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Development and Implementation of a Standardized Protocol for Nurse Practitioners Working in an AUD Treatment Telehealth Program

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Abstract

Background

Alcohol Use Disorder (AUD) is a public health concern in the United States with the National Institutes of Health citing alcohol as the third leading preventable cause of death in the United States. Ria Health is a growing telehealth provider delivering AUD treatment through pharmacotherapy combined with behavioral health counseling. Ria Health was founded in 2017 by board-certified addiction specialist, Dr. John Mendelson.

Local Problem

Ria Health employs six California licensed nurse practitioners. Among the six are two nurse practitioners who have not yet met all the California provisions to practice independently without protocols. Ria Health has not put any standardized protocols in place. A standardized protocol at Ria Health is required by state law for these two nurses who are practicing as an advanced practice nurse.

Methods

This DNP project involved the creation of an evidence-based standardized protocol for alcohol use disorder. The Student Satisfaction and Self-Confidence in Learning questionnaire was disseminated via email to the participants after the orientation to the standardized protocol. This is a 13-item instrument designed was designed by National League for Nursing to measure student satisfaction (five items) with an activity and self-confidence in learning (eight items) using a five-point Likert scale. The outcome measure was analyzed using Microsoft Excel.

Intervention

The creation and implementation of a standardized protocol for nurse practitioners employed at Ria Health is a significant quality improvement project. Not only are standardized protocols required by California law for some nurse practitioners, these protocols would also contribute to the maintenance of high standards of care for patients through evidence-based practices. Because the nursing curriculum for most nurse practitioners does not include addiction medicine, nurse practitioners may not have confidence with medication-assisted treatment (MAT) for AUD. The standardized protocols can increase the nurse practitioner's confidence, improve patient care outcomes, and ensure compliance with state law. The project goal was to implement a standardized protocol at Ria Health by May 2022.

Results

The standardized protocol for alcohol use disorder was successfully implemented for only one out of two nurse practitioners. The first nurse was satisfied with the orientation to the standardized protocol as it had increased her self-confidence in learning. Moreover, this nurse was an active contributor as an editor to the protocol. The second nurse was dissatisfied with the orientation and did not find the protocol helpful. This second nurse did not want to participate in the implementation of the protocol.

Conclusion

Standardized protocols are required to be developed with the nurse practitioner delivering the care and not just by administrators or physicians, who do not understand the practice of the nurse practitioner as well as the nurse practitioner providing the service. These protocols are the legal authority for the nurse practitioner to exceed the usual scope of practice from a registered nurse. Without standardized protocols, the nurse practitioner is legally vulnerable, and may be subject

to discipline from the state board of nursing for practicing medicine which is beyond their scope of nursing practice. This DNP project may also benefit other AUD programs which may not have standardized protocols in place.

***Keywords*:** nurse practitioner, NP, advance practice nurse, APRN, alcohol use disorder, AUD, standardized procedure, standardized protocols, guideline, protocol, procedure.

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Introduction

Background

Alcohol Use Disorder (AUD) is a public health concern in the United States. The mortality of alcohol abuse and addiction in the US is as follows: more than 95,000 deaths per year which approximates to 261 deaths per day; 29 years of life lost per person; and liver disease accounts for one-third of all alcohol-associated mortality (CDC, 2021). The National Institutes of Health cites alcohol as the third leading preventable cause of death in the United States (NIH, 2018). Moreover, the economic burden of alcohol misuse cost the United States $249.0 billion in 2010 (CDC, 2019). The COVID-19 pandemic has changed many people's drinking habits. The Nielsen survey reported a 54% increase of alcohol sales nationwide during the first week of the shelter-in-place mandates in March 2020 (Pollard, Tucker, & Green, 2020). Pandemic-related stress (45.7%), increased alcohol access (34.4%), and boredom (30.1%) were the top main reasons for increased alcohol consumption (Grossman, Benjamin-Neelon, & Sonnenschein, 2020). Treatment for AUD is complex and challenging. Nurse practitioners can fulfill an important role in the healthcare system by serving as frontline clinicians to assess and to implement treatment plans for AUD (Cadet & Tucker, 2019).

Problem Description

Ria Health, a telehealth provider, is currently licensed to treat AUD clients in fifteen states and has goals in expanding services to all fifty states in the near future. Ria Health began employing nurse practitioners due to growth in the demand for services and has plans to employ more nurse practitioners. Currently, Ria Health has not put any standardized protocols in place.

In California, standardized protocols are the legal mechanism for nurse practitioners to perform advance practice functions outside the scope of a registered nurse which would otherwise be considered the practice of medicine (BRN, 1998). Beginning January 1, 2021, AB 890 will allow some nurse practitioners to practice independently in particular healthcare settings where at least one physician practices with the nurse practitioner. Those nurse practitioners who meet certain educational and practice requirements are allowed, under this new law, to perform medical functions without standardized protocols (A.B. 890, 2020). Because not all nurse practitioners may have the education and practice requirements specified in A.B. 890 and the full measure of A.B. 890 is not in effect until 2023, the creation and implementation of standardized protocols for AUD at Ria Health is still required by California state law for many nurse practitioners. Not only is using standardized protocols a legal requirement for many nurse practitioners, but it also contributes to the maintenance of high standards of care for patients through evidence-based practices (Chidgey, Leng, & Lacey, 2007). The implementation of standardized protocols at Ria Health will be a quality improvement from current practices. Most nurse practitioners did not have addiction medicine in their nursing curriculum and therefore may not have confidence with medication-assisted treatment (MAT) for AUD. The standardized protocols can increase the nurse practitioner's autonomy and body of knowledge, in addition to providing guidance for AUD treatment and improving patient care outcomes. This project may also benefit other addiction programs aiming to develop, to revise or to improve their practices.

Setting

Ria Health is a growing telehealth provider delivering evidence-based alcohol addiction treatment through a mobile care delivery platform. The clinic office is located in San Francisco, CA. This program is intended for clients who are looking to control their alcohol intake or to

become abstinent. Ria Health uses pharmacotherapy or medication-assisted treatment (MAT) combined with behavioral health counseling to help clients overcome their AUD. The company was founded in 2017 by Dr. John Mendelson, a board-certified addiction specialist who had been Ria Health's sole physician until 2020 when psychiatrist Dr. Paul Linde was hired. All employees work remotely from their home. Patients do not physically go to Ria Health. All patient care is done remotely, by use of telephone or teleconference.

Specific Aim (Purpose)

The aim of this DNP student quality improvement project was to implement a standardized protocol for California licensed nurse practitioners at Ria Health by May 2022.

Available Knowledge

PICO(T) Question

Standardized protocols for nurse practitioners ensure adherence to a standard of care and provide effective care aimed at positive patient outcomes (Singleton & Levin, 2008). The assessment, diagnosis, treatment, and management of specific conditions may be included in such standardized protocols. Nurse practitioners have the discretion either to develop their own standardized protocols in collaboration with the supervising physician, or to adopt protocols developed by specialty organizations or groups (Singleton & Levin, 2008). Accordingly, this raises the PICOT question: Will the implementation of standardized protocols result in higher confidence levels of knowledge among nurse practitioners employed at Ria Health after its implementation? In order to answer this question, standardized protocols along with associated processes were developed based on scientific evidence.

Search Methodology

A literature review was conducted with search terms inclusive of three keywords, with each word having an alternative name. The three keyword permutations are: (A) nurse practitioner/NP/advance practice nurse/APRN, (B) alcohol use disorder/AUD, and (C) standardized procedure/standardized protocols, or guideline/protocol/procedure. The search was performed using Medline, CINAHL, Academic Search Premier, Cochrane reviews, and Google Scholar. No literature was found in any of the search engines that included all three keywords within A, B and C, or two keywords within A and B.

The combination of A and C yielded 13 articles. One out of these 13 articles remained after excluding those older than ten years and excluding guidelines that pertained to protocols on medical or social screenings. Google scholar found one dissertation about the development of an SP for Nurse practitioners in a long-term care setting. This dissertation was not published in a peer-reviewed journal; however, due to the limited literature available, dissertations were included in the literature analysis as a framework for this DNP project. The keywords of B and C yielded two results, with one being another dissertation. Articles on study protocols were excluded.

To broaden the search, keyword (B) was replaced with the following: (D) substance use disorder, (E) addiction, and (F) alcohol. The combination of A and C with either D, E or F did not yield any articles. Pairing just A with either D, E or F yielded one article that met criteria, but this article addresses literature about disciplinary procedures for nurses who have addictions or alcoholism, and, therefore, was excluded. Pairing just C with either D, E or F was slightly more productive. The combination of C and D yielded one relevant article. The combination of C and E yielded six articles, but all of them concerned smoking or opioid use disorder, and,

therefore, were excluded. The combination of C and F yielded in 19 articles. Only one was

relevant, but this was a repeated article found earlier with combination of B and C. In summary,

eight articles were deemed pertinent.

The literature review also included a search on clinical guidelines in relation to

developmental tools. Search term used was "clinical guideline" in the title and published within

the last 12 years in the English language. The search yielded 208 results. After the articles that

were specific to a condition or disease were excluded, only a few articles remained that pertained

to general clinical guidelines. The John Hopkins Evidence-Based Practice Research Appraisal

Tool (2017) was used to evaluate the level and quality of evidence of these articles. (See

Appendix B for the Evaluation Table).

Integrated Review of the Literature

The articles pertaining to general clinical guidelines provide the framework for drafting

new standardized protocols. The article by Chidgey, Leng, and Lacey (2007) identifies the

National Institute for Health and Care Excellence (NICE) as a key organization that publishes

clinical guidelines to improve healthcare through evidence-based practices. The article discusses

the "robust methodology used to develop NICE guidance and NICE's approach to economic

analysis, the mechanisms by which clinicians are involved in guidance development, the

practical support available to aid implementation of guidance, and the advantages to doctors (and

other clinicians) of using NICE guidance" (p. 448). NICE uses an independent committee in its

development process with the overall goal to provide guidance at the national level. Although the

aim of this DNP project is specifically for one clinic setting, incorporating the pertinent elements

from NICE's guideline development is essential to make protocols evidence based.

GRADE (Grading of Recommendations Assessment, Development and Evaluation) is a method of rating the quality of evidence in a guideline and the strength of outcomes from its recommendations (Schünemann, Best, Vist, and Oxman (2003). NICE began integrating GRADE across its clinical guideline program in 2007 to enable separation of rulings about the evidence quality from rulings about the strength of the recommendation (Thornton et al., 2013). Although GRADE has been positively received by guideline developers, the "application of imprecision and presenting results from analyses considering more than two alternative interventions" requires refinement (Thornton et al., 2013, p. 131).

Standardized protocols for nurse practitioners ensure adherence to a standard of care and provide effective care aimed at positive patient outcomes (Singleton & Levin, 2008). The assessment, diagnosis, treatment, and management of specific conditions may be included in such protocols. Nurse practitioners have the discretion to either develop their own protocols in collaboration with the physician, or adopt protocols developed by specialty organizations or groups (Singleton & Levin, 2008). These two authors are nursing faculty at Pace University and their article describes a teaching-learning strategy to appraising clinical protocols critically to determine whether those protocols qualify as evidence-based practice.

The application of the general framework for the development of standardized protocols on AUD specifically for nurse practitioners is difficult because no literature specifically addresses standardized protocols on AUD specifically for nurse practitioners. Only a couple of standardized protocols for nurse practitioners were found in peer-reviewed journals within the last ten years. Powel and Engberg (2018) implemented the use of a glycemic management protocol at a primary care clinic as a tool to provide guidance and a framework for decision making for the nurse practitioner in escalation of drug management for patients with type-2

diabetes. The protocol was not created by the authors, but was based on the REMEDIES 4D

protocol. This article demonstrated that protocols assist Nurse practitioners in remaining

autonomous and can provide "positive patient outcomes" without the need for constant physician

authorization for medication adjustment (Powel & Engberg, 2018). For Marshall's (2016)

dissertation, she developed an evidence-based practice guideline for nurse practitioners with

DNP degrees employed in long-term care settings. After the creation of the guideline, Marshall

used the Appraisal of Guidelines for Research and Evaluation (AGREE) Instrument to address

the variability in the quality of her developed guideline. The substance of Marshall's dissertation

is unrelated to AUD, but her framework on development of guidelines is central to this paper.

She also encountered a gap in literature on her topic and explained the likely cause for this gap to

be "the fact that DNP is still a relatively new degree" (Marshall, 2016, p. 16). Similarity, in

relation to the topic of this paper, the NP role in treatment for AUD is apparently quite new.

Steven Ling presented a paper titled "Nurse Practitioners in Drug and Alcohol: Where

Are They?" at the 2007 annual Australian nursing conference. Ling introduced the idea of having

Nurse practitioners employed in the drug and alcohol setting to his Australian audience as a way

to address the shortage of appropriate trained medical staff in the workforce. His article,

proposing the expansion of the role of nurse practitioners throughout Australia, was in harmony

with the Australian government announcing $59.7 million funding for nurse practitioner

education during that time period. However, Ling mentions that the full potential of nurse

practitioners in the substance use realm would not be realized until Australian nurse practitioners

have access to healthcare financial arrangements for mid-level providers.

Since Ling's 2007 article, the nurse practitioner educational programs in the United

Stated have slowly begun integrating substance use into their curriculum. Covington et al.,

(2018) published a study about incorporating, into the curriculum for nurse practitioner students, information on substance use screening and brief interventions in the clinical setting. The students were taught using a process called SBIRT (screening, brief interventions, and referral to treatment) which was developed by the Substance Abuse and Mental Health Services Administration (SAMHSA). The AUDIT and DAST tools were used for alcohol and drug use, respectively. This study used univariate descriptive statistics and a one-way ANOVA to demonstrate the positive effects of increasing students' knowledge and confidence in screening for substance use, which, in turn, may result in better patient responses to interventions using motivational interviewing to reduce substance use or to refer to addiction specialists for treatment. Hence, this is "the first step toward highlighting the important role APRNs can play in addressing at-risk patients in clinical settings" (Covington et al., 2018, p. 127).

Summary/Synthesis of the Evidence

With the recent proposal from Covington et al., the absence of literature on nurse practitioners in the treatment of AUD is not surprising. In order to create an AUD standardized protocol for nurse practitioners, the following three literature analyses were used as an outline for its development. First, Rundio (2013) developed and successfully implemented an alcohol withdrawal protocol in a residential addiction treatment facility. Prior to implementation, the clinicians were writing the withdrawal orders daily. The author noticed the medication orders were similar daily. Therefore, having a protocol that addressed all orders for the entire duration of the patient's admittance at the facility could facilitate the patient's treatment process by decreasing the variance of patient care and the number of written orders. Rundio collaborated with the facility's Director of Nursing and Medical Director on protocol creation and extracted relevant evidence-based research for the best treatment modalities. The protocol was

implemented once the Medical Director approved it. The protocol's effectiveness was then

evaluated by monitoring patient outcomes preceding the 3 months after protocol implementation.

Rundio's protocol was so efficacious that two additional protocols were created for

implementation as a result of the initial protocols' usefulness. The article did not discuss any

research limitations.

Second, Gonzalez-Mendez (2017) created an evidence-based guideline with an algorithm

to aid medical screeners at a correctional facility to screen appropriately for AUD in incoming

inmates in order to prevent dangerous incidents of alcohol withdrawal syndrome. The adoption

of the AGREE II instrument assisted the author in guideline development. The Delphi technique

was used for settlement of the proper guideline; this included nine correctional health experts

(nurses and physicians) from nine regions across the United States. The ACE Star Model was

suggested as the framework for systemically implementing the evidence-based guideline. The

limitation of this study was the inability for implementation due to the federal government's

rigorous and time-exhausting practices for review, approval, and change.

Third, the American Psychiatric Association (APA) practice guideline for

pharmacological treatment of patients with AUD (2018) is thorough in discussing the FDA-

approved drugs used in AUD and their benefits versus harm. The first-line agents for AUD are

naltrexone and acamprosate. The APA also discussed topiramate and gabapentin, which are not

FDA approved for AUD but have shown efficiency for AUD. This guideline assists clinicians

with appropriate medication selection, especially when the patients with AUD have complex

comorbidities. The guideline is a recommendation; the ultimate decision lies on the treating

clinician with collaboration from the patient to incorporate personal and sociocultural

preferences in order to create and maintain the therapeutic alliance and adherence to treatment (APA, 2018).

The information gained from this literature review demonstrated the importance of having an evidence-base protocol not only for legal purposes, but also for patient safety and improved quality of services. The challenge was the gap in literature about standardized protocols for nurse practitioners treating AUD.

Rationale

Lewin's Change Theory was applied in this quality improvement project as it provided the fundamental principles for change. This theory is a three-stage model of change known as unfreeze-change-refreeze model that requires prior learning to be rejected and replaced (Wojciechowsk, et al., 2016). Ria Health did not have any standardized protocols in place. Nurse practitioners had no guidance or framework on care delivery., Therefore, the quality of patient care is variable. Application of the Change Theory would "unfreeze" by having Ria Health exit the mindset of ad hoc judgments, or freelance mentality. Next, "change" by implementing the standardized protocol. Last, "refreeze" when the use of standardized protocol becomes the standard operating procedure (See Appendix C).

Benner's Novice to Expert Theory was also applied for this DNP project. Benner (1984) identifies five possible nursing expertise levels: novice, advanced beginner, competent, proficient, and expert (See Appendix D). The novice stage begins in nursing school. In the next stage, advanced beginner, these nurses use analytical principles or rules to determine what actions are required for the immediate situation. This authors' creation and implementation of the protocol serves as the foundation for the advanced beginner nurse practitioner employed at Ria Health. This brings forth the next stage of being competent. Benner (1984) describes this stage

in which nurses can respond to the clinical situations but lack the ability to recognize situations as a whole. With increased knowledge and experience, proficient nurses are able to see situations in a larger context and have more capability to know and respond to varying circumstances. The last level, expert nurse, is achieved when the nurse "no longer relies on rules to connect his/her understanding of the situation to an appropriate action" but has the "intuitive grasp" to make critical clinical decisions efficiently while grasping the entire situation. Accordingly, the expert nurse is able to diagnose accurately and to respond quickly, without wasteful consideration of ineffective possibilities.

Methods

Context

The major stakeholders at Ria Health include John Mendelson (Chief Medical Director), Paul Linde (Medical Director), Tom Nix (CEO), David Deacon (COO), Bob Nix (CTO), California licensed nurse practitioners, and the Ria Health patients. Dr. Mendelson is aware that employing nurse practitioners would be cost advantageous to him and it would allow him to have more time to focus on the corporate aspect of Ria Health. He was not aware that a standardized protocol is required by California law for nurse practitioners, but he was open to the need for change. The California licensed nurse practitioners at Ria Health will have a participatory role in receiving education on the evidenced-based AUD standardized protocol approved by Dr. Mendelson.

Intervention

The creation and implementation of a standardized protocol for nurse practitioners employed at Ria Health is a significant quality improvement project. Not only are standardized protocols required by California law for some nurse practitioners, these protocols would also

contribute to the maintenance of high standards of care for patients through evidence-based practices. Because the nursing curriculum for most nurse practitioners does not include addiction medicine, nurse practitioners may not have confidence with medication-assisted treatment (MAT) for AUD. The standardized protocols can increase the nurse practitioner's confidence while improving patient care outcomes. The project goal was to implement a standardized protocol at Ria Health by May 2022.

Gap Analysis

Standardized protocols are required to ensure that nurse practitioners function within their scope of practice to meet the health care needs of their patients in states where nurse practitioners lack full independent practice authority. Ria Health has not had any standardized protocols in place since hiring their first nurse practitioner in 2018. Consequently, nurse practitioners have no guidance or framework on care delivery, and the quality of patient care varies. Moreover, nurse practitioners are legally vulnerable without any standardized protocols in place since AB 890 is not effective until 2023. (See Appendix E for the Gap Analysis chart).

Gantt Chart

Prospectus development began over the course of the 2020 fall semester with Ria Health's stakeholders officially approving the DNP project on 14 February 2021. (See Appendix F for the Organizational Support Letter). The project lead developed the proposed AUD SP and it has been approved in March 2021 by Ria Health's Medical Director (See Appendix G for the SP). The implementation of the standardized protocol concluded in early April 2022, with data synthesis completion done within a week from implementation. (See Appendix H for GANNT Chart).

Work Breakdown Structure

The Work Breakdown Structure (WBS) for this project has three key categories: planning, implementation, and evaluation. Planning was the largest part of the project. The first step of planning was the need analysis or clinical implications for doing the project. This was followed by SWOT analysis and the drafting of a GANTT chart to help with the timeline. From there, the literature review was completed. This led to the final step of development of a basic framework. When the project was approved by Ria Health's Medical Director, the AUD standardized protocol was created and, shortly thereafter, was approved for implementation. The project was approved for implementation from USF's Committee Chair and Committee Member (See Appendix I for the WBS Chart).

Responsibility/Communication Matrix

Ongoing communication with stakeholders was held primarily via email, telephone and occasionally via Zoom sessions. Ongoing mentorship by the DNP chair was on an as-needed basis throughout the duration of DNP project via Zoom (See Appendix J for the communication matrix).

SWOT Analysis

Because Ria Health is small, it has developed a set of traditions that inhibit productive change. The small size of the organization, however, can theoretically make the implementation of change easier. The opportunities offered by this project were exciting. The market seems to have a demand for Ria Health's service now. Due to restrictions designed to limit transmission of COVID-19, people are at home and are drinking more (Pollard, Tucker, & Green, 2020). The biggest strength is having Professor Radasa employed there. One major threat to the project was

COVID-19, which virtually stalled the implementation of the DNP project. A more detailed

SWOT analysis is included in Appendix K.

Budget

The materials chosen for use in this project were selected based on sustainability as they

were easily accessible, reproducible, and free on the internet. The total expenses for this project

was $15,875. The major expense was for the DNP student/project directors' fee at $15,750

(payment-in-kind), followed by $100 in office materials, and $25 (payment-in-kind) to train two

California licensed nurse practitioners in a 15-min session. All cost and fees involved in the DNP

project were solely absorbed by the DNP student/project director (See Appendix L for a detailed

budget chart).

Study of the Intervention

The goal of the DNP project was to implement an evidenced-based AUD standardized

protocol for all California-licensed nurse practitioners who have not meet the California state

requirements to practice independently at Ria Health. Among the six California licensed nurse

practitioners at Ria Heath, only four of them are qualified to have full independent practice

authority under AB 890. The requirements and the format of the standardized protocol were

adapted from the California Board of Nursing. Additionally, a flow chart is attached to the

standardized protocol as a visual guide to help ease the use of the standardized protocol (See

Appendix G, Figure 1). The standardized protocol will legally protect the Ria Health nurse

practitioners who are licensed in California and are practicing beyond the scope of practice for

registered nurses. The two California licensed nurse practitioners who were required to work

under standardized protocols were given an orientation to the rules and regulations imposed by

the California Board of Nursing and to the proposed AUD standardized protocol. These nurse

practitioners were also invited to be a contributing editor for the protocol.

Outcome Measures

CQI Method and Data Collection Tools

The Student Satisfaction and Self-Confidence in Learning instrument was used to

measure the nurse practitioner's satisfaction and their self-confidence in learning about the AUD

standardized protocol (Appendix M). The tool consists of a 13-item questionnaire using a five-

point Likert scale survey. The Student Satisfaction and Self-Confidence in Learning tool, is taken

from the National League for Nursing (2004) and has a Cronbach's alpha reliability in

satisfaction and self-confidence of 0.94 and 0.87, respectively. In order to make the tool relevant

to the Ria Health setting, the word "simulation" within the questionnaire was replaced with

"orientation" and "medical surgical curriculum" was replaced with "alcohol use disorder

curriculum" (See Appendix N). The questionnaire was emailed to all participants after

orientation to the AUD standardized protocol.

Analysis

An analysis using Microsoft Excel was performed to measure the level of the nurse

practitioner's satisfaction with the training and self-confidence levels in learning after the

orientation training to the AUD standardized protocol. The raw data was extrapolated into a bar-

chart (see Appendix O).

Ethical considerations

This quality improvement project was approved as non-research; therefore, no IRB

approval was needed and there were no privacy concerns. The project falls under ANA's Ethical

Standards Provision 7.2, "Contributions through developing, maintaining, and implementing

professional practice standards" and under Jesuit values. St. Ignatius's original statement of purpose for the Jesuit Order, included the need "to reconcile the estranged." This project supports that objective. The implementation of this quality improvement project enhances the quality of care for those whose AUD leaves them estranged from family, colleagues and community, thus aligning with the mission and values of USF.

Results

The Student Satisfaction and Self-Confidence in Learning instrument was emailed to the two participants immediately after the conclusion of the orientation to the AUD standardized protocol. In the 13-item questionnaire, the first five questions measure the participants satisfaction with current learning. The remaining eight questions measures the participants self-confidence in learning.

The following are the questions:

(1) The teaching methods used in this presentation was helpful and effective.

(2) The presentation provided me with a variety of learning materials and activities to promote my learning the AUD curriculum.

(3) I enjoyed how my presenter taught the presentation.

(4) The teaching materials used in this presentation was motivating and helped me

(5) The way my presenter taught the presentation was suitable to the way I learn.

(6) I am confident that I am mastering the content of the presentation activity that my presenter presented to me.

(7) I am confident that this presentation covered critical content necessary for the mastery of AUD curriculum.

(8) I am confident that I am developing the skills and obtaining the required

knowledge from this presentation to perform necessary tasks in a clinical setting.

(9) My presenter used helpful resources to teach the presentation.

(10)   It is my responsibility as the student to learn what I need to know from this

presentation activity.

(11)   I know how to get help when I do not understand the concepts covered in the

presentation.

(12)   I know how to use this presentation activity to learn critical aspects of these

skills.

(13)   It is the presenter's responsibility to tell me what I need to learn of the

presentation activity content during class time.

This questionnaire uses a five-point Likert scale survey. The scoring systems is as

follows:

1 = Strongly disagree with the statement

2 = Disagree with the statement

3 = Neither agree or disagree with the statement

4 = Agree with the statement

5 = Strongly agree with the statement

Ultimately, a score of 5 is the highest possible score, which translates to a

positive advancement in learning in terms of satisfaction or confidence. On the other

end of the spectrum, a scoring of 1 indicates the lowest possible score, which means

the standardized protocol made no impact on the participant.

The first participant, NP #1, marked 5 (strongly agree) across almost all questions except marked 4 (agree) for questions 1, 3, and 13. The second participant, NP #2, marked 1 (strongly disagree) for all questions in the questionnaire. (See Appendix O).

Discussion

Summary

The aim to implement an alcohol use disorder standardized protocol at Ria Health for California licensed nurse practitioners was not 100% achieved. Success was measured to be at fifty percent. NP #1 was satisfied with the orientation to the standardized protocol and marked 5's in their confidence levels, meaning the protocol was helpful. NP #1 was enthusiastic and actively involved in collaborating with the DNP student/project director in editing the protocol. NP #1 was aware of the legal requirement in California for nurse practitioners, and felt it was a relief that the DNP student/project director was implementing this AUD standardized protocol.

NP #2 indicated that this quality improvement project was not helpful given their extensive experience in clinical practice. NP #2 was not aware that a standardized protocol was requirement for those who have not completed the "transition to practice in California" yet. NP #2's license had only been endorsed in California for 10 months. This participant was not happy, stated having had over 6 years of experience working independently in other states. Consequently, NP #2 did not volunteer to provide feedback or collaborate with the protocol.

This DNP project has assisted in bringing a needed standardized protocol for one Ria Health nurse practitioner. NP #1 is now practicing legally in California as a nurse practitioner, whereas NP#2 has chosen to practice illegally.

Interpretation

The findings of this DNP quality improvement project proved to be less successful than anticipated. Ria Health has now published the standardized protocol within its provider handbook (available via their intranet system); however, this is only one of two parts of the implementation process. The California Code of Regulations (CCR section 1474; Medical Board of California, Title 16, CCR Section 1379) requires the nurse practitioner protocol to be signed and dated by both the medical director and by those nurse practitioners who have not yet met all the provisions to practice independently without protocols.

This lack of enforcement from the Ria Health's leadership team support Lewin's Change Theory, which is the framework that guided this DNP project as it. The driving force from the DNP student/project director is not strong enough to affect the movement from the existing equilibrium at Ria Health. Unless nurse practitioners are advocating to have a standardized protocol agreement form signed off by the medical director and themselves, or if the state nursing board intervenes, Ria Health is not actively involved in keeping in compliance with California law. Moreover, additional protocols will need to be created and implemented in the future to incorporate requirements from all 51 united states jurisdictions as Ria Health expands nationwide.

Limitations

This standardized protocol is specific to Ria Health. For example, Ria Health clinicians prescribe naltrexone differently than compared to other clinics. The initial naltrexone dose prescribed to patients is 12.5mg (quarter tablet) for two days, then 25mg (half-tablet) for two days, then 50mg thereafter. In the past, higher dosages for naltrexone, such as 25mg – 50mg, immediately lead to nausea and GI upset, which resulted to poor medication compliance in patients. Lowered naltrexone dosages initially, was therefore used in favor to increase better compliance.

Another limitation is that some nurse practitioners do not want to work under a standardized protocol after working independently in other states. They are resistant to change even though they are required by law to work under standardized protocols in some states. The Ria Health leadership team is not enforcing the standardized protocol on nurse practitioners who refuse. Having their nurse practitioners practice legally in California is simply not a priority for Ria Health. This in turn places a huge liability to the company and to some nurse practitioner(s) who are required by law to work under standardized protocols.

Conclusions

The standardized protocols that were created and implemented are specific to how Ria Health treats AUD in the telehealth setting. (See Appendix H). The standardized protocol implemented at Ria Health does not apply to other settings unless another clinic is using a treatment platform similar to Ria Health. At this time, the Ria Treatment Platform appears to be the only telehealth service that incorporates physician-prescribed medication and a recovery coach (Mitchell et al., 2019). Other outpatient clinics or community organizations like Alcohol

Anonymous aim for the goals of sobriety and abstinence for their patients. Ria Health's aim is help patients achieve their goals whether it be drinking less or not at all. With the possibility of future telehealth alcohol addiction programs appearing, these standardized protocols can be used as sample guidelines and modified for other clinics to meet their needs by providing patient safety and to set a legal framework for nurse practitioners. Although existing research supports the use of nurse practitioners in primary care, no evidence is available about nurse practitioners working in the specialty field environment of AUD. Further research that explores the impact of nurse practitioners employed in the AUD setting is needed. The immediate goal was to have Ria Health exit the mindset of ad hoc judgments, or freelance mentality. Ria Health will need to wed all the nurse practitioners (who lack the "transition to practice in California" requirements) to the standardized protocols. In the aggregate, this produces better outcomes. It will increase the nurse practitioners' autonomy and body of knowledge as well as provide guidance for AUD treatment and improve patient care outcomes.

Funding

All costs involved in the development and implementation of the project were solely incurred by the DNP student/project director without external funding.

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Appendix A

DNP Statement of Non-Research Determination Form

UNIVERSITY OF SAN FRANCISCO | School of Nursing and Health Professions

Doctor of Nursing Practice
Statement of Non-Research Determination (SOD) Form

The SOD should be completed in NURS 7005 and NURS 791E/P or NURS 749/A/E

General Information

Last Name:	Dea	**First Name:**	Crystal
CWID Number:	11314093	**Semester/Year:**	Spring 2020
Course Name & Number:	N7005_Population Health Leadership and Teamwork in Project Planning		
Chairperson Name:	Unknown	**Advisor Name:**	Trinette Radasa

Project Description

1. **Title of Project**

   Development of a Standardized Protocol for Nurse Practitioners Working in an AUD Treatment Telehealth Program

2. **Brief Description of Project**

Clearly state the purpose of the project and the problem statement in 250 words or less.

The California Board of Registered Nursing mandates all nurse practitioners (NPs) to collaborate with the on-site physician to create standardized protocols (SPs) jointly covering the elements of NP practice at a work setting. SPs outline the scope of practice for NPs. Not only are SPs a legal requirement, studies have demonstrated that the use of guidelines have yielded better patient outcomes and cost-effectiveness. The aim of this DNP student quality improvement project is to change the current clinical practice at an AUD treatment program by creating the organization's first SP and implementing it for nurse practitioners employed there by December 2022. These SPs, like all SPs, should be developed, reviewed and revised when new information is available, generally on an annual basis.

3. AIM Statement: What are you trying to accomplish?
- What do you hope to accomplish with this project? Aims should be SMART, specific, clear, well-defined, and at a minimum describe the target population, the desired improvement, and the targeted timeframe.
- To improve (your process) from (baseline)% to (target)%, by (timeframe), among (your specific population)

Complete this statement:

To increase / ~~decrease~~: the use of standardized protocols_____   (process/outcome)

from: none   __(baseline %, rate, #, etc.)

to: 100%   __(goal/target %, rate, #, etc.)

by: September 2022   __(date, 3 - 6-month timeframe)

in: the Ria Health Clinic for all NPs employed there   __(population impacted)

4 Brief Description of Intervention (150 words).

Under the Board of Registered Nursing (BRN), Cal. Bus & Prof Code §2836.1 requires NPs to have a standardized procedure or protocol (interchangeably SP) in place that must be developed and approved by a supervising physician. The purpose of the standardized procedure is (a) to define the scope of practice of NPs at the clinical site; (b) to meet the required legal guidelines for the provision of health care by NPs; and (c) to promote the highest standard of care for clients at that clinical site. SPs are to be considered guidelines, not standards of care; they are not intended to replace clinical judgment. The overall project goal is to improve patient care while adhering to the promulgated regulations by the BRN. This will be accomplished by changing the current clinical practice at an AUD treatment program by creating the organization's first SP and implementing it for nurse practitioners employed there.

4a. How will this intervention be implemented?
- Where will you implement the project?
- Attach a letter from the agency with approval of your project.
- Who is the focus of the intervention?
- How will you inform stakeholders/participants about the project and the intervention?

The intervention will be implemented at Ria Health in San Francisco.

A letter from the agency is not available currently due to the COVID-19 pandemic.

NPs at Ria Health are the focus of this intervention.

I will discuss this project with the medical director and NPs at Ria Health by email and telephone conferences.

5. Outcome measurements: How will you know that a change is an improvement?
- Measurement over time is essential to QI. Measures can be outcome, process, or balancing measures. Baseline or benchmark data are needed to show improvement.
- Align your measure with your problem statement and aim.
- Try to define your measure as a numerator/denominator.
    - What is the reliability and validity of the measure? Provide any tools that you will use as appendices.
    - Describe how you will protect participant confidentiality.

A survey will be conducted to determine whether the NPs are adhering to the Standardized Procedures.

A study will be performed to determine whether the implementation of the project has resulted in reducing medical costs by comparing the imputed costs associated with the medical director performing all clinical tasks to the actual costs associated with deploying NPs to share clinical tasks with the medical director.

The planned SPs should have no effect on the organization's confidentiality protocols. These will be left in place unchanged.

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DNP Statement of Determination
Evidence-Based Change of Practice Project Checklist*
The SOD should be completed in NURS 7005 and NURS 791E/P or NURS 749/A/E

Project Title:

Development of a Standardized Protocol for Nurse Practitioners Working in an AUD Treatment Telehealth Program

Mark an "X" under "Yes" or "No" for each of the following statements:	Yes	No
The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	X	
The specific aim is to improve performance on a specific service or program and **is a part of usual care**. <u>All</u> participants will receive standard of care.	X	
The project is <u>not</u> designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does <u>not</u> follow a protocol that overrides clinical decision-making.	X	
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does <u>not</u> develop paradigms or untested methods or new untested standards.	X	
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does <u>not</u> seek to test an intervention that is beyond current science and experience.	X	
The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.	X	
The project has <u>no</u> funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.	X	
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., <u>not</u> a personal research project that is dependent upon the voluntary participation of colleagues, students and/ or patients.	X	
If there is an intent to, or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: *"This project was undertaken as an Evidence-based change of practice project at X hospital or agency and as such was not formally supervised by the Institutional Review Board."*	X	

Answer Key:
- If the answer to <u>all</u> of these items is "Yes", the project can be considered an evidence-based activity that does <u>not</u> meet the definition of research. IRB review is not required. Keep a copy of this checklist in your files.
- If the answer to <u>any</u> of these questions is "No", you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used: http://answers.hhs.gov/ohrp/categories/1569

UNIVERSITY OF SAN FRANCISCO | School of Nursing and Health Professions

DNP Statement of Determination
Evidence-Based Change of Practice Project Checklist Outcome
The SOD should be completed in NURS 7005 and NURS 791E/P or NURS 749/A/E

Project Title:

Development of a Standardized Protocol for Nurse Practitioners Working in an AUD Treatment Telehealth Program

☐ This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). **Student may proceed with implementation.**

☐ This project involves research with human subjects and **must be submitted for IRB approval before project activity can commence.**

Comments:

Student Last Name: Dea	**Student First Name:** Crystal
CWID Number:	**Semester/ Year:** Spring/2020
Student Signature: *Crystal Dea*	**Date:** 2/2/2020
Chairperson Name:	
Chairperson Signature:	**Date:**
DNP SOD Review Committee Member Name:	
DNP SOD Review Committee Member Signature:	**Date:**

Appendix B

Evidence Evaluation Table

Reference	Citation	Evidence Type	Evidence Level	Sample Size
1	American Psychiatric Association. (2018). Practice guideline for the pharmacological treatment of patients with alcohol use disorder. *American Journal of Psychiatry, 175*(1), 86-90.	Practice Guideline	IV. Quality A	N/A
2	Anton, R., Myrick, H., Wright, T., Latham, P., Baros, A, Waid, L., & Randall, P. (2012). Gabapentin Combined with Naltrexone for the Treatment of Alcohol Dependence. *American Journal of Psychiatry, 168*(7), 709-717.	RCT	I. Quality B	150
3	Anton, R., O'Malley, S., Ciraulo, D., Cisler, R., Couper, D., Donovan, D., Gastfriend, D., Hosking, J., Johnson, B., LoCastro, J., Longabaugh, R., Mason, B., Mattson, M., Miller, W., Pettinati, H., Randall, C., Swift, R., Weiss, R., Williams, L., & Zweben, A. (2006). Combine Study Research Group: Combined pharmacotherapies and behavioral interventions for alcohol dependence: The COMBINE study: A randomized controlled trial. *JAMA, 295*, 2003–2017.	RCT	I. Quality A	1383
4	Baltieri, D., Daró, F., Ribeiro, P., & de Andrade, A. (2008). Comparing topiramate with naltrexone in the treatment of alcohol dependence. Addiction, 103(12), 2035-2044.	RCT	I. Quality B	155
5	Brower, K., Myra Kim, H., Strobbe, S., Karam-Hage, M., Consens, F., & Zucker, R. (2008). A randomized double-blind pilot trial of gabapentin versus placebo to treat alcohol dependence and comorbid insomnia. *Alcoholism: Clinical and Experimental Research, 157*(1), 151.	RCT	I. Quality B	21
6	Brünen, S., Bekier, N., & Hiemke, C. (2019). Therapeutic drug monitoring of naltrexone and 6β-naltrexol during anti-craving treatment in alcohol dependence: reference ranges. *Alcohol and Alcoholism 54*, 51–55.	RCT	II. Quality B	63
7	Cadet, M., & Tucker, L. (2019). NP role in medication-assisted treatment for opioid use disorder. *American Nurse Today, 14*(1), 8-13.	Opinion	V. Quality B	N/A
8	Center for Substance Abuse Treatment (CSAT). (2009). Incorporating Alcohol Pharmacotherapies Into Medical Practice. Treatment Improvement Protocol (TIP) Series, No. 49. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK64041/	Opinion	V. Quality B	N/A
9	Chidgey, J., Leng, G., & Lacey, T. (2007). Implementing NICE guidance. *Journal of the Royal Society of Medicine, 100*(10), 448-452.	Position Statement	IV. Quality B	N/A
10	Covington, K., Johnson, J., Henry, D., Chalmers, S., Payne, F., Tuck, L., & Seale, J. (2018). Alcohol and drug screening and brief intervention behaviors among advanced practice registered nurse (APRN) students in clinical settings. *Applied Nursing Research, 39*, 125-129.	Qualitative Study	III. Quality B	113
11	De Beaurepaire, R. (2012). Suppression of Alcohol Dependence Using Baclofen: A 2-Year Observational Study of 100 Patients. *Frontiers in Psychiatry*, 3, 103.	Observational Study	III. Quality B	100
12	Donoghue, K., Elzerbi, C., Saunders, R., Whittington C., Pilling, S., & Drummond, C. (2015). The efficacy of acamprosate and naltrexone in the treatment of alcohol dependence, Europe versus the rest of the world: A meta-analysis. *Addiction, 110*(6), 920-930.	Systematic review and meta-analysis	II. Quality A	49 RCTs reviewed
13	Gonzalez-Mendez, W. (2017). Alcohol Use Disorder and withdrawal syndrome in correctional facilities: An evidence-based clinical practice guideline to prevent alcohol related adverse events. Retrieved from https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=5547&context=dissertations	Practice guideline	IV. Quality A	N/A
14	Ipser, J., Wilson, D., Akindipe, T., Sager, C., & Stein, D. (2015). Pharmacotherapy for anxiety and comorbid alcohol use disorders. Cochrane Database System Review. doi: 10.1002/14651858.CD007505.pub2.	Systematic review	II. Quality A	5 RCTs reviewed

15	Johnson, B., & Ait-Daoud, N. (2010). Topiramate in the new generation of drugs: Efficacy in the treatment of alcoholic patients. *Current Pharmaceutical Design, 16*(19), 2103-1212.	Expert Opinion	V. Quality A	N/A
16	Kranzler, H., Covault, J., Feinn, R., Armeli, S., Tennen, H., Arias, A., Gelernter, J., Pond, T., Oncken, C., & Kampman, K. (2014). Topiramate Treatment for Heavy Drinkers: Moderation by a GRIK1 Polymorphism. *The American Journal of Psychiatry, 171*(4), 445-452.	RCT	I. Quality B	138
17	Leung, J., Hall-Flavin, D., Nelson, S., Schmidt, K., & Schak, K. (2015). The role of gabapentin in the management of alcohol withdrawal and dependence. *Annals of Pharmacotherapy, 49(*8), 897-906.	Literature review	V. Quality B	10 articles reviewed
18	Ling, S. (2007). Nurse practitioners in drug and alcohol: where are they? *Australian Journal of Advanced Nursing, 26*(4), 64-69.	Expert Opinion	V. Quality B	N/A
19	Maisel, N., Blodgett, J., Wilbourne, P., Humphreys, K., & Finney, J. (2013). Meta-analysis of naltrexone and acamprosate for treating alcohol use disorders: when are these medications most helpful? *Addiction, 108*(2), 275-293.	Meta-analysis	II. Quality A	64 RCTS analyzed
20	Marshall, A. (2016). Development of a practice guideline for DNP prepared nurse practitioners working in long-term care facilities. Retrieved from https://pdfs.semanticscholar.org/1936/bc5fa3bbba2363168f0a393b5555 4fe081ec.pdf	Practice Guideline	VI. Quality A	N/A
21	Mason, B., Quello, S., Goodell, V., Shadan, F., Kyle, M., & Begovic, A. (2014). Gabapentin treatment for alcohol dependence: A randomized clinical trial. *JAMA Internal Medicine, 174*(1), 70-77	RCT	I. Quality A	150
22	Mendelson, J., Mitchell, M., Carswell, S., & Schwartz, R. (2018, June). Efficacy of the Ria treatment platform: The first 230 patients. *Alcoholism Clinical & Experimental Research, 42*, 263.	Quasi-experimental study	II. Quality B	230
23	Mosoni, C., Dionisi, T., Vassallo, G., Mirijello, A., Tarli, C., Antonelli, M., Sestito, L., Rando M., Tosoni, A., De Cosmo, S., Gasbarrini, A., & Addolorato, G. (2018). Baclofen for the treatment of alcohol use disorder in patients with liver cirrhosis: 10 years after the first evidence. *Frontiers in Psychiatry, 9,* 474.	Expert Opinion	VI. Quality A	N/A
24	Paparrigopoulos, T., Tzavellas, E., Karaiskos, D., Kourlaba, G., & Liappas, I. (2011). Treatment of alcohol dependence with low-dose topiramate: an open-label controlled study. *BMC Psychiatry, 14*(11), 41.	RCT	I. Quality B	90
25	Powel, E. & Engberg, S. (2008). Nurse Practitioner implementation of a glycemic management protocol. *Journal for Nurse Practitioners, 14*(4), e81-e84.	Quality improvement	V. Quality A	N/A
26	Reus, V., Fochtmann, L., Bukstein, O., Eyler, A., Hilty, D., Horvitz-Lennon, M., Mahoney, J., Pasic, J., Weaver, M., Wills, C., McIntyre, J., Kidd, J., Yager, J., & Hong, S. (2018). The American Psychiatric Association practice guideline for the pharmacological treatment of patients with alcohol use disorder. *American Journal of Psychiatry, 175*(1), 86-90. doi: 10.1176/appi.ajp.2017.1750101.	Clinical Practice Guideline	VI. Quality A	N/A
27	Rose, A., & Jones, A. (2018). Baclofen: Its effectiveness in reducing harmful drinking, craving, and negative mood. A meta-analysis. *Addiction, 113*(8), 1396-1406.	Meta-analysis	II. Quality A	12 RCT reviewed
28	Rundio, A. (2013). Implementation an evidence-based detoxification protocol for alcoholism in a residential addictions treatment facility. *Nursing Clinics of North America Journal, 48*, 391-400.	Quality improvement	V. Quality A	N/A
29	Schünemann, H., Best, D., Vist, G., & Oxman, A. (2003). Letters, numbers, symbols, and words: How best to communicate grades of evidence and recommendations? *Canadian Medical Association Journal, 169*(7), 677–80.	Expert Opinion	V. Quality A	N/A
30	Sinclair, J. (2001). Evidence about the use of naltrexone and for different ways of using it in the treatment of alcoholism. *Alcohol 36*, 2–10.	Expert Opinion	V. Quality B.	N/A

31	Sinclair J., Chambers S., Shiles C., & Baldwin D. (2016). Safety and tolerability of pharmacological treatment of alcohol dependence: Comprehensive review of evidence. *Drug Safety, 39(*7), 27–45.	Literature review	V. Quality A	N/A
32	Singleton, J., & Levin, R. (2008). Strategies for learning evidence-based practice: critically appraising clinical practice guidelines. *Journal of Nursing Education, 47*(8), 380-383.	Expert Opinion	V. Quality A	N/A
33	Soyka, M., & Müller C. (2017). Pharmacotherapy of alcoholism - An update on approved and off-label medications. *Expert Opinion on Pharmacotherapy, 18*(12), 1187-1199.	Expert Opinion	V. Quality A	N/A
34	Streeton, C., & Whelan, G. (2001). Naltrexone, a relapse prevention maintenance treatment of alcohol dependence: a meta-analysis of randomized controlled trials. *Alcohol and Alcoholism, 36(*6), 544-552.	Systematic review and meta-analysis	II. Quality A	13 articles reviewed
35	Thornton, J., Alderson, P., Tan, T., Turner, C., Latchem, S., Shaw, E., Ruiz, F., Reken, S., Mugglestone, M., Hill, J., Neilson, J., Westby, M., Francis, K., Whittington, C., Siddiqui, F., Sharma, T., Kelly, V., Ayiku, L., & Chamberlain, K. (2013). Introducing GRADE across the NICE clinical guideline program. *Journal of Clinical Epidemiology, 66*(2), 124-131.	Consensus panel	VI. Quality A	N/A
36	US Department of Veterans Affairs/Department of Defense (VA/DoD). VA/DoD clinical practice guideline for the management of substance use disorders. Retrieved from http://www.healthquality.va.gov/guidelines/MH/sud/VADoDSUDCPG Revised22216.pdf. Published December 2015.	Clinical Practice Guideline	VI. Quality A	N/A

Appendix C

Lewin's Change Theory
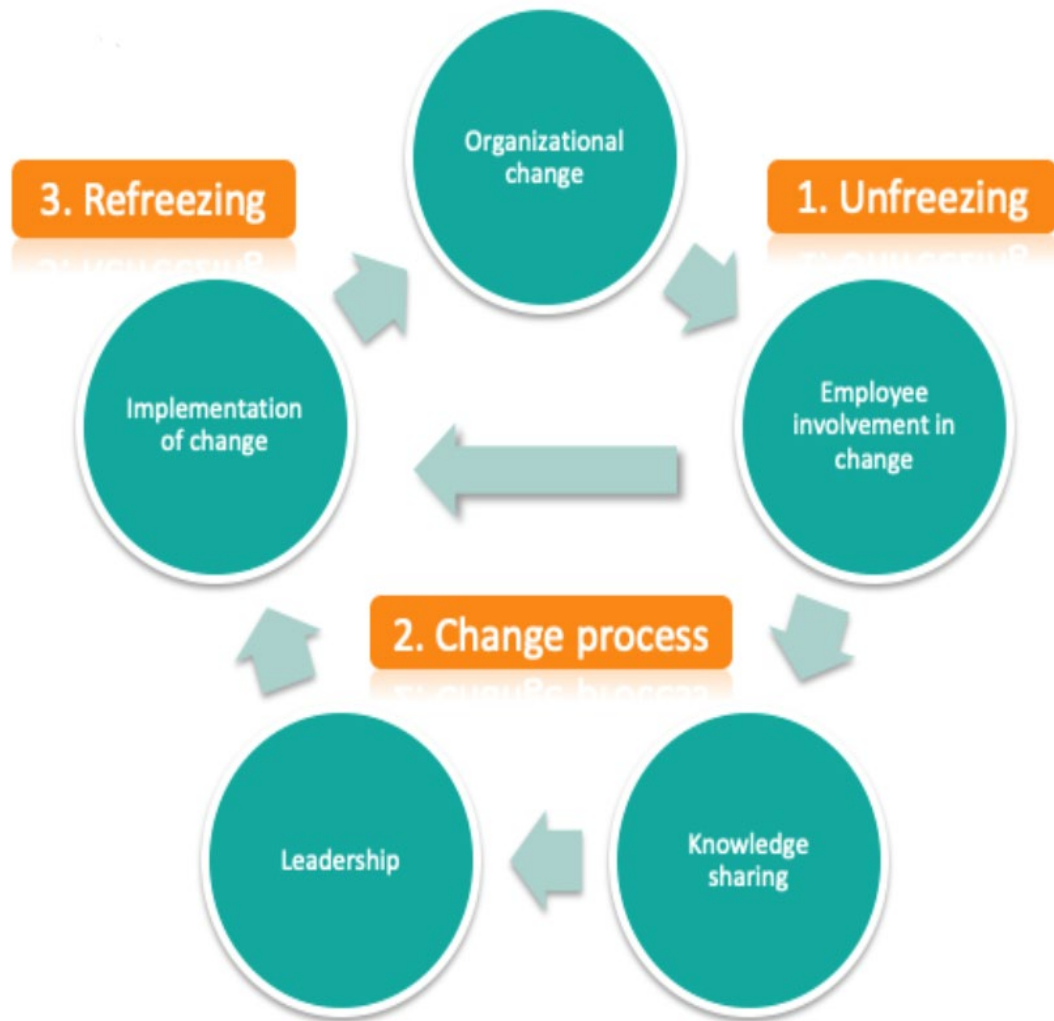
Appendix D

Benner's Novice to Expert Theory

Appendix E

Gap Analysis

Best Practice	Best Practice Strategies	How the site practices differ from Best Practices	Barriers to Best Practice Implementation	Will Implement Best Practice (Yes/No, why not?)
Standardize protocol for AUD at Ria Health	Collaboration between Ria Health and Nurse Practitioners employed at Ria Health	Siloed stakeholder activities	Historical use of ad hoc judgment	Yes
	Signed standardized AUD protocol between Medical Director and Nurse practitioners	Absence of standardized protocol used at Ria Health	Perceived lack of focused collaboration	Yes

Appendix F

Letter of Support from Agency

DNP Project Letter of Support from Agency

Course: Nursing 795

This is a letter of support for CJ Dea to implement her DNP Comprehensive
Project: Implementation of a Standardized Procedure for NPs at Ria Health.

Signature_____

Date __Feb 14, 2021____

Appendix G

AUD Standardized Procedure

Standardized Procedure

FACILITY: <u>Ria Health</u>

<u>POLICY</u>

I.   FUNCTIONS NURSE PRACTITIONERS MAY PERFORM:

Provide care for patients with alcohol use disorder as covered in attached protocol and furnish non-controlled/controlled drugs and devices to essentially healthy patients.

II.   CIRCUMSTANCES UNDER WHICH NURSE PRACTITIONERS MAY PERFORM THESE FUNCTIONS:

A. May furnish non-controlled/controlled drugs and devices under standardized procedures under the supervision of John Mendelson, MD and other appropriately licensed and credentialed Ria Health physicians.

B. Applies to nurse practitioners working at Ria Health.

III.   EXPERIENCE, TRAINING AND/OR EDUCATION REQUIRED OF THE NURSE PRACTITIONER:

Maintains a current California license to practice as an RN; is certified by the State of California as a Nurse Practitioner; has met all the requirements for, and has a current Furnishing Number issued by the Board of Registered Nursing; is oriented to the facility.

IV.   METHOD OF INITIAL AND CONTINUED EVALUATION OF COMPETENCE:

General competency is initially evaluated during the probationary period through a proctoring process by the Chief Medical Officer of Ria Health, John Mendelson, MD, or the appropriately licensed and credentialed Ria Medical staff physicians. [Insert Name] NP is assigned to, and is supervised by, John Mendelson, MD, who is responsible to evaluate annually appropriateness of practice and clinical decision making. A QA review process is established to assure that compliance to standards relating to important aspects of care are maintained.

V.   DOCUMENTATION

Documentation required is outlined in each protocol. Patient specific documentation is entered into the patient's medical record.

DEVELOPMENT AND APPROVAL OF THE STANDARDIZED PROCEDURE

I. THIS STANDARDIZED PROCEDURE WAS:

Developed and approved by John Mendelson, MD, and [Insert Name] NP.

II. THIS STANDARDIZED PROCEDURE WILL BE REVIEWED AT LEAST ANNUALLY.

REVISION DATED _____ REVIEWED DATED _____
                _____   _____
                _____   _____

III. THE STANDARDIZED PROCEDURE WAS APPROVED BY:

_____   DATE_____
        John Mendelson MD

_____   DATE_____
        [Insert Name] NP

IV. PRACTITIONERS FUNCTION UNDER THIS STANDARDIZED PROCEDURE:
         [Insert Name/s] NP

         <u>PROTOCOLS</u>
         Alcohol Use Disorder (AUD)

         <u>References:</u>

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (*DSM-5*). American Psychiatric Pub.

Anton, R., Myrick, H., Wright, T., Latham, P., Baros, A, Waid, L., and Randall, P. (2012). Gabapentin Combined with Naltrexone for the Treatment of Alcohol Dependence. *American Journal of Psychiatry, 168*(7), 709-717.

Anton, R., O'Malley, S., Ciraulo, D., Cisler, R., Couper, D., Donovan, D., Gastfriend, D., Hosking, J., Johnson, B., LoCastro, J., Longabaugh, R., Mason, B., Mattson, M., Miller, W., Pettinati, H., Randall, C., Swift, R., Weiss, R., Williams, L., and Zweben, A. (2006). Combine Study Research Group: Combined pharmacotherapies and behavioral interventions for alcohol dependence: The COMBINE study: A randomized controlled trial. *JAMA*, *295*, 2003–2017.

Brower, K., Myra Kim, H., Strobbe, S., Karam-Hage, M., Consens, F., and Zucker, R. (2008). A randomized double-blind pilot trial of gabapentin versus placebo to treat alcohol dependence and comorbid insomnia. *Alcoholism: Clinical and Experimental Research, 157*(1), 151.

California Board of Registered Nursing. (1998). *An explanation of standardized procedure requirements for nurse practitioner practice.* (NPR-B-20). Retrieved from www.rn.ca.gov/pdfs/regulations/npr-b-20.pdf

Crowley, P. (2015). Long-term drug treatment of patients with alcohol dependence. Australian Prescriber, 38(2), 41-43.

Eastlack, S., Cornett, E., & Kay, A. (2020). Kratom—Pharmacology, clinical Implications, and outlook: A comprehensive review. Pain Therapy, 9(1), 55–69.

Mason, B., Quello, S., Goodell, V., Shadan, F., Kyle, M., and Begovic, A. (2014). Gabapentin treatment for alcohol dependence: a randomized clinical trial. *JAMA Internal Medicine, 174*(1), 70-77.

UpToDate. (2019). Approach to treating alcohol use disorder. Retrieved from https://www.uptodate.com/contents/approach-to-treating-alcohol-use-disorder?search=naltrexone%20alcohol%20abuse&source=search_result&selectedTitle=2~150&usage_type=default&display_rank=2

US Department of Veterans Affairs/Department of Defense (VA/DoD). VA/DoD clinical practice guideline for the management of substance use disorders. Retrieved from

http://www.healthquality.va.gov/guidelines/MH/sud/VADoDSUDCPGRevised22216.pdf.
Published December 2015.

Yen, M., Ko, H., Tang, F., Lu, R., & Hong, J. (2006). Study of hepatotoxicity of naltrexone in the
treatment of alcoholism. *Alcohol, 38,* 117-20.

ALCOHOL USE DISORDER (AUD) PROTICOL:

I. RATIONALE

This protocol will assist in the diagnosis and management of AUD. The design of the protocol for AUD encompasses these principles.

II. DIAGNOSTIC CRITERIA (DSM-5)

Alcohol use disorder is defined as a problematic pattern of alcohol use leading to clinically significant impairment or distress as manifested by at least 2 of the following criteria over the same 12-month period:

1. Alcohol used in larger amounts or over a longer period of time than intended
2. Persistent desire or unsuccessful attempts to reduce or to control alcohol use
3. Significant time spent obtaining, using, and recovering from the effects of alcohol
4. Craving to use alcohol
5. Recurrent alcohol use leading to failure to fulfil major role obligations at work, school, or home
6. Recurrent use of alcohol, despite having persistent or recurring social or interpersonal problems caused or worsened by alcohol
7. Recurrent alcohol use despite having persistent or recurring physical or psychological problems caused or worsened by alcohol
8. Giving up or missing important social, occupational, or recreational activities due to alcohol use
9. Recurrent alcohol use in hazardous situations
10. Tolerance: markedly increased amounts of alcohol are needed to achieve intoxication or the desired effect, or continued use of the same amount of alcohol achieves a markedly diminished effect
11. Withdrawal: characteristic alcohol withdrawal syndrome, or alcohol is taken to relieve or to avoid withdrawal symptoms.

Severity is specified based on the number of criteria met: mild alcohol use disorder when 2 to 3 criteria are met, moderate alcohol use disorder when 4 to 5 criteria are met, and severe alcohol use disorder when 6 or more criteria are met. Remission is specified when no criteria, other than cravings, are met for at least 3 months (early remission) or 12 months (sustained remission).

III. HISTORY

A. Ask about patient's drinking goal, current drinking habits (amount, frequency, variability, time at current level), cravings, specific drinking precipitants.
B. Assess contribution of pain (acute or chronic), medical diseases and prior surgeries (bariatric) to drinking.
C. Ask about drinking history, withdrawal symptoms, sleep patterns, complications of drinking, risky behaviors, problems related to drinking, health problems associated with drinking, prior treatments tried and results, readiness to change
D. Assess concurrent abuse of stimulants, opioids and cannbionoids.
E. Ask about psychiatric disease. Review past and current psychiatric diagnoses and symptoms
F. Evaluate suicidal ideation and risks (plans, means)

G. Ask about prior treatment of addictive disorders.
H. Perform a review of systems

IV. PHYSICAL EXAM

A. Perform mental status exam

V. DIFFERENTIAL DIAGNOSIS

A. Other psychiatric disorders
B. Other substance use disorders

VI. LAB TESTS
A. CBC with diff
B. CMP including AST and ALT
C. PT/INR
D. gamma-glutamyl transpeptidase (ggt)
E. phosphatidylethanol
F. transferrin, carbohydrate-deficient/total
G. ethyl glucuronide

VII. ASSESSMENT & TREATMENT

A. Refer patients to a higher level of care (Erm residential program) if they score 3 on more than 1 dimension of the ASAM Level of Determination Questionnaire.

B. INITIAL VISIT
1. Counsel patients that they will start using the mobile Bluetooth breathalyzer twice a day to establish baseline data on alcohol levels and drinking patterns. This will track alcohol use with the Ria Health mobile app.
2. Inform clients to continue drinking their usual amount in order to get accurate breathalyzer readings for one week.
3. Inform clients that they will meet with both a personal coach to discuss goals, and the medical team to discuss care plan, and if desired, obtain medication management to reduce alcohol cravings.
4. Order Labs
5. Prescribe thiamine (vitamin B1) 100mg PO daily for the first 30 days of treatment.
6. Follow up in 1-week to evaluate baseline data.

C. FOLLOW-UP VISIT
1. Prescribe gabapentin
   a. Initial: 300 mg once daily; increase dose based on response and tolerability in increments of 300 mg every 1 to 2 days up to a maximum dose of 2700mg/day.
      i. The addition of gabapentin to naltrexone improved drinking

outcomes over naltrexone alone during the first six weeks after cessation of drinking (Anton et al. 2012; Anton et al. 2006).

      ii. Gabapentin has an off-label use to treat those with moderate to severe alcohol use disorder, and comorbid insomnia (Brower 2008; Mason 2014; VA/DoD 2015).

  b. Provide education to client on the side effects of gabapentin. See Table 1.

2. Determine which first-line treatment to use
  a. If patient is opioid free for at least 7 days,
    i. Prescribe naltrexone if not contradicted
      1. Naltrexone should be used cautiously in people who have alanine aminotransferase (ALT) concentrations greater than 3–5 times the normal limit, and is contradicted in acute hepatitis or liver failure. However, continued heavy drinking is more likely to pose a greater risk to liver function than naltrexone. Arguably, the risk−benefit analysis likely favors naltrexone treatment (Yen et al. 2006; Crowley 2015).
      2. Naltrexone is contradicted if patient is on atypical opioids such as Kratom (Eastlack, Cornett, & Kay, 2020).
    ii. To decrease gastrointestinal side effects, start with 25 mg PO with food 1-2 hours prior to anticipated alcohol ingestion, and gradually titrate the dose to 50mg PO once daily
      1. If GI side effects persists
        a. Start with dose of 12.5mg and slowly titrate up to 50mg
        b. Or adjust the administration times (e.g. naltrexone 25mg BID)
    iii. Naltrexone dosing is 50 mg/day. Increase dose gradually based on clinical response and tolerability in increments of 25 mg every 4 to 6 weeks up to a maximum dose of 200 mg/day.
    iv. Provide education to client on the side effects of naltrexone. See Table 1.
  b. If patient is currently taking opioids:
    i. Consider prescribing baclofen if not contradicted
      1. Dose range 5 mg PO TID, up to a maximum dosage of 160 mg/day (e.g. 40mg QID). Baclofen dose needs careful titration over weeks.
      2. The optimum dose generally ranges between 30 mg and 75 mg (Crowley 2015)
      3. Slowly taper baclofen when it is discontinued to avoid serious adverse reactions (e.g. seizures or confusion).
    ii. Provide education to client on the side effects of baclofen. See Table 1.

      c. Alternative option if patient is currently taking opioids:
         i. Consider prescribing topiramate if not contradicted
            1. Dosing requires slow titration from 25 mg daily to a maximum of 150 mg twice daily.
         ii. Provide education to client on the side effects of topiramate. See Table 1.

      d. If patient is abstinent and wants to maintain sobriety:
         i. Consider prescribing acamprosate 666mg PO TID
            1. Renal dosing CrCl 30-50: 333mg TID
         ii. Consider adding targeted naltrexone dosing to reduce relapse rates after abstinence

   3. Follow-up in 1-month or sooner if having adverse reactions or intolerable side effects

D. MAINTENANCE VISIT
   1. Gabapentin
      a. Continue if no adverse side effects; titrate to maximum dose or 2700 mg/day
      b. If having adverse effects, consider decreasing the dose
   2. Naltrexone
      a. If nonadherence, switch to depot naltrexone
      b. If having a partial response or no response, consider increasing naltrexone dosage by 25mg to a maximum of 150 mg/day
         i. Follow-up in 1 month, or sooner if needed
      c. If responding well, continue current treatment plan
         i. Follow-up in 2 months, or sooner if needed
   3. Baclofen
      a. If responding well, continue current treatment plan
      b. If having partial response, consider increasing the dose to a max of 90 mg/day; can titrate to 120 after MD consultation
      c. If having no response or having adverse effects, consider decreasing dose and/or switching to another AUD medication, if not contradicted.
         i. Consult with Medical Director
   4. Topiramate
      a. If responding well, continue current treatment plan
      b. If having partial response, consider increasing the dose
      c. If having no response, consider increasing the dose to a maximum of 400 mg/day, adding and/or switching to another AUD medication, if not contradicted.
         i. Consult with Medical Director
   5. Acamprosate
      a. If responding well, continue current treatment plan
      b. If partial response, considering adding another AUD medication.

    c. If no response, consider adding/or switching to another AUD
        medication, if not contradicted.
          i. Consult with Medical Director

AUD PROTICOL: TREATMENT FAILURE

If the patient calls in with persistent or recurrent symptoms after unsuccessful treatment, consult with the attending physician.

Protocol developed by: _____, NP
                      [Insert Name]

                _____, MD
                    John Mendelson

Table 1. Pharmacotherapy for alcohol use disorder (AUD).

Medication[1]	Dosing[2]	Side effects and monitoring[3]	Medicolegal tips, other indications and contraindications[4]
Naltrexone	50 mg once daily and can increased up to 100mg daily 380 mg monthly for intramuscular formulation	**Nausea**, vomiting, decreased appetite, anxiety, hepatocellular injury, suicidality Injection site reactions for the intramuscular formulation Monitor liver function	- Patient must be opioid-free for 7-10 days prior to initiation - Discontinue if opioid-based anesthesia is anticipated - Warn patients of potential for hepatotoxicity - Contraindicated in acute hepatitis or liver failure
Acamprosate	333 mg tablets 2 tablets TID for weight ≥132 lbs and 2 tablets BID for weight <132 lbs *Renal dosing	**Diarrhea**, nausea, **flatulence**, anxiety, depression, suicidality Monitor renal function	- Recommend for patients who are alcohol free for at least 3 days - Contraindicated in patients with creatinine clearance less than 30 mL per minute
Topiramate	Begin at 25 mg daily and can increase to up to 150 mg twice daily *Renal dosing	**Sedation**, dizziness, ataxia, paresthesia, psychomotor retardation, speech difficulties, tremor, nausea, cognitive function, metabolic acidosis Monitor electrolytes	- Indicated for epilepsy, migraine prophylaxis, chronic weight management - Non-FDA use for bipolar disorder, psychotropic drug –induced weight gain, binge-eating disorder
Gabapentin	Begin at 300 mg once daily and can increase to up to 900 mg three times daily *Renal dosing	**Sedation**, dizziness, ataxia, fatigue, tremor, xerostomia, constipation, weight gain, peripheral edema, sudden death (when used in epilepsy) and suicidality Monitor renal function	- Indicated for post-herpetic neuralgia, adjunctive therapy in epilepsy, restless leg syndrome - Non-FDA use for fibromyalgia, anxiety, bipolar disorder

Table 1. Pharmacotherapy for alcohol use disorder (AUD) continued.

Medication[1]	Dosing[2]	Side effects and monitoring[3]	Medicolegal tips, other indications and contraindications[4]
Baclofen	Begin at 5 mg three times daily, may increase up to 20 mg four times daily	Dizziness, **drowsiness**, fatigue, weakness, CNS depression respiratory depression, seizures	- Indicated for spasticity - Non-FDA use for intractable hiccups
SSRI[4]	Depends on choice of SSRI	Constipation, flatulence, insomnia, sedation, tremor, headache, dizziness, sweating, sexual dysfunction, seizures, mania, suicidality	- Indicated for mood, anxiety, obsessive compulsive disorders, eating disorders, but depends on the choice of SSRI - Use with caution in patients with history of seizures or bipolar disorder
Chlordiazepoxide	Depends on clinical presentation. Recommended dosing range 5mg daily to 10mg TID for 2-3 days	**Sedation**, **fatigue**, depression, dizziness, ataxia, slurred speech, weakness, forgetfulness, confusion	-Indicated for withdrawal symptoms of acute alcoholism - Contradicted in patients with angle-closure glaucoma

[1]FDA (U.S. Food and Drug Administration) approved medications for treatment of AUD indicated in bold.
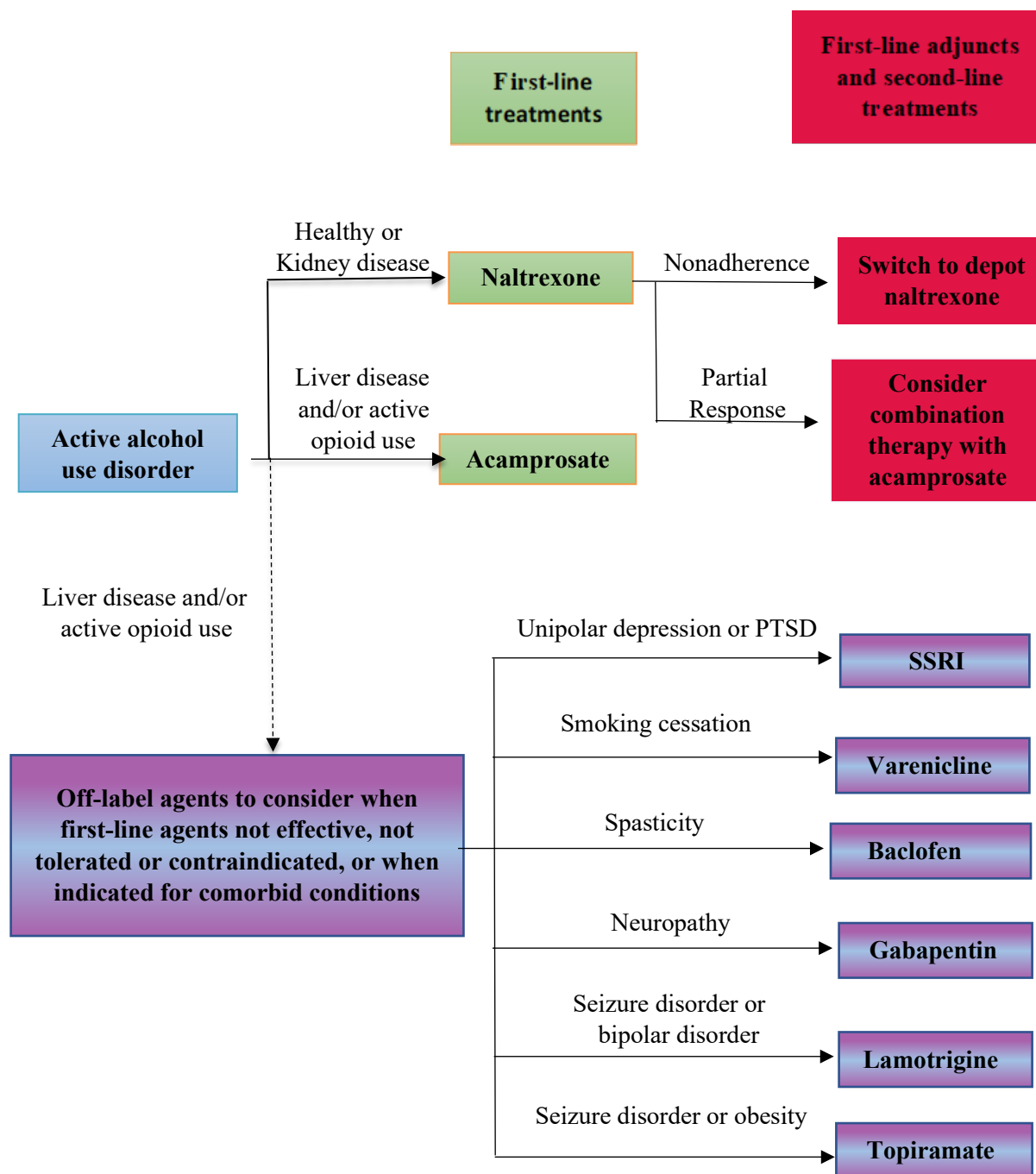[2]All dosing in oral route unless otherwise indicated.
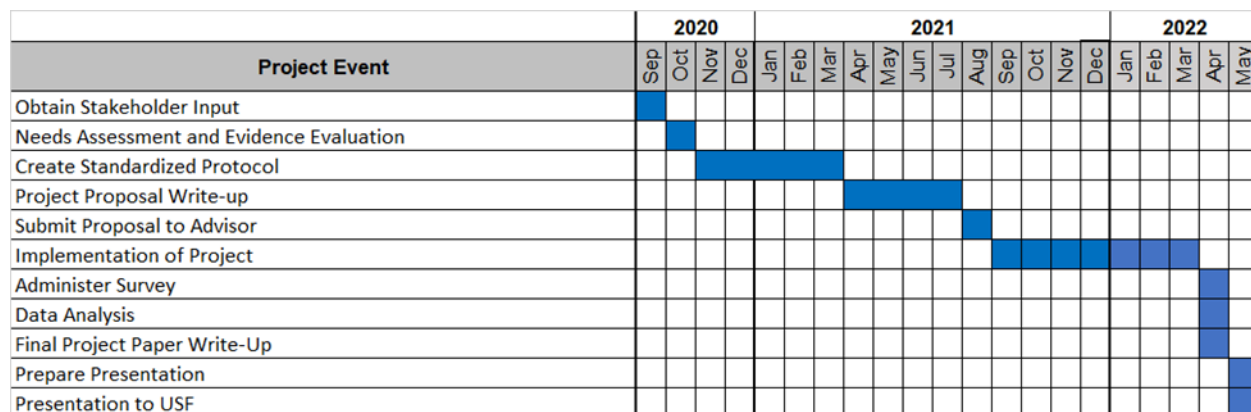[3] More common side effects are highlighted in bold
[4]Selective serotonin reuptake inhibitors.
*Indicates drug dosing considerations for patients with hepatic or renal impairments

Figure 1.   Suggested treatment algorithm for alcohol use disorder (AUD)

Appendix H

Gantt Chart

Project Event	2020				2021												2022				
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Obtain Stakeholder Input	■																				
Needs Assessment and Evidence Evaluation		■																			
Create Standardized Protocol			■	■	■	■															
Project Proposal Write-up							■	■	■												
Submit Proposal to Advisor												■									
Implementation of Project													■	■	■	■	■	■	■		
Administer Survey																				■	
Data Analysis																				■	
Final Project Paper Write-Up																				■	
Prepare Presentation																					■
Presentation to USF																					■

Appendix I

Work Breakdown Structure

PROJECT TITLE	Standarized Protocols	Ria Health	COMPANY NAME
PROJECT MANAGER	Crystal Jade Dea	Apr-20	DATE

PROJECT	Creatiion of Standardized Protocols for Nurse Practitioners in a Telehealth AUD Program

PHASE	Planning	Implementation	Evaluation

TASK	Needs Analysis	Conduct Orientation Training	Measure Satisfaction Levels
	SWOT Analysis	Obtain Survey Questionaire Data	Measure Confidence Levels
	GANTT Chart		
	Literature Review		
	Budget		
	Submission to USF		
	Obtain Approval of Meical Director		

Appendix J

Responsibility/Communication Matrix

Task	CJ Dea Project Lead	John Mendelson, Medical Director	Trinette Rasada NP/USF Advisor	Tom Nix VC Investor
USF Approval	I	I	P	I
Formulate SP	P	C	C	A
Implement SP	C	P	C	I
Evaluate SP	P	C	C	I

P   Primary Actor
C   Critique (review and comment)
A   Approve
I   Inform

Appendix K

SWOT Analysis
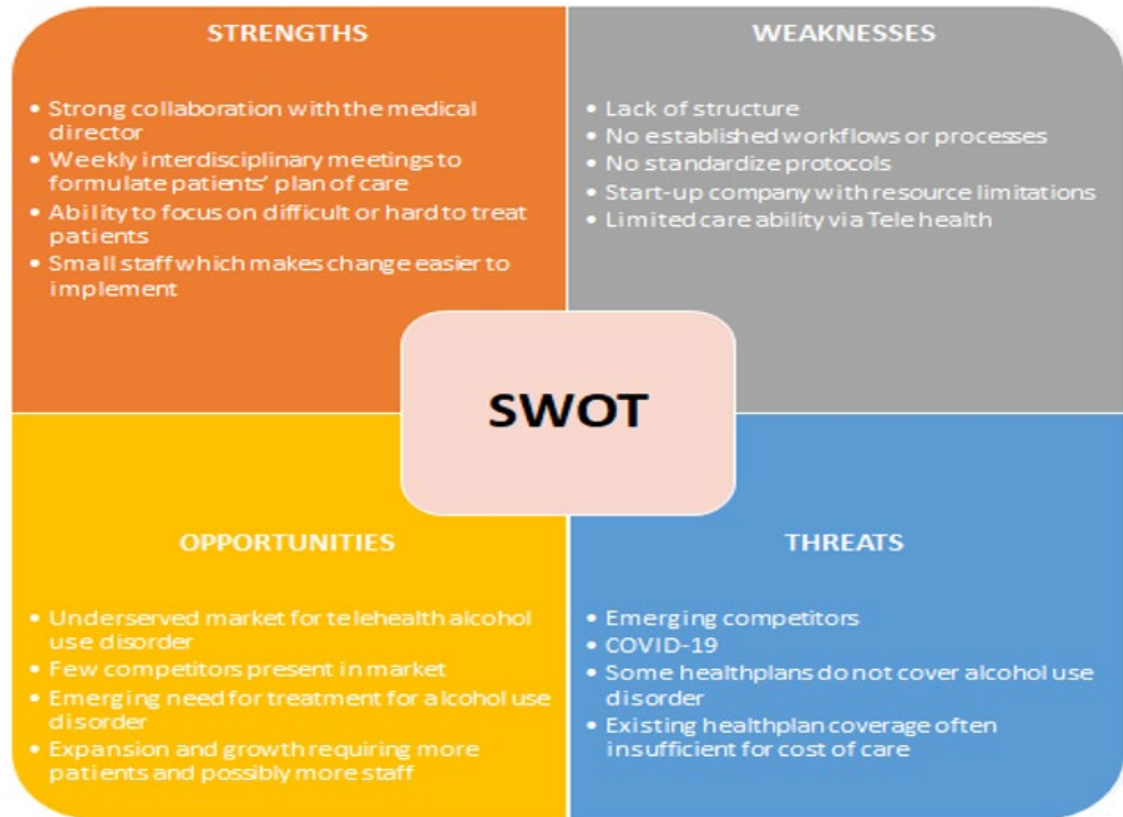
Appendix L

Project Budget

Budget Item	Description	Estimated Cost
Project Manager Expense		
Salary in Project Development & Implementation	$50/hour x 315 hours ($15,750 in-kind)	$15,750
Training two Nurse practitioners at Ria	$50/hr x 15 mins x 2NP= ($25 in-kind)	$25.00
Supplies and Resources		
Office Supplies	Paper, binders, post-its, photocopying, ink cartridge	$100.00
Cost for The Student Satisfaction and Self-Confidence in Learning Questionnaire	Free unlimited use	$0.00
Total		$15875.00

Appendix M

Original Student Satisfaction and Self-Confidence in Learning Questionnaire

Student Satisfaction and Self-Confidence in Learning

Instructions: This questionnaire is a series of statements about your personal attitudes about the instruction you receive during your simulation activity. Each item represents a statement about your attitude toward your satisfaction with learning and self-confidence in obtaining the instruction you need. There are no right or wrong answers. You will probably agree with some of the statements and disagree with others. Please indicate your own personal feelings about each statement below by marking the numbers that best describe your attitude or beliefs. Please be truthful and describe your attitude as it really is, not what you would like for it to be. This is anonymous with the results being compiled as a group, not individually.
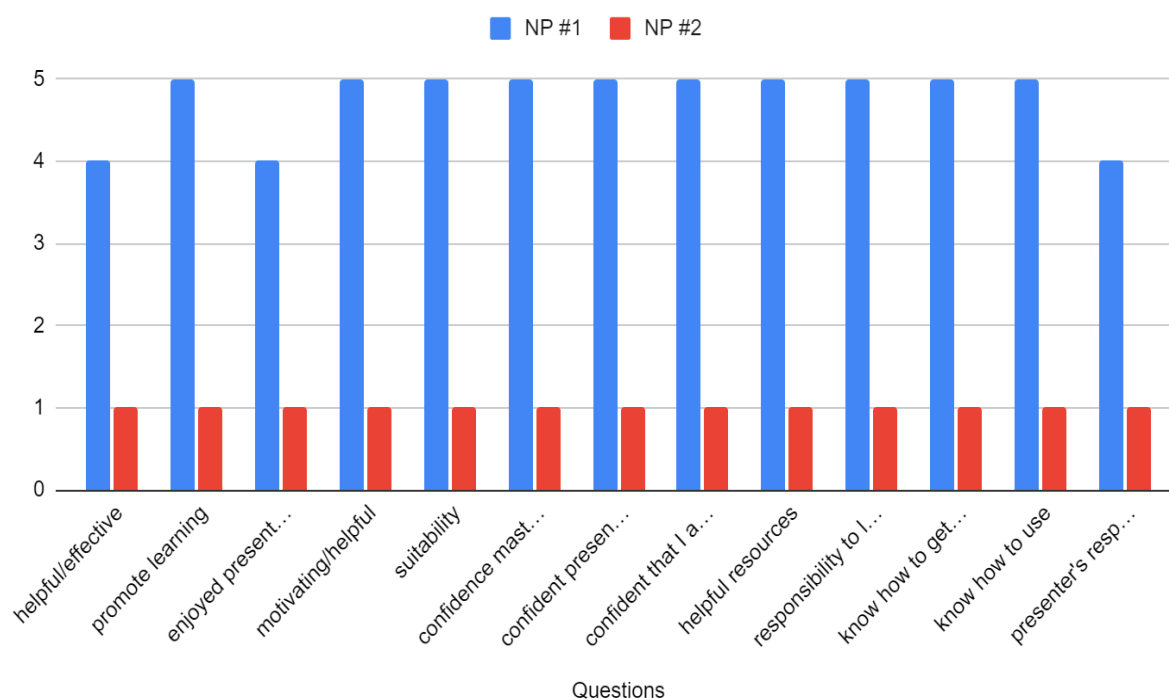
Mark:
    1 = STRONGLY DISAGREE with the statement
    2 = DISAGREE with the statement
    3 = UNDECIDED - you neither agree or disagree with the statement
    4 = AGREE with the statement
    5 = STRONGLY AGREE with the statement

Satisfaction with Current Learning	SD	D	UN	A	SA
1. The teaching methods used in this simulation were helpful and effective.	○1	○2	○3	○4	○5
2. The simulation provided me with a variety of learning materials and activities to promote my learning the medical surgical curriculum.	○1	○2	○3	○4	○5
3. I enjoyed how my instructor taught the simulation.	○1	○2	○3	○4	○5
4. The teaching materials used in this simulation were motivating and helped me to learn.	○1	○2	○3	○4	○5
5. The way my instructor(s) taught the simulation was suitable to the way I learn.	○1	○2	○3	○4	○5
Self-confidence in Learning	**SD**	**D**	**UN**	**A**	**SA**
6. I am confident that I am mastering the content of the simulation activity that my instructors presented to me.	○1	○2	○3	○4	○5
7. I am confident that this simulation covered critical content necessary for the mastery of medical surgical curriculum.	○1	○2	○3	○4	○5
8. I am confident that I am developing the skills and obtaining the required knowledge from this simulation to perform necessary tasks in a clinical setting	○1	○2	○3	○4	○5
9. My instructors used helpful resources to teach the simulation.	○1	○2	○3	○4	○5
10. It is my responsibility as the student to learn what I need to know from this simulation activity.	○1	○2	○3	○4	○5
11. I know how to get help when I do not understand the concepts covered in the simulation.	○1	○2	○3	○4	○5
12. I know how to use simulation activities to learn critical aspects of these skills.	○1	○2	○3	○4	○5
13. It is the instructor's responsibility to tell me what I need to learn of the simulation activity content during class time..	○1	○2	○3	○4	○5

Revised December 22, 2004

Appendix N

Revised Student Satisfaction and Self-Confidence in Learning Questionnaire

Student Satisfaction and Self-Confidence in Learning

Instructions: This questionnaire is a series of statements about your personal attitudes about the instruction you receive during your orientation activity. Each item represents a statement about your attitude toward your satisfaction with learning and self-confidence in obtaining the instruction you need. There are no right or wrong answers. You will probably agree with some of the statements and disagree with others. Please indicate your own personal feelings about each statement below by marking the numbers that best describe your attitude or beliefs. Please be truthful and describe your attitude as it really is, not what you would like for it to be. This is anonymous with the results being compiled as a group, not individually.

Mark:
    1 = STRONGLY DISAGREE with the statement
    2 = DISAGREE with the statement
    3 = UNDECIDED - you neither agree or disagree with the statement
    4 = AGREE with the statement
    5 = STRONGLY AGREE with the statement

Satisfaction with Current Learning	SD	D	UN	A	SA
1. The teaching methods used in this orientation were helpful and effective.	○ 1	○ 2	○ 3	○ 4	○ 5
2. The orientation provided me with a variety of learning materials and activities to promote my learning the alcohol use disorder protocol.	○ 1	○ 2	○ 3	○ 4	○ 5
3. I enjoyed how my instructor taught the orientation.	○ 1	○ 2	○ 3	○ 4	○ 5
4. The teaching materials used in this orientation were motivating and helped me to learn.	○ 1	○ 2	○ 3	○ 4	○ 5
5. The way my instructor(s) taught the orientation was suitable to the way I learn.	○ 1	○ 2	○ 3	○ 4	○ 5
Self-confidence in Learning	SD	D	UN	A	SA
6. I am confident that I am mastering the content of the orientation activity that my instructor presented to me.	○ 1	○ 2	○ 3	○ 4	○ 5
7. I am confident that this orientation covered critical content necessary for the mastery of alcohol use disorder protocol.	○ 1	○ 2	○ 3	○ 4	○ 5
8. I am confident that I am developing the skills and obtaining the required knowledge from this orientation to perform necessary tasks in a clinical setting	○ 1	○ 2	○ 3	○ 4	○ 5
9. My instructor used helpful resources to teach the orientation.	○ 1	○ 2	○ 3	○ 4	○ 5
10. It is my responsibility as the student to learn what I need to know from this orientation activity.	○ 1	○ 2	○ 3	○ 4	○ 5
11. I know how to get help when I do not understand the concepts covered in the orientation.	○ 1	○ 2	○ 3	○ 4	○ 5
12. I know how to use orientation activities to learn critical aspects of these skills.	○ 1	○ 2	○ 3	○ 4	○ 5
13. It is the instructor's responsibility to tell me what I need to learn of the orientation activity content during class time.	○ 1	○ 2	○ 3	○ 4	○ 5

Appendix O

Student Satisfaction and Self-Confidence in Learning Questionnaire Results

NP #1 and NP #2

1 = STRONGLY DISAGREE with the statement
2 = DISAGREE with the statement
3 = UNDECIDED - you neither agree or disagree with the statement
4 = AGREE with the statement
5 = STRONGLY AGREE with the statement