School-Based Development and Implementation of an Educational Toolkit

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School-Based Development and Implementation of an Educational Toolkit

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Abstract

The purpose of this evidence-based change in practice is to increase knowledge and confidence among healthcare providers and teachers within a high school setting by providing an educational tool kit about behavioral disorders in children. The disorders that will be focused upon are conduct disorder, oppositional defiant disorder, and common co-morbidities of these disorders. There will be education about an appropriate childhood, evidence based mental health assessment tool that assesses childhood mental health, including how to score the tool and interpret the results. Evidence suggests that healthcare providers and teachers are not confident or knowledgeable about identification, assessment, and behavioral management of these disorders and that they are either not focused upon, or not focused upon enough within educational curriculum. After the onset of the COVID pandemic, there are significant increases of children with behavioral and conduct problems. These disorders have devasting individual, social, and economic ramifications and school-based staff play a key role in prompt identification, assessment, and treatment. The proposed project is a quality improvement project with a one group pre-post assessment with an educational PowerPoint presentation and YouTube presentation that includes prevalence, assessment, common co-existing co-morbidities, community resources and psychosocial treatment of the disorders. Also, the PowerPoint will include a tool kit with resources and appropriate mental health assessment tools that will assist the healthcare providers and teachers within a high school setting.

Keywords: ADHD, adolescent, children, conduct disorder, oppositional defiant disorder, pediatric mental health, school-based
School-Based Development and Implementation of an Educational Toolkit

Background

Behavioral disorders such as conduct disorder (CD) and oppositional defiant disorder (ODD) have devastating individual, social, and economic ramifications and healthcare providers and teachers play a key role in prompt identification, assessment, and treatments (Fairchild et al, 2019). A review of the available evidence was performed which found that often healthcare providers and teachers are not confident or knowledgeable about identification and assessment of CD and ODD due to a lack of education. Recommendations include educational intervention, integration of mental health providers into primary care and school settings and the use of valid, reliable assessment tools to identify children with conduct traits and associated common comorbidities.

The evidence-based change of practice project is an educational intervention within a high school for both healthcare providers and teachers about behavioral disorders in children. Also, an integration into practice of the Pediatric Symptom Checklist (PSC, Massachusetts General Hospital, 2018) which will identify CD and ODD traits consistent for these disorders. The PSC has been used extensively to identify children at risk of conduct traits as well as other childhood mental health disorders (Burke et al., 2021; Holcomb, 2021; Murphy et al., 2021).

The project costs are modest, however there is an increasing return on investment overtime as early identification and intervention has been shown to improve lifelong outcomes (Frick, 2016). Barriers of resistance exist but by using leadership strategies and resource utilization these can be conquered successfully. The results of the project can advance education within the school system and can also initiate a useful tool for both healthcare providers and
teachers to use, which according to a position statement by the American Academy of Pediatricians is very much needed (Foy et al., 2019).

**Problem Description**

Conduct Disorder is a mental health condition which starts in childhood and can cause detrimental effects well into adulthood. Conduct disorder is described by the American Psychiatric Association (APA, 2013) as “a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated” (p. 469). Conduct disorder has specific diagnostic criteria in which three out of 15 criteria must be met and at least one of these must be within the previous six months. Criteria is categorized under these concepts: Aggression to animals or people, destruction of property, deceitfulness or theft and evidence of serious violations of rules. Oppositional deficient disorder is “a pattern of angry/irritable mood, argumentative/defiant behavior, or vindictiveness for at least six months” (APA, 2013, p. 462). To fit diagnostic criteria four out of eight symptoms must be met and these symptoms are categorized by angry/irritable mood, argumentative/defiant behavior, and vindictiveness (APA, 2013).

Within the United States of America (USA), national survey data from the Health Resources and Services administration Maternal and Child Health Bureau (2020) found that behavioral and conduct problems of children aged three to 17 years of age is 6.9% of the USA population and is the sixth highest childhood prevalent health condition. Anxiety is the only childhood mental health condition that is more prevalent. After the onset of the pandemic, there were significant increases in children diagnosed with behavioral or conduct problems (Lebrun-Harris et al. 2022). It is important to identify and assess childhood behavioral disorders because they impact individuals academic progress, increases potential for criminality and increases the
risk for other mental health and substance abuse disorders later in life (Fairchild et al., 2019). Behavioral disorders such as CD and ODD are also associated with a high societal and economic burden (Fairchild et al., 2019). Health disparities such as low economic status, poverty and community violence increase the risk of these behavioral and disruptive disorders (Fairchild et al., 2019). Early identification of disruptive and conduct type disorders improve life-long outcomes for children (Frick, 2016).

Specific prevalence of CD and ODD are not available within Alameda County, California, where the project will be implemented. However, children with a serious emotional disturbance constitute 7.1% of the population within the San Francisco Bay Area (California Health Care Foundation, 2018). The National Alliance on Mental Illness (2021) state that in California there are 17% of adolescents between 12-17 years old that have a serious mental illness and 64% of adolescents did not receive needed mental health treatment when required. U.S Department of Health and Human Services (2021a) state that mental, emotional, and behavioral disorders begin early in life and evidence illustrates that prevention through early childhood interventions produces the best outcomes. The specific Healthy People 2030 objectives that pertain to CD and ODD are to identify and increase the number of children and adolescents with a serious emotional disturbance to receive treatment (U.S Department of Health and Human Services., 2021b). Alameda County (2020) and the California Mental Health Planning Council (2016) have similar initiative indicators as Healthy People 2030, regarding increases in mental health services for children and adolescents.

There is a need for the described educational toolkit not only because of increasing national prevalence of disruptive disorders, but also because of evidence to suggest that both healthcare providers and teachers do not receive enough education and are not confident enough
to identify and assess for the behavioral disorders (Balestra, 2019; Baum et al., 2019; Lempp et al., 2016). Lack of education is evident for all healthcare providers. Gecker (2022) states that Northern Californian teachers are now having to expand their mental health knowledge so that they can identify mental health issues with students. However, onsite training has shown a positive relationship between intervention uptake and change in practice (Baum et al., 2019).

**Setting**

The project will be completed within a high school within Alameda County, California. The high school has around 1600 students aged between 14 and 18 years of age. Within the high school the educational intervention will be completed by any teachers and school counselors who believe they would benefit from the course. There is a primary care health center on site, which comprises of a medical doctor and a family nurse practitioner (FNP) as well as a school registered nurse and medical assistants. These healthcare providers will all be invited to complete the intervention. Teachers in special education and counselors that work in a delinquency prevention counseling program will be consulted about the educational intervention for advice and guidance. Intern school counselors on site and intern psychiatric mental health nurse practitioners (PMHNP) will also be offered the training.

**Specific Aim and Purpose**

Based upon the literature review, the project aim statement is that by May 2023, develop, implement, and evaluate an educational toolkit about disruptive and conduct disorders. Also, a mental health assessment tool, that can be used by teachers and healthcare providers will be implemented to identity at risk adolescents and guide assessment and treatments. The desired outcome is that healthcare providers and teachers’ knowledge, and confidence will be increased by 20% post educational intervention. The project objectives will be to significantly increase
knowledge and confidence levels about these disorders through an educational intervention and the implementation of a mental health assessment tool into practice, through measurement of mental health literacy and confidence levels pre, post intervention and then follow up after two months.

**Available Knowledge**

**PICO(T) Question**

A review of the evidence relating to CD and ODD and teachers and healthcare providers knowledge about the disorders and childhood mental health was performed. The following PICOT (Population, Intervention, Comparison, Outcome and Time) question was used to help guide the literature search: Would the development, implementation, and educational toolkit about CD and ODD and the integration of a mental health assessment tool increase knowledge and confidence among healthcare providers and teachers compared to status quo measures over a period of four months?

**Search Methodology**

A systematic search was conducted using the following databases from the University of San Francisco Library: PubMed, CINAHL, Cochrane Database of Systematic Reviews, APA Psych Info, AHRQ Evidence reports, Joanna Briggs Institute EBP database and National Institute for Healthcare and Clinical Excellence Database. The key words used within the searches were: Conduct disorder, oppositional defiant disorder, primary care, pediatricians, social workers, teachers, nurse practitioner, pediatric mental health assessment tool, assessment tool and doctor. Initially when searching the search terms this gave 258 results on CINAHL, 3000 on PubMed, 100 articles on APA Psych Info and 25 articles on Cochrane Database of Systematic Reviews. To narrow the scope on Pub Med and CINAHL a combination of search
terms was used from the above mentioned to narrow down the specific focus of CD and ODD. The search was narrowed down further by using a publication date within the last seven years and English language and citation backward searching with most recent articles.

**Integrated Review of the Literature**

Throughout the literature review and synthesis, the John Hopkins Nursing Evidence-Based Practice (JHNEBP) appraisal tools were utilized. JHNEBP appraisal tools enable research and non-research evidence to be analyzed through questioning elements of that evidence. The user can then establish what level and quality of evidence is appropriate. Levels of evidence range from level one to level five and are dependent on the strength and type of study design. The quality of the evidence is either categorized as: A is very good quality; B is good quality and C is poor quality (Dang et al. 2022). All appraised evidence is summarized in a table within Appendix A of the paper.

**Disruptive Behavioral Disorder Mortality Risk and Outcomes**

Border et al. (2018) found that mortality hazard for adolescents who have CD, and their siblings was 4.9 times higher than those children without CD (hazard ratio 1.18, p < .001). Border et al. (2018) also found that adolescents with CD had higher mortality risk than their siblings and sibling mortality risk was higher than children without CD. In Border et al. (2018) prospective, longitudinal, cohort study, children with CD and their siblings were recruited from court records, juvenile correctional systems, and substance abuse programs within the USA. It is important for healthcare providers and teachers to recognize that mortality risk is significant not only for children with CD, but also their siblings, and screening should be completed accordingly. The JHNEBP appraisal score is Level II, A, high quality.
The earliest age of the participants in Border et al. (2018) study were 16 years of age. These children were already either part of the juvenile correctional system or in substance abuse programs. When those participants were diagnosed with CD is unclear, but evidence from Bevilacqua et al. (2017) found that the younger children present with symptoms, the poorer the outcome. So, these results could be potentially even more devastating. Bevilacqua et al. (2017) also found in their meta-analysis of longitudinal studies that children who had adolescent onset and childhood limited CD also had poorer psychological outcomes than children with low levels of CD symptoms. However, early onset CD had the worst outcomes and early interventions, and identification is recommended to minimize antisocial behavior. The JHNEBP appraisal score is Level III, B, good quality. Generally, ODD and CD are viewed as a continuum or spectrum with ODD sometimes seen as a precursor before CD appears and then at the opposite end of the spectrum antisocial personality disorder (Sagar et al. 2019). However, just because a child may exhibit ODD does not mean that CD will follow or antisocial personality disorder (Sagar et al. 2019).

**Disruptive Behavioral Disorder Comorbidities and Trajectories.**

The National Institute for Health and Care Excellence (NICE, 2017) established clinical guidelines for the management of CD within the United Kingdom (UK). Recommendations are based on a vast array of evidence-based research. It was found that there are co-morbidities that can exist with CD, mainly attention deficit hyperactivity disorder (ADHD), and providers need to be aware of this and screen accordingly. Within the USA there is not any evident clinical guidelines for CD; only a policy statement which incorporates all pediatric mental health disorders (Foy, 2019). The clinical guideline states that a general mental health assessment tool is appropriate for CD screening and gives recommendations for parental training, psychosocial
interventions, and pharmacological therapies (NICE, 2017). Interestingly, these guidelines advise awareness of diagnostic bias and potential stigma due to diagnosis. The JHNEBP appraisal score is Level IV, A, high quality.

Bakker et al. (2017) performed a meta-analysis, which included the clinical guideline evidence from NICE, (2017) regarding psychological treatments for CD. These findings concluded that use of psychological treatments, especially in children under ten years of age are essential and that the biggest co-morbidity of CD and ODD is ADHD. Bakker et al. (2017) found in the meta-analysis that here is a lack of evidence supporting what the best treatment is, mainly because of a lack of rigor in research, due to poor study design and sample size. The JHNEBP appraisal score is Level I, B, good quality.

As indicated in NICE (2017), Patel et al. (2018) found in their quantitative, retrospective analysis of demographic predictors and comorbidities of hospitalized children with CD in the USA, that there is the potential for diagnostic bias. Patel et al. (2018) identified that black males under the age of 11 have the highest risk of inpatient admission with CD. These patients also have the highest risk of co-morbid psychosis and depression. Low-income families have a 1.5 times higher risk of inpatient admission than high income families. The JHNEBP appraisal score is Level II, B, good quality.

Fadus et al. (2019) also identifies how health disparities can increase CD. Fadus et al. (2019) discusses how bias may misdiagnose Black and Hispanic youth, and these children are more likely to receive a diagnosis of CD than non-Hispanic white children, who are more likely to be diagnosed with ADHD. Also, having an unstable support network whether it be inconsistent, harsh parenting practices, family dysfunction, caregiver neglect and abuse, and or frequent changes in caregivers has shown to increase the risk of CD (Fadus et al., 2019). Carliner
et al. (2017) found that externalizing disorders, such as CD and substance abuse disorders that generally begin in adolescence, are more likely to emerge in adolescents with prior trauma. Oppositional defiant disorder onset, in contrast, is unrelated to trauma exposure but is associated with an elevated risk of experiencing trauma later in development. This is important for healthcare providers and teachers to be aware of, as this indicates that behavioral disruptive disorders such as CD and even aggression in adolescents can be due to trauma, children with ODD have a higher risk of trauma in adolescence. Furthermore, the more trauma youth have experienced, the more likely they are to be diagnosed with CD (Marsh & Cox, 2022). Therefore, assessment and interventions should be trauma focused. The research highlights the potential root causes of the disruptive behaviors.

**Healthcare Providers and Teachers Knowledge and Confidence**

Baum et al. (2019) study wanted to improve management of pediatric mental health conditions and did this through onsite training within 29 primary care practices within the USA. The study is a quantitative, quasi experimental, one group pretest-posttest design and clinical confidence was measured over time using a linear regression model. A Pearson correlation coefficient was used to assess the relationship between change in clinical confidence and program uptake. It was found that clinical confidence increased on average by 20% throughout the training and there was a positive relationship between intervention uptake and change in practice. The study concluded that healthcare providers did have a lack of knowledge and confidence about mental health conditions, including CD, and the onsite trainings did improve this. Therefore, an educational intervention about CD and ODD, with onsite trainings will be of value to healthcare providers. The JHNEBP appraisal score was Level II, B, good quality.

Foy et al. (2019) formulated a manuscript, published by the American Academy of
Pediatrics to outline a revised policy statement about pediatric mental health competencies in healthcare. One of the purposes of the policy statement is to improve the assessment and treatment of children who display disruptive and/or aggressive behavior. Evidence shows that there is a lack of training and confidence to treat and counsel these children. Evidence similarly was found by Baum et al. (2019). The American Academy of Pediatrics policy statement gives evidence-based behavioral recommendations for children with disruptive and aggression problems as well as examples of brief interventions that healthcare providers can use. Competencies are outlined in the policy statement that demonstrate that healthcare providers can analyze and interpret results from mental health screenings. The competencies in the policy statement provide some guidance when considering the scope of practice of healthcare providers treating mental health conditions. These competencies can be incorporated into clinical decision making. The JHNEBP appraisal score is Level IV, A, high quality. Lempp et al. (2016) also found that physicians have a lack of knowledge and confidence when treating children with CD. The researchers surveyed physicians and pediatricians and found that both ranked four out of five for importance of knowledge about CD. Additionally, when asked to rank 17 psychiatric diagnoses at level of need for knowledge CD ranked eighth with physicians and fifth with pediatricians. The JHNEBP appraisal score is Level II, B, good quality.

Hanisch et al. (2020) discussed how childhood behavioral disorders such as ADHD, ODD and CD can impact psychosocial development. This includes academic underachievement. Hanisch et al. (2020) developed a school-based coaching (SCEP) for elementary school teachers of children with these behavioral disorders. Based on a functional behavior assessment, SCEP addressed teachers of children with severe externalizing behavior problems in an individualized modular manner. The goals of SCEP were to reduce problem behavior, increase student teacher
relationship, increase knowledge, and reduce teachers stress levels. Hanisch et al. (2020) found that with SCEP there was a significant reduction in problem behaviors and attention span was significantly increased. However, teachers also pointedly changed their teaching styles. However, teachers stress levels were not reduced. The SCEP program was very labor intensive, and the teachers, along with the clinical psychologists worked with one child at a time. Even though the study design could have been improved through use of manipulation of the independent variable with randomization controls, the study is relevant to the project as there are aspects of the SCEP manual and functional behavioral analysis that can be applied to both teacher and healthcare providers to reduce problem behavior. Teachers’ knowledge and confidence did increase with regards to the childhood ADHD, CD and ODD and how to manage these disorders through the behavioral interventions. The JHNEBP appraisal score is Level III, B, good quality.

Therefore, the previous studies are pertinent to the PICOT question: Healthcare providers and teachers do have a lack of knowledge and confidence in assessing and treating children with disruptive behavioral disorders. Also, educational interventions do help increase knowledge and confidence resulting in a change of practice.

**Importance of Child Mental Health Assessment Tool Within School and Healthcare Settings**

Bloomfield (2022) states that it is important for healthcare providers looking after children to obtain primary mental health screening tools, which give an overall assessment of the children and secondary screening tools which focus on specific mental health disorders. Within the USA, between 13% to 20% of adolescents in one year, experience a mental health disorder and primary and secondary tools can identify and reduce the chances of missing an opportunity to provide assessment and treatment (Bloomfield, 2022). The American Academy of Pediatrics
recommends two primary screening tools, either the strengths and difficulties questionnaire (SDQ) or the PSC (Bloomfield, 2022).

Donohue et al. (2015) implemented a quality improvement project within their school after recommendations from the Connecticut Office of the Child Advocate suggesting that there should be screening of youth’s behavior and development. The recommendations came after 20 first-grade children and six educators were fatally shot at Sandy Hook Elementary School in Newtown, Connecticut in 2012. Donohue et al. (2015) believe that schools can be an integral part of the screening process, connecting school, home, and mental health professionals to identify students with elevated needs and provide integrated supports. Donohue et al. (2015) evaluated several tools and chose the Behavior Assessment Scale for Children Two: Behavior and Emotional Screening Scale (BASC-2 BESS). School counselors input data for 944 children and t scores were obtained, which determined if children were at no risk or at an increased risk of mental health disorder. Those children who were at risk received individual and/or group psychotherapy. Parents sought consent for the student self-assessment to be completed and were informed of the results and interventions.

Donohue et al. (2015) only used the self-report assessment tool and there were issues with some children not understanding the questions or the format of the assessment. The study also did not incorporate randomization and controls or measure child outcomes. However, the study did demonstrate that it is important to monitor children’s mental health within a school setting. Given the shortcomings of the self-report tool, it seems crucial to utilize a validated, recognized tool and one that subjects can accurately understand and complete. Monitoring children’s mental health through a validated assessment tool is also supported by Foy et al. (2019), Hanisch et al. (2020) and NICE (2017).
Synthesis of the Evidence

All the evidence presented is either of high or good quality and were mostly research based. The main criticisms of the studies used for the review are from a methodological stance. In four of the studies (Baum et al. 2019; Border et al. 2018; Donohue et al. 2015; Hanisch et al. 2020) there is no random assignment, although within quasi-experimental design sometimes this can be challenging. Also, the meta-analysis conducted by Bevilacqua et al. (2017) used only two databases to conduct their study search but did implement other sound methodology such as using effect sizes to ascertain acceptable sample size. However, both the clinical guideline (NICE, 2017) and policy statement (Foy et al. 2019) were updated within the previous five years, as recommended by Dang et al. (2022). Also, they both are sponsored by a regulatory body, but did not utilize appraisal scoring for separate research studies used within the evidence provided. All studies did use adequate sample sizes apart from Hanisch et al. (2020) and all are generalizable to healthcare providers and teachers in the USA. Even those studies outside of the USA, where healthcare and school systems operate differently, are appliable to healthcare providers and teachers due to the context of those findings. When applicable, all studies that used assessment tools, used these tools appropriately to guide assessment, apart from Donohue et al. (2015).

The consensus found in the studies was that the SDQ assessment tool or the PSC were consistently used to assess risk for disruptive behavioral disorders such as CD and ODD. Gaps surrounding knowledge of the disorders were identified. The need for education of teachers and healthcare professionals about CD, ODD and the mental health conditions that coexist with these is evident (Balestra, 2019; Baum et al., 2019; Hanisch et al, 2020). There is not a mental health assessment tool consistently used to assess for these disruptive, behavioral disorders within
pediatric healthcare or school settings or screens children’s overall mental health. The PSC not only assesses for signs of CD and ODD, but also assesses for inattention, anxiety, and depression (Massachusetts General Hospital, 2018).

**Rational**

A theoretical framework that will be used for the project is Fawcett and Ellenbecker’s (2015) Conceptual Model of Nursing and Population Health, seen in Appendix B. The model was chosen because it is tailored to improve the health outcomes from a population, upstream approach, specifically within the USA. A central part of the model is the nurse and the influence that the nurse can have on populations; so, it is not just an individualized approach. The Centers for Disease Control and Prevention (CDC, 2020) state that population health is an interdisciplinary approach, which involves communities including teachers.

The primary focus of the theory is the attainment of the highest level of quality of life and the theory concentrates on those nursing activities that can promote well-being and prevent disease. The constructs within the Conceptual Model of Nursing and Population Health will be integrated throughout the project are: Upstream approach, population, and healthcare system factors as well as nursing activities (Fawcett & Ellenbecker, 2015). The nursing activities will include the actions necessary to improve population outcomes and mediates the relations of the other constructs so that this can lead to the desired population outcomes of wellness, disease prevention and improved quality of life. As teachers will also be included in the intervention, they are also an integrative part of population health because there is a focus on children’s levels of well-being, and this directly impacts educational achievement (CDC, 2020).

The educational intervention will deliver an evidence-based program based on disease prevention and an upstream approach. The educational intervention will also include the social
determinants of health. By utilizing a mental health assessment tool and educational toolkit, the construct population factors, and behavioral factors of future students will be addressed. Health care system factors will also be included in the project, especially regarding time resources, budget considerations and relevant competencies and policies.

**Methods**

**Context and Stakeholders**

The project will be designed and implemented within five months. The stakeholders include a family practice doctor, FNP, intern PMHNPs, registered nurse, medical assistants, school counselors, intern school counselors, teachers and the principal and assistant principals of the high school who are within Alameda County, California. The doctors, FNP, intern PMHNPs, registered nurse, medical assistants, school counselors, intern school counselors and teachers will be the participants receiving the educational intervention. All stakeholders will be able to complete the mental health assessment tool of students that they had concerns about by identifying the items within the mental health assessment tool. These would be forwarded to the Coordination of Services Team (COST). The doctor, FNP, intern PMHNPs, registered nurse, medical assistants, school counselors, intern school counselors and teachers are highly interested stakeholders that need to be managed closely as they are directly related to the assessment and collection of data. The principal of the school (site advisor) and assistant principals would have less interest levels but would still need to be managed closely due to the operational effects of the project. The COST team receives referrals from all stakeholders, including parents and student self-referral. The COST team then coordinates with the psychologist, therapists, the social emotional counselor, intern PMHNPs, community outreach and special education to
delegate who is the most appropriate provider to manage that student’s needs (Hayward Unified School District, 2022).

**Proposed Intervention**

The proposed project is one group pre-post assessment and educational intervention about CD and ODD in children and then implementation of the PSC into practice within the school-based setting (Massachusetts General Hospital, 2018). The educational intervention will be a combined PowerPoint presentation and YouTube video that will include the prevalence of the disorders, common co-existing co-morbidities, psychosocial and parental interventions, community resources and management. Recognition will be given to applicable health disparities and risk factors influencing incidence of the disorders. Also, the mental health assessment tool will be discussed within the presentation, including how to score the tool and interpret the results.

The Pediatric Symptom Checklist was designed by Michael Jelinek, psychiatrist, and Michael Murphy, educational psychologist, at the Psychiatry department at Massachusetts General Hospital. Both the paper and online version of the tool is free to use and requires no prior copyright authorization. The online version of the PSC parent version and youth version are provided by Mental Health America (2022) and its use is endorsed by the PSC authors. The free, online tool automatically scores assessments and provides a score report. Consequently, the administrator does not have to score the assessment and results are immediate after the youth has completed the assessment online, all that is required is a sign up (Mental Health America, 2022).

The Pediatric Symptom Checklist is a brief behavioral screening questionnaire for children aged 3-18 years old. The 35 questions explore externalizing problems including attention and conduct problems and internalizing problems such as depression and anxiety. The
PSC can be completed by healthcare providers, parents, and teachers. Adolescents who self-report should be aged 11 years and over. The tool is available in over 31 different languages including Spanish. When appropriate, student self-report would also be encouraged as the children are all over 11 years old in the high school. The PSC includes a Likert type scale with options, never, sometimes, and often (Massachusetts General Hospital, 2018).

The Pediatric Symptom Checklist was chosen for many reasons, the test/retest reliability ranges from .84 to .91. and over time, case/not case classification ranges from 83% to 87% and kappa = .84, internal consistency Cronbach alpha = .91 and the tool has been used within the USA extensively to assess for the childhood mental health risk of CD and ODD (Massachusetts General Hospital, 2018). CD and ODD also has many co-morbidities that coincide with this disorder such as: Bipolar, depression, anxiety, and ADHD (Patel et al., 2018). ADHD is a high comorbidity that can be frequently present in children with CD and ODD (Vetter et al., 2019) and is the most common co-existing comorbidity (NICE, 2017). Previous childhood trauma can also be evident for adolescents with aggression and CD (Marsh & Cox, 2022). So, a brief screening tool that can identify abnormalities is important so that healthcare providers and teachers can screen for other potential disorders. The PSC has been endorsed by the National Quality Forum and is the only pediatric assessment tool that focuses on mental health (National Quality Forum, 2013).

The Pediatric Symptom Checklist has been used successfully to identify children at risk of disruptive and conduct type disorders, ADHD and anxiety and depression (Holcomb, 2021; Trafalis et al., 2021). The PSC has also been used as a general mental health screening tool in a school setting, clinical practice, and primary care (Burke et al., 2021; Murphy et al., 2021; Trafalis et al., 2021). Predominately the PSC has been implemented when healthcare providers
and/or parents have been concerned about the child’s behavior and academic progress. It is important to add that the PSC is not a diagnostic tool, the mental health assessment tool provides an initial gateway into additional clinical inquiry (Trafalis et al., 2021). The PSC self-report tool will be used within the project. English (USA) versions of the PSC for youth self-report for is presented in Appendix C.

**Gap Analysis**

There are knowledge gaps that are identified within the evidence. Firstly, all research about the lack of knowledge and confidence in assessing CD and ODD is formulated from medical doctors and not nurse practitioners. FNs and PMHNPs have a fundamental role within primary care. However, in both FNP, PMHNP and medical school curriculum there is limited education about CD and ODD and family practice doctors have identified the need for this education (Balestra, 2019; Baum et al., 2019; Lempp et al., 2016). The American Academy of Pediatrics (Foy et al., 2019) published pediatric mental health competencies in primary care to improve the assessment and treatment of children who display disruptive and/or aggressive behavior. Best practice includes incorporating a childhood assessment tool into practice and integration of mental health care into primary care. Currently, apart from the PHQ-A, which is recommended to screen depression in over 12-year old’s (United States Preventative Services Taskforce, 2016) there are no childhood screening tools used within primary care for these disorders.

Barriers include a perceived lack of time and a lack of mental health resources for referral. A gap analysis diagram is presented in Appendix D. Post pandemic due to rising childhood mental health disorders, including violence and conduct type disorders, teachers are now being expected to identify and manage these disorders in the classroom. There are some
educational interventions recently implemented by the state of California, which focuses on teachers learning mental health crisis intervention and focuses on suicidal ideation, depression and anxiety and ADHD. Conduct type disorders do not appear to be discussed thoroughly (California Department of Education, 2020).

**Gantt Chart**

A Gantt chart is displayed in Appendix E. The Gantt chart outlines the steps for the project design, and a timeline for the various steps of the project completion, including communication with various stakeholder, designing educational materials, providing staff educational training and feedback to staff as well as a timeline for completing and presenting the DNP project. The implementation process of the project will be completed within four months.

**Work Breakdown Structure**

The Work Breakdown Structure (WBS) assists in identifying how the goals and objectives will be met in the project (Moran et al., 2020). Within the project an outline format of the WBS is chosen as this is easier to view and not difficult to amend if changes are needed (Project Management Docs, n.d.). The WBS analysis is presented in Appendix F.

The WBS firstly outlines the project initiation, steps include: The DNP Project committee approval, establishing stakeholder buy in from the high school and other relevant stakeholders, email of support from the organization project site and creation and sharing a timeline with stakeholders involved with the project. The WBS next outlines the planning of the project which includes a needs assessment with informational interviews with stakeholders, gap analysis, formulating an aim statement and a GANTT chart to lay out a timeline for the project. Project planning also includes identifying theoretical frameworks that assist with the overall project and identification of measurable objectives and defining budget items.
Next within the WBS analysis is project development/execution which involves creating and designing qualitative questions to ask stakeholders post implementation of the educational intervention and assessment tool. Then development of the measurement tool questions to assess for knowledge (mental health literacy) and confidence of the healthcare providers and teachers. Finally, identification of the format of the PSC (Massachusetts General Hospital, 2018) which will then be integrated into practice.

The project implementation stage of the WBS analysis addresses the delivery of the educational intervention, with pre and post exam and confidence level surveys and communication steps with stakeholders throughout the implementation. Evaluation of the educational intervention and assessment tool with delivery of qualitative question to stakeholders will occur immediately post educational intervention and then two months later. The WBS data analysis outlines what data will be analyzed and the use of SPSS to analyze that data. Finally, the WBS focuses on the project close out, which incorporates presenting findings to stakeholders and the DNP chair and committee, the recommendations for future applications and the submission of the final manuscript for the DNP Project.

Communication Plan

The communication matrix is presented in Appendix G and displays essential stakeholders and frequency and means of communication. The meetings include the initial stakeholders meeting to establish if any mental health assessment tools have been used before and thoughts about the educational intervention and practice change. After the educational intervention and integration of the mental health assessment tool an on-site meeting will take place within a week to facilitate integration of the tool and if any issues. Ongoing meetings, if necessary, will focus on proper documentation and accurate interpretation of results and
implementation of appropriate care. Communication with stakeholders at the project site will be through on-site meetings, email, and phone calls.

**Strengths, Weaknesses, Opportunities and Threats Analysis**

The strengths, weaknesses, opportunities, and threats (SWOT) analysis is an assessment of both “internal and external attributes and threats to a phenomenon of interest” (Moran et al., 2020, p. 130). Through this analysis, the evaluation provides an overview of the current situation. The SWOT analysis is presented in Appendix H. The strengths of the project include that there is evidence within the existing literature to suggest that healthcare providers and teachers have a lack of knowledge and confidence identifying and assessing CD and ODD in children, so the project is needed. The existing literature suggests that early interventions and primary and secondary prevention improves lifelong outcomes of children with these disorders (Frick, 2016). The Pediatric Symptom Checklist has been endorsed by the National Quality Forum (2013) and lastly, the mental health assessment tool, the PSC (Massachusetts General Hospital, 2022) has good reliability and validity and has been used within schools to assess for CD and ODD and overall childhood mental health (Burke et al., 2021; Murphy et al., 2021; Trafalis et al., 2021).

The weaknesses include the potential for the non-compliance and non-acceptance of the PSC (Massachusetts General Hospital, 2018). Healthcare providers and teachers may have a preference to a different pediatric mental health assessment tool. A meeting will be scheduled during the planning stage of the project to investigate this potential issue.

The opportunities of the project are to create a culture of primary and secondary prevention on a district wide scale. Also, the project will educate healthcare providers and teachers about pediatric mental health and integrates pediatric mental health competencies within
the school setting. It also encourages a team approach and collaboration of teachers, counselors, the COST team, and healthcare providers. The threats to the project are that the workflow maybe too busy to implement the mental health assessment tool into practice or complete the educational intervention. Due to the healthcare providers and teachers being unionized, the educational intervention cannot be made mandatory, as mandatory education is decided by the California Board of Education. Hopefully if there can be stakeholder incentive gained, then both healthcare providers and the teachers will buy in to the educational intervention, which in turn will assist them in managing children with these mental health issues. Lastly, healthcare providers may fear stigmatization and labeling children with behavioral disorders, and this will be addressed within the educational intervention and when supporting providers and teachers post intervention as the PSC is not a diagnostic tool.

**Proposed Budget and Financial Analysis**

The high school participating in the project most recent absenteeism rate is 17% (Education Data Partnership, 2022). The California Department of Education (2022) cost of funding per day per student is $85.92. After completing a cost benefit avoidance analysis, the annual loss of funding based on chronic absenteeism and percentage reasonably attributable to diagnosis of severe mental illness within that high school totals $74,234.880. Cost benefit avoidance analysis is within Appendix I.

For the purposes of increasing the sustainability of this project, the PSC (Massachusetts General Hospital, 2018) which is the selected mental health assessment tool was chosen specifically because it is free of charge when completing by paper and is easily accessible and reproducible. In addition, the resources to support the use of the assessment tool (website) are free of charge. All costs involved in the development of the project and its materials have been
solely incurred by the project lead. Included within the budget would be the cost of the educational intervention training, which would take around one hour. The sustained costs for the program would be modest, represented by expenses incurred for the reproduction of the mental health assessment forms, which could realistically be incorporated into existing budgets. Total costs including project manager and training costs and supplies, and resources is $14,924.00. See Appendix I.

**Proposed Outcome Measures and Data Collection Instruments**

Both quantitative and qualitative measures will be used to assess the efficacy of the intervention and integration of the PSC (Massachusetts General Hospital, 2018) and assessments developed onto Qualtrics survey tool. Quantitative measures will include pre-post assessment scores of both knowledge and confidence level scores. The outcome measures will be compared immediately pre and post education implementation and then two months post intervention. The confidence level will be measured with a Likert scale. The confidence Likert scale was taken from research by Baum et al. (2019) in which they measured clinician confidence pre and post implementation of the integration of mental health services into pediatric primary care (Appendix J). The confidence Likert scale was piloted and then used to assess 52 clinician confidence levels. To measure knowledge, The Mental Health Literacy Scales will be incorporated with the confidence survey. The Mental Health Literacy Scale is also Likert scale in which mental health literacy knowledge is measured. The tool has been used to assess mental health literacy of healthcare professionals who work within areas of individuals with mental health conditions and has been used to evaluate knowledge when developing new programs or interventions. The Mental Health Literacy Scale was adapted from O’Connor & Casey (2015) and demonstrates good internal and test-retest reliability (Appendix K).
Qualitative data will be ascertained from a Qualtrics evaluation open-ended question survey incorporated into the pre and post educational assessment. A question will be asked to select words of how participants felt after the educational intervention. Participants will also be asked how they felt incorporating the mental health assessment tool into practice.

Proposed Analysis

Quantitative data will be analyzed using the SPSS statistics program. Firstly, there will be a descriptive statistical analysis, in which nominal data such as job title and staff gender will be analyzed using frequency distributions. Then ratio data including age and years within the discipline and previous years of experience with children with these disorders will be analyzed using descriptive statistics. The dependent variable, the pre and post mental health literacy scores will be analyzed with both descriptive statistics and a dependent groups paired $t$ test, level of significance .05. The $t$ test will be used to establish the difference in knowledge before and after the educational intervention. The other dependent variable, the confidence scores will be analyzed with a repeated measures ANOVA, level of significance .05, to ascertain the differences in healthcare provider confidence. Qualitative analysis data will be analyzed using the Qualtrics word cloud and a qualitative thematic analysis will be completed to visualize and interpret responses with the most frequent occurring themes.

Ethical Considerations

The project will need approval by the University of San Francisco (USF) School of Nursing and Health Professions Doctor of Nursing Practice program. Within the intervention the Jesuit core values of USF will be adopted by promoting a common good that transcends to the interests of the stakeholders and respects their diversity of perspectives and experiences (USF, 2021). The American Nurses Association (2015) code of ethics will be integrated throughout the
project by advancing the profession through research and scholarly inquiry, professional standard development, reducing health disparities and demonstrating respect for human rights, including privacy and confidentiality. To maintain privacy and confidentiality any participant data will only be coded by number and HIPAA compliance will be met throughout the course of the project. Within the first survey that is given to healthcare providers and teachers will be an outline of the quality improvement project and the reassurance that data obtained from the surveys and exam will be confidential and documented without personal identifiers. An informed consent will be obtained through acceptance on the initial survey.

Discussion

Limitations

The potential barriers that the project leader will face when implementing this innovation are time restriction, lack of motivation and resistance to change and/or new learning. Poggenburg et al. (2017) found that healthcare workers are willing to take part in quality improvement projects, but lack of time, administrative workload and lack of assistance are barriers. The plan for mitigating these potential barriers throughout the intervention are to adopt emotional intelligence principles of self-awareness, social awareness, self-management, and relationship management (Goleman 1998). Adopting these principles will allow positive and effective communication with Stakeholders. Also, using empathy and being able to identify when others are not coping with the intervention is imperative.

As a previous provider in a healthcare clinic, I recognize that time constraints are a huge barrier to learning and implementing any new change. Utilizing all stakeholders and delegation is necessary during the implementation of the mental health screening tool and should reduce stress and utilize time more effectively. Also, any system processes, for example billing codes and the
mental health assessment tool should be ready and available for use. As a leader, taking steps to recognize how one can help improve processes and being open for suggestion will also be imperative. Also, the project leader will be available on site two full days a week to work with and support the healthcare providers and teachers with this change and new learning.

Elements of both a democratic leader and transformational leader will be incorporated into my approach. As a democratic leader the emphasis is on teamwork, criticism is constructive and decision making involves others (Mitchell, 2013). A transformational leader models a sense of purpose for the greater good, able to energize others who identify with their visions and goals and thus motivate them towards a change. Through teamwork and collaboration, they recognize and support individual contributions, and this results in self-actualization of the team members (Gabel, 2012). The transformational leadership model has been successfully used within healthcare and schools previously, and results in better staff satisfaction and improves staff innovation and motivation (Gabel, 2012; Ismail & Mydin, 2019).

Another potential limitation is that efficacy of the scoring of the PSC (Massachusetts General Hospital, 2018) and accuracy of outcomes depends on the ability of ones administering the tool. This also could make staff not want to use the tool and lead to incompetency and resistance. However, issues related to acceptance, competency and compliance among users could be solved by having hands-on simulations after the educational intervention to increase confidence. The Pediatric Symptom Checklist has also been developed as an online tool, in which the child would complete, so this will be encouraged as will reduce scoring error and reduce time resources (Mental Health America, 2022). The project leader will be making on-site visits after the integration of the tool to identify issues and work with healthcare providers and the teachers to score and interpret them.
Conclusions

Conduct Disorder and ODD are detrimental conditions that can impact children for the rest of their lives and has a high societal and economic burden (Fairchild et al., 2019). Healthcare providers and teachers are often the professionals that see the child and have interactions with the family at a consistent level while the child attends high school. Therefore, staff can form a trusting relationship with both child and family and are key to not only following the child’s academic and physical development, but also that child’s mental health. Lack of education and confidence about treating most childhood mental health conditions including these behavioral disorders is lacking within these settings (Balestra, 2019; Baum et al., 2019; Lempp et al., 2016). It is evident from the literature review that early identification and assessment of children with these disorders is imperative to improve outcomes and prevent future lifelong sequela.

An educational intervention in the school setting for healthcare providers and teachers and the integration of the PSC (Massachusetts General Hospital, 2018) into practice can help identify children at risk of possible disruptive and behavioral traits and identify risk of other mental health conditions. The project costs are modest but results in increasing returns on investment overtime as early identification and intervention has shown to improve outcomes and will reduce overall societal economic burden (Frick, 2016). Barriers of resistance exist, but hopefully using leadership strategies and resource utilization these barriers can be successfully conquered. The results of the project can advance education within the school setting around common pediatric mental health conditions, which is very much needed (Foy et al., 2019).
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objectives/mental-health-and-mental-disorders/increase-number-children-and-adolescents-serious-emotional-disturbance-who-get-treatment-mhmd-d01


# Appendix A

## Evidence Evaluation Table

<table>
<thead>
<tr>
<th>Citation</th>
<th>Design Method</th>
<th>Sample &amp; Variables Studied</th>
<th>Measurements &amp; Data Analysis</th>
<th>Findings</th>
<th>Appraisal Worth to Practice</th>
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<tbody>
<tr>
<td>Bakker, M., Greven, C., Buitelaar, J., &amp; Glennon, J. (2017). Practitioner review: Psychological treatments for children and adolescents with conduct disorder problems - a systematic review and meta-analysis. <em>Journal of Child Psychology and Psychiatry</em>, 58(1) 4–18.</td>
<td>Meta-analysis. No evident conceptual framework. Control group (placebo, waiting list, no treatment).</td>
<td>17 RCT studies fit inclusion/exclusion criteria. N = 1999. Sample was throughout different settings in the world. Independent Variable: Younger than age 18 years with CD diagnosis. One quantitative CD problem outcome reported. RCT of non-pharmaceutical intervention. Dependent Variable: Psychological treatments.</td>
<td>Controlled trial quality measured by standard definition for randomization &amp; Treatment efficacy measured by effect size. PRISMA used for article selection. Treatment efficacy measured by effect size.</td>
<td>Findings support use of psychological treatments for CD. Lack of evidence about what the best treatment is. Treatment more effective in children under 10 years of age. ADHD was the biggest co-morbidity. Lack of effect size with most studies.</td>
<td>Level I B Good Quality. Is feasible and generalizable as studies are taken from across the world. <strong>Strengths:</strong> Inclusion, exclusion criteria outlined. Flow diagram outlining studies is present. Results and conclusions are clearly outlined. <strong>Weaknesses:</strong> Independent and dependent variable not mentioned. Conclusions and recommendations: Future studies need to address CD onset, callous-unemotional traits and subtype and severity of aggression. More research is needed comparing specific interventions.</td>
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<td>Baum, R. A., King, M. A., &amp; Wissow, L. S. (2019). Outcomes of a statewide learning collaborative to implement mental health services in pediatric primary care. <em>Psychiatric Services, 70</em>(2), p 123–129.</td>
<td>Quantitative, quasi-experimental, one group pretest-posttest design. No conceptual framework evident.</td>
<td>Quality improvement program of onsite training within 29 primary care practices over 18 months in Ohio, USA. Independent Variables: Educational intervention and on-site trainings. Dependent Variables: Clinical Confidence.</td>
<td>Clinical confidence was measured throughout the intervention on a Likert scale survey given to providers. A total confidence score was measured over time using a linear regression model. A Pearson correlation coefficient was used to assess the relationship between change in clinical confidence</td>
<td>Clinical confidence increased over the course of the on-site trainings by an average of 20 percent. There is a positive correlation between intervention uptake and change in practice-mean clinical confidence from baseline to post-intervention.</td>
<td>Level II, B Good Quality. Study showed that clinicians have a lack of knowledge and confidence when treating pediatric mental health conditions in primary care. <strong>Strengths:</strong> Clinical confidence scale was designed and validated by within the clinics there. Feasible to replicate. <strong>Weaknesses:</strong> The researchers recognize their limitations. Study design was quasi-experimental as they were unable to use random assignment. Also, they were unable to validate the accuracy of diagnoses and the quality of prescribing practices.</td>
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<td>Bevilacqua, L., Hale, D., Barker, E. D., &amp; Viner, R. (2017). Conduct problems trajectories and psychosocial outcomes: A systematic review and meta-analysis. European Child &amp; Adolescent Psychiatry, 27(10), 1239–1260.</td>
<td>Quantitative, systematic review and meta-analysis of longitudinal studies. No conceptual framework evident.</td>
<td>13 studies, containing total N = 10,663 in USA, UK, Australia, New Zealand, and Belgium.</td>
<td>Independent Variables: Early onset persistent CD. Adolescent onset CD. Childhood limited CD. Low CD problems. Dependent Variables: Mental health (depression), cannabis use, alcohol use, self-reported aggression, official records of antisocial behavior, poor general health, poor education, and poor employment</td>
<td>Teacher Report Form. Child Behavior Checklist (self-report). Young Adult Health Survey. Clinical Interview Scale (depression). Diagnostic Interview Schedule. WHO Sexually Instrument. Rutter Child Scale (antisocial behavior). Strengths and Difficulties Questionnaire (mother reported). PRISMA used for article selection. STATA 13 used to compute pooled effect size and Confidence Intervals. Random effects model.</td>
<td>Early onset participants showed significantly higher risk of poor outcomes followed by adolescent onset, childhood-limited onset and then participants in low group. Early onset participants also show highest risk of poor psychological outcomes.</td>
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<td>Border, R., Corley, R. P., Brown, S. A., Hewitt, J. K., Hopfer, C. J., McWilliams, S. K., Rhea, S. A., Shriver, C. L., Stallings, M. C., Wall, T. L., Woodward, K. E., &amp; Rhee, S. H. (2018). Independent predictors of mortality in adolescents ascertained for conduct disorder and substance use problems, their siblings and community controls. <em>Addiction, 113</em>(11), 2107–2115</td>
<td>Prospective, longitudinal, cohort design. Mortality Analysis. No conceptual framework evident.</td>
<td>N = 3766 Adolescents had conduct disorder 1463, their siblings 1399 and 904 controls from community. Adolescents with conduct disorder were ascertained through court records, juvenile correctional system, and substance abuse treatment programs. In San Diego, California and Denver, Colorado, USA.</td>
<td>Composite International Diagnostic Interview-Substance Abuse Module. Diagnostic Interview Schedule for Children (CD symptoms). National Death Index</td>
<td>Univariate frailty models and multivariate frailty models, P &lt; .005 used to determine significance.</td>
<td>Mortality hazard for adolescents who had conduct disorder and their siblings was 4.9 times higher than controls (hazard ratio 1.18, p &lt; .001). Adolescents and their siblings with conduct disorder have a greater risk of premature death than community controls. Adolescents with CD had higher mortality risk than siblings, but siblings much higher than controls.</td>
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<td>Donohue, P., Goodman-Scott, E., &amp; Jennifer, B. B. (2015). Using universal screening for early identification of students at risk: A case example from the field. Professional School Counseling.</td>
<td>Two-year pilot study. Quality improvement project. School psychologists evaluated mental health assessment tools then choose the paper and pencil version of the BASC-2 BESS administered students. Then at-risk students received individualized and group psychotherapy.</td>
<td>N = 944 students in years 4th to 10th grade in New England, USA.</td>
<td>Base-2 BESS scores were used.</td>
<td>The BASC-2 BESS scores were analyzed with t scores. Scores below 60 indicated students exceeded the expectations for school functioning, scores between 61 and 70 indicated student elevated risk, and scores of 71 or higher indicated elevated risk.</td>
<td>Found issues with the assessment tool and students' comprehension of this. The identification of students in need of support lead to early intervention and a greater likelihood of positive student outcomes. Data input was time consuming.</td>
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<td>Systematic review and synthesis of evidence-based research. Expert opinion. No conceptual framework evident.</td>
<td>Not directly applicable as a policy statement but focuses on expert opinion and evidence-based research on pediatric mental health conditions seen in pediatric primary care.</td>
<td>Not applicable as a policy statement.</td>
<td>Expert opinion and even though a synthesis of the evidence, no data analysis mentioned.</td>
<td>Increases in childhood mental health morbidity and mortality increases urgency for the need to improve training and competence of PCP. Pediatric mental health is a national priority of the American Board of Pediatrics. Gives evidence-based behavioral recommendations for children with disruptive and aggression problems and examples of brief interventions to use in primary care. Outline's competencies that PCP can analyze and interpret results from mental health screening and if higher level of care is needed criteria outlined in an algorithm and competencies to collaborate with specialized mental health providers.</td>
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<td>Pilot study: A within subject control group design. Within 15 elementary schools in Germany. One day training for teachers which includes knowledge on a school-based program externalizing behavior problems (SCEP). Then the teacher will pick a target child and use functional behavioral analysis using “SMART” goals with coaches who were child psychotherapists. Plan, adapt, and design interventions together. There were three tiers of interventions based on the severity of disruption of the child.</td>
<td>N = 60 target children, who had received a diagnosis of ADHD, CD or ODD.</td>
<td>Independent Variable: SCEP training. Dependent Variables: Primary outcome measures are attention issues and rule breaking behavior measured by the SKAMP-ge. Secondary outcome variables are the problem checklist for ADHD &amp; ODD. Teacher behavior: The teacher strategies questionnaire. Problem behaviors rated on scale of 1-6 (low to high intensity). Teacher stress: The depression subscale of depression anxiety stress scales. Teacher self-efficacy: Assesses teachers’ personal convictions regarding ability to manage professional challenge.</td>
<td>Descriptive statistics. Data analyzed using multilevel modeling and effect sizes. Data analyzed using multilevel modeling and effect sizes. Completed a power analysis.</td>
<td>SCEP reduced problem behavior in lessons significantly and attention was significantly increased. Teachers significantly changed their teaching styles.</td>
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<td>Delphi approach self-report questionnaire and interviews. PCP and pediatricians had to rate 17 CAP related knowledge and 13 CAP related skills by importance in daily practice.</td>
<td>PCP N = 241 and pediatricians N = 194. Total N = 435 In Germany.</td>
<td>Independent variables: CAP related knowledge and skills. Dependent variables: Survey responses</td>
<td>CAP related knowledge and skills were taken from standard CAP textbooks and research literature. Mann-Whitney test, Kruskal-Wallis test, Wilcoxon test and Spearman Correlation to evaluate the association between CAP exposure and perceived importance of skills and knowledge.</td>
<td>Both pediatricians and PCP ranked CD out of 5 (very important) as rank 4 for knowledge need. Out of the 17 CAP related knowledge, physicians ranked CD 8th rank of importance and pediatricians ranked CD as of 5th importance</td>
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<td>National Institute for Health and Care Excellence. (2017, April).</td>
<td>Systematic review and synthesis of evidence-based research. Expert opinion. No conceptual framework evident.</td>
<td>Not a research study but audience is children with CD and those in contact with the Criminal Justice System within the UK.</td>
<td>Not applicable as a Clinical Guideline.</td>
<td>Expert opinion and synthesis of studies so no direct data analysis used.</td>
<td>Assess for other potential co-morbidities that occur with CD: ADHD, substance misuse, depression &amp; PTSD. Initial assessment: SDQ. Complete comprehensive assessment and care plan. Parent training programs. Offer group social and cognitive problem-solving and multimodal programs to children. Offer Methylphenidate or Atomoxetine for management of ADHD in children with CD. Providers to be aware of diagnostic bias and potential stigma due to diagnosis.</td>
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<td>The quantitative study is a retrospective analysis. No conceptual framework mentioned.</td>
<td>Nationwide inpatient sample, total N = 442,824 children under 18 years old with CD (n = 32,345) and a comparison group of children with another psychiatric diagnosis (n = 410,479) who had been hospitalized in the USA.</td>
<td>Independent Variables: Primary diagnosis of CD. Primary diagnosis of other psychiatric conditions. Dependent Variables: Demographic Predictors: Age, gender, race, median household income. Comorbidities: Alcohol abuse, drug abuse, psychosis, and depression.</td>
<td>Nationwide Inpatient Sample. International Classification of Diseases Diagnosis Codes (ninth revision). Logistic Regression Model used to generate odds ratios between both groups.</td>
<td>African Americans under 11 years of age are at highest risk for inpatient admission. Higher risk of psychosis and depression. It is also found that children with CD in low-income families have a 1.5 times higher risk of inpatient admission than high income families. Discusses diagnostic bias.</td>
</tr>
</tbody>
</table>

Appendix B

Fawcett and Ellenbecker’s Conceptual Model of Nursing and Population Health (2015)
Appendix C

Pediatric Symptom Checklist (PSC-Y)

Please mark under the heading that best fits you:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Complain of aches or pains</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Spend more time alone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Tired easily, little energy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Fidgety, unable to sit still</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Have trouble with teacher</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Less interested in school</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Act as if driven by motor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Daydream too much</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Distract easily</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Are afraid of new situations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Feel sad, unhappy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Are irritable, angry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Feel hopeless</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Have trouble concentrating</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Less interested in friends</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Fight with other children</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Absent from school</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. School grades dropping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Down on yourself</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Visit doctor with doctor finding nothing wrong</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Have trouble sleeping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Worry a lot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Want to be with parent more than before</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Feel that you are bad</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Take unnecessary risks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Get hurt frequently</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Seem to be having less fun</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Act younger than children your age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Do not listen to rules</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Do not show feelings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. Do not understand other people's feelings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. Tease others</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. Blame others for your troubles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. Take things that do not belong to you</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. Refuse to share</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix D

Gap Analysis

<table>
<thead>
<tr>
<th>Best Practice</th>
<th>Best Practice Strategies</th>
<th>How Site Practices Differ from Best Practices</th>
<th>Barriers to Best Practice Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Childhood Mental Health Assessment Tool Integration of Mental Health Care into Healthcare and Classroom Workflow</td>
<td>Collaboration Between Healthcare Staff, Teachers &amp; Mental Health Providers Standardized Mental Health Assessment Tool</td>
<td>Absence of Assessment Tool used by Stakeholders Siloed Stakeholder Activities</td>
<td>Perceived Lack of Time Resources, Lack of Knowledge, and Confidence Historical Lack of Teachers Focused upon Childhood Mental Health &amp; Collaboration and is a New Way to Practice Within School System</td>
</tr>
</tbody>
</table>
Appendix E

Gantt Chart
Appendix F

Work Breakdown Structure

1. Healthcare Staff and Teachers Based Educational Intervention and Integration of Mental Health Assessment Tool: Improving Outcomes Through Increasing Knowledge and Confidence of Behavioral Disorders in Children.

1.1 Project Initiation

1.1.1 DNP committee approval of project.
1.1.2 Establish stakeholder buy-in from healthcare staff and Teachers.
1.1.3 Organizational support letter from identified project site.
1.1.4 Create and share project timeline with stakeholders.

1.2. Project Planning

1.2.1 Perform needs assessment

1.2.1.1 Conduct informational interviews.
1.2.1.2 Create Gap, SWOT analyses.
1.2.1.3 Formulate Aim Statement.
1.2.1.4 Formulate GANTT chart.

1.2.2 Identify theoretical frameworks.
1.2.3 Identify measurable objectives.
1.2.4 Define budget items.

1.3. Project Development/Execution

1.3.1 Create educational intervention toolkit.

1.3.1.1 Select mental health screening tool determined by best practice.
1.3.1.2 Design educational intervention about behavioral disorders in children.
1.3.1.3 Design qualitative questions on thoughts of use of mental health assessment tool and educational intervention.

1.3.2. Create measurement tools: pre-and post-education, knowledge and confidence level Likert scale.
1.3.3 Identify if mental health assessment tool will be used on hand-held device or pen and paper.
1.4. Project Implementation

1.4.1 Deliver pre-intervention knowledge and confidence Likert scales directly before educational PowerPoint presentation.
1.4.2 Administer educational PowerPoint and introduce mental health assessment tool.
1.4.3 Conduct post-intervention knowledge and confidence Likert scales directly after educational PowerPoint presentation. With qualitative question about educational intervention.
1.4.4 Meet healthcare staff and teachers within one week following intervention to establish if any questions about implementing mental health assessment tool.
1.4.5 Two months post intervention send survey to establish thoughts on use of mental health assessment tool in the form of a qualitative question.
1.4.6 Conduct confidence level Likert scale survey at two months post educational intervention.

1.5. Data Analysis

1.5.1 Using SPSS analyze confidence level Likert scales pre-post intervention and two-months post intervention.
1.5.2 Using manual transcription and evaluation, determine key themes in post-intervention qualitative responses.

1.6. Project Close Out

1.6.1 Present findings to site-specific and district stakeholders.
1.6.2 Make recommendations for future applications.
1.6.3 Present to DNP Chair and Committee.
## Appendix G

### Communication Matrix

<table>
<thead>
<tr>
<th>Contact Person</th>
<th>Frequency</th>
<th>Communication Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNP Chair</td>
<td>As needed</td>
<td>Phone, email, Zoom meetings</td>
</tr>
<tr>
<td>Dr. Trinette Radasa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DNP Committee Members</td>
<td>As needed</td>
<td>Phone, email</td>
</tr>
<tr>
<td>Site Advisors</td>
<td>Once a week</td>
<td>Phone, email, text, face to face meetings</td>
</tr>
<tr>
<td>Participants</td>
<td>As needed</td>
<td>Phone, email, face to face meetings</td>
</tr>
</tbody>
</table>
### Appendix H

**Strengths, Weaknesses, Opportunities and Threats Analysis of Educational Intervention**

<table>
<thead>
<tr>
<th>Strengths (+)</th>
<th>Weaknesses (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Strong evidence to suggest that healthcare staff and teachers have a lack of knowledge and confidence identifying and assessing behavioral disorders in children.</td>
<td>• Potential for the non-compliance and non-acceptance of mental health assessment tool.</td>
</tr>
<tr>
<td>• Primary and secondary prevention increases lifelong outcomes of children with these behavioral disorders and associated comorbidities.</td>
<td>• Due to constraints with unions, staff cannot be mandated to complete this training.</td>
</tr>
<tr>
<td>• The mental health assessment tool is free, has good reliability and validity and is endorsed by the National Quality Forum.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities (+)</th>
<th>Threats (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Create a culture of primary and secondary prevention on a district wide scale.</td>
<td>• Healthcare staff and teacher workflow too busy to implement mental health assessment tool into practice.</td>
</tr>
<tr>
<td>• Address pediatric mental health competencies within school setting.</td>
<td>• Healthcare staff fear of stigmatization and labeling of children with behavioral disorders.</td>
</tr>
<tr>
<td>• Encourage a team approach and collaboration with mental health services.</td>
<td></td>
</tr>
</tbody>
</table>
# Appendix I

## Proposed Budget

<table>
<thead>
<tr>
<th>Budget Item</th>
<th>Description</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager and Training Expense</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RN Salary in project planning</td>
<td>$84.00 x 135 hours</td>
<td>$11340.00</td>
</tr>
<tr>
<td>Travel time</td>
<td>Mileage at $0.625/mile (16 trips at 50 miles round trip)</td>
<td>$500.00</td>
</tr>
<tr>
<td>Educational Intervention for Doctor and FNP</td>
<td>$125.00 x 1 hour</td>
<td>$250.00</td>
</tr>
<tr>
<td>Educational Intervention Training for Teachers/Counselors</td>
<td>$50.00 x 1 hour</td>
<td>$2500.00</td>
</tr>
<tr>
<td>Educational Intervention for Registered Nurse (RN) and Medical Assistant (MA)</td>
<td>RN $84.00 x 1 hour</td>
<td>$134.00</td>
</tr>
<tr>
<td></td>
<td>MA $25.00 x 1 hour</td>
<td></td>
</tr>
<tr>
<td>Supplies and Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pediatric Symptom Checklist</td>
<td>Free unlimited use on paper and electronically.</td>
<td>$0</td>
</tr>
<tr>
<td>Office Supplies</td>
<td>Paper, binder, printer ink and sheet protectors</td>
<td>$200.00</td>
</tr>
<tr>
<td></td>
<td>Total = $14924.00</td>
<td></td>
</tr>
</tbody>
</table>
Cost Benefit and Avoidant Analysis

Calculated Funding per Student Day

Annual expenditure cost per average daily attendance (ANA) $15,465.33

Divided by Number of School Days 180

Cost per Student/Day $85.92

Calculated Daily Loss of Funding Amount Due to Chronic Absenteeism (California)

Project School Site Total Enrollment 1632 students

2020/2021 Chronic Absenteeism Rate (14.7%) 240 students

Percentage Reasonably Attributable to Mental Health (MH) 17% 48 students

Multiplied by Cost per Student/Day $85.92

Daily Loss of Funding d/t MH $4124.16

Annual Loss of Funding d/t MH (based on school year 180 days) $74,234,880

Data from the California Department of Education (2022) and Education Data Partnership (2022).
Appendix J

Data Collection Tool

Clinical Confidence Likert Scale Pre and Post Education

<table>
<thead>
<tr>
<th></th>
<th>1 Not Confident</th>
<th>2 Slightly confident</th>
<th>3 Somewhat Confident</th>
<th>4 Confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>How confident do you feel identifying the signs and symptoms of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behavioral and conduct type disorders in children?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How confident do you feel in the process of referral when</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>concerned about childhood behavioral and conduct type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>disorders?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How confident do you feel in using a general child mental</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>health assessment tool?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How confident do you feel when dealing with students with</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>disruptive behavior?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Higher scores represent more clinical confidence. Lower scores represent lower clinical confidence. Adapted from Baum et al. (2019).
### Appendix K

**Data Collection Tool**

**Mental Health Literacy Likert Scale**

<table>
<thead>
<tr>
<th>1 Strongly Disagree</th>
<th>2 Disagree</th>
<th>3 Agree</th>
<th>4 Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am aware of resources for children with conduct disorder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have the tools that I need to identify students at risk of conduct disorder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have the tools I need to identify students at risk of other mental health disorders</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Higher scores represent higher mental health literacy and knowledge. Lower scores represent lower mental health literacy and knowledge. Adapted from O'Connor & Casey (2015).
Appendix L

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

General Information

Last Name: Kilford
First Name: Chantel
CWID Number: 20625529
Semester/Year: Fall 2022
Course Name & Number: NP Qualifying Project: Prospectus Development. NURS-749B
Chairperson Name: Dr. Trinette Radasa
Advisor Name: Dr. Trinette Radasa
Second Reader Name: Dr. Susan Mortell

Project Description

Title of Project: School-Based Development and Implementation of an Educational Toolkit

Brief Description of Project

The idea for the Doctorate in Nursing project is an evidence based educational toolkit for healthcare staff, school counselors, and teachers within a high school about behavioral disorders in children and adolescents. There will also be integration of a relevant mental health assessment tool in which all staff will be given education and then follow up support on its use. It is important for identification of behavioral disorders such as conduct disorder (CD) and oppositional defiant disorder (ODD) because these increase mortality risk, mental health, and substance abuse disorders later in life. Both also impact a child’s academic progress and potential for criminality and is associated with a high societal and economic burden (Fairchild et al., 2019).

There is also evidence to suggest that healthcare workers and teachers are not educated or confident about identification of these disorders. Both, healthcare staff and teachers do
not receive adequate training about these disruptive disorders within their schooling curriculum (Balestra, 2019; Baum et al., 2019; Hanisch et al. 2020).

School based providers are key to identify, assess, give brief intervention, and refer (if necessary) to mental health providers. School based providers are often the first to see the child and on a regular basis, so a trusting relationship with child and caregivers can form. School based providers will also be educated about co-morbidities that commonly coexist with CD and ODD. Early preventive interventions have been consistently shown to reduce the risk of CD and ODD escalating and therefore improve lifelong outcomes (Frick, 2016).

AIM Statement: What are you trying to accomplish?

By May 2023, develop, implement, and evaluate an educational toolkit surrounding childhood behavioral disorders and use of a mental health assessment tool in children for high school-based providers. Providers will include healthcare staff (family nurse practitioner, doctor, psychiatric nurse practitioner interns, registered nurse, and medical assistants), school counselors, school counselor interns and teachers. The desired outcome is that school based providers knowledge of behavioral childhood mental health disorders and confidence when encountering and assessing for these disorders, will be increased by at least 20% post educational intervention.

Brief Description of Intervention:
A survey prior to designing the educational toolkit will be forwarded to teachers, counselors, and healthcare staff to determine what educational needs they require and if there is a general interest in completing the educational intervention. Then there will be a survey immediately before the educational intervention that will establish known knowledge, through mental health literacy assessment and confidence about CD, ODD and the most common co-morbidities. The educational intervention will be an online learning module PowerPoint/U-Tube video about assessment, identification, community resources and strategies to assist in management of children with these disorders. There will also be education about a reliable, valid assessment tool that staff can use to assess behavioral disorders and co-morbidities. Immediately after the intervention, a survey with the same questions will assess knowledge and confidence. Two months after intervention another survey via email will be sent to assess clinical confidence. On-site visits will be integrated throughout the process to assist with the utilization of the assessment tool and general support. A qualitative survey will be sent immediately pre and post educational intervention to evaluate staff thoughts about the educational toolkit.

How will this intervention be implemented?
The project will be implemented within a high school in Alameda County, California. The stakeholders will be informed about the educational toolkit through on-site visits and email. The educational toolkit will be online, but on-site visits will be offered afterwards to provide support.
**Outcome measurements: How will you know that a change is an improvement?**

Measurement will be ascertained through pre and post scores about confidence and knowledge measured by mental health literacy. There will be measurement of both knowledge and clinician confidence pre and immediately post administration of the educational toolkit, and then two months post the administration of the tool kit. Both knowledge and confidence levels will be increased by 20%. To protect privacy and confidentiality, stakeholder’s participation in surveys and exams will not have any personal identifiers. Consent for the surveys and exam will be obtained before completion.
**Title of Project:** School-Based Development and Implementation of an Educational Toolkit

<table>
<thead>
<tr>
<th>Mark an “X” under “Yes” or “No” for each of the following statements:</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The specific aim is to improve performance on a specific service or program and <strong>is a part of usual care.</strong> All participants will receive standard of care.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The project is <strong>not</strong> 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 <strong>not</strong> follow a protocol that overrides clinical decision-making.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>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 <strong>not</strong> develop paradigms or untested methods or new untested standards.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does <strong>not</strong> seek to test an intervention that is beyond current science and experience.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The project has <strong>no</strong> funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>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., <strong>not</strong> a personal research project that is dependent upon the voluntary participation of colleagues, students and/or patients.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>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: “<strong>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.</strong>”</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
Answer Key:

- If the answer to all these items is “Yes”, the project can be considered an evidence-based activity that does not meet the definition of research. IRB review is not required. Keep a copy of this checklist in your files.
- If the answer to any 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

References


https://doi.org/10.1016/j.nurpra.2018.11.007


https://doi.org/10.1038/s41572-019-0095-y


https://doi.org/10.1177/0081246316628455


https://doi.org/10.1177/0143034320958743
DNP Statement of Determination
Evidence-Based Change of Practice Project Checklist Outcome

☐ 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: Kilford  
Student First Name: Chantel  
Student Signature: C Kilford  
Date: 29th August 2022

Chairperson Name: Dr Trinette Radasa  
Chairperson Signature:  
Date:

Second Reader Name: Dr. Susan Mortell  
Second Reader Signature:  
Date:

DNP SOD Review Committee Member Name: 
DNP SOD Review Committee Member Signature:  
Date:
Appendix M

Support from Agency

Miller, Waylon

to me

I fully support Chantel Kilford working with HHS staff to complete her Doctor of nursing project here at HHS.

Waylon Miller
Principal
Hayward High School
510-723-3170 x61102
Haywardhigh.net

"To touch the hearts of students is the greatest miracle you can perform" - St. Jean Baptiste de La Salle"