Implementing the Patient-Centered Care Paradigm in an Academic Research Environment

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IMPLEMENTING THE PATIENT-CENTERED CARE PARADIGM IN AN ACADEMIC RESEARCH ENVIRONMENT

by

FERNANDO ORGAS

A DISSERTATION

Presented to the Faculty of the University of the Incarnate Word in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

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I would like to thank my committee members; Arthur E. Hernández, PhD, NCSP, NCC, Danielle Gunter, PhD, RN, CPN, and Charles W. Mathias, PhD, whose guidance allowed me to believe that there is still more to learn and to be improved upon in life. The engagement throughout the process has allowed me to flourish and become a critical thinker.

In addition, a huge thank you to my wife Candilace Orgas, who introduced me to true learning, and whose enthusiasm for education has had lasting effects. I would like to especially thank Paul Brown, my “Tio”, whose foundation of belief started me in education.

Fernando Orgas
DEDICATION

I happily dedicate this work to my family: Candilace, Phoenix-Reign, Pharo-Ivan, Gabriel-Mikial, the Orgas family, and my in-laws the Rivera family. Words cannot begin to express how thankful I am that you all are my life. Your love has made me a better leader, a better boss, and most importantly a better person. You taught me how to communicate, listen, understand, and handle all situations that I was most definitely not prepared for! You all have consistently showed me the importance of having an open mind, cultivating the ability to create and set the culture of our environment. You have all helped shape me into the person I am today, both professionally and personally, and for that I am forever grateful.

“Chances Makes Champions!”
The healthcare landscape is transitioning from a provider-centered care model toward greater emphasis on patient-centered care. The shift to patient-centered care reflects efforts to increase the quality of healthcare and the care experience. The current state of research within healthcare remains focused on how to provide high quality and sound research that will bring new equipment, procedures, and verify strategies that may benefit healthcare globally. However, changes in the healthcare atmosphere bring a new perspective to research. How do we implement the paradigm shift of patient-centered care, into an academic research environment? Will this holistic mindset fully cross into the spectrum of research and fit its existing criteria?

The purpose of this qualitative focused ethnographic case study is to describe the implementation of patient-centered care, as defined by the Institute of Medicine and Agency for Healthcare Research and Quality, and examine how this model may be integrated within the standards of current healthcare research settings. The study describes a model to translate the success or failure of integrating patient-centered care into the academic research environment, compared to the expectations of current understanding about patient-centered care.
TABLE OF CONTENTS

LIST OF TABLES .................................................................................................................. xi

LIST OF FIGURES ............................................................................................................... xii

ACADEMIC RESEARCH AND PATIENT-CENTERED CARE ........................................ 1

  Context of Topic ............................................................................................................. 1

  Statement of Problem .................................................................................................... 4

  Problem in its current context ....................................................................................... 5

  Personal Background .................................................................................................... 8

Purpose of the Study ........................................................................................................ 10

Research Question ......................................................................................................... 10

Summary of Appropriate Methodology ........................................................................ 11

Clinical Determination for Focused Ethnographic Case Study ........................................ 12

Theoretical Framework .................................................................................................. 13

Significance of the Study ............................................................................................... 13

Definition of Terms ........................................................................................................ 13

Limitations ...................................................................................................................... 14

Organization of the Study .............................................................................................. 15

A REVIEW OF LITERATURE ......................................................................................... 17

  Review of Research Studies on PCC ........................................................................... 19

  Communication in a PCC environment ........................................................................ 20

  Patient Participation in a PCC environment ................................................................. 21
# Table of Contents—Continued

## A REVIEW OF LITERATURE

- Family participation in a PCC environment .................................................................22
- Major Areas of Review .................................................................................................23
- Patient-Centered Care Theory .....................................................................................23
- Strategies Towards PCC .............................................................................................25
- Better Engagement and Patient Health Outcomes .....................................................26
- PCC Practice Successes .............................................................................................27
- PCC in Academic Research .......................................................................................27
- Change Management/Total Quality Management ......................................................28
- Quality Improvement (5 Deming Principles) ..............................................................31
- Related Research .......................................................................................................34
  - Implementation science ............................................................................................34
  - Methodological Approach .......................................................................................34
    - Focused ethnographic case study .........................................................................34
  - Summary ..................................................................................................................36

## DISCUSSION OF METHODOLOGY AND DATA ORGANIZATION .........................38

- Overall Approach and Rationale .................................................................................38
- Specific Methodology ..................................................................................................38
- Focused Ethnographic Case Study .............................................................................40
- Focused Ethnography in Healthcare ..........................................................................41
- Site or Population Selection .......................................................................................42
- Setting .......................................................................................................................43
Table of Contents—Continued

DISCUSSION OF METHODOLOGY AND DATA ORGANIZATION

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>44</td>
</tr>
<tr>
<td>Culture</td>
<td>45</td>
</tr>
<tr>
<td>Research Instruments</td>
<td>46</td>
</tr>
<tr>
<td>Strategies</td>
<td>46</td>
</tr>
<tr>
<td>Audio-recorded semi-structured 1:1 interviews</td>
<td>46</td>
</tr>
<tr>
<td>Interview protocols and procedures</td>
<td>47</td>
</tr>
<tr>
<td>Field notes</td>
<td>47</td>
</tr>
<tr>
<td>Survey</td>
<td>47</td>
</tr>
<tr>
<td>Protection of Human Subjects: Ethical Considerations</td>
<td>48</td>
</tr>
<tr>
<td>Data Collection</td>
<td>49</td>
</tr>
<tr>
<td>Interview reasoning – questions and perspective</td>
<td>49</td>
</tr>
<tr>
<td>Survey – reasoning and perspective</td>
<td>50</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>51</td>
</tr>
<tr>
<td>Coding</td>
<td>52</td>
</tr>
<tr>
<td>Role of Researcher</td>
<td>54</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>54</td>
</tr>
<tr>
<td>Credibility</td>
<td>55</td>
</tr>
<tr>
<td>Member checks</td>
<td>56</td>
</tr>
<tr>
<td>Transferability</td>
<td>56</td>
</tr>
<tr>
<td>Dependability</td>
<td>57</td>
</tr>
<tr>
<td>Confirmability</td>
<td>57</td>
</tr>
</tbody>
</table>
Table of Contents—Continued

DISCUSSION OF METHODOLOGY AND DATA ORGANIZATION

Summary ........................................................................................................................................57

RESULTS AND ANALYSIS ........................................................................................................59

How PCC Was Implemented Within the Unit? ....................................................................60

Progression ...................................................................................................................................61

Results ........................................................................................................................................61

   Observations ..........................................................................................................................61

Interview Results .......................................................................................................................63

   Culture of the academic research environment prior to implementation ..........63

   Culture of the academic research environment after PCC implementation ..........66

Survey Results .........................................................................................................................70

   Theme 1: Alignment by “essence” not structure .................................................................71

   Theme 2: PCC is a collaborative “opinion” between care group and patient ..........73

Research Question 1 ..................................................................................................................74

   How is the PCC paradigm implemented in the academic research environment? 74

Research Question 2 ..................................................................................................................76

   What are the perceived challenges in implementing PCC in an academic research
   environment? .........................................................................................................................76

Summary ........................................................................................................................................78

DISCUSSION AND SUGGESTIONS FOR FUTURE RESEARCH .............................................79

Discussion ....................................................................................................................................79

   How is the PCC paradigm implemented in the academic research environment? 79
<table>
<thead>
<tr>
<th>DISCUSSION AND SUGGESTIONS FOR FUTURE RESEARCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHA Moment—Cultural Awareness..........................80</td>
</tr>
<tr>
<td>What are the perceived challenges in implementing PCC in an academic research environment?.................................................................81</td>
</tr>
<tr>
<td>Implications..................................................................................................................84</td>
</tr>
<tr>
<td>Recommendations for Future Research .....................84</td>
</tr>
<tr>
<td>Tools for Measurement ..................................................85</td>
</tr>
<tr>
<td>Studies Demonstrating What Works for Implementing PCC in the Academic Research Environment .............................................................................86</td>
</tr>
<tr>
<td>Implementation Guidance for Other Academic Research Systems to Utilize What is Learned .................................................................86</td>
</tr>
<tr>
<td>Summary ......................................................................................................................87</td>
</tr>
<tr>
<td>REFERENCES ..............................................................................................................................89</td>
</tr>
<tr>
<td>APPENDICES ...............................................................................................................................94</td>
</tr>
<tr>
<td>Appendix A: Patient- and Family-Centered Care Organizational Self-Assessment Tool .95</td>
</tr>
<tr>
<td>Appendix B: Subject Consent to Take Part in a Study of Implementing the Patient-Centered Care Paradigm in an Academic Research Environment.................................100</td>
</tr>
<tr>
<td>Appendix C: Semi-Structured 1:1 Interview Protocol.................................................................103</td>
</tr>
<tr>
<td>Appendix D: Coding........................................................................................................105</td>
</tr>
<tr>
<td>Appendix E: IRB Approval .........................................................................................111</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Comparison of Focused Ethnography to Traditional Ethnography:</td>
<td>12.</td>
</tr>
<tr>
<td>When to Use Focused Ethnography</td>
<td></td>
</tr>
</tbody>
</table>
LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Meaningful Use – Core Measures</td>
<td>7</td>
</tr>
</tbody>
</table>
Academic Research and Patient-Centered Care

This chapter provides an overview of this study on the implementation of patient-centered care (PCC) in an academic research environment. First, this chapter will discuss the context of the topic, the PCC paradigm as defined by the influential report called *Crossing the Quality Chasm: A New Health System for the 21st Century*, published by the Institute of Medicine (IOM) in 2001. Next, the statement of the problem, personal background of investigator, purpose of the study, and research questions are discussed. The theoretical framework and justification for the study are provided along with the qualitative method of inquiry that will be used in this study, focused ethnography. Finally, the significance of the study and factors that motivated the investigator to study the phenomenon are outlined.

Context of Topic

The academic research healthcare environment has been influenced by improvements in the healthcare landscape, shifting from provider-centered care to a more PCC approach. This shift, stemming from change management theory of quality improvement, has created a gap in the care provided to patients in research settings. The gap is between current expectations of the holistic best practices of PCC in the healthcare environment and current approaches in academic healthcare research. The research setting provides a form of patient care that is focused on limiting variance within the administration of protocols and completeness of data collection. As a result, PCC has not been widely adopted for use within the academic research environment. There are challenges in implementing measures, processes to transition into the healthcare paradigm, or frameworks for what this transition should look like, within a clinical setting. PCC “is a return to the holistic roots” that is “organized around the patient” (Frampton et al., 2008, p.
3). This philosophy, coupled with value-based purchasing, moves healthcare from provider driven to patient-focused (Frampton et al., 2008, p. 3).

PCC, listed as one of the six aims for the improvement of healthcare, is based on the IOM 2001 report called *Crossing the Quality Chasm: A New Health System for the 21st Century*. PCC is holistic in nature that provides “care that is respectful of, and responsive to, individual patient preferences, needs and values, and ensuring that patient values guide all clinical decisions” (OneView, 2015). The Picker Institute and Harvard Medical School, cited by IOM, extend the definition of PCC as “practices caring for patients (and their families) in ways that are meaningful and valuable to the individual patient” (OneView, 2015). This approach to healthcare steps away from the fee-for-service payment methods and incorporates the value-based reimbursement pay scale associated with a “wide variety of quality measures” (Brown & Crapo, 2014). Entities that are patient-centered follow eight principles: 1) Respect for Patients’ Preferences, 2) Coordination & Integration of Care, 3) Information & Education, 4) Physical Comfort, 5) Emotional Support, 6) Involvement of Family & Friends (as desired), 7) Continuity & Transition, and 8) Access to Care (OneView, 2015).

These eight principles were translated into the accepted 11 domains or areas recognized as the most influential for incorporation of PCC into the healthcare setting. These domains were defined by IOM, and listed as: 1) Leadership/Operation, 2) Mission, Vision, Values, 3) Advisors, 4) Quality Improvement, 5) Personnel, 6) Environment & Design, 7) Information/Education, 8) Diversity & Disparities, 9) Charting & Documentation, 10) Care Support, and 11) Care (IOM, 2001).

The research realm is poised to guide for evidence-based practices, bridging the development of new and improved procedures, evidence, or processes with current medical
practices. “To say that a health care intervention is effective implies an evidence base” (IOM, 2001), which is defined as, “the integration of best research evidence with clinical expertise and patient values” (IOM, 2001, p. 47). The approach in clinics varies depending on specialization of the health professional sector and accepted practices in care based on proven and accepted standards. Because the academic research environment has had difficulty “keeping up with the furious pace of research advances even in one’s own discipline” (Johnson, 2012), academic healthcare researchers utilize tools (not always state-of-the-art) to limit the variance among populations they work with. Dr. Paul Johnson, Vice Chancellor of the University of Western Australia, states:

Nevertheless, it is this research, which is the foundation for knowledge that makes possible so much of the innovation and application that provides wider benefit. There is a large element of serendipity in research and we need to acknowledge that for every successful connection between research and application, there are many projects that will not succeed in the same way. But such research, nevertheless, adds to the stock of global knowledge and provides the source of new ideas, methods, techniques and innovation across a whole range of disciplinary and multi-disciplinary areas (2012, para 8).

Research entities have established, through years of practice, parameters that must be followed to ensure compliance with ethical and common expectations for community acceptance. For example, the Collaborative Institutional Training Initiative (CITI), considered to be the gold standard in academic research and used by most institutions, provides training that aligns the educational demands with care to ensure safety of research participants is paramount in any research protocol. CITI, along with private and federal funding agencies, are focused on milestone and improvement measures that follow the commonly accepted ethical and procedural rules of research and through these documented practices yield findings that are credible and reproducible.
To articulate the current state of healthcare and healthcare research, this study will describe what PCC looks like in an academic clinical research environment compared to the IOM’s philosophical expectations of PCC as interpreted by the Agency for Healthcare Research and Quality (AHRQ), which has a program that assists organizations in becoming more patient-centered. This choice was made above the other federally funded agencies such as, Patient-Centered Outcomes Research Institute (PCORI) and National Institutes of Health (NIH), due to the tool TeamSTEPPS that was utilized. TeamSTEPPS is an AHRQ tool that assists the cultural changed needed to embark on the PCC endeavor. The overall goal of this project is to describe implementation of PCC in an academic research environment, by translating expectations of PCC into parallel situations within the research environment. The hope is to begin considering which attributes of PCC feasibly translate into the research realm, and how that would look, providing a point of reference that may allow the PCC philosophy to be implemented across research contexts.

Statement of Problem

The healthcare paradigm has shifted based on the recommendations of the IOM’s report 2001 Crossing the Quality Chasm: A New Health System for the 21st Century. A follow-up to the frequently cited patient safety report To Err Is Human: Building a Safer Health System that the IOM issued in 1999, Crossing the Quality Chasm advocates for a fundamental redesign of the United States health care system (IOM, 2001). It recommended improvements in six dimensions of health care in the United States: patient safety, care effectiveness, patient-centeredness, timeliness, care efficiency, and equity. This shift in priorities has altered the perspective of care by ensuring that provider-centered care is no longer the standard. The new look of care is focused around the patient who is now capable, through the advent of the internet, of knowing
the depth of information that parallels the current best practice and knowledge throughout the world (IOM, 2001).

Some federal research grants have included client quality improvement (QI) measures, process improvement, and patient satisfaction among their primary milestones of projects. The rationale for these milestones is to ensure that grant-funded research progresses as it should, and in the direction that will improve healthcare. But such measures, as of now, are recommendations that do not provide clear guidelines for transitioning into the clinical realm.

Thus, our team at an academic psychiatric research clinic has looked for new ways to improve its culture and provide the best care, not only for research participants but for patients in general. The mission of our clinic, holistic care, parallels the new PCC paradigm in the healthcare realm and provides an opportunity to discover how this paradigm will translate into the research environment. The unit functions within the department of psychiatry, at a university, and adheres to policies expanded by academia within the scope of the vision and mission of the university. However, this unit works independently and is funded specifically from outside revenue sources; public and private grants.

Our research unit consists of four doctorally prepared (PhD) administration team members, a director and three researchers, and three clinical front-line operations employees. The unit is described as “a group of investigators who use a translational approach to research that incorporates areas of behavioral, biological, physiological, and clinical approaches” (Division within the Department of Psychiatry, 2018). The research group develops empirically based preventive interventions for substance use disorders with a scope requiring a holistic approach (Division within the Department of Psychiatry, 2018).
Problem in its current context. Incorporation of the 11 PCC domains (see Table 2) in research has been challenging with discussions needing to retrace the momentum from the initial IOM documents, 2001 Crossing the Quality Chasm: A New Health System for the 21st Century and To Err Is Human: Building a Safer Health System 1999. There have been no attempts to integrate all aspects of PCC or literature to discuss what fits well within the academic research environment. At present, it is unclear how to develop an integrative process that will allow seamless incorporation of research results into clinical settings.

Research has tried to fill dual roles: providing direct care to patients and collecting data for research analyses (AHRQ, 2013). This can create a tension where clinical research design is driven by need to develop generalizable knowledge at the expense of best practices for the direct care of patient participants. Because of the research emphasis on rigor and reproducibility, study designs are specific and rigid. This focus can unintentionally create situations where a research trial can only deliver a specific treatment in a specific manner. This lack of flexibility makes it difficult to accommodate PCC concepts like patient references, coordination of care, and involvement of family/friends.

The federal government has changed reimbursement rates to hospitals and clinics based on the quality of work seen through the patient’s perspective (AHRQ, 2014). They have developed meaningful-use measures (see Figure 1) to ensure that hospital systems and providers are incorporating PCC into their practices. These measures assist organizations, with eligible professionals (EPs), in developing areas to be monitored and measured so that at least some concepts of PCC are added to standard practices.
<table>
<thead>
<tr>
<th>Functional Requirements</th>
<th>Objective / Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Computerized Physician Order Entry (CPOE)</td>
<td>• At least one medication ordered via CPOE for &gt;30 percent of unique patients seen with at least one medication on current medication list</td>
</tr>
<tr>
<td>2. Drug-drug, Drug-Allergy Checking</td>
<td>• CPOE drug-drug and drug-allergy checking features are enabled</td>
</tr>
<tr>
<td>3. Generate and Transmit Electronic Prescriptions</td>
<td>• &gt;40 percent of all permissible medication orders (excluding controlled substance orders) are electronically prescribed</td>
</tr>
<tr>
<td>4. Maintain up-to-date Problem/Diagnosis List</td>
<td>• For &gt;80 percent of unique patients seen (at least one structured entry, ICD-9-CM or SNOMED CT)</td>
</tr>
<tr>
<td>5. Maintain Active Medication List</td>
<td>• For &gt;80 percent of unique patients seen (at least one structured entry)</td>
</tr>
<tr>
<td>6. Maintain Active Medication Allergy List</td>
<td>• For &gt;80 percent of unique patients seen (at least one structured entry)</td>
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</table>
| 7. Record Vital Signs                                        | • For >50 percent of unique patients ≥2 years old, record and chart changes in vital signs (as structured data):  
  - Height, weight, blood pressure  
  - Calculate and display BMI  
  - Plot and display growth chart, including BMI (patients 2-20 years old) |
| 8. Record Demographics                                      | • For >50 percent of unique patients seen, record demographics (as structured data):  
  - Gender  
  - Ethnicity, race (federal guidelines), preferred language  
  - Date of birth |
| 9. Record Smoking Status                                     | • For >50 percent of unique patients seen ≥13 years old                                  |
| 10. Report Quality Measures to CMS and the States           | • Report ambulatory quality measures — per data captured and calculated by the EHR — to CMS or the states for specified core and specialty measures  
  - For 2011: attest to accuracy and completeness of aggregate numerator and denominator  
  - For 2012 (and beyond): submit (at least one measure) electronically |
| 11. Implement Clinical Decision Support                      | • Implement one rule (with high clinical priority for or relevant to the specialty of the EP) and track compliance |
| Health Information Exchange (HIE) Requirements               | Objective / Condition                                                                 |
| 12. Provide Patients with Clinical Summary of Office Visits  | • Satisfy more than 50 percent of requests for a clinical summary of an office visit (via Personal Health Record (PHR), portal, other electronic media, or printed output) within 3 business days |
| 13. Provide Patient with Electronic Copies of Health Information | • Provide >50 percent of patients who request copies with electronic copies of their health information (lab test results, problem list, medication, allergy lists) within 3 business days |
| 14. Implement Capability to Exchange Key Clinical Information| • Perform at least one test of the capability of the certified EHR system used by the EP to electronically exchange key clinical information (for example, problem list, med list, allergies, test results) with another EHR (not shared) |
| HITECH Privacy And Security                                 | Objective / Condition                                                                 |
| 15. Implement Systems to Protect Patient Data                | • Conduct or update a security risk assessment per 45 CFR 164.308 (a)(1) and implement security updates as necessary |
There is a federal agency, PCORI, funded through the Obamacare legislation, whose purpose is to establish rigorous criteria for PC research and fund research to advance these concepts that is not part of NIH or AHRQ. Federal milestones have begun to include screening for PCC within the research setting. These changes have now become the cornerstone for QI measures in research settings. This incorporation leads to the gap of how to apply PCC within an academic research environment, providing quality research while trying to better the acknowledged, IOM (2001), timeline for effective care to be implemented. In *Closing the Gap*, the IOM stated that it takes 17 years for new findings from randomized controlled trials to be incorporated into practice (IOM, 2001). Although the concept of PCC was introduced over 30 years ago, holistic change in research settings has yet to be implemented.

The vagueness of how to do this remains a hurdle for all practitioners (Bokhour et al., 2018). Although there are scoring systems, such as the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), which provide a percentage of reimbursements based on patient surveys, these systems require researchers and trainees to work within the payee system, with little to no understanding of why and how to use that information in a research context.

**Personal Background**

As a research coordinator for a university, I have been privy to the academic research clinic, as a subset of the support role that is undertaken in my current job duties. For patient participants, the researcher is a support resource for their direct and indirect clinical needs. The specific job duties of the researcher are to directly support the department chief within the organization, but part of his added responsibility and expertise is to guide the production of a successful working environment that meets funding authorities’ expectations.
I have been in the medical field for 16 years as both a front-line employee and an administrator. My healthcare professional journey began while I was enlisted soldier in the United States Army. I was a laboratory technician, where I saw both the good and bad aspects of management and care. After my military service ended, I worked in a hospital setting, learning about medical care in the civilian world. I then earned an Associate in Science in the Field of Health Sciences degree from George Washington University, and a Bachelor of Business Management and Master of Healthcare Administration from the University of the Incarnate Word. I have gained many perspectives in healthcare: front-line, middle management, administrator, direct, and indirect, that sum up the complexity felt and seen within the healthcare field.

My professional career experiences have formed my personal approach to care. I seek to ensure that all avenues of PCC are fulfilled and not forgotten, and to include the needs of the personnel within the clinic. I first heard about PCC as a practice manager for a surgical group in a hospital system. Meaningful use measures were targeted to ensure that opportunities to receive complete reimbursement were not missed. PCC meant employees were no longer transient members of the provider’s arms, but rather autonomous advocates, whose function were to create an atmosphere that would reinforce the new direction of the community.

In my current position within an academic research clinic, the holistic approach of PCC was mentioned at an administrative meeting in which we discussed QI measures being required as a condition of federal grants. We then pursued the opportunity to become Master TeamSTEPPS Trainers through the AHRQ. This program assists organizations in becoming more patient-centered, and has us on the verge of fully incorporating this mindset within our practice.
Purpose of the Study

The intent of this study is to serve as a catalyst for deepening discussion of implementation of PCC into the current parameters of an academic research environment. This case is one of the few, if not the first, that addresses the successes and barriers of PCC as seen through the eyes of key personnel engaged in providing care that aligns with current healthcare demands.

This study describes the implementation of PCC domains within an academic research environment, maintaining the traditional research goals of providing high quality and sound research that will bring new and improved procedures, equipment, and strategies to benefit patients. This study identifies the mechanism of translation and implementation of PCC domains within clinical academic research.

I interviewed a work unit of six employees within an academic research environment, three scientific researchers and three front-line employees, who were participating in implementation of PCC. I used a qualitative research design to specifically form a focused ethnography to hear each person’s unique story from his or her perspective. The goal is to learn what factors facilitated or hindered the process, and identify common themes that can be used to define and shape PCC in the academic research environment.

Research Question

This study specifically addresses the following research questions:

1. How is the PCC paradigm implemented in an academic research environment?
2. What are the perceived challenges of implementing PCC in an academic research environment?
Summary of Appropriate Methodology

LeCompte and Schensul (1999, p. 9) posit seven characteristics that mark a study as ethnographic., Studies; (a) describe events “as they occur in their natural setting, (b) researchers become intimately involved with participants through face to face interactions, (c) places emphasis on accurately reflecting the participants’ perspectives and meanings, (d) uses and inductive, interactive and recursive (e.g., cyclically moves back and forth between inductive and deductive analysis) process data collection and analysis, (e) uses multiple data sources, (f) examines behavior and belief as existing in context, and (g) guided by the concept of culture as a lens through which to interpret results (Maddocks, 2008).

LeCompte and Schensul (1999) suggest that a focused ethnographic research design is appropriate when (see Table 1) (a) the researcher is familiar with the field setting or cultural context, (b) the work is focused on one specific aspect of the culture, (c) the researcher works in concert with local experts familiar with the culture who can help in designing the research and interpreting the results, (d) data collection can be accomplished in a relatively brief period of time (i.e., as compared to more traditional cultural ethnographic studies which can span over several years), and (e) multiple data sources are used and data are triangulated (Maddocks, 2008). Thus, this study used a focused ethnographic design.

Clinical Determination for Focused Ethnographic Case Study

In February 2017, the administrative group of an academic research clinic was discussing QI reporting for grant-funded research, and exploring how best to incorporate current healthcare practice to strengthen their position. The investigative team learned of an initiative, the TeamSTEPPS Master Trainer program, developed by AHRQ. TeamSTEPPS is documented to improve collaboration and communication within a practice by developing the
Table 1

Comparison of Focused Ethnography to Traditional Ethnography: When to Use Focused Ethnography

<table>
<thead>
<tr>
<th>Focused Ethnography</th>
<th>Anthropologic Ethnographies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific aspect of field studied with purpose.</td>
<td>Entire social field studied</td>
</tr>
<tr>
<td>Closed field of investigation as per research question.</td>
<td>Open field of investigation as determined through time.</td>
</tr>
<tr>
<td>Background knowledge usually informs research question.</td>
<td>Researcher gains insider knowledge from participatory engagement in field.</td>
</tr>
<tr>
<td>Informants serve as key participants with their knowledge.</td>
<td>Participants are often those whom the researcher has developed a close relationship.</td>
</tr>
<tr>
<td>Intermittent and purposeful field visits using particular timeframes or events, or may eliminate observation.</td>
<td>Immersion during long-term, experiential-intense fieldwork.</td>
</tr>
<tr>
<td>Data analysis intensity often with numerous recording devices including video cameras, tape recorders and photo-cameras.</td>
<td>Narrative intensity.</td>
</tr>
<tr>
<td>Data sessions with a gathering of researchers knowledgeable of the research goals may be extensively useful for providing heightened perspective to the data analysis particularly of recorded data.</td>
<td>Individual data analysis.</td>
</tr>
</tbody>
</table>


teamwork initiatives and identifying the need to deliver better care through communication (AHRQ, 2013). The Master Trainer program was briefly brought to the university setting, with two members of the clinical administration team completing the training of the TeamSTEPPS process, but there has been no follow-up at this time within the overall university.

This focused ethnographic case study directly looks at the implementation of PCC in an academic research setting and the challenges in meeting the standards expected by AHRQ and the Institute for Healthcare Improvement (IHI), who developed the survey utilized in this project.
This approach will elucidate how PCC is being implemented within an academic research environment and incorporate first-hand accounts and conversations about PCC, through the perspective of those engaged in that process.

**Theoretical Framework**

The main theories that will be used consist of change management, PCC, and Deming’s Theory from total quality management (TQM) principles (Haughom, 2016). These theories will help to explain the current approach of healthcare and describe the framework being used to implement PCC within the academic research environment.

**Significance of the Study**

This study will describe the process of implementing the PCC paradigm into an academic research environment. The knowledge gained will educate and can assist, academic investigators and staff, by showing what aspects of PCC are viable in the context of today’s healthcare research environment. The dissemination of this knowledge may assist these individuals in better understanding the changing culture of healthcare and help them incorporate the PCC paradigm into their research protocols and procedures.

**Definition of Terms**

An academic research environment is an area where the investigations and writings are based upon the idea of scientific, organized, inquiry to provide information for the solution to a problem (Frank et al., 2015).

The clinical care process is providing observations and treatment to patients in a true healthcare setting (i.e., ob—gyn, primary care, surgical, emergency) (Foley & Steel, 2017).

Clinical PCC is the process of providing observations and treatments to patients through the PCC perspective (IHI, 2013).
Culture is "the sum of a social group's observable patterns of behavior, customs, and way of life" (Maddocks, 2008).

Domain is any symbolic category that includes other categories. All the members of a domain share at least one feature. The domain structure includes three elements (a) a cover term, (b) two or more included terms, and, (c) a single semantic relationship (Maddocks, 2008, p. 12).

Cover term - names for a category of cultural knowledge (e.g., tree, Maddocks, 2008, p. 12). Included terms—folk terms that belong to the category of knowledge named by the cover term e.g.; oak, Maddocks, 2008, p. 12). Semantic relationship- the link between two folk categories (e.g., is a kind of, Maddocks, 2008, p. 12).

Organizational change management (OCM) is a framework for managing the effect of new business processes, changes in organizational structure or cultural changes within an enterprise. Simply put, OCM addresses the people side of change management.

Patient- and Family-Centered Care (PFCC) for this research project PFCC will be synonymous with PCC and is parallel to the definition listed in the definition of terms (OneView, 2015).

Limitations

The researcher acknowledges a preferential bias towards PCC but will interpret the data as an outsider of the current environment through the QI lens. This is a single case with a small sample size, and not representative of the complete research field. Data interpretation takes into consideration a specific academic research environment; they are not cross-sectional and cannot be generalized across all academic research environments. Limitations also account for the research limits inclusion factors for PCC.
Organization of the Study

This research dissertation consists of five chapters. Chapter 1 includes the framework for the study to follow. It contains the introduction to the study, context of topic, statement of the problem, history of the problem, problem in its current form, personal background, purpose of the study, research question, summary of appropriate method, theoretical framework, significance of the study, and definition of terms and limitations. Chapter 2 presents a literature review as it relates to this particular study. The literature begins by exploring PCC as it was originally intended for use in the healthcare field. This section includes the domains listed for PCC in healthcare and their links to reimbursement and pay incentives, current research trends of PCC implementation within academia, and current directions for approaches to change in the QI context, required by some funding agencies. Next, the chapter discusses implementation, in all forms, where it lies within the research, and how close academic research is to complete PCC integration across all aspects of care. Chapter 3 describes the research and methodology used for this study: its overall approach, methodology, population, setting, participants, instruments, strategies, protocols, ethical considerations, data analysis, role of researcher, trustworthiness. Chapter 4 highlights the research findings, analysis, and interpretive approach in the qualitative case study design. Chapter 5 summarizes findings within Chapter 4, conclusions, contributions to research, recommendations, and overall summary.

The goal for myself is to assist academia in inundating the literature with studies that will highlight the PCC paradigm. Creating an understanding of what fits well in academic research—and what does not—is key to ensure that any policies/procedures can be easily transitioned into current care environments. In the current state of PCC, developing tools and investigations that
lead to the overall implementation of this paradigm as a whole is needed to ensure that all aspects of healthcare are moving in the direction determined as the best approach to care.
A Review of Literature

Chapter 2 will discuss the current literature of PCC, and PCC implementation efforts and outcomes within the academic research environment. This discussion will provide the foundation for inquiry into this phenomenon, and introduce an emerging method of inquiry within the healthcare field for qualitative studies. The literature begins by exploring PCC as it has been intended to be used in the healthcare system, exploring PCC domains and their links to reimbursements and pay incentives, and current research trends of PCC implementation within health care research. The approach to implementation in the research realm is guided through QI measures for grants and governing agencies. Next, the chapter discusses implementation, in all forms, where it lies within the research environment and how close academic research is to complete PCC integration across all aspects of care.

A review of literature within the healthcare realm generates more questions than answers. Most publications to date fall between the detailed complexity of successes in innovations and procedural improvements, to poorly defined attempts to develop common themes, goals, or paradigms for the healthcare field in its entirety. The desire to accomplish continuous improvement in healthcare is not new – it spans back to the time of Florence Nightingale, during the Crimean War of October 1853, who sought to document ways to improve quality of life and care, better disease identification and elimination, and relationship building between caregivers and patients (Sheingold & Hahn, 2013). PCC was first identified as a need within healthcare systems in the early 1930s, as a desire to move from a physician directed to patient-directed care, and reemerged over thirty years ago, in the early 1980s.

Healthcare scholars describe efforts (administrative and professional) and catalysts of our current medical practices as “many fragmented collections of unrelated events” (Sheingold &
Hahn, 2013). Paradigm shifts can be described through periods: specific disease mechanisms and
treatment (oldest) to international health and global health (PCC paradigm) (DeAngulo &
Losada, 2015). It is important to know what periods are being considered as this leads to the
understanding of the thought process at the time. (IOM, 2001)

The foundation of these dimensions is steeped in QI ensuring a continual flow for change
so that each realm does not become stagnant or outdated. But this flow has yet to be cultivated or
refined to ensure that all the participants’ values are truly represented and that PCC is fully
incorporated within the research realm.

However, PCC is now included in the most accepted criterion for accessing the
effectiveness of healthcare delivery, the quality measurement (Sheingold & Hahn, 2013). PCC
has also become a main factor in the Centers for Medicare and Medicaid (CMM) payer/payee
scale. The change from disease-driven to fee-for-service reimbursement has been the catalyst for
this investment (IOM, 2001). Put simply, physicians no longer receive a lump sum for
reimbursement related to care for a given patient and disease; rather, they are now having to code
specifically the services delivered to receive payment for them.

In academic research, QI is the entry point for PCC, and can be captured in milestone
measures reported annually in process update reports. QI has become a goal considered worth
pursuing in all healthcare elements. In this dissertation, I will identify the links between PCC and
research through TQM/QI concepts, the emerging discipline of implementation science, and
Deming’s Five Principles of Healthcare Improvement.

There is disagreement about what PCC means, as seen through the eyes of practitioners (doctors,
nurses, frontline workers); administration and management teams; and scholars in theories of
care. Uncertainty remains about how to traverse the complexity of healthcare to reach the “new
system for the 21st century” (IOM, 2001). As stated by the IHI, “PCC is in the consciousness of most every health care leader….considerable resources are expended to solicit feedback on it….nevertheless, many organizations continue to struggle with what “it” is” (IHI, 2013). This ambiguity leaves many with vague or muddled expectations for what constitutes PCC (Moretz & Abraham, 2012).

The PCC approach ideally incorporates people at all levels of the healthcare system, from frontline staff to CEOs, so that everyone knows the right action for transitioning PCC concepts into the culture as a whole. In the research realm, using all aspects of the PCC does not seem to have been fully attempted. The literature shows many different aspects of the paradigm: communication, patient involvement, family involvement, their successes, failures, perceptions and needs, but only in the form of individual components (Bokhour, et al., 2018). The rationale behind this mindset is that moving completely, to a holistic encounter, does not fit the production of quality and sound research as needed to ensure validity.

**Review of Research Studies on PCC**

Most of the literature on components of PCC describes the theoretical and practical uses within the niche of which the researchers are learning through. Authors agree on the goals of PCC as a central component of high-quality healthcare, but have been unclear on what it is and how to properly measure it (Epstein et al., 2005). In an academic setting, work toward a complete PCC effort begins with having effective communication skills, which are part of each individual’s continuing education process. As well as, being open to learning can help to incorporate the paradigm into practice and research as a fundamental aspect of care (Lambert et al., 2009).
The problem as seen in the literature toward achieving successful PCC is the lack of implementation strategies or guidelines for systematic incorporation. New strategies must be developed that require an integrative, overarching theory of health, built on sound successes for PCC implementations. The real test or measure will be to see if the new strategy leads to productive research that increases our knowledge and improves our ability to keep ourselves and other people healthy (Lambert, et al., 2009)

**Communication in a PCC Environment**

Studies of PCC communication endorse the goal as being an approach that helps practitioners provide care that is concordant with the patients’ values, needs and preferences, and allows patients to provide input and participate actively in decisions regarding their health and health care (Epstein, et al., 2005). According to Epstein, et al. (2005), PCC includes four communication domains:

1. Eliciting and understanding the patients’ perspective – concerns, ideas, expectations, needs, feeling and functioning.
2. Understanding the patient within his or her unique psychosocial context.
3. Reaching a shared understanding of the problem and its treatment with the patient that is concordant with the patient’s values.
4. Helping patients to share power and responsibility by involving them in choices to the degree that they wish. (Epstein, et al., 2005)

In 2009, Lambert et al. (2009) commented that PCC “has now become an outgrowth of macrosocial trends, that include the aging of the population, growth of chronic illness, focus of quality, advent of managed care, and the realization that psychosocial factors impact overall health” (Lambert et al., 2009, p. 27—28). As noted, PCC communication plays an integral role
in the seven dimensions defined by IOM. Lambert, et al. (2009) identified two distinct approaches taken by researchers studying communication and PCC. The first approach defines PCC and then asks how communication processes fit into the larger PCC process. The second is to “adopt a specific theoretical perspective in communication research and then ask how this theory might shed light on PCC” (Lambert, et al., 2009, p. 30—31).

**Patient Participation in a PCC Environment**

Patient participation studies have used two tools, TeamSTEPPS and Implementation Surveys, to coordinate involvement at all levels of care. Challenges seen in this aspect of PCC have led researchers to develop recommendations to enhance communication between participants in care, such as making the transfer of information a priority, eliminating redundancy, and addressing patients’ boredom (Khuan & Juni, 2017). In their qualitative study, Khuan and Juni (2017), highlight four main themes pertaining to patient involvement that inhibit nurses from delivering PCC, as defined by IHI.

1. Superficial involvement related to knowledge deficit, inexperience, and/or task-orientated mindset.
2. PCC as interactive and respectful of patients’ wishes and/or decisions.
3. Impracticality of patient involvement in relation to time constraints, length of interaction, and hierarchy of nurse-patient communication.
4. Patient involvement as not representative of PCC due to violations of patient autonomy. (Khuan & Juni, 2017, p. 219)

They concluded that for optimal patient treatment – for example, when patients move to different parts of the system or during shift changes of nurses (called “handovers” or “turnovers”, respectively), the level of involvement and care direction explanations depends on
how nurses view the practicality of their involvement and the importance of PCC (Khuan & Juni, 2017).

The reality of partnerships in PCC is still under investigation with further clarifications to understand how a partnership is created and perceived. Wolf et al. (2017) identified themes that included an “informal and formal aspect of partnerships” (Wolf et al., 2017, p. 4). Informal elements of communication provide the conditions for communication and mutual cooperation that are the foundation of true partnerships (Khuan & Juni, 2017). The concept that professional and patient perspectives should highlight the importance of participation and human connectedness is a crucial factor in the realization of PCC.

Patients’ perspectives of participation in PCC fall into two areas: the staff that provided the care, and the system in which they operate. Work by Marshal, Kitson, and Zeitz, (2012) suggests that patients do not seem to differentiate or discriminate between health professional groups and clearly see a difference in the activities of these different professions; to patients, all staff are responsible for their care (Marshal, Kitson, & Zeitz, 2012). For patients to perceive true PCC, they must perceive it at all levels within the system. There is an important overlap in what patients experience in their care and what they want as part of the PCC process.

**Family Participation in a PCC Environment**

Participation of family members is important within the PCC environment, especially for hospitalized patients. Numerous studies in different realms of care speak to the difficulty of implementing PCC in hospitals. However, two studies that describe the complexity of connectedness of family participation in care were set in adult intensive care units (ICUs) and pediatric ICUs. Brown et al., (2015), in defining patient and family engagement in an ICU, observed that the emotional stakes in this environment are high, time is greatly compressed,
surrogates play a central role, and the specter of death often dominates decision making (Brown, et al., 2015). Thus, in ICUs, they determined that the engagement of patient and family care required by PCC would apply differently and in varying levels. For example, they suggest that PCC success could be captured in QI metrics for patient experience and satisfaction, specifically viewing these criteria as opportunities to improve the timeliness of family meetings or consultations.

In pediatric ICUs, parents or family members struggle more with the severity of their child’s illness and how to care for their child; this requires most of their attention and limits their levels of participation in care due to high stress (Hill, Knafl, & Santacroce, 2018). As in the adult ICU, family participation in the pediatric ICU is influenced by attitudes and actions of health professionals, such that challenges remain in incorporating PCC in these environments (Hill, et al., 2018).

**Major Areas of Review**

The major areas of review for this dissertation will include PCC theory, academic research QI, and change management, with a discussion on implementation sciences and its impact in academia. Sources used for the literature review were PubMed, Google Scholar, ProQuest, CINAHL, and the UT Health and UIW Library archives.

**PCC Theory**

For this study, I will use the IHI’s definition of, and requirements for, PCC. The IHI defines PCC as an approach to care, perceived as the right thing to do (IHI, 2013). Behaviors associated with PCC, such as respecting patients’ preferences, should be justified on moral grounds alone, independent of their relationship to health outcomes (Epstein & Street, 2011). Patients’ desires to feel known, respected, involved, engaged, and knowledgeable, may mitigate
their distress associated with their illness and uncertainty about their outcomes. Proximal outcomes of PCC—feeling understood, developing trust, or motivation for change—might contribute most strongly to improved adherence and self-care (Epstein & Street, 2011).

An organization that uses this holistic approach has incorporated this change through all levels of the system in some form. Being able to say that one has reached the “gold standard” of what PCC is, means that employees at all levels of the organization no longer need reminding about these principles, and can react to the situations of care in a manner that is considered patient-centered with little feedback or acknowledgement. This behavior is considered a way of doing things that is simply a vessel of the holistic improvisations fundamental to the wellness of patients as unique and complete owners of their body, mind and soul (Epstein & Street, 2011). Some consider PCC a return to the pure form of patient care (Bergeson & Dean, 2006), when physicians made house calls at any point of the day or night. This mentality can be easily stated and understood by many people, but is hard to achieve today, as the policies, security, and pay systems have a complex influence in what is viable and reasonable in care. PCC now needs to be conceptualized into a process that accounts for the cultural shift in care delivery from the old to the new, throughout all areas.

In June 2013, the IHI and the National Institute for Children’s Health Quality (NICHQ), in partnership with the Institute for Patient- and Family-Centered Care, developed a tool called the Patient- and Family-Centered Care Organizational Self-Assessment Tool (PFCCOST) (IHI, 2013) (see Appendix A). This tool allows organizations to understand the range and breadth of elements of PCC, and to assess where they compare to the leading edge of practice (IHI, 2013). It organizes the eight principles of PCC (listed in Table 1) into specific domains, allowing any team to rate their performance as a reference for the organization (IHI, 2013).
The PFCCOST subdivides these eight principles into 11 domains (see Table 2) that allow a deeper understanding for what is being done within the system being assessed. Each of these domains breaks down specific elements that align with PCC, all of which are ranked on a Likert scale from low (1) to high (5), with a “do not know” box at the end. The goal is for the survey tool to be completed by a team whose members are requested to provide their non-biased, honest opinion, and reflect as to why they have chosen the number rank score for the domain category. This allows for the team to create a plan to move forward ensuring that they become more PCC-oriented.

Although PCC can be found in multiple settings within the literature, implementation of the whole process has yet to reach the academic research realm. There have been attempts made by many individual organizations on one element of care; e.g. communication. However, the totality of the complex integration of PCC has not reached full materialization.

**Strategies Towards PCC**

When viewing the many components of PCC, some strategies have been identified to assist overall communication and buy-in from all involved parties. In one study, Nguyen, Bauman, Watling and Hahn, (2017) sought to identify factors that oncologists felt would increase their ability to practice PCC (Nguyen, Bauman, Watling, & Hahn, 2017). They identified two strategies: improving physician-patient communication, and streamlining care delivery (Nguyen et al., 2017). Improving communication falls in line with moving from a provider-driven approach, to a more patient-centered system (OneView, 2015). The authors noted that discussion for the change toward PCC enhancement in the current care system must (a) provide a clear understanding of the PCC principles, and (b) involve the insight of the physician, who may have invaluable experience into the barriers and systems that may impair
PCC. Finally, they suggested that recognition for the current strategies being used by physicians was important, and could increase the adoption of best practices within the institution (Nguyen et al., 2017).

The study suggests that there are many current practices within the health system that align with the principles of PCC. For example, “Most providers want their patients to have a positive healthcare experience” and this should be “sufficient motivation to aspire to PCC” (Nguyen et al., 2017). But they continued, “The ongoing challenge will be identifying additional strategies to address barriers to change that are feasible within the current healthcare constraints, while working toward removing these high-level limitations” (Nguyen et al., 2017, p. 219).

**Better Engagement and Patient Health Outcomes**

Ensuring better engagement and health outcomes through implementation is seen as a necessary part of patient-centered (Miller, 2016, p. 466). Patient engagement/activation is important, since health care system redesign focuses on the patient’s role in self-management. To incorporate a foundation for change of behavior that will enhance the patient’s confidence for readiness and lasting change, providers may use tools and resources currently available, such as motivational interviewing and self-determining theory (Miller, 2016).

Constructs that assess patient engagement encourage participation by placing accountability on both the caregiver and patient to make changes in behavior and terms (Miller, 2016, p. 465). Interventions towards PCC can include better two-way communication and an understanding for the change behaviors required (both for the patient and provider), to help them make appropriate choices and implement lasting changes (Miller, 2016). PCC requires the involvement of the patient and/or the caregiver at the center of the plan; when sustainable change
is encouraged and barriers removed, patients are more likely to realize positive health behavior change and in turn demonstrate improved health outcomes and health (Miller, 2016).

**PCC Practice Successes**

The current literature on PCC widely acknowledges the importance of creating a PCC culture across the continuum of care structured across the recognized domains mentioned earlier, see table 2. These domains are linked to the values of PCC listed by OneView (2015) as a guide to successful implementation. However, as one study stated, “The lack of emphasis on PCC in medical education remains a barrier to its implementation” (Santana et al., 2017). This has created a “practice gap”, wherein current medical education focuses on an older biomedical model that is not standardized across healthcare sectors or co-developed by patients and healthcare providers. The rapid emergence of PCC creates a need for innovative education programs endorsed by stakeholders through all facets of the healthcare field (administration to governing agencies) that incorporate all levels of the care process. To improve health and health care, health-care systems must find a way to effectively implement and measure PCC (Santana et al., 2017). Success can be captured, for example, in HCAHPS reporting from the outpatient perspective. Using this as a catalyst for implementation could be a guiding point across the care spectrum.

**PCC in Academic Research**

In the academic research environment, the PCC paradigm is in the introductory stages. In the academic research clinic where the current study took place, a provider realized that incorporating PCC concepts could enhance progress toward grant milestones by incorporating voluntary QI metrics, showing the clinic was exceeding the required reporting. It was through this search that the TEAMStepps tool of PCC (recognized in the Department of Veterans Affairs
system) was discovered and the Master Certification for Trainer of TEAMStepps (see Figure 2 in Appendices) journey began.

The literature for PCC does not have a “how to” guide or case studies in the research literature that allows for examples, comparisons, and checkpoints for inclusion. The concern in the research realm is maintaining the original concept of the research while ensuring validity of the study and meeting expectations of institutional review boards (IRB), milestones from funders, and other measures.

IHI’s goal of making PCC the way care is done throughout the entire healthcare field does not provide clear expectations for researchers (Christensen, 2017). The benefits of PCC are commonly agreed upon, but moving this paradigm into the complex research realm seems to be elusive. How are researchers to embed the new paradigm into their practice and allow for the uncertainty and flexibility that exists in research, yet ensure that monetary penalties for not reaching PCC milestones are not onerous?

In an attempt to provide case studies and for the implementation of PCC in the academic research environment, this study will discuss in depth the ins and outs of implementation as seen in this environment. This discussion will be tailored through the change management process, which eases organizational transitions and helps employees understand, commit, accept and embrace the changes in their environment (Al-Abri, 2007).

**Change Management/TQM**

Change management is a collective term for all approaches to preparing and supporting individuals, teams, and organizations to make organizational change. It includes methods that redirect or redefine the use of resources, business processes, budget allocations, or other modes of operation that significantly change a company or organization (Anderson & Ackerman-
Anderson, 2001). OCM considers the complete organization and what change is needed, while change management may be used solely to refer to how people and teams are affected by such organizational transition. OCM is used in many different disciplines, from behavioral and social sciences to information technology and business solutions (Anderson & Ackerman-Anderson, 2001).

Understanding today’s change management means appreciating that organizations are now structured to plan, and not simply react to, challenges of changes within the system or environment. Agents of change management recommend small changes over time to improve the activities of the organization and ensure viability in the market place (Anderson & Ackerman-Anderson, 2001). Regardless of the type of setting, all organizations can appreciate the basic concepts and theories of change. The core elements are:

1. Identify what will be improved.
2. Present a solid business case to stakeholders
3. Plan for the change.
4. Provide resources and use data for evaluation.
5. Communicate.
6. Monitor and manage resistance, dependencies, and budgeting risks.
7. Celebrate success.
8. Review, revise, and continuously improve.

The models for change have become specific and well designed, yet the core elements have not changed, items have been incorporated into one or the other, and there has been overall acceptance and growth of the tools and theories (8 Elements of an Effective, 2018).
Change management in healthcare has similar goals to any other business niche: to improve quality and safety, save money, and develop a cycle for continuous improvement (Al-Abri, 2007). These goals are now an expectation that coincide with the new paradigm of healthcare, PCC. IOM has incorporated this approach in the six aims identified in Crossing the Quality Chasm (IOM, 2001), see table 5.

Quality management (QM) in the academic research realm is somewhat challenging because the goal for most research is to ensure that there is little to no variance within the delivery of care or process and allows data to guide improvements or changes (Bergeson & Dean, 2006). For other change management situations, ensuring improvements to the stated goal(s) is desired; however, in the research realm, measuring an event can change the nature of the event. Any intervention in the event can and will affect the validity or truth of the effect.

However, with the new PCC paradigm, incorporation of QM will assist researchers by ensuring that QI principles can become fully effective in the relevant area. QM and QI are similar concepts; QI involves managing the small items needed for change, while QM is an ongoing long-term approach to improve processes, products, and services (where PCC currently lies in healthcare) (Anderson & Ackerman-Anderson, 2001). Having a basic understanding of what is expected in the process and how to effectively include these theories and tools in the environment allows measures to be defined and checkpoints to be determined, creating a path that can be followed by others.

In the academic research environment, seeing the implementation of PCC delivered in QI reportable measures as analogous to PCC in Clinical Care, signals that PCC is here to stay. Thus, researchers need to develop a system to ensure that the fitting PCC into their projects’ design and execution does not affect the overall goals of true research.
QI (5 Deming Principles)

QI is a systematic, formal approach to the analysis of practice performance and efforts to improve performance (American Academy of Family Physicians (AAFP), 2017). QI is essential to a well-functioning practice interested in improving efficiency, patient safety, or clinical outcomes (AAFP, 2017). In healthcare, QI is an overall approach to the practice; for example, in most medical practices, QI assists the practice in being staffed properly according to the Medical Group Management Association (MGMA) standards and policies of their affiliated hospital systems.

Physicians themselves must also take steps that will keep them competitive. QI in the healthcare industry can determine the success or failure of a practice/physician. Some examples of procedures affected by QI are robotic-assisted surgeries, new dyeing techniques in imaging, and managing care at the patient’s bedside. PCC affects delivery of care in these and other medical specialties (Weber, 2017)—not to mention its effects on other units, such as marketing, billing/coding, administration, and direct/indirect care support groups. These may all have the same goals of care as defined by IOM, but limited to their specific realm.

The complexity of the healthcare industry means that different missions and visions sometimes place units in conflicting positions, creating barriers to providing high-quality PCC. Although the specified goals of healthcare are to provide the six aims of care, the reality is that healthcare is as successful as it is allowed to be as some principles from other disciplines can be a useful guide, however.

One of the leading theorists of QI was an engineer named William Edwards Deming (1920s—1993) (Business and Management, 2008). Dr. Deming is credited as the father of total QM, and he developed or was a catalyst for many currently used concepts and theories (Dr. W.
Edwards Deming, 2018). Some of these are used in healthcare today, e.g. the Plan-Do-Study-Act (PDSA) Cycle, Lean Management, Lean Six Sigma, and Continuous Improvement (Dr. W. Edwards Deming, 2018). The Five Deming Principles are directly applicable to healthcare process improvement. These are:

- QI is the science of process management;
- If you cannot measure it – you cannot improve it;
- Managed care means managing the process of care, not managing physicians and nurses;
- The right data in the right format, at the right time, in the right hands;
- Engaging the “smart cogs” of healthcare. (Haughom, 2016)

In the healthcare realm, the Five Deming Principles were first introduced in the 1980s by Donald M. Berwick and Paul Batalden. Both were pediatricians who were convinced that the Deming Principles could be used to approach healthcare quality from an entirely different perspective than before (Anderson, & Ackerman-Anderson, 2001). These influential physicians, who began IHI, have now been involved in TQM in healthcare for two generations, and left their mark on IOM’s recommendations for healthcare. “To be effective, any regulation designed to protect patient safety must focus on continually improving the safety of the process and systems of healthcare, rather than on punishing providers” (Anderson, 2010, p. 72).

The Five Deming Principles can inform the scope of implementation by ensuring that items most needed within the practice are laid out specifically through strategic planning. “Strategic planning needs to anticipate many changes, such as, customer’s expectations, new opportunities, and advance diagnostic technologies development” (Gunjan, 2009, p. 3). Knowing weaknesses and strengths of a practice is useful when reviewing theories, and models, deciding what areas can primarily be included. This knowledge may assist in understanding where the
remaining attributes of the PCC model expectations will fit, if at all. The nature of PCC means that all practices have to make a change that will affect their long-term identity. Those who can address current ambiguities in PCC with proven methods will be far ahead of the game when the mandates in research start to be incorporated.

In academic research, QI is a desired outcome, not a mandated milestone for the investigation being conducted. However, some healthcare providers can be assessed penalties for not meeting the HCAHPS criteria. For example, in environments where the trainee physicians are overseen by a provider. The provider takes all the HCAHPS negative reviews if the trainer does not meet the care as desired by the patient. For those who can incorporate inclusion of PCC voluntarily, the benefit will come from the continued support and funding for their work.

Furthermore, a health care environment that is aware of its position, in the market of potential patients/clients, and knows its strengths and weaknesses promotes collaboration of administrators and physicians and is in a better position to reduce harm to patients (Cantiello, Kitsantas, Moncada, & Abdul, 2016).

In some research, studies use the QI tool PDSA Cycle to demonstrate interventions within the practice, and to provide data from the client perspective, to inform future efficacy studies of change management using PDSA for target participants (Mathias et al., 2018). The uses of QI are diverse within the research realm and are becoming broadly accepted and acknowledged as an integral part of growth for the future.

As research continues, the evolution of QI and PCC within the research realm of healthcare may generate substantial evidence to describe all aspects of total PCC incorporation and generate new findings.
Related Research

**Implementation science.** Implementation science is an emerging field, pioneered by Dr. Enola Proctor, concerned with dissemination and implementation of evidence-based practice, with the goal of advancing conceptual and methodological tools for dissemination and implementation practice.

Implementation science is the science of studying, testing, and understanding strategies for implementation, preferably of evidence-based interventions. This field comes from the perspective that we can create effective treatments, but if they are not disseminated they are worthless (Proctor et al., 2008). This new but growing discipline crosses disease-specific areas and emphasizes the rigorous testing of interventions in real-world settings.

**Methodological Approach**

**Focused ethnographic case study.** The purpose of this qualitative focused ethnographic case study is to discover how implementation of PCC, as defined by the IOM and AHRQ, integrates within the current healthcare research settings, the success and failures as seen in this study. A focused-ethnographic case study was chosen, since it is an applied and pragmatic form of ethnography that differs from other ethnographies due to it being a time-limited, exploration of a particular phenomenon (Knoblauch, 2005).

The phenomenon under investigation was the implementation of a new paradigm within an academic research setting. Focused ethnography presumes a close familiarity with the field as a precondition of its primary research phase (Kuhn & Garcia, 2013). The phenomenon under investigation was the implementation of a new paradigm within an academic research setting. As a research method, focused ethnography allows for the researcher to discover what is happening to the individuals, groups, and culture of the particular setting gaining meaning from the in-
context data (Neal, Brown, & Rojjanasrirat, 1999). “The focused approach is often used in health-care research and provides in-depth descriptions of a specific phenomenon of interest” (Haagen, 2001, p. 12).

This method was chosen based on the opportunity that presented itself to the researcher. This case developed for the researcher as if it had been waiting to be crossed in a path. The timing for the events that had taken place and the ability for the researcher to be in the position to be an outsider, with insider perspective, allowed this dissertation to form into what it is today. The researchers’ goal based on the minimal literature on PCC implementation within the academic research setting is to leave a case that can be used as the basis for conversation and comparative analysis for future researchers. It is desired that the information on this topic be provided with speed and accuracy to allow conversations of substantiated facts and reduce the 17-year gap of bringing new strategies to fruition.

The evidence gathered in this case, highlights, the complexity of the academic research environment, of which, the necessity to accommodate many avenues to ensure a valid truth to be spoken. The difficulty of maneuvering within the academic research arena adds to the uncertainty of implementation for the PCC paradigm. The situation that delivers the best evidence is of highly scrutinized applications that provide the guide for acceptance into the variables associated with “good” research and practice. Seemingly, whether a procedure or policy is successful within the current healthcare paradigm is not at the forethought of the educational environment, but rather ensuring that the procedure or policy abides by current research and academic standards.

Focused ethnography allows for the connections and conversations of this dynamic to be delivered to the audience as an avenue to consider. It allows for the participants to garner the
depth of knowledge from first-hand accounts within the setting and delivers the perspective for which to understand these conversations (Maddocks, 2008).

Qualitative research follows the discovery paradigm allowing the researcher to participate in the setting using protocols in an effort to describe and understand the topic (Haagen, 2001). The approach of this study, a focused ethnographic case study, was chosen because it allowed the researcher to study immediate phenomena while considering historical and cultural contexts (Haagen, 2001). A focused ethnography usually deals with a distinct problem in a specific context and is conducted within a sub-cultural group rather than with a cultural group that differs completely from that of the researcher.

Summary

This chapter discussed the current literature in PCC and the outcomes of PCC implementation efforts within the academic research environment. This discussion provides the foundation for inquiry into the phenomena of implementation of PCC in an academic research environment, as well as, introducing the method of inquiry for this qualitative research study. The literature began by exploring PCC as it has been intended to be used in the healthcare field and provided evidence of inclusions of individual domains. The research studies have provided an understanding of the complexity of the holistic paradigm and the difficulty on complete implementation. There has been a systematic approach to implementation that begins with the understanding of the vision and mission of the organization using communication to foster the change toward PCC. This section includes the domains listed for PCC in healthcare and their link to current research trends of PCC implementation within academia, as well as, current direction for approach to change as used in QI for grants. Next, the chapter discusses implementation, in all forms, where it lies within the research and how close academic research is to complete PCC
integration across all aspects of care. In its current form, the PCC paradigm has yet to fully manifest within the research realm, but attempts are continuing to advance knowledge and bring researchers closer to fruition.
Discussion of Methodology and Data Organization

Overall Approach and Rationale

The purpose of this qualitative study is to describe the implementation of PCC within an academic research environment. This study describes what the implementation of PCC looks like in such an environment, while keeping the traditional research goals of conducting high-quality and sound studies of new procedures, equipment, and verified strategies that may enhance healthcare locally and globally. In this project, an academic clinical research group in the midst of a paradigm change was the setting for this case study conducted with qualitative research methodology and an ethnographic emphasis. The study documents how this research group is transitioning to PCC.

Specific Methodology

Ethnography is a method of uncovering culturally defined meanings of phenomena (Haagen, 2001). Broadly defined, culture refers to the knowledge, behaviors, values, beliefs, and norms of a particular group of people (Germain, 1993; Omery, 1988) cited in (2001) Haagen. As a shared experience among members of a group, culture can be described and understood (Morse & Field, 1995) as cited by Haagen (2001), and these descriptions enable others to understand the unique meanings of an event or phenomenon. The primary aim of ethnographic research, therefore, is to understand another's way of life from the perspective of "native," that is, someone who lives within the culture and is most knowledgeable about it (Haagen 2001).

Ethnographic research is predicated on understanding the contextual platform of a phenomenon. Germain (1993) has suggested that the preservation, not control, of context provides the holistic perspective that is characteristic of ethnography. While the manipulation of
aspects of the environment is intrinsic to quantitative or deductive methods, creating the minimal amount of disruption is characteristic of ethnography or qualitative inquiry (Haagen, 2001).

Savage described ethnography as “a holistic way of exploring the relationship between the different kinds of evidence that underpin clinical practice” (Savage, 2006, p. 383). The usefulness of ethnography, either as the focus or as an adjunct to other research methods, is increasingly recognized within healthcare research (Savage, 2006, p. 389). Ethnography is being applied more often “to essentially practical concerns that have been identified, for the most part, by policy-makers, managers or practitioners, and reported primarily in professional rather than academic journals” (Savage, 2006, p. 389).

Ethnography can be especially useful in studies of safety and quality in healthcare, because it is well suited to identifying conditions of risk, particularly where these are rooted in organizational dynamics, human performance or interactions between staff and technology, and in complex areas where there are long chains of causation (Dixon-Woods, 2003). As Dixon-Woods (2003, p. 326) puts it, “ethnography can capture the winks, sighs, head shaking, and gossip that may be exceptionally powerful in explaining why mistakes happen, but which more formal methods will miss” (Savage, 2006, p. 389).

The current study was designed as a focused ethnographic case study. Such a study usually concerns a distinct problem in a specific context and is conducted within a sub-cultural group with which the researcher is familiar. Focused ethnography presumes a close familiarity with the field as a precondition of its primary research phase (Kuhn & Garcia, 2013).

The phenomenon under investigation in this study was the implementation of a new paradigm within an academic research setting. As a research method, focused ethnography allows the researcher to discover what is happening to the individuals, groups, and culture of the
particular setting, gaining meaning from data in the context of that setting (Neal et al., 1999).

Hubert Knoblauch, a German sociologist credited for developing this focused approach to social interaction, describes focused ethnography as a “blossoming” of ethnography in numerous disciplines (Knoblauch, 2005).

**Focused Ethnographic Case Study**

Focused ethnography requires precautions to reduce personal bias and “blind spots”, such as constant self-observation and explicit declaration of previous knowledge and expectations (Knoblauch 2005). Thus, it is advisable to write down all field-related knowledge, value judgments, and personal preferences before beginning research, to identify these during practical research and to deal with them as such. In the present study, we used my experience in the field as a guide to express field-related knowledge; my personal preferences and judgments were written down in a journal and returned to once the research participant interviews within the research setting were complete. This process allowed me to identify personal biases and review my preferences compared to the participants and outcomes. In this type of study, researchers inevitably become part of the object of research during participant observation. They elicit statements and attitudes from observed parties—an active, participatory, and productive act; the observed parties respond to the researchers and assign certain roles to them, which they factor into their answers and actions (Knoblauch, 2005).

In this study, I attempt to elicit unobstructed answers from participants—that is, answers are what is felt to be true in a scenario where there will be no repercussions or reprisals in the workplace for honesty. The goal is for the researcher to remain a trusted member of the environment, so that the attitudes and responses of the participatory parties allow for the researcher within the group to be seen as a qualified interpreter of the data.
Ethnographies have been historically established in the study of societal cultures; the method has recently found favor in health-care research due to the emergence of medical anthropology (Haagen, 2001). As health-care, knowledge has become recognized for its value in understanding and informing practice, ethnographic methods have been modified with a more narrowly defined scope and time frame. According to Haagen, this practical adaptation of ethnographic research methodology (focusing on a specific topic for a short duration) has been shaped by the pragmatic and fiscal constraints of the healthcare environment (Haagen, 2001). She notes that focused ethnographies have resulted in improved mechanisms and collections, reimbursements for QI, in healthcare situations (Haagen, 2001).

**Focused Ethnography in Healthcare**

Focused ethnographies can have meaningful and useful application in primary care, community, or hospital healthcare practice, and are often used to determine ways to improve care and care processes. They can be pragmatic and efficient ways to capture data on a specific topic of importance to individual clinicians or clinical specialties. There are many examples of focused ethnography in healthcare that show the promise of this relatively new and “blossoming” approach, see Figure 3 in the appendix. The method is now used “in many health-related fields, including nursing, where the goal is often to enhance and understand practice by studying specific phenomena within distinct client or professional cultures and sub-cultures” (Higginbottom, et al., 2013, p. 5).

For example, Pasco, Morse and Olson (2004) studied the cultural identity embedded values that implicitly guide Filipino patients’ interactions with nurses. They described how nurses provided culturally competent care by understanding patients’ verbal and non-verbal
communication through genuine interactions. This focus is similar to the central concept of PCC, where a caregiver is able to communicate through the perspective of the patients’ expectations.

In 2010, Spiers and Wood explored perceptions and actions of community mental health nurses in building a therapeutic alliance during brief therapy, and what helped or impeded its development. This study identified the factors, no communication or trust, inhibiting alliances and provided recommendations to enhance intentional alliances. Again, this work is relevant to the current study’s focus on how to incorporate bridges between participants and caregivers into the healthcare setting.

As a starting point, the current study utilizes focused ethnography within a group conducting academic research. This university research setting provides the first documented investigation of an attempt at the implementation of PCC, but also is the first use of this specific method, focused ethnography, toward implementation.

**Site or Population Selection**

The site chosen for this project is an academic research environment that seeks to incorporate PCC within its research clinics from the lens of QI measures. This site utilizes government funding, especially grants from the NIH to support its clinical research activities. The researcher is a research coordinator within the group, and has observed the process of implementation and incorporation of the new healthcare paradigm within the group’s operations.

In general, a research coordinator provides specialized administrative support in a laboratory and/or clinical research environment. This includes pre- and post- award activities and regular communications/meetings with faculty and staff. These individuals can have compliance and oversight through their monitoring of budgets, spending and approving capital equipment.
requisitions, and by providing guidance and counsel to Principal Investigators for optimal stewardship of sponsored research funds.

In my work as a research coordinator within this setting, I have been a support resource for direct and indirect clinical needs such as inventory tracking, employee human resource functions, and employee time sheet tracker. My job duties are to directly support the department chief within the organization, but also to guide the administration in producing a successful working environment that adheres to the needs or milestones set by the funding.

The site chief and administrative group agreed to allow me to conduct the interviews included in this project. Interviews were scheduled after the University of the Incarnate Word (UIW) IRB approval letter was received during the last week of October in 2018 (see Appendix C).

Setting

The primary setting for this study was an academic research clinic that provides holistic care within a university system; members of the faculty administration and staff were the participants. The clinic sees approximately 1,000 patients annually, and our research participants are largely drawn from this population. As part of participating in research, patients can receive free services such as risk assessment, motivational enhancement, contingency management, individual therapy, and alcohol monitoring.

The desired culture expressed through interviews of the participants of this study is based on the PCC “best practice” of a teamwork-centered environment where open communication, patient safety, and a holistic approach to care are priorities. Open communication, for the purposes of this project, is defined as the ability of all parties to express ideas and opinions, and ask any questions needed to clarify processes so that they understand the reasons for and
necessity of decisions that determine workflow. Patient safety is defined as the prevention of errors and adverse effects associated with care provided in the clinic. Finally, a holistic approach to care is defined as the understanding that the patient is seen as a whole person whose mind and spirit also affect their physical health.

Implementing a new paradigm requires a holistic approach, parallel to PCC, which is why the administrative group incorporated a variety of expertise ranging from basic research to applied sciences that study the process of cognition, biological functions, and the environment. The clinic’s mission is to ease suffering caused by mental illness through excellence in research, treatment, education, administration, and service (Division within the Department of Psychiatry, 2018). In particular, the goal is to advance human mental health with regard to impulse control, aggressive and suicidal behaviors, drug and alcohol abuse, and disruption of serotonin function (Division within the Department of Psychiatry, 2018).

Participants

A focused ethnography study includes a relatively small sample of informants to acquire depth in the level of information obtained from them. While there is no minimum number of participants to include, in discussions with my committee chair from the University of the Incarnate Word, Dr. Herbers, we determined that three to six participants would be adequate to meet the goals of this study (Maddocks, 2008). Six participants were recruited and agreed to be included in this project—three frontline clinic employees and three faculty/administrators.

The front-line personnel within this academic research clinic are individuals with at least a bachelor’s degree and whose clinical experience is limited to the research environment. Their common understanding of the clinical needs is linked to the aims of the grant funding the research underway and focuses on consistent and accurate data collection and detailed
procedures. Personnel with such limited experience in clinical research are commonly found in these roles within most academic research environments. The personnel within this environment are fairly green and are in the process of training. This circumstance enhanced the freshness of the change to allow a connection to build with the paradigm. The front-line staff did not have a deep rooted root of old processes which, it is felt, allowed for a smoother transition.

The administrative personnel/faculty within the clinical research environment are four PhD professionals who average 22 years of experience in this area of research. Collectively they have published over 400 papers in the literature, and are commonly cited or referenced in works describing mechanisms and procedures developed within this clinic (Division within the Department of Psychiatry, 2018).

**Culture**

To acquaint the readers with a description of the culture in this academic clinical research environment, imagine an area which is constantly gathering new and best approaches, within a specific niche, and comparing and contrasting findings with published academic literature. At the most basic level, the administrative group monitors the day-to-day processes of research that is underway, while producing peer-reviewed scientific manuscripts, presentations, and other forms of educational dissemination as required by funding agencies. The culture of the front-line personnel ensures that data collection and project processes are conducted within standard operating procedures with no delay or variation. This reflects the need of the research environment for efficient and consistent collection of data. Analysis and evaluation of these data also is the responsibility of the administrative group. By contrast, the front-line personnel are not deeply involved these aspects of the work being conducted—they ensure the data are collected
and accurately described. This is a crucial role, since the value of any study depends on the completeness of its data, and accuracy in how data were gathered.

**Research Instruments**

The primary research instrument used in this project was the PFCCOST, which was developed by the IHI and the NICHQ in partnership with the Institute of Patient- and Family-Centered Care (June, 2013) (see Appendix A). This tool allows organizations to understand the range and breadth of elements of PFCC and to assess where they are compared to the leading edge of practice (IHI, 2013). A number of different data collection methods were used to "cast a wide net" (Maddocks, 2008, p. 89) to capture the full range of information available regarding the participants' experiences of PCC implementation. This section briefly describes the instruments that were used to either collect or record data for the study. The researcher maintains a master list of data collected from these processes and will hold them as long as required.

**Strategies**

**Audio-recorded semi-structured 1:1 interviews.** Interviews sought to gain the “raw” understanding of how the participants view PCC and its implementation within the academic research environment. The interviews took place before distribution of the self-assessment tool noted above survey to learn what participants considered as successes and barriers of PCC within the research setting. The goal was to better understand the limits of PCC in this environment, to assist in identifying which areas may be impacted immediately and those that will need more investigation to ensure implementation within the research setting.

Audio-recorded, semi-structured interviews and notes allowed the researcher to interact with the participants in these interviews. The interview protocol (see Appendix B) provided a script of standardized comments as a guide to conduct these interviews to ensure that there was
no deviation in the process. The interview recordings were transcribed (by the researcher) and then organized with the qualitative data analysis tool DEDOOSE.

**Interview protocols and procedures.** Interview protocols and procedures ensure that the purpose of a study aligns with the interview questions. The goal was to document how PCC carries over into research according to those whose work is to do this research.

**Field notes.** Lincoln and Guba (1985) suggested that the researcher keep a journal, which includes three sections: (a) the daily schedule and logistics of the study, (b) a personal diary, and (c) a methodological log. The researcher maintained such a journal, which was reviewed by a peer auditor who is familiar with healthcare and research to support the reliability of the study’s findings. The auditor assisted in removing the researcher’s bias to ensure that the voices of the collective group were being heard.

The researcher maintained many field notes in the journal, which were daily notes of events and actions observed during the study. Recorded thoughts about methodologic decisions in the study were written and comments by members of the dissertation committee. Notes were stored and documented of ideas or questions for further research, which included plans for constructing and analyzing the study and copies of outputs of the study. Extensive notes also were made during the data analysis stage of the study.

**Survey.** The PFCCOST tool organizes the eight principles of PCC into specific domains (see Table 1), allowing any PCC team to rate their performance as a reference for the organization becoming more patient-centered (IHI, 2013). This survey instrument was used for this research, with appropriate permission from the creators, as a reflection of what is required in a “true PCC” setting that allowed participants to identify pertinent PCC domains in the academic research environment.
The PFCCOST these eight principles into 11 domains, which allow a deeper probing of the workflow within the system, as seen through the PCC lens. Each of these domains breaks down 2 to 6 specific elements that align with PCC, all of which are ranked on a Likert scale from low (1) to high (5), with a “do not know” box at the end. Participants were asked to complete the survey with instructions to clarify low, “do not know”, and not applicable scores with feedback provided to researcher. The self-administered survey was distributed as a hard copy and completed individually and manually by participants at a location of their choosing, with a return deadline of one week after receipt. All participants completed the survey and returned it within three weeks from receipt.

**Protection of Human Subjects: Ethical Considerations**

Ethics are the norms or standards for conduct that distinguish between right and wrong, which help to determine the difference between acceptable and unacceptable behaviors. Review of study protocols through the IRB and continuing investigator and staff training through the Collaborative Initiative Training Institute (CITI) program help to ensure that researchers are aware of ethical standards, are applying them in their clinical research, and are minimizing risks to participants.

For the current study, names, any form of personal identification, and demographic details such as age, sex, and race were not recorded. These were known only to the researcher to ensure privacy. Academic research classification and clinic participation were used to identify whether a participant was frontline or administrative personnel and thus provided direct or indirect nature of care. To ensure the confidentiality of the data collected, the computer used to store research information is protected with a log in and password, with a different user name and password to access collected data. No data are saved on any other computer.
Data Collection

In this study, the first phase of investigation was delivered through one-on-one interviews. These interviews were performed at a time, designated by the participant, which did not interfere with employee schedules, work duties, and clinic needs. Interviews were conducted in a private location, where the participant and interviewer could speak candidly. The atmosphere was set as an open private conversation that would not lead to any form of employee reprisal.

Prior to interviews, the researcher developed a coding system to ensure the privacy of participants, so that data collected would not allow anyone to identify interviewees. The coding system used was not written, and only the researcher/interviewer has direct knowledge of it. A check-back was completed three days after transcriptions in a private setting, to allow the interviewee the opportunity to review interview ensuring validity and credibility of the transcription.

The interviewer requested that there be no discussion of the research topic among participants, until both the interviews and survey were complete. During the interview, each participant confirmed that he or she would not engage in conversation about the study. This step was taken to ensure that data were not compromised during the collection process.

Interview reasoning—questions and perspective. The style of the interview was to elicit a conversation with the participant, rather than have a question and answer session. The interview protocol (see Appendix B) was designed to be semi-structured to guide the interviewer in gathering responses that would assist in answering the research questions.

The interviews began with questions, to determine the beliefs and value that the individual holds within the environment. This is meant to show whether the participant’s true
nature favors education or health care, and what drew them to this work, through their own words. Throughout the interviews, the participants were free to elaborate and provide anecdotes they felt relevant. The interviewer ended each interview with an open-ended question that allowed for anything else to be brought up for discussion and inclusion.

The interviews highlighted participants’ conceptual understanding of what PCC was, acknowledging confusion about what PCC means and how it falls within implementation principles as compared to best practice. The attitudes of the group confirmed that their key motivation for entering into the healthcare field was “helping others” (i4).

Survey—reasoning and perspective. In the second phase of data collection, the PFCCOST survey tool was used to demonstrate structural expectations within the PCC paradigm as the “best practice” of a PCC environment. It was developed to benchmark an organization’s current working environment against expected domains of the PCC environment. The survey is a respected assessment tool that is commonly used by organizations throughout their personal change processes (IHI, 2013). The developers of the survey suggest that any working environment seeking to move to the holistic paradigm would benefit to start with baseline assessment using this type of survey (IHI, 2013). It is called the necessary first step for any group looking to make this change and will enhance the probability that the change will be maintained.

The researcher delivered the survey individually to the participant with instructions to complete and return it in a week. The researcher reiterated the request of not having conversations among one another until the completion of return of all surveys. The survey was delivered a month after interviews to minimize carry-over affect from one assessment to the next. Participants were aware they would receive a survey, but did not have a specific timeframe
for its receipt or expected deadline for completion. This was done intentionally to ensure that the elements within the environment were captured realistically. Participants could also use a separate sheet of paper to add any questions, clarifications or other items. After surveys were returned, the researcher thanked each person for his or her participation, and confirmed that another meeting could take place if needed.

**Data Analysis**

Data were synthesized within transcripts composed from one-on-one interviews, field notes, researcher memos, and the survey. The researcher requested that the participants review the transcripts for clarification and accuracy to provide an opportunity to further validate the trustworthiness of the research (Neal et al., 1999). Analysis by the researcher started at a level one coding, initial coding, and then proceeded to a holistic coding with the development of sub-codes through analysis with DEDOOSE software system. All data were subject to a rigorous four-pass process to ensure the themes developed were effects of the implementation process as seen through the participants’ lens. The four pass process was cyclical attempt to ensure that all data was reviewed and analyze, even though the following is a brief description of the events, the passes were conducted as to ensure all data was reviewed three times for each pass. The first pass developed the initial codes of over 287 items. The second pass identified duplicate coding, as well as, recoded original codes to mother codes leaving 87 codes. The third pass was to generalize mother codes and recode the codes into specific initial theme, leaving us with a mother and child code system. The fourth pass solidified the code tree and developed the initial thematic guidance for the triangulation process of correlating codes with survey results.

Data analysis is an emergent and ongoing process in most qualitative research (Maddocks, 2008). The sequence of data collection and data analysis continues throughout the
process. I analyzed the data, developed a collective understanding, repeated the analysis process with the new data and targeted questions, and again analyzed the data in a repeating pattern until a picture of the micro-culture emerged (Maddocks, 2008).

For the first part of the evaluation, which was exploratory in nature, a qualitative interpretive approach was used to analyze participants’ perspectives and points of view. Interview and survey data were then compared, and a domain analysis was used to solidify their findings. The survey results suggested that the opinions varied and that a quantitative approach would help elucidate participants’ perspectives.

The researcher sought to understand how the current environment in the academic research setting defines PCC as compared to the environment of current healthcare practices as described by IOM. A cross-case analysis, which describes the same arena through different personnel perspectives, illustrate the path taken by the academic research group concerning implementation of the PCC paradigm. The survey was used to verify the thematic analysis results, ensuring what the participants say about the process and policies is reflected in a document used as the initial tool for exemplifying the change to the PCC paradigm. The survey also provides a positional inquiry that may be used in further studies of evaluations to identify “closeness” to PCC in the structural sense.

Coding

Thematic analysis through categorization and coding was organized with DEDOOSE, qualitative analysis software. DEDOOSE assisted in condensing the data into recognizable themes. The data were first coded in a preliminary sweep of all interviews, then recoded to develop the mother and child codes, a hierarchically organized outline with super-ordinate and sub-ordinate levels (or parent and child code/tags) linking similar items (Dedoose, 2016).
The main codes were categorized into eight classes with an average of nine sub codes within each class. This allowed the researcher to identify emergent themes with four being recognized before the cross-case analysis being expected from the results of the pending survey.

Initially the preliminary pass through the data yielded more than 287 initial codes. This was verified through a second pass to ensure satisfaction with the initial identification and description of the codes. This sweep utilized the research question as a reference to ensure that any codes developed would allow the data to accurately capture the voice of participants. The next stage of analysis was to recode the data into correlated codes through up coding into mother-codes that combined similar concepts or explanations as described by the interviewees. All codes were subsequently combined to create an appropriate mother code that captured the information in a group. This reduced the number of codes to 73. The next step was moving all codes from mother to child codes. The goal was to have an identifiable mother code with child codes categorized within to allow for quick reference and viewing any emergent themes, allowing the researcher a guide to validate survey results with interview data.

The researcher wanted to best transform the data into a form suitable to answer the research questions. The rationale for the codes being built were to identify the summary of what was being said in regards to the PCC implementation and how it is delivered within the setting. All codes used spoke to some form of the process of implementation of PCC with regards to the adjustments needed within the research environment. The analysis discovered the items that specifically spoke to PCC in this setting with codes speaking to the data from interviews in general. This allowed the information to flow in accordance with the goals of the project, describing PCC within the academic research environment, see appendix C. The codes generated
the discussion that reflects the culture and environment and the processes relevant to PCC implementation within the academic research environment.

**Role of Researcher**

I undertook several roles as the primary researcher of this project.

1. As a participant, I worked within the organization to describe the framework of PCC. I utilized my professional expertise, communicated the “gold standard” of PCC and described the approach taken during implementation of this paradigm within the setting.

2. As a non-participant observer, I made notes and observed with the intent of not to be obtrusive, with the goal of gaining a direct understanding of PCC implementation within an academic research environment.

3. As an investigator, I identified where the clinic is in regard to complete incorporation of “gold standard” PCC principles. I discussed possible avenues for this implementation without sacrificing the standards of research, in which data need to be verifiable, replicated, and accurate.

**Trustworthiness**

The scientific merit of a qualitative research project depends on meeting the criteria for trustworthiness (Haagen, 2001). Lincoln and Guba (1985) have identified four criteria for operationalizing the trustworthiness of qualitative data: (a) credibility, (b) transferability, (c) dependability, and (d) confirmability. Trustworthiness is all about establishing these four areas (What is Trustworthiness, 2018), and implies the extent to which the reader can have confidence in the findings of the study (Haagen, 2001). This section will describe these terms and the
techniques that were incorporated in this study to increase the trustworthiness of the results (Maddocks, 2008).

**Credibility**

Credibility is an indicator of internal validity known as “truth value” (Haagen, 2001). This tells how confident the researcher is in the truth of the research study’s findings (What is Trustworthiness, 2018). The criterion is met through in-depth involvement in the field, selection of key informants, verification of information, and a debriefing (Haagen, 2001). Investigators may introduce personal distortions into the data (Lincoln & Guba, 1985, p. 302). In clarifying biases, the researcher comments on past experiences, biases, prejudices, and orientations" (Creswell, 1998, p. 202) that may shape interpretations. Prior to embarking on this study, I identified potential sources of bias and discussed them with two fellow doctoral candidates experienced in qualitative research, to identify ways that these biases could be set aside during the study.

I have worked principally in environments with provider-centered paradigm. I identified my educational experience and personal gravitation toward the PCC paradigm as a potential source of bias. I was alerted to recognizing any paradigm-related biases, which may have prevented me from understanding the unique perspective of participants. Another potential bias was related to conducting interviews, where it would not be appropriate to focus on potential sources of disconnect.

For this research, key informants were administrators who oversee the clinical operations, and front-line personnel who are tasked with the hands-on implementation of PCC. The process of verifying the information was met through the interactions of these participants (member checks) and consultation with my research expert (committee member).
Another method used in this study to support credibility was triangulation of data sources. Triangulation refers to the "convergence of sources of information" (Creswell, 1998, p. 251). Thus, as more sources of information are used to gather data, the likelihood increases for identifying a picture of the participants' experiences that they themselves would recognize as "true." Triangulation of data sources, including field observations, field notes, and case interviews, and review of artifacts such as policy documents and forms, was used to improve the credibility of the study (Maddocks, 2008).

**Member checks.** The "member check" (Lincoln & Guba, 1985, p. 314) is a procedure where the participants review the findings or a summary of findings of the study to validate that they represent their experiences (Maddocks, 2008, p. 101). Initially, the plan was to provide informants with a copy of their first interview transcript for their review. However, due to the desire for privacy and the commonality of research procedures, participants did not want to maintain a copy of the transcripts for personal records. They instead opted to check the transcript and obtain a copy of the final study once defended.

**Transferability**

Transferability is how the qualitative researcher demonstrates that the research study’s findings are applicable to other contexts (meaning similar situations, populations, and phenomena) (What is Trustworthiness, 2018). “Thick” descriptions include the context and cultural meanings and provide the reader with essential data to apply the findings to other contexts (Haagen, 2001). The final report contains enough data from the participants to allow readers to determine whether the findings can be transferred to other areas with shared characteristics (Maddocks, 2008).
Dependability

Dependability is the extent that other researchers could repeat the study and that the findings would be consistent (What is Trustworthiness, 2018). Germain (1993) has suggested that dependability can be achieved by repetitive questioning over time. The repetition provides evidence of the repeatability of the data, ensuring that all informants are asked the same questions and interviewer behaviors are observed to determine consistencies and interactions (Haagen, 2001). In short-term studies however, repetition will not work, as timing is more important.

Confirmability

Confirmability means that the findings are based on participants’ responses and not any potential bias or personal motivations of the researcher. This involves ensuring that researcher bias does not skew the interpretation of what the research participants said to fit a certain narrative. To establish confirmability, qualitative researchers can provide an audit trail, which highlights every step of data analysis to provide a rationale for the decisions made. This helps establish that the research study’s findings accurately portray participants’ responses (What is Trustworthiness, 2018).

Summary

This chapter discussed the design and execution of this qualitative study describing the implementation of PCC within an academic research environment. The identified best approach, as determined by the researcher, for such an endeavor was an ethnographic case study providing interpretive information and delivering a thematic analysis regarding the needs of the research group as they transition to the PCC paradigm. Gathering the insight and expectations of participants within an academic clinical research group, amidst a paradigm change allowed the
researcher to investigate the approach of such community and determine if the changes made reflect expectations of PCC as defined in the field.
Results and Analysis

This chapter presents the results of my focused ethnographic case study questions concerning the perceived barriers and/or successes of implementing PCC within an academic research environment. Here I summarize the results of this study answering two research questions:

1. How is the PCC paradigm implemented in the academic research environment?
2. What are the perceived challenges of implementing PCC in an academic research environment?

All participants completed the surveys and one-on-one interviews. The researcher also established rapport for further conversations, or follow-up questioning, as needed once the data analysis was concluded.

The survey results were not subject to any quantitative research techniques. The results were reviewed in a qualitative perspective, listening, to what the data discovered. Initially the discovery yielded four themes:

- Alignment by theory—no structure
- PCC level matters
- Alignment by “essence” not structure
- PCC is a collaborative opinion between care group and patient

The four themes drew on the personal connection with PCC that was spoken to by most participants within the interviews. The themes clearly stated how the implementation process was viewed, with anticipation of how future care would look like.

The discovery provided the validity to eliminate the first two themes. We determined that the “PCC level matters” theme was not appropriate for this project for two reasons. First, the
literature suggests that the reimbursement scales in the patient care sector do not differentiate between partial or complete provision of PCC (Wilson et al., 2015). Second, in an arena without guidance or support, any level of PCC still represents improvement. The “alignment by theory – no structure” theme was eliminated based on the knowledge, which did not include the participants’ perspective, stating that the perspective being used for this theory was based solely on the black and white identification of “did the environment align with the theory?” The researcher felt that to include a theme that does not account for the participants perspective did not fall into the purview of the goal of qualitative research.

**How PCC Was Implemented Within the Unit**

The TeamSTEPPS Master Trainer program, developed by AHRQ was the tool utilized to build the path of implementation within the academic research environment. TeamSTEPPS is documented to improve collaboration and communication within a practice by developing the teamwork initiatives and identifying the need to deliver better care through communication (AHRQ, 2013). The Master Trainer program was briefly brought to the university setting, with two members of the clinical administration team completing the training of the TeamSTEPPS process, but there has been no follow-up at this time within the overall university.

The administrative team, once completed and certified with Master Trainer approval, was able to utilize the tools within the AHRQ TeamSTEPPS resource area and deliver PCC teamwork guidance through educational connections. The toolbox within this site allowed the academic research environment to engage the change needed to align the clinic with the PCC path.

The material was tailored to fit the environmental needs, with the majority of the training being through PowerPoint presentations. The team was first put through the initiation phase of
learning the definitions and expectations of this new process moving forward. As the implementation transitioned, the team added huddles, and other recommended measures and processes to guide the change needed for the implementation.

**Progression**

Figure 4, in appendix, depicts the study timeline, including analysis cycles and flow of the study components. The first stage of discovery was to align the research with the nuances of the research method utilized. It is at this point—where the cultural investigation, interviews, took place, developing the research questions that would align to ensure proper development of procedures and the protocol.

The interviews were completed within a short timeframe after IRB approval was provided. Data analysis started and was reviewed continually throughout the entire investigation after the interviews. The key findings began to emerge in the early to middle stages of the process, with validation arriving in the middle to late stages. The findings were derived from the cyclical process through identifying as closely as possible to the meaning heard, seen, and delivered in the study.

**Results**

**Observations.** Non-verbal hints were observed throughout the investigation, and data concerning them were collected as they arose. Many indicators of happiness and confidence were seen when speaking of the current working environment and the PCC change as understood by all parties. “I think it’s great for my work ethic, I think it’s great for me like I can work with it really well, I think that’s already a natural approach that I have” (i4). Uneasy conversations usually dealt with the past working environment or personnel that did not align with the goals, service and needs of the clinic.
I think there are some people that it’s probably harder for them umm it’s probably a style of work ethic that is dependent upon each individual, I think it works for some people and for some people it’s a lot harder. (i4)

Excitement was apparent regarding the future of PCC in an academic research environment and all participants were pleased to be part of a study that can be viewed as a first. The mindset is now,

more proactive, what can I do today to make today go smoother, because we might have seven people each in a day and I want to make sure that I’m not burnt out. I want to offer the same amount of focus, attention, and care to each person. I want to make sure everybody feels that they’re here with us and not just another participant coming through our doors and we don’t care. (i5)

One participant that did not want to have their conversation recorded, but explained that this was due to a personal comfort, not a desire to hinder or hide answers or emotions from the researcher. To address this request, the researcher took detailed notes during the interview, with pauses to ensure proper documentation. This interview lasted longer than the others because of these check backs. The overall takeaway from the non-verbal cues were feelings of comfort, satisfaction and joy in being a team that is providing a form of PCC to those who come to the clinic.

One memorable one, was a client, she came in and she had a high breath alcohol concentration, and by our protocol we can’t continue the session. So, we had to ask her to come back, you know we didn’t chastise her, we made it as you know as positive as possible. ‘Unfortunately we can’t see you today, that’s just the way it goes here, but we will see you in a couple of days and we’ll finish the session. You’ll be ok.’ (i6). She broke down crying, because she felt so embarrassed and it wasn’t uh she just felt embarrassed that we were seeing her like that, because it had already been six weeks and she had already gotten to know us and for her to fall off the wagon at that point was embarrassing for her. We made sure that this wasn’t going to stop the study, this wasn’t going to ruin the dynamic we had with them, it was just going to be this is just another day and tomorrow’s another day and you can still do it. (i6)
Interview Results

**Culture of the academic research environment prior to implementation.** Prior to implementation of the PCC paradigm, the culture of the academic research environment was typical of many medical environment who are specialized and separated into groups as determined by the work title and responsibilities and do not communicate well. “We have had many different people through the years and the changes had people feeling superior to other because of how much time some had.” (i3). Employees focused on performing the activities assigned to them from the training provided on the on-boarding sessions of common new hire procedures. The sessions covered expectations for the position, whom to contact when trouble arose, and the everyday nuances of work within the environment was delivered. As in many working environments, the aspects of competition shaped how and who within the staff would bring issues to the administration team and how the information would be communicated.

The personnel, selected based on their research experience, have been involved in some form of psychiatric research in their undergraduate or post-graduate work. “Everyone has their own niche; we have people that are good with patients and staff that is great at the research” (i1). This mindset coupled with the defined environment of “research” seems to promote a feeling of best performance and zero error tolerance as indicated during the interviews. However, in reality, these goals were never fully achieved, or at least not that participants could recollect. “We’ve had some people that were petty and felt superior and that disrupted the environment with sloppy data collection and poor transcriptions” (i3).

In their interviews, the administrative group gave a collaborative description of the working environment, with almost a collective mindset and agreement. They described how staff exhibited characteristics common to healthcare clinical environments, including challenges of:
inter-personnel hierarchy, competitive positioning, miscommunication, and polarizing and hostile behaviors. “I think there are some people who didn’t care it made it harder for us to work with them, it’s probably a style of work ethic that is dependent upon each individual, but it was difficult” (i4). For example, one person said, “During audits we would have to do deviation reports due to the improper collection of data or the misses in signatures/initials, dates and times” (i2). Another commented, “We had personnel that really did not communicate with others and let participant information lag, meaning that we didn’t get all items correct” (i5). The take-away from these comments is that the team performed the job at hand, but was not guided to help create a working environment that supported team camaraderie or check backs that would ensure proper collection and transcription.

All participants described the front-line staff prior to the paradigm implementation as competitive individuals, who could perform duties within the clinical setting. They showed aspirations of being promoted so they could participate in activities such as grand rounds, poster presentations, and research quality and improvement days. These would bolster their experience and improve their ability to be admitted to a postgraduate degree program. The competition stemmed from the aspiration of personal growth that was encouraged as an expectation of the positions within the research environment. “People have worked for us and went on to other positions or to be PhDs themselves, this is something that we pride ourselves in saying, we build people up to go out and be really good in other areas” (i2). The historical aptitude of team members has led former members to pursue advanced degree training or advancement through employment in state or federal government positions focusing on health and/or judicial arenas.

The administrative team described a dysfunctional work group that continued to have personal issues and could not effectively find the flow needed to perform at a high level. “We
had people who didn’t care about the work they were doing and being committed to the job” (i4). The problem, as described by the administrative team, seemed to stem from miscommunication, favoring, competition and role confusion. These issues could have stemmed from the administrative team’s lack of focus on the project at hand and their expectation that the work description, which does not allow for variance, would be self-explanatory, leaving the work group to figure things out on their own. But as described in most organizational management theories, laissez-faire and hands-off management is a recipe for failure (Forbes, 2013).

The administrative/faculty group consists of three PhD professionals who average 22 years of relevant research experience and have become leading investigators within their field. The group has published over 400 papers in the literature and are commonly cited or referenced regarding the mechanisms and procedures they have developed within the research clinic setting.

The strength of this research group as a functioning team can be proven through their many successful grant applications, publications, and software. However, the administrative team was seen as the source of the problem by the front-line staff. The professional group is able to work, communicate and function at a high level and unconsciously demands the same from other personnel, increasing competitiveness and causing frustrations within the culture. The backgrounds of the individuals reflected little “real-life” management experience in any environment, let alone the healthcare field. The measure that would determine success through the work environment was based on grant metrics: if the team met the metrics in any form, then they were deemed successful, and vice versa.

This situation was illustrated by the case of a longstanding member of the front-line personnel who is familiar with every aspect of the clinic. This person was not well liked among
the staff as she was “socially awkward”, and her staff had high turnover. The frustration of how to handle this was described by interviewee 2:

I was unsure of what the situation really meant and how to fix it. I knew that tensions ran high in the staff, but it is hard to try to alleviate their concerns while ensuring that we get the data needed to fulfill our obligation. So for us it was a more out of sight out of mind kind of situation, if we could keep this person away, now mind you, this person has been with this group since the beginning here at San Antonio, so we know them and like them as a person, but it is hard to separate work from that. We bounce them around from project to project then isolate and allow the person to just do data processing and training of the new personnel, but not work with or around the staff. This was how we handled this type of situation. (i2)

The administrative group describes the cultural change of this environment into the current situation as manifesting in two waves. The first was the hiring of a coordinator with experience working in a healthcare setting, as a practice manager for a local high-profile surgical team. The second was the decision to implement the PCC paradigm, which can be attributed to the administrative group needing to educate themselves on how to manage the front-line personnel, solving conflicts and developing a culture that supports this paradigm. Before this change occurred, there were many administrative meetings. Some were to gain trust and to understand the true working desire of each of the faculty; other meetings were used to educate and provide scenarios of management to determine as they moved forward to discuss how success within the “new” standards, would be defined.

**Culture of the academic research environment after PCC implementation.** The interview process provides evidence that describes the TeamSTEPPS training as the catalyst for cultural change that all interviewees pointed out. One person said, “The changes, I think that the people get along really well, nobody feels superior to anyone else… the staff that we have now I don’t feel they don’t feel superior to one another.” (i3). In conceptual terms, the staff are able to see the participants as more than just numbers within the study, broadening the description of
participants to include them as patients. The changes within the structure were in the relational aspect of the working community, the unseen forces that we are part of: standards, rules, laws and expectations, while spending a workday with other people, within the dynamic of interaction.

The research environment provides a form of patient care through the base lens of focus to ensure that the effect being seen is an accurate representation of the research. For example, the research group in this study is providing care to enhance their mission of advancing human mental health in many different behaviors and conditions: impulse control, aggressive and suicidal, drug and alcohol abuse, and disruption of serotonin function. This group utilizes for their care is a holistic lens through intervention, which takes into account the need for other care, but does not provide that care in the clinic, as dictated by the grant requirements.

The structure within the department has not changed since the new paradigm was introduced; however, when issues arise, there are people identified as the best qualified within the administrative group to find solutions. This enhancement of the environment was added in from the TeamSTEPPS process implementation. The difference within the structure of the environment is the understanding that the entire work community, administration and front-line staff are considered a team. As a team they now have avenues to ensure support and success. The communication within this structure was the most difficult for the group to change, but with reinforcement of availability and prodding, the team is now communicating at the level that can be described as PCC. As one participant said, “When we were doing the same treatment with people who’ve been arrested with DWI previously we had a higher dropout rate, so we had people who did not stay in treatment” (i1). This change was able to occur for the participants by the guidance of the TeamSTEPPS process. The training assisted the functionality to advance to
team status, while improving the dynamic engagement of all members which in-turn could be a reason for the lower-dropout rates.

One of the benefits achieved through the implementation was the removal of competition among the front-line personnel. The competition was redirected to metrics and timing issues that were seen as being detrimental. For example, in a “real-world” setting, the “best practice” durations from intake to follow-up appointment is a maximum of 35 minutes. This scenario, which was taking 1.5 hours on average in this clinic, became an opportunity to shift the competitive nature of the staff to identify ways to enhance patient safety and care as seen in the paradigm. The administrative group used this issue as a training opportunity, to set expectations about how procedure timing can play a role in PCC and the patient experience. The improvements have transformed the environment to what is needed to achieve PCC as described in the literature providing care within the clinical norm for the practice, 25 to 40 minutes. The shorter time enhances patient safety by ensuring that the staff is not bogged down on the complexity of the visit, eliminating the potential for errors in a wait and see environment.

As described by the administrative team, the front-line staff are now seen as a high-functioning work team, who can perform their duties within the clinical setting at a high level. They also have more opportunities to participate in educational activities to continue their learning. The changes seen can be described as care that is delivered through the fundamental values of the PCC paradigm. As one person said, “The workflow has definitely changed so I think we spend a lot more time with the participant of engaging them and doing things that are more about rapport and understanding” (i2).

The need for transparency and patient safety calls for a work team who can be proactive and deliver care specific to the needs of each patients. The TeamSTEPPS curriculum provided
the roadmap to ensure that the culture change was successful. This tool provides resources, systematic guides, and real-world examples of what PCC would look like, compared to the typical disease-driven care paradigm. The administrative team is now able to focus on communication and delivering the transparency needed to achieve PCC.

The changes seen within the administrative group, as described by the front-line staff, show better understanding on how to lead the changes and open the lines of communication for the environment to maintain its functionality as a team. The atmosphere now focuses on proactive behaviors that look to alleviate issues before they arise. As one administrative team member said, “just opening the door and ensuring that the staff knows we are here to find solutions with them” (i2) is a key difference. The administrative group is now more aware of how to deliver their expectations within a team concept, rather than assigning tasks to whoever they are most comfortable talking to among the staff.

Since implementation of PCC last year, the staff turnover ratio diminished to almost zero, only two staff departed to pursue a higher degree. The measures and deadlines have been met with months to spare, allowing for interactions among staff who desire to learn about data analysis and other aspects of the research. The rush and stress of the old ways have dissipated, and the continued learning model with proactive engagement is now the driver of the environment.

The adjustments made by the implementation of the PCC paradigm corresponds to the 8 principles of PCC developed by the Picker Institute and Harvard Medical School in collaboration with IHI in 2013. The environment is team-oriented with patient safety at the forefront. The culture, or “the way things are done” (Maddocks, 2008), within the academic research
The working environment has transitioned into a team atmosphere focused on PCC using the TeamSTEPPS tool. This was developed by the Department of Defense’s patient safety program in collaboration with the AHRQ (AHRQ, 2014). At its core, this training provides an evidence-based teamwork system to improve communication and teamwork skills among health care professionals. It also provides a source for ready-to-use materials (such as the survey used in this study) and a training curriculum to successfully integrate teamwork principles into all areas of a health care system.

**Survey Results**

The domains listed in the survey (see Appendix A) are a fundamental basis for understanding the requirements of PCC as seen in the patient care realm. However, this tool also illustrated several gaps in implementation of PCC. As result of the study, of the 11 domains, the academic research environment could incorporate in a median faction the following five domains: (a) Clinic Mission, Vision, Values, (b) QI, (c) Personnel, (d) Environment & Design, and (e) Information/Education. The survey strengths identify the particular domains utilized and define the depth of use within the academic research clinic through a Likert-type scale (responses ranging from 1 = Low through 5 = High). These five domains, as indicated in the results, were subjectively considered viable within the academic research environment, which showed the effort change from none (zero) to some (twos and threes), respectively. The results still leave room for growth within the environment to reach the top rating consistently.

Although the depth of involvement that goes into the survey was not completely utilized in this research project, the results demonstrate that the clinic is still in the beginning stages of
planning, even though the participants all felt that progress had occurred. For example, the survey was not utilized as a basis for conversations about patient-centeredness in the organization, as recommended in the initial survey instructions.

The survey coupled with the interviews allow for a complete picture of PCC implementation as described by the participants. These tools provide the researcher the understanding of what, how, and why processes are occurring within the academic research clinic.

**Theme 1: alignment by “essence” not structure.** Alignment by “essence” not structure is defined as the inception of PCC into the academic research environment. This thematic concept addresses the degree to which the “gold” standard of PCC is actualized within the academic research environment. As one study participant commented,

> We’re still trying to make sense of the structure of it and the best practice. We have best practices that we understand right now, but we don’t have all the outcomes from it! It is an evolving concept, so we don’t know all the long-term outcomes and I’m sure there’s going to be continued growth and development improvements on how we’re doing it, so it feels like, to me, like we’re in the adolescent period of trying to use this principle to make the best healthcare we can. (i2)

In the healthcare field, there is evidence that the paradigm is effective. Governing agencies: PCORI, AHRQ and IHI, as well as, literature speak to the successes seen within several areas, for example, in the Veterans Affairs Office of Patient Centered Care and Cultural Transformation with the Whole Health initiative. In addition, the Institute for Patient and Family-Centered Care has developed assessment tools, consulting, and interventions that guide hospital systems to successful HCAHPS scores and PCC alignment, and feedback seen through the patient lens as to what changes are not only seen, but also felt with the paradigm.

In research, however, the successes are limited to single domain implementations and there is little information on complete PCC implementation attempts. The recommendations for
most literature remains tentative in movement with recommendations of building on the success of one domain, commonly expressed as communication and patient safety, or cultural awareness moving the clinic from specialized descriptive personnel to a team-oriented atmosphere. Thus, this project is the first attempt to provide an example of the success and failures of PCC implementation in the academic research environment.

Because the academic research environment is focused on adherence to research protocols, they have limited flexibility to provide services or procedures that are outside of scope of practice. The PCC essence can be communicated within research clinics and the cultural changes of teamwork adapted; however, in reality the domains of PCC are sifted and sorted, ensuring that those chosen are acceptable and functional within the research scope. Fortunately, the current tailoring of PCC within the research realm provides an opportunity to further incorporate PCC depth while ensuring that the movement develops beyond the initial goals established by IOM.

The biggest challenge is, if you go to your regular doctor’s office their toolbox is pretty wide open. They can do many different things and if they cannot do it, they know some other specialists. Some other person that can do even more things, so you know it is almost like the skies the limit on different tests or techniques that could be tried over time. The way we’re funded, and the way we’re trying to produce metrics around outcomes of our studies, we’re really restricted in the scope of things that we can do with that patient. If the patient comes in and says “well I was really hoping to get out of this, this acupuncture”, you know we don’t deliver that in this protocol, so we just can’t service them. We end up in the consent process, were we are explaining to them the alternative to our program, as we can provide you with referrals to other things out there. We can’t provide those things ourselves, so you know, we would like to provide all these different kinds of things, but the way we’re funded and approved by the regulatory bodies like institutional review board we have a fairly narrow scope. That’s a challenge to patient-centeredness, because we can only give them this piece of what they might want not everything that’s available out there. (i2)

The PCC essence is considered by personnel to be “very heavily focused on patient care and non-judgment…wanting to put their comfort level first” (i4). The clinic’s culture has had
significant changes of attitudes and perspective since implementing this paradigm. Personnel are now able to see the participant as a patient as opposed to a number within the study.

Now I feel like I got support and feel like I can ask the questions that are on my mind, I can feel like I can raise questions where I think they should be raised. I think I have people now who care about the same aspects of the job, whereas before I didn’t, so that is important. (i4)

The current clinic’s operations and structure fall well short of full realization in seven of the 11 domains: Mission/Vision/Values, Advisors, Care Support, and Charting & Documentation. This speaks to the need for the top tier of the administrative group to have buy-in for such changes to occur.

**Theme 2: PCC is a collaborative “opinion” between care group and patient.** In research, the current reality is that the implementation of PCC is used as a QI experiment that calls for clinics to pursue the concept with little guidance on how to properly incorporate the paradigm. This attempt is then measured on a QI scale for the benefit of governing and funding agencies, who commend the attempt, but deliver feedback only based on the original goals and scope of the study. This feedback may allow those in the academic research environment to think they have reached some form of PCC, but in actuality, they only have developed the “essence,” as described in Theme 1 above, which does not match or translate to the metrics provided for PCC. This situation led to one of the recommendations seen in Chapter 5, for creation of a PCC research assessment tool that will take into account the structural realities of the academic research environment.

At first glance, when reviewing the interviews and survey results, the concept usage has made great headway in how the care group functions and perceives the environment in which they work, compared to the lack of previous teamwork integration. The success of opening communication, bridging the holistic ideology, and developing a culture of team concept, are
important steps but do not fully achieve the structure and meaning of a PCC paradigm as has
been established by organizations such as the Department of Veterans Affairs. The
organizational tool utilized is not specific to the academic research environment and therefore
only indicates alignment with seven domains: Leadership/Operations, QI, Personnel,
Environment & Design, Information/Education, Care, and Diversity & Disparities. This study
used the TeamSTEPPS tool to engrain the team atmosphere and conceptual understanding of
PCC needs, but did not assist in overall alignment with PCC.

The meaning given to “PCC is a collaborative ‘opinion’ between care group and patient”
is highlighted by the holistic interpretation of the emotional side of the working environment.
The theme is traced by the front-line personnel to the
difference in the participant at the end of their treatment or even half way or whatever
that might be, uh seeing a positive difference in that it was their choice and that we
helped them to make that choice or we gave them the courage to make that choice or the
education to make that choice, whatever positive change that is in their lives. (i5)

The reflections provided from all study members are those of successes within the areas
seen as changed. “There were less drop outs from the study, maybe because we are now more
open and empathetic to the patient” (i3). These considerations do not provide a solid outcome
measure, but still point to the paradigm as the causal agent for this change. It is with these
scenarios that the theme of PCC being an opinion, from both sides, was developed although this
research. We did not delve into the firsthand accounts from patient participants, but their
perspective was taken into consideration as the interviewees recounted scenarios.

Research Question 1

How is the PCC paradigm implemented in the academic research environment?
This study describes how implementation of PCC was delivered through a TQM, QI lens
utilizing the Five Deming principles of process improvement for healthcare as a guide. The steps
moved from initial thought, basic research, tool assessment, and usage starting with the front-line staff.

However, the elements of PCC that were recognized immediately were those that assisted the cultural change from a competitive, specialized work team, to one now considered as an example of what a healthcare research team should strive to become. It was through the conscious effort of continual checking on alignment with Deming’s model for improvement, by a member of the administration team, which allowed this change to flourish within the system. Deming’s Model is important within the setting as it is a guide that allows the agents of change to monitor their progress during the process.

This process began based on the administrative group’s attention to QI within their progress reports provided to funding agencies annually. The summary of actions within the grant year addresses issues such as: measure attainment, action plans, goal realizations, next year’s goals with plans to attain them, and what extra components have been considered or set the working group apart from others in the field.

The timing of the summation to grants for review fell in line with a training opportunity made available by the university, the TeamSTEPPS Mentor Program. Through this program, the administrative group was able to utilize and include PCC enhancements to the QI measures, with a plan that would incorporate the mindset, into practice. The TeamSTEPPS training made resources available for the administrative group that align with PCC and provide a systematic guide to encourage the cultural change seen as needed to embrace the paradigm.

The administrative team then realized that PCC has not been completely attempted within the research niche, and that they had an opportunity to be the first to do so. Further, such work
could bring future resources and capital, allowing the group to continue on their path within the research agenda.

Implementation followed through many informative sessions and training that encouraged the holistic approach. The sessions provided an opportunity for the administrative group to make a desired change in how the work group interacted and enabled the concept of working as a team. The group has been able to function as generalists, which allowed the clinic to run together smoothly.

**Research Question 2**

**What are the perceived challenges in implementing PCC in an academic research environment?** The findings in this chapter emerged through the interview process and survey. The challenges perceived by the group included time constraints, requiring specific PCC information/guidance, obtaining feedback on progress in implementation, and frustrations over limited flexibility in research studies being pursued in the clinic.

One of the most common barriers has been the perception that PCC requires a lot of time to properly coordinate. Interviewee 1 noted, “it can take a lot more time to handle people individually like that and as far as the research study I think sometimes those individual encounters can have an impact on the data you collect, that you may not have otherwise, and whether that’s a good or bad thing I’m not really sure, to be honest”.

In one aspect, the research clinic is attempting to ensure that any deviation in the process of care is minimized to maintain compliance with their research protocols, and IRB and governing agencies’ regulations. This means that if the time in the clinic for one research participant, without the use of PCC, is one hour from start to finish, inclusion of PCC should not take longer. However, as one participant commented, “if “best practice” of a process states that
the real healthcare time for care takes between 20 to 30 minutes to complete and the research clinic is needing one hour, then the practitioners are hesitate to implement the new process, due to the lack of feasibility of time” (i2). Although this barrier is a real consideration, AHRQ has shown that the time needed for PCC adherence can be minimal (Frampton et al., 2017). Most time is actually spent on training and processing measures to ensure that the paradigm and tools are being properly utilized.

The second barrier speaks to the “essence” of PCC as how the academic research environment implements PCC. The consensus among the study participants was that the cultural change and the ability to communicate among all members has improved. However, there was a desire and need to receive feedback and more training, to ensure that the changes made will lead to success within PCC. The research team made enough significant change to consider themselves practitioners within the PCC paradigm. The changes include moving to a team-orientated care group, sensitivity and transparency in communication with patients, and motivational interviewing as a staple in supporting patients and their health trajectories. The staff can now speak the language of PCC, understand the nuances of interactions between patients and staff, and collaborate in a team environment. Importantly, while doing so, grant milestones were still met with little variation, and the research agenda was not compromised in any form.

The third barrier for implementation is the lack of flexibility within a grant-funded project itself. Although personnel care delivery was altered, the care itself did not fall outside of the IRB-approved processes. The care increased the emotional intelligence of the staff and changed the culture of the clinic from specialized to generalized or individual to team. As one participant noted,

We all know we all do the same thing, so there’s no power balance there. There is no one better, no one less, and so we all do the same thing. We all know how to do the same
thing, so we can all help out, even if one person can handle a client by themselves, we always try to make sure at least one other person is helping out. Just to make it less of a burden for that person and to make it seem that the whole clinic is there for that one person (client and staff) kind of makes it more tailored to that one person so we’re all here for them. (i5)

Summary

This chapter discussed the analysis and findings of the research study. The themes developed through the analysis of tools utilized in the study have provided a picture of what is happening within the current setting. The view of PCC through the perspective of the participants is rooted deeply in the desire to provide the best care and highest-quality research. The academic research environment is a complex one; it exists to develop enhancements that will benefit healthcare in the future. The research setting is poised and capable of understanding what PCC needs, but a fundamental or complete assessment tool and guide is not currently available. The participants of the study showed a promising determination to continue the work toward development of a more PCC-centered clinic and strive to provide valid research. However, as seen in the survey responses, implementation of the PCC domains was incomplete. This suggests that although there is a QI plan and a desire to change, the structural needs as currently demanded by PCC are not in line with the demands of an academic research environment. Understanding the premises that complete implementation takes a while, the research team is still new in this process and this study is a “snapshot” in time, a longitudinal study may capture more completely the implementation. It is possible that these findings could be a result of the study’s limitations, not necessarily saying that PCC cannot work fully in a research setting.
Discussion and Suggestions for Future Research

Discussion

In this chapter, I discuss the results of this focused ethnographic case study of a research team’s perspectives on the factors influencing implementation of PCC in an academic research environment. This chapter starts with answers to research questions and highlights key aspects of the themes, barriers, and successes that were discovered in this study. This information may assist in initiating similar conversations in other academic settings. Recommendations for further research and direction of the researcher will be revealed along with implications. The thematic alignment in the research questions is found in the basis of definitive engagement, meaning that the themes are built from the understanding that the solutions found are limited by the solutions provided. The degree for which PCC has influenced the research environment describes the limitations and changes needed for this environment to progress to full implementation.

How is the PCC paradigm implemented in the academic research environment? The implementation of PCC in an academic research environment is delivered in the Five Deming principles of process improvement for healthcare, which are guided through TQM/QI (Haughom, 2016). This process began when the research site’s administrative group sought to add some form of QI to the current annual progress reports provided to grant funding agencies. These reports describe attainment of measures and goals, action plans, goals for the coming year and plans on how they will be achieved, and items that the investigators would like the funder to consider that set the working group apart from others in the field.

The timing of these annual reports fell in line with an opportunity offered at the university called the TeamSTEPPS Mentor Program. This program allowed the administrative group to utilize and include PCC enhancements as QI measures, creating a plan that would
incorporate the paradigm into practice. The TeamSTEPPS program master training and support have since been discontinued by the university. However, other initiatives have begun such as discussions about the importance of bringing the PCC paradigm to the research arena. The need for these conversations demonstrates the complexity of bridging the current PCC paradigm into research implementation, from the institutional perspective.

The TeamSTEPPS training resources provided a systematic guide for the research group to encourage the cultural change needed to incorporate the PCC paradigm. This training, along with investigation of best practices in care and an understanding of management changes, revealed that the PCC paradigm was not actualized within the research niche. However, the group also realized that implementation of this paradigm would allow the group to be ahead of the competition in seeking future grant funding. Such projects could allow wider conversations that may bring future resources and capital, allowing the group to continue implementing and refining PCC within the research context. So far, inclusion of the TeamSTEPPS tool into daily routines has guided both faculty and staff to function as a team of generalists, so the research clinic runs more smoothly.

**AHA Moment—Cultural Awareness**

After analysis on the cultural expectations in review for the defense of this work to my committee, there was a moment of clarity that sparked an opinion that I regard as a necessity for anyone seeking to engage the PCC change within their arena. This clarity spoke to my understanding of the expectation of PCC. PCC as it is being cased and delivered requires that anyone attempting to deliver this within their arena must fundamentally be open to a cultural change. Cultural change is the foremost effect of the paradigm, due to the mechanisms that have been attached to support the successful transition. PCC theory, moves away from one dynamic
and demands that the next dynamic be solidify in principles that speak to the QI with a cycle, guided through Deming’s healthcare improvements, that is meant to be continually poked and prodded not settling for the current results, always seeking better and more efficient solutions.

PCC is meant to be the basis for all work and is not to be an addition to any environment. To successful transverse this paradigm, you must, as in the military setting reshape the organizational lens to PCC. If the attempt made is to add pieces of PCC to the environment, it is in my opinion that the effort made is valiant, but will never allow and organization to be considered true PCC.

**What are the perceived challenges in implementing PCC in an academic research environment?** The challenges that the academic research group perceived in implementing PCC were time constraints, needing specific PCC information/guidance, getting feedback about how well they may or may not be implementing the paradigm, and limited flexibility of protocol-driven research studies underway in the clinic.

One of the most common barriers cited was the perception that PCC requires a significant amount of time to properly coordinate. Interviewee 1 noted, “it can take a lot more time to handle people individually like that and as far as the research study I think sometimes those individual encounters can have an impact on the data you collect, that you may not have otherwise, and whether that’s a good or bad thing I’m not really sure, to be honest”. Time is crucial, both in labor cost for research data collection, and for consistency in the data collection process between individual research participants. Nonetheless, studies have shown that the time needed for PCC adherence is a minimal factor, with most time spent training and processing the measures to ensure that the paradigm and tools are being properly utilized.
The second barrier speaks to the “essence” of PCC being the process by which the academic research environment implements PCC. The consensus among the study participants was that the cultural change and the ability to communicate among all team members has improved. The care increased the emotional intelligence of the staff and change the culture of the clinic from specialized to generalized or individual to team. However, participants expressed a desire and need to receive feedback and more training from PCC expert to ensure that the changes made to date, if continued, will lead to successful incorporation of PCC. Currently, the process of PCC is not fully realized, due to limited guidance on how to implement PCC in the academic research environment.

The research team has made a significant amount of change in the processes of patient care and consider themselves practitioners of the PCC paradigm. However, existing grant milestones were met with little variation and the research agenda was not compromised.

The third barrier for implementation is the lack of flexibility within grant-funded research protocols. In the research environment, the control of the grant processes is governed by IRB and regulatory agencies, once the scope of practice has been approved. The responsibility to maintain the integrity of the grant falls on the administrative team who review and guide the front-line staff with the parameters in mind. Yet although care delivery was altered within the research clinic, the changes did not fall outside of IRB-approved processes.

My analysis developed two main themes in this study identifying that in a research setting, PCC is aligned by “essence” not structure, and PCC is a collaborative “opinion” between the care group and patients. The first point is defined as the inception of PCC into the academic research environment. This thematic concept speaks to the realistic degree to which the “gold standard” of PCC is actualized within that setting. Although study participants expressed
willingness to continue working to ensure that their research activities resonate with PCC, at the leadership level of the academic research environment, a QI approach correlated to enhanced customer service and appreciation is still more common.

In the healthcare field, there is evidence that the paradigm is effective and delivers the IOM goal of improving health care delivery in the 21st Century (IHI, 2013). In research, however, the successes are limited to single domain implementations and have few to no information on complete PCC implementation attempts. Governing agencies, such as PCORI, are providing more funded projects that will enhance the knowledge in the future. The recommendations for most literatures remain tentative in moving through complete PCC implementation with recommendations of building on the success of one domain, commonly expressed as communication and patient safety, or cultural awareness moving the clinic from specialized descriptive personnel to a team-orientated atmosphere. The literature has not shown what complete implementation looks like within the research environment, leaving this attempt as the first study to provide an example of what the success and failures are in the academic research environment. The recommendation thus begins with continuing to implement PCC within the research setting as a complete package until saturation is maximized and can therefore gain enough support to bring the agenda to the heart of the niche creating a research based tool, much like the Patient- and Family-Care Organizational Self-Assessment Tool, that will enhance the beginning stages for the field.

Challenges in the research-setting stem from the adherence to a research agenda, limiting the flexibility of studies to provide services or procedures that are outside of scope of practice. The PCC essence can be described within research clinics and the cultural changes of teamwork adapted, but not all domains of PCC are readily acceptable and functional within the research
scope. The current tailoring of PCC within the research realm provides an opportunity to further PCC depth while ensuring that the idea develops beyond the initial goals established by IOM.

The current reality is that implementation of PCC is used as a QI experiment; research clinic staff have little guidance on how to properly incorporate the paradigm. This attempt is then measured on a QI scale that draws from the benefit of governing agencies, who commend the attempt, and deliver feedback based on the original goals and scope of the study. Because of this feedback, those in the research environment may articulate the belief that they have incorporated PCC into their setting. But in actuality, they have only developed the “essence”, as described above. This “essence” does not match or translate to identifiable metrics provided by the experts of the PCC culture. Due to this lack of structural adherence, one of this study’s recommendations is creation of a PCC Research Assessment tool that will take into account the structural realities of the academic research environment.

**Implications**

There have not been studies done that discuss the complete implementation of PCC domains in an academic environment. The attempt to bridge the PCC paradigm to current healthcare research has started, with identifying the problem as the first step in change. The findings and recommendations of this study suggest ways to begin incorporating PCC into the academic research environment, if there is a collaborative will to do so and methods that are congruent with the goals and expectation of the university.

**Recommendations for Future Research**

There has been little to nothing done on the implementation package of PCC in an ARE. Current attempts to promote the conversation of bringing PCC are currently on the agenda for some researchers within the clinic’s university medical center; however, there appears to be
confusion on how to begin. The TeamSTEPPS Master Trainer program was briefly brought to the university, but was discontinued without explanation. It was noted that within the university setting, phase 1 of the site assessment, see figure 2 in the appendix, was difficult to attain. The entire research clinic team completed the TeamSTEPPS training process, but there has been no follow-up. This investigation recommends that a greater sense of urgency is developed, and those interested in furthering the discussion and implementation of PCC can use this paper as a guide.

Three recommendations that may help build a strong foundation for setting PCC within the academic research environment are: (a) development of measurement tools, (b) experiments to demonstrate what works for implementing PCC in the academic research environment, and 3. implementation guidance for other academic research environments to utilize what is learned. Projects would allow for the collective voices of those who conduct academic research to be heard, and serve to create and validate a system-specific self-assessment tool. This tool could then be distributed for use throughout university settings, fostering greater incorporation of PCC into those environments.

**Tools for Measurement**

The current tools available for PCC are steeped in the clinical aspects of the healthcare setting. These include PCC improvement guides, TeamSTEPPS program, and PFCC self-assessments. They were not specifically designed for the academic research environment and do not speak to many components of research. Furthermore, the assessment tools used now would be limited to the specific department or clinic seeking to implement them.

A new assessment tool(s) is needed to accurately gauge baseline conditions in the academic research environment and also measure change as part or all of PCC criteria are
adopted. The tool would be developed and refined after more projects are conducted to understand what is working and what is not. This would identify recommended domains in which changes might be more easily attained.

There is still much to do before all levels of university healthcare systems buy into full incorporation of PCC. The most crucial opportunity at hand is to continue to provide the evidence that will support this suggested need. The delivery of PCC in a research environment calls for the current structure, developed for the hospital settings, to be fine-tuned to accommodate the needs of the research environment. The development of a clinical research assessment tool can be the start of a hallmark approach that would allow all university settings to move toward adoption of PCC.

**Studies Demonstrating What Works for Implementing PCC in the Academic Research Environment**

More qualitative and quantitative research is needed to document what processes work for implementing PCC within the academic research environment. In developing an evidence basis, the most powerful test would be randomized controlled trials, which would allow comparisons of the effectiveness of procedures for implementing PCC within the academic research environment. For example, a comparative effectiveness study could be done among clinics of similar size and scope that are and are not implementing PCC.

These studies could be part of the governing agencies initiatives to investigate the complete implementation and academic environments expanding roles toward PCC.

**Implementation Guidance for Other Academic Research Systems to Utilize What is Learned**

As a reference tool, an implementation guide would be useful to assist groups, committees and communities to implement PCC. The guide could list four different areas similar to the list below:
I. Laying the Groundwork

- Familiarize the planning team with PCC – why it is important and how it works
- Ensure that practice leaders are committed to implementation of PCC

II. Adapting PCC to the Practice

- Plan PCC awareness meetings
- Plan TeamSTEPPS guidance
- Establish procedures for care

III. Implementing PCC in Your Practice

- Train staff for roles
- Pilot test and refine plan
- Manage initial full implementation so it succeeds

IV. Refining and Promoting

- Monitor and improve PCC plan over time
- Publicize efforts so that others can learn from your experience (Centers for Disease Control and Prevention, 2014, p. 6).

Within an academic research environment, a PCC Advisory Committee, composed of members who had participated in previous PCC interventions, could be a useful resource. This group could guide others to be successful in implementing PCC in an academic research context, to help shorten the gap to implementation.

Summary

This study is believed to be the first qualitative study to examine the process of implementing PCC into an academic research environment, from an emic perspective of
personnel engaged in this process. The study identified strengths and barriers that may assist persons within the academic research environment to have a better understanding of the process for implementing PCC across the spectrum of research activities.

The study provides suggestions that may be useful to researchers in the medical and mental health treatment professions, healthcare providers and system administrators (and persons training for these professions) to provide that understanding. This dissertation could be the starting point to bring about future changes needed to move the entire academic research environment into the PCC paradigm.

The results of the study suggest that implementation is complex. This work begins to provide the evidence base needed for future PCC researchers, which we hope will become a staple in every university. The project also uses a program evaluation lens that allows for interpreting opinions regarding changes made and gauge a group’s progress toward the “gold standard” of PCC.
References


Appendices
Appendix A
Patient- and Family-Centered Care Organizational Self-Assessment Tool

Patient- and Family-Centered Care Organizational Self-Assessment Tool

Elements of Hospital-Based Patient- and Family-Centered Care (PFCC) and Examples of Current Practice with Patient and Family (PF) Partnerships

This self-assessment tool allows organizations to understand the range and breadth of elements of patient- and family-centered care and to assess where they are compared to the leading edge of practice. Use this self-assessment tool to assess how your organization is performing in relation to specific components of patient- and family-centered care, or as a basis for conversations about patient-centeredness in the organization.

Directions

- The tool should be completed by a team of caregivers and providers from the departments or programs and leaders from the front line to the executive office.
- Review each question and indicate a rating of 1 to 5 for each (with 1 being low and 5 being high), or indicate "Do not know."
  - The 1 to 5 rating for each question is discussed by team members as an essential part of the assessment:
    - What does being a "5" on this question mean to us?
    - How would we know we are a "5"?
    - What would it take for us to rate ourselves a "5" consistently?
  - Questions with a "Do not know" response should seek further team discussion, such as:
    - Why don't we know this?
    - How can we find out?
    - Why is it important to find out?
- Summarize the findings and then determine next steps:
  - What is most important for us to address?
  - Where do we have strengths that we need to make sure others see and build on?
  - How can we gain more patient and family advice on what to focus on next?

Codes:
PFCC = Patient- and Family-Centered Care
PF = Patient and Family
PAS = Performance Appraisal System
<table>
<thead>
<tr>
<th>Domain</th>
<th>Element</th>
<th>Low</th>
<th>High</th>
<th>Do not know</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leadership / Operations</strong></td>
<td>Clear statement of commitment to PFCC and PF partnerships</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Explicit expectation, accountability, measurement of PFCC</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PF inclusion in policy, procedure, program, guideline development, Governing Board activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>Mission, Vision, Values</strong></td>
<td>PFCC included in mission, vision, and/or core values</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PF-friendly Patient Bill of Rights and Responsibilities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>Advisors</strong></td>
<td>PF serve on hospital committees</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PF participate in quality and safety rounds</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Patient and family advisory councils</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td><strong>Quality Improvement</strong></td>
<td>PF voice informs strategic/operational aims/goals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PF active participants on task forces, QI teams</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PF interviewed as part of walk-rounds</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PF participate in quality, safety, and risk meetings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PF part of team attending IHI, NPSF, and other meetings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>Personnel</strong></td>
<td>Expectation for collaboration with PF in job descriptions and PAS</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PF participate on interview teams, search committees</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PF welcome new staff at new employee orientation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Environment and Design</td>
<td>PF participate fully in all clinical design projects</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td></td>
<td>Environment supports patient and family presence and participation as well as interdisciplinary collaboration</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Domain</td>
<td>Element</td>
<td>Low</td>
<td>Med</td>
<td>High</td>
<td>Do not know</td>
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<tr>
<td>Information/Education</td>
<td>Web portals provide specific resources for PF</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Clinician email access from PF is encouraged and safe</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PF serve as educators/faculty for clinicians and other staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PF access to/encouraged to use resource rooms</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Diversity and Disparities</td>
<td>Careful collection and measurement by race, ethnicity, language</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PF provided timely access to interpreter services</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Navigator programs for minority and underserved patients</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Educational materials at appropriate literacy levels</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>Charting and Documentat</td>
<td>PF have full and easy access to paper/electronic record</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>ion</td>
<td>Patient and family are able to chart</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>Care Support</td>
<td>Families members of care team, not visitors, with 24/7 access</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td></td>
<td>Families can stay, join in rounds and change of shift report</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PF find support, disclosure, apology with error and harm</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Family presence allowed/support during rescue events</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td></td>
<td>PF are able to activate rapid response systems</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td></td>
<td>Patients receive updated medication history at each visit</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>Care</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>----------------------------------------------------------------------</td>
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<tr>
<td>PF engage with clinicians in collaborative goal setting</td>
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<tr>
<td>PF listened to, respected, treated as partners in care</td>
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<tr>
<td>Actively involve families in care planning and transitions</td>
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<tr>
<td>Pain is respectively managed in partnership with patient and family</td>
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</tbody>
</table>

*Institute for Healthcare Improvement and the National Institute for Children’s Health Quality, developed in partnership with the Institute for Patient- and Family-Centered Care (June 2013)*
Appendix B
Subject Consent to Take Part in a Study of Implementing the Patient-Centered Care Paradigm in an Academic Research Environment

Authorized Study Personnel:

Fernando Orgas, PhD Candidate, PI
Dreeben School of Education
(830) 469 – 7011
forgas@student.uiwtx.edu

Sharon Herbers, Ed.D., Chair
Dreeben School of Education
(210) 805 - 3073
herbers@uiwtx.edu

Key Information: Your consent is being sought for participation in a research study. The purpose of the research is to describe the implementation of Patient Centered Care (PCC) within an academic research environment. If you agree to participate in this study, the project will involve:

- Procedures will include survey and one-on-one interviews
- A minimum of 2 visits are required. There is a possibility of follow up interviews if questions arise when transcribing or analyzing the interview or survey data that may need further clarification.
- These visits will take up to 1.25 hours total
- There are no physical or emotional risks associated with this study beyond that of everyday life
- You will not be paid for your participation
- Your participation is voluntary and you may decide not to participate at any time

Invitation: You are invited to volunteer as one of 6 subjects in the research project named above. The information in this form is meant to help you decide whether or not to participate. If you have any questions, please ask.

Why are you being asked to be in this research study? You are being asked to be in this study because as an informant of your clinic you are best capable of describing the implementation of PCC within an academic research environment.

What is the reason for doing this research study? The purpose of this study is to describe the implementation of PCC within an academic research environment.

What will be done during this research study? You will be asked to complete a survey and participate in one-on-one interviews.

I would like to audio-record the interviews to make sure that I remember accurately all of the information you provide. I will keep these recordings in a file on a computer protected with a log in and password as well as a different user name and password to access data collection online and they will only be used by PI Fernando Orgas. If you prefer not to be audio-recorded, I will take notes instead.
I may quote your remarks in presentations or articles resulting from this work. A pseudonym will be used to protect your identity, unless you specifically request that you be identified by your true name.

**How will my data/samples/images be used?** Your quotes or recordings could be used for future research studies. You are given the option to choose whether you will allow your de-identified data to be stored indefinitely for further analysis or other relevant research studies.

**What are the possible risks of being in this study?** Your participation in this study does not involve any physical or emotional risk to you beyond that of everyday life. As with all research, there is a chance that confidentiality of the information we collect from you could be breached – we will take steps to minimize this risk, as discussed in more detail below in this form.

**What are the possible benefits to you?** You are not likely to have any direct benefit from being in this research study.

**What are the possible benefits to other people?** The benefits to science and/or society may include a case study on implementation of the Patient-Centered Care paradigm in an academic research environment.

**What will being in this research study cost you?** There is no cost to you to be in this research study.

**How will information about you be protected?** Everything we learn about you in the study will be confidential. The only persons who will have access to your research records are the study personnel, the Institutional Review Board (IRB), and any other person, agency, or sponsor as required by law. If we publish with results of the study, you will not be identified in any way, unless you give specific permission for this.

**What will happen if you decide not to be in this research study or decide to stop participating once you start?** You can decide not to be in this research study, or you can stop being in this research study at any time, for any reason. You do not have to answer any question you do not want to answer. Deciding not to be in this research study or deciding to withdraw will not affect your relationship with; the investigator, UT Health (formerly UTHSCSA), or the University of the Incarnate Word. As there are no benefits to being in this study there are also no negative effects to consider.

The study has been approved by the UIW-IRB and UT Health has consented to employee participation in this study. Your participation in this research is in no way part of your university duties, and your refusal to participate will not affect your employment. If you decide to withdraw from the study, the researchers will ask you if the information already collected from you can be used.

**What should you do if you have a problem or question during this research study?** If you have a problem as a direct result of being in this study, you should immediately contact one of the people listed at the beginning of this consent form.
If you have any questions now, feel free to ask us. If you have additional questions about your rights or wish to report a problem that may be related to the study, please contact the University of the Incarnate Word Institutional Review Board office at 210-805-3036.

**Consent for future use of data**

**Initial one of the following to indicate your choice:**

_____ I give permission for my de-identified data to be used in the future for additional analysis or other relevant research studies. I understand that no additional informed consent for this use will be sought. I understand that my de-identified data can be stored indefinitely.

_____ I give my permission for my data to be used for this research study only. I do not give permission for any future use beyond the scope of this research study. I understand that my data will be destroyed within 5 year(s) after completion of this study.

**Consent**

Your signature indicates that you (1) consent to take part in this research study, (2) that you have read and understand the information given above, and (3) that the information above was explained to you, and you have been given the chance to discuss it and ask questions. You will be given a copy of this consent form to keep.

__________________________
Name of Participant

__________________________     _____________________________
Signature of Participant      Date

__________________________
Name of Principal Investigator/Designee

__________________________     _____________________________
Signature of Principal Investigator/Designee   Date
Appendix C

Semi-Structured 1:1 Interview Protocol

One-on-One Semi-Structured Interviews

Purpose is to create a picture of what Patient-Centered Care (PCC) implementation looks like in an academic research environment. What carries over according to the research environment and how employees view the needs of PCC to ensure complete implementation?

Patient-Centered Care - (PCC) is care that is respectful of, and responsive to, individual patient preferences, needs and values, and ensuring that patient values guide all clinical decisions through the practices of caring for patients (and their families) in ways that are meaningful and valuable to the individual patient (OneView, 2015).

Preparation for Interview

In preparation for conducting the interview, there are a few things to ensure. These things include:

- A comfortable meeting location
- Time/Date designated by interviewee
- Interview/Recording Consent
- Reaffirm Terms of Confidentiality
- Code word will be determined for each interviewee to ensure anonymity

Atmosphere and Dynamics of the Interview

Things to keep in mind for this interview:

- Each interview will be approximately 60 minutes
- Each interview will be conducted by the same interviewer
- Each interview will be conducted at time and location most comfortable to interviewee
- All interviews will be transcribed
- Ask the same questions to each candidate
- Interviewer will take notes and audio record interview for transcription
- Notes will be of items observed during interview to include emotion of responses

Questions

1. What drew you to this work? Why?
2. How would you describe your current work environment?
3. What do you feel you do in this work environment?
4. Is this environment unique as compared to other clinics? How? Why?
5. In the time that you have been here have you noticed any changed in attitudes, behaviors or habits within the clinic?
6. Do you consider your work primarily as patient care or investigation? Why? (Tell me a story)
7. Do you describe the people coming in as participants or patients? Why?
8. How do you describe your work when speaking to outsiders?
9. Have your feelings about coming to work or being at work changed?
10. How do you view members of your working group? (Describe them)
11. How would you describe your interactions or relationships with patients/participants? Tell me a memorable interaction. (depending on how they describe them)
12. What do you know about PCC? (What is it?)
13. How and where did you learn of the PCC paradigm?
14. Have you used PCC in other working environments? Or just your current working environment?
15. What is your perception of PCC? Why?
17. What would you consider to be the PROs to PCC in this environment? What does success look like?
18. What would you consider to be the CONs or barriers to PCC in this environment? What are the barriers?
19. How has workflow or workload changed from the implementation of PCC in this environment?
20. What can be done better to integrate PCC in the research environment?
21. Where do you see your clinic in terms of accomplishing PCC?
22. Is there anything that you would like to add?
Appendix D

Coding

<table>
<thead>
<tr>
<th>Original Coding</th>
<th>Mid-level Coding (Mother/Child Codes)</th>
<th>Thematic Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>287 Codes</td>
<td>73 Codes</td>
<td>8 Codes</td>
</tr>
<tr>
<td>• Reorganize codes into meaningful containers</td>
<td>• Take Children Codes and reorganize into potential parents/themes/categories</td>
<td>• Up code all codes</td>
</tr>
<tr>
<td>• Up code</td>
<td>• Recode; eliminate redundancy</td>
<td>• Remove Children codes into Mother codes</td>
</tr>
<tr>
<td>• Eliminate redundant codes</td>
<td>• Affirm thematic development</td>
<td>• Analyze codes for strength</td>
</tr>
<tr>
<td>• Initial thematic development</td>
<td></td>
<td>• Cross – Case Analysis (w/ Survey)</td>
</tr>
<tr>
<td>• Make Children Codes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mid-level Coding (Mother/Child Codes)</th>
<th>Thematic Coding</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>• Take Children Codes and reorganize into potential parents/themes/categories</td>
<td>• Up code all codes</td>
</tr>
<tr>
<td>• Recode; eliminate redundancy</td>
<td>• Remove Children codes into Mother codes</td>
</tr>
<tr>
<td>• Affirm thematic development</td>
<td>• Analyze codes for strength</td>
</tr>
<tr>
<td></td>
<td>• Cross – Case Analysis (w/ Survey)</td>
</tr>
</tbody>
</table>
### Mid-Level Codes
- Team Mentality
- PCC will be expectation
- No Power Conflict
- More Education for all
- General Patient PCC Excitement
- EQ as Tool for Circumstances
- Effective Listening is Key
- Direct PCC Effect
- Continual Stream of PCC Info Needed
- Continual Cycle Reinforcements
- Complimentary Work Vision
- Balance – No Power Struggles
- Alignment with Quality
- Pt Satisfaction to Engagement
- Proactive Involvement
- Patient PCC Transition
- Noticed in Completion Most
- More Hands-On and Emotion Sensing
- Improved Pt Involvement
- Empathetic to Pt Wait
- Cultural/Environmental Benefits
- Clinic Process Improvement
- Time Extensive
- Tailored Interactions not Process Change
- Realism in Collaboration
- PCC R&D in Works
- Not Taught Enough
- Low Esteem Less Belief
- Guessing not Knowing
- Consistency for All
- Transparency through Honesty
- Success is Completion
- Hope of HC as Best Practice
- Hope of Baseline Understanding
- Growth through Experience
- Clinical PCC Goal
- Why We Research
- Why We Are Unique
- What it Was & What is Now

### Thematic Codes
1. Clarification
2. Clinic Description
3. Conflict: ARE vs PCC
4. Defining Research Environment
5. Expectation
6. PCC Challenges
7. PCC Outcomes
8. PCC Realities
<table>
<thead>
<tr>
<th>We are Governed not Free</th>
<th>Grant Study Understanding of Immediate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real World View of Us</td>
<td>Diverse Foundations</td>
</tr>
<tr>
<td>Limitations in Research</td>
<td>Set Research-Inflexibility</td>
</tr>
<tr>
<td>How We Started PCC</td>
<td>Research Process Expectation</td>
</tr>
<tr>
<td>How it Works Here</td>
<td>Rationale for Research Generalizations</td>
</tr>
<tr>
<td></td>
<td>Pt Motives Awareness a Factor</td>
</tr>
<tr>
<td></td>
<td>PCC Tool Limitations</td>
</tr>
<tr>
<td></td>
<td>Parameter Limitations for Listening</td>
</tr>
<tr>
<td></td>
<td>Flexibility as a Luxury</td>
</tr>
<tr>
<td></td>
<td>Dual Patient Roles</td>
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<tr>
<td></td>
<td>Consistency is Success</td>
</tr>
<tr>
<td></td>
<td>What the Clinic Does</td>
</tr>
<tr>
<td></td>
<td>What is Given</td>
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<tr>
<td></td>
<td>PCC Focused</td>
</tr>
<tr>
<td></td>
<td>Happiness Universally</td>
</tr>
<tr>
<td></td>
<td>For Who and What We Do</td>
</tr>
<tr>
<td></td>
<td>Why Healthcare is for Me</td>
</tr>
<tr>
<td></td>
<td>Personal Stepping Stone</td>
</tr>
<tr>
<td></td>
<td>Personal Role/Strength</td>
</tr>
<tr>
<td></td>
<td>Patient Experience Misconception</td>
</tr>
<tr>
<td></td>
<td>Patient Experience Expectation</td>
</tr>
<tr>
<td></td>
<td>Patient as Driver of Care</td>
</tr>
<tr>
<td></td>
<td>Job Experience – Historically</td>
</tr>
<tr>
<td></td>
<td>How I See My Role</td>
</tr>
<tr>
<td></td>
<td>Heavily a Researcher</td>
</tr>
<tr>
<td></td>
<td>Current Role in Clinic</td>
</tr>
<tr>
<td></td>
<td>Clinic Foundation</td>
</tr>
<tr>
<td></td>
<td>Clinic Environmental Transition</td>
</tr>
</tbody>
</table>
Theme 1: Alignment by “Essence” not Structure

Desire for PCC – No Structure in place

PCC Challenges

- Conflict: ARE vs PCC
- Alignment with Quality Improvement
- Limitations of PCC Care provided
- Inflexibility of Research
- Tailored Interactions
- Research Demands not Real World

PCC Realities

- Limited PCC info
- PCC tools not developed for ARE
- PCC not predominant in ARE
- Support from Supervisors not Organization
- Variation not recommended
- IRB & Grant Measure Driven
- No established PCC processes in ARE

Implementation of a team atmosphere

Need for QI is provided no PCC rationale

Strict expectations

No complete PCC implementation process
Theme 2: PCC is a collaborative “opinion” between care group and patient

Clinic Description

- For who we do this work
- To validate process being studied
- For “sick” individuals & Research Studies

Expectations

- What is done?
- Provide care & evidence to improve utilized process

PCC goals; primarily customer awareness

- Transparency
- Honest Feedback - expectations and ethics

PCC Realities

- No Power Struggles amongst Staff
- Improved Customer Care & PT care experience through complimentary work vision

- Better communication
- Care success is based on customer actions

- Opinion from data collected from real use of process
- Provide care that we want to receive
- Expert Opinions
Appendix E

IRB Approval

October 24, 2018

To: Mr. Fernando Orgas

From: University of the Incarnate Word Institutional Review Board, FWA00009201

Fernando:

Your request to conduct the study titled "Implementing the Patient-Centered Care Paradigm in an Academic Research Environment" was approved by Exempt review on 10/24/2018. Your IRB approval number is 18-10-009. You have approval to conduct this study through 10/24/19.

Please keep in mind the following responsibilities of the Principal Investigator:

1. Conducting the study only according to the protocol approved by the IRB.
2. Submitting any changes to the protocol and/or consent documents to the IRB for review and approval prior to the implementation of the changes. Use the IRB Amendment Request form.
3. Ensuring that only persons formally approved by the IRB enroll subjects.
4. Reporting immediately to the IRB any severe adverse reaction or serious problem, whether anticipated or unanticipated.
5. Reporting immediately to the IRB the death of a subject, regardless of the cause.
6. Reporting promptly to the IRB any significant findings that become known in the course of the research that might affect the willingness of the subjects to participate in the study or, once enrolled, to continue to take part.
7. Timely submission of an annual status report (for exempt studies) or a request for continuing review (for expedited and full Board studies). Use either the IRB Study Status Update or IRB Continuing Review Request form.
8. Completion and maintenance of an active (non-expired) CITI human subjects training certificate.
9. Timely notification of a project's completion. Use the IRB Closure form.

Approval may be suspended or terminated if there is evidence of a) noncompliance with federal regulations or university policy or b) any aberration from the current, approved protocol.

If you need any assistance, please contact the UIW IRB representative for your college/school or the Office of Research Development.

Sincerely,

Ana Hagendorf, PhD, CPRA

Ana Hagendorf, PhD, CPRA
Director, Office of Research and Sponsored Projects Operations
University of the Incarnate Word
(210) 805-3036
wandlers@uiwtx.edu
## Tables

Table 1. Comparison of Focused Ethnography to Traditional Ethnography: When to Use Focused Ethnography.

<table>
<thead>
<tr>
<th>Focused Ethnography</th>
<th>Anthropologic Ethnographies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific aspect of field studied with purpose</td>
<td>Entire social field studied</td>
</tr>
<tr>
<td>Closed field of investigation as per research question.</td>
<td>Open field of investigation as determined through time.</td>
</tr>
<tr>
<td>Background knowledge usually informs research question.</td>
<td>Researcher gains insider knowledge from participatory engagement in field.</td>
</tr>
<tr>
<td>Informants serve as key participants with their knowledge.</td>
<td>Participants are often those whom the researcher has developed a close relationship.</td>
</tr>
<tr>
<td>Intermittent and purposeful field visits using particular timeframes or events, or may eliminate observation.</td>
<td>Immersion during long-term, experiential-intense fieldwork.</td>
</tr>
<tr>
<td>Data analysis intensity often with numerous recording devices including video cameras, tape recorders and photo-cameras.</td>
<td>Narrative intensity.</td>
</tr>
<tr>
<td>Data sessions with a gathering of researchers knowledgeable of the research goals may be extensively useful for providing heightened perspective to the data analysis particularly of recorded data.</td>
<td>Individual data analysis.</td>
</tr>
</tbody>
</table>

### About TeamSTEPPS®

**Teamwork system designed for health care professionals that is:**

- A powerful solution to improving patient safety within your organization.
- An evidence-based teamwork system to improve communication and teamwork skills among health care professionals.
- A source for ready-to-use materials and a training curriculum to successfully integrate teamwork principles into all areas of your health care system.

**Provides higher quality, safer patient care by:**

- Producing highly effective medical teams that optimize the use of information, people, and resources to achieve the best clinical outcomes for patients.
- Increasing team awareness and clarifying team roles and responsibilities.
- Resolving conflicts and improving information sharing.
- Eliminating barriers to quality and safety.

**Three-phased process aimed at creating and sustaining a culture of safety with:**

- A pre-training assessment for site readiness.
- Training for onsite trainers and health care staff.
- Implementation and sustainment.

**Scientifically rooted in more than 20 years of research and lessons from the application of teamwork principles.**

**Developed by Department of Defense's Patient Safety Program in collaboration with the Agency for Healthcare Research and Quality.**
### Three Phases of the TeamSTEPPS Delivery System

<table>
<thead>
<tr>
<th>Phase 1 – Assess the Need</th>
<th>Phase 2 – Planning, Training &amp; Implementation</th>
<th>Phase 3 – Sustainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal to determine an organization's readiness for undertaking a TeamSTEPPS-based initiative, training needs analysis, which is a necessary first step to implementing a teamwork initiative.</td>
<td>Goal is the planning and execution segment of the TeamSTEPPS initiative. Designed to be tailored to the organization, options in this phase include implementation of all tools and strategies in the entire organization, a phased-in approach that targets specific units or departments, or selection of individual tools introduced at specific intervals (called a &quot;dosing strategy&quot; in TeamSTEPPS parlance). As long as the primary learning objectives are maintained, the TeamSTEPPS materials are extremely adaptable.</td>
<td>Goal is to sustain and spread improvements in teamwork performance, clinical processes, and outcomes resulting from the TeamSTEPPS initiative. Key objective is to ensure opportunities exist to implement the tools and strategies taught, practice and receive feedback on skills, and provide continual reinforcement of the TeamSTEPPS principles on the unit or within the department.</td>
</tr>
</tbody>
</table>
Details of a Site Assessment

A site assessment entails identifying opportunities for improvement; determining the readiness of the institution, such as leadership support; identifying potential barriers to implementing change; and deciding whether resources are in place to successfully support the initiative. Each part of the Phase 1 assessment is described below.

| Establish an organizational-level change team. | The organizational-level change team should consist of a multidisciplinary group that represents the breadth of health care professionals within the organization. Successful change teams are comprised of organizational leaders who are committed to changing the current culture. |
| Conduct a site assessment. | A site assessment, also called team training needs analysis, is a process for systematically identifying teamwork deficiencies so training programs can be developed to address those deficiencies. This information is then used to identify critical training and develop training objectives. |
| Define the problem, challenge, or opportunity for improvement. | The team must identify the recurring problem that threatens patient safety and then determine how this problem results from existing processes and procedures. The team should devise a flowchart or map of the process during which the problem occurs. With information and processes properly mapped, it becomes clear what interventions are needed, what the objective of these interventions should be, and how ready the organization is to engage in these interventions. |
| Define the goal of your intervention. | List the goals that will reduce or eliminate the risk to safe patient care. For each goal, state in one sentence what will be achieved, who will be involved (whose behavior will change), and when and where the change will occur. Ideally, a team process goal, a team outcome goal, and a clinical outcome goal will be defined. |
The tools and strategies needed to address opportunities for improvement in an organization will be determined by the Phase 1 assessment. The next step is to develop a customized Implementation and Action Plan, followed by training and implementation. Below is a brief description of steps for planning, training, and implementation.

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define the TeamSTEPPS intervention.</td>
<td>Decide whether &quot;whole training&quot; (all the tools in one sitting) or &quot;dosing&quot; (specific tools targeted to specific interventions) is the best intervention tactic. Whole training optimizes teamwork but does not maximize learning. It can also lead to overload or uncertainty about which tools best fit improvement opportunities. Dosing is the recommended approach because it allows for direct linking of tools and strategies with specific opportunities for improvement to minimize training fatigue and overload.</td>
</tr>
<tr>
<td>Develop a plan for determining the intervention’s effectiveness</td>
<td>There are a variety of ways to evaluate the impact of training. The plan should assess whether trainees have acquired new knowledge, skills, or attitudes at the end of training; if individuals are taking their learning back to the workplace and using it on the job; and organizational outcomes.</td>
</tr>
<tr>
<td>Develop an implementation plan.</td>
<td>Assess what groups will be trained, the order in which they will be trained (if not together and all at once), and what level of training they will receive. Include in the plan who will conduct training and where and when training will take place.</td>
</tr>
<tr>
<td>Gain leadership commitment to the plan.</td>
<td>Inform leaders of all facets of the plan, including how much time will be used for training and the desired resources to support it. Leadership commitment often yields plan refinement. The key is to know what elements of the plan cannot be altered.</td>
</tr>
<tr>
<td>Develop a communication plan.</td>
<td>Develop a plan for communicating what will be done and how the goal will be achieved. Leaders (both designated and situational) should provide information to all those in their departments or units about the initiative. It is crucial to tie together all activities that will take place with the overall goal for the initiative (i.e., improved patient safety).</td>
</tr>
<tr>
<td>Prepare the institution.</td>
<td>For any initiative to be fully successful, transfer of training must be achieved. Transfer is achieved by ensuring new knowledge or skills are learned and applied in the work environment. The change team must ensure the work environment is prepared to foster transfer of training so new tools and strategies are applied on the job.</td>
</tr>
<tr>
<td>Implement training.</td>
<td>Train-the-Trainer</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>This 2-day training course is designed to create a cadre of teamwork instructors with the skills to train and coach other staff members.</td>
<td>This curriculum includes 4 to 6 hours of interactive workshops for direct patient care providers.</td>
</tr>
</tbody>
</table>
Details for Sustaining a TeamSTEPPS Intervention

The designated change team manages sustaining interventions through coaching and observing team performance. An effective sustainment plan should account for ongoing assessment of the effectiveness of the intervention, sustainment of positive changes, and identification of opportunities for further improvements. Below is a brief description of the steps to include in a TeamSTEPPS sustainment plan.

Provide opportunities to practice. Any TeamSTEPPS based initiative will be much more successful if the change team accounts for opportunities to practice these behaviors. It is important to embed opportunities for practice in day-to-day functions.

Ensure leaders emphasize new skills. Leaders play a critical role in sustainment because they are responsible for emphasizing daily the skills learned in TeamSTEPPS training. The goal is for leaders to engage in activities that will ensure continuous involvement in teamwork.

Provide regular feedback and coaching. Regular feedback and coaching are key to ensuring interventions are sustained. Change team members, champions from the unit, and leaders should develop and use a coaching and feedback plan that allows for sufficient observation and feedback opportunities.

Celebrate wins. Celebrating wins bolsters further sustainment and engagement in teamwork. When using a TeamSTEPPS-based initiative, it is critical to celebrate successes for two reasons. First, it recognizes the efforts of those who were engaged from the beginning, and second, it provides detractors or laggards a tangible example of how teamwork has improved the current operations.

Measure success. The change team should measure success by demonstrating satisfaction with training, learning, the effective use of tools and strategies on the job, and changes in processes and outcomes. It is useful to ensure that measurement of pre-training factors is parallel with post-training factors so changes can be assessed.

Update the plan The final stage in any TeamSTEPPS-based intervention is to revise the plan as the organization’s needs change. The change team should determine when organizational needs have changed and ensure the sustainment plan continues to focus on the needs of the organization or unit where the intervention has been implemented.

Figure 2. Examples of Focused Ethnographies in Healthcare (Nursing).

<table>
<thead>
<tr>
<th>Reference</th>
<th>Setting and sample</th>
<th>Study aim</th>
<th>Data collection and analysis methods</th>
<th>Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dupuis-Blanchard et al. (2009)</td>
<td>19 people 55 years or older, able to converse in English and living in a selected building in Canada.</td>
<td>To identify the meaning of social engagement for adults who had recently moved to flats for older people and the types of relationships they developed in their new homes.</td>
<td>Semi-structured interviews in the building. Interviews were also guided by ongoing data analysis. Demographic information was collected. An ecomap consisting of a central circle, to represent the participant, with outer circles representing other significant people, was used to show participants’ relationships.</td>
<td>Older adults developed relationships to help with feelings of insecurity and casual interactions, extend support to others and develop friendship. The study provides a better understanding of the concept of social engagement for older people.</td>
</tr>
<tr>
<td>Ensign and Bell (2004)</td>
<td>Convenience and purposive sampling were used to engage 45 clinic- and street-based homeless young people aged between 12 and 23 years in Seattle, Washington.</td>
<td>To describe the experiences of homeless youths of illness and how these experiences differed by age, gender and sampling site.</td>
<td>Participant observations in the youth clinic and street areas, key informant interviews, semi-structured interviews in a private consulting room in the clinic or street-side in the front seats of the medical van, focus group interviews for more in-depth exploration.</td>
<td>Health-seeking behaviour varied according to gender. Age affected the participants’ ability to seek health care at hospitals. Street-based youth had more challenges related to health and access to health care.</td>
</tr>
<tr>
<td>Garcia &amp; Saewyc (2007)</td>
<td>14 adolescent participants from a bilingual charter school and a Catholic church in neighboring urban cities centered in a larger metropolitan area in the United States. These participants were aged 15 to 20 years old, and were born in and raised in Latin America.</td>
<td>To explore the health-related perceptions and experiences of immigrant Latino adolescents.</td>
<td>Information from two interviews and pictures taken by participants, who had been given 24-exposure disposable cameras. Participant observation, field notes and journaling, Content analysis and constant comparison with the help of Atlas.ti</td>
<td>Three themes were identified: mentally healthy, mentally unhealthy and health promotion. Mental health nurses are in a position to educate this group of immigrant youths about health and mental health services.</td>
</tr>
<tr>
<td>Higginbottom (2011)</td>
<td>Purposive sampling of 23 internationally educated nurses (IENs) who were recently recruited by one of Western Canada’s health authorities.</td>
<td>To understand IENs’ transitioning experiences on relocation to Canada.</td>
<td>Semi-structured interviews with IENs. Participants’ demographic information. Analysis followed Roper and Shapira’s framework for ethnographic data analysis with the help of Atlas.ti software.</td>
<td>Negative experiences were reported by IENs with respect to their work contract and support. Communication, or its absence, was a contributory factor in the reported discontent among IENs. Failure to provide IENs with appropriate orientation opportunities affected their ability to communicate effectively with their colleagues.</td>
</tr>
<tr>
<td>Reference</td>
<td>Setting and sample</td>
<td>Study aim</td>
<td>Data collection and analysis</td>
<td>Conclusions</td>
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<tr>
<td>Kilian et al. (2008)</td>
<td>Purposive sampling using a ‘chain-referral’ process, of older people who were ‘fallers’ and their six adult children living in urban Toronto, Canada.</td>
<td>To examine the perceptions of risk regarding falling older adults and their adult children, and what personal, interpersonal and societal factors</td>
<td>Semi-structured interviews, field notes and reflective journal. Participant checking was used to provide elaboration. Thematic analysis during data analysis</td>
<td>The seniors valued independence and it is important to include multiple family perspectives when taking action to prevent falls.</td>
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<td>Pasco et al. (2004)</td>
<td>23 Filipino-Canadian patients, aged 33 to 86 years old, who had lived in Canada for five to 40 years and received care in Canadian hospitals.</td>
<td>To identify the culturally embedded values that implicitly guide Filipino Canadian patients’ interactions in developing nurse-patient relationships.</td>
<td>Face-to-face unstructured interviews initiated with a ‘grand tour’ question, field notes and person diary. Data analysis used thematic content analysis.</td>
<td>Nurses’ ability to provide culturally-competent care to Filipino Canadian patients can be facilitated by an understanding of the patients’ verbal and non-verbal communication.</td>
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<td>Scott and Pollock (2008)</td>
<td>29 unit members, consisting of nurses, nurse managers, physicians and other healthcare professionals working in a critical care unit.</td>
<td>To explore the effect of unit culture on the general use of research by nurses.</td>
<td>Individual interviews. Field visits, field journal, audit trail. Analysis and interpretation employed Fetterman’s (1998) ethnographic methodology.</td>
<td>Unit culture and those of the individuals in charge dictated nurses’ use of research in their practice. There was significant reluctance to go against established norms in the unit.</td>
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<td>Spiers and Wood (2010)</td>
<td>Convenience and theoretical sampling of community mental health nurses providing brief therapy (ten sessions or less) or consulting practice for three or more years in Alberta, Canada.</td>
<td>To explore perceptions and actions of community mental health nurses in building a therapeutic alliance in the context of brief therapy and the factors that helped or impeded its development.</td>
<td>Three focus groups, individual interview, verification interview and methodological journal. Thematic content analysis.</td>
<td>Building an alliance consisted of three overlapping phases: establishing mutuality, finding the fit in reciprocal exchange and activating the power of the client. Factors inhibiting alliances were related to patient history, environment, and individual characteristics.</td>
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<td>Tzeng et al. (2010)</td>
<td>Convenient and purposive sampling were used to invite participants working full-time in a medical centre in Taipei, Taiwan. 18 participants consented to interviews, while 36 nurses consented to be interviewed.</td>
<td>To describe the ways psychiatric nurses provided care for and responded to dilemmas associated with caring for suicidal patients.</td>
<td>Participant observations and field notes. Interviews were interviewed at times and places convenient for them. Content analysis and constant comparison using Hammersley and Atkinson’s (2007) analytic induction.</td>
<td>Nurses spoke about the idea of opening and closing doors in understanding the inner worlds of their suicidal clients. An understanding of the suicide experience is needed to help nurses understand when...</td>
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Figure 4
ORGAS Research Timeline

DATA COLLECTION

Focused Ethnographic Case Study - Culture Review
Start: 1 Oct. 2018

Interview Analysis
Transcription & analysis
Start: 1 Nov. 2018
Thematic Review
6 weeks

Survey Analysis
Analysis & comparison
Start: 29 Dec. 18

Study Analysis
Edit - write - edit
Start: 12 Jan. 19

Defend
PhD Defense
August 2019

ANALYSIS

1 Days
Field Notes & Memo-logging
Audio recordings & transcription
"Seeing the Picture"

12 Days
Write - review - rewrite
"Framing the Picture"

Survey Launch
Start: 17 Dec. 18

Defend
PhD Defense
August 2019

New Beginning
Follow-up book
Start: August 2019

Interviews
Participant Interviews
Start: 19 Oct. 18

Cycling & Thematic Review
Alfredo Ortiz, MD