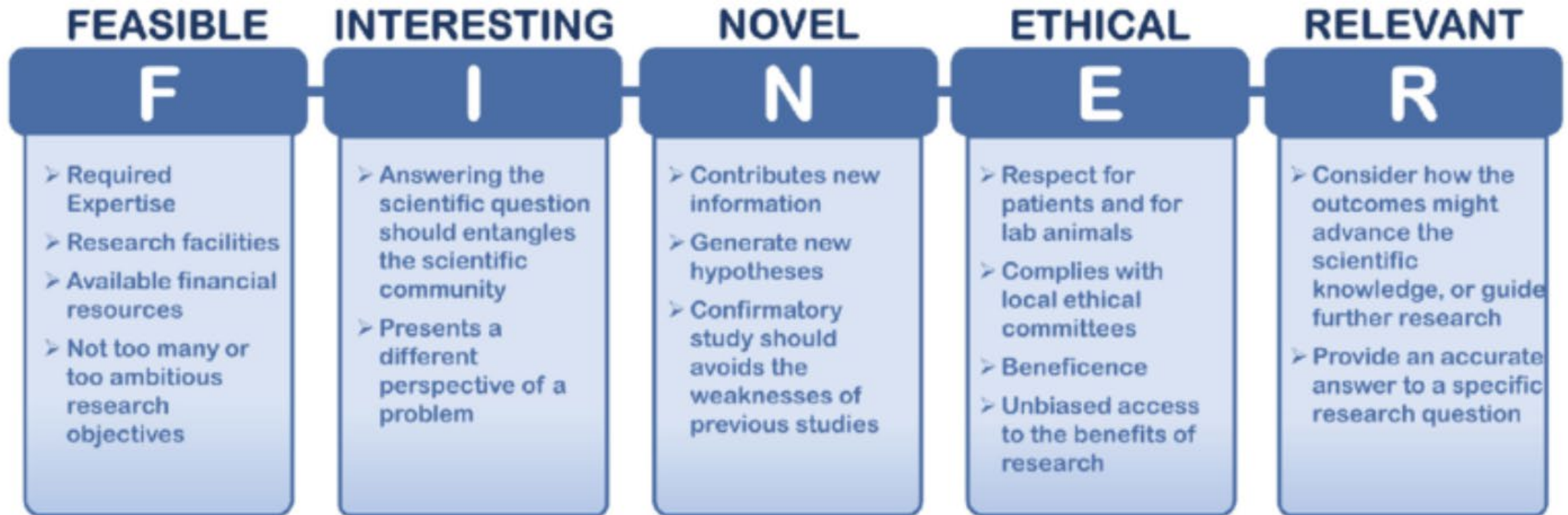
The impact we have

Patient

Nurse

Care Delivery System

FINER criteria to formulate solid research question



Constructive Criticism

Critical
thinking

Sharing
ideas

Building
teamwork

Embracing
being
wrong

Constructive Criticism

The process of offering valid and well-reasoned opinions about the work of others, usually involving both positive and negative comments, in a friendly manner rather than an oppositional one. It focuses on a situation, not a person, and offers ideas for improvement.

Resources to support Clinical Inquiry

- Your daily practice
- Your interprofessional colleagues, charge RN, preceptor
- Your governance structure
- Your professional organization
- Journal club
- The literature
- Librarian
- Practice leader

Checklist for conducting a research study on a clinical nursing unit

Nursing Management: April 2017, Vol. 48, No. 4, p. 28-35.

1. Identify the clinical question.
2. Conduct a literature review.
3. If evidence supports a practice change, integrate the evidence into practice (no additional research needed).
 1. If the literature review doesn't provide substantial research studies to answer the clinical question, conduct research.
4. Examine and evaluate your organization's strategic plan and organizational chart.
5. Review organizational policies/procedures regarding research in the clinical setting.
6. Review potential study settings/nursing units and the unit culture of the potential study unit.
7. Form the research team.
 1. Identify the:
 1. Nurse research mentor
 2. Team members
 3. Study PI
 4. Unit nursing staff
 5. Interdisciplinary team members
 6. Academic partner (if applicable)
8. Identify administrative support, including senior nursing leadership and key stakeholders.
9. Complete the research proposal.
10. Apply for IRB approval.
 1. Review organizational IRB guidelines.
 2. Submit the proposal to the IRB.
 3. Obtain IRB approval.
11. Assess and seek all other institutional approval as required by your organization (for example, nursing research council, hospital quality council, or HIPAA council).
12. Conduct the research study after obtaining all required approvals.
13. Disseminate research findings.
 1. Submit a manuscript to a peer reviewed journal.
 2. Present a poster at a national conference.

Nursing Research Idea Proposal Form

Name and credentials: _____ Date: _____

Unit/area: _____ Manager's signature*: _____

Others interested in participating in the project:

Role	Name	Title	Unit/Dept

Required with research proposal form:

___ Current resume or curriculum vitae

Required before data collection begins:

___ CITI Training Good Clinical Practice (Link on Nursing Research & Evidence-Based Practice Council webpage)

Research project

Please attach a one- to two-page summary of your project. Briefly address the following:

1. Working title This temporary name can be revised during protocol development.
2. Introduction/problem What is the area of concern or interest? What is already known about the problem you are addressing? Why is the study needed?
3. Research questions List the questions your research will attempt to answer.
4. Study design How do you intend to answer the questions? Will you administer a questionnaire? Will you abstract data from the patient record or other documents?
5. Recruiting Are the participants in your research patients or staff? If patients, are they admitted to your area? How will you recruit your participants?
6. Impact on practice (patient outcomes or work environment) What are the potential contributions of your study to the practice environment at Moffitt, to oncology nursing practice, or to oncology nurses?

Priorities for research

- <https://www.ena.org/enau/research/ena-research-priorities-and-contributions-to-emergency-nursing>
- Workplace Health
- Behavioral Health
 - Assessment and Treatment Patients with Harmful & Addictive Substances

Research priority setting in emergency care: A scoping review (JACEP 2022)

- Emergency populations (pediatrics, geriatrics)
- Emergency care workforce and processes (nursing, shared decision making, general workforce, and process)
- Emergency care clinical areas (imaging, falls, pain management, trauma care, substance misuse, infectious diseases, mental health, cardiology, general clinical care)
- <https://doi.org/10.1002/emp2.12852>



YOUR questions matter most

References

- Capili, B. (2020). How Does Research Start? *AJN, American Journal of Nursing* 120(10):p 41-44. DOI: 10.1097/01.NAJ.0000718644.96765.b3
- Curtis, AC & Keeler, C (2021). Measurement in Nursing Research. *AJN, American Journal of Nursing*, 121(6):p56-60.
- Capili, B. (2020). Selection and implementation of outcome measurements. *AJN, American Journal of Nursing*, 121(8):p63-67
- Mason, TM & Patterson AE (2022). The ABCs of nursing research. *American Nurse*, 17(6) (June 18, 2022)
- Crilly, JC, Huang, YA, et al. (2022) Research priority setting in emergency care: A scoping review. *Journal of the American College of Emergency Physicians*, 3(6). December 2022. <https://doi.org/10.1002/emp2.12852>

Reference Collections

- American Journal of Nursing: Nursing Research Step by Step
 - <https://journals.lww.com/ajnonline/pages/collectiondetails.aspx?topicalcollectionid=51>
- University of Minnesota Library Guides: Resources for Nursing Research & Practice
 - <https://libguides.umn.edu/c.php?g=827097&p=5905081>
- Royal College of Nursing – Considering a Role within Research
 - <https://www.rcn.org.uk/Professional-Development/Your-career/Nurse/Career-Crossroads/Career-Ideas-and-Inspiration/Research>