Using Qualitative Methods in your Implementation Science Study
Acknowledgements

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• No conflicts of interest
Goals

• Provide an overview of qualitative methods in Implementation Science
• Familiarize audience with strengths of different qualitative approaches
• Use real-world examples to demonstrate how to incorporate qualitative methods in an IS study
• Provide practical strategies to incorporate qualitative methods into an IS study
Overview

I. Implementation Science
II. Why Qualitative Methods
III. Qualitative Methods
IV. Example
V. Using Qualitative Methods in your Implementation Science Study
I. IMPLEMENTATION SCIENCE
What is Implementation Science

• Uses a systematic approach to understand & address barriers to effective implementation of EBPs
• Study of methods to promote the integration of research findings and evidence into healthcare policy and practice
• Seeks to understand the behavior of healthcare professionals and other stakeholders as a key variable in the sustainable uptake, adoption, and implementation of EBPs
• Investigates & addresses major bottlenecks (e.g. social, behavioral, economic, management) that impede effective implementation,
• Tests approaches to improve health programs
• Determines a causal relationship between the intervention and its impact
Why Implementation Science?

- **CA or Bust!**
  - Southern
  - Easy Route: Made it 32%, Satisfied 75%
- **Long Winter**
  - Northern
  - Made it 60%, Satisfied 55%
- **Hard Route, Famine**
  - Middle
  - Made it 15%, Satisfied 5%

Bolton, RB
Why Implementation Science?

• Implementation can help us learn:
  • Program Structure
  • Barriers
  • Facilitators
  • Solutions
  • Contextualize Results
  • Provide future guidance
  • “De-implementation”

• A conceptual framework can:
  • Help us understand what happens when a program is implemented
  • Identify key people or features to examine
Consolidated Framework for Implementation Research (CFIR)
Implementation Science Characteristics

• Real-world
  • More complicated & “messy” than traditional studies – real world, adaptation is part of it

• Contextual
  • Incorporates context
  • Attentive to local cultural & community influences

• Complex
  • Dynamic, adaptive, occurs at multiple levels, non-linear, analyses are multi-component (process outcomes & clinical outcomes)
Data Collection and Analysis - What is Unique with Implementation Science?

- Diverse array of data collection & analysis techniques

- Multiple forms of non-traditional data are common
  - Notes from meetings, conference calls, e-mails, documents and other artifacts

- Multiple types of participants are included
  - Patients, providers, team members, other stakeholders

- Data analysis is often on-going with quick turn-around as the data are needed to guide study decisions throughout the project

Zickmond, Hamilton & Bokhour
II. QUALITATIVE METHODS
Why Qualitative Methods?

- Rich descriptions of phenomena
- Describe complex settings/interactions
- Enhance understanding of context
- Theory development
- Identify patterns
- Provides meaningful explanations

- Traditionally used in social sciences (sociology, anthropology)
- Increasingly used in Health Services & Implementation Science

(Sofaer1999)
When to Use Qualitative Methods

• Good for “Why?” or “How?” questions
• Need detailed descriptions or explanations of experiences, behaviors or beliefs

• Identifying and exploring
  • Want to identify a range of behaviors

• Describing
  • Capture dimensions or describe complex processes

• Explaining
  • How or why individuals do/don’t do certain things

• Evaluation/Assessment
  • Tell the program’s story

Guest, Namey, Mitchell 2013
When **Not** to Use Qualitative Methods

- Test theories with hypothesis
- Make generalizations to the whole population
- Reliably comparing groups (i.e., pre-test/post-test)
- Measure the outcomes of a program
Qualitative Methods in Implementation Science

- Qualitative methods are an essential aspect of Implementation Science

- Particularly well-suited to:
  - Discern how effectively an intervention is adopted at a site (fidelity)
  - Reveal the organizational or interpersonal dynamics that can affect an intervention
    - Participants’ (e.g., staff, patients) insider knowledge & perspectives about the evidence & context in which implementation is to occur
  - Uncover the barriers & facilitators that impact the uptake of the intervention
III. THE METHODS
Qualitative Methods

- Interview
- Focus Group
- Archival Documents
- Observation

- Data is often used in conjunction with each other and with quantitative data (i.e., mixed methods)
Qualitative Interview

• Conversation designed to elicit depth on a topic of interest
• Usually 1-on-1
• Open-ended questions
• Inductive probing
• Look/feel like a conversation

• Strength: Good for understanding perspectives or experiences
• Limitation: Labor intensive; may miss perspectives; don’t know what people actually do
Focus Group

• Carefully planned discussion with a small group of people
• Focused topic
• Experiences, opinions, perceptions, reactions
• Group setting and group dynamics are integral
• Similarity in group (characteristics, experiences, situation)
• Discussion moderated by experienced researcher

• Strength: Good for generating ideas; can be fast way to collect data
• Limitation: Not good for personal experiences; quieter people may not speak; not good for all populations (i.e., difficult to reach)
Archival Documents

• Textual & visual; Selected (not generated)
• Example documents:
  • Meeting minutes
  • Memos
  • Mission statements
  • Presentation materials
  • Policy documents
  • Procedural documents (steps taken to achieve something)
  • Clinical practice guidelines
  • Patient records
  • Educational materials, pamphlets, brochures

• Strength: Easy to collect
• Limitation: ≠ actually happening; hard to follow-up

Guest, Namey, Mitchell 2013; Bokhour
Observation

• Systematic recording of events, actions & interactions

• Participant Observation
  • Unstructured/qualitative
  • Traditionally used in anthropology

• Direct Observation
  • More structured/quantitative, systematic
  • How many, how often

• Strengths: capture behaviors participants may be unaware of
• Limitation: labor intensive

Guest, Namey, Mitchell 2013; Rossman & Rallis 2017
Observation Data Collection Tools

- Fieldnotes
- Templates
- Recording sheets and check lists
Fieldnotes

• Least standardized
• Open-ended, narrative
• Does not include preset questions or responses
  • Example: Fieldnote, written by GMFix
    Spring 2014
Templates

- List the interactions, processes or behaviors
- Space to jot down narrative data
- Allows for emergent data to be recorded

**Example: Observation template. From VA PEC 13-001 (Developed by GM Fix & RE Bolton; BG Bokhour, PI)**
The client expresses concern that smoking is making his diabetes worse during the encounter. In instances such as this, when the client elucidates how smoking affects the patient’s diabetes. "Yes, you have diabetes, smoking makes it more dangerous.”

The HC10-03 tells a story about himself when he was on a mission (CHC/EP/DFV Veteran), as a way to explain how stressful situations can make you want to smoke.

M: “What really matters?”

P: God, religion, spiritual growth.

M: “How do you relate to smoking?”

P: I need God’s help. I trust He’ll help navigate. God will fill the void (left by not smoking). Patient likes quitting smoking to his experiences in a 12 step program.

M: Did you use that when recovering from heroin?

P: Do you have the Blue Book?

M: Yes, has a sponsor, AA 12 Step Program.

P: Why or not [not sure] have talked to your sponsor about quitting smoking? [Encourages M to speak with sponsor.] P: Explains sponsor smokes and expresses doubt about sponsor being appropriate for quitting smoking. Has worked with sponsor 3-4 years.

P: If you take cigarettes away, you need to fill the void with something. Fill it with God. Patient uses scriptures where he gets the urge to smoke. I’m a thief, I steal stuff. Relies on God to stop stealing and not go back to those activities. He gets clothes, kinds to walk away from home and cocaine.

God supplied the Salvation Army. God made this meeting happen today. (This interaction recorded in the Activities.)

During this interaction, HC is writing notes/action items on an erasable white board. “Talk to Sponsor.” “Activities.” HC is also working on a “quitting list” that includes how much and a quit date.

P: Points to school of health mounted on the wall, right next to the patient. Points specifically to the spiritual circle. “If a rock is thrown, it would ripple through all the circles. The circles are connected, and so the patient’s spiritual well-being is affected by the other realms of his life. HC gives example of how “family” is an important circle to him. HC brings up event yesterday with diabetes and discusses how it is connected. Patient then mentions how he unrelated on his appointment yesterday. Patient says this was God’s work, and that the HC would know this has been ongoing issue. Patient was sent to urology to check this out—possibly during those 3 hours yesterday (not clear). HC acknowledges this event and apologizes.

M: Continue with next PHI question—this is only the 2nd where do you want to be/where will you be in 10 years?

P: “I need to clean up some things. I don’t know how to answer. I’m worried about toes and eyes [likely because of diabetes]. His 87 year old mother, whom he has a good relationship with, had her foot amputated. Things might start to fall off.”

M: Has this back to diabetes. M asks about his brother.

P: Brother also has a diabetes-related amputation.

M: Asks about specific goals related to not smoking. Does he want to quit “cold turkey.” They also offer a program. M: describes quitting vs. “staying stopped.” Patient likes this no stopping drug use. You don’t really ever stop, instead you just have to stay stopped, live soberly.

M: What timeframe is the patient interested in trying to quit. It’s up to you.

M: As soon as possible.

All [M, HC, GC] Discuss next steps. What do you when you hit a wall. How to manage “curve balls.”

HC: “Give me a phone call” [If you need help or support or anything]

M:onders about connections between diabetes and smoking. [HC looks for pamphlet describing the relationship].

M: Should patient talk to sponsor?

M: Sponsor smokes, “Maybe I’ll get another sponsor.” A year is better than a Dr. One person helping another, so talk with...
Recording Sheets and Check Lists

- Standardized
- A priori questions & responses
- Allows for counting phenomena

IV. AN EXAMPLE
Implementing Personal Health Planning in VA: Results of a Multisite Evaluation
Team

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- Timothy P. Hogan, PhD
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What is Patient-Centered Care?

- Patient-Centered Care (PCC)
  - Institute of Medicine
    - Care that is respectful of and responsive to individual patient preferences, needs, and values
    - Ensures that patient values guide all clinical decisions
  - Small, but growing evidence base
  - Healthcare systems implementing PCC programs
  - Requires cultural shift in care practices

- VA’s Office of Patient-Centered Care & Cultural Transformation
  - Focused on transforming VA to a system that provides personalized, proactive, patient-driven care
  - Implementing several PCC initiatives
Personal Health Planning

• VA Patient-Centered Care initiative

• Collaborative development of a health plan

• Patient identifies health goal, based on patient life context, values, preferences

• Series of questions designed to identify what really matters

• Growing evidence base
MyStory: Personal Health Inventory

1. What REALLY matters to you in your life?

2. What brings you a sense of joy and happiness?

3. What is your vision of your best possible health?

CURRENT AND DESIRED STATES:

<table>
<thead>
<tr>
<th>Working the Body: “Energy and Flexibility” Movement and physical activities like walking, dancing, gardening, sports, lifting weights, yoga, cycling, swimming, and working out in a gym.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current State:</strong> Rate yourself on a scale of 1 (low) to 10 (high)</td>
</tr>
<tr>
<td>1  2  3  4  5  6  7  8  9  10</td>
</tr>
<tr>
<td>What are the reasons you choose this number?</td>
</tr>
</tbody>
</table>
PHP Implementation

• Goal of OPCC&CT was to know what the impact of PHP was on Veterans

• Natural experiment;
  • Not a prescriptive rollout of evidenced-based program
  • Sites given latitude on what and how they implemented PHP

• EPCC research team wanted to learn:
  • How PHP was implemented at a range of sites,
  • How PHP was done, in depth
  • What were patients experiences with PHP
  • What were the patient reported and clinical outcomes of PHP.
Study Objectives

• Understand what PHP looked like in practice
  • How PHP was implemented at a range of sites
  • How PHP was done, in depth

• Examine patient experiences of PHP

• Describe clinical outcomes associated with exposure to PHP
Study Design

I. Qualitative Evaluation of Implementation
   • Phase 1, broad overview
   • Phase 2, in-depth case studies

II. Quantitative Evaluation
    • Patient surveys
    • Intermediate clinical outcomes
Mixed-Methods Design

• More than just qualitative & quantitative data
• Multiple data sources:
  • Qualitative (interviews, observations, case study approach),
  • Quantitative (survey, database)
• Inter-related, complementary data
• Iterative, integration between qualitative & quantitative methods.
Collaboration

• Administrative level
  • OPCC&CT and EPCC
  • OPCC&CT field team and EPCC research team

• Site level
  • EPCC research team and study sites

• Team level
  • EPCC qualitative research team and quantitative research team
I. Qualitative
Collaboration

• Administrative level
  • OPCC&CT and EPCC
  • OPCC&CT field team and EPCC research team

• Site level
  • EPCC research team and study sites

• Team level
  • EPCC qualitative research team and quantitative research team
Study Design

1.1 How PHP was implemented at a range of sites,
   • 10 diverse sites
   • Selection criteria: OPCC&CT input; size, location & program history
   • Qualitative phone interviews with PHP leads

1.2 How PHP was done, in depth
   • 2 sites
   • Selection criteria: extent of PHP program, use of innovative practices & potential to be spread
   • Ethnographic (site visits; interviews, observation, document review)

   • Analysis
     • Qualitative, grounded thematic approach
     • A priori coding, based on PHP program & theories of PCC
<table>
<thead>
<tr>
<th>Site</th>
<th>Site Characteristics</th>
<th>Where PHP is Implemented</th>
<th>Which Veterans</th>
<th>Responsible staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rural South Atlantic, High complexity (1c)</td>
<td>Wellness Clinic groups; Individual health coaching</td>
<td>Pre-transplant; History of substance abuse</td>
<td>Health coaches</td>
</tr>
<tr>
<td>2</td>
<td>Rural Southwest Central, High complexity (1a)</td>
<td>Shared Medical Appointments</td>
<td>Hypertension; Less complex</td>
<td>Shared Medical Appointment Providers &amp; Ancillary Staff</td>
</tr>
<tr>
<td>3</td>
<td>Urban New England, High complexity (1a)</td>
<td>1 PACT team</td>
<td>No acute concerns</td>
<td>PACT MD &amp; RN</td>
</tr>
<tr>
<td>4</td>
<td>Rural Pacific West, Low complexity (3)</td>
<td>All PACT teams</td>
<td>All PACT patients</td>
<td>PACT clerk, LPN, RN, &amp; provider</td>
</tr>
<tr>
<td>5</td>
<td>Urban Southwest Central, High complexity (1b)</td>
<td>Pain clinic</td>
<td>Chronic pain</td>
<td>Pain clinic providers &amp; ancillary staff</td>
</tr>
<tr>
<td>6</td>
<td>Urban Southwest Central, High complexity (1c)</td>
<td>PACT; Mental Health</td>
<td>Serious mental illness</td>
<td>Peer Support Specialists in Shared Medical Appointments &amp; Individual Appointments</td>
</tr>
<tr>
<td>7</td>
<td>Urban New England, High complexity (1a)</td>
<td>1 PACT team; 1 Women’s Health Clinic; 1 CBOC</td>
<td>No acute concerns</td>
<td>1 MD in each location &amp; RN</td>
</tr>
<tr>
<td>8</td>
<td>Rural New England, Low complexity (3)</td>
<td>Pain clinic</td>
<td>Chronic pain</td>
<td>All clinic team members</td>
</tr>
<tr>
<td>9</td>
<td>Urban Southeast Central, Medium complexity (2)</td>
<td>Health coaching</td>
<td>Chronic conditions</td>
<td>Health coaches</td>
</tr>
<tr>
<td>10</td>
<td>Urban Midwest, High complexity (1a)</td>
<td>PACT teams at main facility CBOCs</td>
<td>All patients interested in health planning</td>
<td>Peer health coach; RN Care Manager</td>
</tr>
</tbody>
</table>
Phase 1.1 Findings

**Location**
- Primary Care
- Mental Health
- Pain Clinic
- Shared Medical Appointments

**Patient Population**
- All patients
- Non-acute appointments
- Diagnosis (hypertension, serious mental illness, chronic pain)

**Responsible Staff**
- 1-2 people
- Whole team
- Health coach
- MD & RN
## Phase 1.2 Sites

<table>
<thead>
<tr>
<th>Facility</th>
<th>Setting</th>
<th>PHP Program</th>
</tr>
</thead>
</table>
| **SITE 4.** Community-based outpatient clinic Pacific NW | *Strong support from Medical Director*  
*2 leads from main facility* | *“Life Goals”*  
*Distributed by clerks*  
*clinicians & ancillary staff discuss throughout appt.* |
| **SITE 10.** Large, urban medical center Midwest | *Regional support*  
*Aligned with already ongoing initiatives* | *Clinicians or ancillary staff refer patient*  
*Health Coach works with patients*  
*HC develop PHP & provide ongoing support* |
# Phase 1.2 Data Collection

<table>
<thead>
<tr>
<th>Role</th>
<th>Site 4</th>
<th>Site 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Staff</td>
<td>5 interviews; 1 observation</td>
<td>3 interviews; 1 observation; 1 focus group</td>
</tr>
<tr>
<td>Health Coach Program</td>
<td></td>
<td>3 interviews</td>
</tr>
<tr>
<td>Primary Care Team</td>
<td>8 interviews</td>
<td>4 interviews</td>
</tr>
<tr>
<td>Ancillary Staff</td>
<td>3 interviews</td>
<td>3 interviews</td>
</tr>
<tr>
<td>Patients</td>
<td>9 observations 2 interviews</td>
<td>4 observations 4 interviews</td>
</tr>
</tbody>
</table>

**TOTAL:** 35 interviews; 15 observations; 1 focus group
Phase 1.2 Findings

- Patient-Provider Interaction
- Develop a Clinic Culture Supportive of PHP
- Facility-level Foundation Supportive of PHP
Build a Facility-level Foundation Supportive of PHP

• Leadership support at all levels
• Quality over quantity
• PHP information documented and communicated

**Site 10**
• PHP in the electronic medical record (EMR)
• Clinical Application Coordinator (CAC) enlisted to develop an electronic template in EMR
• Entire facility had access to a patient’s PHP
Develop a Supportive Clinic Culture

- Involve providers in the implementation process
- Engage all primary care providers in PHP
- Train team members responsible for PHP
- Raise awareness across ancillary staff

Site 10
- Ancillary staff (dietitian, social work, pharmacy, behavioral health)
  - Largely unaware of PHP
  - Developed their own care plans, in accordance with their scope of practice
  - Care plans were not informed by or even congruent with PHPs
- A dietician characterized his role by saying: “[My] plan has more to do with the goals that we [the providers] actually set for the patients... [We] make sure that they’re onboard with. I mean I’m never going to tell a patient, you know, ‘You need to do this,’ without them, you know, acquiescing to actually do it.”
Patient-Provider Interactions

- Orient the patient
- Engage patients in conversations about their priorities
- Collaboration between primary care and ancillary staff
- Identify meaningful goals with actionable plans

**Site 4**
Beginning of appointment.
Clerk introduces PHP & explains it is a different way of providing healthcare
"[PHP] really helps put you in the driver’s seat of your health care. For a long time, the VA has been the driver of that bus, and that’s really not where we should be"
End of the appointment.
Clerk checks the patient out.
Asks if the patient has questions or issues the patient had not had the opportunity to ask.
Putting PHP into Practice (cont.)

• Orient the patient
• Engage patients in conversations about their priorities
• Collaboration between primary care and ancillary staff
• Identify meaningful goals with actionable plans

**Site 10**

Patient

Made PHP appointment focused on smoking cessation
Previous day, had emergency appointment for high blood glucose

Appointment

Nurse framed the appointment
Health coach & nurse ask patient about his daily life (not smoking)
Daily life discussed; marked by when and where the patient smoked

Plan

Collaboratively decided to reduce smoking during work breaks
Health coach & nurse suggested strategies— which the patient connected to diabetes management
Recommendations for Implementing PHP

• Develop a local vision, including facility-level strategic planning and self-reflection

• Define roles and communication practices across the team

• Create infrastructure to support the PHP process, built on existing processes and attentive to patient flow

• Conduct iterative rounds of piloting to incorporate staff, provider and patient needs

• Foster an organizational climate that supports PHP, such as identifying and supporting PCC champions
Collaboration

• Administrative level
  • OPCC&CT and EPCC
  • OPCC&CT field team and EPCC research team

• Site level
  • EPCC research team and study sites

• Team level
  • EPCC qualitative research team and quantitative research team
II. Quantitative
Aims and Approaches

- Assess veteran perceptions of the Personal Health Planning (PHP) Process and its impact on patient-level outcomes
  
  **Veteran Experience Survey**

- Evaluate effects of PHP on clinical outcomes over time
  
  **Time-series analysis of selected clinical measures**
Veteran Experience Survey

<table>
<thead>
<tr>
<th>Survey Measures of the PHP Process Derived from Qualitative Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Health Goals</td>
</tr>
<tr>
<td>Actions by VA primary care team and health coach to help reach personal health goals</td>
</tr>
<tr>
<td>Helpfulness of specific programs and services at site in reaching personal health goals</td>
</tr>
<tr>
<td>Experiences in personal health planning</td>
</tr>
<tr>
<td>Satisfaction with personal health planning</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Measures – Previously Developed, Validated, and Used</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient Experience Category</strong></td>
</tr>
<tr>
<td><strong>Measures Used</strong></td>
</tr>
<tr>
<td>Process of Care</td>
</tr>
<tr>
<td>Communication Assessment Tool (CAT), CollaboRATE</td>
</tr>
<tr>
<td>Self-Reported Health and Functional Status</td>
</tr>
<tr>
<td>PROMIS (Patient Reported Outcomes Measurement Information System)</td>
</tr>
<tr>
<td>Self-Efficacy</td>
</tr>
<tr>
<td>Chronic Disease Self-Efficacy Scale</td>
</tr>
<tr>
<td>Patient’s Confidence in Managing Health</td>
</tr>
<tr>
<td>Patient Activation Measure (PAM)</td>
</tr>
<tr>
<td>VA Services</td>
</tr>
<tr>
<td>Services offered at outpatient sites</td>
</tr>
<tr>
<td>Sociodemographics</td>
</tr>
<tr>
<td>General health, sex, age, social conditions, etc.</td>
</tr>
</tbody>
</table>
Survey Methods

• Sites
  • 2 PHP qualitative evaluation sites
  • 2 comparison sites similar in region, size, and complexity.

• As example, presenting results from one PHP site and its comparison site (urban Midwest)

• Survey mailed to patients along with a $5 CVS gift card as incentive; reminder card sent to non-respondents

• Survey samples
  • Identified by healthcare teams
  • PHP site - 304 outpatients - 168 completed surveys (55%)
  • Comparison - 304 outpatients - 149 completed surveys (49%)
Veteran Experience Survey at PHP Site
How VA primary care team or health coach helped veterans reach their personal health goals

Veterans received broad and varied support in reaching health goals
Veteran Experience Survey at PHP Site
Experiences of Veterans in Personal Health Planning

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>88%</td>
<td>Personal health goal is important to health and well-being</td>
</tr>
<tr>
<td>75%</td>
<td>Would recommend setting a personal health goal</td>
</tr>
<tr>
<td>74%</td>
<td>Had enough say in selecting a personal health goal</td>
</tr>
<tr>
<td>73%</td>
<td>Made progress toward reaching personal health goal</td>
</tr>
<tr>
<td>72%</td>
<td>Someone followed up to discuss progress on personal health goal</td>
</tr>
<tr>
<td>70%</td>
<td>Often discuss personal health goal at visits with VA primary care team or coach</td>
</tr>
<tr>
<td>69%</td>
<td>Relationship with VA health care team or health coach was helpful in making progress towards personal health goal</td>
</tr>
<tr>
<td>68%</td>
<td>Choosing a personal health goal improved my health and well-being</td>
</tr>
</tbody>
</table>

Veterans’ experiences were generally favorable in support of reaching health goals
Time-series analysis of clinical measures

- Clinical Measures
  - Body weight (BMI)
  - Blood pressure
  - LDL
  - HbA1C (glycemic control)

- Analysis
  - Serial measures from 24 months before & after initial PHP visit
  - Trends in measures; interrupted time-serial analysis; site comparisons

- Analyses are on-going; no results to date
Veterans

had a range of personal health goals

report experiencing the PHP process as positive - collaborative, patient-centered, and important to their health.

experiences with PHP were related to better patient-reported outcomes

No short-term measurable differences between sites in self-reported outcomes, such as health status, functional status.

Awaiting results of analysis of clinical measures
Strengths & Challenges

• Strengths
  • Rapid, flexible study design
  • Collaborative= iterative discussions between OPCC&CT & EPCC
  • Holistic, integrated mixed methods study design
  • Design allowed for:
    • OPCC&CT and EPCC to understand what the sites are doing to adapt PHP to their context.
    • Development of survey questions/measures
    • Interpret outcomes.

• Challenges
  • Trying to measure real world, natural experiment= messy
  • PHP does not always equal PHP
  • Need a large, dedicated team
  • Streamlining communication amongst all the stakeholders
Conclusions

• Need for multiple kinds of data to understand a complex intervention

• Researchers need to be flexible and adaptable

• Need experienced team

• Findings inform Operations/Front line employees

• Efficient use of resources

• Next steps
  • Applying approach to examine other OPCC&CT initiatives
V. USING QUALITATIVE METHODS IN YOUR IMPLEMENTATION SCIENCE STUDY
Planning Your Implementation Science Study

• Research/Implementation Science questions = Method
  • “How” or “Why” questions = Qualitative Methods
• Framework
• Focus: What is being implemented; by whom; in what context
• Study Design
  • Participants
  • Setting (i.e., hospital, clinic)
  • Methods
    • Qualitative (i.e., interviews, focus group, observation, archival data)
    • Quantitative (i.e., survey, clinical outcomes)
Important points to consider

• Flexibility
• Team
  • Background/training (need some experienced team members)
  • Staffing/Budgeting resources (Can be labor intensive!)
  • Staffing (qualitative= 2 minimum; 4-6+, can collect/analyze)
• Study Site/Participants
  • Access; Enrollment
• Data collection
  • Verbatim transcripts; Verbatim, bulleted notes; Field notes –
    descriptive summaries (i.e., site impressions)
• Analytic approach
  • A priori vs. grounded thematic
• Audience
• Products (Report; Publications; future grants)
Thank you

- Gemmae M. Fix, PhD gmfix@bu.edu
http://sites.bu.edu/ciis/

Center for Implementation and Improvement Sciences (CIIS)

Bringing Science to Quality

The Evans Center for Implementation and Improvement Sciences (CIIS) is a methodological hub for the scientific evaluation of efforts to improve healthcare delivery that integrates key components of implementation and improvement sciences with a focus on care within safety net systems.

What are Implementation and Improvement Sciences?
Veteran Experience Survey at PHP Site

Top 10 Personal Health Goals

1) Get more exercise
2) Eat more healthy food
3) Manage long-term health condition
4) Lower blood pressure or cholesterol
5) Lose weight
6) Improve my sleep and feel more rested
7) Become more involved in my health care
8) Manage my anxiety or depression
9) Manage my pain
10) Take my medications when I should

N=150
### Patient-reported outcomes from the survey →

<table>
<thead>
<tr>
<th>Patient-reported outcome</th>
<th>Collabo RATE</th>
<th>Promis 10</th>
<th>Self-efficacy</th>
<th>PAM 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal health goal is important to health and well-being</td>
<td>☑</td>
<td>☑</td>
<td></td>
<td>☑</td>
</tr>
<tr>
<td>Would recommend setting a personal health goal</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Had enough say in selecting a personal health goal</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Made progress toward reaching personal health goal</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Someone followed up to discuss progress on personal health goal</td>
<td>☑</td>
<td></td>
<td></td>
<td>☑</td>
</tr>
<tr>
<td>Often discuss personal health goal at visits with VA primary care team or coach</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Relationship with VA health care team or health coach was helpful in making progress towards personal health goal</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Choosing a personal health goal improved my health and well-being</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Significance</th>
<th>0.05&gt;p&lt;=0.01</th>
<th>0.01&gt;p&lt;=0.001</th>
<th>P&lt;0.001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collabo RATE</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
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<td>Promis 10</td>
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<tr>
<td>PAM 13</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
</tbody>
</table>

Veterans’ experiences were highly correlated with patient-reported outcomes.
Veteran Experience Survey
Site Comparisons of Patient-Reported Outcomes

<table>
<thead>
<tr>
<th>Patient-reported outcomes from the survey</th>
<th>Difference between sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CollaboRATE: Patient-centered communication/involvement</td>
<td>N.S.</td>
</tr>
<tr>
<td>PROMIS: Physical Function</td>
<td>N.S.</td>
</tr>
<tr>
<td>PROMIS: Anxiety</td>
<td>N.S.</td>
</tr>
<tr>
<td>PROMIS: Depression</td>
<td>N.S.</td>
</tr>
<tr>
<td>PROMIS: Fatigue</td>
<td>N.S.</td>
</tr>
<tr>
<td>PROMIS: Sleep Disturbance</td>
<td>N.S.</td>
</tr>
<tr>
<td>PROMIS: Social Function</td>
<td>N.S.</td>
</tr>
<tr>
<td>PROMIS: Pain Interference</td>
<td>N.S.</td>
</tr>
<tr>
<td>PROMIS: Pain Intensity</td>
<td>N.S.</td>
</tr>
<tr>
<td>Self-Efficacy in chronic disease care</td>
<td>N.S.</td>
</tr>
<tr>
<td>PAM: Patient activation</td>
<td>N.S.</td>
</tr>
</tbody>
</table>

No differences between PHP and comparison sites in patient-reported outcomes