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Creating Opportunities for Personal Empowerment: A Project Evaluation

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Abstract

Introduction: 66% of individuals in the United States who experienced a major depressive episode in the last year saw a general practitioner or family doctor and not a psychiatrist or psychotherapist (Center for Behavioral Health Statistics and Quality, 2018). Many primary care providers treat with medication, however, a combination of medication and psychotherapy is associated with better results (Anxiety and Depression Association of America, n.d.). A Midwestern faith-based healthcare organization implemented a pilot cognitive behavioral therapy program at a family medicine residency clinic to improve mental health care. **Objectives:** The purpose of this project was to evaluate if the implementation of Creating Opportunities for Personal Empowerment (COPE) by primary care providers was beneficial and sustainable at the clinic. **Methods:** Using the Consolidated Framework for Implementation Research, a DNP student analyzed data collected from electronic health records, observed behaviors and systems within the clinic, and conducted semi-structured interviews with the COPE providers. **Results:** Care as usual data from the clinic suggested the need for additional anxiety and depression interventions. Nine individuals participated in COPE and experienced decreases in PHQ-9 and GAD-7 scores. Providers experienced barriers related to completing COPE training and scheduling COPE appointments. Three providers participated in COPE sessions, but it was not well adopted. **Conclusions:** COPE was beneficial for patient anxiety and depression, but it is not sustainable in the family medicine residency clinic primarily due to busy provider schedule, and lack of organizational support. **Implications:** COPE may be used by individual providers but there are difficult barriers to overcome when implementing clinic wide.

Keywords: depression, anxiety, primary care, COPE

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Introduction and Background

The prevalence of mental illness in the United States is astonishing. Approximately seven percent of all individuals have experienced a major depressive episode in the last year and around 31% percent experience an anxiety disorder during their lifetime (Center for Behavioral Health Statistics and Quality, 2018; National Institute of Mental Health, 2017). 12.7% of individuals between 2011-2014 reported they had taken an antidepressant in the last month but estimates suggest that number to be much higher today (Pratt et al., 2017). Suicide which is often associated with mental illness, is currently the second leading cause of death among individuals ages 10-34 (Centers for Disease Control and Prevention, 2017). Mental illness is also increasingly present in pediatric populations (Bitsko et al., 2018). Nationally representative estimates suggest that among children aged 3-17 years, 7.4% have a diagnosed behavioral problem, 7.1% are diagnosed with anxiety, and 3.2% are diagnosed with depression (Ghandour et al., 2019). Children who endure stressors at a young age are more likely to experience poor mental and physical health outcomes in adulthood (Chang et al., 2019).

Adverse Childhood Experiences (ACEs) is a term used to describe a range of stressful or traumatic events such as abuse, poverty, violence, household dysfunction, or exposure to family members with mental illness (Tsehay et al., 2020). History of these experiences has adverse and persistent effects on health later in life, including risky behaviors, chronic health conditions, low life potential, and early death (Chang et al., 2019). ACEs screening is more routinely being used as an indicator of negative current and future mental and physical health outcomes.

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Appropriately addressing mental illness can greatly improve quality of life for both children and adults now and in the future.

Mental illness has traditionally been treated separately from other types of health care (Kroenke & Unutzer, 2017). However, due to a shortage of mental health providers, the role of mental health management has fallen to primary care providers. It is estimated that in the United States, 32.52% of the needed mental health professionals are available (Bureau of Health Workforce et al., 2019). Of individuals who experienced a major depressive episode in the last year, 66% saw a general practitioner, family doctor, or other medical doctor who was not a psychiatrist or psychotherapist (Center for Behavioral Health Statistics and Quality, 2018). Because of the separation in physical and mental health care, many primary care providers feel unprepared to adequately manage mental health concerns (Loeb et al., 2012).

Most primary care providers treat with medication only, but a combination of medication and psychotherapy is associated with better results (Anxiety and Depression Association of America, n.d.). In an attempt to bridge the gap to psychotherapy, Creating Opportunities for Personal Empowerment (COPE) was created by Dr. Melnyk as a standardized cognitive-behavioral therapy (CBT) program deliverable in the primary care setting (COPE, n.d.). Though initially designed to assist children and young adults to cope with stress and anxiety, the program has now been adapted for use among adult populations. The program educates participants about the universal principals of the thinking, feeling, and behaving triangle using a 7-session, 30-minute, manual lead approach (Appendix A).

Problem Statement

In an attempt to improve mental health care, a Midwestern faith-based healthcare organization implemented the COPE program at a family medicine residency clinic. The organizational goal was to increase provider cognitive behavioral therapy competencies to produce a synergistic patient-provider relationship and improved patient mental health outcomes. The implementation of COPE led to the following clinical question for this quality improvement project: Is the implementation of COPE by primary care providers beneficial and sustainable at the family medicine residency clinic?

Assessment of the Organization

The organization assessed was a family medicine residency clinic affiliated with a sizeable faith-based healthcare system. The organization was established over 100 years ago and is located within a Midwestern community. At the start of this assessment, the clinic was separated into two clinics: a family medicine clinic and a residency teaching clinic. During the organizational assessment process, the clinics merged to form one larger clinic. Key stakeholders within the identified setting, included the clinic providers, medical assistants, the clinic manager, and the patients. Additional stakeholders included the clinical services director, senior leadership, and the organization's psychiatrists. These individuals would be influential in the implementation and sustainability of the project (Moran et al., 2020). Assessment of the organization was conducted using the Universalia Institutional and Organizational Assessment Model (Lusthaus et al., 2002; Universalia, n.d.) in addition to an analysis of the strengths, weaknesses, opportunities, and threats (SWOT) assessment.

Universalia Institutional and Organizational Assessment Model

The Universalia Institutional and Organizational Assessment (IOA) Model (Appendix B) aims to identify needed improvements, to inform strategic planning initiatives, and to satisfy accountability requirements (Lusthaus et al., 2002; Universalia, n.d.). The model helps users to identify three contextual forces that drive organizational performance: organizational capacity, external environment, and internal motivation (Lusthaus et al., 2002). The three contextual forces will now be considered within the context of the family medicine residency center.

***Organizational capacity*.** Organizational capacity describes the organization's ability to use its resources to perform (Lusthaus et al., 2002). An organization that is effectively utilizing its resources operates at full capacity. The volume of resources available to the organization determines the boundaries of its capacity. Capacity includes an organization's financial, program, and process management, inter-organizational linkages, strategic leadership, human resources, infrastructure, and organizational structure (Lusthaus et al., 2002). These factors support the organization in completing its work.

On a macro level, the family medicine residency clinic was affiliated with an extensive health care system consisting of a hospital and multiple primary care clinics. This affiliation offered stability and resources. The organization had a behavioral health department that had strong leadership and desired to expand services. There was also a growing social work department dedicated to the management of more complex clients. These macro factors were very favorable when considering the implementation of a mental health project. Additionally, several micro capacity factors made this particular clinic favorable. Such factors included

informal clinic leaders, approved grant funding for COPE training, and positive attitudes about COPE among the clinic providers.

External environment. Organizations are influenced by the environment in which they operate. External influences include cultural values, norms, and beliefs, as well as economic, political, sociocultural, environmental, and technological conditions (Lusthaus et al., 2002). Organizations are reliant on the support from this external environment to survive. It is essential to assess the external environment of the organization to determine if it is congruent with the aims of the project.

The culture surrounding mental health at the time of the organizational assessment in the Midwestern community was largely positive and supportive. Individuals were more accepting of vocalizing mental health needs and more comfortable around people who are different from themselves. Because of this, there was a high demand for mental health services but minimal resources to meet those needs. It could often take months for an individual to see a psychiatrist or other mental health provider. The environment surrounding the clinic was hopeful for improved mental health care and the clinic itself has already begun to pilot COPE.

***Organizational motivation*.** An organization's motivation is referred to by Lusthaus et al. (2002) as the organization's "underlying personality" (p. 11). Motivation influences the performance and quality of work (Lusthaus et al., 2002). Organizational motivation includes an organization's history, mission, culture, and incentive. The history of this organization was faith-based, with a mission to serve in the spirit of the gospel. Its core values were reverence, commitment to those who are poor, justice, stewardship, and integrity (XXXXX XXXXXX, n.d.). Within the clinic, providers valued fostering relationships with clients, but they also valued

a full schedule and high relative value units (RVUs). Several of the clinic providers had stated that COPE was something they valued and a mission they intend to pursue.

***Organizational performance*.** Lusthaus et al. (2002) report that most non-profit organizations determine their performance by the extent to which they meet their stated mission. When an organization is living out its objectives, it must be mindful of its efficiency. Ensuring the organization's operational costs are economical indicates their capacity for survival and the ability to continue their work (Lusthaus et al., 2002). The larger organization had been effective in meeting its mission by offering programs to assist the underserved and by providing a psychiatric hospital. However, the organization had recently experienced some financial difficulties leading to several budget cuts.

Despite these trials, funds to meet the initial COPE provider training goals had already been identified. Training had been previously offered to seven providers with one completing the training but not certification. The organization was working to place a social worker within each clinic, and they were interested in COPE certifying the social workers. There had also been conversations about COPE certifying the medical residents as part of their mental health education. The family medicine residency clinic had recently been challenged by a quality improvement initiative to begin screening at-risk individuals for ACEs. All of these factors were promising for COPE and demonstrate the organization’s ability to meet its stated mission and values. Next, the DNP student will summarize the findings of the organizational assessment using a SWOT analysis.

SWOT

The organizational assessment also included a SWOT for strategic analysis (Appendix C). First the strengths and weaknesses of the organization were considered to examine the internal operations and identify areas where the clinic was doing well and where there was room for improvement (The William and Anitia Newman Library, n.d.). Then an examination of the external opportunities and threats was conducted to identify forces that could pose threats or opportunities for the organization (The William and Anitia Newman Library, n.d.).

Strengths and Weaknesses

The family medicine residency clinic had significant strengths which suggested the potential for a successful COPE implementation. The clinic was large and composed of well-established and skilled providers. It also included residency students who were learning from the seasoned physicians in the office. The clinic providers saw the need for additional mental health services among their patients and had expressed a willingness to be a part of making this happen. The clinic providers were already familiar with ACEs which was a valuable springboard to COPE engagement. One provider and one medical assistant in particular, were champions of COPE and had been vocal about its use within the clinic.

The family medicine residency clinic also had weaknesses which could negatively impact the success of COPE. Though ACEs was well known among clinic providers, the medical assistants did not have experience screening patients nor was there a designated place to record scores in the medical health record. Both the clinic providers and medical assistants had expressed confusion about the types of individuals who would be appropriate for participation in COPE. The barrier to scheduling COPE appointments had paralyzed the program's momentum.

Furthermore, providers had not successfully finalized COPE certification nor received COPE manuals so that they could facilitate sessions with patients. The healthcare team had recently experienced change because of the clinic merge which has resulted in a more distracted and chaotic work environment.

Opportunities and Threats

The opportunities available from the greater organization and external environment could help the clinic overcome its weaknesses. One of the primary opportunities for the clinic, was its association with an extensive healthcare system. This relationship had the potential to offer financial resources, an established mission, and future expansion. Individuals within the clinic had vocalized COPE's potential usefulness among social workers and medical residents. Affiliation with a large organization could help such suggestions come to fruition. The organization valued mental health and was pursuing ways to integrate it more effectively into its clinics. The organization had already received grant funding for the pilot implementation of COPE.

The threats introduced by the greater organization and external environment that could have interfered with COPE and the strengths of the family medicine residency clinic were also considered. The primary threat to COPE was related to reimbursement. Leadership within the organization was not confident about how COPE was reimbursed compared to care as usual. Furthermore, there was speculation that COPE appointments had inferior RVUs than other appointments. RVUs rank the resources used to provide each service, including the provider's work, the expenses of the provider's practice, and professional liability insurance (Coberly, 2015). It would be difficult to receive organizational support without providing data to contradict

these concerns. The organization was also not providing salary to cover COPE certification for providers, nor offering incentives to encourage providers to implement COPE sessions. Threats related to the clinic merge and the upcoming implementation of a new electronic health record (EHR) system were also significant. All of these factors could have threatened the implementation of COPE.

Clinical Practice Question

Considering all of the available organizational data, a clinic practice question was developed. Is the implementation of COPE by primary care providers beneficial and sustainable at the family medicine residency clinic? In order to develop an evidenced-based approach to this question, a review of the literature was conducted.

Review of the Literature

A literature review was conducted to explore whether the implementation of COPE appointments by primary care providers could result in improved patient mental health outcomes and in what ways the appointments may impact revenue. Additionally, the review sought to determine in what settings and populations COPE implementation has previously occurred. The methods, summary of findings, and evidence to be used are as follows.

Methods

An integrative review of the literature was conducted using the keyword “creating opportunities for personal empowerment.” Inclusion criteria were COPE, depression or anxiety measures, and a 7-session format. Exclusion criteria were group delivery, in-class setting, an exercise component, and delivery by a teacher or professor. Each article was screened using inclusion and exclusion factors according to PRISMA criteria (Moher et al., 2009). The

databases CINAHL Complete and PubMed were used, resulting in 259 non-duplicated articles (Appendix D).

Two hundred forty results were excluded based on non-related article titles, and 19 journal abstracts were reviewed. Three articles were excluded based on abstract because they did not include participant mental health outcome measures, and one article was excluded because it was a literature review. Nine additional articles were excluded based on full text because COPE sessions were delivered by a teacher or in a group setting. The eight remaining articles were included in this review.

Summary of Results

Of the eight studies included in this literature review, three used randomized control methods where a COPE group was compared to a control group who received placebo treatment. These studies had randomization, dual interventions, blinding, and medium to large effect sizes indicating overall strong internal and external validity. Four of the included studies were one group pretest and posttest design, which had several threats to internal validity (Hart Abney et al., 2019; J. Kozlowski et al., 2015; P Lusk & Melnyk, 2011; Pamela Lusk & Melnyk, 2011). The threats included the roles of medication, maturation, and testing. The final study used a two-group design, but due to randomization, it upheld relatively good internal validity (Indiana University, n.d.). The studies were overall robust, with clear measures and objective study findings.

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Evidence to be Used for Project

After review, the articles were summarized into a table (Appendix E). The following themes emerged: the delivery of COPE, the feasibility of COPE, and the effects of COPE. The findings related to the reimbursement and billing of COPE appointments were also considered.

Delivery

One of the primary reasons for interest in COPE was related to its flexibility of delivery. COPE has been used in K-12 schools, universities, mental health centers, hospitals, and outpatient clinics (Hickman et al., 2015a; Kozlowski et al., 2015; Lusk & Melnyk, 2011; Melnyk et al., 2015; Melnyk et al., 2007). The program format is flexible and has been delivered one-on-one, in groups, as a high school class, as a credited academic course, and online (Lusk & Melnyk, 2011; Melnyk et al., 2013, 2015). COPE has been used among populations of children, minority youth, adults, parents, mothers, those with chronic headaches or asthma, overweight youth, athletes, and those pursuing a healthy lifestyle (Buffington et al., 2016; Duffy & Vessey, 2016; Hickman et al., 2015a; Hoying & Melnyk, 2016; McGovern et al., 2019; B. Melnyk et al., 1997; B. M. Melnyk, Jacobson, et al., 2015; Oswalt et al., 2013). It has been disseminated by researchers, advanced practice nurses, pediatric nurse practitioners, family nurse practitioners, and psychiatric mental health nurse practitioners (Hart Abney et al., 2019; Hickman et al., 2015a; Kozlowski et al., 2015; Lusk & Melnyk, 2011; Melnyk et al., 1997).

Location. After excluding delivery in K-12 school locations, the remaining studies were conducted in a college health clinic, acute care, outpatient settings, community mental health centers, and one online format through a university (Hart Abney et al., 2019; J. Kozlowski et al., 2015; Lusk & Melnyk, 2011; Melnyk et al., 2015; Melnyk & Feinstein, 2009). Three studies

incorporated electronic dissemination via phone calls or audio recordings (Melnyk et al., 1997, 2006; Melnyk et al., 2015). These formats allowed participants to be at any location while reviewing the content.

Role. After excluding teachers and professors as deliverers of COPE, the results showed delivery by psychiatric mental health advanced practice nurse, other advanced practice nurses, a pediatric nurse practitioner, a psychiatric nurse practitioner, and an online delivery format. These studies did not measure the feasibility of delivery by a particular health provider. Several studies noted the ability to receive higher reimbursement for COPE appointments when delivered by a psychiatric mental health nurse practitioner when COPE appointments also included medication management or addressed other health concerns (Lusk & Melnyk, 2011; Lusk & Melnyk, 2011).

Sessions. All studies used a 7-session format. Some included an additional one to two meetings before the COPE sessions started to obtain a psychiatric history and build rapport (Hart Abney et al., 2019; Lusk & Melnyk, 2011). Parents were invited to attend COPE sessions with their children in several of the studies, but this variable did not appear to impact results. Typically, each session began by reviewing the previous session's assigned homework. Then engaging in the next lesson and ending with a review of the next homework assignment (Hart Abney et al., 2019). Most of the studies executed sessions in a 30-minute one-on-one format. Six studies attempted a one session per week schedule, but when sessions needed to be rescheduled, participants would pick up at the first missed session (Hart Abney et al., 2019). The majority of participants completed all seven of the COPE sessions within ten weeks, by week 14, all participants had completed the intervention (Hickman et al., 2015b).

Two studies in this literature review were found to use a variation of COPE called Creating Opportunities for Parent Empowerment (Melnyk et al., 2006; Melnyk & Feinstein, 2009). These studies were included in the review because the content is similar to the traditional COPE and they offer information about the effects of COPE for adult populations. Additional content in these sessions included infant-behavior information, parent-role information, and activities to assist parents in implementations (Melnyk et al., 2006). The participants in these studies were parents (mean mother age: 27.8 years, mean father/significant other age: 30.6 years) with children in an intensive care unit (Melnyk et al., 2006; Melnyk & Feinstein, 2009). Because of the recent publication of the adult COPE manual in 2019, there are not currently any studies published using the adult COPE manual due to its recent publication.

Homework. The average completion rate of reported weekly homework was 79% (Hickman et al., 2015b). Study results indicated that participants who completed five or more homework sessions had statistically stronger beliefs in their ability to manage their symptoms (Hickman et al., 2015b). Most of the studies did not report their homework completion rates. Participants reported that the homework length was appropriate, and parents who reviewed the homework found the content age-appropriate and interesting (Lusk & Melnyk, 2011). The manual was reported to be easy to use, and it fostered accountability (Hart Abney et al., 2019).

Feasibility

As for the practicality of COPE sessions in the clinical setting, only one study questioned the ability to complete all sessions. Hickman et al. (2015b) questioned the feasibility of implementing COPE in a specialty neurology clinic because some adolescents did not complete all of the homework assignments. However, Hickman et al. (2015a) hypothesized that this could

be related to their incorporation of several telephone sessions. All other studies reported that the 7-session 30-minute model was feasible and practical.

Effects

All studies in this literature review contained data about changes in COPE participant anxiety, depression, self-perception, or feedback about the program. The consideration of patients' mental health changes and their COPE experiences is an integral part of this project evaluation. The literature indicates that individuals who completed COPE experience reductions in depression and anxiety symptoms as well as improvements in the way they perceive and respond to stressors (Hart Abney et al., 2019; Hickman et al., 2015a; Kozlowski et al., 2015; Lusk & Melnyk, 2011; Lusk & Melnyk, 2011; Melnyk et al., 1997, 2006). Overall, participants found COPE to be beneficial.

Anxiety. Though the studies used various tools to measure anxiety, overall decreases in anxiety were observed. The mean decreases in State-Trait Anxiety Inventory scores in a study by Hart Abney et al. (2019) were 18.70 ($p < .0001$). Also, using the State-Trait Anxiety Inventory, mothers with children in an intensive care unit reported significantly less stress than mothers in the comparison group, but there was no difference between groups for fathers (Melnyk et al., 2006). Using the Screen for Child Anxiety-Related Disorders checklist, a study by Kozlowski et al. (2015) indicated a reduction in anxiety symptoms by 13.88 points ($p = .07$, significance set at .10). Several of the studies that used the Beck Youth Inventory-II did not give specific results for anxiety reductions. The results from a study by Hickman et al. (2015b) did not indicate statistically significant differences in anxiety reduction when compared to the comparison group.

Depression. The research indicated that individuals with the most elevated depression scores experienced the most improvements post-COPE, whereas individuals who had average scores stayed near the average range (Lusk & Melnyk, 2011). Using the Beck Depression Inventory-II scale, baseline depression ratings decreased by an average score of 21.70 ($p < .0001$) using the in three studies (Hart Abney et al., 2019). Among studies using the Beck Youth Inventory-II scale, average reductions in depression were 12.20 ($p < .005$), 12.20 ($p < .005$), and 8.31 ($p = .01$), respectively (Hickman et al., 2015b; Lusk & Melnyk, 2011; Lusk & Melnyk, 2011). However, when controlling for baseline depression differences, no significant results in post-intervention depression were found in one of the studies (Hickman et al., 2015b). Decreases in depression were not remarkable in the COPE Headache Education program (Hickman et al., 2015b). However, mothers using the COPE parent version reported less negative mood states 24-48 hours after transfer to the general pediatric unit than mothers in the comparison group (B. Melnyk et al., 1997).

Self-perceptions. Young adults reported that COPE changed the way they saw themselves and the way they reacted to stressful situations (Hart Abney et al., 2019). Consistently participants who completed COPE reported feeling more in control of their emotions and stress. Self-Concept and Personal Belief scores increased from pre to postintervention (Lusk & Melnyk, 2011; Lusk & Melnyk, 2011). Several days after the first session among the parental COPE groups, participants reported improved beliefs about their role as a parent, and this was associated with decreased hospital length of stay (Melnyk et al., 2006).

COPE Evaluation. The majority of participants reported that COPE was helpful. Participants commented that COPE was definitely worth their time, with some individuals

reporting they learned new ways to manage their pain and found COPE helped them to reduce their anger (Hart Abney et al., 2019; Hickman et al., 2015b). Adolescent participants and their parents found the length of COPE to be acceptable and reported that they would recommend the program to others (Hickman et al., 2015b). Participants additionally reported COPE assisted them in improving their relationships with others. This finding was also echoed by parents of participants who reported that COPE was beneficial for their teens but also for the whole family (Lusk & Melnyk, 2011). College students who participated in COPE recommend the program should be given to incoming first-year students to help them with the transition to school (Melnyk et al., 2015).

Revenue. Overall, the research did not speak much to the reimbursement of COPE visits. However, the billing codes used were called out in several of the studies. Kozlowski et al. (2015) reported billing COPE appointments using CPT code 99214. The code was justified based on spending more than half of the appointment time providing counseling. Lusk and Melnyk (2011) billed COPE appointments using 90805, which reportedly reimbursement at a higher rate than a medication monitoring appointment alone (Lusk & Melnyk, 2013). However, this code was billed by a psychiatric nurse practitioner and thus may not apply to all nurse practitioners in the primary care setting.

Lusk and Melnyk (Lusk & Melnyk, 2011; 2011) addressed concerns about the need to keep providers available for medication management visits by running cost analysis. Their most persuasive argument in favor of COPE utilization was their suggestion to up-code visits to 90805. The code bills for outpatient psychotherapy with evaluation and medication management in 20-30 minutes and is billable at a higher rate. According to Kozlowski et al. (2015), COPE

appointments were billed and reimbursed 100% of the time. Higher reimbursement made up for concern related to decreased productivity (Lusk & Melnyk, 2011).

Discussion

The current literature review focused on adolescents and adults who were experiencing moderate depression or anxiety. A consistent finding was the positive mental health outcomes correlated with participating in COPE. Reductions in depression and anxiety symptoms were noted among most studies. Additionally, clinically significant results indicated that participants reported changes in the way they perceive triggers and manage stress (Hart Abney et al., 2019). Participants found COPE to be effective in reducing internalizing and externalizing symptoms.

The literature reviewed supported the feasibility of delivering COPE sessions in a 30-minute time frame. COPE appointments were able to replace 20-minute medication management appointments among psychiatric nurse practitioners. Billing with code 90805 offered a solution to cost concerns, allowed providers to change to evidence-based practice, and added psychotherapy to care as usual (Lusk & Melnyk, 2011). Providers were able to incorporate medication management questions and assessments to COPE appointments without difficulty. Offering a way to balance productivity and quality of care proved to be a successful way to achieve organizational buy-in (Lusk & Melnyk, 2011).

Phenomenon Conceptual Model

The conceptual model used to explain the phenomenon of equipping providers with cognitive-behavioral competencies is the Synergy model (Appendix F). Though initially created to describe the relationship between a nurse and a patient, the model can be expanded to physicians and physicians' assistants who have a similar scope of practice as a nurse practitioner.

The purpose of the Synergy model is to cultivate a match between patient needs and the nurse or provider competencies (Curley, 1998; Fawcett, 2017). Curley (1998) describes synergy as a phenomenon that occurs when individuals work together in a mutually enhancing way. Both the patient and the nurse are active participants with the patient requiring nursing care and the nurse needing a patient to care for (Curley, 1998).

Patient Characteristics

Each patient is unique and has the capacity for health and also vulnerability to illness (Curley, 1998). Variabilities such as biological makeup, disease, health practices, community, and economic status impact the continuum of health for an individual. Each individual also possesses personal characteristics such as stability and resiliency that impact outcomes (Curley, 1998). These variables can change for an individual over the course of their life, but the presence or absence of such factors impacts the nursing care required.

Many patients present to primary care clinics vulnerabilities that increase their likelihood of experiencing a mental illness. When individuals have depression or anxiety symptoms, they often seek out their primary care provider hoping to have their needs met. The goal of the synergy model is to have the patient needs matched by the competencies possessed by the provider. If a patient can present their needs to the provider, and the provider is able to meet those needs appropriately, the Synergy model is working as it should.

Nurses' Competencies

Provider competencies act on a continuum that is determined by patient needs (Curley, 1998). Competencies include clinical judgment, moral agency, caring practices, collaboration, and clinical inquiry. Providers demonstrate each competency to the extent that it meets the needs

of their population – highly developed competencies are required to address substantial patient needs, and lower-level competencies are often adequate to meet straightforward patient needs (Curley, 1998).

Clinical expertise, judgment, and the ability to understand the trajectory of illness contribute to creating safe passage for patients (Curley, 1998). According to Curley (1998), a safe passage may include helping patients move toward greater self-awareness, competence, and health through difficult transitions or events. To do so requires knowledge and understanding of the patient and their vulnerabilities. It also requires clinical expertise and knowledge of how to guide individuals into healthier ways of thinking and coping. For this project, COPE training will act to increase provider competencies so that the providers can work to fill the needs of complex anxiety or depression symptoms experienced by patients.

Project Plan

After establishing the appropriateness of a CBT tool in the midwestern clinic, the validity of COPE, and reviewing the conceptual model behind this intervention, the next step was to develop a project plan. COPE implementation was initiated at the clinic in 2018, but as noted in the SWOT, the implementation was hindered by the completion of provider certification and COPE manual acquisition. A project plan was next developed to overcome identified barriers and complete a project evaluation.

Purpose of Project

The goal of the project evaluation was to analyze the outcomes and sustainability of COPE at the family medicine residency clinic. The findings of the evaluation were expected to influence the expansion of COPE within the organization. The project sought to answer the

following clinical practice question: Is the implementation of COPE by providers beneficial and sustainable at the family medicine residency clinic? Beneficial and sustainable were determined by collecting data to answer the following sub-questions:

1. Is COPE beneficial in the family medicine residency clinic?
    a. How is the clinic currently treating individuals who screen positive for anxiety or depression?
    b. Are the anxiety or depression symptoms of patients in the clinic well managed as determined by GAD-7 and PHQ-9 scores?
    c. Does participation in COPE result in improved anxiety and depression symptoms as determined by patient GAD-7 and PHQ-9 scores?
    d. How does the reimbursement of a COPE session compare to the reimbursement of care as usual?
2. Is COPE sustainable in the family medicine residency clinic?
    a. What are the knowledge and beliefs about COPE among the clinic healthcare team?
    b. Are providers in the clinic utilizing COPE?
    c. Is COPE compatible with the healthcare team's workflow?
    d. Are there incentives for providers who offer COPE appointments?
    e. What financial and leadership supports are in place to sustain the program?
    f. Are the COPE materials cost-effective and easy to use?
    g. Of the patients introduced to COPE, what was the average interest level?
    h. What were the facilitators and barriers to implementation?

Objectives and Implementation Strategies

The objectives for this DNP project were aimed at evaluating whether the implementation of COPE at a family medicine residency clinic was beneficial and sustainable among participants and providers. In an attempt to ensure timely project management, a timeline of all of the necessary steps was designed (Appendix G). The timeline consisted of the necessary steps to complete the project evaluation on time. The project objectives with associated evaluation strategies include:

1. Allocate COPE patient manuals by September 30, 2019. Providers were using sample COPE manuals that were printed in the office for the patients. Securing manuals and purchasing the new Adult version manual would be crucial to the implementation.
    - Email the COPE contact for instructions about how to receive the purchased manuals.
    - Email the COPE contact about the release date of the Adult manual and coordinate purchase information with the clinic manager.
2. Finalize COPE certification status among the six providers who committed to participate, by November 14, 2019. Though COPE providers committed to finalizing certification by December 2018, six providers had not begun at the time this project evaluation started. Instructions about how to complete certification were communicated in 2018 and again via email in May 2019. During the evaluation, it would be essential to identify the barriers to training completion and assist providers in overcoming those barriers. Steps to achieve this objective included:
    - Email COPE providers certification instructions by November 4.

- Offer face-to-face COPE troubleshooting to the clinic healthcare team during clinic hours.
- Start a monthly COPE newsletter in January 2020 to offer consistent support and updates to the COPE providers.

3. Educate all the primary care providers about the COPE program by November 30, 2019. A previous DNP student had presented education about the COPE program to some providers and medical assistants within the clinic. The purpose of a broader educational opportunity was to inform other providers about how to refer their patients to COPE sessions with a certified provider. Though the opportunity to present in a provider meeting was turned down, there was an opportunity to create a one-page summary handout. Steps to achieve this objective included:
    - Develop a one-page informational COPE handout by November 22, 2019.
    - Submit to site lead by November 30, 2019
    - Pending approval, disseminate handout during scheduled provider meeting by December 6, 2019.
    - Disseminate a COPE process flowchart for clinic workers by December 6, 2019
4. Gather baseline clinic mental health treatment data and COPE appointment data through chart audits pending IRB approval. Regular monitoring would allow the DNP student to address any barriers in real-time. Steps to achieve this objective included:
    - Weekly chart audits would be performed to gather clinical data (Appendix H).

- The DNP student would review PHQ-9, GAD-7, and ACE scores weekly to identify patients experiencing altered mental health. These patients could be recommended to COPE certified providers as a potential candidate.

5. Collect COPE reimbursement data through Billing Department summaries.
    - Email site mentor about who should be contacted to retrieve reimbursement records.
    - Contact billing department with specific COPE data to be collected (Appendix H)
    - Analyze average dollar value reimbursement.
    - Identify CPT codes used for COPE appointments.
    - Determine RVUs for COPE appointments.
6. Gather data about COPE sustainability through observation, Likert-style questionnaires, and semi-structured interviews with COPE providers (Appendix I).
    - Begin semi-structured interviews February 1, 2020
    - Disseminate Likert scale questionnaire February 1, 2020
    - Finalize semi-structured interviews and Likert scale questionnaires by March 6, 2020
7. The final evaluation would be shared with the organization and the DNP student's educational institute.
    - Disseminate the results of the project evaluation in the April COPE newsletter.
    - Include future recommendations for project revision.

- Defend the project in April of 2020.
- Upload copy of final defense to Scholarworks.

Setting and Participants

As stated, this DNP project took place in a Midwestern family medicine residency clinic that is part of an extensive healthcare system. The key stakeholders included an interdisciplinary primary care team consisting of nurse practitioners, physicians, physician assistants, residents, medical assistants, a clinic manager, and the patients. The senior leaders who would be valuable to the sustainability of the project included the clinical services director and the organization's psychiatrists. The project was targeted at improving mental health care among individuals with anxiety or depression who received primary care services in the clinic. Inclusion criteria included persons participating in COPE sessions over the age of seven years old. Exclusion criteria were individuals under the age of seven years old and individuals who did not complete Session 1 of COPE. Patient participation in COPE was reliant on COPE providers offering the program to appropriate individuals, and the receptive patients returning for scheduled COPE appointments.

Design for the Evidence-Based Initiative

The framework used for the project evaluation was the Consolidated Framework for Implementation Research (CFIR) with supplemental outcomes (Appendix J) (Damschroder et al., 2009; Tinc et al., 2018). The DNP student evaluated the five domains of the CFIR with two supplemental outcomes measures to determine the benefits and sustainability of COPE in the clinic. The framework was chosen for its ability to guide the assessment of barriers and facilitators while finalizing implementation (University of Michigan Institute for Healthcare Policy & Innovation, n.d.).

Characteristics of Individuals

Perhaps one of the most critical domains to consider when evaluating COPE sustainability was the individual characteristics of persons who make up the interprofessional team. Essential characteristics included the care team's knowledge and beliefs about COPE and its materials. Evaluation would also consider the individual stage of change, self-efficacy, and other personal attributes of COPE providers and other stakeholders involved in delivery (Damschroder et al., 2009). These characteristics would help to inform stakeholder buy-in and project sustainability.

Inner Setting

The domain, inner setting, involves assessment of the culture and structural characteristics of the family medicine residency clinic. This will be represented by the priority of implementation, the learning climate, and incentives or rewards for participation (Damschroder et al., 2009). Defining the clinic culture will help answer questions regarding the readiness and engagement surrounding COPE.

Intervention Characteristics

Re-evaluation of COPE and its tools within the clinical setting would also be essential. Though the stakeholders agreed with a cognitive-behavioral intervention, the tool itself may not be sustainable due to complexity, cost, or design (Damschroder et al., 2009). Discussing the advantages and disadvantages of COPE with providers would help to inform the projected sustainability of the project.

Outer Setting

As the external environment was initially considered before the implementation of COPE and was again reconsidered at the initiation of this project evaluation, it would be necessary to again consider how changes in the environment could have impacted the evaluation. Insight would be gained through feedback from providers and patients concerning. Any changes in policy, incentives, resources, and community responses that occurred during this project evaluation would be valuable to consider (Damschroder et al., 2009).

Process

Evaluating the process domain would include identification of the COPE project champions, leaders, external change agents, and the provider opinions of COPE processes (Damschroder et al., 2009). How were the COPE project planning, execution, and evaluation processes? What areas went well during implementation, and what processes were complicated?

Implementation Outcomes

One of the goals of this project evaluation was to determine the sustainability of COPE in this setting. Implementation outcomes included the acceptability, adoption, feasibility, and economic changes related to the adoption of COPE (Damschroder et al., 2009). As a result of considering this domain, the evaluation sought to identify the outcomes from an organizational standpoint.

Client Outcomes

Finally, the primary objective of the COPE implementation was to improve patient care. Evaluation of this domain included assessment of changes in patient GAD-7 and PHQ-9 scores.

What were additional unforeseen benefits or consequences experienced as a result of COPE participation?

Measures and Data Collection

Retrospective Chart Reviews

The DNP student conducting the project evaluation participated in weekly data collection while in the clinic. Data collection was executed to inform baseline mental health needs in the clinic and to evaluate the COPE intervention. The data elements to be collected are outlined in Appendix H. The elements included, GAD-7, PHQ-9, dollar values, CPT codes, and RVUs. The DNP student followed a data auditing plan to assist with the collection of data (Appendix K). Seven inconsecutive days would be examined, and all patients seen in the clinic that day would be audited for mental health treatment data. For COPE, the goal was to have a sample of twenty COPE participants who complete all seven sessions in order to have significant results. Chart audits occurred in Athena electronic health records until January 2020 when Epic was to be used.

Billing Department Reports

Information about care as usual reimbursement for mental health related appointments would be requested from the billing department. For COPE, similar data about reimbursement, CPT codes, RVUs, and type of insurance would be requested by indicating the patient medical record number and dates of the COPE sessions. COPE reimbursement would be compared to care as usual.

Semi-Structured Interviews

The DNP student will conduct semi-structured interviews with COPE providers at the family medicine residency clinic. This qualitative method will allow the providers to express

themselves as the interview guide will not be strictly structured. Providers will be encouraged to speak freely about their experiences with COPE. The questions addressed in the interview are presented in Appendix I.

Likert-Style Questionnaire

A six item Likert-style questionnaire was developed so that COPE providers could report their evaluation of COPE. Questionnaires were intended to evaluate provider perspectives on sustainability in a measurable way. The questionnaires would be emailed and also disseminated while the DNP student was on site.

Data Management and Analysis

Secure data was accessed only while at the organization through a password-protected computer. The data was de-identified and stored under password protection. The statistician received the de-identified data at the end of the evaluation to complete further analysis. The project evaluation used both qualitative and quantitative data.

Ethics and Protection of Human Subjects

Before the formal project evaluation began, the protection of human subjects was reviewed. The DNP student applied to the organization's Institutional Review Board (IRB) and the University's Human Research Review Committee. The project entitled “Cognitive Behavioral Therapy in Primary Care” was approved by the organization’s IRB as a quality improvement project (Appendix L).

There was no identifiable physical, social, economic, or legal threats to patients included in the project. The DNP student completed the human subject’s protection training through the Collaborative Institute Training Initiative in order to uphold patient rights and privacy. Data was

only accessed at the organization under password protection to ensure the protection of participants. De-identified data was also protected by password and shared with university statistician for additional analysis.

Resources and Budget

Consideration was given to the human and financial resources required to complete this project. The human resources needed for this evaluation included several of the clinic physicians, physician assistants, residents, a nurse practitioner, and a project manager who volunteered time to complete training. Additional resources for this project included statistician time donated and grant money that was provided in 2018. Space was required for storage of COPE materials in an easily accessible location in the office. Other expenses for the project included team member time donated, COPE online education sessions for each provider, COPE patient workbooks, and costs for printing (Appendix M).

Results

Implementation

Prior to the project evaluation, it was necessary to finalize the project implementation. Though COPE was initially introduced to the clinic in 2018, two tasks were necessary to complete before a fair and accurate evaluation could take place. Finalization involved allocation of COPE manuals and completion of COPE certification among the committed providers.

Manuals

The DNP student emailed the COPE contact for instructions about how to receive the purchased manuals. Per COPE2Thrive, the manuals could not be released until all providers had completed certification. Certification required providers to complete the training modules but

also to participate in a trial COPE session with a family, friend, or patient. After the trial, providers were to complete a trial report form and submit it to the COPE contact and then the manuals would be mailed directly to the provider. The discovery of the requirements to obtain the manuals shed light on the initial COPE implementation barrier. After sending updated instructions to all COPE providers and negotiating with the COPE contact, the manuals were released to the clinic.

Additional manuals were purchased with the remaining grant money. The purchases included the updated Adult COPE manual, and PDF versions of the young adult and child COPE manuals. The decision to purchase the PDF was made after cost analysis and consideration of possible COPE expansion within the organization. Purchases were made by the clinic manager through the recommendation of the DNP student.

Certification

After discovering the complete certification requirements, an email with updated instructions was sent to all COPE providers. Face-to-face troubleshooting was offered to clinic providers by the DNP student when in the clinic. One physician, two physician assistants, and one nurse practitioner had completed the COPE modules but had not finalized certification by completing the session trial and submitting the trial report form. In total, one provider and the DNP student completed the certification process.

In addition to completing certification among COPE providers, the DNP student and site preceptor pursued teaching all clinic providers about COPE. Requests to offer an in-service session, to present during a provider meeting, or to provide educational materials in the form of a one-page hand out were denied. The DNP student instead developed laminated COPE flowsheet

handouts for all healthcare workers. The flowsheets were designed to walk medical assistants, nurses, or providers through the steps from enrollment of a patient in COPE to charting. The DNP student also developed a monthly COPE newsletter that contained updates on the project. The newsletter was sent monthly from January to April to all of the COPE providers. The newsletters were intended to inform and to remind providers about COPE.

Evaluation

The primary purpose of the project was to evaluate the benefits and sustainability of COPE within the family medicine residency clinic. The evaluation was completed using the CFIR framework with supplemental outcome measures (Damschroder et al., 2009; Tinc et al., 2018). The evaluation included baseline mental health treatment data, COPE client outcomes, reimbursement, observation, semi-structured interviews, and implementation outcomes.

Baseline Clinic Data

Baseline clinic data was collected using the electronic health record during February and March 2020. A retrospective sampling of four days was collected between the months of October 2019 and January 2020. Due to COVID-19 pandemic, data collection was limited to four days rather than of the desired seven days. The results are summarized in Appendix N.

Demographics. The total number of audited charts were 98 on date one, 86 on date two, 64 on date three, and 142 charts on date 4. An average of 97.5 patients were seen during each date that was audited, with a minimum of 64 and a maximum of 142 patients. Demographics were not collected but patients ranged in age from seven years old to 90. 12.31% (n = 48) of patients presented to the clinic with a chief complaint related to their mental health. 65% (n =

256) of appointments that addressed mental health were 25-40 minutes in length and 26.41% (n = 103) were 15-20 minutes.

GAD-7. The Generalized Anxiety Disorder (GAD-7) seven-item scale (Spitzer et al., 2006) is used in the family medicine residency clinic to screen patients for anxiety. GAD-7 screens were used during 14.62% of visits with 50.87% of patients screening with a positive score. A positive score was defined as a score greater than or equal to five (Jordan et al., 2017; Spitzer et al., 2006). 40% of individuals screened as having moderately severe anxiety, and 28% had severe anxiety (Jordan et al., 2017; Spitzer et al., 2006).

PHQ-9. The Patient Health Questionnaire (PHQ-9) is a nine-item tool (Pfizer Inc., 1999) used in the family medicine residency clinic to screen patients for depression. PHQ-9 screens were used during 75.13% of visits each day with 12.29% of patients screening with a positive score. A positive score was defined as a score greater than or equal to 10 (Kroenke et al., 2001; Pfizer Inc., 1999). Of patients screened using the PHQ-9, five percent of individuals had moderately severe depression and two percent had severe depression (Kroenke et al., 2001; Pfizer Inc., 1999).

Psychopharmacology. Medications in the psychopharmacology category that were included in this audit include antidepressants, anxiolytics, mood stabilizers, antipsychotics, stimulants, and sedatives. 46.92% (n = 183) of the patient population seen in the clinic is prescribed a psychopharmacological agent. Of the individuals prescribed this type of medication, 36.07% (n = 66) of provider notes documented a discussion or reference to the patient's mental health. 87.5% (n = 14) of individuals with moderately severe depression or higher are taking a medication and 85.71% (n = 6) of individuals with severe depression. 82.61% (n = 19) of

individuals with moderately severe anxiety or higher are taking a medication and 87.5% (n = 14) of individuals with severe anxiety (Appendix O).

Therapy. Chart audits for therapy were positive if there was documentation of counseling, therapy, psychotherapy, or a psychiatrist visit within the appointment note. Discrimination was not made based on whether the patient was actively participating in therapy, only that it was addressed or suggested by the provider and documented. 6.92% (n = 27) of audited charts included a documented reference to discussing therapy with the patient. Of individuals prescribed a psychopharmacological agent, only 10.38% (n = 19) of visits documented a discussion about therapy. Therapy was referenced in 25% (n = 9) of notes among individuals with mild depression or greater, 18.75% (n = 3) among individuals with moderate depression or greater, and 42% (n = 3) among individuals with severe depression. Therapy was referenced in notes 34.38% (n = 11) among individuals with mild anxiety or greater, 43.48% (n = 10) among individuals with moderate anxiety or greater, and 43.75% (n = 7) among individuals with severe anxiety.

COPE. A reference to or suggestion of the COPE program was present in 0.26% (n = 1) of audited provider notes.

Reimbursement. Mental health related visits were billed as 99213 or 99214 based on appointment length and complexity of visit. 99213 appointments were billed for mental health visits lasting 15 minutes and equate to 0.97 RVUs. 99214 appointments were billed for mental health visits lasting 30 minutes and equate to 1.5 RVUs. Requests for specific data from the clinic were denied.

COPE PROJECT EVALUATION

COPE Outcomes

COPE clinic data was collected using the electronic health record, during February and March 2020. Retrospective data was collected between the months of January 2018 to November 2019. The results are summarized in Appendix P.

Demographics. The COPE sample size was nine (n = 9). The mean age of COPE participants was 22.89 years old with a minimum age of 10 and a maximum age of 51 years old. The mean ACEs score among participants was 4.78 with a minimum of 2 and a maximum of 8. There was one male participant and the remaining eight identified as female. Six participants were Caucasian and the remaining three did not have ethnicity listed in their chart. The primary reason for COPE referral was anxiety (8) with depression (4), pain (2), and behavior (2) being other identified reasons for participation.

Session Information. A total of nine patients participated in at least one session of COPE, and two patients completed the entire program. Five participants completed at least four COPE sessions, which has been identified as a marker of maximum dose-response. Sessions five and six were repeated by two patients who indicated they were not ready to move past the material (Appendix P, Figure 1). The maximum time a session was repeated was three times (session six). The number of days between COPE sessions ranged from six to 175 days. The mean time between sessions was 84.22 days. Three providers offered COPE sessions. One physician and one physician assistant each worked with one patient, and one nurse practitioner worked with seven patients. All sessions lasted 30 minutes except for one that was 60 minutes and combined with a physical.

Psychopharmacology. At the time of session one, five patients were taking a psychopharmacological agent, and four patients were not (Appendix P, Figure 2). One patient started a medication during session four, and two patients experienced a medication change during COPE. Of the two patients who completed all seven sessions, only one continued the same medication and dose from beginning to end of COPE. The other patient started the program without a mental health medication but was prescribed one during the program.

GAD-7. The average decrease in GAD-7 scores from the pre-COPE session to the final session was 6.14 (Appendix P, Figure 3) with a range from + 4 to 20. The average decrease in GAD-7 scores from the pre-COPE session to the fourth session was 3.8. The standardized mean decreases in GAD-7 were 0.28 compared to 0.17 in PHQ-9. A greater change was observed in GAD-7 than PHQ-9.

PHQ-9. The average decrease in PHQ-9 scores from the pre-COPE session to the final session was 3.57 (Appendix P, Figure 3) with a range from + 3 to 18. The average decrease in PHQ-9 scores from the pre-COPE session to the fourth session was 2.6. The decreases in PHQ-9 were smaller than decreases observed in GAD-7 scores.

Reimbursement. The three COPE providers who initiated COPE sessions billed appointments with 99214 for time-based services and embedded the counseling activities within the note. COPE providers reported that COPE appointments were reimbursed 100% of the time as they had not received notification of an error. Requests for billing data were denied due to the system being overwhelmed after the implementation of a new EHR.

Additional Findings. Six of the nine COPE patients started seeing a counselor, therapist, or psychiatrist at the time they finished COPE. The individuals not only intended to find other therapy but were able to report whom they were scheduled to see.

Semi-Structured Interviews. Four COPE providers participated in semi-structured interviews with the DNP student during clinic hours. Consistently, all four COPE providers identified a lack of time as a hindrance to using COPE. Lack of time was experienced with training completion, identifying potential COPE patients, and piquing patient interest in COPE. The following quotes from COPE providers demonstrate this point:

> "Patients have a hard time committing to seven weekly visits and [COPE] works well with fewer visits for those who have more minor issues."

> "I just couldn't find the time to do the training."

> "If someone else could get the patients to do COPE and then schedule the appointments, that would be nice."

Another theme noted among providers was a lack of motivation. This was mainly expressed concerning the training completion. The training modules were described as "boring," and the providers struggled to motivate themselves to complete it without incentive. One provider expressed that the problems their patients were experiencing were very complicated, and they were unsure if COPE would even make a significant difference. All of the COPE

providers expressed support for the program in theory, but experienced barriers with implementation.

The COPE nurse practitioner reported the most positive experiences using COPE. She indicated that the program was consistent with her nursing perspective, and she did not struggle to initiate focused therapy appointments with patients. The nurse practitioner executed 42 COPE appointments between seven patients over the course of 12 months. She stated that COPE was a good starting point for patients interested in therapy.

> "Often patients have more complex issues than can be managed with COPE, but it has proven to be a place to start which then helps the patient see the need to progress and allows the provider the venue to help guide to next steps if needed."

Likert-Style Questionnaire. Four providers completed the Likert-style questionnaire. 50% (n = 2) of providers agreed that they could lead a patient through the COPE program. 75% (n = 3) of providers indicated that the COPE manual was easy to follow. When asked if patients who were told about COPE expressed interest in the program, 75% (n = 3) of providers reported that they neither agreed nor disagreed. 100% (n = 4) of providers agreed that COPE is useful in the primary care setting, and 75% (n = 3) of providers reported that they intended to use COPE in the future. However, 50% (n = 2) of COPE providers responded that COPE does not fit into their workflow, 25% (n = 1) reported they neither agreed nor disagreed, and only 25% (n = 1) reported that COPE does fit into their workflow.

Discussion

Characteristics of Individuals

All of the COPE providers verbalized appreciation for the program. They were able to identify why a tool such as COPE was valuable in this setting. Similarly, medical assistants without prompting were able to describe several patients they believed COPE would be beneficial for. Unfortunately, COPE was also a burden. Many medical assistants were unsure about recommending COPE to patients or did not feel comfortable vocalizing recommendations. COPE providers expressed low self-efficacy through vocalization of inadequate CBT skills and discomfort with therapy focused visits.

Individual stage of change varied across COPE providers. During the initial phase of COPE implementation, all of the COPE providers reached the preparation stage by making arrangements to be participate. However, when it came to the action phase, only three providers completed the training modules and began implementing COPE with a patient. Several providers regressed to contemplation and even precontemplation. Personal circumstances such as bed rest, surgery, and maternity leave hindered some COPE providers' involvement.

Inner Setting

Though the culture of the clinic was initially friendly and cohesive, the culture has changed since the implementation of COPE. The clinic experienced a merge with the residency clinic, implementation of a new EHR system, and has most recently experienced significant stress related to the COVID-19 pandemic. The following were significant clinic changes observed by the DNP student during the project evaluation that negatively impacted COPE implementation.

With the clinic merge, the culture became more tense and chaotic. Higher levels of tension were experienced because an influx of new employees entered the clinic at the same time care teams were reconfigured. Initially, all of the medical assistants in teams with COPE providers were familiar with and passionate about COPE. After the merge, the majority of medical assistants did not know what COPE was. This was a significant barrier as time had been invested in coaching medical assistants about how to identify appropriate COPE candidates, and how to administer the ACEs screening.

After the new EHR implementation, providers experienced stress related to documentation and retrieval of records. Due to a lag in the roll-out of a new EHR and the syncing of old records, providers were observed with multiple computers or screens open. Increased time was required to retrieve information about the patient and navigating documentation in a new system. Finally, with COVID-19, all healthcare systems are strained and have implemented telehealth and new precautions. Non-essential visits are being rescheduled. Other priorities demonstrate that the current clinic culture is not ready for a change such as COPE.

Intervention Characteristics

Theoretically, the adaptability, complexity, and design of COPE are conducive to the primary care setting. However, due to barriers outside of the intervention, this has not proven to be true in this clinic. The materials themselves have been reported as easy to use. Providers were able to read the script in the manual to direct COPE visits, and patients did not report difficulty understanding or completing the assigned homework. However, scheduling seven consecutive COPE appointments was difficult for all of the involved parties. Despite these findings, no

substantial losses have occurred because of COPE. Because of grant money and providers volunteering to participate, the organization has not suffered any losses as a result of COPE. All training and materials costs were covered by grant money.

Outer Setting

The setting outside of the clinic remains positive towards mental health. Delays continue to be experienced when seeking psychiatric and therapy assistance. Recently the global culture has shifted with COVID-19. There is much more anxiety in the world with even fewer resources for mental health assistance than before. All healthcare resources are taxed during this viral pandemic. An intervention such as COPE is not a priority in light of the current climate. Many non-essential visits are being transferred to telehealth or postponed altogether. Though COPE could theoretically be completed during a telehealth visit to improve mental health for patients, it is not a priority at this time.

Process

The primary champion of COPE within the clinic is the COPE nurse practitioner. The nurse practitioner has been influential in the implementation and sustainability of COPE. She has been dedicated to offering COPE to her patients but also to encouraging other providers to do the same. She has also advocated for the program with the clinic manager and within the residency program. Despite this, the execution of COPE has not been seamless. For several months, the clinic was attempting to implement COPE without the patient manuals. COPE providers continue to delay certification and are not well informed about the certification process. Until this project evaluation initiative, little evaluation of the program had been accomplished. The implementation has relied solely on the COPE nurse practitioner and the DNP student.

Implementation Outcomes

Acceptability. COPE was well accepted in the clinic. Healthcare workers and the office manager believed it to be a valuable tool and supported its implementation in the office. Individuals in the office were excited to talk to the DNP student about COPE, and they designated prime office shelves to store COPE materials. Some individuals in the healthcare team believed that the residency program would benefit from completing the training. However, when the DNP student pursued expansion to the residents, the organizational leadership was not as accepting of COPE. Requests to introduce the residents and other clinic providers to the COPE program were denied.

Adoption. COPE was not well adopted in the clinic. Three COPE providers initiated a session with a patient. Nine patients in total participated in COPE, with only two completing all seven sessions. Though there were some informal project champions, overall, the clinic did not use COPE. COPE did not evolve into part of the healthcare team's daily process and was not brought to mind as an option for the majority of individuals who presented with depression or anxiety. Furthermore, the organization did not adopt the program as evidenced by a lack of reimbursement for time spent in COPE training or encouragement to offer COPE appointments.

Appropriateness. COPE is appropriate in the primary care setting. Members of the healthcare team vocalized the need for a tool like COPE in their workplace. The appointments were able to be completed in a 30-minute timeframe and no problems with reimbursement of COPE sessions were reported. The manual was easy to follow for individuals without a background in CBT.

Feasibility. COPE is feasible for providers on an individual level, but it is not conducive to clinic-wide or organization-wide implementation at this time due to the multiple barriers previously described. COPE is not feasible at this level due to system barriers such as lack of organizational support, lack of incentive, and difficulties with providers identifying and scheduling COPE appointments. During the implementation of COPE, the clinic has also experienced circumstantial barriers such as a clinic merge, a new EHR system, and the COVID-19 pandemic. The results of a project evaluation such as this would have been instrumental to COPE expansion if there were results to suggest a significant impact.

Client Outcomes

COPE was beneficial for the participating patients and resulted in decreased reported anxiety and depression symptoms. The commitment to seven sessions was difficult for some patients to complete. But, the majority of patients who participated in COPE found other therapy upon concluding the program.

Limitations

The findings of this project evaluation are specific to the family medicine residency clinic and are not generalizable to the public. Because of the small sample size, the results of this evaluation are not significant or generalizable. Reimbursement data was not retrievable due to outside circumstances. Threats such as the clinic merge, new EHR, and COVID-19 negatively impacted the adoption of COPE among providers.

Stakeholder Support and Sustainability

There are several recommendations to improve the sustainability of COPE. First, implement wage compensation for time spent completing COPE training. If providers were

compensated for the 2-hour long training modules, they would be more likely to complete it. Secondly, implement a CPT dummy code that can be used to track the reimbursement of COPE appointments. Having definitive numbers for reimbursement and RVU compensation would help to inform outcomes. Thirdly, provide COPE dot phrases that can be used to support providers in the documentation of COPE appointments for time-based based services. Fourthly, equip medical assistants to offer information about COPE to patients and provide teaching for scheduling appointments. Finally, additional support and promotion of COPE is necessary to motivate providers to use COPE. Implementing these recommendations would promote the use of COPE on both clinic and organizational levels.

Implications for Practice

The findings of this project evaluation help to inform the organization about the usefulness of COPE for anxiety and depression. Additionally, the findings confirm the need and appropriateness for this type of intervention in the primary care setting. Further study is necessary to determine if COPE can be sustainable on a clinic level.

Conclusion

In an attempt to improve mental health care in the primary care setting, a Midwestern faith-based healthcare organization implemented a pilot cognitive behavioral therapy program at one of their family medicine residency clinics. They hoped that increasing provider CBT competencies would result in a synergistic patient-provider relationship. The purpose of this project was to evaluate whether the implementation of COPE by primary care providers is beneficial and sustainable at the family medicine residency clinic. Literature supports COPE as a

tool to improve anxiety and depression symptoms in mental health patients. Using the CFIR framework, this project evaluation identified facilitators and barriers to sustainability

Overall, participation in COPE was associated with improved depression and anxiety scores. Attending all seven COPE sessions was associated with further reduced anxiety and depression when compared to four sessions. An unexpected finding was that after participating in a COPE session, the majority of patients left to start therapy elsewhere. This is an important finding because it could indicate that COPE is a launching point for therapy. COPE participants may have found that participation in a brief manual-led CBT program facilitated their desire to take action and locate a therapist.

Although COPE was accepted and appropriate in the family medicine residency clinic, it was not well adopted nor feasible at the clinic level. Because of this, it is not expected to be sustainable without process modification. Unfortunately, unless COPE is implemented from a top-down approach or is further supported by the organizational leadership, it is unlikely COPE will be used except on an individual provider-level basis.

Dissemination of Results

The results of this project evaluation will be presented during a final defense in April of 2020. The event will be open to the community, including members of the organization and the university. A summary of the findings will be sent to the COPE providers at the family medicine residency clinic in the form of a monthly newsletter. Additionally, the findings will be disseminated to a large body of nurses at a local chapter of the American Psychiatric Nurse's Association and uploaded to Scholarworks.

Reflections on DNP Essentials

The DNP student demonstrated advanced competencies, knowledge, and leadership skills, as outlined by the American Association of Colleges of Nursing Essentials (2006). Practicing at this level means the DNP student is prepared to integrate and evaluate nursing science and health within ethical, psychosocial, and organizational domains (Essential I). Essential I was demonstrated during this project by performing a literature search on COPE and implementing then evaluating a brief cognitive-behavioral health intervention. The knowledge gained has been used to improve care for the mentally ill population within the clinic. The DNP student evaluated care delivery, used advanced communication, and analyzed practice strategies to improve care among diverse populations during the project evaluation (Essential II). This was done through meetings with stakeholders to uncover barriers and facilitators and through an organizational assessment.

The DNP student analyzed the literature about COPE and CBT to understand the evidenced-based practice, then finalized implementation and designed an evaluation process to promote effective and patient-centered care (Essential III). The student evaluated the quality improvement initiative using databases and technology to generate meaningful evidence for collaborative care groups (Essential IV). The student navigated the organization's EHR using ethical guidelines to retrieve screening tool scores, medication status, demographics, and other data spanning the course of one year. Through analysis, the data was generated into meaningful findings using Excel, email communication, and meetings with a statistician. Furthermore, the student harnessed the new EHR technology to improve COPE implementation by creating and implementing dot phrases to improve COPE appointment documentation.

COPE PROJECT EVALUATION

The DNP student demonstrated the ability to analyze health policy for the organization from the perspective of consumers, health professionals, and stakeholders (Essential V). Policies impacting counseling and time-based services were focused on as they directly impacted the sustainability of COPE. The student also effectively worked with interprofessional collaborative teams to overcome complex issues by both giving and receiving consultative recommendations as it relates to COPE and motivational interviewing (Essential VI). Collaboration in the clinic occurred with medical assistants, nurses, nurse practitioners, administration, physicians, physician assistants, and residents. This project surrounded the clinical prevention of anxiety and depression and sought to improve health for the mentally ill population (Essential VII). Epidemiological data was used to determine the current state of the population within this clinic's setting. Through this project evaluation, the DNP student has used their knowledge and advanced competencies to partner with patients, other professionals, and nurses to promote excellence in healthcare and nursing (Essential VIII) (American Association of Colleges of Nursing, 2006).

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Appendix A

COPE Sessions: Adult Manual

- Session 1: Thinking, Feeling, and Behaving
    - Skills-Building Session
    - Goal Setting & Self-Monitoring Log
- Session 2: Self-Esteem and Positive Thinking/Self-Talk
    - Skills-Building Session
    - Goal Setting & Self-Monitoring Log
- Session 3: Stress and Coping
    - Skills-Building Session
    - Goal Setting & Self-Monitoring Log
- Session 4: Problem Solving & Setting Goals
    - Skills-Building Session
    - Goal Setting & Self-Monitoring Log
- Session 5: Dealing with Your Emotions in Healthy Ways
    - Skills-Building Session
    - Goal Setting & Self-Monitoring Log
- Session 6: Coping with Stressful Situations/Valuable Sleep
    - Skills-Building Session
    - Goal Setting & Self-Monitoring Log
    - My Sleep Diary
- Session 7: Pulling it All Together for a Healthy You

Appendix B

The Institutional and Organizational Assessment Model

Figure 1. Universalia. (n.d.). Institutional and organizational performance assessment. Retrieved from https://www.universalia.com/en/services/institutional-and-organizational-performance-assessment

Appendix C

SWOT Table, Analysis of Midwestern Family Medicine Residency Clinic

Strengths	Weaknesses
Established providers	Minimal experience with ACEs
Desire to integrate MH	No COPE manuals
Familiarity with ACEs	Haven't finalized certification
Champions for COPE	Identifying potential participants
COPE implementation started	Variation in interpersonal skills
Providers beginning certification	Busy schedule
Opportunities	**Threats**
Association with healthcare system	Unclear reimbursement
Desire to integrate MH	RVU requirements
Resources & Grant funding	Money for incentives
Expand COPE to other clinics	Profitable services
Expand COPE to other disciplines	New EHR
Increased need for MH services	Clinic merge

Appendix D

PRISMA Diagram

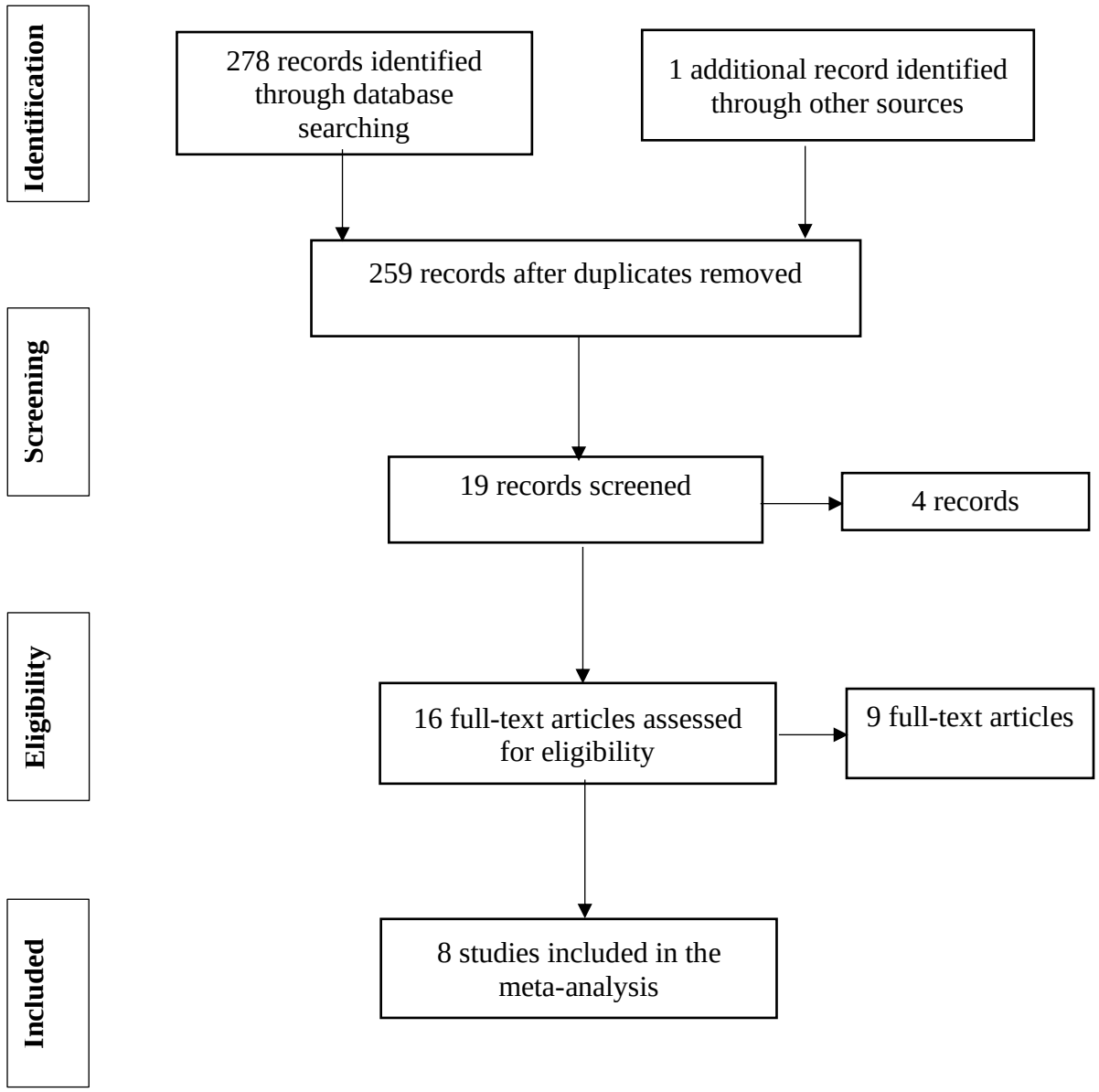

Figure 1. Flow diagram of the search selection process. Adapted from "Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement," by D. Moher, A. Liberati, J. Tetzlaff, D. Altman, and PRISMA Group.

Appendix E

Literature Review Table

Author (Year) Purpose	Design (n)	Inclusion Criteria	Measures	Intervention vs. Comparison	Results	Conclusion	Delivery & Setting	Billing Code
Hart Abney, Lusk, Hovermale, & Melnyk (2019) Evaluate the effects of COPE on college students' anxiety and depression	One group pretest and posttest (n=13)	DSM-5 diagnosis of anxiety and/or depression Recent or prior patients at the college's student health and disability services Ages 19-23	Beck Depression Inventory-II The State-Trait Anxiety Inventory COPE Young Adult Program Evaluation Form	COPE group (n = 13)	COPE participants demonstrate-ed clinically meaningful improvement in depression and anxiety	COPE is an effective brief program for reducing depression and anxiety in college-age youth	Psych-iatric mental health advanced practice nurse in a college health services clinic 7 sessions One-on-one format	N/A
Hickman, Jacobson, & Melnyk (2015) Evaluate the acceptability, feasibility, and preliminary effects of a brief cognitive behavioral skills building intervention	Randomized control trial (n = 36)	Diagnosis of chronic daily headaches (CDH) Age 13-17 Parent/guardian available to accompany to clinic visit	Beck Youth Inventory II Healthy Lifestyle Beliefs Scale Perceived Stress Scale PedMIDAS: headache disability Parent Perception of Pain Interference Teen and parent questionnaire	COPE Headache Education Program (n = 18) Headache education comparison group (n = 18)	Adolescents and parents found COPE-HEP highly acceptable Medium-Large positive effects demonstrated on adolescents' depression both groups Positive effect on anxiety and beliefs in COPE-HEP group COPE-HEP offered additional benefits of more significantly decreased in adolescent anxiety over time and stronger beliefs in teens' ability to manage their headaches	Adolescents with CDHs and depression/anxiety should be offered headache hygiene education plus COPE	Advanced practice nurse in hospital-based pediatric neurology specialty care clinic setting 7 sessions: 3 one-on-one office sessions format, 4 telephone sessions format	N/A

Kozlowski, Lusk, & Melnyk (2015) Assess feasibility and effects of a brief seven-session cognitive-behavioral skills-building intervention; COPE delivered to anxious children by a pediatric nurse practitioner in the primary care setting	Pre-experiment-al, one-group, pretest and posttest (n = 14)	Ages 8-13 Anxiety disorder or DSM-5 criteria Child scored >25 on the SCARED instrument	Screen for Child Anxiety-Related Disorders COPE content quiz	COPE group (n = 14)	A decrease in anxiety symptoms Increase knowledge of CBT coping skills Improved functioning	COPE promises EBP intervention for children with anxiety in primary care	A pediatric nurse practitioner in a primary care setting	99214
Lusk & Melnyk (2011a) Describe lessons learned from implementing the COPE program in a community mental health practice to improve advanced clinical practice and provide treatment for depressed teens	Pre-experiment-al, one-group, pretest and posttest (n = 15)	Ages 12-17 Enrolled in a community mental health center	Beck Youth Inventory II Personal Beliefs Scale COPE evaluation questionnaire	COPE group (n = 15)	A decrease in depression, anxiety, anger, and destructive behavior Increases in self-concept and personal beliefs about managing negative emotions	COPE is a promising brief CBT intervention that can be delivered within 30-minute individual outpatient visits	A family psychiatric nurse practitioner in a community mental health center 7 sessions, one-on-one format	90805
Lusk & Melnyk (2011b) Assess the feasibility and effects of a theory-driven cognitive-behavioral skills-building intervention, COPE for Teens	Pre-experiment-al, one-group, pretest and posttest (n = 15)	Age 12-17 Clinically depressed Receiving treatment in a community mental health center	Personal Beliefs Scale – Teens Beck Youth Inventory-II Post-COPE program evaluations Intervention Quiz	COPE group (n = 15)	Decreases in depression, anxiety, anger, and destructive behaviors Increases in self-concept and personal beliefs about managing negative emotions	COPE is a promising CBT intervention that can be delivered within 30-minute individual outpatient visits	A psychiatric nurse practitioner in a community mental health center 7 sessions, one-on-one format	90805
Melnyk, Alpert-Gillis, Hensel, Cable-Beiling, Rubenstein (1997)	Two-group experiment-al (n = 30)	Mothers of children ages 1-6 Child admitted to PICU in NY	Index of Parent Support During Intrusive Procedures Index of Parent	COPE group (n = 16) Control group (n = 14)	COPE mothers provided more support to their children during	Results indicate the need to educate parents regarding their children's responses as they recover. Findings also indicate	Audio-taped and written format in the acute care setting	N/A

Test the effects of COPE on the coping outcomes of critically ill children and their mothers			Participation/ Hospitalized Child Two visual analog scales (CAS-PC, VAS-EC) State-Trait Anxiety Inventory		intrusive procedures Provided more emotional support to their children Reported less negative mood state and less parental stress	improved mood and stress among parents		
Melnyk, Feinstein, Alpert-Gillis, Fairbanks, Crean, Sinkin, Stone, Small, Tu, & Gross (2006) Evaluate the efficacy of Creating Opportunities for Parent Empowerment to enhance parent-infant interactions and parent mental health outcomes	Randomized controlled trial (n = 260)	Families with preterm infants Between 2001 and 2004 2 NICUs in the northeast U.S.	Infant length of stay State-Trait Anxiety Inventory Beck Depression Inventory II Parental Stressor Scale-Neonatal Intensive Care Index of Parental Behavior in the NICU Parental Belief Scale-NICU	COPE group Hospital services and policies group	COPE mothers reported less stress in the NICU Less depression and anxiety and 2 months corrected infant age Mothers and fathers reported stronger beliefs about their parental role COPE infants had a 3.8-day shorter length of stay	A reproducible educational, behavioral intervention program for parents that commences early in NICU can improve parent mental health outcomes, enhance parent-infant interaction and reduce hospital length of stay	Audio-taped and written format in the acute care setting 4 sessions, audiotaped	N/A
Melnyk, Amaya, Szalacha, Hoying, Taylor, & Bowersox (2015) Assess feasibility and preliminary effects of a seven-session online COPE versus a comparison on their anxiety, depressive symptoms, and grade performance	Cluster randomized controlled trial (n = 121)	Ages >18 College freshmen Enrolled in a required survey course at a public university	Personal Beliefs Scale Personal Health Questionnaire-9 General Anxiety Disorders Scale Grade Point Average	COPE group (n = 61) Control group (n = 32)	COPE students with an elevated level of anxiety had a significant decline in symptoms Grade point average was higher in COPE	COPE is a promising brief intervention that can be integrated effectively into a required freshman course	Online format through a university 7 sessions, online setting	N/A

Appendix F

The Synergy Model practice methodology

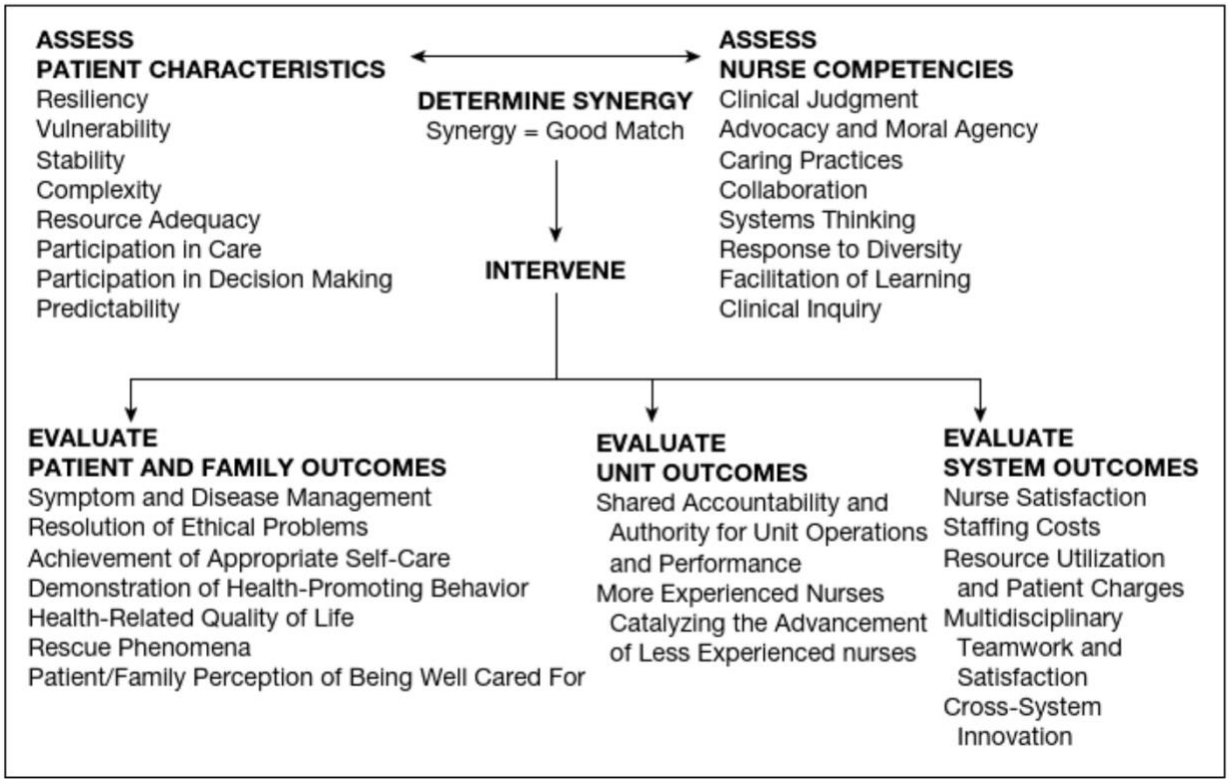

Figure 1. Fawcett, J. (2017). *Applying conceptual models of nursing: Quality improvement, research, and practice*. New York: Springer Publishing Company.

Appendix G

Projected Project Timeline

November	December	January	February	March	April
Proposal	Finalize provider certification	Meet with statistician	IRB approval	Meet with statistician	Defend project
Create 1-page summary of COPE for clinic	Disseminate COPE education to clinic	Start monthly newsletter	Data collection	Data collection	Disseminate results
Create COPE process flowchart	Disseminate COPE process flowchart	IRB application	Retrieve reimburse-ment data	Data analysis	Upload to Scholar-works
Observation	Observation	COPE newsletter	COPE newsletter	COPE newsletter	COPE newsletter
Face-to-face troubleshoot	Face-to-face troubleshoot	Epic training	Semi-structured provider interviews	Semi-structured provider interviews	
		Face-to-face troubleshoot	Likert question-naire	Likert question-naire	

Appendix H

Excel Codebook for Data Collection

Variable name	Description	Coded Values
	Project ID Correlation tool	
MRN	Medical record number	#
DOB	Date of birth	##/##/##
ID	ID variable	#01-25
	Baseline Clinic Data	
CC_MH	Was the chief complaint related to mental health?	0 = no, 1 = yes
Screened_GAD	Was a GAD-7 administered?	0 = no, 1 = yes
Screened_PHQ	Was a PHQ-9 administered?	0 = no, 1 = yes
Score_PHQ	PHQ-9 score for baseline data	#0-27
Score_GAD	GAD-7 score for baseline data	#0-21
Med	Psychopharmacology medication status	0 = no meds, 1 = taking medication, 2 = med change
Addressed_MH	Was mental health addressed in HPI or patient instructions?	0 = no, 1 = yes
Addressed_counsel	Was counseling addressed in HPI or patient instructions?	0 = no, 1 = yes
Addressed_COPE	Was COPE addressed in the HPI or patient instructions?	0 = no, 1 = yes
Time	How long was the appointment?	1 = 15-20 minutes, 2 = 25-40 minutes, 3 = 45 minutes, 4 = 60-75 minutes
	COPE Patient Demographics	
ID	ID variable	#01-25
Age	The patient age at the time of the first appointment	Age in years #1-89
Gender	What was the patient's identified gender at the time of the first COPE session?	0 = other, 1 = female, 2 = male
Race	What was the patient's identified race at the time of the first COPE session?	1 = Caucasian, 2 = African American, 3 = other
Score_ACE	ACEs score	#0-10
Med	Psychopharmacology medication status	0 = no meds, 1 = taking medication, 2 = med change
	Post COPE Session Data	
ID	ID variable	#01-25

COPE PROJECT EVALUATION

Provider	Which provider administered COPE?	1 = Provider 1, 2 = Provider 2, 3 = Provider 3, 4 = Provider 4, 5 = Provider 5, 6 = Provider 6
Med	Psychopharmacology medication status	0 = no meds, 1 = taking medication, 2 = med change
Time	How long was the appointment?	1 = 15-20 minutes, 2 = 25-40 minutes, 3 = 45 minutes, 4 = 60-75 minutes
Days	Number of days between first COPE session and last completed COPE session	#
Reason_anx	The reason for the COPE referral was anxiety	0 = no, 1 = yes
Reason_pain	The reason for the COPE referral was pain	0 = no, 1 = yes
Reason_dep	The reason for the COPE referral was depression	0 = no, 1 = yes
Reason_behavior	The reason for the COPE referral was behavioral	0 = no, 1 = yes
Reason_other	The reason for the COPE referral was other	0 = no, 1 = yes
COPE_session	The session number	0 = pre session, 1 = first session, 2 = second session, 3 = third session, 4 = fourth session, 5 = fifth session, 6 = sixth session, 7 = seventh session e = extra session
Score_GAD0	Screening tool result pre-COPE, GAD-7	#0-21
Score_GAD1	Screening tool results in session 1, GAD-7	#0-21
Score_GAD2	Screening tool results in session 2, GAD-7	#0-21
Score_GAD3	Screening tool results in session 3, GAD-7	#0-21
Score_GAD4	Screening tool results in session 4, GAD-7	#0-21
Score_GAD5	Screening tool results in session 5, GAD-7	#0-21
Score_GAD6	Screening tool results in session 6, GAD-7	#0-21
Sscore_GAD7	Screening tool results in session 7, GAD-7	#0-21

Score_GADe	Screening tool result at an extra appointment, GAD-7	#0-21
Score_PHQ0	Screening tool result pre-COPE, PHQ-9	#0-27
Score_PHQ1	Screening tool results in session 1, PHQ-9	#0-27
Score_PHQ2	Screening tool results in session 2, PHQ-9	#0-27
Score_PHQ3	Screening tool results in session 3, PHQ-9	#0-27
Score_PHQ4	Screening tool results in session 4, PHQ-9	#0-27
Score_PHQ5	Screening tool results in session 5, PHQ-9	#0-27
Score_PHQ6	Screening tool results in session 6, PHQ-9	#0-27
Score_PHQ7	Screening tool results in session 7, PHQ-9	#0-27
Score_PHQe	Screening tool result at an extra appointment, PHQ-9	#0-27
	Post COPE Reimbursement Data	
Reimbursement	Dollar value for appointment reimbursement	#
CPT	Billing code(s) used for COPE session	#
Insurance	What type of insurance was billed?	0 = no insurance, 1 = HMO or prepaid plan, 2 = PPO, 3 = private insurance, 4 = Medicaid, 5 = Medicaid and HMO, 6 = Medicaid and PPO, 7 = Medicare, 8 = Medicare and HMO, 9 = Medicare and PPO, 10 = Medicare/Medicaid dual-eligible, 11 = workman's comp, 12 = other

Appendix I

COPE Provider Survey

Likert Scale Questionnaire					
	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
I could lead a patient through the COPE program	1	2	3	4	5
The COPE manual is easy to follow	1	2	3	4	5
Patients who were told about COPE were interested in participating	1	2	3	4	5
I think COPE is useful in this setting	1	2	3	4	5
There is a need for this type of intervention in primary care	1	2	3	4	5
I intend to use COPE in the future	1	2	3	4	5

Semi-Structured Interview Questions	Comments
How does COPE fit into the typical workflow?	
What would have motivated you to use COPE more?	
What hindered you from using COPE?	

Appendix J

The Consolidated Framework for Implementation Research

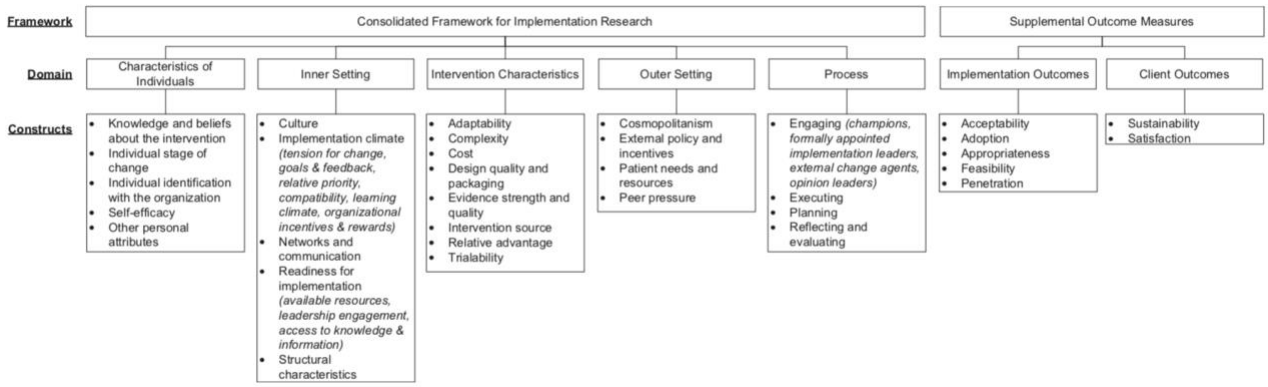

Figure 1. Tinc, P. J., Gadomski, A., Sorensen, J. A., Weinehall, L., Jenkins, P., & Lindvall, K. (2018). Applying the consolidated framework for implementation research to agricultural safety and health: Barriers, facilitators, and evaluation opportunities. *Safety Science, 107,* 99-108. https://doi.org/10.1016/j.ssci.2018.04.008

Appendix K

Data Gathering Tool

Baseline Clinic Data

- Was the chief complaint during the visit related to mental health?
  - 0 = no, 1 = yes
  - Retrieve data from Athena/Epic
- What mental health screening was done?
  - Was a GAD-7 administered?
    - 0 = no, 1 = yes
    - Retrieve data from Athena/Epic
  - Was a PHQ-9 administered?
    - 0 = no, 1 = yes
    - Retrieve data from Athena/Epic
  - If yes, what was the score?
    - GAD-7
      - #0-21
    - PHQ-9
      - #0-27
- Was mental health addressed in the HPI or plan/patient instructions?
  - 0 = no, 1 = yes
  - Retrieve data from Athena/Epic
- Was counseling addressed in HPI or plan/patient instructions?
  - 0 = no, 1 = yes
  - Retrieve data from Athena/Epic
- Was COPE addressed in the HPI or plan/patient instructions?
  - 0 = no, 1 = yes
  - Retrieve data from Athena/Epic
- Is the patient prescribed a medication to manage mental health?
  - 0 = no meds, 1 = taking medication, 2 = med change
  - Retrieve data from Athena/Epic
- How long was the appointment?
  - 1 = 15-20 minutes, 2 = 25-40 minutes, 3 = 45 minutes, 4 = 60-75 minutes
  - Retrieve data from Athena/Epic

COPE Patient Demographics

- ID variable
  - Represented as a number value
  - Retrieve data from Project ID Correlation Tool
- What was the patient's age at the time of the first COPE session?
  - Age in years #8-90 (if over 90 rounds down)

    - Retrieve data from Athena/Epic
- What was the patient's identified gender at the time of the first COPE session?
    - 0 = other, 1 = female, 2 = male
    - Retrieve data from Athena/Epic
- What was the patient's identified race at the time of the first COPE session?
    - 1 = Caucasian, 2 = African American, 3 = other
    - Retrieve data from Athena/Epic
- What is the patient's ACEs score?
    - Measured: tool_ace
    - Represented as a number ranging from 0 to 10
    - Retrieve data from Athena/Epic
- Is the patient receiving psychopharmacology treatment, or was a medication change made?
    - Measured: 0 = no medication, 1 = taking medication, 2 = medication change was made
    - Retrieve data from Athena/Epic

Post COPE Session Data

- What is the patient's ID number?
    - Represented as a number value
    - Retrieve data from Project ID Correlation Tool
- Which provider administered COPE?
    - 1 = Provider 1, 2 = Provider 2, 3 = Provider 3, 4 = Provider 4, 5 = Provider 5, 6 = Provider 6
    - Retrieve data from Athena/Epic
- Is the patient receiving psychopharmacology treatment, or was a medication change made?
    - Measured: 0 = no medication, 1 = taking medication, 2 = medication change was made
    - Retrieve data from Athena/Epic
- How long was the appointment?
    - 1 = 15-20 minutes, 2 = 25-40 minutes, 3 = 45 minutes, 4 = 60-75 minutes
- What was the primary reason for COPE participation (anxiety, depression, behavior, pain, other)?
    - Measured: 0 = no, 1 = yes
    - Retrieve data from Athena/Epic
- What session material was covered during the appointment?
    - Measured: 0 = repeat session, 1 = first session, 2 = second session, 3 = third session, 4 = forth session, 5 = fifth session, 6 = sixth session, 7 = seventh session
    - Retrieve data from Athena/Epic
- What was the patient's PHQ-9 and GAD-7 score at the time of the appointment?
    - Measured: Score_PHQ#, Score_GAD#
    - Represented as a number ranging from 0 to 27

    - Retrieve data from Athena/Epic
- How did the patient respond to each question on the PHQ-9 and GAD-7?
    - Measured: 0 = not at all, 1 = several days, 2 = over half the days, 3 = nearly every day
    - Retrieve data from Athena/Epic

Post COPE Reimbursement Data

- Was the appointment reimbursement?
    - Measured: 0 = no, 1 = yes
    - Represented as a number value
    - Retrieve data from Athena/Epic or Billing Department
- What CPT billing code was used?
    - Represented as a number value
    - Retrieve data from Athena/Epic or Billing Department
- What type of insurance was billed?
    - 0 = no insurance, 1 = HMO or prepaid plan, 2 = PPO, 3 = private insurance, 4 = Medicaid, 5 = Medicaid and HMO, 6 = Medicaid and PPO, 7 = Medicare, 8 = Medicare and HMO, 9 = Medicare and PPO, 10 = Medicare/Medicaid dual eligible, 11 = workman's comp, 12 = other
    - Retrieve data from Athena/Epic or Billing Department

Appendix L

IRB Letter of Project Approval

MERCY HEALTH

MercyHealth.com

NOTICE OF CLINICAL QUALITY IMPROVEMENT MEASUREMENT DESIGNATION

To: Ann Cudney, RN-BC, DNP-s
63 Graceland St. NE
Grand Rapids, MI 49505

Re: IRB# 20-0203-2
Creating Opportunities for Personal Empowerment: A Project Evaluation

Date: 02/11/2020

This is to inform you that the Mercy Health Regional Institutional Review Board (IRB) has reviewed your proposed research project entitled *"Creating Opportunities for Personal Empowerment: A Project Evaluation".* The IRB has determined that your proposed project is not considered human subjects research. The purpose and objective of the proposed project meets the definition of a clinical quality improvement measurement. All publications referring to the proposed project should include the following statement: *"This project was undertaken as a Clinical Quality Improvement Initiative at Mercy Health and, as such, was not formally supervised by the Mercy Health Regional Institutional Review Board per their policies."*

The IRB requests careful consideration of all future activities using the data that has been proposed to be collected and used "in order to assess how participation in a pilot 7-session cognitive behavioral therapy (CBT) based program at a Midwestern family medicine residency clinic impacts patient outcomes and reimbursement, and determine the program's sustainability in a primary care environment."

The IRB requests resubmission of the proposed project if there is a change in the current clinical quality improvement measurement design that includes testing hypothesis, asking a research question, following a research design or involves overriding standard clinical decision making and care.

Please feel free to contact me if you have any questions regarding this matter.

G. Robert DeYoung, PharmD, FCCP, BCPS
IRB Chairperson

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Institutional Review Board - 200 Jefferson Ave. SE – Grand Rapids, MI 49503 - P: 616.685.6198

Appendix M

Doctor of Nursing Practice Project Budget

Doctor of Nursing Practice Project Financial Operating Plan Creating Opportunities for Personal Empowerment: A Project Evaluation	
Revenue	
Project Manager Time (in-kind donation)	2,820.00
Team Member Time Donated:	
Clinical Services Director (Site Mentor)	400.00
Nurse Practitioner (Site Lead)	2,000.00
Previous Project Manager	200.00
Physician	276.00
Physician Assistant	162.00
Consultations	
Statistician	200.00
Foundation Grant	4,850.00
COPE appointments estimate	5,720.00
Total Income	16,628.00
Expenses	
Project Manager Time (in-kind donation)	2,820.00
Team Member Time:	
Clinical Services Director (Site Mentor)	400.00
Nurse Practitioner (Site Lead)	2,000.00
Previous Project Manager	200.00
Physician	276.00
Physician Assistants	162.00
Consultations	
Statistician	200.00
Estimated Wages for COPE:	
Nurse Practitioner	2,268.00
Physician	92.00
Physician assistant	54.00
COPE Materials:	
COPE online education (7 providers)	2,290.00
COPE workbooks	2,343.00
Cost of print/copy/fax	20.00
Incentive for Questionnaire Completion	50.00
Total Expenses	10,907.00
Net Operating Plan	5,721.00

Appendix N

Table 1

Baseline Clinic Data Sample

Variable	N	Mean	Frequency	Standard Deviation	Percent
MH CC, Total			48		12.31
MH Appt. Length					
15-20 mins			103		26.41
25-40 mins			256		65.64
45 mins			26		6.67
60-75 mins			5		1.28
GAD-7 Screening	57				14.62
Score		7.94		7.15	
Positive Screen			29		50.87
Anxiety, Mild >5			32		
Psych Med			26		81.25
Therapy			11		34.38
Anxiety, Mod >10			32		
Psych Med			19		82.61
Therapy			10		43.48
Anxiety, Severe >15			16		
Psych Med			14		87.50
Therapy			7		43.75
PHQ-9 Screening	293				75.13
Score		2.49		5.42	
Positive Screen			36		12.29
Depression, Mild >10			36		
Psych Med			27		75.00
Therapy			9		25.00
Depression, Mod >15			16		
Psych Med			14		87.71
Therapy			3		18.75
Depression, Severe >20			7		
Psych Med			6		85.71
Therapy			3		42.86

Psych Med, Total	183	46.92
MH Discussed, Total	66	36.07
Therapy, Total	27	6.92
COPE, Total	1	0.26

Note. This table demonstrates a sample of mental health screening and treatment within the family medicine residency clinic.

Appendix O

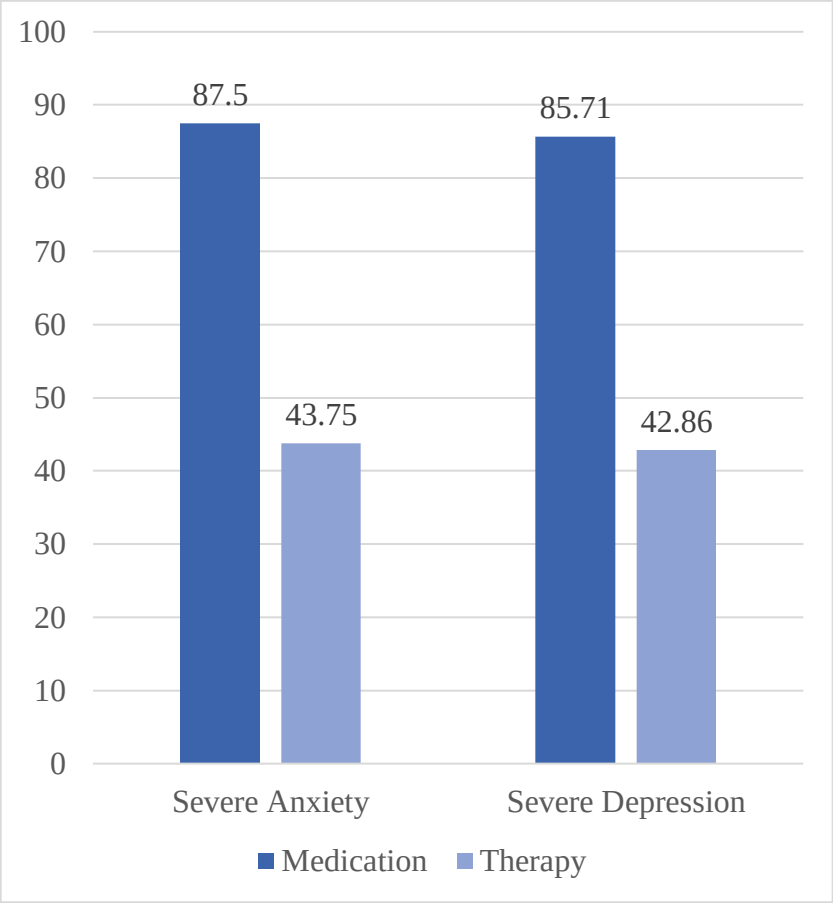


Figure 1. Of individuals with severe anxiety, 88% are prescribed a psychiatric medication and 44% discussed therapy with a primary care provider. Of individuals with severe depression, 86% are prescribed a psychiatric medication and 43% discussed therapy with a primary care provider.

Appendix P

Table 1

COPE Session Attendance Data

Variable	Session Number							
	Pre	One	Two	Three	Four	Five	Six	Seven
Attendance Total	9	9	6	5	5	3	3	2
Number of Times Session Repeated								
1	9	9	6	5	5	1	1	2
2						1	1	
3						1		
4							1	
Medication Status								
Taking Meds	3	5	3	2	2	2	2	2
Med Change	2			1	2			
No Meds	4	4	3	2	1	1	1	
Missing			3	4	4	6	6	7

Note. This table demonstrates the total number of times each session was attended, how many times each session was repeated, and the medication status during each session.

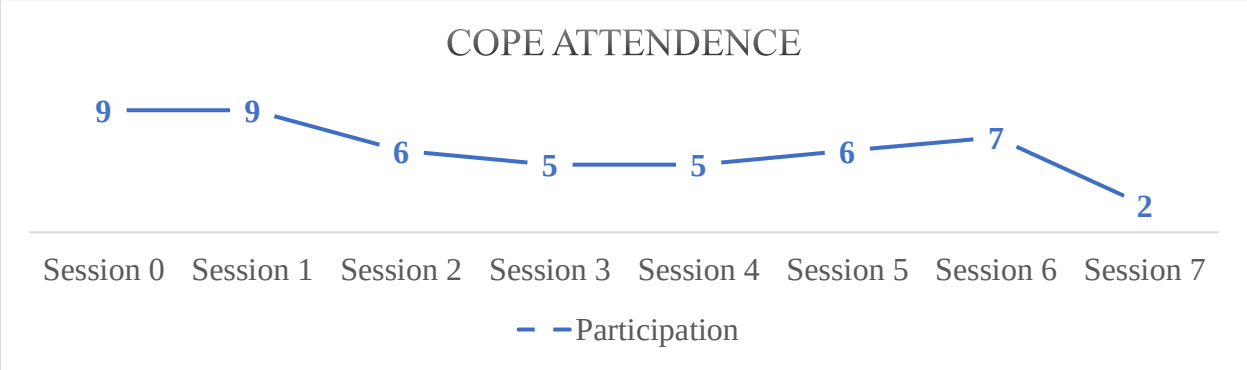


Figure 1. Demonstrates the number of times each session was attended.

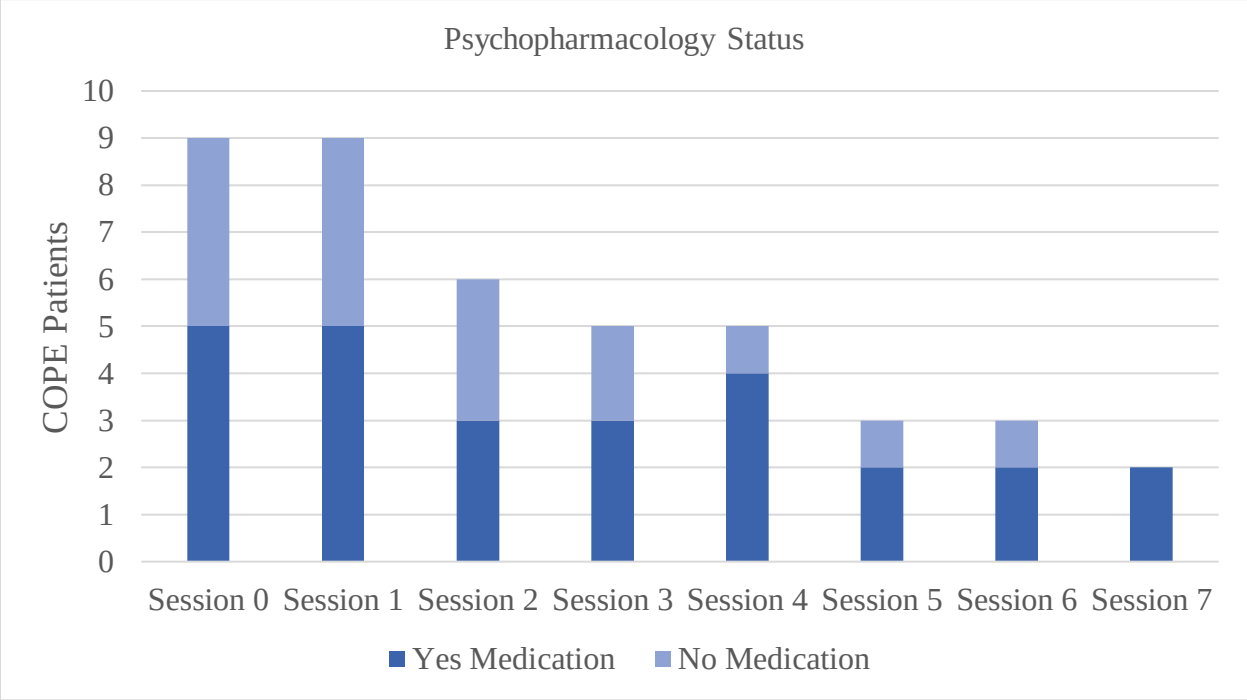


Figure 2. Demonstrates the number of participants who were and were not taking a psychiatric medication at the time of each session.

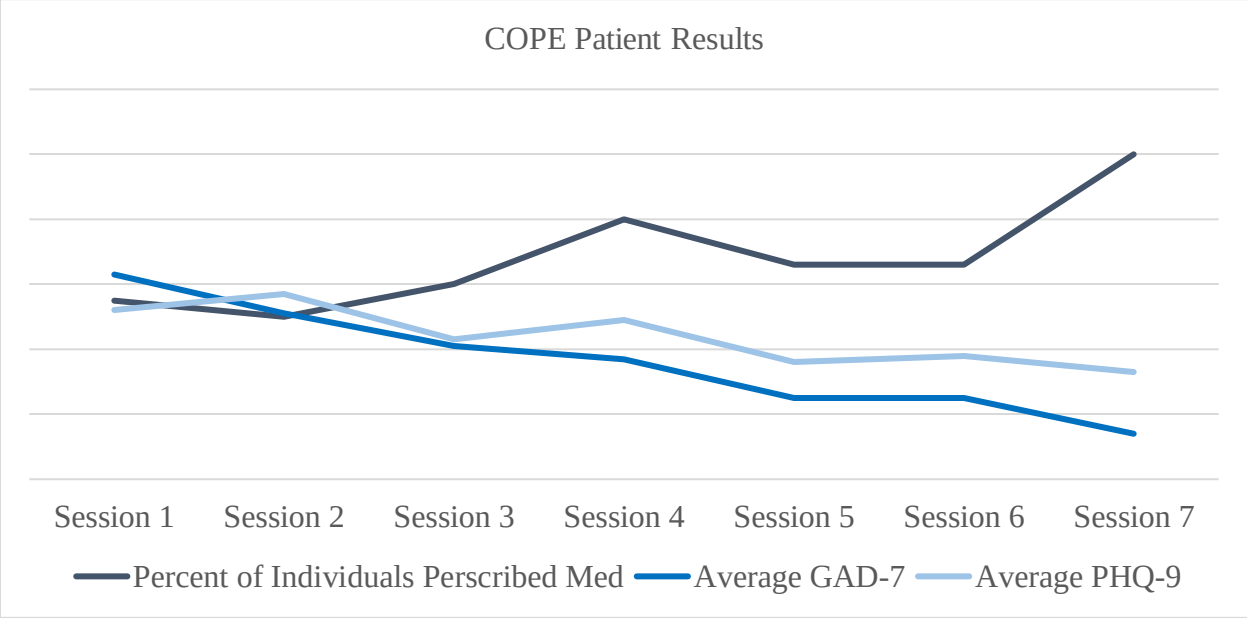


Figure 3. Demonstrates trends in medication status, average GAD-7, and average PHQ-9.

Creating Opportunities for Personal Empowerment: A Project Evaluation

Ann L. Cudney

DNP Project Final Defense

April 15, 2020

Grand Valley State University
Kirkhof College of Nursing

Acknowledgements

- **Project Advisor:** Karen Burritt, Ph.D., RN, FNP-BC
- **Advisory Team:** Anne McKay, DNP, ANP-BC
- **Site Mentors:** Carrie Mull, DNP, RN, Kevin Hengeveld, DNP, RN
- **Clinical Lead:** Jane Visser, FNP, RN

Objectives for Presentation

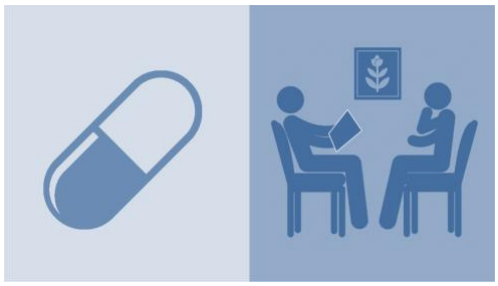
1. Examine the clinical problem and past work
2. Consider an evidenced-based solution
3. Review DNP project plan, results, and implications for practice
4. Reflect on DNP Essentials

Introduction

- 7% experienced major depression in the last month (Center for Behavioral Health Statistics and Quality, 2018)
- 31% suffer from an anxiety disorder (National Institute of Mental Health, 2017)
- Suicide is the second leading cause of death (CDC, 2017)

Introduction

- Combination therapy associated with better outcomes (Anxiety and Depression Association of America, n.d.)
- Primary care providers feel underprepared to adequately address needs (Loeb, Bayliss, Binswanger, Candrian, & deGruy, 2012)



Introduction & Background

- COPE (COPE, n.d.)
  - Cognitive behavioral therapy (CBT)
  - Seven 30-minute manual-led sessions
  - For children, adolescents, and adults
- 2018 Pilot project at a Family Medicine Residency Clinic
  - Certify 7 primary care providers
  - Grant funding allocated

Assessment of Organization

- Family Medicine Residency Clinic
- Midwestern Community

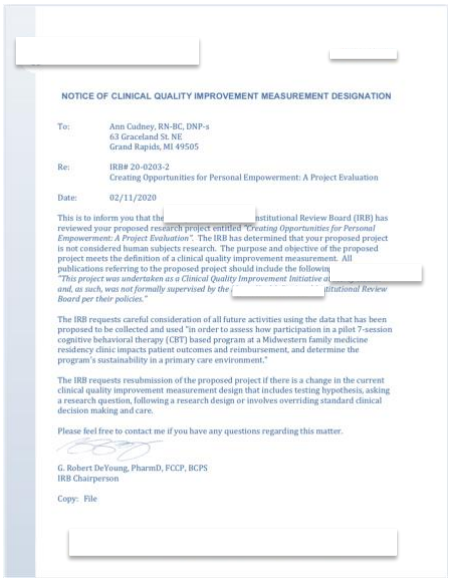
Framework: IOA Model

- Three contextual forces (Lusthaus, Adrien, Anderson, Carden, & Montalvan, 2002)
  - Capacity
  - External environment
  - Motivation
- Organizational Performance

Figure 1. Universalia. (n.d.). Institutional and organizational performance assessment. Retrieved from https://www.universalia.com/en/services/institutional-and-organizational-performance-assessment

IRB Approval

- Organization IRB
- No identifiable participant risks
- Data security



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The IRB requests careful consideration of all future activities using the data that has been proposed to be collected and used "in order to assess how participation in a pilot 7-session cognitive behavioral therapy (CBT) based program at a Midwestern family medicine residency clinic impacts patient outcomes and reimbursement, and determine the program's sustainability in a primary care environment."

The IRB requests resubmission of the proposed project if there is a change in the current clinical quality improvement measurement design that includes testing hypothesis, asking a research question, following a research design or involves overriding standard clinical decision making and care.

Please feel free to contact me if you have any questions regarding this matter.

G. Robert DeYoung, PharmD, FCCP, BCPS
IRB Chairperson

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[redacted]

Stakeholders

- Mental health patients
- Clinic providers
- Medical assistants
- Clinic manager
- Clinical services director
- Organization’s mental health providers

SWOT

Strengths	Weaknesses
• Established providers • Desire to integrate MH • Familiarity with ACEs • Champions for COPE • COPE implementation started • Providers beginning certification	• Minimal experience with ACEs • No COPE manuals • Haven't finalized certification • Identifying potential participants • Variation in interpersonal skills • Busy schedule
Opportunities	**Threats**
• Association with healthcare system • Desire to integrate MH • Resources & Grant funding • Expand COPE to other clinics • Expand COPE to other disciplines • Increased need for MH services	• Unclear reimbursement • RVU requirements • Money for incentives • Profitable services • New EHR • Clinic merge

Clinical Practice Question

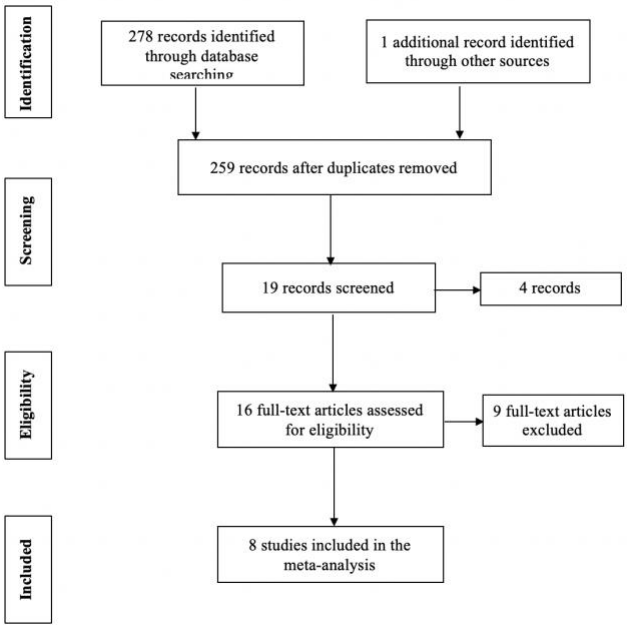
- Is the implementation of COPE by primary care providers beneficial and sustainable at the family medicine residency clinic?

Literature Review

- Purpose
  - Review current evidence-based literature
    - Key words: creating opportunities for personal empowerment
- Methods
  - Integrative review
  - CINAHL Complete and PubMed

Literature Review

- PRISMA criteria
  (Moher, Liberati, Tetzlaff, & Altman, 2009)



Literature Review: Results

Author (Year)	Design (n)	Delivery & Setting	Results	Billing Code
Hart et al. (2019)	Pretest posttest (n=13)	Psych APN College clinic	Decreased depression & anxiety	N/A
Hickman et al. (2015)	RCT (n=36)	APN Specialty clinic	Decreased depression & anxiety. Increased self-perception	N/A
Kozlowski et al. (2015)	Pretest posttest (n=14)	Pediatric NP Primary care	Decreased anxiety. Increased coping	99214
Lusk & Melnyk (2011a)	Pretest posttest (n=15)	Psych NP MH clinic	Decreased depression, anxiety, & anger. Increased self-perception	90805
Lusk & Melnyk (2011b)	Pretest posttest (n=15)	Psych NP MH clinic	Decreased depression, anxiety, & anger. Increased self-perception	90805
Melnyk et al. (1997)	Two-group experimental (n=30)	Audiotape Acute care	Improved mood & reduced stress	N/A
Melnyk et al. (2006)	RCT (n=260)	Audiotape Acute care	Decreased depression & anxiety. Increased self-perception. Decreased length of stay	N/A
Melnyk et al. (2015)	Cluster RCT (n=121)	Online setting	Decreased anxiety. Increased GPA	N/A

Literature Review: Results

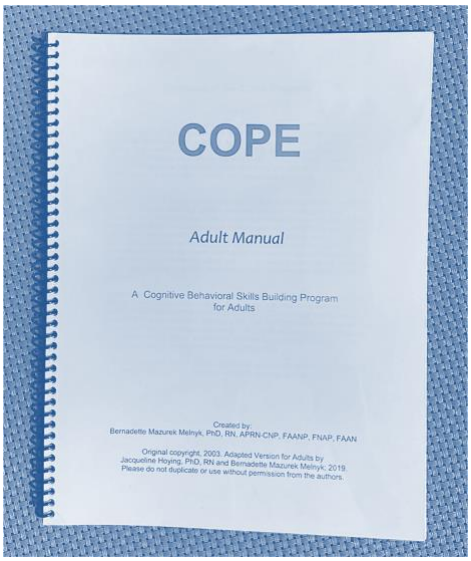
- Delivery
  - Delivered in a variety of settings primarily by NPs
- Feasibility
  - 30 minute sessions were practical (Hart Abney, Lusk, Hovermale, & Melnyk, 2019; Kozlowski, Lusk, & Melnyk, 2015; Lusk & Melnyk, 2011a; Lusk & Melnyk, 2011b; Melnyk, Alpert-Gillis, Hensel, Cable-Beiling, & Rubenstein, 1997; Melnyk, Feinstein, Alpert-Gillis, Fairbanks, Crean, Sinkin, Stone, Small, Tu, & Gross, 2006; Melnyk, Amaya, Szalacha, Hoying, Taylor, & Bowersox, 2015)

Literature Review: Results

- Effects
  - Decreased anxiety and depression scores (Hart et al., 2019; Hickman, Jacobson, & Melnyk, 2015; Lusk & Melnyk, 2011a; Lusk & Melnyk, 2011b; Melnyk et al., 1997; Melnyk et al., 2006)
  - Increased self-perceptions (Hickman et al., 2015; Kozlowski et al., 2015; Lusk & Melnyk, 2011a; Lusk & Melnyk, 2011b; Melnyk et al., 1997; Melnyk et al., 2006)
- Revenue
  - CPT code 99214 or 90805 (Kozlowski et al., 2015; Lusk & Melnyk, 2011a; Lusk & Melnyk, 2011b; Melnyk, 2019, Melnyk,2019)

Evidence for Project

- COPE
  - Evidenced-based
  - Improves mental health
  - Improves self-perception
  - Deliverable in outpatient setting by NPs
  - Reimbursable as 99214



Model to Examine Phenomenon: The Synergy Model

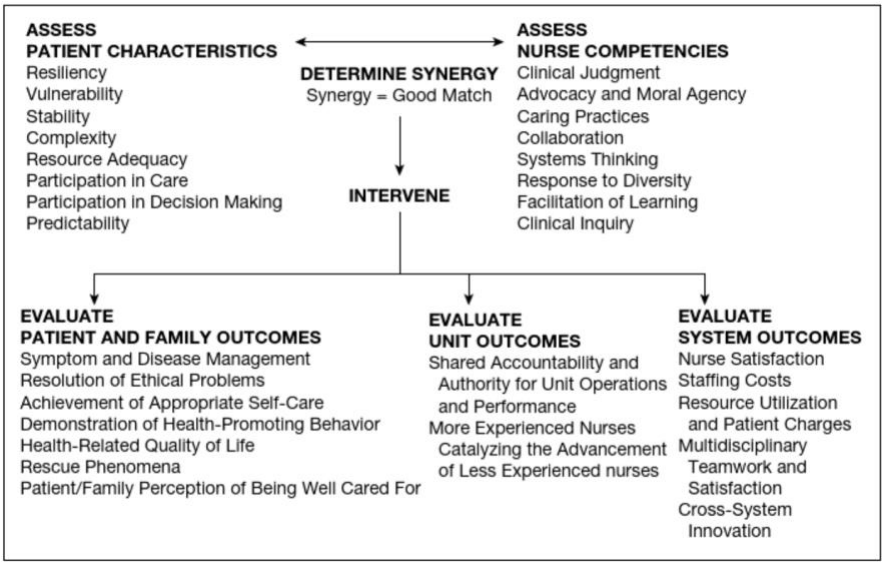


Figure 1. Fawcett, J. (2017). *Applying conceptual models of nursing: Quality improvement, research, and practice*. New York: Springer Publishing Company.

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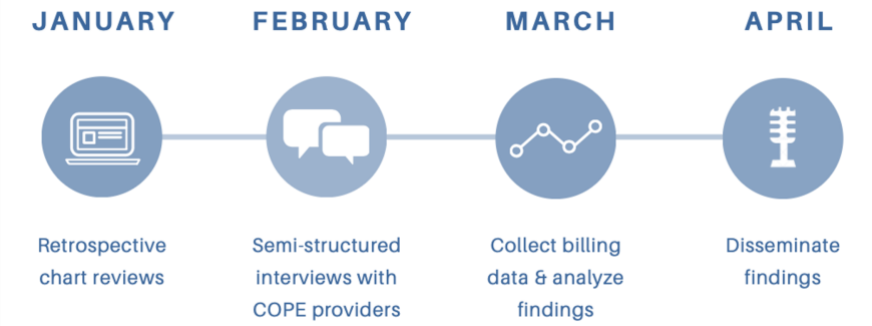
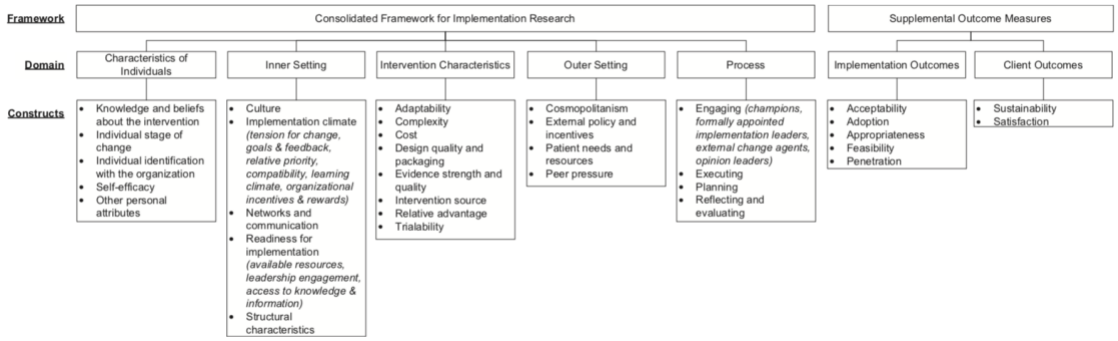
Project Plan



Design for Evidenced-Based Initiative

The Consolidated Framework for Implementation Research



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Project Plan: Steps & Strategies

1. Allocate COPE patient manuals
   - Email COPE about receiving purchased manuals
   - Email COPE about release date of the Adult manual
2. Finalize COPE certification status among the providers committed to participate
   - Email COPE providers certification instructions
   - Face-to-face troubleshooting
   - Monthly COPE newsletters

Project Plan: Steps & Strategies

3. Educate all providers about the COPE program
   - Develop a one-page informational COPE handout
   - Submit to site lead & disseminate
   - Disseminate COPE process flowchart
4. Gather baseline data and COPE data through chart audits
   - Weekly chart audits
   - Advise about potential COPE patients while on-site

Project Plan: Steps & Strategies

5. Collect COPE reimbursement data through Billing Department summaries
   - Analyze average dollar value reimbursement
   - Identify CPTs and RVUs for visit
6. Gather data about COPE sustainability
   - Semi-structured interviews
   - Disseminate Likert scale questionnaire

Project Plan: Steps & Strategies

7. Disseminate the results to the organization and educational
   - Disseminate the results of the project evaluation in the April COPE newsletter
   - Include future recommendations for project revision
   - Defend DNP project April 15, 2020
   - Upload to Scholarworks

Evaluation & Measures

- Baseline & COPE data
  - GAD-7
  - PHQ-9
  - Money
  - CPT
  - RVU
- Likert style questionnaire
- Semi-structured interviews
- Observation

Analysis Plan

- Evaluate need for COPE using baseline data
- Compare pre and post COPE data
- Compare reimbursement-as-usual to COPE reimbursement
- Examine trends in provider feedback
- Review observed barriers and facilitators

Resources

- Human
- Financial
- Technology
- Space
- Materials

Timeline

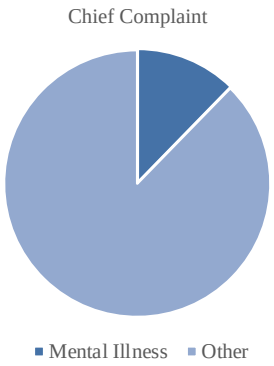
November	December	January	February	March	April
Proposal	Finalize provider certification	Meet with statistician	IRB approval	Meet with statistician	Defend project
Create 1-page summary of COPE for clinic	Disseminate COPE education to clinic	COPE newsletter	Data collection	Data collection	Disseminate results
Create COPE process flowchart	Disseminate COPE process flowchart	IRB application	Retrieve reimbursement data	Data analysis	Upload to Scholarworks
Observation	Observation	Epic training	Semi-structured interviews	Semi-structured interviews	COPE newsletter
Face-to-face troubleshoot	Face-to-face troubleshoot	Face-to-face troubleshoot	Likert questionnaire	Likert questionnaire	
			COPE newsletter	COPE newsletter	

Results: Implementation

- COPE Manuals
  - Hard-copies stored in clinic
  - PDFs available
- COPE Certification
  - Four providers completed training modules
  - One provider completed certification
  - COPE process flowchart disseminated
  - Implemented monthly COPE newsletter

Results: Baseline Clinic Data

- Patient sample from 10/2019-1/2020
- Demographics
  - Age 7-90 years old
  - Average of 97.5 patients seen daily
  - 12.31% of patients' chief complaint was mental illness
  - Appointment length 30 minutes

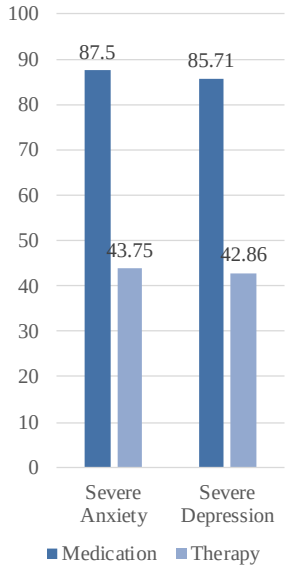


Results: Baseline Clinic Data

- GAD-7 anxiety screening tool
  - Used during 14.62% of appointments
  - 50.87% of screened patients were positive
  - Mean score: 7.94 out of 27
- PHQ-9 depression screening tool
  - Used during 75.13% of appointments
  - 12.29% of screened patients were positive
  - Mean score 2.49 out of 21

Results: Baseline Clinic Data

- Psychopharmacology
  - 46.92% of patient population takes a psych med
  - Of individuals with severe anxiety
    - 88% prescribed psych med
    - 44% discussed therapy with provider
  - Of individuals with severe depression
    - 86% prescribed psych med
    - 43% discussed therapy with provider



Results: Baseline Clinic Data

- Therapy
  - 6.92% of appointments included a discussion about therapy
- COPE
  - 0.26% of appointments included a discussion about COPE
- Reimbursement

CPT Code	Time	Complexity	History	RVU	Money
99213	15 mins	Low	Expanded	0.97	~ $90
99214	30 mins	Moderate	Detailed	1.5	~ $130

Department of Health and Human Services Centers for Medicare & Medicaid Services. (2017). *Evaluation and management services.* Centers for Medicare and Medicaid Services. Retrieved from https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/eval-mgmt-serv-guide-ICN006764.pdf

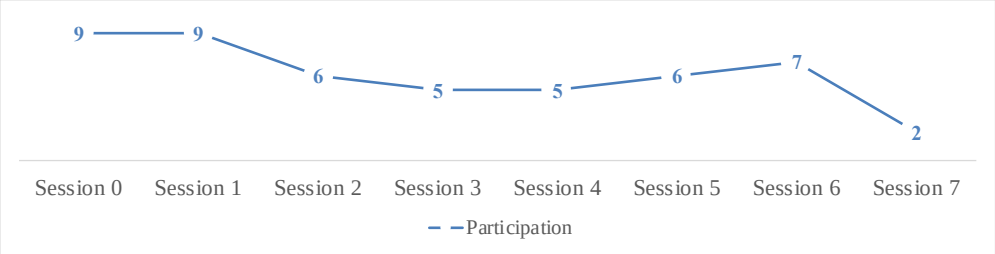
Family Care, PA. (n.d.) Primary care price listings. Retrieved from http://familycarepa.com/primary-care-price-listing/

Results: COPE Outcomes

- Patient COPE data from 1/2018-11/2020
- Demographics
  - 9 COPE patients
  - Mean age 22.89 (range 10-51)
  - 1 male & 8 females
  - Primary reason for referral was anxiety
    - Other reasons: depression, pain, and behavior

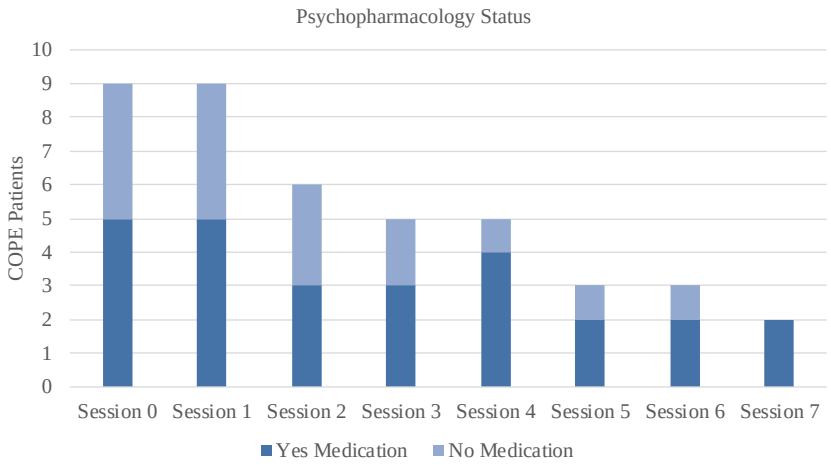
Results: COPE Outcomes

- Session Information
  - 3 COPE providers participated
  - 30-minute appointments
  - 2 patients completed all 7 sessions
  - Days between sessions ranged from 6-175 days



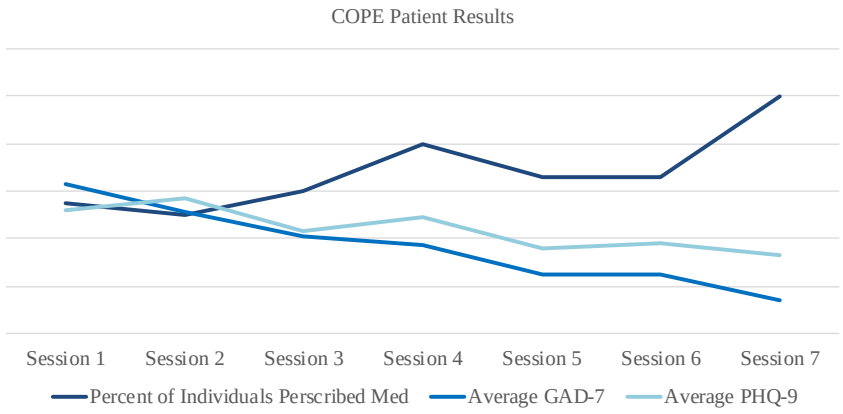
Results: COPE Outcomes

- Psychopharmacology



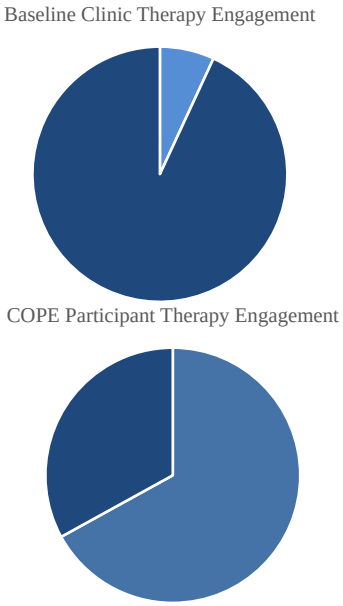
Results: COPE Outcomes

- GAD-7 mean decrease: 6.14
- PHQ-9 mean decrease: 3.57



Results: COPE Outcomes

- Reimbursement
  - CPT 99214
  - 100% Reimbursement
  - Dollar value data not available
- Additional Findings
  - 67% of COPE participants started additional therapy



Results: COPE Outcomes

- Likert-Style Questionnaire
  - COPE is easy to follow
  - Useful in primary care
  - Does not fit into workflow

Semi-Structured Interview Questions

Linkert Scale Questionnaire					
	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
I could lead a patient through the COPE program	1	2	3	4	5
The COPE manual is easy to follow	1	2	3	4	5
Patients told about the COPE program were interested in participating	1	2	3	4	5
I think COPE is useful in this setting	1	2	3	4	5
There is a need for this type of intervention in primary care	1	2	3	4	5
I intend to use COPE in the future	1	2	3	4	5

Semi-Structured Interview Questions	Comments
How does COPE fit into the typical workflow?	
What would have motivated you to use COPE more?	
What hindered you from using COPE?	

Budget/Resources

- Net operating plan $5,721.00

Doctor of Nursing Practice Project Financial Operating Plan Creating Opportunities for Personal Empowerment: A Project Evaluation	
Revenue	
Project Manager Time (in-kind donation)	2,820.00
Team Member Time Donated:	
Clinical Services Director (Site Mentor)	400.00
Nurse Practitioner (Site Lead)	2,000.00
Previous Project Manager	200.00
Physician	276.00
Physician Assistant	162.00
Consultations	
Statistician	200.00
Foundation Grant	4,850.00
COPE appointments estimate	5,720.00
Total Income	16,628.00
Expenses	
Project Manager Time (in-kind donation)	2,820.00
Team Member Time:	
Clinical Services Director (Site Mentor)	400.00
Nurse Practitioner (Site Lead)	2,000.00
Previous Project Manager	200.00
Physician	276.00
Physician Assistants	162.00
Consultations	
Statistician	200.00
Estimated Wages for COPE:	
Nurse Practitioner	2,268.00
Physician	92.00
Physician assistant	54.00
COPE Materials:	
COPE online education (7 providers)	2,290.00
COPE workbooks	2,343.00
Cost of print/copy/fax	20.00
Incentive for Questionnaire Completion	50.00
Total Expenses	10,907.00
Net Operating Plan	5,721.00

Discussion

1. Characteristics of Individuals
   - Appreciated COPE
   - Stage of change varied
   - Semi-structured interviews
     - Lack of time
     - Lack of motivation

Discussion

2. Inner Setting
   - Culture change
   - Increased stress related to EHR and COVID-19
3. Intervention Characteristics
   - COPE materials easy to use
   - Difficult to schedule 7 consecutive appointments
4. Outer Setting
   - Increased anxiety
5. Process
   - Relied on DNP student and NP champion

Discussion

6. Implementation Outcomes
   - Acceptability
   - Adoption
   - Appropriateness
   - Feasibility
7. Client Outcomes
   - Improved symptoms
   - Started additional therapy

Limitations

- Results are specific to one clinic
- 4 Providers did not participate
- Reimbursement data unavailable
- Threats such as merge, new EHR, and COVID-19 interfered with use

Implications for Practice

- COPE is useful in the primary care setting
- Further study is necessary to determine if COPE is sustainable in this setting

Sustainability Plan

- Compensate providers for time
- Equip medical assistants to educate and schedule COPE patients
- Standardize COPE documentation
- Implement “dummy misc.” CPT code
- Engage management in promoting COPE

Conclusion

- Need for improved mental health management
- COPE is associated with improved anxiety and depression symptoms
- Sustainability and adoption is dependent on additional organizational support
- Individual providers may choose to use COPE

Dissemination

- Findings included in COPE newsletter
- Upload to Scholarworks

DNP Essentials Reflection

American Association of Colleges of Nursing (AACN, 2006)

I. Evaluated new practice approach based on theory

II. Evaluated delivery to improve care among diverse population

III. Analyzed COPE literature, finalized implementation, and designed evaluation process to promote effective care

IV. Used databases and technology to generate meaningful evidence for collaborative care groups

American Association of Colleges of Nursing. (2006). *The essentials of doctoral education for advanced nursing practice*. https://www.aacnnursing.org/Portals/42/Publications/DNPEssentials.pdf

Grand Valley State University, Kirkhof College of Nursing

DNP Essentials Reflection

V. Analyzed the clinic's current anxiety, depression, and ACEs screening policy

VI. Effectively worked with interprofessional collaborative teams to overcome complex issues

VII. Implemented COPE to improve anxiety and depression outcomes among the clinic's patient population

VIII. Used knowledge and advanced competencies to partner with patients and healthcare professions to promote excellence

American Association of Colleges of Nursing. (2006). *The essentials of doctoral education for advanced nursing practice*. https://www.aacnnursing.org/Portals/42/Publications/DNPEssentials.pdf

Grand Valley State University, Kirkhof College of Nursing

Thank You!

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