Taking (Specific) Aim

How to Make the Case for Qualitative Research in an NIH-style Grant Proposal

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PI, Medical Cultures Lab
Agenda

Orienting considerations, then…

- Evolution & anatomy of an aim
- How to write an aim
  - Words to avoid & use
  - Thinking about n’s
  - Developing research plan

Objectives

After this session, you’ll be able to…

- Identify and critically assess the strengths and weaknesses of a qualitative research aim
- Write a rudimentary draft of a qualitative aim for a given research project
Some orienting considerations
I rob banks because that’s where the money is.
Willie Sutton, 1951

<table>
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<th>Agency</th>
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Total NIH Budget = $33,110m

National Institutes of Health; Agency for Healthcare Research and Quality; Patient Centered Outcomes Research Institute; Veterans Administration; Robert Wood Johnson Foundation

Funded HSR Projects, 2016

Design

Comparative studies of institutional, professional, and community culture

Procedures

Deductive analysis of longitudinal observation and interview data
Current NIA/ADRD Projects

- **LEARN-MC (K07)**
  Foster learning community on medical culture, qualitative methods, and aging

- **DISCERN-MC (DP1)**
  Examine ADRD experiences & decision-making using “Next Gen” comparative ethnography

[cultureofmedicine.org]
Why did I rob banks? Because I enjoyed it. I loved it. I was more alive when I was inside a bank, robbing it, than at any other time in my life. I enjoyed everything about it...

**Willie Sutton**

*Where the Money Was.* Willie Sutton and Edward Linn. 1976. New York: Viking Press. p. 120
Evolution of an aim
Post-Op Prescribing K23: Evolution of Qual Aim

- First Draft: Using qualitative methods, define best practices in discharge processes related to postoperative prescribing in older patients at various healthcare sites. Hypothesis: Issues will emerge related to conflicting or absent guidelines for discharge prescribing in the postoperative period in older adults, as well as lack of communication and partnership between providers and patients in the discharge process.

- Submission (score = 27): Using qualitative methods, characterize barriers and facilitators to preventing prolonged use of pain medications after surgery in older adults. Hypothesis: A lack of understanding of the purpose of pain medications in the postoperative period, and communication and collaboration between clinicians and patients and their caregivers at discharge, will emerge as key barriers to preventing prolonged use.

- Re-Submission (score = 15): Conduct qualitative interviews with clinicians and older adult patients and their caregivers to document experiences of prolonged use of pain medication in the postoperative period and obtain feedback about a planned pilot intervention to address these issues. Qualitative data will provide insights into barriers to reducing prolonged use and guide adaption of the pilot intervention so it is feasible and acceptable to all stakeholders. Anticipated findings: A lack of understanding of pain medication use in the postoperative period as well as poor communication among clinicians, patients and caregivers, will emerge as key barriers related to reducing prolonged use of pain medication. Ensuring the pilot is feasible and acceptable to all stakeholders will be a key factor in adaptation of the intervention.
Surgical Palliative Care: Evolution of Aim

- **Draft**: Obtain an in-depth understanding of contextual factors influencing implementation of palliative care processes in the care of seriously ill older (≥65 years) surgical patients (n~40) at 6 hospitals (2 academic, 2 community, 2 post-acute) in (name redacted to preserve confidentiality). We will purposively identify and follow patients from their first to their last (<90 days) perioperative visit, and conduct participant observations and semi-structured interviews with patients, clinicians and clinical administrators to elucidate perceived barriers and facilitators to including palliative care processes in the workflow for these patients.

- **Submitted**: Document and analyze how contextual factors influence perioperative palliative care delivery at 6 hospitals in the (name redacted to preserve confidentiality) system (2 academic, 2 community, 2 post-acute). We will use qualitative methods (in-depth interview and direct observation) to document perioperative processes of care for a purposefully assembled cohort of seriously ill older (≥65 years) patients having major surgery (n=40). To gather information about contextual factors, we will interview clinicians (e.g. physicians, nurses, social workers) and administrators (n=40). A deductive analytic approach will compare barriers/ facilitators across sites and an inductive approach will identify themes.
Anatomy of an aim
Dissecting Surgical Palliative Care Qual Aim

goal, setting, subjects, data collection, analysis

- **Draft**: Obtain an in-depth understanding of contextual factors influencing implementation of palliative care processes

- **Submitted**: Document and analyze how contextual factors influence perioperative palliative care delivery
Dissecting Surgical Palliative Care Qual Aim

goal, setting, subjects, data collection, analysis

- **Draft**: Obtain an in-depth understanding of contextual factors influencing implementation of palliative care processes…[…]…at 6 hospitals (2 academic, 2 community, 2 post-acute) in (name redacted).

- **Submitted**: Document and analyze how contextual factors influence perioperative palliative care delivery at 6 hospitals in the (name redacted) (2 academic, 2 community, 2 post-acute).
Dissecting Surgical Palliative Care Qual Aim

**goal, setting, subjects, data collection, analysis**

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Words, numbers, and plans
Aims are Short: Choose words thoughtfully

- Look for “Expected Findings”
  - Don’t use the “H” word: Hypothesis testing is impossible with qualitative data
- “Document”, “Analyze” and other active verbs
  - Use Blooms Taxonomy to find measurable verbs: Utica College; https://www.bloomstaxonomy.net
  - Avoid verbs, e.g., understand, that don’t lend themselves to concrete, active measurement
- “Purposeful” selection of sites and participants
  - Do not rely or invoke random samples or selection (qualitative n’s are not representative)
- How context “shapes”
  - Avoid suggesting that variables affect outcomes
Thinking about n’s

A. Resources constrain total interview N
   - n=40-60 for an R21 or a K; n=100-150 for an R01

B. N of sites: What voices do you need to address your research question?
   - Who are the stakeholder groups you need to hear from?
   - How many settings at how many times do you need?

C. Make a recruitment matrix
   - How many cells do you have?
   - How many people do you need in each cell to convince you and readers?
## Recruitment Matrices

### Surgery Palliative Care Mock-Up

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Taking (Specific) Aim, April 2022
Connect aims to research strategy

- **Goal**: Recap aim; why are you doing this?

- **Setting Analysis**
  - Work backwards from analysis to setting
  - Our work is often deductive; don’t default to grounded theory inductive terminology (saturation, coding)

- **Subjects Data Collection**
  - How/why you have access to subjects
  - Procedures for recruitment and consent, including *some* gritty details, such as length of interviews
Experts Standing By for Questions & Discussion
Thank You:
Amanda Reich, PhD, Center for Surgery and Public Health
Mass General Brigham
Sophia & Hazel, Swag Models

Supported by NIH K07 AG066814 (Dohan). Opinions are mine.