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PTSD Secondary to Childhood Maltreatment: Educating Health Care Providers in Roles and Responsibilities Directed to Improved Patient Outcomes

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PTSD Secondary to Childhood Maltreatment: Educating Health Care Providers in Roles and Responsibilities Directed to Improved Patient Outcomes

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Abstract

Researchers have described the connection between childhood maltreatment and adult mental illness such as Post-Traumatic Stress Disorder (PTSD) and depression. Research has also shown a serious lack of recognition of PTSD by the primary care provider. Using the Four Question Primary Care PTSD Screening tool provides information to the primary care provider necessary for ongoing treatment. Education of the primary care provider(s) in the use of the screening tool and in the care of the patient with symptoms of PTSD is based on the process employed by the Department of Veteran Affairs for PTSD identification in the primary care setting.

Key words: PTSD, childhood maltreatment, adult mental illness, primary care education,

Introduction

Post-Traumatic Stress Disorder (PTSD) has been found to be an undiagnosed and under-diagnosed illness in the primary care setting. Past patient histories of childhood maltreatment and other forms of physical or sexual trauma has been shown to cause depression, substance abuse, obesity, hypertension, diabetes, somatic disorders, poor medical compliance and early death due to lack of medical compliance. Treatment in the primary care setting is usually based on symptoms of depression and anxiety. Referrals to psychiatric services do not frequently occur if the patient states relief of depression and anxiety. Time constraints and lack of education interfere with the ability of the primary care provider to intervene and provide health care measures that will assist the patient in self-healing through appropriate referrals to counselors, psychiatrists and PTSD support groups.

The intent of this project is to educate primary care providers in recognition of the potential for a patient to have PTSD from traumatic events in their lives. Research has shown that patients with past histories of maltreatment manifest physical (obesity, diabetes, heart conditions) and psychological illnesses in adulthood (depression, anxiety) (Felitti, 2002, Lang, Gearity, Laffaye, Satz, Dresselhaus, Stein, et al, 2008, National Clearinghouse on Child Abuse and Neglect, 2005). The primary care provider has the opportunity to address distant past medical histories that may affect current symptoms with patients they encounter on a daily basis through the use of the Primary Care PTSD Screen (Department of Veterans Affairs Employee Education System and The National Center for PTSD, 2002).

The plan was for a local patient – centered medical homes facility to take on this project as a part of the recommended care produced in the study "Evolving Models of Behavioral Health Integration in Primary Care" (Collins, Hewson, Munger, Wade, 2010). The study is based on integration and application of behavioral services in collaborative and integrative health care

settings. Unfortunately, the facility where the project was to be done doesn't feel they are ready to do the project at this time. I was able to find a different facility, Riverview Psychiatric Center (RPC), which is the only forensic facility in the State of Maine. The facility offers primary care provider services on admission and throughout the hospital stay along with psychiatric services. The opportunity to be able to follow a patient from admission through a portion of their stay at the facility will allow this writer immediate access to patient care documentation and evaluation daily.

Applying the Chronic Care Model (CCM) to the project provides a strong base to the project through the use of organizational and patient-centered service opportunities (Mauer, 2009). As the CCM is applied to the project, not all measures will need to be applied at RPC as it is an established psychiatric hospital. The CCM will be used in conjunction with hospital policies and policies may be reviewed for potential changes.

Statement of Problem

Applying Issel's (2009) model for problem definition, the problem is defined as the lack of primary care provider recognition and treatment of male and female patients with histories of childhood maltreatment and residual Post-Traumatic Stress Disorder (PTSD) symptoms. The lack of distant past medical history regarding maltreatment denies the patient access to appropriate medical and psychological care for the symptoms of PTSD. Symptoms of childhood maltreatment manifest in both physical and psychological illnesses that can be debilitating to the patient. However, such sequela can be recognized by the primary care provider and appropriate interventions recommended.

Evidence of the problem demonstrated in the literature

Post-Traumatic Stress Disorder (PTSD) has been a an unnamed anxiety disorder described in the writings and journals of soldiers and citizens as far back as Thermopylae (Bentley, 2005) and up to the present day. PTSD became a recognized diagnosis in the Diagnostic and Statistical Manual of Psychiatric Disorders (DSM III) in 1980. Childhood maltreatment has been well documented throughout centuries of written documentation (Net Industries, 2011). The Bible mentions the selling of children into slavery, incest, prostitution, and physical abuse of children usually perpetrated by the father who "owned" his family. Industrialization of Europe, England, Canada, and America saw children as young as five years old being forced to work sixteen hour days in retched conditions where maltreatment and malnourishment were side-effects of the forced labor (Net Industries, 2011)

Throughout the last 60 years a number of laws have been enacted to protect children from physical and sexual abuse, emotional abuse and neglect, or any form of maltreatment (Net Industries, 2011). Despite the number of federal and state laws protecting children and the number of social agencies funded for the protection of the child, childhood maltreatment continues. According to Kilpatrick, National Violence Against Women Prevention Research Center, Medical University of South Carolina (2000), twenty nine percent of forcible rapes committed on children occurred when the child was less than eleven years old. Thirty two percent occurred during the ages of eleven to seventeen and twenty two percent between eighteen to twenty four years of age. The forcible rape statistics drop considerably between twenty five years old to twenty nine years old, seven percent, and over twenty nine years old drops to six percent. The majority of sexual assault of these children, adolescents and adults occurred by someone they knew such as husband, ex-husband, father, stepfather, uncle, brother,

boyfriend, friends and neighbors. Twenty two percent of the rapes were stranger rape or the child was raped by someone they did not know well (Kilpatrick, 2000).

Kempe, a pediatric radiologist, and his colleagues proposed the diagnosis of "Battered Child Syndrome" in 1961 based on their evaluation of pediatric x-rays that showed a series of injuries they diagnosed on children who had been mistreated.(Net Industries, 2011) Kempe, through his research, was able to demonstrate to the American Academy of Pediatrics, that there was a significant connection between the radiology results and child abuse. His efforts resulted in the requirement of physicians to report to authorities their suspicion of child abuse. His work on child abuse has been expand to cover all forms of abuse and has been renamed childhood maltreatment.(Net Industries, 2011)

The long-term consequences of childhood maltreatment can be physical or psychological. Physical effects may be brain damage from physical abuse or from undiagnosed poorly healed extremity fractures.(National Clearinghouse on Child Abuse and Neglect Information, 2005, Net Industries, 2011) Psychological effects may manifest as high risk behavior such as smoking, alcohol/substance abuse and overeating.(National Clearinghouse on Child Abuse and Neglect Information, 2005) These behaviors may continue into adulthood. High risk behavior may also result in the person becoming obese, and/or be diagnosed with a sexually transmitted disease or cancer. (National Clearinghouse on Child Abuse and Neglect Information,2005) Additional problems for the maltreated child manifest in adolescence. The abused child may be at higher risk for pregnancy, drug use, poor academic achievement, and delinquency.(National Clearinghouse on Child Abuse and Neglect Information,2005) Criminal behaviors that may start in the juvenile years as a result of childhood maltreatment continue into adulthood. Widom (2002) in her article regarding childhood maltreatment and juvenile delinquency explains the

connection between these issues. Widom conducted a study of child abuse cases and juvenile arrests, between the years of 1967 to 1971, in a mid-western city using court and arrest records. Her research found that the younger the child was when the abuse started increased juvenile arrests by 55% and increased violent crime arrests of juveniles by 96%.

An obesity research project following patients enrolled in an study on obesity during the 1980s observed high drop-out rates from these programs leading the researchers to re-examine the patients in the program through more involved questioning about past health problems and family and social issues.. The researchers, through patient questioning, discovered a large number of patients had experiences of childhood maltreatment. Patients involved in the obesity research stated that no one had ever asked them about childhood maltreatment.(Felitti, 2002) As a result of these observations, the Adverse Childhood Events (ACE) Study was conceived. The Center for Disease Control and Prevention (CDC) working with Kaiser Permanente's Department of Preventive Medicine, San Diego, California, enlisted 17,421 adults with an average age of 57 years old (Felitti, 2002) into the ACE study. The findings of the study showed through the compilation of data that "adverse childhood experiences are vastly more common than recognized or acknowledged and have a more powerful relation to adult health a half century later." (Felitti, 2002, pg 3).

The majority of childhood maltreatment is perpetrated on females (Arias, 2004; Lang, Gearity, Laffaye, Satz,, Dresselhaus, Stein, 2008). Patients admitted to Riverview Psychiatric Center are a mix of male and female patients but the larger numbers of admissions to RPC are male. According to Sexual Assault Statistics documented by the National Sexual Violence Resource Center (n.d.) one in four girls and one in six boys will be assaulted before the age of eighteen and of the one in four girls fifty percent will develop Post Traumatic Stress Disorder

(PTSD). The incidence of adverse childhood events (ACE) has been connected to psychological problems (PTSD, depression, anxiety), behavioral problems (promiscuity, smoking, alcohol and drug use) and physical (obesity, diabetes, hypertension) problems in adults (National Sexual Violence Resource Center, n.d.). The physical and psychological effects of PTSD are similar for both genders. Children who have been maltreated exhibit a number of behaviors that affect their school and social lives through poor behavioral control and physical aggression.(Arias, 2004, pg 46). The younger the child is when the abuse started and the length and nature of abuse may determine the severity of the physical and psychological illnesses (Widom, 2002). The effects of the abuse are usually pervasive and overlapping. There are seven distinct reactions: emotional, PTSD, self-perception, physical, sexual, interpersonal, and social functioning effects.(American College of Obstetricians and Gynecologists, 2006, DeCarli, 2009) During the teen years girls internalize symptoms such as depression and boys externalize symptoms such as aggressive behavior.

Physical and mental illnesses have been found in men and women who have suffered childhood maltreatment and are believed to be a result of the maltreatment (Lang, Gearity, Laffaye, Satz,, Dresselhaus, Stein, et al. 2008). A number of symptoms have been associated with childhood sexual abuse. Physical complaints are usually chronic in nature in most instances such as chronic pelvic pain (women), obesity, asthma, respiratory illnesses, somatizing disorders, unwillingness to follow medical advice and early death due to poor physical health. Psychological complaints tend to be behavioral and psychological. Behavioral complaints may be high risk in nature such as smoking, drug and alcohol use, promiscuity, and eating disorders. Psychological complaints may be depression, anxiety, PTSD, repeated self-injury, and suicide attempts. (Duncan, 2005, Felitti, 2002, Mullen, Fleming, 1998)

There have been a number of research articles that document the long and short-term effects of a variety of symptoms men and women with a history of childhood sexual abuse display. The symptoms may be a coping mechanism for the abuse such as dissociation, a state of separation of the mind from the activity going on at the time. Physical response to sexual abuse may vary but the psychological symptoms tend to be more consistent. Depression and anxiety are found more often with physical symptoms

Evidence of the Problem in Practice Setting

Post-Traumatic Stress Disorder is a debilitating disorder that is caused by traumatic events that may be recent or in the past. The long-term consequences of childhood maltreatment can be physical or psychological. The Substance Abuse and Mental Health Services Administration report Leading Change: A Plan for SAMHSA's Roles and Actions (SAMHSA) 2011-2014 Trauma and Justice has determined the need for reductions in the pervasive, harmful, and costly health impact of violence and trauma by integrating trauma-informed approaches throughout health, behavioral health, and related systems (Huang, 2010). Additionally, research performed over the last 10 years has shown a definite connection between adverse childhood events, PTSD and chronic medical and psychological illnesses in the adult population, (Arias, 2004, Batten, Aslan, Maciejewski, Mazure, 2004). Health care costs related to the psychological and physical manifestations of PTSD depend on the nature of the illnesses and the degree to which the patient uses the health care system. The mean cost of care with major depressive disorder and somatic pain in the primary care setting was 19,838 dollars/year versus no or low major depressive disorder at 6,268 dollars per year (Gameroff, Olfson, 2006).

I conducted extensive searches for information regarding primary provider education in PTSD recognition. The most effective site was the Veteran Administration site for PTSD. This site offers on-line programs for education and a comprehensive description on how primary care providers should be educated to identify and treat PTSD in the military and military retiree population. The program also translates well to civilian health care and patient populations.

Additional research was conducted using multiple research engines such as Google, Google Scholar, the Cumulative Index of Nursing and Allied Health Literature (CINAHL) available through Marvel.gov which gives access to all the state libraries in Maine, MEDLINE, and National Center for Biotechnology Information, U.S. National Library of Medicine (PUBMED). Articles retrieved from these sites support the need for primary care provider recognition of PTSD based on patient symptoms and health care use.

A review of literature provided a wide range of agreement among researchers that PTSD, especially incidents which involved distant past maltreatment, affects the health and wellbeing of adults throughout their lives.(Anda RF, Butchart A, Felitti VJ, Brown DW, 2010, Arias, 2004, Batten, Aslan, Maciejewski, Mazure**,** 2004, Collins, Hewson, Munger, Wade, 2010) Primary care providers are usually the first health care providers many of these patients encounter. Many patients do not or are not willing to divulge the information regarding maltreatment unless they are asked specific questions (Felitti, 2002).

Educating the primary care provider becomes a very important part of providing evidenced based patient centered care. An advance practice nurse (APN) employed by a primary care facility would be in the best position to provide education and leadership in the use of the Primary Care PTSD Screen and its application in the facility. Chart review will be completed

over a three week period for the completion of the PTSD Screen, a diagnosis of PTSD, referral to appropriate counseling services within the facility and prescribed medications if needed. Evaluations of the results of chart review can be collated and results disseminated to the providers within the practice. Any issues noted in the chart review can be approached in medical staff meetings or on an individual based.

PTSD is diagnosed under specifiers for the diagnosis. A specifier describes the onset and duration of an illness or condition. PTSD may be described as acute, chronic or delayed onset. Acute PTSD is a situation of symptom occurrence less than three months after the incident. Chronic PTSD is based on the continuation of symptoms longer than three months. PTSD with Delayed Onset is defined as PTSD which has occurred at least six months after the traumatic event.(Mental Health Today,n.a., n.d,, DSM-IV – TR, 2000) Symptoms of PTSD are flashbacks to the event, disturbing dreams, avoidance and emotional numbing, hyper-vigilance, irritability and anger, disassociation, anxiety and depression. PTSD can be expressed in a multitude of hard-to-treat symptoms, such as chronic pain, depression, obesity and health risk behaviors such as substance abuse, sexual risky behaviors, self-mutilation, eating-disregulation (Danielson, de Arellano, Kilpatrick, Saunders, & Resnick, 2005; Noll, Zeller, Trickett, & Putnam, 2007; Wu, Schairer, Dellor, & Grella, 2010).

Application of a theory, model or conceptual framework

Results of Needs Assessment

According to Issel (2009 p123), a needs assessment is a way to "define the gaps, lacks, and wants relative to a defined population and to define a specific health outcome". The assessment provides the information necessary for planning, implementation and evaluation of a program/project. The needs assessment defines health related problems that may be pursued

based on the identification of patients in need of health care intervention. Riverview Psychiatric Services, according to the 2011 Citizen Centric Report lists the top three psychiatric diagnoses as (1) Schizoaffective Disorder, (2) Unspecified (295.7), Bipolar Disorder, Unspecified (296.7) and (3) Psychosis NOS (298.9). The top three medical diagnoses for patients is (1) Exogenous Obesity, (2) Hyperlipidemia and (3) Hypertension. PTSD admissions at RPC, according to the report, show that thirteen patients had this as their primary diagnosis.

Organizational analysis of project site

Riverview Psychiatric Center (RPC) is a state forensic psychiatric facility providing mental health services to patients who have been deemed not criminally responsible (NCR) or incompetent to stand trial (IST). According to the census of patient admits the majority of the patients currently residing at RPC fall into these two categories. The average length of stay at RPC is approximately 89 days (Department of Health and Human Services, 2011 Citizen Centric Report). Admissions to the facility outside of the court system tend to be short, approximately ten to fifteen days. Psychiatric services are provided through Dartmouth-Hitchcock Medical School, Department of Psychiatry through contract with the State of Maine. (Dartmouth-Hitchcock Medical School, n.d.). In a lawsuit brought by the patients residing at RPC, formerly known as the Augusta Mental Health Institute, in 1988, guidelines for care and patient rights at the facility was established. In Bates vs Department of Health and Human Services, State of Maine Superior Court docket no. 89-88, settlement agreement stipulated certain rights and principles and standards regarding the care of mental health consumers in the State of Maine. Section Nine K, paragraph 202 stipulated minimum staffing levels at 2:1 with specific ratios for professional, nursing, and support personnel. (Bates, et al V. STATE OF MAINE, NO. 89-88).

The primary care providers who will be involved with the initial admission evaluation of patients to the facility are Dr. George Davis, M.D. and Doris Solmitz, F.N.P., both employed by Riverview Psychiatric Center 40 hours per week. Dr. Davis takes responsibility for admissions to the Kennebec patient care units and Doris Solmitz is responsible for patients admitted to the Saco units. Each provider is responsible for the primary care needs of their patients while they are residents of the facility. Psychiatric care is provided by the psychiatric service providers under contract from Dartmouth-Hitchcock Department of Psychiatry.

Evidence of Stakeholder Support and Letter of Agreement

Riverview Psychiatric Center (RPC), Augusta Maine is the primary stakeholder and/or key person for the project at RPC and includes:

Dr. William Nelson, Medical Director Clinical Services, RPC - provides secondary supervision in the absence of the primary supervisor

Dr. George Davis, MD, Primary Care Supervisor

Doris Solmitz, FNP, Primary Care Provider, RPC - primary supervisor/mentor

Angie Newhouse, Director of Staff Development – program champion

Admission Team for Saco and Kennebec patient care units

A letter of agreement has been signed by Dr. William Nelson, MD and is on file at Riverview Psychiatric Facility and sent to Donna Zucker, RN, PhD, FAAN Associate Professor of Nursing, University of Massachusetts, Amherst Campus.

Goals/Objectives

Education of the primary care providers will encompass the use of a short, four question Primary Care Questionnaire developed by Department of Veterans Affairs Employee Education System and The National Center for PTSD. This questionnaire may be used to establish PTSD as a

possible diagnosis for newly admitted patients. This questionnaire will establish a baseline for further examination of the patient by psychiatric services within RPC.

Table 1

Primary Care PTSD Screen

In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you…

YES	NO	1. Have had nightmares about it or thought about it when you did not want to?
YES	NO	2. Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?
YES	NO	3. Were constantly on guard, watchful, or easily startled?
YES	NO	4. Felt numb or detached from others, activities, or your surroundings?

Note: The patient is considered to be positive for PTSD if they answer yes to any two questions. Adapted from "Post-Traumatic Stress Disorder: Implications for Primary Care," Independent Study Course by Department of Veterans Affairs Employee Education System and The National Center for PTSD, 2002. Washington, DC. p35.

Issel (2009) emphasizes the need for broadly defined goals and narrow, measurable objectives which will define the expected outcomes of the project. The need for primary care provider education regarding undiagnosed PTSD and the physical and psychological effects it may have on a patient is important to create a patient-centered health care plan. Review the Primary Care Provider PTSD Screen with the PCPs and the admission intake nurse at RPC in a short one hour presentation. A handout that will include a review of the evidenced-based history of PTSD and its physical and psychological effects on the patient will be provided for the PCPs and admission nurse. A four question evaluation of the program will be given to all the PCPs and admission intake nurse to evaluate the program.

Objective 1: Evidence based provider education in the necessity of recognizing Post-Traumatic Stress Disorder in the civilian population. At this time the admission PCP asks the patient if there has been any history of abuse, sexual or physical, in their lives. Patients many times choose not to answer the question because of fear or due to the number of people in the room when the questions are asked. Use of the PCP PTSD Screen will allow the patient to answer the questions without feeling judged or fearful of any perceived repercussions.

Outcome Measure 1a*:* Provide a PTSD program that includes a discussion of the physical and psychological effects of childhood/adolescent maltreatment on the adult patient. An explanation of the under-recognition of PTSD in patients and the drain on the healthcare system because of the increased use of healthcare services based on physical and psychological illnesses

Outcome Expectation 1a*:* The PCP and admission nurse will verbalize an understanding of the need for the PTSD Screen and its use in the hospital setting. A post education evaluation will be done by all participants. Any unclear points in the education will be addressed individually or as a group.

Objective 2: Determine the effectiveness of the PTSD education on provider use of Primary Care PTSD Screen.

Outcome Measure 2a*:* Identify the patients seen by each primary care provider. Evaluate the patient chart for use of the PTSD Screen at each admission.

Outcome Expectation 2a*:* 100% compliance of the use of the screen by the primary care providers.

Protocol and program tailoring for Post-Traumatic Stress Disorder project

Project design

Information for the project will be gathered on a prospective pre-test and post-test design. The pre-test portion of the project requires an evaluation of the admission providers and intake nurse understanding of PTSD and how PTSD may affect the physical and psychological well-being of a patient. According to the PCPs their positions are to care for the medical needs of the patients only. Psychiatric care which includes PTSD evaluation is followed by the psychiatric services at the facility if it is identified as a diagnosis. When this writer spoke with the PCPs and admission intake nurse regarding their knowledge and understanding of the long-term effects of undiagnosed PTSD the overall agreement among them was they know and understand the basics of PTSD but they don't generally deal with these patients beyond the admission and daily medical care of the patient. The PCPs identified a lack of knowledge in the evidenced based connection between chronic diseases such as hypertension, diabetes and obesity and long-term undiagnosed and untreated PTSD. When asked what information would be useful to their practice, the PCPs identified the need for a better understanding of the effect undiagnosed PTSD can have on the physical health of the patient. The average patient admission to Riverview Psychiatric Center (RPC) is eighty-nine days. Patients deemed not criminally liable for their actions may reside at RPC for fifteen or more years. The PCPs would like to provide a level of medical care that will help the patient control or eliminate chronic long-term illnesses caused by undiagnosed PTSD in conjunction with the in-house psychiatric services. Patients at RPC are expected to take an active role in their care.

Patients will be asked to fill out the Primary Care PTSD Screen at admission. Patients identified as having a positive PTSD Screen will be referred for counseling services with in-

house counselors. The post test will be the PCP evaluation of the education program immediately following the program and chart review done by this writer for three weeks following the implementation of the program. This chart review will include primary care and psychiatric medical record information on the patient. The data to be gathered will be from the patient chart which is to include the PCP Screen, a diagnosis of PTSD and referral to in-house counseling. The desired outcome for the project is relief of symptoms of PTSD through recognition and treatment. Issel (2009) finds the one group pre-test and post-test design acceptable when the group in the project will receive the interventions.

The goal is to have a minimum of ten to twenty patients involved in the project based on the number of admissions to RPC that occur over a four week period. Evaluation of the chart will commence within twenty-four hours after admission for baseline data on the patient such as the initial psychiatric admission evaluation, new medication orders and patient referral for PTSD counseling. Review of patient charts will continue for three weeks to evaluate response to treatment two or more times per week through documented patient response to counseling, medication compliance, and responsible patient behavior based on the policies of the facility.

Evaluation of the project will include primary care provider evaluation of the application of the PTSD Screen and evaluation of the usefulness of the education and its application to the patient admission. Staff will evaluate the education program based on four questions. The questions are: Did you find the PTSD education useful? Does the Primary Care PTSD Screen have a place in the admission process at Riverview Psychiatric Center? Is the PTSD Screen easily understood by the patient? Do you think the PTSD Screen can improve patient care by identifying patients with PTSD?

Cost/Benefit Analysis

Costs will be minimal as RPC is an inpatient facility. Patient care days average 89 days. The benefit to the patients and the project is that the patients are at the facility for a minimum of 10 days depending on whether this is a civil or court-ordered stay. Patients have access to both primary care services and mental health services, no patient travel is required.

IRB Approval/Exemption

This project for evaluation of undiagnosed Post Traumatic Stress Disorder in the admission stage at Riverview Psychiatric Center has been presented to the Director of Staff Development, Angie Newhouse. She has determined that IRB approval is not required. Utilization of any protected health information related to clients at RPC is covered by hospital policies and procedures that are compliant with:

Health Insurance Portability and Accountability Act (HIPPA regulations at 45 CFR Parts 160 and 164), the federal law related to privacy of health information;

Federal substance abuse law (regulations at 42 CFR Part 2);

State mental health confidentiality law (34-B M.R.S.A. § 1207) and Community Service Network law (34-B M.R.S.A. § 3608);

Federal protection and advocacy agency regulations (42 CFR Part 51); and

State mental health confidentiality regulations (Rights of Recipients of Mental Health Services, Part A(IX) and Rules Governing the Disclosure of Information Pertaining to Mentally Disabled Clients).

Plan for implementation and evaluation

The outline for the education program is as follows:

Educating Primary Care Providers in the use of Primary Care Providers Post-Traumatic stress Disorder Screen Tool

Handout information packet with the program outline, copy of the PCP PTSD Screen, reference list and course evaluation.

One hour education

5 minutes: Introduction of the program and why this program is important to patient care.

Post-Traumatic Stress Disorder (PTSD) has been found to be an undiagnosed and under-diagnosed illness in the primary care setting. Past patient histories of childhood maltreatment and other forms of physical or sexual trauma has been shown to cause depression, substance abuse, obesity, hypertension, diabetes, somatic disorders, poor medical compliance and early death due to lack of medical compliance. Treatment in the primary care setting is usually based on symptoms of depression and anxiety. Time constraints and lack of education interfere with the ability of the primary care provider to intervene and provide health care measures that will assist the patient in self-healing through appropriate referrals to counselors, psychiatrists and PTSD support groups

10 minutes: Overview of the effects of childhood maltreatment on the adult patient through a review of evidence based research. Discuss physical and psychological effects of the maltreatment. Questions from participants and discussion of the material

Twenty-nine percent of forcible rapes committed on children occurred when the child was less than eleven years old. Thirty two percent occurred during the ages of eleven to seventeen and twenty two percent between eighteen to twenty four years of age. The forcible rape statistics drop considerably between twenty five years old to twenty nine years old, seven percent, and over twenty nine years old drops to six percent. According to Sexual Assault Statistics documented by the National Sexual Violence Resource Center (n.d.) one in four girls and one in six boys will be assaulted before the age of eighteen and of the one in four girls fifty percent will develop Post Traumatic Stress Disorder (PTSD). The incidence of adverse childhood events (ACE) has been connected to psychological problems (PTSD, depression, anxiety), behavioral problems (promiscuity, smoking, alcohol and drug use) and physical (obesity, diabetes, hypertension) problems in adults (National Sexual Violence Resource Center, n.d.). The physical and psychological effects of PTSD are similar for both genders. The effects of the abuse are usually pervasive and overlapping. There are seven distinct reactions: emotional, PTSD, self-perception, physical, sexual, interpersonal, and social functioning effects.(American College of Obstetricians and Gynecologists, 2006, DeCarli, 2009)

15 minutes: Review of the Primary Care Provider PTSD Screen and its applicability to the patients admitted to RPC. Provide discussion time of PTSD Screen and how it can be

applied to each patient and their physical and psychological needs. (PTSD Screen attached in handout packet). Discuss the fact that PCPs do not establish the diagnosis of PTSD but do set the groundwork through referral for psychiatric services to evaluate the patient and establish the PTSD diagnosis. The PTSD Screen is to be conducted over a three week period by this writer or designated admission team member.

Primary Care PTSD Screen

In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you…

YES	NO	1. Have had nightmares about it or thought about it when you did not want to?
YES	NO	2. Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?
YES	NO	3. Were constantly on guard, watchful, or easily startled?
YES	NO	4. Felt numb or detached from others, activities, or your surroundings?

Note: The patient is considered to be positive for PTSD if they answer yes to any two questions. Adapted from "Post-Traumatic Stress Disorder: Implications for Primary Care," Independent Study Course by Department of Veterans Affairs Employee Education System and The National Center for PTSD, 2002. Washington, DC. p35.

15 minutes: Expected outcome for the education program: compliance with using the screening tool should be discussed at this time – the need for 100% compliance and its importance to the project, diagnosis of PTSD based on the PTSD screen, referral to counseling services.

10 minutes: Questions about project, who should be responsible for obtaining the PSTD Screen, data gathering responsibility to be done over a three week period by this writer, and the data to be gathered for the project:

Did the patient fill out the survey?
Did the patient refuse to fill out the survey?
Has the patient completed the survey within 24 hours?
Has psychiatric services evaluated the patient?
Has the psychiatrist addressed the PTSD survey with the patient?
Has the patient been medicated for symptomatic PTSD if needed?

5 minutes: Evaluation of education program

Did you find the PTSD education useful?

Does the Primary Care PTSD Screen have a place in the admission process at Riverview Psychiatric Center?

Is the PTSD Screen easily understood by the patient?

Do you think the PTSD Screen can improve patient care by identifying patients with PTSD?

Implementation of the project will occur upon approval of this project. A patient being admitted to RPC is initially met by the Admission Team at which time a gross evaluation of the patient occurs. The Post-Traumatic Stress Disorder Four Question Screen will be given for completion at this time. Any patient who does not complete the survey at admission will be included in the project if the questionnaire is completed within 24 hours of admission. The questionnaire will become a part of the patient paper chart and followed through to patient discharge. By having the questionnaire as part of the patient paper chart, it will be available to the primary care and psychiatric services providers. The plan for psychiatric care will be done by psychiatric services.

Evaluation of the patient care will be done within 24 hours of admission and then at least three times a week through chart review. Patient identifiers will consist of the unique identifier number assigned to each client and an episode of care number assigned to each client at each admission. The information will be kept in a locked draw in the preceptor's office where the door is kept locked at all times. Information will be gathered as Yes/No responses and a ratio of positive responses to the total sample of inquiries will be calculated. The questions posed for each client interaction subject to the query will be:

Did the patient fill out the survey?

Has the patient completed the survey within 24 hours?

Has psychiatric services evaluated the patient?

Will the patient be referred to the PTSD group after discharge?

Responses to these questions will be compared to data obtained within the first twenty-four hours after admission.

Timeline of project

I met with Angie Newhouse, Director of Staff Education, regarding the project implementation at Riverview Psychiatric Center. We discussed the project and what results were being reviewed including the effect use of the Primary Care PTSD Screen. Once the project is approved by Drs. Chandler and DeMartinis an education program will be given to the primary care providers and admissions teams for the Saco and Kennebec Units.

February/March, 2012 – Evaluate the PCPs and admission intake nurses educational needs for using the PCP PTSD Screening tool. Create education program to meet the needs of the four staff members involved with the initial admission to RPC. Provide a one hour presentation which will discuss the PTSD Screen, the potential chronic illnesses that may accompany the PTSD. The project is to start at the next patient admission to Riverview Psychiatric Center. Responsibility for asking the patient to fill out the PTSD Screen will be this writer and the admission intake nurse.

March, 2012 - April, 2012 – ongoing evaluation of patient chart for PTSD diagnosis and counseling

April 5, 2012 - present Client Case Review to Medical Staff (per RPC requirements for graduate students)

April-May, 2012 – Collate the information regarding the number of patients (10-20) who filled out the Primary Care Provider PTSD Screen at admission versus those who refused, the

number of patients diagnosed with PTSD and the number of patient referrals to counseling services within Riverview Psychiatric Center for PTSD.

Table 2

TITLE OF EDUCATIONAL ACTIVITY: EDUCATING PROVIDERS IN PTSD

OBJECTIVES	**CONTENT (Topics)**	**TIME FRAME**	**METHODS**	**EVALUATION**
List learner's objectives using action verbs, i.e. describe, identify, list, explain. At the end of this presentation, the learner will be able to:	Each objective needs a brief outline of content that is not just a restatement of the objective.	State the time frame for each objective	Describe the teaching methods, strategies, materials & resources for each objective	
Define the need and benefit for the training program on PTSD for the Primary Care Provider at RPC.	Trauma is a common occurrence and may lead to PTSD and other impairments , is usually unrecognized in the primary care setting, may have severe consequences on physical and mental health, PTSD influences an increase	A one hour education program will be given for the PCPs and admission intake nurse prior to start of project.	Give a verbal one hour education program regarding the evidenced-based need to identify patients with PTSD. Review the PCP PTSD Screen and why it is pertinent to the care of the patient and their physical and psychological well-being.	Did you find the PTSD education useful? Does the Primary Care PTSD Screen have a place in the admission process at Riverview Psychiatric Center? Is the PTSD Screen easily understood by the patient? Do you think the PTSD Screen can improve patient care by identifying patients with PTSD?

TITLE OF EDUCATIONAL ACTIVITY: EDUCATING PROVIDERS IN PTSD (cont'd)

OBJECTIVES	CONTENT (Topics)	TIME FRAME	METHODS	EVALUATION
	in the use of health care services.			
Describe the measurement method applied through the use of the Four Question Primary Care PTSD Screen.	The Four Question Primary Care PTSD Screen is short and provides an excellent base for the provider to establish an undiagnosed PTSD history.	The PCP PTSD Screen will be administered at each admission to RPC with a minimum of ten participants	The admission evaluation will establish a baseline for treatment for the patient.	Conduct chart audit for completion of the PTSD Screen
Analyze or Evaluate the information acquired from the questionnaire	Two or more yes answers to the questionnaire are considered to be a positive result for PTSD.	Review PTSD Screening tool for inclusion in chart and plan of care over a 3 week period	100% compliance in the use of the PCP PTSD Screen	Chart audit for completion of the PTSD Screen and diagnosis.
Ascertain potential improvements in the planning for care as a result of the information acquired from the assessment tool.	Referral for counseling for PTSD in the patient care plan	Chart/EMR review over 3 week period	100% compliance for referral to counseling for PTSD if appropriate	Ongoing chart evaluation.

TITLE OF EDUCATIONAL ACTIVITY: EDUCATING PROVIDERS IN PTSD (cont'd)

OBJECTIVES	CONTENT (Topics)	TIME FRAME	METHODS	EVALUATION
Execute treatment planning and care	Patient chart should have included: PCP PTSD	3 week chart/EMR review of care plan	Ongoing evaluation of patient treatment care plan.	Collate and disburse the data extracted from the patient chart/EMR. Did the patient fill
strategies that are driven by the evaluation information acquired through the use of the PTSD Assessment Tool.	Screen, diagnosis of PTSD if applicable and referral for counseling.			out the survey? Did the patient refuse to fill out the survey? Has the patient completed the survey within 24 hours? Has psychiatric services evaluated the patient? Has the psychiatrist addressed the PTSD survey with the patient? Has the patient been medicated for symptomatic PTSD if needed? Will the patient be referred to the PTSD group after discharge?

Evaluation

The education project was presented to the primary care providers and admission team, a total of five people, on March 7, 2012 in a one hour program of PowerPoint presentation and discussion of the project and expected outcomes. The discussion centered on the projects applicability to the incoming patient and the immediate use of the PTSD Screen. It was suggested that most patients are too unstable and potentially volatile when first admitted to the facility and a waiting period of two days or more may be necessary before the patient is stable enough to be focused on what is being asked of them. I was also informed that the hospital was closed to any admission for the time being due to unavailability of beds. The participants also suggested that the study focus on patients admitted from January 1, 2012 to March 2, 2012 and

that these patients be asked to participate in the PTSD Screen since a higher degree of patient stability would most likely offer a higher probability of cooperation from the patient.

Evaluations of the educational program by the primary care providers and admission team were favorable and these providers communicated that the PTSD Screen provides valuable information and should be included as an element in the admission process at Riverview Psychiatric Center.

Evaluation of education program

Did you find the PTSD education useful? 100% indicated yes.

Does the Primary Care PTSD Screen have a place in the admission process at Riverview Psychiatric Center? 100% indicated yes. Concerns were the ability of the patient to be compliant and competent to fully understand the process on admission. A later follow-up to accompany the delayed completion of the psychosocial assessment would be appropriate for patients with highly acute psychiatric conditions or diminished cognitive capacity.

Is the PTSD Screen easily understood by the patient? !00% indicated yes due to the simplistic nature of the PTSD Screen tool.

Do you think the PTSD Screen can improve patient care by identifying patients with PTSD? 100% indicated yes.

Concerns about the PTSD Screen were based on the ability of the patient to comprehend the PTSD screening tool while in a psychotic state during the admission process. Another suggestion for the program is to include more information on what may cause PTSD secondary to a traumatic event.

One primary care provider was willing to administer the PTSD Screen toll to newly admitted patients. Due to unforeseen changes in staff members availability as a result of staffing changes the provider was unable to fulfill the tasks required to complete the project. To remedy this change in provider availability, the project facilitator continued the process of data

collection. Hospital patient care staffs were instrumental in providing assistance and security during patient interactions.

Results, Data Analysis and Interpretation

The number of patient admissions to Riverview Psychiatric Center between January 1 and March 2, 2012 totaled forty-one patients. Four patients had been admitted with Axis I diagnosis of Post-Traumatic Stress Disorder, three females and one male, and three patients were discharged prior to implementation of the project. Of the remaining thirty-four patients, twenty-one refused to take the PTSD Screen. Thirteen patients agreed to participate in the project, all were male.

Chart review of the thirty-four patients was accomplished prior to giving the screening tool to the patients. Chart review consisted of the admission examination done by the admission team, the primary psychiatric evaluation and the patient self-evaluation form on March 8 and 9 2012. During the period beginning March 12, 2012 through April 8, 2012 patients were asked for their participation in completing of the PTSD Screen. Post-test chart review centered on the eight patients who agreed to take the PTSD Screen. Information reviewed was any changes or additions in medications to the daily medication record. Additional information would be a referral to the PTSD group that meets twice a week for two hours in the Treatment Mall. As of the time this data was gathered there was no information in the chart to identify that this had occurred for any of these patients. The providers had not become accustomed to the process in spite of efforts to ensure their knowledge of the project and its potential impact on assessment and treatment needs. As stated, all patients are assigned a psychiatric treatment team at admission therefore the patients were receiving counseling for their primary admission diagnosis.

Data gathered from the patient interaction was entered on a Microsoft Excel spreadsheet. The categories for data entry are:

PTSD Diagnosis at Admission:

1=Yes

0=No

PTSD Post-Screening:

0=Yes

1=No

Questionnaire (Screening) Completion:

REF = Refusal,

NEG = All questions answered No,

N1Q = One question answered Yes/negative for PTSD

Y#Q = # of questions answered Yes/positive for PTSD

Table 3

PTSD Screening Assessment Data

GENDER	ADMIT	DIAGNOSIS DESCRIPTION	PTSD DIAG (Y/N)	QUEST	POST-SCREEN PTSD
Female	1/5/2012	PSYCHOSIS NOS	0	REF	
Male	1/6/2012	PARANOID SCHIZO-CHRONIC	0	REF	
Male	1/9/2012	UNSPECIFIED EPISODIC MOOD DISORDER	0	N1Q	0
Female	1/10/2012	UNSPECIFIED EPISODIC MOOD DISORDER	1		
Female	1/11/2012	SCHIZOAFFECTIVE DISORDER, UNSPECIFIED	0	Y4Q	1

Male	1/11/2012	SCHIZOAFFECTIVE DISORDER, UNSPECIFIED	0	Y4Q	1
Female	1/12/2012	SCHIZOAFFECTIVE DISORDER, UNSPECIFIED	0	REF	
Male	1/18/2012	SCHIZOPHRENIA NOS-CHR	0	REF	

PTSD Screening Assessment Data (cont'd)

GENDER	ADMIT	DIAGNOSIS DESCRIPTION	PTSD DIAG (Y/N)	QUEST	POST-SCREEN PTSD
Male	1/19/2012	SCHIZOAFFECTIVE DISORDER, UNSPECIFIED	0	REF	
Female	1/20/2012	SCHIZOAFFECTIVE DISORDER, UNSPECIFIED	0	REF	
Male	1/20/2012	SCHIZOAFFECTIVE DISORDER, UNSPECIFIED	0	Y3Q	1
Female	1/24/2012	DEPRESS DISORDER-UNSPEC	0	Y2Q	1
Female	1/25/2012	PARANOID SCHIZO-CHRONIC	0	REF	
Male	1/25/2012	PARANOID SCHIZO-CHRONIC	0	REF	
Male	1/26/2012	PSYCHOSIS NOS	1		
Male	1/27/2012	PSYCHOSIS NOS	0	NEG	0
Male	1/30/2012	SCHIZOAFFECTIVE DISORDER, UNSPECIFIED	0	Y4Q	1
Male	1/31/2012	PARANOID SCHIZO-CHRONIC	0	NEG	0
Male	2/2/2012	BIPOLAR DISORDER, UNSPECIFIED	0	NEG	0
Male	2/3/2012	PARANOID SCHIZO-CHRONIC	0	REF	
Male	2/6/2012	PSYCHOSIS NOS	0	REF	
Male	2/8/2012	SCHIZOPHRENIFORM DISORDER, UNSPECIFIED	0	N1Q	0
Male	2/8/2012	PSYCHOSIS NOS	0	REF	
Female	2/10/2012	PSYCHOSIS NOS	0	REF	
Female	2/13/2012	PARANOID SCHIZO-CHRONIC	0	REF	
Male	2/14/2012	PSYCHOSIS NOS	1		
Male	2/15/2012	SCHIZOAFFECTIVE DISORDER, UNSPECIFIED	0	REF	
Male	2/22/2012	DRUG MENTAL DISORDER NOS	0	REF	
Male	2/23/2012	HEBEPHRENIA-CHRONIC	0	Y4Q	1
Female	2/24/2012	PARANOID SCHIZO-CHRONIC	0	REF	
Male	2/27/2012	DYSTHYMIC DISORDER	0	REF	
Male	2/28/2012	SCHIZOAFFECTIVE DISORDER, UNSPECIFIED	0	REF	

Female	2/29/2012	SCHIZOAFFECTIVE DISORDER, UNSPECIFIED	0	REF	
Male	2/29/2012	SCHIZOAFFECTIVE DISORDER, UNSPECIFIED	0	Y4Q	1
Male	3/2/2012	BIPOLAR DISORDER, UNSPECIFIED	0	Y4Q	1

PTSD Screening Assessment Data (cont'd)

GENDER	ADMIT	DIAGNOSIS DESCRIPTION	PTSD DIAG (Y/N)	QUEST	POST-SCREEN PTSD
Male	3/5/2012		1		
Female	3/6/2012		0	REF	
Male	3/7/2012		0	REF	

The project and Primary Care PTSD Screen (Table1) was explained to a total of 34 patients by the project facilitator prior to administration of the screen and thirteen were willing to participate. Four of the originally available patients had been diagnosed with PTSD on admission and were excluded from the sample. The results of the screen outcome analysis are depicted in the following table.

Table 4

PTSD Screening Outcomes Summary

	Refusals	Negative for PTSD		Positive for PTSD			Pre-Diagnosed PTSD
		No All Questions	Yes 1 Question	Yes 2 Questions	Yes 3 Questions	Yes 4 Questions	
n = 34	21	3	2	1	1	6	
% of n	61.8%	8.8%	5.9%	2.9%	2.9%	17.6%	
% of n less Refusals	0%	23.1%	15.4%	7.7%	7.7%	46.2%	

PTSD Findings N = 38		13.2%	21.1%	10.1%

Three of the patients answered "No" to all four questions (8.8%), two patients answered "Yes" to one question (5.9%), one patient answered "Yes" to two questions (2.9%), and one patient answered "Yes" to three questions (2.9%). The remaining six participants answered "Yes" to four questions (17.6%). Patients answering yes to two or more questions on the PTSD Screen are considered to be positive for PTSD and are to be assessed by psychiatric services for a full PTSD evaluation.

A total of 10.1% of the patient population (N=38) was diagnosed with PTSD upon admission. An additional 21.1% of the patient population was identified as PTSD positive following the administration of the PTSD Screen. The patients who were diagnosed with PTSD were not administered the PTSD Screen. Given that an additional 21.1% of the patient population was identified as PTSD positive utilizing the PTSD Screen, the value of the tool has been validated in identifying patients with PTSD. There appears to be a significant disparity between those patients diagnosed on admission without PTSD and those identified as positive for PTSD. This gap could be explained in many ways. Since a preponderance of the literature documents the willingness of females to acknowledge past traumas and symptoms of PTSD it is not remarkable that 75% of the initial psychiatric assessments that revealed a diagnosis of PTSD were among the female patients. (Briere, J & Jordan, CE, 2009; Chapman, DP, 2004; Clardie, S, 2004). This gender-based disparity is supported as a plausible reason for differences in the diagnostic identification of PTSD since twice as many patients were identified positive for PTSD using the screen and all of these patients were male. This leads to a conclusion that males tend to

be more reticent in discussing or freely revealing the effects of childhood trauma and the utilization of a screening tool designed to draw out information from these patients is required.

Upon admission each patient is assigned a primary care provider, a psychiatrist, and a psychiatric licensed social worker. The Kennebec and Saco Units have psychiatric nurse practitioners that are fully involved in the patient care. The results of the PTSD Screen for each patient who participated in the project was then shared with the psychiatric nurse practitioner assigned to the unit where the patient resides. Patients who answered "Yes" to two or more questions on the PTSD Screen will be followed by the psychiatric services at RPC. Based on the determination by psychiatric services at RPC, patients will be treated with appropriate medications for symptomatic PTSD and referred to the PTSD group that meets in the facility two times a week. Follow-up counseling with outpatient psychiatric services at RPC and in the community will continue once the patient is determined to be stable and returned to the community.

Limitations to the project were dependent upon the willingness of the client to participate. This willingness was often influenced by the acuity level of the patient, the effectiveness of the treatment provided to the patient for their psychiatric illness, the alternative activities available to the patient at the time the screening was offered, and the general atmosphere of the milieu.

Patient perception of the PTSD Screen impacted the willingness of the patient to participate. Many patients were concerned that the PTSD Screen would be "used against me" or not taking the PTSD Screen would result in a loss of privileges. Patient privileges are earned through acceptable behavior while hospitalized. These privileges are outlined in Riverview Psychiatric Center Policy NO: PC.8.50.2 (Attachment 1). Additional patient concerns were how

the PTSD Screen would affect their length of stay at RPC. Reassurances were given to the patients by the project facilitator that they were not obligated to take the PTSD Screen but that the information gained may help them with their illness.

The time allotted to the study limited the breadth of data collection possibilities and full engagement of the system stakeholders in the project. There was insufficient time to achieve buy-in from providers to ensure a sustainable system of assessment. The providers did indicate an acknowledgement of the value of the information acquired from the utilization of the assessment tool; however, there was a perception that time constrains during the admission process and high degree of variability in patient acuity would present a barrier to consistent utilization. Identification of value-added outcomes for the providers and their patients that result from the utilization of the PTSD Screen might encourage greater utilization. The "what's in it for me" principle is a common theme in many transformation or change-management projects Strategies that can be used to encourage the acceptance of change include engaging the providers in defining methods for the deployment of the screen. Examples of successful outcomes at other facilities or primary care delivery locations can also encourage acceptance in the use of the screening tool. (Dunwoody, WH, 2010) Although the project process was easily adapted to the inpatient psychiatric services, this tool might be more effectively utilized in the primary care setting for two reasons: 1) other, more in-depth assessment methodologies are used as part of the initial assessment process in the inpatient setting; and, 2) there is a dearth of effective methods to quantitatively evaluate psychiatric needs, specifically needs related to PTSD, in the community primary care setting.

Conclusion

The purpose of the project is to develop an in-depth understanding of facilitation and barriers to project implementation. The time frame available to encourage the utilization of the assessment tool at RPC was limited. Provider and admission team buy-in was an under-developed process based on past histories of the volatile and psychotic nature of the majority of the admitted patients. Immediate use of the PTSD Screen is not a viable option for the patient and follow-up by the providers to administer the PTSD Screen may not be feasible. Possible alternatives to administration of the PTSD Screen may be done by the nurse during the admission assessment to a unit. Education would be necessary prior to instituting this process.

Utilization of the project in the psychiatric setting requires no additional costs for personnel or materials. If the project is to be done in the primary care setting, costs may become an issue for the facility. The hiring of additional personnel such as a provider, counselor or additional support staff may be required to keep the patient care flow progressing through the facility. Hiring additional personnel may not be a financial option and referrals to outside services would be required. Patients may not be willing to attend outside counseling sessions.

Results of the project will be sent to Angie Newhouse, Director Staff Education who will provide copies of the project to Dr. William Nelson, Clinical Medical Director. Formal presentation of the project will occur May 11, 2012 on the campus of University of Massachusetts, Amherst.

Riverview Psychiatric Facility has a number of evaluation tools that are used consistently for patient assessment and diagnostics. Increased identification of PTSD in the hospital setting could be gained through the use of this tool as the starting point for patient-provider dialogue.

Table 5

Proposed Inputs and Outputs to the Organizational Plan for educating PCP

Elements	Measure of Input	Measure of Outputs	Cost
Human Resources: Includes personnel costs (New hire, FTEs, Training hours) Primary care providers, admission teams for Saco and Kennebec Units	1. No new hires required 2. Will use existing DNP-FNPc	1. No increased work hours during pilot	During project, DNPc is volunteering her services. Success of project will require no new personnel
Informational Resources: Computer systems (hardware/ software); Information Systems (IS), computer generated reports	1. No change in current hardware is anticipated 3. Printing of PTSD educational material is anticipated	1. Number of forms printed	During Project- $15.00 for two reams of paper. After project cannot be determined because cost of printing depends on extent to which forms are printed.
Monetary Resources: Funding for project is unnecessary	1. Riverview Psychiatric Center is a state facility and is funded through state	1. Patient care services for patients in project	None

Proposed Inputs and Outputs to the Organizational Plan for educating PCP (cont'd)

Elements	Measure of Input	Measure of Outputs	Cost
	and general federal funds		
Physical Resources: Materials, facilities, equipment	1. No new facility space is anticipated 2. Use of existing office space 3.Use of existing clinic lap top computers with	1. No changes in physical resources anticipated for pilot program interventions to be delivered. 2. Possible need for additional lap top/user profile for	During and after project- $0.00

	Medi-TECH HER/ EMR	EMR	
Managerial Resources: Program Facilitator Collaborative Clinicians	1. Educational level of program leader is suitable for project. Program leader is a Doctor of Nursing Practice (DNP) candidate in the Family Nurse Practitioner Track (FNP). 2. Doris Solmitz, FNP	1. No additional managers are anticipated.	12-18 hours/week donated by the DNP candidate. Collaborative clinician's time will be unchanged with no additional cost.
Time Resources: Personal/timelines/ deadlines	1. Timeline developed with a deadline for completion.	1. No delay in meeting all deadlines	During pilot-$00.00
TOTAL COSTS ANTICIPATED FOR PILOT PROGRAM			$ 15.00
TOTAL COSTS ANTICIPATED FOR PROGRAM ADOPTION			Not yet determined

Table 6

Proposed Inputs and Outputs to the Service Utilization of the PTSD project

Elements	Measure of Input	Measure of Outputs	Cost
Recipients: Extent to which only target audience is reached	1. All new admissions to RPC be included in this pilot if willing	1. % of eligible patients will be determined based on admissions.	During project $00.0

Participants: Extent of staff engagement	1. Collaborative involvement of RCP primary care providers and Admission Team 2. DNP/FNPc 3. Dr G. Davis, PCP supervisor, will be available for support throughout project. 4. Preceptor/Mentor involvement is critical	1. RPC PCP staff and Admission Team collaboration 2. FNP-DNPc completes project 3. Support from Dr. G. Davis and Doris Solmitz, FNP	During project $00.0
Queuing: How program will handle the demand	1 Patients who do not fill out PTSD screen or are unable to fill out screen will be excluded from project.	1. All new patient admissions will receive PTSD screen	During project $00.0
Social Marketing: How the program is promoted. Where it takes place. What it costs and what it offers	1.Project is promoted through provider education	1. Eligible patients are new admissions to the facility patients	During project $00.0

Proposed Inputs and Outputs to the Service Utilization of the PTSD project (cont'd)

Elements	Measure of Input	Measure of Outputs	Cost
	2. At no cost to the program recipients	2. RPC PCPs and Admission Team are aware of the project	

Intervention: Was the intervention consistently patient centered and delivered using the established	1. Patient medication review on admission	1. Number of patients that have a medication reconciliation within 48 hours of admission	During project $00.0
protocols and procedures	2. Psychiatric services evaluation w/in 24 hours of admission to include PTSD evaluation. 3. Appropriate SSRIs ordered for patient based on symptoms	2 Percentage of patients who are evaluated for PTSD w/in 24 hours of admission 3. Percentage of patients taking SSRIs or medications appropriate for symptoms. .	
TOTAL COSTS ANTICIPATED FOR PROJECT			$ 0.00
TOTAL COSTS ANTICIPATED FOR PROGRAM ADOPTION			Not yet determined

Attachment

RIVERVIEW PSYCHIATRIC CENTER

FUNCTIONAL AREA: Provision of Care, Treatment and Services **POLICY NO:** PC.8.50.2

TOPIC: Level System

AUTHORIZATION: _____

Medical Director

_____

Director of Nursing

_____

Superintendent

I. PURPOSE: To delineate policy and procedure to ensure that clients have access to the least restrictive environment and activities that preserve their safety and that of others, and promotes their recovery in accordance with all federal, state licensing, accreditation, and other legal standards. The prescription of levels shall never be done for coercive or punitive measures.

II. POLICY: The Level System is intended to ensure that all clients have access to exercise and fresh air, as well as access to therapeutic activities in the hospital and in the community that are part of their transition plan, at a level of participation that is consistent with their clinical and medical conditions. The levels system is designed to encourage client functioning at a maximum level of autonomy within these parameters. The Treatment Team assesses the client's condition in order to ensure safety and maximum participation in therapeutic activities. Evidence of criteria that justifies each level is clearly documented when assigning a client level. Clients are encouraged to be active participants in the process of assessment of safety and level change decisions.

Each Program Services Director (PSD) or designee maintains a daily unit census sheet listing the current level for each client on the unit.

Client's levels **within the hospital** and **outside of the hospital** are evaluated separately from one another in order to enable treatment teams to provide clients the maximum amount of autonomy possible in both settings, while ensuring their safety and that of others. As a result, clients receive a two-part level in accordance with the following options:

Level designations consist of one **number** for **In Hospital Level** and one **letter** for **Outside Hospital Level** chosen from the lists below. All levels will be referred to by number/letter combinations (e.g., 1B, 2D, 4A, 3BG, 4CG,). The outside hospital level G maybe given along with any of the other outside hospital levels. Client-specific modifications are not allowed.

In Hospital Level (1-4)	**Outside Hospital Level (A-G)**
1. Civil/Forensic Unit Status: Other than leaving the unit for outside medical appointments or court, these clients do not have an off unit level.	**A. Hospital Status**: No travel outside the secure area of the hospital without a specific physician's order.
2. Off Unit In Hospital Supervised 1:1: Clients may leave unit with 1:1 staffing within secure area for treatment, activities, and dining.	**B. Outside Hospital Supervised 1:1:** Clients may leave hospital grounds with 1:1 staffing. Mobility for forensic clients may be restricted by court ordered parameters or by treatment plans.
3. Off Unit In Hospital Supervised Group: Clients may leave unit with 1:6 staffing within secure area for treatment, activities, and dining.	**C. Outside Hospital Supervised Group:** Clients may leave hospital grounds with 1:3 staffing, or 1:1 with designated responsible adult. Documented success at level 4. Mobility for forensic clients may be restricted by court ordered parameters or by treatment plans.
4. Open Hospital Time: Clients may leave unit unsupervised within secure area for treatment, activities, and dining, as well as unstructured time during designated open hours.	**D. Community Transition**: Clients may leave hospital grounds unsupervised to participate in independent activities to support a transition process to the community. Documented success at level 4C. Mobility for forensic clients may be restricted by court ordered parameters or by treatment plans.
	G. Grounds: Clients may be outside the building supervised/unsupervised but may not leave the immediate hospital grounds. Level of supervision

	must be specified as either 1:1, 1:6 or unsupervised.

Levels are generally progressive but may be placed on hold or reduced based on clinical safety assessments. Clients are assessed to have met and maintained the expectations of each level prior to moving to the next level. Levels outside of the building (B-G) require a greater degree of competency and autonomy than levels inside of the building (1-4). As a general rule clients are expected to have demonstrated and documented safety at level 4 (A or B) prior to attaining a level C and above. Exceptions to this when clinically appropriate should be clearly understood and well documented in the client's individual service plan.

The following are specific behavioral criteria that are used to guide the clinical decision making of the Treatment Team when determining a client's level:

CRITERIA FOR IN HOSPITAL LEVELS

Criteria for Unit Status (Level 1):

Definition: Other than leaving the unit for outside medical appointments or court, these clients do not have an off unit level if one or more of the following apply:

a) The client presents an imminent danger of hurting self.
b) The client presents an imminent danger of hurting others.
c) Delusions or hallucinations are considerably influencing the client's behavior.
d) The client is an elopement risk.
e) The Client is an arson risk.
f) The Client has gross impairment of their communication due to active psychiatric symptoms.
g) The Client is disoriented to person or place, aimlessly wanders, or is not able to follow basic instructions.

Criteria for Off Unit In Hospital Supervised 1:1 (Level 2):

Definition: Clients may leave unit with 1:1 staffing within secure area for treatment, activities, and dining.

a) The client is free from assaultive behavior for a period no less than 24 hrs.

b) The client is free from self-injurious behavior (unless the self-injurious behavior is not life-threatening and is being addressed in a clinically appropriate manner in the treatment plan) behavior for a period no less than 24 hrs.

c) The client is a low risk for elopement or arson.

d) The client is able to communicate basic needs to staff members.

e) The client has been assessed to be a low risk for suicide with 1:1 supervision within the secure area of the hospital.

f) The team has a reasonable expectation that if the client begins to engage in self-destructive or aggressive behavior towards others, s/he will be able to respond to staff intervention.

Criteria for Off Unit in Hospital Supervised Group (Level 3):

Definition: Clients may leave unit with 1:6 staffing within secure area for treatment, activities, and dining.

The client meets all of the criteria for Level 2, plus:

a) The client can maintain personal safety within the secure area with limited supervision (including being out of staff members' view for brief periods of time) for clearly delineated periods of time.

b) The client has been assessed to be a low suicide risk with limited supervision (including being out of staff members' view for brief periods of time) for clearly delineated periods of time.

c) The client has been assessed to be a low elopement risk with limited supervision (including being out of staff members' view for brief periods of time) for clearly delineated periods of time.

d) The client has been assessed to be a low assault risk with limited supervision (including being out of staff members' view for brief periods of time) for clearly delineated periods of time.

e) The team has a reasonable expectation that if the client begins to engage in disruptive behavior, s/he will be able to respond to an intervention by any hospital staff.

Criteria for Open Hospital Time (Level 4):

Definition: Clients may leave unit unsupervised within secure area for treatment, activities, and dining, as well as open time as designated (see hospital open times attachment).

The client meets all of the criteria for Level 3, plus:

a) The client can maintain personal safety within the secure area without direct supervision for clearly delineated periods of time.

b) The client has been assessed to be a low suicide risk within the secure area without direct supervision for clearly delineated periods of time.

c) The client has been assessed to be a low elopement risk within the secure area without direct supervision for clearly delineated periods of time.

d) The client has been assessed to be a low assault risk within the secure area without direct supervision for clearly delineated periods of time.

e) The client has been assessed to be able to consistently manage self in groups without disruptive behavior.

CRITERIA FOR OUTSIDE HOSPITAL LEVELS

Criteria for Hospital Status (Level A):

Definition: No travel outside the secure area of the hospital without a specific physician/treating practitioner's order for necessary medical appointments or discharge planning.

- The client has been assessed as being unable to maintain safety of self and/or others outside the secure area, due to danger to self or others and/or risk of elopement.

Criteria for Outside Hospital Supervised 1:1 (Level B):

Definition: Clients may leave hospital grounds with 1:1 staffing. Mobility for forensic clients may be restricted by court ordered parameters or by treatment plans.

a) The client has been assessed to be able to maintain personal safety outside the hospital with 1:1 staffing for clearly delineated periods of time.

b) The client has been assessed to be a low suicide risk outside the hospital with 1:1 staffing for clearly delineated periods of time.

c) The client has been assessed to be a low elopement risk outside the hospital with 1:1 staffing for clearly delineated periods of time.

d) The client has been assessed to be a low assault risk outside the hospital with 1:1 staffing for clearly delineated periods of time.

Criteria for Outside Hospital Supervised Group (Level C):

Definition: Clients may leave hospital grounds with 1:3 staffing, or 1:1 with a designated responsible adult. Mobility for forensic clients may be restricted by court ordered parameters or by treatment plans.

The client meets all of the criteria for Level B and has shown ability to use level 3 successfully and consistently, plus all of the following:

a) The client has been assessed to be able to maintain personal safety outside the hospital with 1:3 staffing, or 1:1 with a designated responsible adult for clearly delineated periods of time.

b) The client has been assessed to be a low suicide risk outside the hospital with 1:3 staffing, or 1:1 with a designated responsible adult for clearly delineated periods of time.

c) The client has been assessed to be a low elopement risk outside the hospital with 1:3 staffing, or 1:1 with a designated responsible adult for clearly delineated periods of time.

d) The client has been assessed to be a low assault risk outside the hospital with 1:3 staffing, or 1:1 with a designated responsible adult for clearly delineated periods of time.

Criteria for Community Transition (Level D):

Definition: Clients may leave the hospital unsupervised for clearly delineated periods of time to engage in activities that support a progressive community transition plan. Mobility for forensic clients may be restricted by court ordered parameters or by treatment plans.

The client meets all of the criteria for Level 4C, and documented success at level 4C plus all of the following:

a) The client is actively involved in a transition plan and the purpose of the community activity is documented as part of their plan. The time/scope of the activity allowed shall be given incrementally.

b) The client has been assessed to be able to maintain personal safety outside the hospital unsupervised for clearly delineated periods of time.

c) The client has been assessed to be a low suicide risk outside the hospital unsupervised for clearly delineated periods of time.

d) The client has been assessed to be a low elopement risk outside the hospital unsupervised for clearly delineated periods of time.

e) The client has been assessed to be a low assault risk outside the hospital unsupervised for clearly delineated periods of time.

Criteria for Grounds (Level G):

Definition: Clients may walk on hospital grounds* with 1:1, 1:6 supervised /unsupervised. Clients my not leave the hospital grounds under any circumstances. Mobility for forensic clients must meet criteria for Level C.

The client meets all of the criteria for Level 3 and documented success at

Level 3.

*Grounds are defined as follows: From BGS Parking lot along Arsenal Street to perimeter of staff parking lot to fire road at rear of hospital. (See attached map)

III. PROCEDURE: The general procedures apply for all levels as follows:

1. The Treatment Team will review each client's level as clinically indicated and no less often than at every client team meeting. Level increases are authenticated by the physician/treating practitioner's order.

2. Orders will specify length and frequency of blocks of time off the unit or outside of the hospital**.**

3. Each client's Clinical Team should try to anticipate increases in levels that might become appropriate over the weekend, with special attention to holiday weekends. In the absence of such advance planning, increases in level over the weekend will not be approved by on-call medical staff.

4. Clients may make suggestions or requests for a change in level at any time. The request is written on the Levels Request Form and is to be submitted to the treatment team. Clients are given assistance if needed to plan in advance for level changes in order to minimize delays required for a thoughtful clinical review.

5. The RN may reduce a client's level to a more restrictive level based on client safety. The RN must then follow-up to obtain a physician or a mid-level practitioner order for the level reduction. Re-evaluation of this restriction by the team will occur the next business day.

6. Upon returning to the unit from Community Transition Activities (level D) unit staff will review the client's success in utilizing the time/activity and document findings by end of shift.

7. A grid defining goals for levels and the hospital designated open times is posted on each unit in a consistent place for clients to reference. The intent of posting the grid is to enable clients to identify and work towards key criteria / goals to advance their levels.

8. Levels for all civil and forensic clients are categorized within the limitations of the Client Levels Status Grid (attached to this policy)

Procedures for Level Review of Forensic Clients:

- In addition to the above Criteria for "Unit Status", the following will apply to ALL FORENSIC CLIENTS (NCR & LEGAL HOLD) throughout the hospital:

    i. Newly admitted forensic clients must have a formal level review of security needs, conducted by the unit treatment team prior to having off unit levels determined.

    ii. **In Hospital** Level 3 for forensic clients is ordered by the psychiatrist/treating practitioner in consultation with the treatment team and submitted for review and approval by the RN IV or PSD.

iii. **In Hospital** Level 4 for forensic clients is ordered by the psychiatrist/treating practitioner in consultation with the treatment team and submitted for review and approval by the Director of Nursing.

iv. **Outside Hospital** levels B, C, D, and G for forensic clients are ordered by the psychiatrist/treating practitioner in consultation with the treatment team and submitted for review and approval by the Medical Director and Superintendent.

v. Levels for forensic clients are also subjected to applicable judicial guidelines and specific judicial orders.

V. RESPONSIBILITY: Medical Director

VI. POLICY STORED IN: Superintendent's Office

VII. POLICY APPLIES TO: Riverview Psychiatric Center

VIII. KEY SEARCH WORDS: Levels, Level System

References

American College of Obstetricians and Gynecologists, (n.d.), Adult Manifestations of childhood sexual abuse, American Academy of Experts in Traumatic Stress, Retrieved from: www.aaets.org/article120.htm

American Psychiatric Association, (2000), Diagnostic and statistical manual of mental disorders: DSM-IV-TR., , American Psychiatric Association. Task Force on DSM-IV. - American Psychiatric Association

American Psychiatric Association. Practice guidelines for the treatment of patients with major depressive disorder. 2nd ed. September 2007

Anda RF, Butchart A, Felitti VJ, Brown DW. Building a framework for global surveillance of the public health implications of adverse childhood experiences. *AM J Prev Med*. 2010 Jul;39(1):93-8.

Arias, I.,(2004), The legacy of child maltreatment: Long-term health consequences for women., Journal of Women's Health, Vol. 13, No. 5, p468-473, Retrieved from:http://www.medscape.com/viewarticle/482931

Bates , et al V. STATE OF MAINE, NO. 89-88 (Kennebec SS. June 15, 1989), Retrieved from: C:\Users\Public\Documents\Consent Decree - Mental Health; DHHS Maine.htm

Batten, S.V., Aslan, M., Maciejewski,P.K., Mazure, C.M., (2004) Childhood maltreatment as a risk factor for adult cardiovascular disease and depression., Journal of Clinical Psychiatry, 2004; 65(2), p249-254

Beck, J.S., Beck, A.T., (2011), Cognitive Behavior Therapy: Basics and Beyond, Guilford Press Goggle e-book, Retrieved from: http://books.google.com/books?hl=en&lr=&id=J_iAUcHc60cC&oi=fnd&pg=PR1&dq=cognitive+behavior+therapy&ots=0B0UP3YWzB&sig=2pNAdiQgWx1uWcWfy5a7SX9vPA4#v=onepage&q&f=false

Bentley, S., (2005) A short history of PTSD: from Thermopylae to Hue solders have always had a disturbing reaction to war, The VVA Veteran, www.vva.org/archive/TheVeteran/2005_03/feature_HistoryPTSD.htm

Breslau, N., Peterson, E.L., (2010), Assaultive violence and the risk of posttraumatic stress disorder following a subsequent trauma, Behavior Research and Therapy, Vol. 48, p1063-1066

Briere, J., Jordan, C.E., (2009), Childhood maltreatment, intervening variables, and adult psychological difficulties in women: An overview, Trauma, Violence, and Abuse, 2009; 10; 375, http://tva.sagepub.com

Browne, K., Hamilton-Giachritsis, C., Vettor, S., (2007), The cycles of Violence: The relationship between childhood maltreatment and the risk of later becoming a victim or perpetrator of violence., Violence and Injury Prevention Programme, WHO European Centre for Environment and Health, Rome, http://www.euro.who.int/violenceinjury

Campbell, C., Greeson, M.R., Bybee, D., Raja, S., (2008), The Co-occurrence of childhood sexual abuse, adult sexual assault, intimate partner violence, and sexual harassment: A meditational model of posttraumatic stress disorder and physical outcomes, Journal of Consulting and Clinical Psychology, 2008, Vol. 76, No. 2, p194-207, http://www.ncbi.nlm.nih.gov/pubmed/18377117

Chapman, D.P., et al, (2004), Adverse childhood experiences and the risk of depressive disorders in adulthood, Journal of Affective Disorders, Vol. 82, p217-225, www.elsevier.com/locate/jad

Clardie, S., (2004), Post-traumatic stress disorder within a primary care setting: Effectively and sensitively responding to sexual trauma survivors, Wisconsin Medical Journal, Vol.103. No.6, p73-77

Collins, C., Heson, D.L.,Munger, R.,Wade, T., (2010) Evolving Models of Behavioral Health Integration in Primary Care, Milbank Memorial Fund http://www.milbank.org/reports/10430EvolvingCare/10430EvolvingCare.html

Dalgleish, T. (2004), Cognitive Approach to Post Traumatic Stress Disorder: The evolution of multirepresentational theorizing, Psychological Bulliten, Vol. 130, No. 2, pp228-260, Retrieved from: http://www.ncbi.nlm.nih.gov/pubmed/14979771

Dallam, S.J., (2001), The long-term medical consequences of childhood trauma, In K. Franey, R. Geffner & R. Falconer (eds.), The cost of child maltreatment: Who pays? We all do. Pp1-14. San Diego, CA: FVSAI Publications, Retrieved from: http://www.leadershipcouncil.org/1/res/dallam/4.html

Danielson, C. K., de Arellano, M. A., Kilpatrick, D. G., Saunders, B. E., & Resnick, H. S. (2005). Child maltreatment in depressed adolescents: differences in symptomatology based on history of abuse. *Child Maltreatment, 10*(1), 37-48.

DeCarli, J.M., (2009), Adult manifestations of childhood sexual abuse, County of Los Angeles, *The Public's Health*, Newsletter for Medical Professionals in Los Angeles County, Retrieved from: www.publichealth.lacounty.gov

Defense Centers of Excellence, (n.a.), (2011) PTSD Treatment Options, Retrieved from: http://dcoe.health.mil/

Department of Health and Human Services, Adult Mental Health Services, (n.a.), Riverview Psychiatric Center, 2011 Citizen Centric Report, Retrieved from: http://www.maine.gov/dhhs/riverview/RPC-CitizenCentricReport.pdf

Dartmouth-Hitchcock Medical School, Department of Psychiatry, (n.a.), n.d.), Services at Riverview Psychiatric Center, Retrieved from: http://dms.dartmouth.edu/psych/care/rpc_services/

Department of Veterans Affairs: Veterans Health Initiative.(2002), Post traumatic stress disorder: Implications for primary care (Independent Study Course), Department of Veterans Affairs Employee Education System and The National Center for PTSD, Retrieved from: http://www.publichealth.va.gov/docs/vhi/posttraumatic.pdf

Dingley,A., (2010), Living with post-traumatic stress disorder, http://www.maine.gov/dhhs/riverview/psychology_articles/posttraumatic_stress.html

Dube SR, Anda RF, Felitti VJ, Chapman D, Williamson DF, Giles WH. Childhood abuse, household dysfunction and the risk of attempted suicide throughout the life span: Findings from Adverse Childhood Experiences Study. *JAMA* 2001,Vol 286, No 24, p3089–3096

Duncan, K.A., (2005), The relationship between Posttraumatic Stress Disorder and Substance Abuse in women with a history of Childhood Sexual Abuse Trauma, In G.R. Walz and R.K. Yep (eds.), VISTAS: compelling Perspective on Counseling, Alexandria, VA: American Counseling Association

Dunwoody, W.H., (2010), Technology Acceptance in Health Care Process Improvement, Quality Management Forum, 36(2), 7-10

Edwards VJ, Anda RF, Nordenberg DF, Felitti VJ, Williamson DF, Howard N, Wright JA., (2001), Bias assessment for child abuse survey: factors affecting probability of response to a survey about child abuse.*Child Abuse & Neglect* 2001, Vol 25, p307–312.

Edwards, V.J., Holden, G.W., Felitti, V.J., Anda, R.F., (2003), Relationship between multiple forms of childhood maltreatment and adult mental health in community respondents: Results from the Adverse Childhood Experiences Study, American Journal of Psychiatry, 160:8, August 2008, p1453-1460, http://ajp.psychiatryonline.org

Felitti, V.J., (2002), The relationship of adverse childhood experiences to adult health: Turning gold into lead, German Ace Article *Z psychomMed Psychother 202;* 48(4): 359-369

Freedy, J.R., Brock, C. D., (2010), Spotting - and treating – PTSD in primary care, The Journal of Family Practice, Vol. 59, No. 2, ppg: 75-80, Retrieved from: http://www.jfponline.com/Pages.asp?AID=8362

Freeman, S.M., (2006), Cognitive Behavioral Therapy in Advanced Practice Nursing: An Overview, Topics in Advanced Practice Nursing eJournal http://www.scribd.com/doc/43046746/Cognitive-Behavioral-Therapy-in-Advanced-Practice-Nursing

Gameroff, M.J., Olfson, M., (2006) Major depressive disorder, somatic pain, and health care costs in an urban primary care practice, Journal of Clinical Psychiatry, 67(8) pg 1232-1239, Retrieved from:www.ncbi.nlm.nih.gov/pubmed/16965201

Hammersly, P, Burston, D., Learning to listen: childhood trauma and adult psychosis, Mental Health Practice (2004) Vol 7, Iss: 6, P18-21 http://www.mendeley.com/research/learning-listen-childhood-trauma-adult-psychosis/

Hughes, T., (2006), The neglect of children and culture: Responding to child maltreatment with cultural competence and a review of child abuse and culture: Working with diverse families, St. John's University Legal Studies Research Paper Series, Paper #06-0053 Retrieved from:www.ct.gov/ccpa/article_neglect_of_children_and_culture.pdf

Giardino, A.P., Harris, T.B., Giardino, E.R., (2011), Posttraumatic Stress Disorder due to childhood abuse and neglect, Medscape Reference, http://emedicine.medscape.com/article/916007-overview

Gonzalez-Prendes, A.A., Resko, S.M., (2011), Chapter 2: Cognitive Behavior Theory, Smith College Studies in Social Work, Vol. 81, Iss. 4, Retrieved from: http://www.tandfonline.com/doi/full/10.1080/00377317.2011.616842

Grinage, B.D.,(2003), Diagnosis and management of Post-traumatic Stress Disorder, American Family Physician, Vol.68., No. 12: p2401-2409, http://aafp.org/afp/2003/1215/p2401.html

International Psychopharmacology Algorithm Project, (2005), IPAP Post-Traumatic Stress Disorder (PTSD) Algorithm v. 1.0, www.ipap.org

Jefferys, M.,(n.d.), National Center for PTSD: Clinicians Guide to Medications for PTSD, www.ptsd.va.gov/professional/pages/clinicians-guide-to-medications-for-ptsd.asp

Kerr, L.D, Kerr L.K., (2001), Screening tools for depression in primary care, WJM, Culture and Medicine, Vol. 175. P349-352

Kilpatrick, D. G.,(2000) Rape and sexual assault, National Violence Against Women Prevention Research Center, Medical University of South Carolina, www.musc.edu/vawprevention/research/sa.shtml

Lang, A.J., Aarons,G.A., Gearity, J., Laffaye, C., Satz, L., Dresselhaus, T.R., Stein,M.B., (2008), Direct and indirect links between childhood maltreatment, posttraumatic stress disorder, and women's health, Behavioral Medicine, Vol. 33, p125-135

Liebschultz, J., et al, (2007), PTSD in urban primary care: High prevalence and low physician recognition, Journal of General Internal Medicine, 2007 June, Vol. 22, No. 6, p719-726, www.ncbi.nlm.nih.gov/pmc/articles/PMC2219859/

Lu, W., Mueser, K.T., Rosenberg, S.D., Jankowski. M.K., (2008) Correlates of adverse childhood experiences among adults with severe mood disorders., Psychiatric Services, 2008, Vol. 59 No. 9, www.ps.psychiatryonline.org

Mauer, B.J., (2009), Behavioral Health/Primary Care Integration and the Person-centered Healthcare Home, National Council for Community Behavioral Healthcare, Retrieved from: http://www.thenationalcouncil.org/galleries/resources-services%20files/Integration%20and%20Healthcare%20Home.pdf

Meredith, L.S., Eisenman, D.P., Green, B.L., Basurto-Davila, R., Cassells, A., Tobin, J., (2009), System factors affect the recognition and management of Posttraumatic Stress Disorder by primary care clinicians, Med Care, 47(6), doi:10.1097/MLR.0b013e318190db5d.

Mullen, P.E., Fleming, J., (1998), Long term effects of Child Sexual Abuse, American Academy of Experts in Traumatic Stress, www.aaets.org/article176.htm

National Clearinghouse on Child Abuse and Neglect Information, (n.a.), (2005), Longterm consequences of child abuse and neglect, Department of Health and Human Services, http://www.childprotectionoffice.org/pdf/long_term_consequences.pdf

National Sexual Violence Resource Center,(n.a.), (n.d.), Sexual Assault Statistics, http://www.ncdsv.org/images/SexualAssaultStatistics.pdf

Net Industries, (2011), Child Abuse—A History - Modern America - Children, Law, Services, and Public, Retrieved from: http://www.libraryindex.com/pages/1362/Child-Abuse-History-MODERN-AMERICA.html#ixzz1fDGYUua9

Noll, J. G., Zeller, M. H., Trickett, P. K., & Putnam, F. W. (2007). Obesity Risk for Female Victims of Childhood Sexual Abuse: A Prospective Study. *Pediatrics, 120*(1), e61-e67. doi: 10.1542/peds.2006-3058

Ogden,P, Pain, C, Fisher, J, (2006) A Sensorimotor Approach to the Treatment of Trauma and Dissociation, Psychiatric Clinician North America http://www.lifespanlearn.org/documents/P.Ogden_ClinArticle.pdf

PTSD Support Services,(n.a.),(2011), The importance of Active Coping, Retrieved from http://www.ptsdsupport.net/coping_with_ptsd.html

PTSD Support Services, (n.a.),(2011), Treatments of PTSD, Retrieved from: http://www.ptsdsupport.net/ptsd_treatments.html

Raphael, K.G., Chandler, H.K., Ciccone, D.S., (2004) Is childhood abuse a risk factor for chronic pain in adulthood, Current Pain and Headache Report, 2004, 8:99-110, Retrieved from: http://www.ncbi.nlm.nih.gov/pubmed/14980144

Shell shock.,(2011), in Medicine Net Medical Dictionary. Retrieved from http://www.medterms.com/script/main/art.asp?articlekey=5474

Shonkoff, J.P., (2009), Neuroscience, Molecular Biology, and the childhood roots of health disparities: Building a new framework for health promotion and disease prevention, Journal of the American Medical Association Vol. 301, No. 21: p 2252-2259, Retrieved from: www.jama.com

Social Issues & Debate Topics » Child Abuse—A History - Overview, Abuse During The Industrial Revolution, Modern America, The International Exploitation Of Children http://www.libraryindex.com/pages/1362/Child-Abuse-History-MODERN-AMERICA.html#ixzz1Yt6s46SX

Staab, J.P., (2011), Post Traumatic Stress Disorder, American College of Physicians: Physician Information and Education Resources, Retrieved from http://pier.acponline.org/physicians/public/d251.html

Terao, S.Y., Borrego, J., Urquiza, A. J.,(2001), A reporting and response model for culture and child maltreatment, Child Maltreatment, Vol.6, No. 2, p158-168, http://pcit.tv/pdf/RPTG_response_model_4_culture_cm.pdf

Whealin, J., Barnett, E., (n.d.) National Center for PTSD: Child sexual abuse, www.ptsd.va.gov/professional/pages/child_sexual_abuse.asp

Widom, C.S., (2002),Part 1: Understanding child maltreatment and juvenile delinquency, the research, CWLA Press, http://www.cwla.org/programs/juvenilejustice/ucmjd03.pdf

Wu, N. S., Schairer, L. C., Dellor, E., & Grella, C. (2010). Childhood trauma and health outcomes in adults with comorbid substance abuse and mental health disorders. *Addictive Behaviors, 35*(1), 68-71. doi: 10.1016/j.addbeh.2009.09.00