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# Retrospective Investigation of One-time Presenters Versus Repeat Presenters to Urban and Suburban Psychiatric Emergency Services : Cross-sectional and Clinical Characteristics

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Philadelphia College of Osteopathic Medicine

Department of Psychology

RETROSPECTIVE INVESTIGATION OF ONE-TIME PRESENTERS VERSUS  
REPEAT PRESENTERS TO URBAN AND SUBURBAN PSYCHIATRIC  
EMERGENCY SERVICES: CROSS-SECTIONAL AND CLINICAL  
CHARACTERISTICS

By April J. Hansen

Submitted in Partial Fulfillment  
Of the Requirements for the Degree of  
Doctor of Psychology

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PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE

DEPARTMENT OF PSYCHOLOGY

Dissertation Approval

This is to certify that the dissertation presented to us by April Jayne Hansen on the 12<sup>th</sup> day of March, 2003, in partial fulfillment of the requirements for the degree of Doctor of Psychology, has been examined and is accepted in both scholarship and literary quality.

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## Dedication

This dissertation is dedicated to my mother, Patricia L. Hansen, who into my adult life has become one of my dearest friends. This dissertation would have been nothing more than an unfulfilled dream if it were not for my mother's direction. She has taught me to always appreciate the beauty in life and to assist others with the best of my ability. Mom, I am so thankful for you and still cannot figure out how I came to be so lucky to have you as my mother, and now my friend!!!

where the research was undertaken for their interest and support. Dr. Udell, your openness and excitement made this project a possibility. You were the link between the clinical world and the research world for me and I thank you for your assistance with my development as a professional and a person. I will treasure my memories of our meetings, which contained the necessary discussions and added life lessons.

While the dissertation can be a lonely process at times, I felt very little loneliness due to some extremely amazing individuals. There is one remarkable friend, Kristen Cirelli, to whom I am very thankful to have had the opportunity to work closely with throughout this process. Together we continually jumped on and off each other's shoulders resulting in the amazing synergy that usually happens when we work together. I will never forget the countless hours and overnight data collection visits, as well as a lasting friendship that came years before the dissertation, which has assisted us through the stressful dissertation times. My dear soul friend, I look forward to continuing to learn, grow and laugh with you through the journeys beyond this project. Thank you to Paul Perrymore, the love of my life, for always listening to my ideas, encouraging me, calming me down during the stressful times and celebrating every little step with me. Thank you for all of the times you've looked into my eyes and told me that you believe in me. Thank you to Dr. M.L. Sicoli, my very first mentor. Your shoulders must be tiring for I have been standing on them for many years. Lastly, thank you to my family (mom and dad,

Glenn, Elaine and the kids, David, grandmom, Aunt Peg and crew, Dave and Ellen) and friends that are like family (Erica, Louisa, Tricia, Garth, and DJ). All of you are probably unaware of the immeasurable amount of happiness you add to my life, which allows me the self-assurance to continue striving toward my goals.

Yes, it is true this dissertation was not written alone and thank you all for lending me your shoulders!

## Abstract

This study retrospectively reviewed 765 patients who presented within a one-year period at either a suburban, urban, or both suburban and urban psychiatric emergency services (PES). Demographic and clinical characteristics were examined. Particular focus included characteristics of children/adolescents and older adults, as well as the relationship between substance misuse and PES presenters. Adults presenting to PES more than three times were more likely to have a chronic mental illness, personality disorder, history of psychiatric treatment, and a history of noncompliance with treatment than those who presented three times or less. Significant differences were found between urban and suburban PESs, in that adults presenting to only the suburban PES were more likely to be employed. Children/adolescents who presented to PES multiple times were more likely to have a history of psychiatric treatment than children/adolescents who had presented one time. No significant differences that were predicted were found between older adults who presented to PES multiple times and older adults who presented to PES one time. Adults who re-presented to PES within 30 days of being discharged from PES were less likely to have social and economic problems. Adults with comorbid diagnosis of substance abuse and psychosis were more likely to visit PES more than one time within a year. Adults who presented to PES with a diagnosis of primary substance abuse without a chronic mental illness were more likely to be self-referred and discharged to the community.

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## Chapter 1

### Introduction

Individuals begin to have unbearable thoughts and feelings of killing themselves by taking pills and believe that these feelings are overwhelming. Whether the individual is among friends and family, alone, at work, or in a therapist's office, where does this individual obtain services to become stabilized? Several trends have taken place concerning how we treat our psychiatric populations. One important trend was the establishment of psychiatric emergency services (PES). The Community Act of 1963 required federally funded facilities to provide psychiatric emergency services (Allen 1999; Gerson & Bassuk 1980; Mezzina & Vidoni 1995). The American Psychiatric Association (1995) details the individuals in need of PES centers based on the work of Bassuk in the paper titled, "*Practice guidelines for psychiatric evaluations of adults,*" as the following: "the emergency psychiatric evaluation occurs in response to the occurrence of thoughts or feelings that are intolerable to the patient, or behavior that prompts urgent action by others, such as violent or self-injurious behavior, threats of harm to self or others, failure to care for oneself, deterioration of mental status, bizarre or confused behavior, or intense expressions of distress" (p. 68). Gerson and Bassuk (1980) describe that the role of these services is to "absorb the weighty burden of containing and defining the unmanageable emotional turmoil of the patient and then directing the patient to longer term sources of treatment" (p. 2). These researchers describe further that the triage model is used in the rendering of psychiatric emergency services, where a rapid evaluation is given while a patient is contained, and then an appropriate referral is made based on the evaluation. Psychiatric services have been continually evolving. "Deinstitutionalization, shrinking financial resources, trends



toward shortened treatments, and centralization of services have contributed to rapid increases in the number of psychiatric emergency services in the USA...” (Brasch & Ferencz, 1999, p. 941). The importance of emergency psychiatric service centers as a site for acute treatment and a gateway to inpatient hospitalization will certainly increase as the focus of mental health care continues to move from the hospital to the community (Brasch & Ferencz). While the psychiatric treatment community has been observing an increase in the number of psychiatric emergency services, and as there is a continued shift away from lengthy hospitalizations, there has been an increase in the amount of individuals utilizing these services.

The American Psychiatric Association's (1995) guidelines for psychiatric evaluation of adults include assessing the patient's ability and willingness to cooperate, taking any necessary precautions, establishing a provisional diagnosis, assessing social environment and cultural factors, and developing a plan for immediate treatment. Often psychiatric emergency services take form according to local need (Stefanis, Rabe-Hesketh, Clark, & Bebbington, 1999) and the psychological services available (Mezzina & Vidoni, 1995; Stefanis, et al.). Psychiatric emergency services generally operate 24 hours a day, 7 days a week with direct access to other agencies (i.e. plan of further treatment in the patient's community or through inpatient psychiatric treatment). In addition, patients are usually treated within their respective catchment area, the area surrounding their hometown, either within their county or a grouping of counties that includes the one in which they reside.

Bernstein (1999) editing a review of the major issues that face clinicians who assess patients in acute crisis stated, “the emergency department assessment of suicidal and violent patients continues to be a mainstay of the psychiatric emergency mission” (p. xiv). Allen (1999) describes the complexity of psychiatric emergencies in general explaining that these types of

emergencies have a sense of urgency and are often characterized by intense symptoms and perceived danger. Nonetheless, we cannot surmise that urgency and intense symptoms characterize all of the individuals presenting for emergency psychiatric services. A diverse variety of human crises present and are assessed through PES (Hatfield, Perry, & Spurrell, 2000). Several studies have been undertaken that address the trends in those utilizing psychiatric emergency services in various countries, as well as the assorted demographic and clinical characteristics of these patients (Gerson & Bassuk, 1980; Hatfield, et al.; Mezzina & Vidoni, 1995; Schnyder, Klaghofer, Leuthold, & Buddeberg, 1999; Stefanis, et al., 1999; Yates, Paxton, Griffiths, & Watson, 2000). However, are those individuals utilizing PESs characterizing specialized groups, such as repeat presenters, children/adolescents, older adults, and individuals meeting criteria for particular diagnoses (i.e. substance and/or alcohol abuse) distinct from the one-time presenter?

Repeat presenters signify a problematic group with a high level of presentations at psychiatric emergency services and may present with distinct characteristics, (Bassuk & Gerson, 1980; Ellison, Blum, & Barsky, 1989; Dhossche & Ghani, 1998; Hjelmeland, 1996; Saarento, Hakko, & Joukamaa, 1998; Segal, Akutsu & Watson, 1998; Surber, et al., 1987; Sullivan, Bulik, Forman, & Mezzich, 1993). When deinstitutionalization and brief psychiatric inpatient stays became the standard, emergency rooms assumed a central role in the management of severely disturbed patients. These psychiatric emergency services have come to symbolize the “revolving door” where patients continually present for services and are repeatedly channeled into other mental health services (Gerson & Bassuk, 1980). However, there are, other reasons discovered through research investigations, such as demographic variables (Sullivan, et al., 1993), as well as substance use (Surber, et al., 1987), which are correlated with repeated visits to

PES. Limited research has been undertaken to investigate the differences with repeated visits to psychiatric emergency services among various age groups.

While it is important to investigate those individuals with a high level of repeat visits to PES centers, an investigation of such magnitude is also in need of considering the child and adolescent presenter, the older adult, and those misusing substance and/or alcohol, who are in need of, and utilize, this emergent level of treatment. The child/adolescent, older adult, and individual presenting with alcohol/substance abuse or dependence signify specialized populations even when utilizing a single psychiatric emergency presentation. Therefore, investigating repeat presenters should uncover valuable information. “Various factors may contribute to cyclical fluctuations in the utilization of mental health emergency services and knowledge about these factors might enable hospital and mental health administrators to better plan and implement effective services” (Sobel, Anisman, & Hamdy, 1998, p. 157).

The remainder of this dissertation critically reviews literature regarding the characteristics of PES presenters: in general, the repeat presenter, the chronic repeat presenter, various age groups, and special diagnoses, such as substance abuse and dependence. Studies in this area conclude that there are indeed characteristics that can identify the repeat presenter, however, conflicting results exist. There are several areas that appear to have limited representation in current literature, such as children/adolescents and elderly who are increasingly utilizing psychiatric emergency services, comparisons of urban and suburban psychiatric emergency services, and comparisons between the one-time presenter, repeat presenter, and the chronic repeat presenter, which are reviewed and addressed in this dissertation. The review concludes with a summary and critique of existing literature, followed by a discussion of the specific research question and hypotheses suggested by the review and examined in this

dissertation, the results, discussion of results, limitations of this study and suggestions for further studies.

### *The Psychiatric Emergency Services Presenter in General*

*Demographics and disposition.* When an individual is in need of the services provided by PES centers what they are likely to encounter is an emergency setting where dispositions need to be made quickly. “The function, organization, treatment approach, and atmosphere of the general hospital emergency room provide a unique context for a psychotherapeutic intervention,” (Gerson & Bassuk, 1980, p. 2). Gerson and Bassuk provided a critical review of the literature from 1967 to 1977 on emergency psychiatric services, with a focus on the determinants of decision-making with patients’ disposition and will be summarized as follows: patients who were referred for inpatient hospitalization were likely to be older, male (however five out of seven studies they reviewed found no significant gender differences), had lost a partner through separation, divorce, or death, exhibited a high degree of psychopathology, and have had behavioral management problems. Upon review of these studies, collective findings indicated that dangerousness is a major deciding factor in the decision to hospitalize. However, it is also noted that an individual who is assessed to be a danger to self or others meets legal criteria for involuntary commitment to inpatient hospitalization.

Marson, McGovern, and Pomp (1988) examined and consolidated studies from 1978 to 1988 and criticized earlier studies for their methodological processes and limitation of the disposition choices. Marson and colleagues found in all of the studies they reviewed, age,

gender, and ethnicity were not significantly related to disposition. However, previous psychiatric history, dangerousness, and psychiatric diagnoses were significantly related to disposition. These authors note that studies tended to differ on the exact diagnoses that are correlated with the disposition of hospitalization. They noted that diagnoses in the emergency setting were unreliable and did not account for the severity of symptoms expressed and/or exhibited by the patient.

Spooren and Jannes (1997) investigated all psychiatric emergency referrals to three hospitals in Belgium looking at the decision-making process for disposition. These researchers found that an individual had an increased likelihood of inpatient hospitalization if they were referred to PES by a professional, presented against their volition, had prior hospitalizations, an Axis I diagnosis of either psychotic or mood disorder, and the information provided about them was judged to be reliable. Schnyder, et al. (1999) analyzed a sample of 3,611 psychiatric emergency visits to a Swiss university general hospital and their results concur with Spooren and Jannes with no mention of the value of reliability information.

Another important factor is the significance of the relationship between the patient's environment and the mental health system surrounding him or her with the resulting PES disposition, as evidenced in Gerson and Bassuk (1980) and Marson, et al. (1988) reviews of the literature. One relationship that was discussed was that those patients with increased social supports and alternative treatment options were less likely to be hospitalized.

*Referral Source.* Due to the high level of care with which an individual in need of psychiatric emergency services may present, it could deepen awareness if it is understood how

they are referred to such services. McNeil, Hatcher, Zeiner, Wolfe, and Myers (1991) retrospectively reviewed the charts of 321 patients evaluated at a PES in San Francisco during a four-week period in August 1998 searching for the characteristics that were related to referral source and police referrals in particular. While a patient may have been referred by more than one source, they found that 33.6% were referred by the police, 18.8% were self-referred, 10.8% were referred by family members, 26.3% by primary medical care facilities, 17.4% by mental health outpatient clinics, day treatment programs, and community residential programs, 12.7% by psychiatric hospitals, and 14.1% by other sources. Due to the focus of their study, those individuals referred by police were compared with those referred by all other sources and no significant results concerning demographics were found. However, those individuals who were referred by the police, as evidenced by global assessment of functioning scores, showed more psychiatric impairment, and they were more likely to have displayed violent behavior two weeks before and during evaluation and treatment. In agreement with these results, Sales (1991) found that patients referred by police were significantly different than those referred by other sources in that they were more likely to be homicidal, a danger to self or others and to have been restrained while being evaluated. Way, Evans, and Banks (1993) focused specifically on police referrals to 10 emergency rooms in New York City and found that police referrals varied from 10% to 53% and these individuals were likely to have exhibited psychotic symptoms, have a severe mental disorder, have been under the influence of substances, were threatening or actually doing harm to themselves, and were more likely to be admitted for psychiatric inpatient treatment. While Stefanis, et al. (1999) investigated a Great Britain PES during a three-month period, they found that only 7% of their 763 presenters were referred by the police (65% were self-referrals). They found that when a patient was referred by the police they were often disturbed or violent. While

investigations regarding psychiatric emergencies have been researched in diverse areas of the world, it is important to note that these PES centers may serve patients unique to that particular geographical area. Bassuk, Winter, and Apsler (1983) described the similarities and differences between British and United States psychiatric emergencies; and while they found significant differences between the two geographical areas in demographic variables, the patients did not differ clinically. These investigators report further that the patients seen as most difficult in both countries were “chronically maladjusted individuals with scanty social supports and were difficult to engage in continuing treatment (p. 183).”

*Presenting Problems.* Once the demographics and referral sources of the individual are understood, one might ponder next on the problems that initiate a PES visit. Stiebel, Allen, and Gordon (2000) stated that the difficulties these individuals present to PES could be classified as “disturbances of behavior, thinking, feeling, and/or perception.” Because PES centers serve as screening centers for the legal commitment of individuals who are a danger to themselves or others due to a mental illness, there exists a high proportion of presentations from individuals with suicidal and/or homicidal ideations and behaviors. At an American Psychological Association symposium regarding psychiatric emergencies one of the speakers, Peter Forester, M.D., stated that one out of three patients has thought about or attempted suicide (Lamberg, 2002, p. 686). Individuals presenting with suicidal ideations and behaviors are most likely diagnosed with schizophrenia, bipolar disorder, major depression, and substance use (Rives, 1999), while those presenting with homicidal ideations and behaviors are most likely to be diagnosed with schizophrenia or another psychotic disorder (Oster, Bernbaum, & Pattern, 2001);

and the acutely psychotic individuals are likely to be diagnosed with schizophrenia and bipolar disorders (Stiebel, et al., 2000). The presenting problems denote what is first observed and are essentially symptoms that may meet criteria for psychiatric disorder(s). Boudreaux, Mandry, Francis, and Friess (2001) found that out of the 920 patients assessed by the psychiatric service center in their urban emergency department, patients were referred for the following presenting problems, equaling more than 100% due to multiple complaints: 48% suicidal, 40% substance abuse, 31% psychotic, and 12% homicidal. As evidenced in the study above, individuals are not often admitted to PES with a single presenting problem. As noted in Stiebel, et al., the problems that patients present are the primary focus of intervention and the diagnoses they meet criteria for are an eminent area of focus when examining the PES patient.

*Diagnoses.* Some psychiatric diagnoses are linked to high levels of PES utilization and have been discovered to be factors in the decision to hospitalize (Gerson & Bassuk, 1980; Schnyder, et al., 1999; Marson, et al., 1988; Sporeen & Jannes, 1997). One of the functions of PES centers as stated in APA guidelines for practice is evaluation of a diagnosis by meeting the current Diagnostic and Statistical Manual of Mental Disorders (DSM) criteria (currently DSM-IV-TR, American Psychological Association, 2000). This “multiaxial system facilitates comprehensive and systematic evaluation with attention to the various mental disorders and general medical conditions, psychosocial and environmental problems, and level of functioning that might be overlooked if the focus were on assessing a single presenting problem” (American Psychological Association, 2000, p. 27). When considering the dynamics of psychiatric emergency services and the rapid decision-making that is often necessary, diagnoses and the



reliability of diagnoses made in this setting may be of concern. Lieberman and Baker (1985) tested the reliability of psychiatric diagnoses in the emergency room, as compared with diagnoses formed while patients were hospitalized, and found a general acceptability of diagnoses for the purposes of triage and initiation of treatment. These investigators examined 50 patients evaluated at a New England PES and learned that the majority of diagnoses were substance abuse, schizophrenia, affective disorders, organic brain disorders, and adjustment disorders. Due to a 78% rate of deferment on DSM Axis II, they chose not to examine the reliability of Axis II diagnoses. Limited research has investigated the five axes of diagnosis.

The DSM-IV-TR (2000) mentions the importance of the multiaxial system, clinician understanding of the medical and psychosocial concerns of which the patient presents, as well as assessment of the patient's global assessment of functioning. Limited research exists that examines personality disorders (Axis II) and the utilization of psychiatric emergency services. Researchers examining 114 suicide attempts, with and without personality disorders, conclude that suicidal behaviors are a more persistent feature among those with personality disorders, however the clinical characteristics of the patient at the time of a suicide attempt may not differ from those without personality disorders, (Suominen, Isometsa, Henriksson, Ostamo, & Lonqvist, 2000). Sommi and Stoner (1998) noted that medical illnesses (Axis III) are not examined as possible contributors to psychiatric conditions in primary health care and there are limited research studies at this time that specifically address medical conditions or the comorbidity of medical and psychiatric disorders and PES presentations. This is surprising considering that Glenn Currier, a speaker at an American Psychological Association symposium on psychiatric emergencies noted that more than half of PES presenters are likely to have coexisting medical problems, (Lamberg, 2002). Boudreaux and colleauges (2001) investigated

the prevalence and type of medical disorders among psychiatric patients who presented to an urban emergency department. They found that out of 920 patients, 39% had at least one diagnosable medical condition in addition to their psychiatric condition, and 6% had more than one medical condition. The most common medical diseases were hypertension, diabetes, and seizure disorders. Medical and psychiatric complaints may often be difficult to identify and separate. For example, “elderly patients with psychiatric problems commonly present with physical symptoms, and elderly patients who are medically ill have accompanying psychiatric presentations” (Tueth & Zuberi, 1999, p. 60). In regards to research investigating Axis IV, psychosocial stressors, multiple studies have demonstrated a positive relationship between limited social support and homelessness as stated above and PES presentations. Lastly, limited investigations regarding an individual’s global assessment of functioning (Axis V) and PES presentations have been undertaken. When assessing a PES patient it can be argued that it is necessary to examine all axes of the diagnosis in order to have a more comprehensive description of the PES presenter. There is a high proportion of patients presenting to PES centers who have comorbid psychiatric diagnoses, such as several Axis I conditions, or a combination of Axis I and Axis II diagnoses. Kessler and associates (1994) took a national comorbidity survey including 8,098 individuals between the ages of 15 and 54 in the United States who were not currently hospitalized. They found that most of the individuals with a psychiatric disorder had more than one disorder and they were more likely to seek treatment.

The individual who presents to psychiatric emergency services is likely to have a primary or secondary diagnosis of substance abuse or substance dependence. “Not only is there a high prevalence of substance abuse among those with clear evidence of mental illness, but those whose primary disorder is substance abuse are often likely to develop a wide range of

psychopathology,” (Breslow, Klinger, & Erikson, 1996, p. 183). Breslow, et al. performed a retrospective review of all evaluations at a New York State psychiatric emergency service during a one-month period and found that 32% of the 294 evaluations were with patients under “acute intoxication” (i.e. positive urine drug screen or positive blood alcohol level) and 17% had a primary diagnosis of substance abuse or dependence. These individuals were likely to self-refer and 70.4% primarily presented due to symptoms of psychosis and suicidality, with suicidality three times more frequent than psychosis. It is interesting to note that this study found that those presenting with acute intoxication had greater behavior management needs; yet only 25.5% of such patients were hospitalized. This is much lower than the compared group of those not presenting with substance use of which 49.3% were hospitalized. In addition, these researchers found that the most frequent substance use was alcohol and/or cocaine (85%).

The prevalence for substance and alcohol use varies. Schiller, Shumway, and Batki (2000) found that 43% and 14% of the 198 patients presenting to a psychiatric emergency in San Francisco were tested positive for drug and alcohol use, respectively. While, Lejoyeux and colleagues (2000) found with 104 PES presenters, the prevalence of alcohol dependence was 37.5%, supporting a high frequency of alcohol dependence diagnoses among patients presenting for PES. Unnithan and Farrell (1992) retrospectively analyzed patients who visited a London PES during a five-month period and discovered that out of the 1,608 patients who presented 245, or 15%, had a diagnosis of substance use; and of these, 191 had alcohol-related problems, while the remaining 54 had drug-related problems. Substance use often exacerbates disruptive behavior. Substance use has increased, while services for community mental health and substance abuse treatment have decreased. Patients presenting with substance use diagnosis might take up a significant proportion of a PES staff’s time (Unnithan & Farrell, 1992). In

addition, individuals presenting with substance use may mimic psychiatric symptoms due to the effects of the substance they are using. For example, DSM-IV-TR (2000) discusses the necessity of ruling out the possibility that a particular symptom a patient is exhibiting is due to use of a substance. However, while many patients presenting with substance use also have psychiatric problems, or may exhibit psychiatric symptoms that dissipate with the effects of the substance, it is important to examine those psychiatric emergency patients that have a comorbid diagnosis of substance use and additional Axis I or Axis II diagnosis.

Menezes and co researchers, (1996) performed a study of 218 subjects identified with a history of psychotic illness in London and found that more than one-third also met diagnostic criteria for a drug or alcohol diagnosis. Due to the high rates of comorbid alcohol/drug problems among individuals with severe mental illnesses, these investigators note that a clinical implication from their research was the significant relationship between these comorbid patients and the heavier use of psychiatric services, inpatient hospitalization in particular. Claassen et al. (1997) investigated 112 psychotic patients admitted to a PES and found that there were several instances where clinicians erroneously believed that a patient was positive for alcohol and drug use, in addition to instances where patients often denied that they were using substances when in fact they were. The demographics that these investigators found as significant for 24 dual diagnosed psychosis and substance disorders were as follows: most were under 45 years old, male, and 2.4 times as likely to be African American. Cacciola, Alterman, McKay, and Rutherford (2001) reviewed the prevalence of psychiatric comorbidity in individuals diagnosed with substance abuse and found that most patients in substance abuse treatment have comorbid Axis I or Axis II, or both Axis I and Axis II psychiatric disorders.

Kessler, et al., (1994) discussed the importance of understanding the distribution of psychiatric disorders among the 15 to 54 year-old individuals in their study showing that 79% had comorbid disorders. McDowell and Reynolds (2001) focused on the comorbidity of patients suffering from both depression and substance abuse found that there exists such a high degree of correlation between these two disorders that the average clinician is likely to encounter these individuals who are difficult to treat. Drake, Alterman, and Rosenberg (1993) make reference to the complexity of detecting substance use disorders in mentally ill patients, reporting that approximately half of those mentally ill patients treated in acute psychiatric settings have abused one or more substances. This means that 47% of individuals meeting criteria for schizophrenia have also met, or currently meet, criteria for a substance-use disorder.

Substance use is prevalent in those presenting to PES. Individuals may present with substance intoxication or substance withdrawal and could be in need of psychiatric emergency stabilization. In addition, an individual could present with psychiatric symptoms that diminish with the dissipation of the substance effects, or substance use could dangerously exacerbate the behavior of an individual with a pre-existing mental illness. Psychiatric emergency staff need to understand the respective characteristics of these individuals in order to be knowledgeable about the differentiation between these presentations to provide the most suitable treatment.

Other specialized populations that psychiatric emergency services treat are children, adolescents, and older adults. Upon review of a 24-hour, 7-day a week university hospital PES of an urban county, there were 14,203 patient visits during a one-year period and of these 3.9% were 13 to 17 year-olds and 6.9% by individuals 65 and older (Hillard, Slomowitz, & Levi, 1987). The majority of literature concerning psychiatric emergency service utilization involves

information on adults and this information cannot be generalized to children/adolescents or older adults.

*Children and adolescents.* Hillard and colleagues (1987) found that adolescents present to PES with different symptoms and receive different diagnoses than adults, yet Healy, Saha, Subotsky, and Fombonne (2002) state that “there is little research into emergency services in child and adolescent psychiatry” (p. 397). Halamandaris and Anderson (1999) make note of the lack of available epidemiological data on the prevalence of psychiatric emergency presentations of children and adolescents; however, they do include a summary of the probable diagnoses and symptoms of which children and adolescents present at PES centers. Suicide is the most common, while aggression, psychosis, physical abuse or neglect, sexual abuse or rape, anxiety disorders, eating disorders, substance abuse, and fire setting are seen to a lesser extent in children presenting in need of psychiatric emergency services. Santiago, Mojica, Foltin, and Tunik (1999) found that over a 6-month period, 210 patients who visited a pediatric emergency department were in need of a psychiatric evaluation; and 45 patients (21%) exhibited problem behaviors, such as threatening behaviors, attempted/successful elopements, or required restraints during the evaluation time. Healy, et al. (2002) found in a review of 107 clinical files of children/adolescents who presented to either a child/adolescent emergency clinic or general hospital emergency room, found that deliberate self-harm was a major component of their presentation. Tomb (1996) discussed child psychiatric emergencies and documented suicide as the most common emergency in child and adolescent psychiatry and noted that 90% of adolescents who have committed suicide had a psychiatric diagnosis. Tomb also found

aggression to be a common presenting behavior contributing to almost 25% of adolescent presentations. Hillard, et al., (1987) found that suicidal ideation or behavior was more common for adolescents than adults. Halamandaris and Anderson (1999) describe further that the anxiety disorders likely to be seen in psychiatric emergency are separation anxiety, panic, and Post-Traumatic Stress Disorder. Eating disorders and substance abuse usually have a comorbid Axis I diagnosis and a particular note is made of recent statistics confirming an increasingly younger age presenting with substance use issues.

The highest prevalence of symptoms associated with child and adolescent presentation for psychiatric emergency service is suicide and, therefore, special attention is necessary (Beautrais, Joyce, & Mulder, 1998; Stewart, Manion, Davidson, & Cloutier, 2001; Peterson, Zhang, Santa Lucia, King, & Lewis, 1996). Peterson and colleagues evaluated 1,436 visits by children in a New England PES from September 1983 to June 1994 and found that the majority presenting for admission ( $n = 673$ ) had attempted suicide or had suicidal thoughts. When these children were compared with other children presenting to the PES, those with suicide attempts or thoughts were significantly older and more likely to be female. However, Healy, et al. (2002) found that in their sample of children and adolescents who presented with self-harm were not likely to be older. There are various severity levels of suicide attempts and perhaps those individuals engaging in suicide attempts requiring medical treatment need to be closely examined due to the imminent danger of these individuals' behaviors. Beautrais, et al., (1998) compared 129 individuals between the ages of 13 and 24 in New Zealand who had medically serious suicide attempts with a control group of individuals of similar ages. Of those who had a serious suicide attempt, 89.2% met DSM criteria for at least one mental health disorder (compared with 31.4% of the control group), 52.7% had a lifetime history of at least one

previous suicide attempt (compared to 5.9% of controls), and 41.1% of subjects had made at least one suicide attempt within the previous year (compared to 2% of control group). These authors also found that individuals who made serious suicide attempts had a significantly higher rate of contact with psychiatric services and were more likely to have higher rates of inpatient hospitalization, had attended outpatient psychiatric treatment, were part of mental health support groups, and had called a crisis hotline.

When children present to PES centers, it is most likely due to parents viewing the child's behavior "an emergency" while adolescents are more likely to seek this service independently (Tomb, 1996). "... Adolescents coming to the psychiatric emergency service have serious, acute pathology and their evaluation and treatment pose significant problems ... given the different presentations and symptoms of adolescents, staff need either special training or the availability of consultation when dealing with adolescent emergencies" (Hillard, et al., 1987, p. 435). In light of the fact that parents, not their children, are often "the identified patient," and adolescents who are suicidal and present to PES often have a history of past suicide attempts, as well as high utilization of services, repeat presenters to PES are likely to be an important issue for children and adolescents.

*Older adults.* There has been a substantial increase in the number of older adults in the United States, as well as high rates of psychological diagnoses, and therefore a resulting pattern of increased usage of PES (Puryear, Lovitt, & Miller, 1991). "While advanced chronological age does not necessitate a change in the approach to the psychiatric evaluation, the strong association of old age with chronic disease and related impairments may increase the need for emphasis on



certain aspects of the evaluation” (American Psychological Association, 1995, p. 76). Puryear and colleagues (1991) found that one-third of the older adults who present to PES had affective disorders, and another third had organic brain disease. Hastings (1993) stated that mental health problems of older adults reflect the range of emotional issues and psychiatric diagnoses found in younger populations, and yet this population does not frequent psychiatric emergency services. Hastings further declared needed awareness for professionals to understand that the older adult at highest risk for mental health problems also had medical conditions. The higher likelihood of medical problems, as well as social isolation, disabling conditions, and feelings of helplessness and loss could lead to depression and substance abuse. Tueth and Zuberi (1999) found that while only approximately 5% of all emergency services sought by the elderly population were considered psychiatric emergencies, the conditions could be life threatening. The most likely behaviors that the elderly presented to PES centers were: “confusion, suicidality, homicidality, aggression, and abuse” (p. 60). Tueth and Zuberi remind us that Caucasian elderly males between the ages of 80 and 84 are the highest risk group for suicide in the United States. Therefore, due to the often life-threatening presentation of the elderly PES patient, further research is needed to deepen our understanding of this understudied PES population. Coyne and Gjertsen (1993) initially considered all referrals from emergency services in northern New Jersey between November 1989 and March 1991 and found that 23.8% of the referrals were for adults living in the community who were 60 years of age or older. The largest portion of these individuals were referred by their family members, 20% by health care facilities and physicians, 15% by community outreach staff, 14% by police, 10% social services agencies, and the remaining 10% by other sources. Seventy-three percent of these elderly individual were referred because they were voluntarily seeking services or because they were seen as a danger to

themselves, others, or property, had a diagnoses of dementia (27%), schizophrenia (16%), psychosis (12%), alcohol abuse (7%), and diagnosis deferred (11%). The authors noted that this particular study took place in a catchment area, where a high proportion of older adults reside, and therefore findings of 23.8% referrals to PES may be inflated. It is important when investigating patients presenting at PES to have an understanding of the community that the PES serves.

*Urban and suburban psychiatric emergency services.* The area where a PES is located may add to the description of the patients they service. Dhossche and Ghani (1998) tested previous theories stating that the usage of psychiatric emergency services are often by underprivileged individuals. The results of their study involving 311 patients showed significance for this statement by providing evidence that unemployment and homelessness were stronger correlates of multiple PES visits than a diagnosis of schizophrenia. The majority of studies involving urban psychiatric services is extensive, however limited research has included PES in suburban areas. Stebbins and Hardman (1993) surveyed 1,707 patient visits to a suburban PES in Newton, Massachusetts between July, 1988 and June, 1989. These authors found support for differences in populations served at urban PES and suburban PES centers, stating that, “the patient seeking psychiatric help from our emergency room requires modification from the urban profile” (p. 241). The “profile” seen during the study was likely to be new patients (only 17% of visits were from repeat patients), were usually employed, well-groomed, sad, depressed, suicidal, and were accompanied by friends or family. Kessler, et al., (1994) from their results of the National Comorbidity Study, found that those living in rural areas

had a 40% lesser chance of having a comorbidity of three or more disorders than their urban counterparts. These researchers state that it is not that rural individuals were less likely to have a psychiatric disorder; however they are not likely to have more than one mental illness. Stebbins' and Hardman's (1993) observation was that urban PES center populations are not able to be generalized to their suburban population. Investigations of suburban PES centers, as well as comparisons of urban and suburban PESs, need to be undertaken due to their under-representation in the literature.

### *The Repeat Presenter*

“As many as one-third of the patients admitted to a psychiatric emergency service are likely to return within the year” (Segal et al., 1998, p.1213). The repeat visitors are often observed as a problematic group (Dhossche & Ghani, 1998), as well as a problem in modern society (Haywood, et al., 1995). Repeat presenters (i.e. more than two times within a year) take up a substantial amount of time and cost and are not able to stabilize themselves in the community, subsequently experiencing symptoms leading to a PES evaluation. Research investigations of the percentage of visits utilized by repeat presenters were as follows: 17.7% (Munves, Trimboli, North, 1983), 26% (Ellison, et al., 1989), 36% (Dhossche & Ghani, 1998) and 65% (Saarento, et al., 1998) to PES services, and 34.5% were repeatedly admitted involuntarily for inpatient psychiatric treatment. Arflken, Zeman, Yeager, Mischel, and Amirsadri (2002) discussed the differences in results regarding repeat visitors to PES were likely due to the “varying definitions of frequent visitors, different health care and social welfare systems, different configurations of

services available, different climates, and different populations served” (p.491). Dhossche and Ghani (1998) found that the following symptoms were related to repeated presentations at PES: chronic mental illness, recurrent intoxication, noncompliance with outpatient treatment, drug-seeking behavior, and psychosocial hardship. However, while they found that there was a significant correlation between the presence of a psychotic disorder and repeat visits; the authors concluded that the role which substance use and repeat PES visits play is in need of further clarification.

*Demographics and Disposition.* Some patients are frequently admitted to inpatient psychiatric units and may differ in demographic and clinical features from those who are not frequently admitted to these units. Haywood and colleagues (1995) evaluated 135 repeatedly admitted patients from four different state hospitals, and compared them with infrequently admitted patients, with the finding that the presence of alcohol/drug problems and medication noncompliance were most significantly related to repeated admissions to psychiatric units. Interestingly, no significant relationships were found among presence of housing, family, and/or money problems and rehospitalization, as well as no significant relationship between readmittance to hospital and criminal history. In contrast, Surber, (1987) found the majority of their subjects had been involved with the criminal justice system, with 60% having had a history of an arrest and 12% having multiple arrests. While an admitted limitation of their study was the omission of Axis II diagnosis, Sullivan and associates (1993) found that in addition to repeat users likely to fit the profile of a younger, unmarried, unemployed, non-Caucasian male with a

diagnosis of schizophrenia or other psychotic disorder, the repeat presenter is also likely to meet criteria for a personality disorder.

Ellison et al. (1989), reporting results from a retrospective chart review of 3,835 visits to a PES in Massachusetts, found that frequent presenters had a severe Axis I or Axis II borderline personality disorder, have had a history of psychotherapy and psychotropic medications, required a greater number of psychiatric hospitalizations, and the majority of their emergency visits concluded with a disposition to follow-up with ongoing outpatient treatment. Two-thirds of the patients in this study presented with symptoms of, but not necessarily a diagnosis of, anxiety. These researchers also observed that homicidal impulses/behaviors, self-injurious behavior, alcohol intoxication, and temporary absence of a psychotherapist correlated with repeat presentations.

Saarento, et al., (1998) examined new patients that presented to a PES and followed them during a three-year period. These researchers defined the repeat presenter as someone who was in the 10<sup>th</sup> percentile for amount of PES contacts and found that they used 65% of PES contacts. They were also more likely to be male, live alone, and had a more serious diagnosis than those individuals who did not repeatedly present to PES.

Surber and colleagues (1987) undertook an indepth investigation of 35 of the possible 99 individuals admitted three or more times and found evidence for violent behavior (57%) and self-destructive behavior (29%). In addition, 37% had acute medical problems and a large majority had problems with basic living skills, such as managing money (80%), and maintaining housing (77%). While 46% of these individuals had substance abuse problems, the authors of this study note that this percentage is likely to be underestimated due to Medicaid reimbursement policies.

Arflken, et al. (2002) discussed the importance of investigating temporal patterns, times of the month, weather conditions, and staff attitudes in relation to repeat presenters. During 1999, they reviewed 10,178 admissions by 5,722 different individuals and categorized those with more than six admissions as frequent visitors. They found evidence that frequent presenters are a distinct group of patients in crisis centers that staff had strong attitudes toward why they present to PES. The staff they surveyed believed that individuals made frequent visits because of “difficult accessing alternative care, basic needs, substance abuse, wanting inpatient admission, and noncompliance with treatment plan.” (p. 494). In addition, staff also stated external events for frequent visits, such as weather and day of week or month.

What characterizes the patient presenting multiple times for psychiatric emergency services and admitted multiple times for involuntary hospitalization? Sanguinetti, Samuel, Schwartz, and Robeson (1996) explored the demographics for a one-year period of consecutive involuntary admissions to a psychiatric unit from 13 crisis centers in the Philadelphia area and discovered that out of 2,200 admissions, 759 were multiple admissions. This consisted of 314 patients who had multiple admissions and 88 high-risk patients, who had three or more admissions and accounted for a total of 307 admissions. These researchers examined a unique group of individuals in that they were mandated by law to be hospitalized due to being deemed as a danger to themselves, others, or property. They found that the overall readmission rate was 34.5% and, of those who were hospitalized multiple times represented 14% of all admissions. The individual most likely to be readmitted involuntarily is a young, unmarried, African American male who has schizophrenia without a diagnosis of substance use. The authors assert that one implication from these results was the significance of the primary diagnosis as the essential determining factor of hospitalization. While the presence of substance use did not

appear to be significantly related to increased inpatient hospitalizations, individuals misusing substances are a high percentage of psychiatric emergency service consumers. While the results of Sanguineti and colleagues' (1996) study show that a comorbid diagnosis of substance use is not significantly related to an increased likelihood of involuntary hospitalization, these researchers do note that substance use has a relationship with a patient's level of destabilization, and they have documented active substance abuse in one of every five patients admitted.

Segal, et al., (1998) and Dhossche and Ghani (1998) found agreement with Sanguineti, et al.'s, (1996) results of the significant relationship between psychotic disorders and further involuntary presentations for PES. Segal, et al., (1998) utilized data from patients that presented to the PES of seven county hospitals in the San Francisco Bay Area from October, 1983 to September, 1986 with a follow-up 12 months after the subject's first presentation. These researchers discovered that 29% of the 417 patients they followed who returned to PES involuntarily were significantly related to the same factors of psychosis and dangerousness that the patient initially presented. Other characteristics that were noteworthy are as follows: Of the patients who returned to PES involuntarily within 12 months, 66% had a diagnosis of a psychotic disorder and had difficulty with daily functioning (as evidenced by a mean global assessment of functioning score of 37.1, + or - 13.32). Although, these researchers admitted that there was an insufficient amount of time to make an accurate substance abuse diagnosis, 33% of their sample had a condition that was complicated by substance use. In concurrence with Sanguineti, et al., (1996), a complication of substance use was significantly more likely to meet criteria for a nonpsychotic disorder. In light of the findings that individuals with nonpsychotic disorders who use substances are frequent presenters at PES with dispositions other than involuntary inpatient treatment, questions arise as to the disposition of these patients and the factors involved in their

repeat presentations. Stefanis, et al., (1999) found that approximately 25% of individuals with alcohol problems and 16.4% with drug problems had an increased likelihood of re-presenting to psychiatric emergency services. Breslow, et al., (1996) discussed the theory that problems of disruptive, disinhibited, noncompliant behaviors that are associated with substance abuse are exacerbated in the chronically and persistently mentally ill leading to frequent use of PESs.

Dhossche and Ghani (1998) investigated 400 (18%) repeat presenters of 2,212 patients during a 7-month period, and found that the repeat presenters accounted for 36% of all PES visits with contradictory results concerning the relationship between substance abuse and repeated presentations to PES. They found there was an increased probability of repeat presentations associated with a comorbidity of substance abuse and schizophrenia in young adults, however this relationship was not found with other diagnoses and other age groups. The above studies support the notion of the value of investigating the repeat presenter of various age groups and diagnoses.

*Children and adolescents.* Although children and adolescents make up a small percentage of all age groups presenting to PES services, there is a significant number who present more than once. Peterson, et al., (1996) found that out of 1,436 children and adolescents presenting for PES, 140 children accounted for 330 repeat visitors. Most of these children (114) presented twice, 18 children presented three times, 5 children four times, 2 children five times, while one child presented six times. Half of the repeat visits occurred during the same month and within the next 6 months for 85% of the children. The only predictors for recurrent visits were younger age and presentation during the school year. Stewart and associates, (2001) examined children



and adolescent patients six months after their first emergency room presentation and found that out of 548 presentations, 32.6% returned to the emergency room and 24.1% had a documented suicide attempt within six months of their initial visit. These researchers also found that the risk for future emergency returns and suicide attempts among first-time emergency presenters tends to be determined by multiple reasons for those between the ages of 15 and 19. Predictors for emergency visit returns and additional suicide attempts are as follows: past foster/group home placement, past mental health care, and a suicide plan.

*Older adults.* The older adult is less likely to present for psychiatric treatment, yet they are at the highest risk level for some conditions, such as cognitive impairment and medical problems with psychiatric components (Hastings, 1993). Tueth and Zuberi (1999) make reference to the need for emergency rooms and doctors' offices to pay more attention to emotional problems, suicidality, and substance abuse. These researchers further state that clinicians need to be aware that older adults with psychiatric complaints will often complain of physical symptoms, while those with physical problems have additional psychiatric complaints. Based on the above studies, further research needs to be undertaken to investigate if those older adults who do present for psychiatric emergency services have emotional problems, suicidality, substance abuse and additional medical complaints. Are older adults who present for psychiatric services more than one time a year different from their counterparts who infrequently utilize psychiatric emergency services?

*Comparison of One-Time, Repeat, and Chronic Repeat Presenters*

*Adults.* The research results describe significant differences between those individuals who present one time and those who present two or more times. A few reasons for the immense need to understand the repeat presenter are as follows: to develop improved staff training and more efficacious interventions, to assist the repeat presenter to better manage their symptoms/diagnoses and lead a higher quality of life, and to decrease the high cost associated with these repeated emergency visits. In addition, “despite their disproportionate use of psychiatric emergency service resources, patients who make frequent repeat visits are little understood” (Ellison, et al., 1989, p. 958). Therefore, if research investigations can further our knowledge of this misunderstood group of individuals repeatedly utilizing psychiatric emergency services, then these groups of individuals can be better served and improve their quality of life, while decreasing the dependency on an already overtaxed emergency service. However, there have been limited studies conducted on comparing the one-time presenter, the repeat presenter consisting of two PES visits, and the chronic repeat presenter consisting of three or more visits. This inquiry is of worth due to the variability in the amount of presentations by the same individuals. For example, Dhossche & Ghani (1998) in their study found that repeat visits ranged from two to twelve visits within seven months, while Haywood and colleagues (1995) found a range of two to fifty-nine repeat visits within their study of 135 subjects with a diagnosis of schizophrenia, unipolar major depressive disorder, bipolar disorder, or schizoaffective disorder who were being treated at a state psychiatric hospital.

Munves, et al., (1983) were interested in examining the difference between repeat presenters who revisit within 90 days and within 360 days and found evidence that 48.9% of those patients who re-presented do so within 30 days. These researchers suggest that for these patients it is likely that their crises were not resolved during their initial visit and they returned for additional help. In addition, they found support that the individual presenting again within 30 days is not significantly different from nonrepeaters in that neither group was chronically mentally ill. However, they tested this theory further by looking at 3,603 patients for 30-day and 90-day follow-up presentations, and found that those who repeated after 30 days, but before 90 days, were more likely than nonrepeaters to have a chronic psychiatric illness and a high level of psychological, social, and economic problems. While the chronic repeat presenter and those who present after 30 days, but before 90 days, could be considered special populations, an additional area (children/adolescents and older adults) is also lacking research investigating the characterological differences between one-time presenters and repeat presenters, as well as those children/adolescents or older adults who present again within 30 days.

*Children, adolescents and older adults.* To date no studies have been undertaken that specifically address the chronic repeat child, adolescent, or older adult presenter. While the overall percentage of presentations of individuals in these groups is relatively small, there are individuals of these ages that present multiple times. Studies need to investigate the demographic and clinical characteristics that differentiate the child, adolescent, or older adult that present once for PES, from those who present two or three times, from those who present more than three times.

*Summary and Conclusions*

Psychiatric emergency services were established by the Community Act of 1963, (Allen, 1999; Gerson & Bassuk, 1980; Mezzina & Vidoni, 1995) to service individuals suffering from psychiatric symptoms in need of stabilization, hospitalization, or linkages to community agencies 24 hours, 7 days a week. Since the establishment of the first PES, several changes in mental health laws, such as deinstitutionalization and trends toward shorter treatments (Brasch & Ferencz, 1999) have resulted in an increase in the number of centers and a rise in the volumes of individuals who utilize PES. In order to best serve the individuals who are in need of PES, research investigations regarding demographic and clinical characteristics have been undertaken in several geographical areas within the United States and abroad.

Through the review of current literature discussed, the general PES presenters can be described as likely to be in danger of harming themselves or others due to mental illness and/or are in great distress at the time of their visit (American Psychological Association, 1995). Past studies have concentrated on the average individual utilizing PES centers. While there may very well exist an “average” presenter, previous investigations concluded the need to investigate the unique PES presenters: very young presenters, the very old, and those with comorbid diagnoses. Especially in need of further research are those who repeatedly present for services, that could include children/adolescents, older adults, and those with comorbid diagnoses.

Since the inception of psychiatric emergency services, researchers have been examining

the presenter, in general. Gerson and Bassuk (1980) and Marson, et al. (1988) consolidated early research by viewing collective studies from 1967-1977 and 1978-1988, respectively. These early reviews of the literature focused on the relationship between clinical and demographic characteristics and the disposition decision. These studies concluded that the characteristics of the patient that appear to be important in making the decision for inpatient hospitalization are as follows: a high level of dangerousness, previous psychiatric history, and current symptoms/diagnosis; with level of dangerousness as the major feature in the decision to hospitalize. More recent studies by Spooren and Jannes (1997) and Schnyder, et al. (1999) are in agreement with earlier research that an individual's history of hospitalization is an important factor in the decision to admit again, as well as meeting criteria for an Axis I diagnosis, being evaluated involuntarily, and being referred by a professional. Due to the focus of these studies on disposition, little information is known about the demographic and clinical characteristics of the average presenter, as well as specialized PES populations.

Emphasis has been placed on those patients referred for an evaluation by police, and these studies have agreed that when the police are the referral source the individual is likely to be disturbed and violent (McNeil, et al., 1991; Sales, 1991; Stefanis, et al., 1999; & Way, et al., 1993). While, it may be interesting to note that when an individual is referred by the police, he or she is likely to be disturbed and violent, the purpose of PES centers is to evaluate an individual who may be a danger to self or others for hospitalization against their volition, if necessary. Therefore, it is not surprising that one study, Boudreaux, et al. (2001) found 48% of the individuals presenting for PES during the time of their investigation were suicidal. What is surprising is that in the same study only 12% of their subjects presented due to homicidal thoughts/behaviors. One of the functions during the evaluation of an individual is to establish a

provisional diagnosis (American Psychological Association, 1995), and yet no studies could be found that examined their subjects using the multiaxial system of the DSM. This is alarming, because Kessler, et al. (1994) found 79% of their subjects had a comorbid diagnosis. One Axis I diagnosis, in particular substance abuse, is often comorbid with other psychiatric diagnoses. An individual with substance use complaints could be presenting for any of the following reasons: substance use as their primary issue (Breslow, et al., 1996), substance use and comorbid mental illness (Cacciola, et al., 2001; Claassen, et al., 1997; Menezes, et al., 1996), or substance use mimicking psychiatric symptoms that will dissipate with effects of the substance. These varied presentations of substance use result in the complexity of the assessment of any of these individuals and necessitate further research within this area.

There are special populations who present to crisis, such as children/adolescents, older adults, in addition to the observed difference in PES presenters depending on the demographic area. Children are not the seekers of psychiatric emergency services even though they appear as the patient (Tomb, 1996) and this alone sets them apart from the average presenter. However, Halamandaris and Anderson (1999) and Tomb (1996) found that children and adolescents, like adults, most frequently suffer with suicidal thoughts. Hillard, et al. (1987) found that suicidal ideation is much more common in adolescents than adults. While older adults are also likely to complain of suicidal ideations (Tueth and Zuberi, 1999), other studies have found that many older adults have medical conditions complicating their presentation (Hastings, 1993), as well as affective disorders and organic brain disorders (American Psychological Association, 1995). It has been theorized that most individuals who utilize are underprivileged (Dhossche & Ghani, 1998) and perhaps would explain why most investigations have been undertaken at urban centers. However, the “profile” of the urban presenter cannot be generalized to the suburban

presenter (Stebbins & Hardman, 1993); and, therefore, investigations of the suburban presenter should be conducted.

When individuals are in need of repeat visits, they are most likely to have a severe Axis I diagnosis (Dhossche & Ghani, 1998; Ellison, et al., 1989; Saarento, et al., 1998; Sanguineti, et al., 1996; Segal, et al., 1998, Sullivan, et al., 1993), medication noncompliance (Haywood, et al., 1995), criminal justice involvement (Surber, et al., 1987), homicidal (Ellison, et al., 1989; Segal, et al., 1998; Surber, 1987), suicidal ideation (Ellison, et al., 1989), and/or alcohol and drug problems (Ellison, et al., 1989; Haywood, et al., 1995; Sanguineti, et al., 1996; Stefanis, et al., 1999). Those who frequent PESs are in need of further updated research, especially concerning special populations of repeat presenters: children/adolescents, older adults, and those from urban and suburban geographic areas due to the lack of investigations concerning these individuals. In addition, a lack of research currently exists on the chronic repeat presenter, described as one who presents more than three times within a year. It is possible that individuals who are frequently treated at PES centers may differ depending on the amount of time between presentations. Further investigations are necessary to expand on Munves, et al., (1983) findings that those individuals who present for additional treatment within 30 days of discharge are significantly different than those who present after 30 days, but before 90 days, of discharge.

### *Statement of purpose*

Since 1963, the number of psychiatric emergency services have been increasing. This current investigation explored the average presenter in comparison with the repeat presenter on demographic and clinical characteristics. It also examined and compared the presenters based on their age, diagnoses, and the differences that may have been present in urban and suburban

treatment settings. Due to the changes occurring within mental health treatment and the increasing volume of individuals presenting in need of services, a systematic investigation focusing on all variables had not yet been explored. In addition, research is limited investigating the possibility of differences that exist between the one-time and repeat presenters, and chronic repeat presenters across age groups, suburban/urban settings, and demographic and clinical characteristics. While a plethora of investigations have included urban PESs, there is a lack of research examining and comparing urban and suburban centers within similar geographic areas. Other limitations of past research include investigations of presenters by examining their primary and secondary problems and DSM-IV diagnoses. There has been contradictory evidence found on the relationship between substance use and the PES presenter, so that this area was also investigated.

### *Research Questions*

This investigation explored the following:

- What are the demographic and clinical characteristics of one-time presenters (one visit), repeat presenters (two to three visits), and chronic repeat presenters (more than three visits) to psychiatric emergency services?
- Are there different demographic and clinical characteristics of those who present to suburban, urban, or both a suburban and urban psychiatric emergency services?



- Do the characteristics of one-time, repeat, and chronic repeat presenters change as a function of age, diagnoses, or geography?
- Are there differences between those who represent within 30 days and those who re-present after 30 days – does this relationship change when looking at children/adolescents or older adults?
- Do the demographic and clinical characteristics of individuals with repeat visits and a diagnosis of substance-use disorder differ from those who do not have a diagnosis of substance use?

### Hypotheses

1. There will be significant demographic and clinical differences between those individuals (age 20-65) who present once for emergency psychiatric services, those who present two to three times (repeat presenter), and those who present more than three times (chronic repeat presenter) within a one-year period, in that chronic repeat presenters are more likely to have a chronic mental illness, present with substance intoxication, be noncompliant with psychiatric treatment, have a history of psychiatric treatment, and have an additional Axis II personality disorder.
2. Demographic and clinical differences would be found among those individuals who present to exclusively suburban or exclusively urban PESs, and those who present to both, in that those exclusively suburban were more likely to have only presented once, be

employed, have good support system, and meet criteria for a diagnosis of a depressive disorder.

3. There will be differences in the demographic and clinical characteristics among children/adolescents (age 3-19) who present one time and those who visited multiple times, in that the latter would be younger, have a suicide plan, and had past mental health treatment.
4. There would be differences in the demographic and clinical characteristics between older adults (66+) who present one time and those who have presented multiple times, in that the latter would not be self-referred, would have cognitive impairment, and medical problems.
5. Significant differences would be found between individuals who have had multiple presentations within 30 days of discharge and those who re-present but did so after 30 days, in that there will be a higher percentage of individuals who re-present within 30 days and these individuals would be less likely to have a serious and pervasive chronic mental illness, and less social and economic problems than those who re-present after 30 days.
6. Individuals meeting criteria for both a substance-use disorder and a psychotic disorder will be more likely to be repeat presenters (two or more visits within a year).
7. Individuals meeting criteria for a primary substance-use disorder and do not meet criteria for a psychosis or bipolar disorder would be more likely to be self-referred, have suicidal ideations, and be discharged with a community referral.

## Chapter 2

### Method

#### *Subjects*

This study retrospectively reviewed a total of 765 charts of individuals who presented to Psychiatric Emergency Service sites in a one-year period. The purpose of the study was to provide a descriptive analysis of the characteristics of the PES presenter including demographic, clinical, and psychosocial variables. The data reviewed were archival. The mental health professionals who originally collected the data were experienced in assessing psychiatric presentations. They were trained to use a semi structured assessment tool to record their observations. Clinical information was recorded by PES staff, who were not aware of this study when they completed the chart. All information for this study was obtained from the date of the selected visit only, and no single patient was represented more than once in the sample. The PES computer system was used to print out all individuals who presented to PES from July 1, 2001 through June 30, 2002 by age, and then the investigator picked every 10th name until each category for number of presentations (one time, two to three times, and more than three times) for each age group (child/adolescent, adult, and older adult) was selected. Due to the low amount of repeated presentations by older adults, all revisits by older adults during the study's time period who did not meet reasons for exclusion ( $n = 36$ ) were used. After subjects were selected the investigator input variables of interest into a SPSS database from the subject's most recent visit. Those patients with the diagnosis of Mental Retardation or a Pervasive Developmental Disorder were excluded from this study, due to the specific focus of this study.

Individuals residing outside of the catchment area were also excluded. In addition, those individuals receiving psychiatric emergency screening on a medical unit were excluded, because the majority of these referrals were made by a hospital psychiatrist specifically due to the dangerousness of the patient to self or others with the purpose of transferring and admitting the patient to a psychiatric hospital, involuntarily.

### *Design*

This study was a between-subjects design that investigated the differences in those who presented for PES one-time, two to three times, and more than three times at urban, suburban, and both urban and suburban PESs. In addition, a cross-sectional design was used to investigate differences among children/adolescents (3-19), adults (20-65), and older adults (66+). This study utilized archival data from a one-year time period (July 1, 2001 through June 30, 2002).

### *Setting and Apparatus*

Data for the present study were based on chart information collected in two PES sites housed in hospitals, both within the same catchment area of New Jersey, and operated by the same umbrella non profit corporation. The hospitals served both private and public sector patients. The population was socioeconomically, ethnically, and racially diverse. Generally, this catchment area consisted of 510,000 individuals, included one residential population of lower socioeconomic status who tend to present to what was considered the urban site. There was another residential section of higher SES of which patients tended to present to the suburban site. This is due to proximity despite the sites being 5.5 miles away from each other.

Both PES centers were located inside a general hospital and were open 7 days a week, 24 hours a day. The patients who presented were medically cleared by the general emergency room and then referred to the PES. The program was staffed by psychiatrists, registered nurses, and

bachelor's or master's level crisis workers who were trained to work at both centers.

The PES program provided evaluation, triage, disposition, and short-term crisis therapy. Each year the combined staff completed 5,000 to 7,000 evaluations. All individuals who presented for a psychiatric emergency evaluation were assessed by a crisis worker and received a comprehensive intake evaluation. The domains of the evaluation, in accordance with the American Psychiatric Association's Practice Guideline for Psychiatric Evaluation of Adults (1995), included: presenting problem, psychiatric history, medical history, developmental history, social history, occupational history, physical examination, mental status examination, functional assessment and additional information from the interview. In addition to the above, the following variables were also assessed: demographic information, diagnoses, history of suicidal/homicidal behavior, history of abuse, legal history, current medication, referral source, and disposition. The site assessment tool that was used also complied with the American Psychiatric Association's Practice Guidelines for Psychiatric Evaluation of Adults (1995). According to these guidelines, the goals of the emergency evaluation were as follows: a) to establish a provisional diagnosis most likely responsible for the current emergency, and to identify other diagnostic possibilities to be further evaluated in the future; b) to identify relevant social, environmental, and cultural issues relevant to treatment; c) to determine if there was a risk of harm to self or others, and if the patient was willing to cooperate or if involuntary admission is needed; and d) to determine the disposition of the patient, and to develop an immediate plan appropriate for admittance or discharge to the community.

Individuals presenting to PES who were in need of psychiatric hospitalization were usually seen by the psychiatrist and referred to one of the several hospital-based inpatient units, or other private facilities, as well as one of the local state facilities. If a patient was not in need

of further stabilization at an inpatient psychiatric hospital, they were referred to a network of less intensive and more flexible community-based programs. These non hospital referrals included outpatient psychotherapy treatment, partial hospitalization programs, substance-abuse programs, and/or intensive case management services.

### *Procedures*

The setting of the study involved one urban and one suburban Psychiatric Emergency Service Centers in a southern New Jersey county. The investigator examined 765 charts that fell within the 12-month period ranging from July 1, 2001 to June 30, 2002. All data were shelved before collection began. A list of names was generated chronologically by age, beginning July 1, 2001, from the PES computer system. Every 10<sup>th</sup> patient was chosen until 765 subjects had been selected. At no time were any names, phone numbers, or chart numbers recorded or linked back to any subject. The agency computer system was used to separate PES setting (urban, suburban, both urban and suburban), age groups, and number of visits. Due to staffing issues, there were occasions when patients that would have normally been evaluated at the urban PES were diverted to the suburban PES. Dates for July 1, 2001 to June 30, 2002 where the PES was on divert status were accessed from administration staff prior to data collection and excluded from this study to ensure a true representation of the population at each site.

The investigator input data from the chart of the selected subject's most recent PES visit into an SPSS database. Thirty charts of those selected for the study were cross-referenced with

another researcher to insure inter-rater reliability. The variables examined will be operationally defined as indicated in the Appendix. The information was obtained from the specified sections of the assessment form also outlined in the Appendix. It is important to note that in the specific area that this investigation was being carried out, there was a Zero Tolerance Policy in the respective county's school system stating that any student who mentioned the word referencing, "suicide," was sent for an evaluation at the local PES. Therefore, the identified presenting problem may have been written as suicidal ideation when the patient may have presented to PES for other problems. Therefore, for children and adolescents who presented to PES referred from school, the investigator searched within the chart to identify the presenting problem.

## Chapter 3

### Results

All variables were coded and processed by SPSS. The predominant statistical test employed was the chi-square test of significance; and one t-test of significance. This section included the following: demographic and clinical variables for the PES presenters of this study, inter-rater agreement, and the result of each hypothesis.

#### *Demographic and Clinical Variables*

This sample consisted of 765 patients ranging in age from 5 to 99 years old (mean = 35.5 years old, SD = 23.02). Gender was 51.5% males and 48.5% females. The majority of the sample was Caucasian (59.2%) and African American (26.1%) and the primary language of the subjects was English (97.4%). The four most frequent presenting problems were: suicidal ideation (16.9%), psychosocial stressors (10.6%), depressed mood (9.7%), and substance dependence (9.4%). Approximately one-quarter of the sample (24.8%) was intoxicated with a substance on arrival to the PES. Better than half of the subjects had a history of inpatient psychiatric treatment (52.2%) or outpatient psychiatric treatment (56.1%) and 15.3% were receiving case management services at the time of their presentation at PES. While two-thirds (66%) of the subjects were prescribed psychiatric medications prior to their presentation, more than half (52.2%) were non compliant with taking their medications. The three most frequent DSM-IV Axis I Diagnoses were depressive disorders (22.6%), adjustment disorders (16.9%),



and schizophrenia (8.8%).

An important part of this study was to investigate differences between urban and suburban centers, repeat presenters, and also focused on age groups. In order to represent these individuals the agency computer system was used that listed the PES that the individual presents to, age, and the number of times visiting within a year. A method of counting every 10<sup>th</sup> patient for possible inclusion in this study was executed. Therefore, the percentage of individuals who presented to urban PES was 38.2% while the percentage presenting to suburban PES was 48.6%. However in an attempt to represent the various age groups and number of PES presentations, 13.2% of the sample had a history of presenting to both urban and suburban PES sites. The number of visits ranged from 1 to 18 (mean = 2.26, SD = 1.81). For children and adolescents the range of visits was from 1 to 9, and for older adults, it was 1 to 4.

Important demographic and clinical differences exist among the age groupings. For example, the three primary reasons that children and adolescents presented for PES was: suicidal ideations/behaviors (32.3%), disruptive behaviors (13.5%), and psychosocial stressors (13.5%). While suicidal ideations/behaviors was also the most frequent primary presenting problem for adults (21.4%), the second and third reasons were complaints of substance dependence (16.1%) and depressed mood (10.3%). Older adults had presented with primary complaints of cognitive impairment (23.5%), depressed mood (16.2%), and anxiety (10.3%). Primary Axis I diagnoses also differed among the age groups. Children were most likely to be diagnosed with adjustment disorders (31.5%), attention-deficit hyperactivity disorders (21.5%), and depressive disorders (18.7%). While adults were diagnosed most often with depressive disorders (22.2%), schizophrenia (15.6%), and bipolar disorders (11.1%); older adults were diagnosed with depressive disorders (30.9%), dementia disorders (27.2%) and anxiety disorders

(10.3%). Further demographic and clinical differences between the age groupings are displayed in Table 1.

Table 1

*Demographic and Clinical Variables by Age Group\**

Variables	Child/Adolescence <sup>1</sup>	Adult <sup>2</sup>	Older Adult <sup>3</sup>
Gender			
Male	60%	52%	33%
Female	40%	48%	67%
Ethnicity			
Caucasian	54%	53%	86%
African American	26%	33%	9%
Hispanic	18%	12%	4%
Asian	1%	1%	less than 1%
Other	1%	1%	1%
Education Level			
8 <sup>th</sup> grade ↓	50%	6%	12%
9-12 <sup>th</sup> grade	46%	27%	15%
HS Grad	3%	46%	53%
Some College	1%	15%	6%
College Grad	-	6%	7%
Unknown	-	-	7%
Employment			
Student	91%	1%	-
Employed	3%	19%	5%
Unemployed	5%	37%	2%

Retired	-	1%	88%
Public Assistance	1%	4%	-
Disability	-	38%	5%
Marital Status			
Never Married	100%	61%	12%
Married	-	18%	32%
Separated	-	5%	less than 1%
Divorced	-	14%	8%
Widowed	-	2%	48%
Insurance			
Private	45.4%	22%	32%
Medicaid/Medicare	42.0%	48%	66%
None	12.4%	30%	2%
Unknown	-	less than 1%	-
PES Site			
Suburban	49%	44%	61%
Urban	38%	40%	33%
Both	13%	16%	6%
Number of Visits			
1 Visit	50%	34%	74.5%
2-3 Visits	41%	33%	25.0%
↑ 3 Visits	9%	33%	1.5%

## Referral Source

Family/Friend	43%	21%	48%
MH Agency	11%	17%	11%
Police	8%	15%	7%
Self	4%	41%	10%
School	30%	less than 1%	-
Other	4%	6%	24%

## Disposition

Community	80%	65%	60%
Vol Unit	19%	12%	13%
Invol Unit	1%	20%	24%
Jail	less than 1%	1%	1.5%
Detox Unit	-	2%	1.5%

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*Note. \* Percentages were rounded off <sup>1</sup>Children and adolescents were 5-19 years old. <sup>2</sup>Adults were 20-65 years old. <sup>3</sup>Older adults were 66 years old and older.*

*Inter-rater reliability*

Inter-rater reliability was performed on 30 charts with two raters. To test inter-rater reliability, Kappa values were computed for the categorical variables and correlations were used to test the continuous variables. For the continuous variables of age, number of visits, and Axis V-GAF, a correlation of 1.00 was computed. For the following categorical variables a Kappa value of 1.00 was computed: gender, education, marital status, employment status, ethnic background, insurance, current partial care, current psychiatric medications, primary presenting problem, substance intoxication, history of suicidal behavior, history of abuse – victim, history of abuse – perpetrator, other risk factors, legal history, Axis IV – occupational stress 2, Axis II diagnosis, Axis III primary, Axis IV – economical problems, Axis IV – economical problems 2, Axis IV – housing problems 2, Axis IV – economic problems, Axis IV – problems with access to healthcare. Table 2 shows Kappa values for all other variables. Some of the variables did not deviate within the variable and therefore Kappa values were not able to be computed. For example, the primary language of all 30 cases was English, both raters rated all of their 30 cases with the primary language of English and therefore there was no variability within the variable and Kappa could not be computed, even though there was 100% agreement between raters.

Table 2

*Inter-rater Reliability*

Variable	Kappa Value
Primary Language	*
Referral Source	.95
Crisis Site	*
Recent Visit within 30 days	*
History of Inpatient Psychiatric Treatment	.92
History of Outpatient Psychiatric Treatment	.93
Case Management Services	*
Current Outpatient	.87
Secondary Presenting Problem	.72
History of Homicidal Behavior	.71
Current Legal Problems	.89
Social Support Present	.77
Primary Axis I Diagnosis	.96
Secondary Axis I Diagnosis	.96
Axis III Secondary	.75
Axis IV – Problems with Primary Support	.84
Axis IV – Problems with Primary Support 2	.86
Axis IV – Occupational Stress	.92
Axis IV – Housing Problems	.76
Axis IV – Legal Problems	.89

Other Psychosocial and Environmental Problems	*
Disposition	.96

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\*Note. Kappa was not able to be computed due to at least one variable in each 2-way table upon which measures of association are computed is a constant.



## *Hypotheses*

*Hypothesis One.* A greater proportion of adult patients who presented to PES more than three times within one year (i.e. chronic repeat presenters) had a chronic mental illness (n = 71, 56%), than adult patients who presented three times or less within the same time period (i.e. non chronic presenters) (n = 42, 16%),  $\chi^2(1, N = 378) = 63.11, p < 0.001$ . A greater proportion of chronic repeat presenters had an Axis II personality disorder (n = 32, 25.3%), than non chronic presenters (n = 36, 14.23%),  $\chi^2(1, N = 378) = 7.02, p < 0.05$ .

A greater proportion of chronic repeat presenters had a history of psychiatric treatment which included outpatient and/or inpatient treatment history (n = 123, 97.6%), than non chronic presenters (n = 178, 70.6%),  $\chi^2(1, N = 378) = 37.70, p < 0.001$ . More specifically, a greater proportion had a history of outpatient psychiatric history (n = 118, 93.65%), than non chronic presenters (n = 132, 52.38%),  $\chi^2(1, N = 378) = 63.88, p < 0.001$ . In addition, a greater percentage of chronic repeat presenters had a history of inpatient psychiatric treatment (n = 117, 92.85%), than non chronic repeaters (n = 141, 55.95%),  $\chi^2(1, N = 378) = 52.79, p < 0.001$ . However, more often chronic repeat presenters were found to be non compliant with psychiatric treatment (n = 87, 69%), than non chronic presenters (n = 81, 32%),  $\chi^2(1, N = 378) = 46.33, p < 0.001$ .

There was no difference in the proportion of chronic repeat presenters with substance intoxication (n = 110, 43.6%), compared with non chronic repeat presenters (n = 47, 37.3%),  $\chi^2(1, N = 378) = 1.39, p > 0.05$ .

*Hypothesis Two.* It was found that a greater proportion who presented to exclusively

suburban PES were employed ( $n = 46, 27.7\%$ ), than those who presented to either an urban or urban and suburban PES ( $n = 30, 14.15\%$ ),  $\chi^2(1, N = 378) = 10.66, p < 0.001$ .

No significant difference was found between the percentage of adult patients who presented once to suburban PES ( $n = 63, 37.95\%$ ), than those adults who presented one to urban/urban and suburban PES ( $n = 64, 30.18\%$ ),  $\chi^2(1, N = 378) = 2.52, p > 0.05$ . There was no difference between individuals who presented exclusively to suburban PES and had a good support system ( $n = 106, 63.85\%$ ), than those who presented to either urban or urban and suburban PES with a good support system ( $n = 116, 54.70\%$ ),  $\chi^2(1, N = 378) = 3.21, p > 0.05$ . In addition, there was no difference in the proportion of patients who presented to exclusively suburban PESs with a diagnosis of depression ( $n = 49, 29.5\%$ ), compared with those adults who presented to either an urban or urban and suburban PES with a diagnosis of depression ( $n = 47, 22.16\%$ ),  $\chi^2(1, N = 378) = 2.65, p > 0.05$ .

*Hypothesis Three.* In contrast to the hypothesis, an independent samples t-test showed that no difference in age was found between those children and adolescents who presented once to PES ( $M = 13.15, SD = 3.84$ ), than those children and adolescents who presented more than once to PES ( $M = 13.79, SD = 3.30$ ),  $t(249) = 1.42, p > 0.05$ . No difference was found with regard to presenting with a suicidal plan between the proportion of children and adolescents who presented once ( $n = 61, 48.4\%$ ), and those children and adolescents who presented more than once ( $n = 52, 41.6\%$ ),  $\chi^2(1, N = 251) = 2.89, p > 0.05$ . In accord with the hypothesis, a significantly greater proportion of children and adolescents who presented more than once had a history of psychiatric treatment, which included outpatient and/or inpatient ( $n = 92, 73.60\%$ ), than those children and adolescents who presented one time ( $n = 52, 41.26\%$ ),  $\chi^2(1, N = 251) = 57.85, p < 0.001$ . More specifically, a greater proportion of children and adolescents who

presented multiple times had a history of outpatient psychiatric history ( $n = 77, 61.6\%$ ), than those who presented one time ( $n = 49, 38.8\%$ ),  $\chi^2(1, N = 251) = 33.08, p < 0.001$ . In addition, a greater proportion of those children/adolescents who presented more than once had a history of inpatient psychiatric treatment ( $n = 68, 54.4\%$ ), than those who presented once ( $n = 12, 9.5\%$ ),  $\chi^2(1, N = 251) = 77.71, p < 0.001$ .

*Hypothesis Four.* No significant difference was found between the proportion of older adults (66 and older) who presented multiple times within one year who were not self-referred ( $n = 32, 88\%$ ), than older adults who visited only once within the same time period ( $n = 90, 90\%$ ),  $\chi^2(1, N = 136) = 0.035, p > 0.05$ . In addition, no significant difference was found between the proportion of older adults who presented multiple times with cognitive impairment ( $n = 15, 41.6\%$ ), than those who presented only once ( $n = 33, 33\%$ ),  $\chi^2(1, N = 136) = 0.871, p > 0.05$ . In contrast to the hypothesis, those older adults who presented multiple times were not more likely to have had medical problems ( $n = 27, 75\%$ ), than those older adults who presented only one time ( $n = 85, 85\%$ ),  $\chi^2(1, N = 136) = 1.82, p > 0.05$ .

*Hypothesis Five.* There was no difference in the percentage of adults who re-presented within 30 days of discharge ( $n = 122, 48.6\%$ ), than after 30 days from being discharged ( $n = 129, 51.4\%$ ). No significant difference was found between the number of adult patients re-presenting with a chronic mental illness ( $n = 51, 41.8\%$ ), than those re-presenting after 30 days with a chronic mental illness ( $n = 48, 37.2\%$ ),  $\chi^2(1, N = 251) = 0.554, p > 0.05$ . In accordance with the hypothesis, those adult patients who re-presented within 30 days were less likely to have social problems ( $n = 48, 39.3\%$ ), than those adults who re-presented after 30 days of being discharged ( $n = 29, 22.5\%$ ),  $\chi^2(1, N = 251) = 8.36, p < 0.01$ . In addition, a significantly greater proportion of those adults who re-presented within 30 days were less likely to have economic problems ( $n =$

90, 73.8%), than those adults re-presenting after 30 days ( $n = 78, 60.5\%$ ),  $\chi^2(1, N = 251) = 5.02$ ,  $p < 0.05$ .

*Hypothesis Six.* In accordance with the hypothesis, a significantly greater proportion of adult patients who met criteria for both a substance use disorder and a psychotic disorder had visited PES more than one time ( $n = 23, 95.8\%$ ) than those adult patients who visited more than one time and did not meet criteria for both a substance-use disorder and a psychotic disorder ( $n = 228, 64.4\%$ ),  $\chi^2(1, N = 378) = 9.95$ ,  $p < 0.01$ .

*Hypothesis Seven.* There was no difference in the proportion of adult patients with a diagnosis of a primary substance-use disorder with no additional diagnosis of a psychosis or a bipolar disorder who presented with suicidal ideations ( $n = 31, 37.8\%$ ), compared with patients who did not present with a primary substance use disorder ( $n = 116, 39\%$ ),  $\chi^2(1, N = 378) = 0.052$ ,  $p > 0.05$ . In accordance with the hypothesis, a significantly greater proportion of adult patients, who had a primary diagnosis of substance-use disorder with no additional bipolar or psychosis diagnosis, were self-referred ( $n = 48, 58.53\%$ ), than adults who were self-referred without a primary substance use diagnosis ( $n = 108, 36.48\%$ ),  $\chi^2(1, N = 378) = 12.88$ ,  $p < 0.001$ . In addition, a significantly greater proportion of adult patients with a primary substance-use disorder with no additional diagnosis of psychosis or a bipolar disorder were discharged with a community referral (87.8%), compared to adults who were discharged with a community referral and did not have a primary substance-use disorder (58%),  $\chi^2(1, N = 378) = 24.75$ ,  $p < 0.001$ .

## Chapter 4

### Discussion

The results of this investigation support the fact that diagnosis, setting of PES, number of visits, and the age of the individual are important factors to investigate and understand in order to best serve individuals in need of PES. This section discusses the demographic and clinical variables in general and the results of each hypothesis.

#### *Demographic and Clinical Variables*

The PES presenter in this study of 765 subjects ranged in age from 5 to 99 years old and visited between 1 and 18 times within the one-year period. Gender representation was close to 50%, the majority of the participants were either Caucasian or African American and the primary language was English. Half of the sample had a history of prior psychiatric treatment (either inpatient and/or outpatient). Two thirds were prescribed psychiatric medications prior to presenting to PES, but half were non-compliant. Approximately a quarter of the sample had substance intoxication, compared to other findings of 32% (Breslow et al., 1996), and 43% drug intoxication and 14% alcohol intoxication (Schiller et al., 2000).

In agreement with the literature, the most frequent reason children/adolescents (Beautrais, et al., 1998; Halamandaris & Anderson, 1999; Healy, et al., 2002; Stewart, et al., 2001; Peterson, et al., 1996; Tomb, 1996) and adults (Boudreaux, et al., 2001) presented for PES was suicidal ideations. In addition, support was found for Hillard, et al.'s (1987) finding that suicidal

ideation/behavior was more common for adolescents (children/adolescents, 32.3%) than adults (21.4%). In support of the literature, older adults were likely to present with complaints of cognitive impairment (Tueth & Zuberi, 1999) and one-third received a diagnosis of dementia disorder (Coyne & Gjertsen, 1993; Puryear, et al., 1991) and another third received a diagnosis of affective disorder (Puryear, et al., 1991).

### *Adult Chronic Repeat Presenters*

A greater proportion of adult patients who presented to PES more than three times within a year (i.e. chronic repeat presenters) had a chronic mental illness, an Axis II personality disorder diagnosis, history of psychiatric treatment (inpatient and/or outpatient), and had a history of non compliance with psychiatric treatment, more than individuals presenting three times or less within a year. However, no significant differences were found between these two groups in the likelihood of presenting with substance intoxication. These results support Dhossche and Ghani (1998) who found in their study that those who repeatedly visited PESs were likely to be non compliant with outpatient treatment and in agreement with Saarento, et al.'s, (1998) to have a chronic mental illness. In addition, support was found for Ellison, et al. (1989) finding that repeat presenters are likely to meet criteria for a personality disorder and have a history of psychotherapy. These results show support for conceptualizing the PES visitor differently than the chronic repeat presenter. However, while past investigators have found that substance intoxication was related to repeat presentations (Dhossche & Ghani, 1998) and a high percentage

of visits (Sanguineti, et al., 1996) and repeated admissions to psychiatric units (Haywood, et al., 1995), in this study, no significant differences were found between presenters and chronic repeat presenters on the percentage of those with substance intoxication. It is possible that significance might have been found if substance-use as a disorder was investigated instead of substance intoxication, taking into account that many of those patients with substance-use disorders may visit the centers due to inability to access drug of choice. The use of substances by PES presenters takes up a substantial proportion of staff's time (Unnithan & Farrell, 1992) and often mimic or exacerbate psychiatric problems. The relationship between substance abuse and psychiatric disorders is addressed further in hypotheses six and seven.

#### *Adults and PES Site*

No significant differences were found between adult patients who presented exclusively to suburban PESs and those who presented to an urban PES or both an urban and suburban PES on the following variables: number of presentations, support system, and depressive disorders. However, in accordance with the hypothesis, those who presented to exclusively suburban PESs were employed more than those who presented to urban and urban and suburban PESs. While these findings are consistent with those of Stebbins and Hardman (1993) in respect to suburban presenters being more likely to be employed than their urban counterparts, these findings are not consistent with the remainder of Stebbins and Hardman's findings. They found that suburban presenters are likely to only visit once, finding only 17% being repeated presenters. In addition,

they found that the majority of their subjects presented with depression, suicidal, or sadness, and were accompanied by a friend. However, it is important to note that while significance was not found in this investigation there was a trend for individuals presenting to exclusively suburban PES to have only presented once and to have met criteria for a depressive disorder. Suburban presenters having a good support system had approached significance. The differences between this study and Stebbins and Hardman might exist due to varying definitions of the variables. For example, having a support system may be different than presenting to PES with a friend or family member, who may or may not be a support. The inconsistencies between these results may also be due to the very limited amount of investigations that have been undertaken with suburban PES populations. In addition, the two sites that were investigated in this study were serviced under the same catchment area and were only 5.5 miles apart; therefore there may be too much overlap between the populations each site serves. The suburban PES serviced a higher volume of patients within a year, and it is possible that the urban population may present to the suburban site, instead of the urban site, due to attending a school or a program in the suburban area. Because of limited studies performed and the non significant results of this study when comparing the PES sites, questions remain as to how suburban presenters differ from urban presenters and further investigations are needed to clarify these differences. As Stefanis, et al. (1999) stated, PES centers often take form according to local need and therefore may differ depending on the community they are serving. While, Bassuk, et al. (1983) found that demographic variables differed but clinical variables were similar when studying the differences in British PESs and those in the United States, we cannot assume, as Stebbins and Hardman (1993) warn, that results found using an urban PES population can be generalized to suburban PES presenters.



*Children & Adolescents and Number of PES Visits*

The children and adolescents who presented multiple times within a one-year period were not likely to be younger and were not more likely to have a suicide plan than the proportion of those who visited only one time within a year period. However, significant differences were found between those children and adolescents who presented multiple times and the ones who presented only once, in that the multiple visitors had a history of psychiatric treatment, inpatient psychiatric treatment, and outpatient psychiatric treatment.

Peterson, et al. (1996) found in his study that the only predictor for repeat presentations was younger age and presentation during the school year. The results of this study do not support Peterson and colleagues' findings, in that children and adolescents, regardless of number of presentations, were around the age of 13. However, the dates during the school year were not taken into account in this study. In addition, it is important to note that Tomb (1996), in contrast to Peterson, et al., found that adolescents were more likely to seek PES independently, while children were more likely to present to PES because of others viewing the child's behavior as an emergency. Perhaps an investigation looking at referral source, number of visits, and age would help clarify the discrepancies in these findings. In addition, some studies had found suicidal behaviors to have a relationship with repeated PES visits (Beautrais, et al., 1998; Peterson, et al., 1996; Stewart, et al., 2001), whereas this study did not find a relationship between suicidal plan and repeated presentations. In this investigation, due to the effect of the "Zero Tolerance Policy" in the school system within the catchment area of the study, the investigator examined referrals from the school system with the presenting problem of suicidal behavior and found the

precipitating reason of the suicidal statement that was the presenting problem. For example, a child was sent to a PES from his school for making a suicidal statement; however, the child was being reprimanded for disruptive behavior and then made the comment. In addition, these children often presented from the school for suicidal ideations and during the assessment deny current suicidal ideation and discussed other complaints. Perhaps, if this study did not take into account the “zero tolerance policy” there would be a significant relationship between suicidal behaviors and repeated presentations. However, the rate of children and adolescents presenting with suicidal ideations would have been inflated due to zero tolerance.

While those children and adolescents who presented more than once were not likely to be younger and were not likely to present with a suicide plan, they were significantly more likely to have had a psychiatric treatment history. Stewart, et al. (2001) found that the predictors of emergency visit returns and additional suicide attempts were past mental health care and a suicide plan. In addition, Beautrais, et al. (1998) found a significant relationship between serious suicide attempts and higher rate of contact with psychiatric services and higher rate of inpatient hospitalization and outpatient psychiatric treatment. It is important to note the benefit of further research distinguishing the relationship between children/adolescents and suicidal behavior and repeated presentations. Perhaps utilizing a measure of suicidal behavior during the assessment could assist with operationally defining suicidal behavior and add to the understanding of how this variable relates to PES visits for this age group.

*Older Adults and Number of PES Visits*

There were no differences in the rate of self-referral between older adults who presented one time to PES and those with multiple visits. There was a trend found for the proportion of older adults who presented to PES multiple times with cognitive impairment than the one-timers,' however a significant difference was not found between these two groups. In contrast to what was hypothesized, older adults who presented only one time were more likely to have medical problems than those who presented multiple times.

To date, no studies had investigated the older adults who present one time and those who present multiple times. While the older adult population continues to remain the smallest, it is important to remember that this group is growing and the need for services will continue to increase. Past investigations have found that older adults are often referred to PES by family members (Coyne & Gjertsen, 1993), are likely to present with cognitive impairment (Puryear, et al., 1991), and have complicating medical/psychiatric problems (Tueth & Zuberi, 1999). When looking at all older adults, regardless of number of presentations, only 10.3% were self-referred, while most were there at the suggestion of family members. In addition, the most frequent reason that older adults presented to PES was due to cognitive impairment (23.5%) and most were likely to have medical problems (82.4%). However, when older adults who presented once were compared to those with more than one visit, there was no difference in referral source, the number with complaints of cognitive impairment, and medical problems between these two groups. It is important to note that those older adults who presented more than once were more likely to have cognitive impairment, however this difference was not significant. In addition, the

reverse of what was predicted was found, but not significant, that a higher percentage of older adults who presented one time were more likely to have had medical problems than those presenting more than one time. As mentioned, this is the first comparison between older adults who visit only one time and those who present more than once. As the percentage of older adults seeking PES treatment increases more research will be needed in this area in order for PES services to understand the unique needs of the older adult presenters so they can be better served. In this investigation, older adults who were referred to PES from the hospital's medical unit were excluded from the study and this may have had an effect on this outcome. Psychiatric treatment of the older adult is complicated by medical problems and medical problems are complicated by psychiatric problems (Tueth & Zuberi, 1999); and, therefore, it is difficult to understand the role that medical problems have in this population.

#### *Adults and Multiple PES Presentations*

No significant difference was found between the percentage of adult patients re-presenting to PES within 30 days of discharge and those adult patients re-presenting to PES after 30 days. In addition, while no significant differences were found, there was a trend between the proportion of adults who re-presented within 30 days with a chronic mental illness and those who returned after 30 days. As hypothesized, those adults who re-presented within 30 days of discharge were less likely to have social and economic problems than those who re-presented after 30 days.

While no significant differences were found between those who revisit PES within 30 days

(48.6%) and after 30 days (51.4%), this non significant result supports Munves, et al. (1983) who found that 48.9% of patients who re-present do so within 30 days. Limited investigations have been undertaken looking at the amount of time between PES visits. Munves, et al. (1983) investigated those individuals who revisit PES after 30 days but before 90 days, and found that these individuals were likely to have a chronic mental illness and more social and economic problems. This investigation researched individuals who revisited within 30 days, as opposed to after 30 days but before 90 days, and, as expected and in support of Munves, et al., found the opposite that those individuals who revisited PES within 30 days were less likely to have social and/or economic problems. However, support was not found for the relationship of the time between visits and chronic mental illness in this study. These results lend support for the possibility that those who revisit PES centers within 30 days of being discharged are a different group with different presentations and treatment needs. However, this area needs to be researched further by investigating individuals revisiting PES with several varying time periods and various demographic and clinical variables.

#### *Adults and Comorbid Diagnosis of Substance Use and Psychotic Disorders*

In accordance with the hypothesis, a significantly greater proportion of adult patients who met criteria for both a substance-use disorder and a psychotic disorder had visited PES more than one time, than those adult patients who did not meet criteria for both a substance-use disorder and a psychotic disorder.

This result supports Dhossche and Ghani's (1998) findings of an increased probability of repeated presentations associated with the comorbidity of substance abuse and schizophrenia in young adults, however they did not find this to be true for other disorders and age groups. This study's findings expand on Dhossche and Ghani, in that it used the more general category of psychotic disorder affecting adults between the ages of 20 and 66. As Breslow and colleagues (1996) commented there is a high prevalence of individuals with a mental illness who also use substances; as well as a high number of individuals using substances that result in the development of psychopathology. Further research is needed to address the comorbidity of these two diagnoses and PES visits, due to the likelihood that these patients will present to PES multiple times.

#### *Adults with Diagnosis of Primary Substance Use Disorder*

Those adults who presented with a diagnosis of a primary substance-use disorder without a psychosis or bipolar disorder were not found more likely to have suicidal ideations than those adults who did not present with a primary substance-use disorder. However, adults who presented with a primary substance-use disorder without a psychosis or bipolar disorder were significantly more likely to be self-referred and discharged with a community referral.

Due to the limited research that has been undertaken with individuals presenting to PES with a primary substance-use disorder, further studies need to address the reasons these individuals present for PES as there were no differences found in this study between those with

suicidal ideation who also complain of a primary substance-use disorder and those with suicidal ideations and had no complaints of a substance-use disorder. The majority of individuals presenting to PES with substance-use disorders had a primary complaint of substance dependence (54.9%). These results support Breslow et al.'s (1996) findings that those presenting with substance use were likely to be self-referred and were hospitalized less. They are also in support of Sanguineti, et al. (1996) who found that those with substance use were less likely to be hospitalized involuntarily on a psychiatric unit.

### *General Implications of Findings*

This investigation has added to the existing support for the differences between individuals who presented for PES once and those who visited multiple times. PES centers can now have knowledge of the clinical characteristics of individuals who repeatedly visit PES centers, such as those with a chronic mental illness, those with a personality disorder, a history of psychiatric treatment and a history of non compliance with treatment. We can now begin to develop and test more efficacious interventions with individuals presenting to PES with these characteristics and observe if their need decreases. For example, because a relationship was found between treatment non compliance and an increase in PES visits, perhaps we could develop strategies to assist this population with continuing their psychiatric treatment. In addition, individuals could utilize outpatient psychiatric service when experiencing daily stressful events or difficulty managing symptoms of their disorder. This would be able to decrease the high cost associated

with repeated emergency visits while improving the individual's quality of life by assisting him or her in developing problem-solving skills with a trained professional with whom the patient has a therapeutic relationship.

One concern raised in previous literature was the limited investigations with suburban PES centers and the inability of generalizing urban findings to suburban centers. This study attempted to add to the literature addressing the suburban PES presenter; however, while the same trends were found that suburban presenters were likely to only visit once, have a good support system, and meet criteria for a depressive disorder, these findings were not significant. It was found that suburban presenters were more likely, than their urban counterparts to be employed. Due to the limited investigations regarding suburban centers and the discrepancies between Stebbins and Hardman (1993) and this investigation, further studies need to be undertaken to more completely understand the differences between geographical areas and the PES patients they serve before any conclusions can be drawn regarding the differences between these populations.

This investigation was the first to compare age grouping and number of presentations. These hypotheses were exploratory due to the limited research results available and before any conclusions can be drawn concerning clinical characteristics of these age groups and number of PES presentations, more investigations are necessary. However, a significant relationship was found between children/adolescents who presented more than one time and a history of psychiatric treatment. This relationship lends support for the idea that more attention needs to focus on intervention strategies to maintain individuals in their current treatment, and perhaps training the professional staff serving these patients in the community in crisis intervention strategies.



The role that substance use has is an area that is in need of further investigation. In this study, while substance intoxication was not found to have a significant relationship with repeated visits, individuals who met criteria for a substance-use disorder and a psychotic disorder were found to significantly present to PES more frequently than other individuals meeting criteria for other diagnoses. Also, it was found that those individuals who met criteria for a primary substance-use disorder and not a chronic mental illness were likely to self-refer for PES and be discharged with a community referral. Investigations need to be undertaken to further understand how the role of substance use changes when a PES presenter is intoxicated, has a comorbid diagnosis of chronic mental illness and when they do not have such a comorbid diagnosis. Once further investigations are undertaken and there is a more definitive understanding of the differences between these groups, better interventions can be developed to specifically address the issues of the patient with substance-use problems, perhaps resulting in a decrease in the amount of high-cost emergency services needed.

Psychiatric emergency services are most often utilized by individuals with intense symptoms who are likely to be perceived as a danger to themselves or others, and it is important that investigations continue with this population. Further studies are needed so we can continue to effectively train the specialized staff that are often in charge of making life decisions for this population and to continue to improve the services that we offer, while enhancing the quality of life for these patients.

### *General Limitations of Study*

This investigation utilized archival data and, therefore, the investigator had limited control over the material collected. Information that was missing on the assessment tool was not able to be retrieved. Nor was there any way to determine the reliability of the data that had been collected. In any study using clinical data there is the possibility of clinician variability due to different levels of experience and education. Some information may not have been collected or known to the clinician due to the nature of the PES centers and the fact that some patients who presented may have been too disturbed to cooperate or provide the crisis worker with accurate information. Also, while the assessment tool was designed by a committee and abides by the American Psychological Association guidelines for PES assessments, it was not a standardized measure with established reliability and validity; and, therefore, may not be easily compared with other studies using reliable and validated measures.

In addition, generalizability of this study to other PES populations needs to consider the geographical area where this study took place and the operational definition of the repeat presenter. Arflken, et al. (2002) discussed that many differences that are found between results of studies are likely due to “varying definitions of frequent visitors, different health care and social welfare systems, different configurations of services available, different climates, and different populations served” (p.491).

*Future Directions*

PES centers developed after federal funding was required from the Community Act of 1963 and studies on these services began shortly after. When reviewing investigations of PES, Gerson and Bassuk (1980) provided a comprehensive review of studies from 1967 to 1977 and Marson, et al. (1988) from 1978 to 1988, concentrating on the PES demographic and clinical variables associated with disposition. From 1988 until now, many studies continued to investigate additional demographic and clinical variables of the PES presenter. With changes in psychiatric services, such as deinstitutionalization and trends toward shorter treatment, the number of individuals utilizing these centers increased and special populations have begun to develop. This study investigated many areas that had not been widely researched, such as the suburban PES, substance use, and the child/adolescent repeat presenter, in addition to older adult repeat presenters.

Further studies are needed to replicate these findings and past findings with various PES populations and expand on them. One suggestion of further research is to concentrate investigations on special populations. For example, several studies, including this one, show a difference between individuals presenting to PES with primarily a substance-use disorder and individuals with both a substance-use disorder and a chronic mental illness. Therefore, investigations concentrating only on individuals with substance use that investigate their demographic and clinical variables and follow their treatment beyond their discharge from the center can better understand the effect the PES disposition has on their quality of life.

Future studies on the special age groups, children/adolescents could gather additional

information by utilizing a longitudinal study following these individuals over time and investigate variables that might predict repeated need for PES services. In addition, the need for understanding how to best service older adults will continue to increase as this population continues to grow. It is important to remember that psychiatric emergency service centers are treating a fragile and intense population with continually changing needs, and new research will constantly be needed to make certain we are providing the best care possible for this population to assist them in having a high quality of life.

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Appendix  
Variables collected

<b>Variable</b>	<b>Operational Definition</b>	<b>Method of collection</b>
Age	5–19 years old = child/ adolescent 20-65 years old = adult 66-99 years old = older adult	Demographic Section of PES assessment
Gender	Male Female	Demographic Section of PES assessment
Education	8 <sup>th</sup> grade and below 9-12 grade High School Graduate Some College College Graduate	Demographic Section of PES assessment
Marital Status	Married Never Married Separated Divorced Widowed	Demographic Section of PES assessment
Employment	Part-time Full-time Student Retired Public Assistance Disability Unemployed	Demographic Section of PES assessment
Ethnic Background	Caucasian African American Asian Hispanic Other	Demographic Section of PES assessment
Primary Language	English Spanish Other	Demographic Section of PES assessment
Insurance Type	Private Medicaid / Medicare None	Demographic Section of PES assessment
Referral Source	Self Family / Friend Police Mental Health Agency School Other	Presenting Problem / Reason for Referral Section

Number of PES visits within one-year time period	Number represents number of visits	History of Mental Health Treatment
Crisis Site	Crisis site visited within the past year:  Suburban Urban Both Suburban and Urban	History of Mental Health Treatment
Recent PES visit	Patient has additional PES visit within 30 days prior to most recent presentation:  Yes No	History of Mental Health Treatment
History of Psychiatric Inpatient Hospitalization	Patient has been hospitalized in a psychiatric unit prior to PES presentation:  Yes No	History of Mental Health Treatment
Recent Inpatient Psychiatric Hospitalization	Patient was hospitalized in and inpatient psychiatric unit 30 days prior to the date of presentation to PES:  Yes No	History of Mental Health Treatment
History of Psychiatric Outpatient Care	Patient has received past psychiatric outpatient care anytime during their lifetime:  Yes No	History of Mental Health Treatment
Case Management Services	Patient current involvement with Case management services:  Yes No	History of Mental Health Services
Outpatient Therapy	Patient's current involvement in outpatient individual psychotherapy services:  Yes No	History of Mental Health Services

Partial Care Program	Patient's current involvement in partial care services:  Yes No	History of Mental Health Services
Medications	Current psychotropic medications that the patient has been prescribed to take from a physician:  Yes No	Medications Section
Primary Presenting Problem	First problem listed as reason for PES visit:  Suicidal Ideation Suicidal Gesture Suicide Attempt Homicidal Ideation Homicidal Gesture Homicidal Attempt Delusions Hallucinations Disruptive Behavior Medical Complaint Depressed Mood Anxiety Anger Substance Abuse Substance Dependence Psychosocial Stressor(s) Cognitive Impairment Self-Mutilating Behavior Bizarre Behavior Other	Presenting Problem / Reason for Referral Section

Secondary Presenting Problem	Second problem listed as reason for PES visit  Suicidal Ideation Suicidal Gesture Suicide Attempt Homicidal Ideation Homicidal Gesture Homicidal Attempt Delusions Hallucinations Disruptive Behavior Medical Complaint Depressed Mood Anxiety Anger Substance Abuse Substance Dependence Psychosocial Stressor(s) Cognitive Impairment Self-Mutilating Behavior Bizarre Behavior None	Presenting Problem / Reason for Referral Section
Substance intoxication	Alcohol Amphetamines Barbituates Benzodiazepines Cocaine Cannabinoids Opioid PCP more than 1 substance more than 2 substances No intoxication	Substance Abuse Section
History of Suicidal Behavior	History of any suicidal behaviors (gestures and/or attempts):  Yes No	Risk Factors Section

History of Homicidal Behavior	History of any homicidal behaviors (gestures and/or attempts towards another person):  Yes No	Risk Factors Section
History of Abuse - Victim	History of being physically, emotionally, or verbally abused:  Yes No	Risk Factors Section
History of Abuse – Perpetrator	History of acting physically, emotionally, or verbally abusive towards another person:  Yes No	Risk Factors Section
Other Risk Factors	Fire setting Animal Abuse Use of Weapons Domestic Abuse victim Domestic Abuse perpetrator No other risk factors	Risk Factors Section
Legal History	History of any legal charges, incarceration, and/or probation:  Yes No	Legal Issues Section
Current Legal Involvement	Current legal charges, incarceration, probation, and/or parole:  Yes No	Legal Issues Section
Social Support	Yes No	Relationship Section / Home and Environment Section



<p>DSM-IV-TR Axis I Diagnosis <i>Primary Diagnosis</i></p>	<p>Diagnosis delineated as the primary clinical diagnosis:</p> <p>Childhood Dx  Learning Disorders  PPD  ADHD  Conduct Disorder  ODD  Disruptive Behavior Disorder  NOS</p> <p>Mental Dx due to general  medical condition</p> <p>Substance Related Disorders  Polysubstance Related  Disorders  Alcohol Related  Disorders  Amphetamine Related  Disorders  Cannabis Related Disorders  Cocaine Related Disorders  Hallucinogen Related  Disorders  Inhalant Related Disorders  Opioid Related Disorders  Sedative Related Disorders</p> <p>Thought Disorders  Schizophrenia  Schizoaffective  Delusional Disorder  Psychotic Disorder NOS</p> <p>Mood Disorders  Depressive Disorders  Bipolar Disorders</p> <p>Anxiety Disorders</p> <p>Sexual Disorders</p> <p>Eating Disorders</p> <p>Adjustment Disorders</p> <p>Dementia Disorders</p>	<p>DSM-IV-TR Primary Axis I Diagnosis under Summary of Mental Status Exam Section</p>
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	<p>Other</p> <p>Deferred</p> <p>No Axis I diagnosis</p>	
<p>DSM-IV-TR Axis I Diagnosis <i>Secondary Diagnosis</i></p>	<p>Diagnosis delineated as a secondary clinical diagnosis:</p> <p>Childhood Dx          Learning Disorders          PPD          ADHD          Conduct Disorder          ODD          Disruptive Behavior Disorder          NOS</p> <p>Mental Dx due to general medical condition</p> <p>Substance Related Disorders          Polysubstance Related Disorders          Alcohol Related Disorders          Amphetamine Related Disorders          Cannabis Related Disorders          Cocaine Related Disorders          Hallucinogen Related Disorders          Inhalant Related Disorders          Opioid Related Disorders          Sedative Related Disorders</p> <p>Thought Disorders          Schizophrenia          Schizoaffective          Delusional Disorder          Psychotic Disorder NOS</p> <p>Mood Disorders          Depressive Disorders          Bipolar Disorders</p> <p>Anxiety Disorders</p> <p>Sexual Disorders</p> <p>Eating Disorders</p>	<p>DSM-IV-TR secondary Axis I diagnosis under Summary of Mental Status Exam Section</p>

	<p>Adjustment Disorders</p> <p>Dementia Disorders</p> <p>Deferred</p> <p>No Secondary Diagnosis</p>	
DSM-IV-TR Axis II Diagnosis	<p>Criteria is met for a DSM-IV-TR Diagnosis of one of the following Personality Disorders: (Axis II diagnosis of Mental Retardation Disorders has been excluded from the study):</p> <p>Paranoid PD Schizoid PD Schizotypal PD Antisocial PD Borderline PD Histrionic PD Narcissistic PD Avoidant PD Dependent PD Obsessive-Compulsive PD Personality Disorder NOS No Axis II diagnosis or deferred</p>	DSM-IV-TR Axis II Diagnosis under Summary of Mental Status Examination
DSM-IV-TR Axis III : Medical Diagnosis	<p>Based on Literature Review and Clinical Experience the following Axis III medical diagnosis that are frequently comorbid with PES presenters:</p> <p>Diabetes Hepatitis Asthma Thyroid HIV Hypertension Obesity Seizure Disorder Other None / Deferred</p>	DSM-IV-TR Axis II Diagnosis under Summary of Mental Status Examination

<p>DSM-IV-TR Axis IV</p>	<p>Psychosocial Stressors as delineated in the DSM-IV-TR diagnostic Criteria (APA, 2000):</p> <p><b>Problems with primary support:</b>  Death of family member  Health problems in the family  Disruption of Family (Separation, divorce, estrangement)  Conflict in relationship with Significant other  Removal from the home  Discord with siblings  Physical or sexual abuse  Problems related to the social Environment  Death or loss of a friend  Inadequate social support  Living alone  Difficulty with acculturation  Other conflictual relationships  None</p> <p><b>Educational Problems</b>  Unable to read  Unable to write  Did not complete high school  Academic problems  Discord with teachers or classmates  None</p> <p><b>Occupational Problems</b>  Unemployment  Job Dissatisfaction  Discord with boss or coworkers  None</p> <p><b>Housing Problems</b>  Homelessness  Unsafe neighborhood  Discord with neighbors or Landlord  None</p> <p><b>Economic Problems</b>  No Income  Inadequate income (less than \$500.00 a month and no family financial support)  None</p>	<p>DSM-IV-TR Axis IV Diagnosis under Summary of Mental Status Examination  Obtained from the section “Presenting Problem” listed under Axis IV and/or as follows:</p> <p>Environmental/Home Relationships, Abuse, and Domestic Violence Sections</p> <p>Education Section</p> <p>Employment Section</p> <p>Activities of Daily Living Section</p> <p>Activities of Daily Living Section</p> <p>Legal Issues section</p>
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	<p>Problems with access to health care services  Inadequate health care Services  Inadequate Insurance  None</p> <p>Problems related to interaction with the legal system  Arrest/Charge  Incarceration  Litigation  Victim of a crime  Probation/Parole  None</p> <p>Other psychosocial and environmental problems  Exposure to disasters or war  Discord with non-family Caregivers (counselor, social worker)  None  Deferred / Denies</p>	Presenting Problems Section
DSM-IV-TR: Axis V – Global Assessment of Functioning	GAF score	DSM-IV-TR Axis V Diagnosis under Summary of Mental Status Examination
Disposition	<p>Referral Patient is given upon being discharged from PES:</p> <p>Community  Jail  Detox Hospitalization  Voluntary Hospitalization  Involuntary Hospitalization</p>	Disposition of Client Section

\*excluded from this study are individuals meeting criteria for mental retardation and PDD, as well as individuals residing outside of the catchment area, psychiatric emergency screenings on medical units, and outreach psychiatric emergency service requests.