



Building a Program of Research

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Learner Objectives

1. Define a *program of research*;
2. Define a topic of high significance;
3. Utilize the Outcomes Model as a heuristic to think about your program of research;
4. Link the Outcomes Model to types of variables (covariates, independent, and dependent).

From PhD to your first faculty Position

- First academic position – post-doctoral fellowship or faculty appointment?
- Creates time for publishing your dissertation, conducting pilot studies, and writing first NIH grants.
- Build additional expertise (qualitative/ quantitative)

Towards advancement, promotion, and tenure: Protecting your time

- Attain
- Delay
- Limit
- Do

Attain

- Internal pilot funding.
- Data-based publications.
- Graduate faculty status (if appropriate).
- Excellent teaching evaluations.

Limit

- Invited lectures
- Presentations that do not become published papers
- Academic commitments, like serving on Protection of Human Subjects committees
- The number of practica and independent study students you supervise
- Teaching new courses each term

Do

- Mentor students, co-authorship.
- Develop national presence.
- Read and understand your schools guidelines for promotion and tenure.
- Create folders to store your milestones, letter of appreciation.
- Keep your CV up to date monthly.
- Build relationship with 10-12 people nationally as potential letter writers for your tenure review.
- Talk with tenured faculty seek their guidance and support.

Program of Research: A Definition

A program of research defines a researcher's area of interest, and:

- Has public health significance.
- Builds knowledge over time.
- Contributes to outcomes of care
- Is theoretically grounded

High significance

- High impact on public health
- High cost of care
- High number affected
- Significant impact on those affected
- Opportunity for nursing practice to intervene
- Examines outcomes that are sensitive to nursing care interventions

Linked to Evidence-Based Practice

Building a program of research in nursing science to enhance patient, family, & community outcomes through building knowledge for evidence-based practice

Sources of knowledge for building a program of research

- Clinical expertise
- Intuition
- Stories/ case studies
- Preferences, values, beliefs, & rights
- Clinical practice guidelines
- Nursing Standards/ Procedural Manuals
- Interpretative studies
- Descriptive/quasi-experimental studies
- Randomized clinical trials (RCTs)

It is an iterative process

- Repeat the process
- Circle back
- Replicate
- Do it again
- Think about it differently
- Incrementally build knowledge
- Quantum leaps of knowledge



There are phases to a program of research

- Clinical practice
- Literature review
- Qualitative study of phenomena
- Develop a scale to measure the phenomena
- Examine correlates of the phenomena
- Test interventions to change the phenomena

Conducting a Literature Review

- We review the literature in order to understand the theory, instruments, and research findings relevant to our area of interest.
- What is known about the constructs and concepts in our area of interest?
- What theories are proposed that link our variables of interest together?

Questions to ask about your program of research

- **Is it?...**

FINER

- Feasible
- Interesting
- Novel
- Ethical
- Relevant

More thinking...

Developing a program of research formalizes how we think about our science and how we think about building knowledge for practice.

Outcomes Model for Health Care Research

- Use the Outcomes Model to reflect upon your program of research
- The Outcomes Model is one way o think about building a program of research

Outcomes Model:

	Inputs →	Processes →	Outcomes
Client			
Provider			
Setting			

References

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- Holzemer (2000). Substruction and the Outcomes Model for Health Care Research. *Kango Kenkyu*, 33 (5), 3-11.

Outcomes Model

- Heuristic
- Systems model (inputs are outputs, outputs become inputs)
- Relates to Donabedian's work on quality of care (Structure, Process, and Outcome Standards)

Outcomes Model: Nursing Process

	Inputs →	Processes →	Outcomes
Client	Problem ↓		← Outcome
Provider		Intervention ↗	
Setting			

Using the Outcomes Model for thinking about one study:

Is there a relationship between touch and pain control, accounting for initial amount of post-operative pain?

	Inputs →	Processes →	Outcomes
Client	Post operative pain		Pain Control
Provider		Therapeutic Touch vs. NL care	
Setting	Surgical ward		

Outcomes Model and a Program of Research: Living with Chronic Illness

	Inputs → (Covariate, confounding variable)	Processes → (Independent Variable)	Outcomes (Outcome Variable)
Client	Age , Gender SES Ethnicity Severity of Illness Diagnoses	Self-care Adherence Family care	Quality of Life Pain control Pt. satisfaction Pt. falls
Provider	Age, gender, SES, Education Experience Certification Perc. Autonomy	Interventions Care Vigilance Communication	Quality of Work life Turnover Errors Satisfaction
Setting	Resources Philosophy Staffing levels	Actual staffing ratios	Mortality Morbidity Cost

Outcomes Model:

Your Program of Research goes here!

	Inputs →	Processes →	Outcomes
Client			
Provider			
Setting			

Outcomes Model & Variable Identification

	Inputs → Z Covariate, confounding variable	Processes → X Independent variable	Outcomes Y Dependent variable
Client	Severity of illness	Self-care Self-management	Functional status Quality of life
Provider		Nursing intervention	
Setting			

Building Your Program of Research

- Outcomes model
- Literature review
- Revise outcome model
- Develop priority areas
- Build a time line
- Publish

Staging your program of research

- I. Qualitative – understanding the phenomena
- II. Measurement – measuring the phenomena
- III. Correlational – relating your phenomena to other important concepts
- IV. Intervening related to your phenomena to improve outcomes

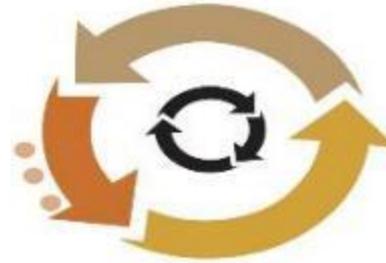
Start again and repeat – iterative

Where to start?

Sustaining a Program of Research

Grants

Publications



- One in your thoughts
- One being written
- One in review
- One funded/in press

In summary, steps to building a Program of Research

1. Know your passion
2. Ensure high public health significance
3. Know the literature in your field
4. Understand clinical practice in your area
5. Use outcomes model to think about ...
6. Nurture interdisciplinary colleagues
7. Publish - building from study to study
8. Have fun along the journey!