

IMPLEMENT ACE SCREENING TOOL IN A PSYCHIATRIC OUTPATIENT CLINIC:
A QUALITY IMPROVEMENT PROJECT

by

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ABSTRACT

Adverse childhood experiences (ACEs) can decrease some of the identified leading causes of death in adults. These leading causes of death include heart disease, cancer, respiratory diseases, diabetes, and suicide. Adverse childhood experiences cause toxic stress, and the long-term effects of which follow people their entire lives. Screening of ACEs can identify ACEs early and allow for early prevention, referrals for additional services and supports to reduce long term health effects. Despite recommendations, psychiatric providers do not consistently screen for ACEs, ultimately missing opportunities to prevent ACEs with early intervention in childhood for those with higher risk or occurrence of ACEs. This quality improvement project took place a pediatric psychiatric outpatient clinic. This project focused on incorporating recommendations from studies completed by Centers for Disease Control and Prevention and Kaiser Permanente focusing on identifying high ACE scores and offering preventative supports. Lewin's three step change theory was used to guide this quality improvement project. The project was conducted for six weeks, collecting data on an excel spreadsheet identifying patients with high ACE scores for psychiatric providers. At the end of the quality improvement project, minimal data was able to be collected due to the barriers of the pandemic. The quality improvement project sought to identify patients with high ACE scores in order to offer additional preventative interventions, supports and referrals to decrease long term health issues. ACEs are a critical public health issue due to the profound negative and lasting effects on the health and wellness of a child later in life. Psychiatric pediatric outpatient clinics are settings in which ACEs can be identified and implementing interventions and supports can help children build resilience and decrease the effects of the adverse experiences and improve patient outcomes.

CHAPTER ONE

INTRODUCTION

Problem Identification

Screening for and addressing adverse childhood experiences (ACEs) can decrease some of the identified leading causes of death in adults. These leading causes of death include heart disease, cancer, respiratory diseases, diabetes, and suicide. Adverse childhood experiences cause toxic stress, the long-term effects of which follow people their entire lives. Screening and prevention strategies are correlated with higher academic achievement as well as decreasing suicidal behaviors, incarceration rates and substance use in the adolescent population. Strategies to reduce ACEs include early prevention, referrals for additional services, and support (Wyckoff, 2019). Unfortunately, ACEs are common: approximately 61% of adults surveyed in 25 states report having one type of ACE, and 1 in 6 adults report they had four ACEs or more. Screening of ACEs could reduce chronic health conditions. According to Centers for Disease Control and Prevention (2021), 1.9 million cases of heart disease and 21 million cases of depression could be prevented with early intervention in childhood for those with higher risk or occurrence of ACEs. The effects of ACEs are also expensive, costing families, communities, and society hundreds of billions each year which ultimately increase healthcare costs overall (CDC, 2021). Despite the data surrounding the impacts of ACEs, many psychiatric providers do not use an ACE Screening tool to calculate ACEs and offer early interventions that could potentially decrease toxic stress and prevent chronic health conditions in a child's future.

Background and Significance

ACEs increase the risk of chronic diseases and mental health issues as well as risk of childhood injury. ACEs are potentially traumatic events that occur between the ages of 0-17 years of age. These traumatic events have long term negative effects on the health of the child into adulthood (Centers for Disease Control and Prevention, 2021). These experiences, including divorce, substance abuse in the household, violence in the household, mental health issues of a family member, incarcerated household member, abuse, neglect, lack of basic care are grouped together into three areas: abuse, neglect, and dysfunction in the household (Rariden, Smithbattle, Yoo, Cibulka and Loman, 2021).

The CDC and Kaiser Permanente (1997) reviewed two sets of data to examine the relationship between the experience of child abuse and neglect and household challenges and the development of chronic diseases that lead to death as adults. Major outcomes of the ACE study found that some populations are increasingly vulnerable to experience ACEs because of their social and economic conditions in their environment. The findings included a graded dose-response relationship between ACEs and negative health and wellness outcomes. This means that as the number of ACEs increase so does the risk for negative health outcomes (CDC, 2021).

The presence of ACEs can significantly affect a child's brain development and structure, which disrupts the cognitive and physical development of the child. A major area of impact of early adversity on the brain is in the stress response system. In an adverse environment, children are continually exposed to danger and stress, the child's brain reacts by releasing large amounts of adrenaline and cortisol. This begins the "fight or flight" response, which is managed by the hypothalamic-pituitary-adrenal (HPA) axis. This area of the brain responds by going into

“survival mode,” which means all higher functions are limited. In summary, the hyperactivation of the adrenaline and cortisol negatively impacts the development of other areas of the brain. The high doses of stress cause the brain to shut down when in survival mode, and causes the child to have difficulties focusing, concentration and performing executive functions (Hesterman, 2021).

Recent research has made it apparent that ACEs are a critical public health issue due to the profound negative and lasting effects on the health and wellness of a child later in life. While exposure to any adverse experience in childhood is detrimental, the accumulation of multiple adversities in childhood has a cumulative effect on the child’s development (Sacks & Murphey, 2018). Psychiatric pediatric providers in outpatient clinics often ask patients and guardians to fill out forms and screenings. This is often done at the initial appointments and can be completed prior to seeing the provider. This is a setting in which detecting childhood adversity and implementing interventions and supports can help children build resilience to decrease the effects of the adverse experiences (Marsicek, Morrison, Manikonda, O’Halloran, Labutta, & Brinn, 2019).

In a National Survey of Children’s Health reports that Montana has among the highest reported ACE scores in the U.S. In fact, 52% of Montana children aged 0-17 reported one ACE, with 17% having three or more ACEs. Compared to other states, Montana has the highest percentage of children living in a home with a parent with alcohol or drug problems (19%) or with mental illness (14%). Montana is in the top quarter of states for percentage of children experiencing divorce or separation (26%) and domestic violence (10%). The most common

ACE that children report in Montana, and nationally, is economic hardship at 28% (Montana Department of Public Health and Human Services, 2018).

In 2019 the first ever CDC analysis provided estimates of potential to improve American's health by preventing adversity in childhood. The CDC recommends healthcare professionals to take advantage of all available evidence and join in the effort to prevent childhood ACEs and improve outcomes (CDC, 2019).

Statement of Problem/Purpose of Project

Psychiatric pediatric providers at the outpatient clinics do not consistently engage in assessing the ACE screenings. Providers at the clinic do acknowledge and understand the importance of screening and early interventions as it relates to decreasing adversity and improving resilience long term in the children they serve. However, barriers such as process flow, time, and patient/guardian perspective cause apprehension to conduct the ACE screening on intake. Therefore, the purpose of the project is to introduce ACE screening for children who present to the outpatient clinic.

Identified Evidence-Based Intervention

The intervention selected for the quality improvement project is to implement a process for ACE screening on intake to identify children with high ACE scores. The tool selected for this project is the Pediatric ACES and related life Events Screener (PEARLS) ACE screening tool, which come in two forms, de-identified screening or identified screening. This screening tool has been successfully implemented into a wide range of clinical settings (Aces aware, 2021).

To implement a new process into an organization, it is useful to use the change management theory created by Kurt Lewin. Lewin's describes these three steps as unfreezing,

changing, and refreezing. Change management is considered the fundamental approach to managing change. It is also called CATS, meaning changing as three steps. To create change this framework will provide the vehicle toward this aim and be the impetus to create organized change (Cummings, Bridgman, & Brown, 2015).

The organization's mission is to "heal, help, and inspire hope." By improving patient and guardian's education on the adverse effects of a high ACE scores, the quality of care provided to the patients will improve, it will continue to promote healing and decrease chronic health conditions in their future, as well as improve resilience. Stakeholders have already had "buy in" to this project and we are in the initial stages of planning and preparing to implement the process of using the PEARLS ACE screening tool for initial intakes, in the very near future.

CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

The following chapter reviews the literature that will inform the implementation of this project. The data used to support these recommendations were obtained from research focusing on children and adolescents with adverse childhood experiences. Three organizations have contributed most significantly to the research on ACEs in children: Aces Aware, Centers for Disease Control and Prevention (CDC) and American Academy of Pediatrics (AAP). The data from these organizations will be referenced most heavily.

Search Process

Databases were identified in partnership with Montana State University librarians to ensure a comprehensive literature review. The data bases selected include Cumulative Index of Nursing (CINAHL), Medical Literature Analysis and Retrieval System Online (MedlinePlus), Web of Science, MeSH, and Psychological Information Database (PsycINFO). Search terms used include 1) adverse childhood experiences AND prevention, 2) adverse childhood experiences AND child, 3) approach AND adverse childhood experiences 4) adverse childhood experience AND screening AND clinic.

Reviewing the Literature

In 1998 Felitti and colleagues published a seminal study known as the ACE study which identified a dose-response relationship between chronic childhood toxic stress and leading causes of death in the United States (U.S.). Kaiser Permanente health plan members, numbering approximately 9,508 members, engaged and responded in a 250-question survey where seven

categories of childhood trauma, also known as ACEs, were evaluated against measures of disease, health status and adult risk behaviors. The seven categories included: physical, psychological, and sexual abuse; violence against the mother; living in a home with members having substance abuse issues; living in a home with members that were mentally ill or suicidal; or having incarcerated family members. The research suggested that over half of the participants in the study had experienced one ACE, while 25% had experienced two or more ACEs. The results suggested a relationship between the participants' number of ACEs and diseases including substance abuse, mental illness such as depression and suicide attempts, heart attack, chronic obstructive pulmonary disease (COPD) and various cancers (Felitti et al.,1998). This study does not make recommendations specifically for providers to implement ACE screenings into practices, however the evidence does suggest that high ACEs are correlated with negative health outcomes.

According to Felitti (2017), the medical arena has been slow to integrate any of the findings of the ACE study. However, recently awareness has increased and may indicate a desire for medical professionals to be aware and participate in the goal to improve patient outcomes. Felitti states that in pediatrics, risk may be found from the ACE score of parents rather than the child who cannot utilize verbal communication or have not lived a long enough life to have experienced some of the adversities listed in the ACE screening. He suggests pediatric clinics support changes in processes to start screening parents for ACEs to inform treatment of the child. This process has been easily accepted in clinics for 4-month infant check-ups: parents and guardians accepted the process and there was no loss of productivity in the clinic. In adult clinics, the 2017 study found that using a simple medial history questionnaire to obtain sensitive

information from patients was helpful. In a study by a large Kaiser cohort of 130,000 members undergoing medical treatments and evaluations, this led to a 35% reduction in office visits and an 11% reduction in emergency room visits over a year (Felitti, 2017).

The three primary organizations referenced recommend implementation of ACE screening in outpatient clinics to improve early intervention decrease chronic health conditions and improve long term resilience. These organizations recommend clinicians in outpatient clinics incorporate ACE screening into their practices and encourage clinicians to make referrals based on scores (Wyckoff, 2019).

Specifically, the CDC encourages approaches to clinics and clinicians to lessen immediate and long-term harms of ACE exposures. The evidence shows that the outpatient setting can offer a unique opportunity to identify and address ACE exposures. Integrated programs targeting the whole health of the patient and family are associated with improved child development and emotional and behavioral functioning; they are also associated with positive impacts on parent child attachment, and positive parenting behaviors (CDC, 2021).

According to Aces Aware (2021), and recommended by the CDC and AAP, outpatient clinics and their clinicians can assess risk of toxic stress upon intake. A pilot of implementing a pediatric ACE screening tool was done in a large pediatric setting using a deidentified tool (ACEs Aware, 2021).

Strengths and Limitations of the Evidence

The three organizations reviewed for this project are all considered highly regarded professional organizations within the field of psychiatry, pediatrics, and population and public health. Among the three organizations, there are many similarities among the recommendations.

Specifically, all three organizations recommend implementing a process for ACE screening in pediatric outpatient practices. The evidence reviewed suggests a positive impact on children that are identified early with high ACE scores based on offered interventions and supports, and long term in promote resiliency.

Finally, the ACE study at Kaiser Permanente's San Diego Health Appraisal Clinic, included over 45,000 adults. Limitations considered include the data regarding adverse childhood experiences are based on self-report, retrospective, and can only associate between childhood exposure and health risk behavior, status, and diseases as an adult. This can ultimately limit inference of causality. Strengths of this study are the estimates of prevalence of childhood exposures are close in estimates from national surveys, which indicate that the experiences of the participants in this ACE study are comparable to the larger population of adults in the United States. Following this study, articles in the medical literature are alerting the health professionals to the comprehensive strategies needed to identify and intervene early with children and families that have high ACE scores, and it is directly related to their health outcomes. These strategies are focused on pediatric clinics, emergency medicine and public health (Felitti, et al,1998).

Importance of Practice Change

Substance Abuse and Mental Health Services Administration (SAMHSA) has been a leader amongst federal agencies to develop trauma-informed and resilience building policies and practices. SAMHSA has played a significant role raising awareness of ACEs and how to incorporate the research findings into practices and programs. SAMHSA funded National Child Traumatic Stress Network (NCTSN) to raise the standard of care and improve access to services for traumatized children, their families, and communities in the US. The goals are to raise

awareness of the impact of child traumatic stress, create trauma-informed programs, and ensure that there is a comprehensive trauma-informed continuum of care across health, mental health, education, and law enforcement (SAMHSA, 2017).

Resilience plays a significant role in the prevention and reduction of negative effects of toxic stress caused by ACE. Implementing evidence-based interventions and supports following an identified ACE score, can facilitate supportive adult-child relationships to improve resilience in youth (Garner, 2013). Additional strategies include growth in self-efficacy, providing opportunities to strengthen skills and self-regulatory capacities, promoting sources of faith, hope and cultural traditions. The strengthening resilience factors through early intervention will help minimize the effects of toxic stress on children (Franke, 2014). The development of resilience is one's own personal journey and is individualized for everyone. An individual will react to toxic stress and trauma differently than others due to varying coping strategies that one has. The building of resiliency involves perseverance to overcome and deal with the experience of toxic stress and traumatic life events (AAP, 2014).

The effects of toxic stress that is caused by ACE can create vulnerability which is individual to each person. Some factors that increase the vulnerability of an individual to toxic stress include the individual's sensitivity to psychological stress, ability to access resources, lack of cognitive and behavioral resources, and the lack of or poor social supports. Additional factors that increase a person's vulnerability to toxic stress include developmental delays, harsh treatment or abuse by a parent or caregiver, and lack of or maladaptive coping skills. To decrease the vulnerabilities to adverse childhood experiences, and the effect of toxic stress, and

traumatic events, a child must have predictable life routines, family stability, and prevention of poverty (Franke, 2014).

These adverse childhood adversities alone are enough to encourage the importance of a change in practice in psychiatric outpatient clinics for children. It is of utmost importance that pediatric providers implement processes for ACE screenings in order identify high ACE scores early, and to refer patients to additional interventions and supports, to mitigate chronic health conditions for children with high ace scores. Early intervention is key to improving patient health outcomes and promote resiliency.

CHAPTER THREE

QUALITY IMPROVEMENT PROJECT IMPLEMENTATION

Introduction

Lewin's three step change theory looks at behavior as the result of driving and restraining forces, which work in opposite directions. Motivating forces are positive and they push people to move in a more positive direction. Restraining forces are the opposite and undermine change in teams by pushing an individual in an opposite direction (Kritsonis, 2005).

Quality Improvement Framework

In the Lewin three step change theory the first phase is transforming people's behavior by unfreezing or changing the status (Kritsonis, 2005). This can be done in multiple ways and techniques, including increasing the motivating factors and reducing the restraining factors. The second step in Lewin's three step change theory is movement. Movement involves relocation of the behavior system of a person to another level by using methods such as persuasion. The third step in Lewin's change theory involves refreezing, which conditions a person to permanently utilize the desired change and the person will not revert to the original behavior.

When implementing planned change, numerous barriers are present. However, using a theory such as Lewin's three step change theory proactively rather than retrospectively can help to eliminate some potential barriers and address and act on others. Careful consideration of change theory can simplify the process for change agents and help the people most affected by change to become more receptive to the change process (Mitchell, 2013).

The DNP student used Lewin's three step change theory in this quality improvement project. This theory was used to proactively eliminate the potential barriers and address and act

on potential problems when implementing a process to administer the PEARLS ACE screening tool at a psychiatric outpatient clinic for children. Information from the CDC, APA, and ACEs Aware was given to the providers, nurses, medical assistants, and office staff at the outpatient clinic to show that there is a gap in practice.

The first step of the change theory involved identifying the change focus: specifically implementing the PEARLS ACE screening tool to all initial intakes at the psychiatric outpatient clinic. During the unfreezing stage, the key components of this step were communicating with all stakeholders, including: providers, nurses, medical assistants, office staff, and Director of Outpatient Services. A one-page handout with key information related to the benefits of ACE screenings in outpatient clinics. This was intended to promote a feeling of understanding of the importance of the project and how it will benefit patient care. Although an in-person training would have been ideal, due to covid restrictions and various scheduling conflicts a one-page handout was utilized. Due to the DNP student's inside knowledge as part of the team, they understood the culture of this organization and knew that providers and staff were on board with the ACE screening, however the time it takes to conduct the screening is a barrier. Other restraining forces during the unfreezing stage may have included staff resistance to change, trying to create possible work arounds, and a lack of trust. Driving forces identified that would potentially move the process to completion would be support from upper management, and potential for ease of use and time management. It was important to actively engage all the parties through an educational component to work towards positive motivating forces and decrease of the restraining forces so that an ACE screening could be used for every patient to improve patient health outcomes.

Next is the moving state, which is the period of actual change to include the planning and implementation of an ACE screening for intakes. Implementation of the PEARLS ACE screening tool in the psychiatric outpatient clinic required a sustained effort from nursing, providers, Director of Outpatient Services, and office staff. This implementation needed planning to ensure an effective roll out with the assistance and inclusion of all the parties listed. Challenges that were anticipated in this stage of the implementation process may include the discovery of the use of workarounds which can be resolved if found early enough and given further education.

The final stage of Lewin's theory, refreezing the changed practice occurs and is part of a time of stability and evaluation of the process. Ongoing support of the providers, nurses, office staff and director of outpatient services continued during this time and all users of the PEARLS ACE screening tool were comfortable with the new process. Ultimately, the refreezing process would end when the change implemented becomes part of standard practice.

Description of practice site

The practice site where this Quality Improvement (QI) project took place was a children's psychiatric hospital in central Montana, providing both inpatient and outpatient care for children ages 3-17 years. The patient population for this QI project was children and adolescents ages 3-17 years, with a variety of mental health diagnoses. The project stakeholders included multiple providers, nurses, medical assistants, office staff and the director of outpatient services.

Former Processes

Currently, the culture at this organization historically promotes the ACE screening and has been known to express interest in utilizing an ACE screening in practice. As with any change in practice, potential barriers to implementation often halted the process. This has been the reason in the past that ACE screening tools have not been utilized in practice. The most significant potential barriers have been changes to the nurses' workflow to send out the PEARLS ACE screening tool prior to the patient's initial intake appointment. Another barrier was following up to the PEARLS ACE screening tool and documenting the ACE score on the spreadsheet for tracking and trending, as opposed to the patient's medical records. The clinic staff have chosen not to put this into the patient's medical records as the providers are not completing the screening tool. An additional barrier to the provider receiving the ACE screening score is lack of follow through from the nurse to send the score to the provider prior to the appointment to alert them of a high ACE score.

Project Design

The purpose of this QI project was to improve health outcomes of patients with high ACE scores, with a long-term goal to ultimately improve resiliency through early interventions. The project aimed to complete PEARLS ACE screening tools for new psychiatric evaluations at a psychiatric outpatient clinic. The QI project was initiated by improving provider education and awareness of the importance of identifying patients with high ACE scores and the potential for poor health outcomes, with the offer of early interventions. The goal was to complete PEARLS ACE screening tools on all patients ages 3-17 years arriving for an initial psychiatric evaluation.

This DNP QI project had 3 primary objectives: (1) provide education and training to all stakeholders at the project site; (2) implement the PEARLS ACE screening tool into the workflow of the outpatient clinic; (3) notify providers of patients with a PEARLS ACE score of 4 or higher so providers could give additional interventions and supports. There were several goals to support the objectives of this QI project. Short term goals were to educate clinic staff about the screening tool and its importance and to have the clinic staff begin to send the screening tool to parents and guardians. An intermediate goal was that 100% of new psychiatric patients at the clinic would have the opportunity to complete the PEARLS ACE screening tool. The second intermediate goal was that 25% of new patients being seen for initial psychiatric evaluation would be screened for ACEs during intake in the first 4 weeks of the project. The first long-term goal was for 50% of initial psychiatric evaluations screened for ACEs at 8 weeks. The final long-term goal was that 100% of stakeholders find the process to screen new psychiatric evaluations for ACEs to be easy to implement.

Project Methods

In January 2022 an educational hand-out was sent to all stakeholders for educational purposes of the ACE screening tool, goals of the project and the impact of the project on each discipline. The Director of Outpatient Services sent the email and handout to all clinic staff. A “go live” date of February 1, 2022 was identified to begin sending the deidentified PEARLS ACE screening tool to all initial psychiatric evaluations to parent or guardian via secure email. The guardian was requested to send the completed deidentified PEARLS ACE screening tool back through secure email. The score was entered onto a confidential spreadsheet as part of step three. Data on all initial psychiatric evaluations with completed PEARLS ACE screening tools

were calculated and scores were entered on the spreadsheet for data analysis at 4-week and 8-week intervals. The clinic staff were then instructed to notify the provider of the patients' ACE score the day of the appointment, and in-turn, the provider would educate and offer additional referrals or early interventions as deemed necessary. At the end of the QI project in March 2022, a survey monkey was sent out to the clinic intake staff with one question: "The process to complete the PEARLS ACE screening tool on initial psychiatric intakes was easy to include in my routine?" Using a 5-point Likert scale, starting with strongly disagree to strongly agree. This would identify ease of use of the process. The goal was that 100% of the staff would find the process easy to implement.

Screening Tool

Pilot studies using a pediatric-specific ACE screening tool in large pediatric settings indicate that the de-identified format has shown to facilitate higher rates of disclosure of ACEs and increased patient and guardian comfort with the ACE screening experience (Aces Aware, 2021). The ACE screening tool utilized in this QI project is the deidentified PEARLS ACE screening tool. There are two versions of the PEARLS, one for ages 0-11 and one for ages 12-19, for the parent/guardian to complete. There are two parts to this screening tool. Part 1 is the 10-question ACE screen for history of abuse, neglect, and household dysfunction. The ACE score refers to the number of ACE categories experienced rather than the severity or frequency of any one category. The total score ranges between 0-10. Only part one is calculated for the ACE score. Part 2 recognizes that social determinants of health other than ACEs are associated with health risks and may contribute to toxic stress. These include community violence, food and housing insecurity, bullying, discrimination and caregiver's illness or death. Children and

adolescents with 4 or more ACEs are known to be at risk for chronic health problems. The questions asked on the PEARLS ACE screening tool include the following:

- Has your child ever lived with a parent/caregiver who went to jail/prison?
- Do you think your child ever felt unsupported, unloved and/ or unprotected?
- Has your child ever lived with a parent/caregiver who had mental health issues?
- Has the child's biological parent or any caregiver ever had, or currently has a problem with too much alcohol, street drugs, or prescription medication use?
- Has your child ever lacked appropriate care by any caregiver?
- Has your child ever seen or heard a parent/caregiver being screamed at, sworn at, insulted, or humiliated by another adult? Or has your child ever seen or heard a parent/caregiver being slapped, kicked punched or beaten up or hurt with a weapon?
- Has any adult in the household often or very often pushed, grabbed, slapped, or thrown something at your child? Or has any adult in the household ever hit your child so hard that your child has marks or was injured? Or has any adult in the household ever threatened your child or acted in a way that makes your child afraid that they might be hurt?
- Has your child ever experienced sexual abuse?
- Have there been significant changes in the relationship status of the child's caregiver?
- Has your child ever seen, heard or been victim of violence in your neighborhood, community, or school?

- Has your child experienced discrimination?
- Has your child ever had problems with housing?
- Have you ever worried that your child did not have enough food to eat or that the food your child would run out before you could buy more?
- Has your child ever been separated from their parent or caregiver due to foster care or immigration?
- Has your child ever lived with a parent/caregiver who had a serious physical illness or disability?
- Has your child ever lived with a parent or caregiver who died?

Part 2 (Teen version)

- Has your child ever been detained, arrested, or incarcerated?
- Has your child ever experienced verbal or physical abuse or threats from romantic partners?

See Appendices A and B

Evaluation of Success

The evaluation of success of this project included 4 outcome measures (or SMART goals). The following measurements were evaluated to evaluate the overall success of this QI project:

1. 25% of initial psychiatric evaluations completed PEARLS scores prior to their initial medication management appointment at the psychiatric outpatient clinic. These data were evaluated at the 4 -week interval of the implementation process.

2. 50% of initial psychiatric evaluations completed PEARLS scores prior to their initial medication management appointment at the psychiatric outpatient clinic. These data were evaluated at the 8-week interval of the implementation process.
3. At 8-weeks post implementation process, the staff involved in the PEARLS screening process were sent a survey monkey with one question. This question was on a 5-point Likert scale, ranging from strongly disagree to strongly agree. The question will ask “The process to complete the PEARLS screening on initial psychiatric intakes was easy to include in my routine?” The goal of this question is that 100% of the staff find this implementation process of the PEARLS screening to be easy to use.
4. The final goal to measure the number of initial psychiatric evaluations with PEARLS screenings out of total psychiatric evaluations as well as how many of these had ACE scores of 4 or more. This information is important to know to inform us of the importance of tracking ACE scores and the number of patients that come to our psychiatric facility that have high ACE scores, in which we can in some way impact their health outcomes in their future.

Evaluating the process of implementing the PEARLS screening could inform future practices for the outpatient clinic to formalize a referral process for additional resources and interventions to improve children and adolescent’s future health outcomes. Prevention and early interventions can make the difference in your children and adolescent’s lives.

Project Adaptations

When discussing implementation of this project, the proposed timeframes for data collection were 4-weeks and 8-weeks. However, due to barriers identified in the first two weeks

of the process, the decision was made to shorten the scope of the project to 4-weeks and 6-weeks. These barriers included staffing shortages due to COVID-related concerns, staff working exclusively remotely/online, and the lack of parent/guardian responses collected. This shortened timeframe also meant that the survey for ease of use of the tool was sent at 6-weeks post implementation instead of 8-weeks. The decision was also made to not collect data about provider notification of the high ACE scores because there would be no way to verify that this notification was provided.

CHAPTER FOUR

QUALITY IMPROVEMENT PROJECT RESULTS

This DNP QI project had 3 primary objectives: (1) provide education and training to all stakeholders at the project site; (2) implement the PEARLS ACE screening tool into the workflow of the outpatient clinic; (3) notify providers of patients with an ACE score of 4 or higher so providers could give additional interventions and supports. There were also multiple SMART goals—short, intermediate, and long-term—which were formulated to guide the achievement of these purposes. Data on the computed ACE scores were collected every two weeks and tracked in an Excel spreadsheet. ACE screenings were provided for every patient scheduled in the clinic for an initial psychiatric evaluation. These screenings were voluntary, and not all were returned to the clinic. Patients that returned the screening tool and reported an ACE score of 4 or more were identified and the provider was notified, so they could offer additional interventions and referrals.

Short-term SMART Goals 1 & 2 Results

The short-term SMART goal of this project was that clinic staff will be able to implement the ACEs screening tool when scheduling new patients. Additionally, clinic staff will express understanding of the tool and its importance. Unfortunately, because of the limitations with clinic staff being out sick and transitioning to a fully remote work environment, these data could not be collected. The intent was that a team meeting would have been able to provide additional education and training on the screening tool, and this did not happen.

Intermediate SMART Goal 1 Results

The first intermediate SMART goal was that after four weeks post-implementation 100% of new patients will have been given the opportunity to complete the screening. At week four post-implementation, 100 ACE screenings had been sent out to new psychiatric evaluation appointments. This was verified verbally by the Director of Outpatient Services, but they did not provide data on the number of new intakes.

Intermediate SMART Goal 2 Results

The second intermediate SMART goal was four weeks post-implementation, 25% of the ACE screenings will have been returned by parents/guardians. At week four post-implementation, 100 ACE screenings had been sent out to new psychiatric evaluation appointments. Six ACE screenings were returned prior to appointments. This means that the screening had a 6% return rate (6 returned and completed screenings/100 screenings sent to patients).

Figure 1. Returned PEARLS ACE Screening at 4 Weeks

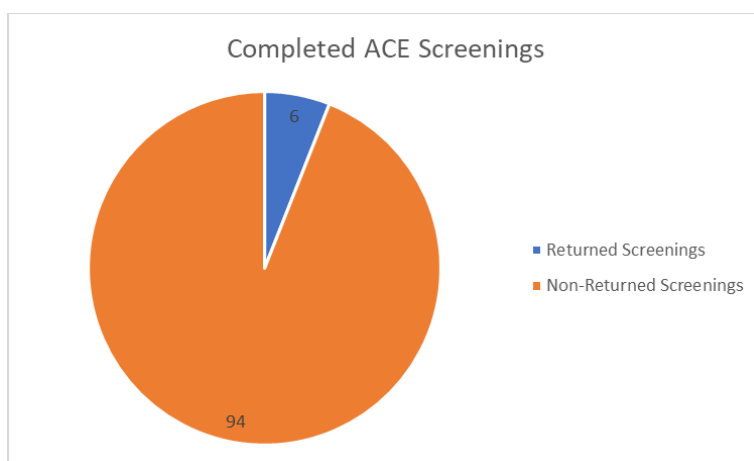
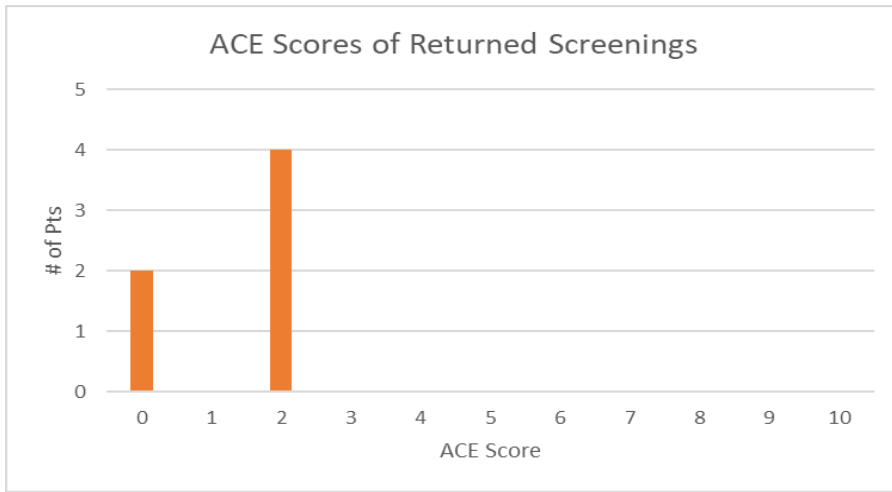


Figure 2. Patient Scores from Completed PEARLS ACE Screening at 4 Weeks



Long term SMART Goal 1 Results

The first long term SMART goal was six weeks post implementation, at least 50% of new patients will have completed and returned ACEs screening prior to their appointment. The Director of Outpatient Services reported that by the end of six weeks, a total of 300 screenings had been sent out. Eight new surveys were recorded, for a total of 14 surveys out of 300 completed and returned.

Figure 3. Total Returned PEARLS ACE Screening at 6 Weeks

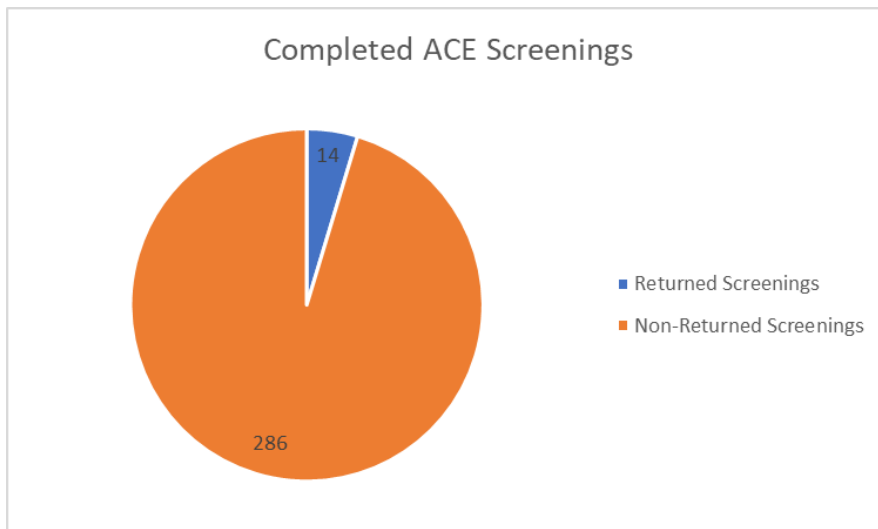
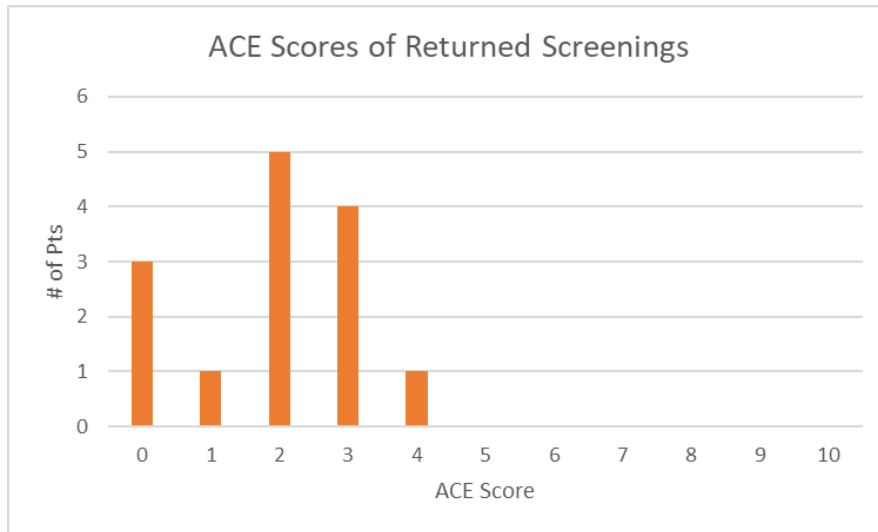


Figure 4. Total Patient Scores from Completed PEARLS ACE Screening at 6 Weeks



Long term SMART Goal 2 Results

The second long term SMART goal was that 100% of clinic staff will report it was easy to implement sending the ACE screening tool to the parents/guardians of new patient psychiatric evaluation appointments. A survey monkey was sent out on March 18, 2022 to the Director of Outpatient Services. They were instructed to fill out the survey and send it to the other employee that was responsible for sending the ACE screening tool to parents/guardians. By March 21, 2022, both responses had been received. Both staff members reported that it was “somewhat easy” to implement the ACE screening into their routine. This goal was ultimately achieved.

Lessons Learned

Numerous lessons were learned throughout the implementation of the QI project. The change of a workflow process and implementation of a new screening can add time and additional tasks to an already busy outpatient clinic. Initially, stakeholders were excited about implementing this project and had historically wanted to utilize the ACE screening in their practice and saw the benefits of screening and offering interventions and referrals as preventative

measures to high ACE scores. Once the implementation of the ACE screening began it was obvious that the screenings were not being returned prior to the patient's appointment. Multiple barriers included a shortage of staff as well as the entire clinic was operating virtually due to the ongoing COVID-19 pandemic. It was apparent that without prompts from the staff prior to the appointment to have the ACE screening returned, the likelihood of the screening being completed and returned was low. According to Ageron et al. (2017), a common weakness of surveys and screenings is low participation rates. Some reasons include language barriers, physical limitations, and mental health problems. Five barriers to non-participation in email surveys and screenings were identified. Gathering patient information through email may lead to an under-representation of some patient subgroups. Other barriers identified in this study included the process of filling out the survey online, difficulty in communication, cognitive limitations, drug or alcohol dependence, psychiatric diagnosis, sight problems as well as illiteracy. The study suggests that alternative survey and screening strategies are needed (Ageron et al., 2017). An additional barrier unique to this project is that the screening asks highly personal questions. It is possible that parents/guardians may not have wanted to complete the screening tools, even though they were notified that all returned screenings would be deidentified and would not include patient-specific personal information.

If the DNP student were to implement this project over again, they would have added prompts from clinic staff to reinforce the completion of the ACE screening and return of the document via email prior to the patient's first appointment. They would also have required staff to attest to their understanding of the new process for intake appointments with regard to the ACE screening tool.

Pandemic Related Barriers

Increased cases of exposure to COVID-19 and quarantine of staff caused the outpatient clinic to go one hundred percent virtual. In person visits from patients would have provided a better opportunity for guardians to ask for help with questions related to the screening and follow through from nursing staff to retrieve the screening prior to the patient entering the appointment with the provider. Many staff were ill with COVID-19 and other related illnesses and unable to work. Creating difficulties to have staff available to send out the ACE screenings in a timely manner, inability to check in prior to day of the appointment to see if the ACE screening was in process of completion.

According to Kesten & El-Banna (2021), the pandemic has created multiple barriers to carrying out a DNP scholarly quality improvement project. Moving forward, it is imperative that students identify barriers and strategies prior to implementing the project. The graduate student can exercise innovation, flexibility, and the ability to pivot to meet challenges and address the barriers to implement the project. It is recommended to strengthen academic practice partnerships to pave the road to success. The quality improvement project may have to pivot and convert to virtual connections, utilize telehealth visits, and engage in other improved technological design to complete and be successful with the quality improvement project. The pandemic provides a window of opportunity for policy analysis and recommendations for policy change. The pandemic is ongoing and its future and impact on a “return to normal” is uncertain, but the technology and creativity will need to improve to be able to continue to improve the quality of patient care in the future (Kesten & El-Banna, 2021).

Project Limitations

It is impossible to evaluate the number of staff that read the one-page informational hand out and the email outlining the process to implement the ACE screenings on new patients scheduled for an initial psychiatric evaluation at the outpatient clinic. Limitations included the following: all staff were working virtually due to the COVID-19 pandemic, and there was a noted shortage of staff due to staff being ill and unable to work. This included the Director of Outpatient Services. Staff were not available to prompt patient's parents or guardians to complete the ACE screening prior to the appointment. Therefore, the majority of ACE screenings sent were never returned. It is possible that had appointments been face-to-face, more screenings would have been completed when patients arrived to the clinic for their appointments. Additionally, there are some staff that may not have sent the screenings to patients.

The Director of Outpatient Services was not responsive to phone calls and emails from the DNP student. When they were able to talk on the phone, the discussion was usually very brief and the Director of Outpatient Services reiterated that the clinic was very busy, short-staffed, and overwhelmed. Additionally, only two people were identified to send out the screening tool to parents/guardians. This was only done at the repeated prompting of the DNP student, and the Director of Outpatient Services did not seem to be invested in the QI project due to the difficulties the pandemic was causing for the clinic and staff. While both of the employees that sent out the ACE screenings reported that they felt it was somewhat easy to implement this into their routine, a limitation is that there were not more staff to survey.

The low number of returned completed ACE screenings means that these data will not show a true representative sample. This also means that this data could not be generalized to

other evidence-based literature on this topic. At week four post-implementation, only six out of 100 ACE screenings sent to parents/guardians of the new psychiatric evaluations had been returned prior to appointments. Additional limitations could be difficulty with filling out a form due to literacy, mental health or cognitive issues, that are not easily addressed unless filling out a form in person, in which clinic staff could assist. It is also possible that not all patients showed up for their scheduled intake, but the Director of Outpatient Services was not able to provide a number for this. Some patients' appointments were also canceled because they did not complete the required initial paperwork, but this was also not tracked by clinic staff. Based on the return results from the first four weeks, it was unlikely that a 50% return rate would be seen at six weeks. At week six weeks post-implementation, a total of only 14 out of 300 ACE screenings sent to parents/guardians of the new psychiatric evaluations had been returned prior to appointments. This yielded a return rate of 4.67%.

Future Practice Recommendations

To improve future sustainability of this project, it was determined by stakeholders that the ACE Screening would be built into the electronic health record (EHR) and the Clinic Medical Assistants could fill this out with the patient and or parent/guardians at the initial appointment. This would alleviate the difficulties with cognitive abilities, literacy issues, and other barriers that get in the way of an emailed document and return of completed forms. The final ACE score would be located in the EHR for viewing by the provider at any time prior to the patient's appointment.

Another recommendation would be to complete ACE screenings on all existing patients at the outpatient clinic for high ACE scores and enter these into the EHR for the providers

reference. All patients would then be provided the opportunity to have interventions and referrals to decrease chronic health conditions in their futures, rather than limiting this to new patients. Additionally, because the screening contains such sensitive information, there may be better results if the client was able to fill the screening out with their therapist at the clinic once a therapeutic relationship has been established. The presence of an existing therapeutic relationship means the client will feel more comfortable being open about their experiences which may help obtain the most accurate information from the screening tool. This also provides the client and their family the opportunity to ask questions about the screening, what it means, and how it can help with treatment.

Conclusion

Despite the decreased data collection process from 8 weeks to 6 weeks implementation period, this project accomplished the overall purpose intended. There may have been minimal data collected due to multiple barriers to the implementation process that could never have been predicted. However, ultimately there was stakeholder buy-in on the importance of ACE screening and preventative interventions and referrals. The organization continues to have interest in implementing the ACE screening for new patients and offer interventions and supports as necessary. The organization would also like to implement ACE screenings for existing patients to provide better interventions and supports. The organization would like to offer prompts to patients to fill out the ACE screenings prior to the appointment and ultimately hopes to be able to assist parents/guardians to complete the ACE screening as their staffing allows them to improve this process. The goals of the project, to gain stakeholder buy-in, implement a

change, and give additional information to providers was ultimately successful despite the relatively few screenings returned.

CHAPTER FIVE

REFLECTION

DNP Essentials & Education Journey

During the course of the DNP program at Montana State University, the DNP student was able to meet the competencies of the Essentials of Doctoral Education for Advanced Nursing Practice outlined by the American Association of Colleges of Nursing (2006). The DNP essentials outline the quality indicators and competencies mastered by graduating DNP students (American Association of Colleges of Nursing [AACN], 2006). The mastery of competencies of the DNP essentials identifies students who are ready to begin practicing as an advanced practice registered nurse (APRN) in the clinical setting educated at the doctorate level (AACN, 2006).

DNP essential I applies scientific knowledge to advanced nursing practice using evidence-based practice (EBP) to inform clinical decision making (AACN, 2006). DNP essential I was a significant part of this EBP that was completed during the course of the DNP program, specifically the DNP Quality Improvement project. The Quality Improvement project used scientific knowledge that was collected and researched related to patient outcomes and reviewed and by the DNP student, then created a change in process to a problem in current clinical practice. The DNP student completed an in-depth literature search to support ACE screening implementation on patients at a psychiatric outpatient clinic. During the course of the DNP QI project, the student was taught and developed skills to search health databases to find literature to support the clinical problem in practice. The literature was entered into a literature review table, to organize the research found. The DNP student used the Lewin's Three Step

Change Theory to develop the literature into an intervention that encouraged identification, awareness, and the ability to offer interventions so that health outcomes for patients could improve. During the course of this DNP program and QI project implementation the DNP student was able to develop skills in researching evidence, synthesizing, and applying scientific evidence to practice which can be utilized in clinical practice as a future psychiatric mental health nurse practitioner.

DNP essential II, organizational and systems leadership for QI and systems thinking, describes a DNP's student's ability to review the workflow practices in a system they are working in, then work back with the organization to identify specific areas where a new process could be created to offer improved patient care and improved patient outcomes (AACN, 2006). The competencies in this essential are the foundation of the DNP QI project in the course of this program. The QI project required the DNP student to identify a problem in a clinical setting within an organization. In this QI project the DNP student identified the lack of utilizing an ACE screening tool to identify high ACE scores in patients, which created long term health problems for patients that did not receive early interventions and supports. The DNP worked back with the leadership and stake holders of the organization to create, implement, evaluate a plan to improve patient outcomes with a new process. The DNP student utilized Lewin's three step change theory as well as nursing theory to incorporate this change. As a leader, this DNP student worked with the stake holders to implement a QI project that's ultimate goal was to improve patient outcomes. During the QI project the DNP student had to identify system barriers that affected the new process. The DNP student was able to learn and develop an

awareness of how systems and organizations work, as well as identify and pivot when barriers affect the ability of the student to institute new process changes into a system. This is a significant area of knowledge that a future APRN needs to understand to be successful in their future role.

DNP essential III, clinical scholarship and analytical methods for EBP, applies a DNP student's ability to research existing literature to find high quality and applicable evidence to base clinical practice treatments and process decisions (AACN, 2006). The DNP student gained skills to understand that examining high quality evidence is significant as well as using statistics to understand the meaning of reliability and validity. During the DNP program the student participated in projects that required the student to review the evidence from research and identify a way of how the evidence could be improved. During the course of the QI project in this program the student was able to examine evidence quality in research studies to use in order to inform decisions made during the course of this project.

DNP essential IV, information systems/technology and patient care technology for the improvement and transformation of health care, engages the DNP student's ability to use and teach other nurses on the use of technology as it relates to patient care and the improvement of healthcare systems and the quality of patient care (AACN, 2006). In the DNP program, a HIPAA compliant and secure excel spreadsheet was designed and developed to track data during the course of this project. The DNP student gained skills in coordinating, creating and using a patient care technology to improve the quality of patient care provided. This experience for the DNP student will give valuable knowledge as their future role as an PMHNP.

DNP essential V, health care policy for advocacy in health care, relates directly to the role of the DNP student in involvement in developing health policies in health care and government (AACN, 2006). Throughout the courses in the DNP program, nursing advocacy was always supported and encouraged, especially in our clinical courses. This DNP QI project was created to advocate for healthcare for all patients and to improve all patient's health outcomes. The opportunity to meet with stakeholders and advocate for improved health outcomes for patients provided experience, which ultimately improved the students level of comfort as well as confidence in being an advocate for improving patients' health outcomes.

DNP essential VI, interprofessional collaboration for improving patient and population outcomes, explains the role of the APRN in providing collaborative multidisciplinary care (AACN, 2006). Collaboration was consistent throughout the DNP program as the student was involved in group projects and often was in a leadership role in the group project setting. In the DNP QI project, collaboration was significant to the success of the project. The DNP attempted to communicate in person and often by email or phone to stakeholders. The importance of consistent communication throughout the project was helpful to keep all stakeholders and the student informed of the process success as well as the barriers to the continuation of the project. When the process changed and had to pivot due to barriers, collaborative communication helped to keep the project on track as well as maintain the sustainability of the project, ultimately to improve patient outcomes. The DNP program offered the experience to communicate and collaborate with a health care team, which will be an important skill to have in the future practices as an PMHNP.

DNP essential VII, clinical prevention and population health for improving nation's health, outlines the role as a leader as it relates to the implementation of clinical prevention and population health activities (AACN, 2006). This QI project required the DNP student to identify a problem in clinical practices that was in need of an intervention to improve outcomes in patients with high ACE scores. It was decided to implement the ACE screening tool for patients to identify high ACE scores. The DNP student implemented a workflow process improvement into practices to identify patients with high ACE scores and offer preventative interventions and supports. The DNP student learned the importance of preventing further ACEs to patients and offering preventative supports. Prevention is key in clinical practice and will have a significant place in the DNP student's role as a future PMHNP.

DNP essential VIII, advanced nursing practice, outlines the DNP student's role in treating diverse patients using advanced practice nursing techniques including assessment, diagnosis, treatment planning, and evaluation of care (AACN, 2006). The experience throughout the DNP program, this essential was mastered through completion of clinical hours in settings of inpatient and outpatient psychiatric care for children and adults with diverse psychiatric conditions. The DNP student was given opportunities to complete psychiatric evaluations, create treatment plans, provide psychotherapy, prescribe medications, order labs as indicated, and evaluate a patient's response to medication and other interventions offered. Courses offered throughout this program that were pertinent to the mastery of these competencies include: Evidence Based Practice, pharmacology courses, health assessment, and pathophysiology. Other courses offered education on nursing theory which is essential for the future role as a PMHNP, to give knowledge on clinical decision making. The courses in the DNP graduate program developed

the DNP graduate as a PMHNP and will continue to be utilized throughout the PMHNP's role in future clinical practice.

QI Project Implementation Experiences

The experience of implementing the DNP QI project into an outpatient psychiatric practice will shape and impact the future role of the DNP as a PMHNP. The QI project gave the DNP student an opportunity to practice their skills to assess for a need for a specific QI project, identify a problem, develop an intervention, and implement a new process. Finally, the DNP student was able to evaluate the project through data analysis and make changes as barriers developed throughout the course of the QI project. This will be a significant experience to gain knowledge that will be needed as the student moves on to their future career. Barriers and successes of this project will help guide future QI projects and offer more information to allow the DNP student to be more efficient in the process with the most important goal of improving outcomes for patients.

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APPENDICES

APPENDIX A

PEDIATRIC ACES AND RELATED LIFE EVENTS SCREENER – CHILD

*Pediatric ACEs and Related Life Events Screener - Child***Pediatric ACEs and Related Life Events Screener (PEARLS)**

———— CHILD - To be completed by: **Caregiver** ————

At any point in time since your child was born, has your child seen or been present when the following experiences happened? Please include past and present experiences.

Please note, some questions have more than one part separated by "OR." If any part of the question is answered "Yes," then the answer to the entire question is "Yes."

PART 1:

1. Has your child ever lived with a parent/caregiver who went to jail/prison?

2. Do you think your child ever felt unsupported, unloved and/or unprotected?

3. Has your child ever lived with a parent/caregiver who had mental health issues?
(for example, depression, schizophrenia, bipolar disorder, PTSD, or an anxiety disorder)

4. Has a parent/caregiver ever insulted, humiliated, or put down your child?

5. Has the child's biological parent or any caregiver ever had, or currently has a problem with too much alcohol, street drugs or prescription medications use?

6. Has your child ever lacked appropriate care by any caregiver?
(for example, not being protected from unsafe situations, or not cared for when sick or injured even when the resources were available)

7. Has your child ever seen or heard a parent/caregiver being screamed at, sworn at, insulted or humiliated by another adult?

Or has your child ever seen or heard a parent/caregiver being slapped, kicked, punched beaten up or hurt with a weapon?

8. Has any adult in the household often or very often pushed, grabbed, slapped or thrown something at your child?

Or has any adult in the household ever hit your child so hard that your child had marks or was injured?

Or has any adult in the household ever threatened your child or acted in a way that made your child afraid that they might be hurt?

9. Has your child ever experienced sexual abuse?
(for example, anyone touched your child or asked your child to touch that person in a way that was unwanted, or made your child feel uncomfortable, or anyone ever attempted or actually had oral, anal, or vaginal sex with your child)

10. Have there ever been significant changes in the relationship status of the child's caregiver(s)?
(for example, a parent/caregiver got a divorce or separated, or a romantic partner moved in or out)



Add up the "yes" answers for this first section:

Please continue to the other side for the rest of questionnaire →

This tool was created in partnership with UCSF School of Medicine.

Child (Parent/Caregiver Report) – Deidentified

PART 2:

1. Has your child ever seen, heard, or been a victim of violence in your neighborhood, community or school?
(for example, targeted bullying, assault or other violent actions, war or terrorism)
2. Has your child experienced discrimination?
(for example, being hassled or made to feel inferior or excluded because of their race, ethnicity, gender identity, sexual orientation, religion, learning differences, or disabilities)
3. Has your child ever had problems with housing?
(for example, being homeless, not having a stable place to live, moved more than two times in a six-month period, faced eviction or foreclosure, or had to live with multiple families or family members)
4. Have you ever worried that your child did not have enough food to eat or that the food for your child would run out before you could buy more?
5. Has your child ever been separated from their parent or caregiver due to foster care, or immigration?
6. Has your child ever lived with a parent/caregiver who had a serious physical illness or disability?
7. Has your child ever lived with a parent or caregiver who died?

Add up the "yes" answers for the second section:

APPENDIX B

PEDIATRIC ACES AND RELATED LIFE EVENTS SCREENER – TEEN

*Pediatric ACEs and Related Life Events Screener - Teen***Pediatric ACEs and Related Life Events Screener (PEARLS)**

———— TEEN (Parent/Caregiver Report) - To be completed by: **Caregiver** ————

At any point in time since your child was born, has your child seen or been present when the following experiences happened? Please include past and present experiences.

Please note, some questions have more than one part separated by "OR." If any part of the question is answered "Yes," then the answer to the entire question is "Yes."

PART 1:

1. Has your child ever lived with a parent/caregiver who went to jail/prison?

2. Do you think your child ever felt unsupported, unloved and/or unprotected?

3. Has your child ever lived with a parent/caregiver who had mental health issues?
(for example, depression, schizophrenia, bipolar disorder, PTSD, or an anxiety disorder)

4. Has a parent/caregiver ever insulted, humiliated, or put down your child?

5. Has the child's biological parent or any caregiver ever had, or currently has a problem with too much alcohol, street drugs or prescription medications use?

6. Has your child ever lacked appropriate care by any caregiver?
(for example, not being protected from unsafe situations, or not cared for when sick or injured even when the resources were available)

7. Has your child ever seen or heard a parent/caregiver being screamed at, sworn at, insulted or humiliated by another adult?

Or has your child ever seen or heard a parent/caregiver being slapped, kicked, punched beaten up or hurt with a weapon?

8. Has any adult in the household often or very often pushed, grabbed, slapped or thrown something at your child?
Or has any adult in the household ever hit your child so hard that your child had marks or was injured?
Or has any adult in the household ever threatened your child or acted in a way that made your child afraid that they might be hurt?
-
9. Has your child ever experienced sexual abuse?
(for example, anyone touched your child or asked your child to touch that person in a way that was unwanted, or made your child feel uncomfortable, or anyone ever attempted or actually had oral, anal, or vaginal sex with your child)
-
10. Have there ever been significant changes in the relationship status of the child's caregiver(s)?
(for example, a parent/caregiver got a divorce or separated, or a romantic partner moved in or out)
-



Add up the “yes” answers for this first section:

Please continue to the other side for the rest of questionnaire →

This tool was created in partnership with UCSF School of Medicine.

Teen (Parent/Caregiver Report) – Deidentified

PART 2:

1. Has your child ever seen, heard, or been a victim of violence in your neighborhood, community or school?
(for example, targeted bullying, assault or other violent actions, war or terrorism)
-
2. Has your child experienced discrimination?
(for example, being hassled or made to feel inferior or excluded because of their race, ethnicity, gender identity, sexual orientation, religion, learning differences, or disabilities)
-
3. Has your child ever had problems with housing?
(for example, being homeless, not having a stable place to live, moved more than two times in a six-month period, faced eviction or foreclosure, or had to live with multiple families or family members)
-
4. Have you ever worried that your child did not have enough food to eat or that the food for your child would run out before you could buy more?
-
5. Has your child ever been separated from their parent or caregiver due to foster care, or immigration?
-
6. Has your child ever lived with a parent/caregiver who had a serious physical illness or disability?
-
7. Has your child ever lived with a parent or caregiver who died?
-
8. Has your child ever been detained, arrested or incarcerated?
-
9. Has your child ever experienced verbal or physical abuse or threats from a romantic partners?
(for example, a boyfriend or girlfriend)
-

Add up the “yes” answers for the second section:

APPENDIX C

OUTCOME MEASURES

Outcome Measures

Short Term Goals

1. Clinic staff will be able to implement the ACEs screening tool when scheduling new patients.
2. Clinic staff will express understanding of the tool and its importance.



Intermediate Goals

1. Four weeks post-implementation, 100% of new patients will have been given the opportunity to complete the screening.
2. At least 25% of screenings will have been returned by patient caregivers.



Long Term Goals

1. Eight weeks post-implementation, at least 50% of new patients will have completed the ACEs screening prior to intake.
2. 100% of clinic staff will report it was easy to implement sending the screening tool



APPENDIX D

IMPLEMENTATION, ANALYSIS, AND FOLLOW UP

*Implementation, Analysis, and Follow Up***Planning Change**

- Identify clinical site and conduct needs assessment
- Identify a problem and select an intervention
- Review and analyze research related to the identified problem and proposed intervention
- Identify short-term, intermediate, and long-term objectives
- Identify measurement tools to analyze the completion of objectives

Testing Change

- Provide training to clinic staff on administering the ACEs screening
- Implement the ACEs screening tool
- Elicit stakeholder feedback
- Assess the progress toward short-term goals
- If goals are not met, conduct root cause analysis to identify barriers to completion

Implementing Change

- Conduct data analysis for the initial 4-week implementation via master Excel spreadsheet
- Continue ACEs screening for new patients
- Elicit stakeholder feedback
- Assess the progress toward short-term and intermediate goals If goals are not met, conduct root cause analysis to identify barriers to completion

Analyzing Change

- Conduct data analysis for the full 8-week initial implementation via master Excel spreadsheet
- Analyze the effectiveness of the screening in patient care
- Elicit stakeholder feedback
- Share results with stakeholders
- Assess the progress toward short-term, intermediate, and long-term goals
- If goals are not met, conduct root cause analysis to identify barriers to completion