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INITIATION OF TREATMENT FOR ALCOHOL ABUSE:

A DEVELOPMENTAL APPROACH

By

JANE G. ALLGOOD

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The members of the Committee approve the Dissertation of Jane G. Allgood defended on May 14, 2003.

C. Aaron McNeece
Professor Directing Dissertation

Rebecca Miles
Outside Committee Member

Dianne F. Harrison
Committee Member

The Office of Graduate Studies has verified and approved the above named committee members.

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ABSTRACT

Alcohol abuse is often considered a young person's rite of passage and part of the maturing process. Indeed, the developmental periods when alcohol misuse and abuse are highest are those of adolescence and early adulthood. The focus for alcohol use research and funding over the years has been with adolescent prevention and intervention. Because of this focus on adolescents, little is being done to explore and to learn more about adult use and adult entry into treatment. Since the average age of the population is increasing, these attitudes toward alcohol use and treatment are no longer valid. Use, misuse, and abuse of alcohol in adulthood, especially that leading to addiction and then treatment, is a problem within the United States (US) that merits careful attention.

The purpose of this dissertation research is to investigate specific aspects of entry into alcohol abuse treatment across stages of the life course. The investigation used the sequential life course theory of Levinson as the primary guiding theory and incorporated those aspects of Bronfenbrenner's social ecology theory used by Levinson. Specifically, with a population of approximately 94,000, this research examined the differences among individuals who began alcohol abuse treatment in mid-life and who experienced variations in time duration from the age of first use to the age of first treatment. Additionally, this research evaluated the timing of treatment episodes in light of the transitions within the life course as outlined by Levinson.

CHAPTER 1

INTRODUCTION

Alcohol abuse is often considered a young person's rite of passage and part of the maturing process. Indeed, the developmental periods when alcohol misuse and abuse are highest are those of adolescence and early adulthood (Chassin, 1991; Chen, 1995; Clark, 1997; Farrell, 1991; Kandel, 1980; Kandel, 1984; Kandel, 1993; Kandel, 1999). Some researchers even imply in their work that studying alcohol use and treatment beyond adolescence and young adulthood is not warranted as the time of heaviest use and greatest concern is adolescence and young adulthood (Lettieri, 1980; Newcomb, 1989; Prescott, 1999). The focus for alcohol use research and funding over the years has been with adolescent prevention and intervention. Because of this focus on adolescents, little is being done to explore and to learn more about adult use and adult entry into treatment. Since the average age of the population is increasing, these attitudes toward alcohol use and treatment are no longer valid. Use, misuse, and abuse of alcohol in adulthood, especially that leading to addiction and then treatment, is a problem within the United States (US) that merits careful attention.

The purpose of this dissertation research is to investigate specific aspects of entry into alcohol abuse treatment across stages of the life course. The investigation will use the sequential life course theory of Levinson (1979, 1986, 1997) as the primary guiding theory and incorporate those aspects of Bronfenbrenner's social ecology theory used by Levinson. Specifically, this research examines the differences among individuals who began alcohol abuse treatment in mid-life and who experienced variations in time duration from the age of first use to the age of first treatment. Additionally, this research

evaluates the timing of treatment episodes in light of the transitions within the life course as outlined by Levinson (1979, 1997). As such, this research is a beginning step in developing a framework for viewing alcohol use and treatment over the life course. Accordingly, this dissertation research examines both the literature about entry into alcohol treatment and the actual experience in the state of Florida with people entering treatment after adolescence and before retirement age.

Entering treatment for addiction disrupts people's lives and, therefore, is not a decision easily made (Battjes et al., 1999). There are several reasons for this obstacle. First, most treatment centers for middle-aged persons are residential, a situation that typically entails being away from family and friends and not working during treatment. Second, mid-life is a time when more people in the client's life become aware of the addiction in a tangible way. Often the client is dealing with increased exposure of their addiction at a time they may feel vulnerable and in need of protection themselves. Because of this increased exposure and increased vulnerability, it is doubtful that most people, in mid-life, in need of treatment willingly seek treatment on their own. Instead, it is more likely that they enter through an employee assistance program or through a court order (Clark, 1998).

Statement of the Problem and Its Significance

Most of the research on alcohol use and treatment episodes has been focused on adolescents with the purpose of prevention and/or intervention (Adams, 1985; Anthony, 1999; Bauman, 1999; Farrell, 1991; Kandel, 1975; Kandel, 1980; Kandel, 1992; Kandel, 1996; Labouvie, 1997; Newcomb, 1989). The area of alcohol use and treatment episodes across the life course, other than for adolescents, has received very little attention (Anthony, 1999; Graham, 1999; Kandel, 1992; Kandel, 1999; Labouvie, 1997). Both Anthony (1999) and Kandel (1999) have suggested that alcohol use across the entire life course is an area that deserves further examination. In investigating alcohol use among the elderly, Anthony and Arria (1999) state, "the apparent upturn in alcohol involvement and alcohol dependence in the retirement years deserves the

attention of gerontologists who can help account for this nonlinear tendencies [sic] of our estimates and indicate what interventions are necessary” (p. 48). Similar attention to the findings of alcohol use and dependence among men and women in the middle years of adulthood is warranted (Anthony, 1999).

Initial entry into alcohol abuse treatment can be seen as an overt indication of difficulties in a person’s life. This is especially true for persons beyond adolescence, the time commonly associated with experimentation with licit and illicit drugs. Historically, researchers and practitioners have neglected the area of adult initiation of alcohol use and treatment (Anthony, 1999; Graham, 1999). Researchers have, in fact, viewed initiation of alcohol treatment beyond adolescence to be insignificant in the overall view of alcohol use problems (Bauman, 1999; Beman, 1995; Chen, 1995; Clark, 1998; Farrell, 1988; Gfroerer, 1999; Kandel, 1984; Kandel, 1992; Labouvie, 1997). Treatment in mid-life takes on greater significance when the aging population is taken into consideration.

According to Anthony (1999), adults are at risk of alcohol use disorders throughout adulthood. Results from epidemiological studies conducted by Anthony and his colleagues indicate that “the mean probability of becoming a new case of alcohol disorder during [one] year of adulthood is 1.79 percent per year” (1999, p. 35). When viewed from a gender-based position, the estimated risk for adult men for each year of adulthood for an alcohol disorder is 3.67 percent per year while the risk for women is 0.61 percent per year (1999). For substances that are legally controlled or considered to be illicit, such as marijuana, stimulants, and anti-anxiety medication, the estimate is 1.66 percent per year for men and 0.66 percent per year for women (Anthony, 1999). While these risks may appear to be small, the numbers and the costs they represent are not.

There are two reasons that more and more of the population will be older: the increased birth rate following World War II and increased longevity. The age group known as the “baby boomers,” which includes those people born in the years following World War II and extending through the early 1950s, is now entering mid-life. Presently, the percentage of Americans ages 65 and over is 13

percent; that percentage is expected to increase slowly until the “baby boomers,” beginning in about 2011, begin to reach age 65 (Gomberg, 1999), when the percentage is expected to rise rapidly. The second reason for a larger aging population is the average life expectancy in the US is now near 80 years and it is expected to climb over the next several years. As the average age of the population in the United States increases, the significance of alcohol use and misuse in an aging population becomes more problematic (Graham, 1999; Anthony, 1999). In an ever-growing older population, many are experiencing alcohol use problems as they age (Anthony, 1999; Graham, 1999). Caregivers for those older persons are facing a challenge in how to recognize and then best treat those with alcohol use problems. These caregivers range from family members such as spouses and children to the staff at assisted living facilities or nursing homes.

Alcohol use and abuse has a large economic impact on the US economy. The economic effects of alcohol are estimated to have been \$166.5 billion in 1995 (NIDA, 1999). This is an increase of nearly \$20 billion from the 1992 estimates of \$148 billion and represents roughly a \$5 billion increase in costs each year. The National Institute for Drug Abuse (NIDA) estimates that the economic costs for alcohol use increased 7.1 percent between 1985 and 1992 based on population growth alone (1994). In estimating the economic impact of alcohol use, three primary areas are considered.

These are:

1. health consequences and the effects on the health care system;
2. productivity impacts; and
3. other impacts such as automobile accidents, fires, and criminal involvement (NIDA, 1994).

The total estimated spending for health care services in 1995 was \$22.4 billion with \$15.8 billion for medical consequences of alcohol consumption and \$6.6 billion for tertiary treatment services (NIDA, 1999). This represents an increase of nearly \$4 billion since 1992. The 1995 estimated costs for lost earnings because of premature death were \$34.9 billion, for lost earnings

because of illness, they were \$77 billion, and for lost earnings because of crime, they were \$7.2 billion (NIDA, 1999). The cost estimates for 1995 for losses for auto accidents, fires, and other events were \$24.7 billion.

Using the 1992 data, NIDA also explains where the economic burden for alcohol use falls within society. These are:

Abusers and their households	\$66.8 billion
Government	\$57.2 billion
Private insurance	\$15.1 billion
Victim losses	\$ 8.9 billion (NIDA, 1994).

As a profession, social work, takes an ecological perspective. Social work practitioners and researchers alike are encouraged to perceive individuals as operating within their environment rather than as isolated beings (Zastrow, 1999). The ecological perspective encourages the conception that people are constantly evolving and this evolution happens by a combination of intrapsychic characteristics and interaction with the environment or the system within which they live (Zastrow, 1999). This position developed from the general systems theory as advanced by scientists such as von Bertalanffy (1969). General systems theory, which is subsumed within ecological theory, is widely used within social work to structure research as well as interventions.

Using the ecological perspective of social work, identifying and defining problems from a theoretical base that supports this stance is essential. Ecological theory and systems theory both form and support this perspective and allow research findings to be transferred from theory to practice.

Conceptual Framework

The theoretical base for this dissertation is found in the work on adult development by Daniel Levinson (1978, 1986, 1996). Levinson's work, which incorporates aspects of the social ecology theory of Bronfenbrenner (1979), also uses the theory of ego stage development of Erikson (1950). Levinson weaves these theories into a structure that outlines the adult life course in a way that has not been done by other developmental psychologists.

In his early work, Bronfenbrenner (1979) joins social, cultural, and historical contexts into what he calls a bio-ecological framework. He builds this concept using Lewin's (1935) belief that behavior is a function of both the person and the environment. Lewin had expressed this theory using the equation $B=f(P,E)$, with B = behavior, P = person, and E = environment. Bronfenbrenner expanded this theory to $D=f(P,E)$, with D = development, P = person, and E = environment. The D represents development more broadly than can be conceptualized as simply behavior (Settersten, 1999). The addition of this broader context also brought about "Bronfenbrenner's emphasis on reciprocal activity and interaction between the individual and the environment; and on ecological transitions in which an individual experiences a shift in settings, a change in roles along with a shift in settings, or a change in behavior" (Settersten, 1999, p.35).

Following in the vein of the original work of Bronfenbrenner, Elder (1996) presents, as a theoretical orientation for the study of human development, the concepts of temporal sequencing, contextual sequencing, and procedural sequencing distinctions. He states that the life course indicates age-defined patterns that are part of social structures (Elder, 1996). He continues that "[t]hese structures vary from social ties with family and friends at the micro level to age-graded hierarchies in work organizations to the policy dictates of the state" (p. 31). It is the use of age-defined stage within temporal sequencing that is relevant to this research.

This researcher's choice of Levinson's theory of adult development is based on four main reasons. First, although Levinson was initially criticized for focusing on the lives of men, he developed this theory taking into account gender differences (1996). His first work, in 1978, did focus on men's lives while his second major work in this area focused on women's lives (1996). The research on women's stages of development was his last and, perhaps, his best work.

Second, Levinson's framework identifies a sequence of periods in adulthood, some of which are viewed as transitional periods. These transitions are periods in the life structure when a person's relationship to self and to the

environment undergoes fundamental changes (Levinson, 1978). These transitional periods are interspersed between periods of relative stability. The transitional periods can be seen as structure changing while the periods of stability can be seen as structure building (Levinson, 1986). The use of transitions by Levinson is consistent with Bronfenbrenner's earlier concept of ecological transitions.

The third reason for choosing Levinson's framework is that it describes well-defined modal ages during which transitions occur. The use of modal ages facilitates fitting this framework to a life course approach. Unlike Erikson's (1959) theory of psychosocial development, which gives no age ranges, Levinson identifies a relatively orderly and sequential progression that is age-linked. While the two theories of development differ, Levinson did not view his theoretical framework as conflicting with Erikson's work (1978). Instead, he viewed it as building on and further developing Erikson's work.

The final reason for choosing Levinson's theory is that the theoretical framework is based on normal adult development as opposed to development of addicted populations (1986, 1996). The value of using a developmental sequence that is considered normative is that patterns of abnormal coping can be linked to customary transitional periods.

Contained in Table 1 are the developmental stages as outlined by Levinson (1978, 1986, 1996). He identifies three major life transition stages and two that could be considered to be significant, but not as life altering as the other three. The three major transitional stages are the Early Adult Transition, which generally occurs between ages 17 and 22; the Mid-Life Transition, which generally occurs between ages 40 and 45; and the Late Adult Transition, which occurs between ages 60 and 65 (Levinson, 1996). The two "minor" transitional stages are the Age 30 Transition, which occurs between ages 28 and 33, and the Age 50 Transition, which occurs between 50 and 55 (Levinson, 1996).

Table 1 Developmental Periods in Adulthood

Developmental Period	Age Range
Era of Pre-Adulthood	0 - 22
Era of Early Adulthood	17 - 45
Early Adulthood Transition	17 - 22
Entry Life Structure for Early Adulthood	22 - 28
Age 30 Transition	28 - 33
Culminating Life Structure for Early Adulthood	33 - 40
Era of Middle Adulthood	40 - 65
Mid-life Transition	40 - 45
Entry Life Structure for Middle Adulthood	45 - 50
Age 50 Transition	50 - 55
Culminating Life Structure for Middle Adulthood	55 - 60
Era of Late Adulthood	60 - ?
Late Adult Transition	60 - 65

Adapted from Levinson 1978 and 1996.

Levinson (1986) organizes these periods of transition and stability into four eras that are characterized by distinctive bio-psychosocial identities. These are Pre-Adulthood, Early Adulthood, Middle Adulthood, and Late Adulthood. Unlike many theories of development, Levinson's framework places three of the four eras in adulthood. This theory's adoption of a life event perspective underscores individual variability in human behavior and highlights the centrality of social events and the transitions they generate as determinants of human behavior. Bronfenbrenner would likely carry this perspective further to view social events and transitions as inseparable from human development. In defining the ecology of human development, he writes:

“The ecology of human development involves the scientific study of the progressive, mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings and by the larger contexts in which the settings are embedded” (Bronfenbrenner, 1979, p. 21).

Accordingly, a life event can be viewed as both a milestone that shapes an individual’s life and a process of development (Reeves, 1999). The individual should not be viewed as a passive being, shaped by the environment, “but as a growing, dynamic entity that progressively moves into and restructures the milieu in which it resides” (Bronfenbrenner, 1979).

The dissertation research proposed will be guided by the following research questions:

- Question 1. Working from Bronfenbrenner’s ecological theory that both development and behavior are a function of the interaction between the person and the environment, is there a connection between age and the initiation of treatment for alcohol abuse?
- Question 2: Continuing from Bronfenbrenner’s same premise, are there connections between life circumstances and initiation of treatment for alcohol abuse?
- Question 3: Working from Levinson’s developmental theory that times of transition are periods when individuals assess their lives and changes that may need to be made, are individuals who have received treatment for alcohol abuse more likely to enter treatment during a transition period than during a more stable period?
- Question 4: Using both theoretical perspectives, are there identifiable groups that tend to enter treatment at certain ages?

Assumptions

The primary assumptions made in this work surround the use of alcohol and the costs to both the individual and society. First, alcohol is a legal substance for adults in the United States. As such, it is not an illicit substance and is controlled only in the selling to and use by minors. The use of alcohol is common in the United States as shown in the work of Anthony and Arria (1999) and others. What is of interest in this dissertation research is the use of alcohol to the point of impairment and subsequent entry into substance abuse treatment. It is at this level of usage that the term alcohol abuse will be adopted in this work. This labeling is not intended to indicate judgment but to designate a level of use that then involves the use of services regulated by the state of Florida.

The second assumption pertains to the costs to society. It is assumed that the costs of lost wages, increased medical expenditures, increased demand on the criminal justice system, and increased morbidity and mortality are negative and that those resources could be better allocated through a reduction in demand. These resources could be better used through productive labor on the part of the alcohol abuser.

Focus of the Study

The focus of this research is on entry into alcohol abuse treatment in mid-life, approximately ages 22 to 65 years. The reasons for narrowing the focus to this age span are that it has not received much attention in the research literature and it is the age span that has the greatest economic impact on our society. The research will take a developmental perspective, based on clearly defined developmental periods. This approach allows a design anchored to predefined tasks in adulthood and full recognition of the ecological nature of life.

Chapter 2 contains a review of the literature on adult alcohol entry into treatment as well as the literature of developmental science as relevant to this study. Very little has been written about entry into substance abuse treatment; virtually none of it focuses on the mid-life period. As a result, literature has been included about adult alcohol abuse in general when it has relevancy to this dissertation.

Chapter 3 explains the proposed methodology and statistical analysis strategy. Definitions of the variables are included, along with a description of how the data were obtained. Chapter 4 presents the results of the analysis focusing on the four research questions. Finally, Chapter 5 presents the discussion, implications, and limitations of the study.

CHAPTER 2

REVIEW OF RELATED RESEARCH

No empirical studies of adult onset alcohol use and treatment have been done using a sequential theory of adult development. Further, no research studies on adult use using developmental theory have been conducted. Not surprisingly, one criticism of alcohol abuse as a field of study is that there is no sound theoretical base to the work (Warner, 1995). Researchers tend to rely on epidemiological methods to examine what is present, but no unifying theories have emerged. As stated in Chapter 1, this research gap is glaring in the fields of both alcohol use and development as related to alcohol use and treatment. Using both Bronfenbrenner's ecological theory and Levinson's developmental theory is an attempt to begin to bridge this gap in the research.

Literature on Relevant Alcohol Abuse and Treatment Research

Research on the etiology and incidence of alcohol initiation and of initial entry into alcohol abuse treatment has focused primarily on adolescents and young adults (Anthony, 1991; Anthony, 1999; Bauman, 1999; Farrell, 1991; Fujioka, 1989; Kandel, 1980; Kandel, 1984; Labouvie, 1997; Newcomb, 1989; Ott, 1999; Prescott, 1999). Only recently have studies relating to adult initiation of alcohol use been conducted and the results published (Gomberg, 1999; Anthony, 1999; Chen, 1995; Clark, 1998; Graham, 1999; Hasselbrock, 1999; Kandel, 1999; Yamagichi, 1984). The most well known researchers in this area are Anthony (1999) and Kandel (1999) and their colleagues. Their approach differs from one another. Anthony (1991, 1999) assumes an epidemiological and

therefore descriptive stance. Kandel and her colleagues (1992, 1999) have focused on initiation and stages of progression with attention to building what she refers to as a “gateway theory” of substance use. Others, such as Clark et al. (1999) and Graham et al. (1999), have conducted exploratory research to find the influences on adult initiation of alcohol use and on the influences of mates in older couples on their overall drinking patterns. Hasselbrock (1999) and Gombert (1999) have focused on the epidemiology of alcohol abuse specifically with adults and the elderly. To date, the majority of research studies on initiation of substance use and entry into treatment focus on adolescence, with the second most researched area being the elderly. The middle adult years have not been extensively studied.

The most recent work by Anthony (1999) that concentrates on adult substance use draws upon data from two national surveys: the 1994 National Household Survey on Drug Abuse (NHSDA) and the 1990-1992 National Comorbidity Survey (NCS). The NHSDA survey consisted of interviews with 17,809 people ages 12 years and older while the NCS survey consisted of 8,098 people ranging in age from 15 through 54 years of age. Both surveys are cross-sectional rather than longitudinal and use a stratified sampling strategy.

Of greatest interest in this research is the reported lifetime use and dependence on various substances. Table 2 displays the percentages of use and dependence as found by Anthony et al. in these two surveys.

It is clear from these estimates that alcohol and tobacco, both legal substances for adults, present the greatest degree of addictive substance use and of dependence, with approximately one in seven individuals reporting dependence on alcohol and nearly one in four reporting tobacco dependence at some point in their lifetime. Anthony et al. (1999) report recent alcohol use by no less than 20 percent of the population across all age groups surveyed with the category ages 20 to 50 years representing nearly 80 percent of the population and reporting recent alcohol use.

Table 2 Lifetime Prevalence and Dependence Estimates

	NHSDA	NCS
Specific Drugs	Lifetime Dependence	Ever Used
Alcohol	14.1	83.6
Tobacco	24.1	73.3
Any Illicit Drug	7.5	34.4
Marijuana	4.2	33.7
Cocaine	2.7	11.3
Stimulants	1.7	6.0
Sedatives	1.2	3.4
Tranquilizers	***	4.6
Analgesics	0.7	6.8
Inhalants	0.3	5.3
Hallucinogens	0.5	8.7
Heroin	0.4	1.1

Adapted from Anthony (1999)

***Information not collected in this survey

Kandel (1999) and her colleagues' most recent work that is germane to viewing substance initiation across the life course is based on a longitudinal study using the New York State Cohort (NYSC). In the survey that began in 1971 in secondary schools in New York State, Kandel and her colleagues have followed the cohort through age 35 years. Interviews were conducted with the participants during high school and then again in 1980, 1984, and 1990. From this work, they conclude, "[t]he rates of initiation into most drugs increase sharply through age 18, when they rapidly begin to decline" (Kandel, 1999, p. 51).

Kandel and Yamaguchi (1999) found the exception to this pattern is cocaine. The highest rate of initiation for cocaine use occurs at age 24, with a dampening through the late 20s. The authors caution against generalizations based on these findings since they represent only one cohort and may not accurately reflect the overall norm for the population.

In contrast to Kandel's work, Hesselbrock and Hesselbrock (1999) suggest that, while initiation of alcohol use may begin in adolescence or early adulthood, the use of alcohol tends to reach its highest level during the 30s age group. They report that alcohol use tends to increase with age, peaking sometime around the age of 30, but not declining dramatically until after age 65. Anthony and Arria (1999) support this finding. They take the age analysis further through the life span and demonstrate a prevalence rate that, after declining around age 65, again rises beginning around age 80. Hesselbrock and Hesselbrock (1999) assert that, while there is a high mortality rate for those who begin chronic heavy alcohol use early in life, there is another group that apparently does not begin problem alcohol use until after age 65.

A consistent finding reported by Hesselbrock and Hesselbrock (1999) is that those persons who suffer from alcoholism often have other comorbid psychiatric disorders. This finding is consistent with Kessler et al. (1985) and Regier (1984) in their studies of alcohol use. According to Hesselbrock and Hesselbrock (1999), women begin heavy drinking later in life than do men and do so often in conjunction with a depressive disorder or other affective disorder.

Edith Gombert (1999) has studied alcohol abuse in the elderly and has found that environmental issues loom large in the extent of alcohol abuse among the elderly. She distinguishes between what is seen as usual aging from what she calls successful aging. Environmental factors that exacerbate the effects of aging, such as low income, declining health, poor nutrition, and social isolation, are part of usual aging. In contrast, successful aging correlates with minimization of factors such as loss and impairment by maintaining good nutrition, exercise, and social involvement either through volunteer activities or through continued

work. Those who experience “usual” aging are more likely to initiate alcohol use or to begin heavier use that becomes problematic.

Whether authors focus on adolescence, the elderly, or a more generic approach, they share something. Each presents the incidence of alcohol use and abuse and each suggest factors that appear to influence alcohol use and abuse, but none uses a theoretical framework to guide their research questions or to suggest avenues for exploration.

The area of alcohol abuse also lacks conceptual literature for adult alcohol use and abuse. Many authors (Chassin, 1991; Chen, 1995; Gombert, 1999; Jessor, 1980; Kandel, 1992; Lettieri, 1980; Ott, 1999) have suggested characteristics that may influence use, but none have anchored their work to a theoretical base. Jessor (1980) comes closest to using a theoretical framework by suggesting Bandura’s social learning theory as one perspective for considering alcohol use. As with the other researchers, he limits this perspective to adolescent onset and use of illicit substances.

Literature on Relevant Developmental Theory

The guiding developmental theory for this work is that of Daniel Levinson. His work in this area was influenced by the work of Erik Erikson and his conception of ego stages across the life cycle (Levinson, 1986). Specifically, it was the view of “the engagement of self with world” (Levinson, 1986, p. 3) across the life cycle that most caught Levinson’s attention. Erikson’s model of the adult life cycle consists of three stages beyond childhood: intimacy versus isolation, generativity versus stagnation, and integrity versus despair (Erikson, 1982). Each of these stages emphasizes a relationship of self with the world. When compared to Levinson’s model, Erikson’s intimacy versus isolation roughly compares to Levinson’s era of early adulthood; generativity versus stagnation compares to era of middle adulthood; and integrity versus despair compares to era of late adulthood. Erikson does not assign age delineation; Levinson does. This is one primary difference between the two theories.

The developmental tasks seen by both men as part of these stages are roughly equivalent (Erikson, 1982; Levinson, 1986). Levinson differentiates his

work from that of Erikson in terms of structure, both life structure and ego structure (Levinson, 1986).

George Vaillant (1993), in reviewing the ego and adult development, commented “that the key to understanding the sequential nature of adult ego development may lie in appreciating both the relative complexity and the inner threat of the tasks and commitments to be mastered” (p. 146). In his review of psychodynamic theories of ego development, Vaillant compares and contrasts the theories of Erikson, Kohlberg, Piaget, and Loevinger. Vaillant believes that Erikson’s model of human development is superior for two reasons: its base is biological and it extends, as does Levinson’s later theory, the concept of continuing development into adulthood (Vaillant, 1993).

In contrast to Vaillant, Michael Rutter compares theories of adult development that use life course development as a “ladder-like progression through inevitable universal transitions and stages, and those who view the sequence as open to major individual variations, some of which stem from differences in self-concept, expectations and other aspects of intrapsychic functioning” (Rutter, 1993). Rutter presents an interesting review of Levinson’s theory and, while not necessarily disagreeing with Levinson, takes issue with what he sees as Levinson’s three main propositions. The first assumption made by Levinson is that mid-life coincides with a variety of accommodations to life patterns such as divorce, major job changes, and major illness. Levinson sees this as happening most frequently in the forties and fifties, while Rutter contends that these can take place well into extreme old age (Rutter, 1993).

The second proposition of Levinson is that middle age brings significant changes in the internal aspects of a person’s life structure. Rutter (1993) takes issue with what he sees as Levinson’s reliance on the “aspirant middle class in the Western world” (p. 308) and the partitioning of this to middle age. Rutter contends that this restricts the utility of Levinson’s theory to the normative group and leaves out a significant proportion of the world population.

The third premise made by Levinson, that one must experience turmoil and upheaval during mid-life to accomplish successfully the transition to older

adulthood, is contested vigorously by Rutter. In challenging this, Rutter looks to the work of Vaillant, who indicated, "that a lack of emotional disturbance in mid-life predicted better psychological functioning in the sixties - in other words, the opposite of what Levinson proposed" (Rutter, 1993, p. 309). Vaillant presented these findings as part of a longitudinal study of successful aging. Rutter's position is that self-searching need not be distressful or disturbing to be successful (Rutter, 1993).

Literature on Relevant Social Ecology Theory

The primary social ecology theory used for this work is that of Bronfenbrenner as detailed in Chapter 1: Conceptual Framework. Bronfenbrenner presented what he considered a new theoretical perspective from which one could research human development (Bronfenbrenner, 1979). He considered this perspective to be new because of "its conception of the developing person, of the environment, and especially of the evolving interaction between the two" (Bronfenbrenner, 1979, p. 3). Bronfenbrenner defines development as "a lasting change in the way in which a person perceives and deals with his environment" (Bronfenbrenner, 1979, p. 3). The use of alcohol, to the degree that the individual requires treatment for alcohol abuse, is indicative of a dysfunctional manner of dealing with the environment and, most likely, the individual's perception of the environment.

According to Bronfenbrenner, individuals and environments must be analyzed in systems terms and not just in terms of interaction of the individual with the immediate environment (Bronfenbrenner, 1979). He refers to this as $N + 2$ systems which generally includes, beyond dyadic relationships, triads, tetrads, and even larger interpersonal systems. He contends that the theoretical conception of extending the environment beyond just the behavior of individuals to encompass functional systems contrasts with usually accepted research models (Bronfenbrenner, 1979). This conception of interaction with the larger environment is fully contained in the ecological aspects of Levinson's theory of adult development.

One of the greatest contributions of developmental science has been to provide structure and guidance to the study of human ontogeny. Magnusson and Cairns (1996) address some of the concerns regarding research methods for a developmental framework. One of the concerns they address is the notion that the procedures and statistical analyses employed to study developmental change should be complex (Magnusson & Cairns, 1996). They contend that “[i]t is often the case that to clarify complex issues, the simpler the statistic, the better” (Magnusson & Cairns, 1996, p. 23). Additionally, others (Magnusson, 1996; Magnusson, 1998; Kumpfer, 1991; Settersten, 1999; Wapner, 2000; Elder, 1996) have also contributed to the underlying assumptions made when studying human ontogeny from a social ecology perspective.

The area of developmental science has grown from the early work of Bronfenbrenner and is becoming a recognized area of scientific study. According to Magnusson and Cairns, the current study of human development is “concerned with the establishment of, maintenance of, and change in structures and processes over the life span” as well as “any process of progressive change” (1996, p. 11). While they include the processes of biological change in their work, they also acknowledge that not all studies can contain all aspects of developmental science. Accordingly, this study will focus attention on the individual, social, and environmental aspect of human ontogeny. This separation of areas of developmental influence is a limitation and is one acknowledged by Magnusson and Cairns (1996). One of their first axioms is:

“An individual develops and functions psychologically as an integrated organism. Maturation, experiential, and cultural contributions are fused in ontogeny. Single aspects do not develop and function in isolation. As such, they should not be divorced from the totality in analysis” (p. 12).

In explaining this axiom, they are careful to point out that “this principle clearly does not require that all investigations must assess all levels simultaneously” but that “investigators are expected to simultaneously assess two, or possibly three, levels of influence” (Magnusson & Cairns, 1996, p. 12). They take into account

that there are limited resources for most studies, precluding the most comprehensive designs. What they encourage, when taking a comprehensive view, is a combining of various studies that individually do include the different levels of assessment.

CHAPTER 3

METHODOLOGIES AND PROCEDURES

The dissertation research was guided by the following research questions and hypotheses:

Question 1. Working from Bronfenbrenner's ecological theory that both development and behavior are a function of the interaction between the person and the environment, is there a connection between age (after adolescence) and the self-initiation of treatment for alcohol abuse.

Hypothesis 1: The relationship between age and self-initiation of treatment for alcohol abuse is positive.

Question 2: Continuing from Bronfenbrenner's same premise, are there connections between life circumstances and self-initiation of treatment for alcohol abuse?

Hypothesis 2: The relationship between life events such as marital status, arrest, employment, income, and education is positive: as the number of "negative" aspects of one's life increases, so does the likelihood of self-initiation of treatment for alcohol abuse. Negative aspects are defined as having never been married or being divorced, having been arrested within the 24 months before treatment, being employed less than full-time, having an income at or near the poverty line, and having an education below completion of high school.

Question 3: Working from Levinson's developmental theory that times of transition are periods when individuals assess their lives and the changes that may need to be made, are individuals who self-initiate treatment for alcohol abuse more likely to enter treatment during a transition period than during a more stable period?

Hypothesis 3: Individuals are more likely to self-initiate treatment during a period described as a transition period by Levinson than during times of stability.

Question 4: Using both Bronfenbrenner's and Levinson's theoretical perspectives, are there identifiable groups that tend to self-initiate treatment at certain ages?

Hypothesis 4: Groups can be identified that are more likely to self-initiate treatment at identifiable ages.

Data Source

The data for this dissertation consists of all admissions for substance abuse treatment in the state of Florida from June 1997 through June 2000, approximately 450,000 cases. The Florida Department of Children and Families, Substance Abuse Program Office has provided these data. These data are part of the database maintained by the Alcohol, Drug, and Mental Health Data Warehouse (ADMDW). The data are contained in a relational database consisting of data records submitted by both community mental health providers and substance abuse treatment providers.

The subsets of data are:

- the provider data set,
- the mental health and substance abuse treatment admissions,
- the substance abuse placements,
- the substance abuse discharges,
- enrollments,

- mental health outcomes,
- service events, and
- satisfaction surveys.

For the purposes of this dissertation, the data being used are from the substance abuse treatment admissions.

Data Confidentiality and Structure

Florida law mandates confidentiality of all client records. One of the concerns of this researcher was how to access the data as a relational database while maintaining client confidentiality. After consultation between the researcher and the data management staff of the Department of Children and Families, the database was altered so that the relational aspect was maintained but no individual client can be identified. The Department of Children and Families is currently in the process of making this data available for public use and used this opportunity to test maintaining the relational mode while making identification of an individual impossible. This maintenance of confidentiality was accomplished by creating a variable called "AllgoodID" which was used in place of the social security number used by the database managers. This variable is the same for all records of one individual so that the records can be identified on an individual basis, but in no way can the actual identity of the individual be established from this variable. Reporting of the data for the purposes of the dissertation will be in aggregate form.

Data Collection and Source

The data were collected by the Substance Abuse Program Office and submitted by the service providers. Each provider has, as a provision of their operating license, the requirement to submit reports to the state. These reports are in a format prescribed by the Program Office and are submitted on a monthly basis. The information obtained in these reports is what constitutes the database used for this dissertation. Table 3 contains the schedule of substance abuse data collection, reporting, and those individuals for whom reporting is mandatory.

Table 3 Schedule of Substance Abuse Data Collection

Type of Information	Collection Frequency	Submission Frequency	Required for Which Clients
Substance Abuse Admission	First service episode	Monthly	All substance abuse clients
Enrollment	At admission; updated as required	Monthly	Substance abuse target populations.
Events	Each service provided	Monthly	All enrolled clients
Substance Abuse Placement	When new placement begins or is completed	Monthly	All substance abuse clients
Substance Abuse Discharge	Discharge from the substance abuse program and the episode of care is completed.	Monthly	All substance abuse clients

Adapted from the DCF Data Handbook 1999.

Data Integrity

The Department of Children and Families, Substance Abuse Program Office requires that each provider keep records that can be audited and that contain the signature and social security number of the clinician completing the forms. These forms are kept in the client record. The authority for this is contained in Chapter 395.77, F.S. and in Chapter 397.321(3)(c) and (10), F.S.

The information for completing the forms is obtained either through client interviews or through collaborative information such as existing records or family member interviews. The Program Office uses the United States General Accounting Office standards of evidence to support the collection of valid and reliable data.

The Substance Abuse Program Office staff does perform routine audits on information submitted by the providers to ensure that the data are accurate and valid. When data are found that either cannot be supported or are incorrect, the provider is required to make corrections. Compliance with these requirements is set forth in the 1999-2000 Appropriations Act, which states that “the department may not make any payment to a private provider for alcohol, drug abuse, and mental health services unless standard client demographic, service, and outcome information required for the department’s Mental Health and Substance Abuse Data System is submitted to the department by the provider within the due date specified in the provider contract” (DCF, 1999, p. 5).

Variables and Definitions

The data used in this research includes client demographics at the time of entry into treatment such as gender, race, ethnicity, age, education, employment, income, and marital status. Other data that will be used include frequency of use during the past 30 days, age of first use, sources of income, arrest record over the 24 months prior to entering treatment, process of referral for services, what kind of insurance (if any), and perceived need for mental health treatment. In addition to the above information, these variables will be included: age of first use, age of first treatment episode, and frequency of use.

For the purposes of this research, the following definitions of select variables are used:

Admission into treatment is defined as the first face-to-face contact made with a service provider. It is at this time that a client record is initiated and assessment/services are begun.

A client is a person who meets the following criteria:

- Assessed with an alcohol or drug related problem or potential problem;
- Has been admitted for substance abuse service;
- Has their own client record; and Is receiving substance abuse services for an alcohol or drug problem or potential problem (DCF, 1999, p. 6).

A provider can be either a private provider or a public provider. A private provider receives no public funding for services rendered but is licensed to provide substance abuse services in Florida. A public provider receives public funding to provide the services and is an independent agency, licensed by Florida to provide substance abuse services. Definitions of other variables are located in Appendix A.

Methodology

The purpose of this study was to examine initial self-initiation of entry into alcohol abuse treatment in mid-adulthood, using Levinson's theory of adult development as the primary structure. The population for this study was purposive, in that all persons who received alcohol abuse treatment in Florida over a three-year period from June 1997 through June 2000 constitute the population. It was cross-sectional for that period.

Establishing whether treatment initiation occurs across the life course was accomplished by calculating the frequency distribution of the characteristic, particularly the age of those seeking treatment. If help seeking does occur across the life span, it is important to identify who is most likely to have adult treatment initiation and what characteristics they are most likely to have in common. Logistic regression and survival analysis were used to obtain the profile of those entering treatment.

The use of logistic regression is dictated by the data. The level of measurement for most of the variables is nominal and therefore violates the Gaussian-Markov assumptions (Goldberger, 1998). These assumptions are that the distribution will be linear in its parameters, normally distributed, unbiased and with a constant and equal variance (Hosmer, 1989). Because most substance abuse, including alcohol abuse, takes place in adolescence and early adulthood, the distribution in this population is not normally distributed and the variance is not equal but is heteroscedastic (Gujarati, 1995). Additionally, most of the dependent variables are dichotomous and, therefore, limited. According to Schroeder et al. (1986), "[w]hile dichotomous indicators are appropriate as explanatory variables, ordinary least squares regression analysis is not

appropriate when a 0-1 or other limited choice variable is the dependent variable" (p. 79).

The logistic regression uses the logit function:

$$g(x) = B_0 + B_1x_1 + B_2x_2 + \dots + B_px_p$$

Part of the reason for using logistic regression was that the logit transformation of the conditional mean provides some of the desirable characteristics of a linear regression model, while using a logistic distribution. These characteristics are that the logit is linear in its parameters, may be continuous, and ranges from negative infinity to positive infinity, depending on the range of the dependent variable (Hosmer, 1989). Additionally, the variance, or errors, uses a binomial distribution rather than a normal distribution; and the logistic regression model is based on a binomial distribution (Hosmer, 1989).

The models used were derived using logistic regression, with the dependent or outcome variable being self-initiation of first treatment at delineated age intervals. The initial variables, such as demographics, arrest history, age at time of first use, age at first treatment episode, and frequency of use, were used to derive a parsimonious model while still explaining the data. The reason for striving to minimize the number of variables in the model is for numeric stability and ease of generalization (Hosmer, 1989). Another advantage of using the most efficient model was to keep the estimated standard errors small and to not "over fit" the model (Hosmer, 1989).

Building the Models

The initial step in building the models will be a univariate analysis of each variable. For variables that are nominal and ordinal, this was accomplished by obtaining the likelihood ratio chi-square. For continuous variables, this was done by fitting a univariate logistic regression model, obtaining the estimated coefficient, the estimated standard error, the likelihood ratio test for significance of the coefficient, and the univariate Wald statistic.

The second step in building the models was to select the variables to be included based on the univariate analysis. According to Hosmer and Lemeshow (1989), “[a]ny variable whose univariate test has a p-value < 0.25 should be considered as a candidate for the multivariate model along with all variables of known biologic importance” (p. 86). Their inclusion of variables with a p-value < 0.25 is based on the work of others who have established that the use of the more common 0.05 p-value level often excludes variables that are known to be important in the model (Hosmer, 1989).

Once the fit of the multivariate model was completed, each variable was examined for importance or contribution to the model. This was accomplished by considering the Wald statistic for each variable along with a comparison of the estimated coefficient to the coefficient from the univariate model containing only that variable. Those variables found not to contribute to the model based on these statistics were eliminated from the model (Hosmer, 1989).

Survival analysis was performed to assess the time-to-event for different age of first use cohorts and different duration cohorts. The event was self-initiated entry into alcohol abuse treatment; the time duration was from age of first use to age of entry into treatment. The purpose was to determine differences among these groups by comparing their survival curves.

A primary aim of using survival analysis was to estimate causal models or predictive models in which the risk of an event, in this case self-initiated entry into treatment, may depend on a covariate or combination of covariates (Allison, 1995). Two features of survival analysis make it more attractive than conventional statistical procedures. These are censoring of data and time-dependent covariates (Allison, 1995). For this study, it was the ability of survival analysis to distinguish the time dependence that was of most importance.

The statistical model that was used in this analysis is the Cox Proportional Hazards Model. This model was used because it is considered robust and it

closely approximated the results of a parametric model such as the Weibull or the exponential (Kleinbaum, 1995). This model was defined as:

$$h(t, \mathbf{X}) = h_0(t)e^{\beta' \mathbf{X}}$$

where \mathbf{X} is the vector of predictor variables, $h_0(t)$ is the baseline hazard and e is the exponential to the linear sum of $|\mathbf{X}|$ (Kleinbaum, 1995). The calculation of the survival model was accomplished using the maximum likelihood estimators (MLE). The MLE are used when the assumptions of ordinary least squares are violated (Hosmer, 1999).

To summarize the methods to be used, Table 4 provides information on each hypothesis and the statistical procedure that will be used to test it.

Table 4
Statistical procedures and hypotheses

Hypothesis	Statistical Procedure
1. An identifiable relationship exists between a person's age and the self-initiation of treatment.	Logistic Regression Bivariate Analysis
2. As negative life events increase, so does the likelihood of initiation of treatment.	Logistic Regression
3. Individuals are more likely to self-initiate treatment during times of transition	Logistic Regression
4. Groups of individuals can be identified who are more likely to self-initiate treatment at identifiable stages of adult development.	Logistic Regression and Survival analysis

CHAPTER 4

RESULTS

This chapter presents the findings of the research on self-initiation of alcohol abuse treatment in mid-life. The focus of the study was to identify those persons most likely to self-initiate alcohol abuse treatment in mid-adulthood and to evaluate their characteristics in light of Levinson's stages of adult development.

Description of the Population

The population consisted of all persons who entered treatment for alcohol abuse in state licensed facilities between June 1997 and June 2000 in the State of Florida. As shown in Table 5, the population size was 94,094 persons. Of these, 71,296 (75.8%) were male and 22,789 (24.2%) were female. Women are under-represented in this population in comparison to the general population in Florida by approximately 27%. In the general population of the state, women account for 51.2% of the population (US Census, 2000). The possible reasons for women being under-represented are discussed in Chapter 5.

Of the 80,497 who identified how they were referred, approximately 25.0% (n=20,119) of those who entered treatment identified themselves as self-referrals with 12.3% (n=9,862) identifying themselves as voluntary referrals and 62.8% (n=50,515) as involuntary referrals such as court ordered treatment. Within the population who self-initiated treatment, 14,691 (73.0%) were male and 5,428 (27.0%) were female. The majority of the population was white (77.2%, N=72,111), non-Hispanic (89.4%, N=83,119), and employed (51.8%, N=44,455). Approximately 22.4% (N=18,941) of the population reported being married, 33.6% (28,346) having never married, and 44.0% (37,109) having been previously married.

Table 5. Characteristics of Population

Characteristic	Overall Population		Self-Referred	
	N	%	N	%
Gender				
Male	71,296	75.8	14,691	73.0
Female	22,798	24.2	5,428	27.0
Race/Ethnicity				
White	72,111	77.2	15,821	78.7
Black	21,299	22.8	4,279	21.3
Hispanic	9,975	10.6	1,823	9.1
Employment				
Not Employed	41,882	48.5	12,961	65.6
Employed	44,455	51.5	6,808	34.4
Marital Status				
Not Married	65,455	77.6	16,267	82.2
Married	18,941	22.4	3,522	17.8
Education Level				
Less than High School	24,930	30.0	4,549	23.7
High School Graduate	36,934	44.5	8,735	45.5
College Graduate	21,126	25.5	5,918	30.8
Living Arrangement				
Homeless	9,351	11.3	4,478	23.1
Dependent Care	13,929	16.9	2,893	14.9
Independent	59,158	71.8	11,998	61.9
Suspected Co-Morbidity				
Yes	12,249	17.8	3,904	24.2
No	56,430	82.2	12,210	75.8

The education level among the entire population was 30.0% (N=24,930) having less than a high school education, 44.5% (N=36,934) having completed high school and 25.5% (N=21,216) having completed college. This compares with the general population of the state reporting 79.9% being high school graduates and 22.3% having completed a four-year college degree (US Census, 2000). The majority of the population lived independently (71.8%, N=58,158) with 11.3% (N=9,351) reporting being homeless at the time of entry into treatment and 16.9% (N=13,929) reporting a dependent living arrangement such as a group home, living with parents, or living in some other type of institutional setting. Prior arrests were reported by 42.6% (N=37,848) of the population. The possibility of having a co-morbid psychiatric diagnosis was identified in 17.8% (N=12,249) of the total population and 24.2% (n=3,904) of the self-referral population.

Self-Referred and Not Self-Referred

A distinction is made for the type of referral into treatment and is fundamental to this research. A self-referral is one who identified as a “self-referral” meaning no one other than the client is reported to have influenced their entry into treatment. As noted earlier, approximately 25% of the population identified as a self-referral. Those who considered themselves to be voluntary referrals, but not self-referrals, accounted for approximately 12% of the population and include referral sources such as family and friends, substance abuse provider, and other mental health provider. The third group is the involuntary referral group. This group accounts for approximately 63% of the population and includes referral sources such as the criminal justice system, the Department of Children and Families, and employee assistance programs. For this research, the groups were identified as self-referred and not self-referred with not self-referred including both voluntary and involuntary referrals.

The two groups exhibit differences that influence entry into treatment. The most remarkable difference is involvement with the criminal justice system. Among those who were self-referrals, 61.7% (N=12,002) had no arrests as compared to 29.3% of those not self-referred (N=17,668). The next most remarkable is employment. Among those who were self-referrals, 65.6%

(N=12,961) reported not being employed as compared to 40.7% (N=24,018) of those not self-referred. Table 6 compares those who were self-referred to those who were not self-referred.

Table 6. Comparison of Self-Referred and Not Self-Referred

Characteristic	Self-Referred		Not Self-Referred	
	N	%	N	%
Gender				
Male	14,691	73.0	45,460	76.9
Female	5,428	27.0	13,917	23.1
Race				
White	15,821	78.7	45,291	75.2
Black	4,279	21.3	14,951	24.8
Ethnicity				
Hispanic	1,823	9.1	7,618	12.6
Non-Hispanic	18,296	90.9	52,759	87.4
Employed				
Yes	6,808	34.4	43,992	59.3
No	12,961	65.6	24,018	40.7
Criminal Justice Involvement				
Yes	8,117	38.8	42,709	29.3
No	12,002	61.7	17,668	70.7
Married				
Yes	3,522	17.8	14,389	24.3
No	16,267	82.2	44,754	75.7
Income Source				
Salary	6,559	36.6	32,548	58.1
Government	3,465	19.2	10,994	19.6
None	8,067	44.6	12,518	22.3

Logistic Regression Analyses

The main purpose of this research was to identify those adults who self-refer into alcohol treatment and to identify the characteristics common to that population. The statistical analyses used for this were logistic regression and two variations of logistic regression: multinomial regression and survival analysis.

Logistic regression was used to determine the likelihood of entering treatment during an identified life stage and comparing those who were self-referred into treatment with those who entered treatment in another manner. Table 7 displays the comparison between the two referral groups based on life stage in terms of percentages that entered treatment during a particular life stage. Both groups reach their highest raw numbers of persons entering treatment during the Culminating Life Structure of Early Adulthood (33 years – 40 years). During this stage, 36.0% (N=9,309) were self-referred for treatment and 64.0% (N=16,560) were not self-referred. There were three periods when self-referral was at its highest. The first was the Entry Life Structure (45 – 50 years) with 44.0% (N=4,530) being self-referred and 56.0% (N=5,773) not being self-referred. The second was the Age 50 Transition (50 – 55 years) when approximately 44% (N=2,471) of those entering during this stage were self-referred. During this period, 56.0% (n=3,164) were not self-referred. The third was the Culminating Life Structure (55 – 60 years) with, again, approximately 44% (N=1,325) being self-referred and approximately 56% (N= 1,703) not being self-referred).

Table 7. Comparison of Levinson's Stages by Referral

Stage	Self-Referred		Not Self-Referred	
	N	%	N	%
ELS for Early Adulthood	977	23.7	3,152	76.3
Age 30 Transition	3,786	28.3	9,588	71.7
CLS for Early Adulthood	9,309	36.0	16,560	64.0
Mid-Life Transition	6,897	41.7	9,629	58.3
ELS for Middle Adulthood	4,530	44.0	5,773	56.0
Age 50 Transition	2,471	43.9	3,614	56.1
CLS for Middle Adulthood	1,325	43.8	1,703	56.2
Late Adulthood Transition	686	42.0	946	58.0

The association between being self-referred into treatment and Levinson's developmental stages was analyzed in terms of log odds for each developmental period. A binary logistic regression was performed to determine the log odds of method of entry at each stage. The results of this analysis are presented in Table 8.

The reference group for this procedure was the Culminating Life Structure Stage for Early Adulthood (33 years – 40 years of age) since it had the highest number of persons. It is desirable in logistic regression to use the largest group as the reference group (Lee, 1999). A forward Wald method was used with a significance value of $p \leq .05$ necessary for inclusion. In other words, each stage must have been significant at the $p \leq .05$ level to be included in the model. All stages were significant in the log odds for entry during this period at the $p \leq .01$ level.

Those in the Entry Life Structure for Early Adulthood Stage (22 years to 28 years of age) were about half as likely to self-refer for treatment than was the reference group (OR=.575; 95% CI=.526 - .629). The log odds for self-referral increased over the life span reaching a high during the Age 50 Transition Stage (50 years to 55 years of age). The log odds for self-referring into treatment

during this stage were significantly greater (OR=1.287; 95% CI=1.208 - 1.373). In contrast, the log odds were greatest in the Entry Life Structure for Early Adulthood for those not self-referring (OR=1.738; 95% CI=1.591 - 1.900). They dip to the lowest log odds during the Age 50 Transition (OR=.777; 95% CI=.729 - .828). Again, all log odds were significant at the $p \leq .01$ level. Testing the Goodness of Fit for this partial model yielded a Chi-square value of 657.048 with 7 degrees of freedom and significance at the $p \leq .001$ level. This indicates that the model is not saturated.

Table 8. Association between Self-Referral and Levinson's Stages

Levinson's Stage	Self-Referral	
	OR*	95% CI
ELS for Early Adulthood	0.575	.526 - .629
Age 30 Transition	0.766	.728 - .806
CLS for Early Adulthood	reference group	
Mid-Life Transition	1.204	1.152 – 1.259
ELS for Middle Adulthood	1.268	1.204 – 1.334
Age 50 Transition	1.287	1.208 – 1.373
CLS for Middle Adulthood	1.217	1.118 – 1.323
Late Adult Transition	1.185	1.059 – 1.325

*All ORs significant at the $p = .01$ level
 Note: OR = odds ratio, CI = confidence interval

The association between self-referral behavior and selected characteristics including what developmental stage the person was in at the time of self-referral is presented in Table 9. The characteristics included in the model are gender, race, ethnicity, education, employment, income source, marital status, living arrangement, possible co-morbid psychiatric condition, and the Levinson stage of adult development. The choice of these variables was based on their demographic and clinical value. Diagnostics were performed to determine influential outliers and none was found. These diagnostics included

goodness of fit measures such as residual sum of squares and the “hat” matrix looking for outliers and the leverage they exert. The Chi-square for the final model was 14,595.815 with 17 df and significance at the $p \leq .001$ level. The Hosmer-Lemeshow Test yielded a Chi-square statistic of 158.499 with eight df and significance at the $p \leq .001$ level.

Table 9. Association between Self-Referral and Selected Characteristics

Characteristic	Self-Referral	
	OR	95% CI
Gender		
Male	reference group	
Female	1.115	1.063 – 1.168
Race		
White	reference group	
Non-White	0.877	0.834 – 0.922
Ethnicity		
Hispanic	reference group	
Non-Hispanic	1.139	1.063 – 1.220
Education		
Less than High School	0.561	0.531 – 0.593
High School Graduate	0.809	0.771 – 0.848
College Graduate	reference group	
Employment		
Employed	reference group	
Not Employed	1.789	1.674 – 1.913
Income Source		
Salary	0.553	0.515 – 0.595
Government	0.535	0.505 – 0.568
None	reference group	
Marital Status		
Married	reference group	
Not Married	1.151	1.093 – 1.212

Table 9 - Continued

Characteristic	Self-Referral	
	OR	95% CI
Living Arrangement		
Homeless	2.290	2.152 – 2.436
Dependent	0.734	0.691 – 0.779
Independent	reference group	
Comorbid Condition		
Yes	1.431	1.360 – 1.506
No	reference group	
Levinson Stage		
ELS for Early Adulthood	0.665	0.595 – 0.743
Age 30 Transition	0.842	0.790 – 0.897
CLS for Early Adulthood	reference group	
Mid-Life Transition	1.114	1.054 – 1.178
ELS for Middle Adulthood	1.103	1.034 – 1.176
Age 50 Transition	1.187	1.095 – 1.287
CLS for Middle Adulthood	1.062	0.954 – 1.182*
Late Adult Transition	1.190	1.035 – 1.369

*Not significant at the p=.05 level

With the full model taken into consideration, the log odds for self-referring into treatment were higher for women than for men (OR=1.115; 95% CI=1.063 - 1.168), lower for non-white than for white (OR=.887; 95% CI=.834 - .922), and higher for non-Hispanics (OR=1.139; 95% CI=1.063 - 1.220). The higher the educational level, the higher the odds of self-referral as well with those having less than a high school education being approximately half as likely to self-refer than were college graduates (OR=.561; 95% CI=.531 - .593). Those who had completed high school were more likely than those who had not completed high school but were still less likely than college graduates to be self-referrals (OR=.809; 95% CI=.771 - .848).

Those who were not employed were more likely to be a self-referral than were those who were employed (OR=1.789; 95% CI=1.674 - 1.913). Along with that, those persons with a source of income were less likely to be self-referrals into treatment (salary: OR=.553; 95% CI=.515 - .595 and governmental

assistance: OR=.535; 95% CI=.505 - .568). Continuing along that line, those who were homeless at the time of entry were over twice as likely to be self-referrals (OR=2.290; 95% CI=2.152 - 2.416). Not being married also made it more likely that one would be a self-referral into treatment (OR=1.151; 95% CI=1.093 - 1.212). The likelihood of having a co-morbid psychiatric condition resulted in higher log odds as well (OR=1.431; 95% CI=1.360 - 1.506).

The consideration of the Levinson stages of adult development in light of the full model indicate that those who are most likely to be self-referrals into treatment are in the Late Adult Transition (age 65 years and above) (OR=1.190; 95% CI=1.035 - 1.369). This is followed very closely by the Age 50 Transition stage (OR=1.187; 95% CI=1.095 - 1.287). The two stages where self-referral is least likely are the Early Life Structure Stage (OR=.665; 95% CI=.595 - .743) and the Age 30 Transition Stage (OR=.842; 95% CI=.790 - .897).

Multinomial Regression Analysis

Multinomial logistic regression is appropriately used when modeling a dependent variable that is not bivariate and does not meet the criteria for multiple regression (Hosmer & Lemeshow, 1989). In this case, the dependent variable of interest is method of referral into treatment, which is a nominal level variable. The independent variables are either nominal or ordinal, which also indicates appropriate use of multinomial logistic regression.

In order to thoroughly examine the differences among the referral groups, a three-level outcome measure was developed that takes into account not only self-referral versus not being a self-referral, but further defines not being a self-referral into voluntary and involuntary referral. An involuntary referral happens when someone is court ordered into treatment because of such events as driving under the influence, child abuse while under the influence, and commission of a crime while under the influence of alcohol. A voluntary entry into treatment is not a self-referral when family or friends coerce a person to enter treatment, a mental health provider or medical doctor orders treatment, or an employee assistance program orders treatment. In these situations, the person has a choice to refuse treatment (hence, it is voluntary) but is being told by persons in their ecology that treatment is necessary and negative consequences will result if treatment is not

sought.

The covariate of primary interest in this study is the Levinson stage of adult development. For clarification, these stages were classified as:

1. Entry Life Structure of Early Adulthood (22 – 28 years of age)
2. Age 30 Transition (28 – 33 years of age)
3. Culminating Life Structure of Early Adulthood (33 – 40 years of age)
4. Mid-Life Transition (40 – 45 years of age)
5. Entry Life Structure of Middle Adulthood (45 – 50 years of age)
6. Age 50 Transition (50 – 55 years of age)
7. Culminating Life Structure of Middle Adulthood (55 – 60 years of age)
8. Late Adult Transition (60 – 65 years of age)

The purpose of this analysis is to understand and describe the relationship between method of referral into treatment and the Levinson stage of adult development. Therefore, the decision to include variables in the model was based on both statistical significance and on whether the presence of that variable in the model significantly changed the relationship between method of referral and developmental stage. Variables that modify the relationship between the outcome variable and the primary “risk factor” of interest can be either confounders or effect modifiers (Lee, 1999).

The method used to determine the level of confounding by a variable was to assess the degree of influence exerted by a particular variable. This was done by measuring the odds ratio without the possible confounding variable and then to compare the odds ratio calculated when the confounding variable is included in the analysis. Mathematically, confounding is present in the data if a crude effect measure is different from an adjusted effect measure. Variables were selected for control only if the adjusted and unadjusted estimates differed by more than 20% in the exposure effect estimate (Lee, 1999). The variable of interest that was determined to be a confounding variable was duration of alcohol consumption as measured in the number of years one had been drinking before entering treatment. This was accomplished by taking the continuous variable, duration of drinking (in years), and recoding it into an ordinal variable as shown below:

1. Duration = 1 – 10 years
2. Duration = 11 – 20 years
3. Duration = 21 – 30 years
4. Duration = 31 – 40 years
5. Duration = 41 – 50 years
6. Duration = 51 – 60 years

and calculating crude effects without duration and comparing those to the adjusted effects with duration being controlled for in the calculation. It must also be noted that inclusion of the duration of drinking also changed the significance level of the Levinson developmental stage so that all levels were significant at the $p \leq .01$ level. Prior to inclusion of duration, Levinson stages 4 – 8 were not statistically significant. This indicated that duration of drinking is both a confounding variable and an effect modifier.

Effect modifiers are variables that have a significant interaction with the risk factor of interest (Levinson stage of development) as manifested by the odds ratio of the risk factor being different for different levels of the effect modifier (Lee, 1999). Two variables were effect modifiers in addition to duration. These were employment and income source. Both are below:

Income

- 1 = Salary
- 2 = Governmental assistance
- 3 = No income

Employment

- 0 = Not employed
- 1 = Employed.

To test for interaction between duration and stage of development, bivariate regressions were run for each stage of development and for stages grouped by era for those who self-referred into treatment. The variable that was an additional effect modifying variable for each stage was marital status. Those who were married were consistently less likely to self-refer into treatment than were those who were previously married or never married.

As the last step in building the final model, all three of the confounding and

effect modifying variables were added into the model along with Levinson stage of adult development. Each of the variables was then removed, one at a time from the full model to assess its level of significance in the model. The odds ratios for Levinson stage of adult development changed each time one of the influential variables was deleted from the model; therefore, each was retained in the final model. Table 10 displays the final model.

Survival Analysis

The last purpose of this research was to examine the relationship between the duration of drinking and the method of entry into alcohol abuse treatment. Figures 1 through 6 graphically illustrate the survival and hazard functions of the reduced model defined in the multinomial regression section.

Table 10

Multinomial Regression for Final Model

	OR	95% CI	
		Lower	Upper
Self-Referral Compared to Not Self- Referral			
ELS for Early Adulthood	1.857	1.532	2.251
Age 30 Transition	2.196	1.861	2.592
CLS for Early Adulthood	2.333	2.006	2.714
Mid-Life Transition	2.419	2.091	2.799
ELS for Middle Adulthood	2.173	1.882	2.510
Age 50 Transition	1.809	1.561	2.095
CLS for Middle Adulthood	1.334	1.138	1.564
Late Adult Transition ^a	.	.	.
Income	1.435	1.388	1.483
Employment	0.453	0.427	0.480
Duration of Drinking Behavior	1.482	1.434	1.532
Other Voluntary Compared to Not Self- Referral			
ELS for Early Adulthood	2.505	1.947	3.223
Age 30 Transition	2.415	1.944	3.001
CLS for Early Adulthood	2.802	2.305	3.407
Mid-Life Transition	2.887	2.392	3.483
ELS for Middle Adulthood	2.633	2.189	3.167
Age 50 Transition	1.949	1.614	2.355
CLS for Middle Adulthood	1.605	1.314	1.960
Late Adult Transition ^a	.	.	.
Income	1.158	1.111	1.207
Employment	0.251	0.233	0.271
Duration of Drinking Behavior	1.578	1.511	1.649

^aParameter intentionally set to zero

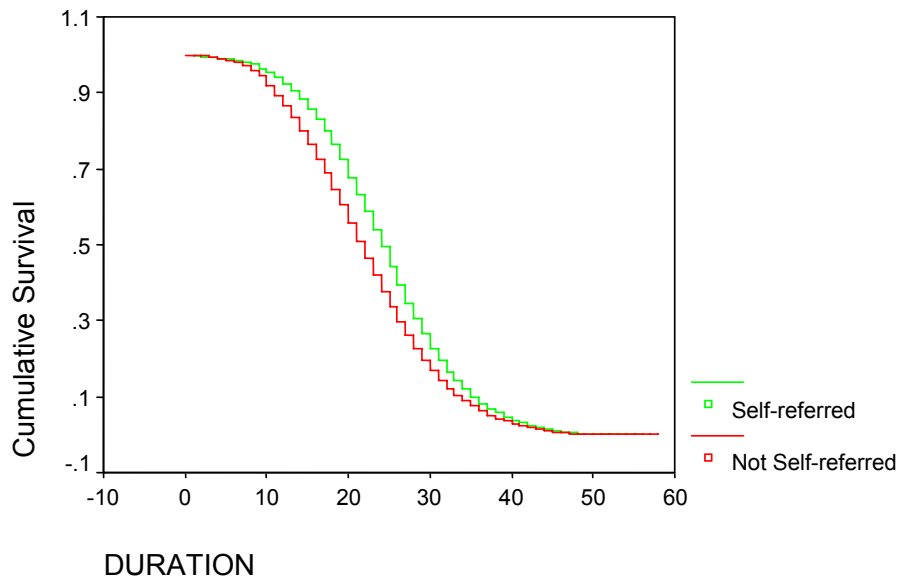


Figure 1. Survival Function at the Mean of the Covariates for the Reduced Model

When viewing the Survival Function at the mean of the covariates, self-referral into treatment is stable until approximately the 10-year mark when there is a rapid decline in the survival rate. This finding coincides with the average duration of drinking behavior being approximately 10 to 20 years before entry into treatment.

Tables 11 and 12 contain the survival proportions and the hazard rate in 10-year increments for both those who did not self-refer into treatment and those who did self-refer into treatment. At the end of the 11 to 20 year interval, approximately 60% of those not self-referred into treatment has yet to enter

Table 11

Survival and Hazard Rates for Not Self Referred

Time Interval	Number Exposed to Risk	Number Entering During Interval	Proportion Surviving	Hazard Rate
0 to 10 years	57027	4729	0.917	0.0865
11 to 20 years	52298	20984	0.599	0.5019
21 to 30 years	31314	21810	0.3035	1.0686
31 to 40 years	9504	7734	0.1862	1.372
41 to 50 years	1770	1698	0.0407	1.8436
51 to 60 years	72	72	0	**

** Not meaningful at this level

treatment. The hazard rate for these time intervals reflects the increase in the rate at which persons who were not self-referred began to enter treatment. The hazard function is the potential per unit of time for referral into treatment to occur given that the person has not entered before that time.

Table 12 presents the same information for those who self-referred into treatment. The timing for those who self-refer into treatment is that they do not enter treatment as early as those who do not self-refer into treatment. This is reflected in the survival rate for the 11 to 20 year interval being approximately 72% as compared to 60% for those who were not self-referred into treatment. These trends were reflected in Figure 1 as well.

Table 12. Survival and Hazard Rates for Self-Referred

Time Interval	Number Exposed to Risk	Number Entering During Interval	Proportion Surviving	Hazard Rate
0 to 10 years	18061	828	0.954	0.047
11 to 20 years	17233	4866	0.718	0.329
21 to 30 years	12367	8021	0.351	0.961
31 to 40 years	4346	3509	0.193	1.354
41 to 50 years	837	800	0.044	1.831
51 to 60 years	37	37	0	**

** Not meaningful at this level

The reduced model has been used for the survival analysis since the variables “employment” and “income source” were the only ones to be either a confounding variable or an effect-modifying variable. Table 13 presents the results of the Cox Proportional Hazards analysis.

Table 13 Odd Ratios for the Reduced Model

	<u>Sig.</u>	<u>OR</u>	<u>95.0% CI</u>	<u>For Exp(β)</u>
			<u>Lower</u>	<u>Upper</u>
Not Employed	.000	1.410	1.335	1.490
Income Source	.000			
Salary	.000	.692	.654	.733
Governmental Assistance	.000	.512	.491	.535

Income source proved to be an effect-modifying variable for method of entry into treatment. Figure 2 displays the survival function by income source. The difference among income source for the survival function was not significant at the $p \leq .05$ level. It is interesting to note, however, that those with no source of income and those with a salary entered treatment slightly ahead of those with income from a governmental source. This is in agreement with the log odds as shown in the multinomial regression where those with no income had log odds of entry into treatment of 1.435 for self-referral and 1.158 for other voluntary referral when compared to Not Self- entry into treatment. In addition, as shown in Table 13, those with no source of income (the reference group) had a higher odds ratio than did the other income source categories.

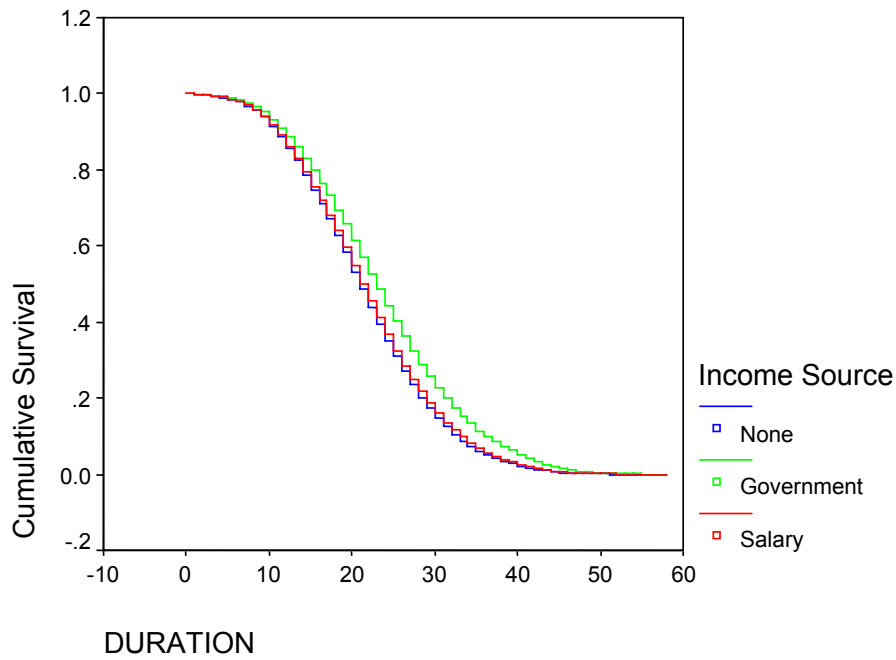


Figure 2. Survival Function for Not Self-Referred

The survival rate for those who self-referred into treatment closely approximates that of not self-referred with the noted exception of somewhat delayed entry into treatment. The source of income did not have any significant effect between these two groups. Figure 3 presents those who were self-referred into treatment by income source.

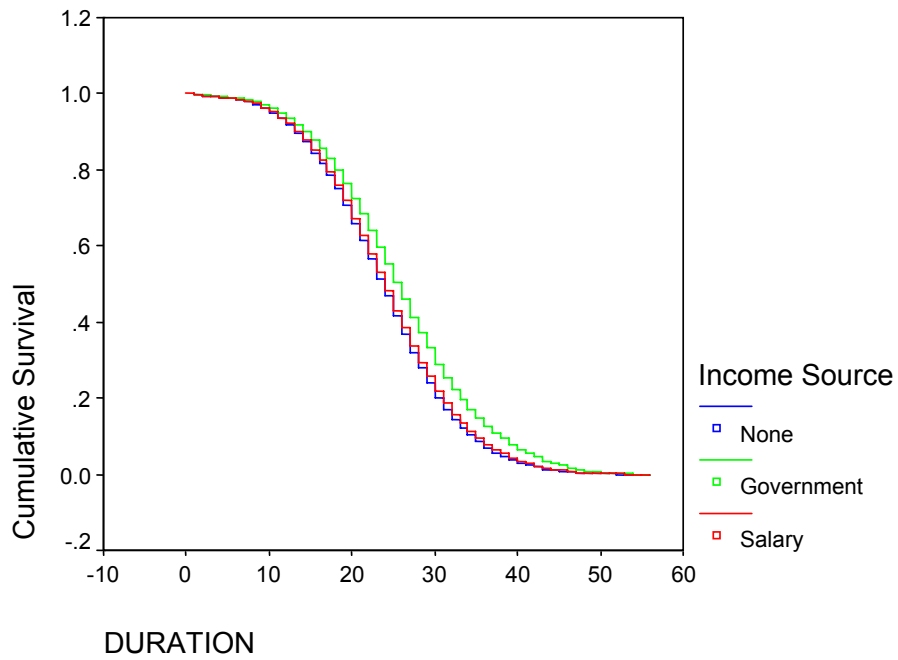


Figure 3. Survival Function for Self-Referred

Employment status also follows the pattern established in the multinomial regression. Those who are employed enter treatment earlier are those who are not employed for both the not self-referred group and the self-referred group. This is presented in Figures 4 and 5.

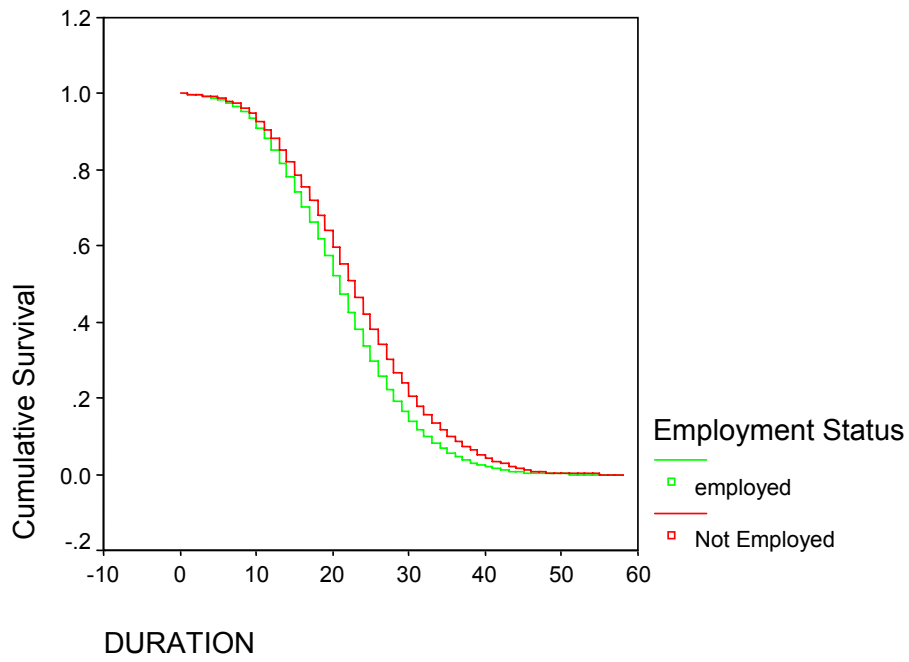


Figure 4. Survival Function for Not Self-Referred

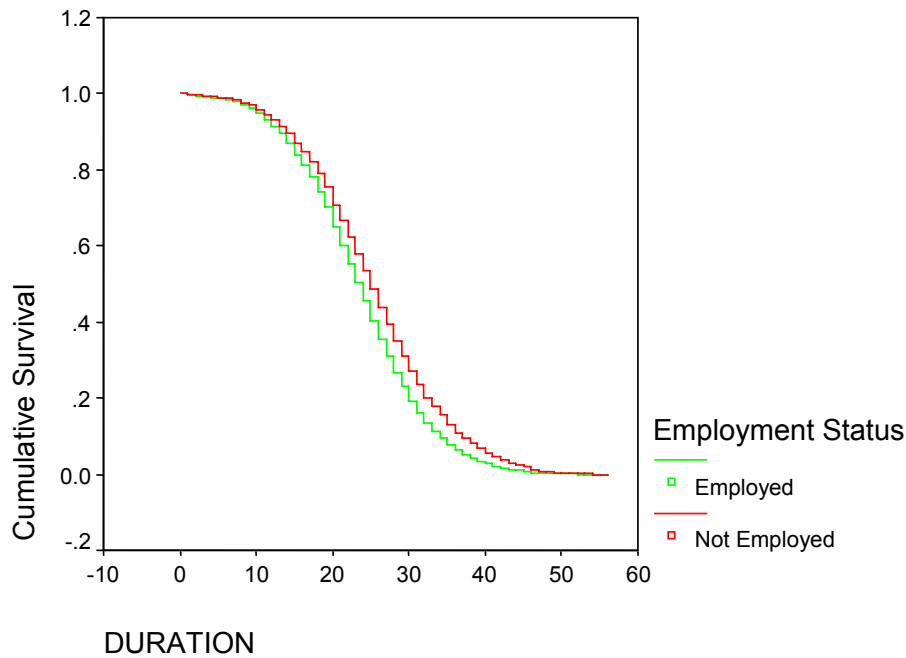


Figure 5. Survival Function for Self-Referred

Summary of Findings

The population entering treatment in Florida for the period June 1997 – June 2000 was predominately white, non-Hispanic, and male. The average age for entry into treatment was approximately 39 years and the duration of drinking behavior was approximately 20 years. The average age of first drinking was just under 17 years of age. Most were employed or had a source of income, and most were at least high school graduates.

Initial bivariate logistic regression indicated that, of those who were self-referrals for treatment, the developmental stage with the largest log odds of entry was the Age 50 Transition. For those who were Not Self-referrals, the largest log odds of entry were the Early Adulthood Culminating Life Structure Stage.

The multinomial regression yielded only three variables having a

significant impact on the Levinson Stages of Development within the method of referral. These were duration of drinking behavior, income source, and employment status. Of these three, duration of drinking behavior had the greatest impact being both a confounding variable and an effect-modifying variable. The final and reduced model included method of referral as the independent variable with Levinson Stage of Adult Development, duration of drinking behavior, income source, and employment status as the dependent variables.

When the multinomial regression results are combined with the survival analysis, the duration of drinking behavior is modified by both employment status and source of income. Those with no source of income or a salary are more likely to enter treatment before those who have income from a governmental source such as disability or welfare. Likewise, those without a job were more likely to enter treatment before those who were employed.

CHAPTER 5

DISCUSSION, IMPLICATIONS, AND LIMITATIONS

The questions guiding this research involved the stages of adult development as defined by Daniel Levinson and self-referral into treatment for alcohol abuse in adulthood. This chapter provides a discussion of the findings with the implications, directions for future research, and the limitations of the present study.

This study was important for two primary reasons. First, little empirical research has been done on adult entry into substance abuse treatment and virtually none has taken a developmental approach. Second, existing data for state supported substance abuse treatment is not routinely used for examining patterns of entry. This data is regularly collected and can be a vital source of information, not only for examining patterns of entry into treatment but also for other utilization indicators.

Findings

The study centered around four research questions that developed from a review of the literature on adult life stages, substance abuse in adulthood, and alcoholism treatment. The first question was to establish a relationship between a person's age and the self-initiation of treatment for alcohol abuse. The underlying assumption was that there exists observable times when a person is more likely to self-initiate alcohol abuse treatment. The frequency distribution as well as a bivariate logistic regression analysis was done. Those persons who self-initiated treatment were most likely to do this between the ages of 45 and 60 years. Those persons who were not self-referred were more likely to enter treatment in their mid-30s. The theory of adult development offered by Daniel

Levinson tends to support the idea that an identifiable stage for self-initiation is probable; however, the findings of this study do not support the identification of one particular stage as being identifiable. Instead, this research supports the concept that an entire era of adulthood is when self-referral is highest. While Levinson worked from the concept of stages, he did not see each stage as distinct with its own tasks (1986). Instead, he viewed the stages and eras as underlying the life structure and as dynamic much as the development of personality is dynamic (1986).

The period of the mid-30s corresponds with Levinson's Culminating Life Structure for Early Adulthood stage (1996). For Levinson, this stage is a time when key life-choices have been made and we are making a more secure place for ourselves within society (1996). As such, it is a time of moving from a young adult role to a more mature adult. In contrast, the period between 45 and 50 years corresponds to Levinson's Entry Life Structure for Middle Adulthood where there is creation of structure to guide the coming years (1996). This is the most likely time for modification of established life patterns and exploratory efforts toward the formation of a new structure. The likelihood of self-referring during this developmental stage and the two following is about equal indicating that middle adulthood is identifiable for self-referral.

A secondary explanation to the developmental stages is that persons whose drinking was causing problems early in their lives such as driving under the influence or committing other crimes were caught by law enforcement and entered treatment that way. Those who were self-referred into treatment may have been those who had fewer problems with their drinking at earlier ages or who managed to not be caught for their actions at an earlier age. Given the fact those who self-referred into treatment were significantly less likely to have been involved with the criminal justice system, a strong argument could be made for this position.

The second question was to identify a relationship between negative life events and self-initiation of treatment. The question corresponds to the Alcoholics Anonymous concept of "hitting bottom" before being willing to admit to

a drinking problem and seeking help. The general definition of this is that when a person has lost part of their life that was meaningful because of their drinking behavior, they are perceived as having hit bottom and are more likely to seek treatment. Each individual self-defines what hitting bottom means for him or her. Some will not consider treatment until they have lost their family, their employment, and other meaningful parts of their lives. These people are said to have a low bottom. Others will seek treatment when they perceive the threat of losing parts of their lives that are meaningful. These are said to have high bottoms. Hitting bottom can be conceived as a continuum from the perceived threat of loss to the actual loss. For this study, negative life events were defined as not being employed, having never been married or being widowed or divorced, not having achieved independence as evidenced by living with parents or in some institutional setting or by being homeless, having an arrest history, and by having a probable co-morbid psychiatric diagnosis. A multinomial regression analysis was performed to test for a relationship between negative life events and the probability of self-initiation of treatment. Only two variables that are considered negative proved to have an impact on self-initiation behavior. These were not having a source of income and being unemployed. These two variables exerted influence across the range of developmental stages. Both of these variables tend to support the Alcoholics Anonymous concept of "hitting bottom" in that they indicate that someone appears unable to be employed and has no visible means of support. The exceptions to this are those who are supported by someone else. This could be someone in a couple where one works and the other does not or someone who is in another type of dependent living arrangement.

The impact of being unemployed and not having a source of income on increasing the likelihood of self-referral into treatment can also be viewed from the perspective that employment might be seen as a barrier to treatment. Entering residential treatment when one is employed often entails either loss of employment or having the employer know about the treatment. Both of these are usually considered to be negative consequences for entering treatment.

Turning again to Levinson, his work with both men and women regarding occupation and the importance of work in adulthood tends to confirm that those who were not employed or do not have a source of income would be more likely to seek changes to their lives that would support being employed and having an income. These changes would most likely happen during a transition stage or immediately following one. The data for this study supports this for the Age 50 Transition Stage. According to Levinson, the Age 30 Transition generally involves the opportunity to reappraise the early adult years, to work on individuation, and to consider new possibilities for the next stage (1996). In contrast, the Age 50 Transition is considered a stage with more developmental turmoil, especially for persons who have made few life changes prior to this time (Levinson, 1996).

The third guiding question concerned self-initiation of treatment during times of transition in the developmental stages. Levinson's work highlights two distinct phases of major transition, the Age 30 Transition and the Age 50 Transition. Based on this, a bimodal distribution would have been expected. Instead, the distribution was not bimodal and approximated a normal distribution given the intentional truncation prior to age 22 and following age 65. This indicates that self-referral into alcohol abuse treatment is not directly attributable to a defined transition period. Instead, self-referral reaches its highest level in middle adulthood (45 - 60 years) and remains level during these years.

What appears to influence self-referral into treatment more than developmental stage is duration of drinking behavior. Those who have a 10-year or longer duration of drinking enter treatment in higher numbers than those with a 10 year or less drinking duration. The peak time for self-referral is between 30 and 40 years duration of drinking behavior. According to Sobell and Sobell, those with a longer history of drinking behavior also tend to have a more chronic course and greater physical dependence (1993). This supports the Alcoholics Anonymous concept of hitting bottom as the more physical dependence there is, the less likely one is to be able to maintain employment and personal relationships (Sobell & Sobell, 1993).

The final guiding question was the identification of groups that tend to self-refer into treatment at identifiable ages. The data were inconclusive for this, but show patterns within each developmental stage. Those who had an income and were employed tended to not self-refer. Additionally, those who were married and who lived independently were less likely to be self-referrals into treatment. In essence, those people who had some evidence of attachment to others and who displayed some successful life skills were less likely to self-refer into treatment. Again, this reflects the Alcoholics Anonymous concept of “hitting bottom” before seeking treatment in that those with life skills and relationship skills tended to not self-refer. Those who appear to not have life skills and to not have successful relationship skills as measured by these variables and, therefore, possibly “hitting bottom” were more likely to self-refer into treatment.

The overlay of Levinson’s theory of normal adult development appears to not have enhanced the understanding of self-referral into treatment. Instead, the duration of drinking behavior which parallels chronologically the developmental stages is the greater determinant of self-referral. The longer one continues to drink in a problematic way without being involuntarily referred into treatment, the greater the likelihood of self-referral into treatment after a drinking duration of 10 years or more.

Under-Representation of Women

Under-representation of women in the study population as compared to women in the general population may have several reasons. Alcoholism is generally more stigmatized for women than for men and, according to Vaillant (1995), women are more likely to be diagnosed with depression than with alcoholism. Women who abuse alcohol are more likely to be socially isolated according to Dahlgren (1978) and to have co-morbid psychiatric disorders (Helzer & Pryzbeck, 1988). The overlay of co-morbid psychiatric conditions such as depression and anxiety are often seen as the primary diagnosis with alcoholism secondary. Because of this, treatment is frequently for abuse and misuse of prescription drugs with alcoholism as the secondary diagnosis (Blume, 1986). Women also experience a more rapid deterioration with alcohol abuse

than do men (Fillmore, 1987). On average, women who die from alcohol abuse do so approximately 11 years sooner than men who die from alcohol abuse (Krasner et al., 1977).

Barriers to treatment are also a probable contributor to the under-representation of women in this population. Women with dependent children have few options for treatment that do not involve having to leave their children in the care of someone else while they are in treatment. Currently in the state of Florida, there are only three centers that offer care for dependent children with their mothers while their mothers are in residential treatment (S. Admunson, personal communication, March 3, 2003). These centers have limited capacity and frequently have to refuse admission to women with dependent children needing to have their children with them during treatment.

Implications for Future Research

One concern that helped drive this study was the lack of information in the literature regarding adult entry into alcohol abuse treatment. There is a considerable body of literature on how to attract someone into treatment or how to court order someone into treatment, but virtually none on self-referral for treatment. Miller and Rollnick (2002) have done extensive research on how to motivate someone who has been identified as having a drinking problem to enter treatment and how to capitalize on the stage of change the person is currently experiencing. Likewise, Marlatt has done extensive research on ways to manage high-risk behaviors for alcohol abusers (1998). None have done research, however, on who self-refers for treatment during what stage of adult development. The findings of this research indicate that the most probable time for self-referral is the Age 50 Transition (50 – 55 years of age) with the rate of self-referral being relatively constant between the ages of 45 and 60 years. The findings also indicate that those with few social and personal resources are the most likely to self-refer

State-funded alcohol treatment programs tend to be abstinence-based programs. The research of Sobell and Sobell (1995) indicates that abstinence-based treatment is most effective for those with advanced, chronic alcohol abuse

while treatment with a harm reduction focus has shown promising results with those who are not in an advanced or chronic stage of alcohol abuse. Given that those in a more chronic and advanced stage of alcohol abuse tend to have fewer personal and societal supports, it may be that more moderate and less chronic abusers would seek treatment if it were not strictly abstinence-based. Continued research on abstinence-based as compared to harm-reduction based treatment would help to resolve this question. In addition, research on outcome of treatment for those who self-refer into treatment as compared to those who are not self-referred would help to inform the importance of self-referral as a method of entry. In other words, is there a significant difference in outcome for those who self-refer versus those who do not self-refer?

Further research is also indicated on how to encourage alcohol abusers to self-refer at an earlier age. Part of this could be examining harm reduction as one course versus abstinence only. Another could be to follow the lead of DiClemente (2003) and others to view addiction and recovery as a process of behavior change and as multi-determined. DiClemente suggests the while each person's process is unique, each follows a common path, and treatment can be designed to build on that path. Research on effective outreach and engagement in treatment is needed to address this. Additionally, few problem drinkers are successful in achieving abstinence or even significant harm reduction with one course of treatment (Sobell & Sobell, 1995). Research with smokers has indicated that it takes an average of 7 to 8 attempts to stop before being successful (Prochaska & DiClemente, 1985). Given this, it seems prudent to engage problem drinkers in treatment as early as possible and to encourage continued attempts in recovery for optimal results.

Of interest is the lack of effect gender, race, and ethnicity displayed on self-referral behavior. None of these was significant as confounding or effect-modifying variables in the multinomial regression analysis. Gender may not have displayed a significant effect due to the under-representation of women. Further research is needed to isolate this and determine the role under-representation may have played. The lack of effect of race and ethnicity is also open for further

research. According to Vaillant, race and ethnicity are not major determinants of drinking behavior despite the common perception that certain ethnic groups tend to drink more than others drink (1995). To be able to focus on race and ethnicity in self-referral behavior, further research is needed.

Implications for Treatment and Policy

The costs to society and to the families of persons who abuse alcohol are high so early treatment and reduction of alcohol abuse would serve to decrease those costs. NIDA estimated the drug-related costs to society to be approximately \$110 billion in 1995 (NIDA, 1998). These costs included law enforcement, lost revenue such as lost wages, incarceration, and treatment. The results of this study indicate that persons who abuse alcohol tend to self-refer into treatment in their late 40s and early 50s. Based on this, waiting for someone to self-refer into current treatment is not an effective way to reduce costs. Current efforts to identify persons who abuse alcohol and to require treatment at younger ages need to be supported with prevention of abuse being optimal. The high percentage of persons referred into treatment through the court system during their 20s and 30s indicates that involuntary referral is currently the most effective for early entry into treatment. This method only reaches those who have committed a criminal act though and does not reach the alcohol abuser who has not committed a crime.

Marlatt and others who work with a harm reduction focus have demonstrated that detection of problem drinking can be done with a high degree of sensitivity using very simple self-report screening methods. The most simple is the CAGE (Mayfield, McLeod, & Hall, 1974). The CAGE consists of four questions:

1. Have you ever felt you should Cut down on your drinking?
2. Have people Annoyed you by criticizing your drinking?
3. Have you ever felt Guilty about your drinking?
4. Have you ever had a drink first thing in the morning (Eye opener)?

The CAGE acronym was developed by using the first letters of the four words that describe the behaviors in question. In conjunction with this short screening

tool, it is important to ask when they had this to happen as it may have been in the past and they have since remedied the behavior and, if possible, to seek corroborating information from another source such as a spouse (Connors, Donovan, and DiClemente, 2001). This screening can be done by a variety of health care professionals for early detection and early intervention.

Another implication for practice and policy is to examine the link between employment and not seeking treatment. Further research on eliminating barriers to being employed and seeking treatment could be done to understand what the barriers are and how they can be eliminated. One such barrier may be that most treatment is based on abstinence only principles while research has demonstrated that even those who complete abstinence only programs sometimes successfully return to a more moderate drinking behavior versus total abstinence (Connors, et al., 2001). Using an approach that includes alternatives to abstinence only may increase the attractiveness of treatment.

McNeece (2003) has suggested a shift in overall perspective as another avenue to consider in removing the barriers to treatment. McNeece suggests shifting the focus from a criminal justice perspective to a public health perspective thus eliminating some of the negative social stigma attached to seeking treatment. He argues that drug use (including alcohol) is a reality and is not going to go away and that the idea of a drug-free society is not practical (2003). He proposes shifting to a harm reduction philosophy and moving away from the criminalization of drug use and the stigmatization of treatment. Instead, practices that are directed toward engaging problem users, such as problem drinkers and alcoholics, in treatment are encouraged (2003).

There are currently practices being used and continually being developed that would fit very well with this shift in perspective and may help to encourage people to get treatment earlier. Among these is motivational interviewing as developed by Miller and Rollnick (2002). Motivational interviewing uses techniques that work with the transtheoretical model of change to help people to recognize that there is a problem and then to feel confident they can make a change successfully.

Implications for Social Work

A major implication for social work as a profession is to consider barriers to treatment and the cost of having persons with 30 and 40-year histories of “problem” drinking before receiving treatment. As noted above, alternatives to the criminalization of drug and alcohol use and the stigmatization of receiving treatment is one possible step. This can be put into action through advocacy for a shift in focus in public policy and in practice. Earlier detection of problem drinking is also indicated by the results of this study. Advocating for earlier detection and referral for treatment is needed.

Another implication for practice is to continue to develop methods of outreach to persons who abuse alcohol and encourage entry into treatment that will not disrupt their lives such as causing them to lose their jobs or to be stigmatized by receiving treatment. Continued research and program development by social workers in this area is needed.

The implication for social work education is to prepare future social workers to conceptualize addictions, including alcohol abuse and addiction, in a way that does not criminalize the behavior or stigmatize receiving treatment. Additionally, preparing social workers to treat substance abusers with more treatment modalities than abstinence-only is needed if more people are to be encouraged to willingly seek treatment than are now doing so.

According to McNeece, if a shift from criminalization to harm reduction is made, there is going to be a high demand for well-trained addictions workers (2003). This will influence social work education in that more workers will be needed and the field of substance abuse will need to attract more students. Developing specific concentrations in addictions treatment that will help meet state certification requirements may help to make this a more attractive field.

Limitations of the Study

This study has several limitations. The first limitation is the threat to internal validity given the source of the data. The data were collected by service providers across the state and based on either self-report or information from collateral sources. This type of collection can introduce error in two forms. The

first is the method of collection. Since many different professionals collected the data, there is the likelihood of differing interpretations of the information requested and how the information is coded. All personnel receive training on completing the forms and the management information personnel for the Alcohol, Drug Abuse, and Mental Health Program Office review and audit the information, which increases the probability of receiving consistent and accurate information. There still exists, however, the threat to internal validity given the number of different professionals entering the information.

The second threat to internal validity is collection of the information from the clients. Client self-report has been an acceptable manner of data collection and it is understood that the accuracy of the information may be suspect (Cook & Campbell, 1979). The degree to which self-reported data is assumed accurate has been debated over the years (Cohen & Cohen, 1983). Additionally, from an epidemiological perspective, this type of data and data collection is routinely used (Anthony & Amelia, 1999). Even with the large population and the acceptance of data of this nature, it remains a limitation of the study.

Maturation is another aspect of internal validity that is a limitation of this study. Specifically, clients reported on the age of first substance use and, for some, decades have passed between the recalled time of first use and the time of data collection. The accuracy of recall is a threat to the internal validity of the study.

Threats to external validity are related to the ability to generalize findings to populations beyond the one being studied (Cook & Campbell, 1979). Generalizing the findings of this study beyond the specific population used is not recommended even though the population for this study was quite large. The findings of this study could be used, along with other studies, to make general statements regarding entry into alcohol abuse treatment.

A final limitation is the fact many problem drinkers were eliminated from the pool of people who may have self-referred by being involuntarily referred for treatment before they could self-refer. Because of this, the picture of who eventually would self-refer for treatment is changed. Therefore, the study

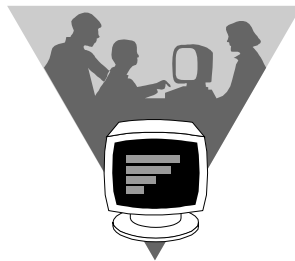
presents information on what actually happens versus what may have happened had someone not been involuntarily referred for treatment.

APPENDIX A

Department of Children & Families



Mental Health and Substance Abuse
Measurement and Data Handbook



July 21, 1999

**Mental Health and Substance Abuse Measurement & Data Handbook
Part 1: Information for Non-Technical Provider Users**

UPDATE CHRONOLOGY

The handbook is a combination of the Mental Health and Substance Abuse Measurement Manual and the Substance Abuse Measurement and Data Guide. It is a continuation of previous documentation about the State Integrated Substance Abuse Reports (SISAR) and the Integrated Data System (IDS). This document supersedes all previous publications concerning IDS and SISAR.

PREFACE

Intended Audience

This handbook is intended for use by clinicians, intake clerks, and other non-technical members of the Community Mental Health and Substance Abuse provider community who will be completing forms or using software to collect information that will subsequently be provided to the state Mental Health and Substance Abuse program offices.

How this handbook is organized

This publication is the first of several parts that will consist of the department's Mental Health and Substance Abuse Measurement and Data Handbook. It is designed to provide comprehensive information for reporting client information to the State Program offices.

The State of Florida's Mental Health and Substance Abuse data and performance measurement system is comprised of nine (9) data record types. The data records consist of: (1) Provider Organization; (2) Client Enrollment; (3) Mental Health Admission; (4) Substance Abuse Admission; (5) Placements/Levels of Care; (6) Substance Abuse Discharge; (7) Service Events; (8) Mental Health Outcomes Measures; and (9) Satisfaction Surveys. They provide the State of Florida the ability to track costs and outcomes of persons whose services were paid for, in whole or in part, by state appropriations for mental health and/or substance abuse services, local matching funds, or Medicaid.

Each record type is organized as a separate chapter. This will allow an agency to extract the appropriate chapter(s) needed within an agency.

Reference must be made to Part 2 of the Mental Health and Substance Abuse Measurement and Data Handbook for information regarding electronic

submission file specifications and edit checks necessary before data is acceptable for receipt by the department.

Related Documents

The following documents contain information that is pertinent to this handbook:

Florida Statutes referenced throughout the handbook,

A Guide to Performance Contracting for ADM Services

Florida Supplement to the American Society of Addiction Medicine Patient Placement Criteria for the Treatment of Substance-Related Disorders, Second Edition

User Comment Mail-in Pages

In an effort to improve how we do business, we are including at the end of each part a user comment mail-in page. We welcome your comments and suggestions on the quality and usefulness of the handbook. Your input is an important part of the information needed and used for revision.

Chapter 1. Overview

Scope

Each chapter specifies which providers, mental health or substance abuse, are required to submit the data records explained. Table 1 specifies which data sets are required from each of the three types of providers and shows the specified periods for submission.

Purpose

The collection and analysis of the data described and required in this handbook serves four primary purposes:

1. The department's data are intended to provide the legislature with valid and reliable information on number of clients served, the cost of care to serve those individuals, and the resultant benefits, both personally and socially, received;
2. This data is used to justify the department's federal Substance Abuse Prevention and Treatment Block Grant and Mental Health Block Grant. For fiscal year (FY) 1999, the Substance Abuse grant equaled approximately \$80 million and represented nearly 44% of the department's budget for substance abuse services. For FY 1999, the Mental Health grant equaled approximately \$10 million of approximately \$250 million.
3. The data collected is expected to provide data that will result in improved effectiveness and efficiency.
4. The data from public and private substance abuse providers provides a more comprehensive picture of who receives services and the types of services provided. The information is vital for an accurate and comprehensive assessment of statewide needs for substance abuse services.

Enabling Authority

Chapter 394.77, F.S. requires that all providers contracting with the

department comply with its uniform data specifications. In addition, Chapter 397.321(3)(c) and (10), Florida Statutes (F.S.) requires that all licensed providers must submit substance abuse data as required by the department.

The Department of Children & Families (DCF) collects performance outcome measures in accordance with Chapter 316.0166 (3), F.S.:

“The agency shall submit a performance-based program legislative budget request pursuant to s.216.0172, using the programs and performance measures adopted by the Legislature, or, if none are adopted, those recommended by the Executive Office of the Governor. Notwithstanding the programs, performance measures, and standards requested in each state agency’s final legislative budget request or the Governor’s budget recommendations, the Legislature shall have final approval of all programs, performance measures, and standards through the General Appropriations Act or legislation implementing the General Appropriations Act.”

Compliance

For Providers who contract with DCF for services, the 1999-2000 Appropriations Act contains proviso language that states:

“From the funds in Specific Appropriations 345 and 356, the department may not make payment to a private provider for alcohol, drug abuse and mental health services, unless standard client demographic, service, and outcome information required for the department’s Mental Health and Substance Abuse Data System is submitted to the department by the provider within the due date specified in the provider contract.”

This Handbook specifies the requirements for the information required. Data received later than 45 days after the due date is out of compliance, and the agency is subject to the proviso language.

Definitions of Terms

Below is a list of terms and definitions that will be used throughout this document.

Admission: The event when a client has his or her first face-to-face contact for the current mental health or substance abuse episode. It is the point in time when the client's medical record or case file is started. This means entry into the agency, and not a particular service.

ADM: An acronym for Alcohol, Drug Abuse, and Mental Health. This is used when referring simultaneously to both the Mental Health and Substance Abuse State Program Offices at the state or district levels.

ADM DW: An acronym for Alcohol, Drug Abuse, and Mental Health Data Warehouse. This is used when referring to the statewide database that is used to store data submitted by community mental health and substance abuse providers.

Adolescent: A client (child) who is less than the age of 18 at the time of admission. Upon reaching 18 years of age (s)he must be re-enrolled as an adult, except that a client who is a court-ordered dependent or delinquent may still be considered an adolescent while (s)he is 18, 19, or 20 years of age.

ASAM PPC-2: An acronym for the Florida Supplement to the American Society of Addiction Medicine Patient Placement Criteria for the Treatment of Substance-Related Disorders, Second Edition.

Census: The number of clients who were receiving services on a given day, normally the beginning of the contract year.

“Child” Records: Any record that requires a record from another data set to be already present in the data warehouse.

Client: A client is a person who meets one of the following three sets of criteria. All criteria in each set must be met:

Receiving Services

Substance Abuse

- *Assessed with an alcohol or drug related problem or potential problem;*
- *Has been admitted for a substance abuse service;*
- *Has his/her own client record; and*
- *Is receiving substance abuse services for an alcohol or drug problem/or potential problem.*

Mental Health

- *Has been admitted with a mental health problem;*
- *Has his/her own client record; and*
- *Is receiving mental health services for a mental health problem or potential problem.*

Co-Dependent Receiving Services

- *Is seeking services due to problems arising from his/her relationship with a substance abuser. The individual is not a substance abuser, and;*
- *Has his/her own client record.*

Screening Only

- *A person who is screened or assessed only and immediately discharged.*

Co-Dependent: See definition of client (Co-Dependent Receiving Services) above. This is not the definition a clinician is familiar with from the “Diagnostic and Statistical Manual of Mental Disorders”. This applies to Substance Abuse agencies only.

Data Record Relationships: See individual entries for “Parent Records” and “Child Records”

Discharge: It is the point in time when a client leaves an agency, normally the last date of actual supervision; in most cases, this is face-to-face. A client can be discharged from a program because he or she has completed all the

requirements for the program, is removed from the program because of non-compliance, or leaves against the advice of program staff.

DSM IV: An acronym for Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition.

Enrolled Client: A client whose services are paid for, in part or in whole, by either the ADM contract, local match, or Medicaid, and who also has the characteristics of one of the defined target population groups, is an enrolled client. These clients are the ones evaluated for the performance outcome measures.

Episode of Care (Generic): The continuous time period over which a client receives services. Services can include both treatment and non-treatment services (excluding prevention). A maximum of 30 days between contact with the client is allowed to maintain the continuous period before the episode is considered terminated.

Episode of Care (Enrolled Clients): The continuous time period a client receives substance abuse services whose cost of care is being paid for, in whole or in part, by an ADM contract beginning with admission and enrollment to a provider and ending when the client completes treatment and/or services. It is possible for a client to be admitted and discharged by more than one provider before the episode of care is completed.

IDP: An acronym for Indigent Drug Program.

Juvenile: A child or adolescent who is referred by the criminal or juvenile justice system or other law enforcement agency, and who is currently involved in the criminal or juvenile justice system. This does include persons being presented for crisis treatment pursuant to the Marchman Act who do have pending charges. This definition applies only to ADM substance abuse reporting.

Mandatory Data Elements: These are specific data elements that are required to be completed in the various data record types. Failure to submit the

necessary data will cause the record to be rejected as an error. (See Relational Key, Record Key, and Outcome Key)

Non-Treatment Services: These are services that a client can receive during an episode of care, but do not qualify as a treatment service. They include detoxification, TASC, intervention, and prevention. Interim services are considered specialized non-treatment services.

"Orphan" Records: Any record that is rejected from the data warehouse because the required matching record ("parent" record) was not already loaded to the data warehouse.

Outcome Key: A data element used for performance outcome measure calculation.

"Parent" Records: Any record that is required to be already present in the data warehouse before a "child" record from another data set can be loaded.

PDMHI: An acronym for Policy Integration and Information Systems. This office processes all data for both Mental Health and Substance Abuse Program offices.

Public Funding: This is money that is provided by any governmental agency (local, state, or federal) for providing substance abuse services. A local agency could be a city or county office, e.g. the county sheriff. A state agency could be the Department of Children & Families, Department of Corrections, or the Department of Juvenile Justice. A federal agency could be the Center for Substance Abuse Treatment, or the Center for Substance Abuse Prevention. This also includes funding provided through an ADM contract for substance abuse services.

Private Provider: This term refers to an independent agency, licensed to provide substance abuse services in the State of Florida, that does not receive any public funding as defined above.

Public Provider: This term refers to an independent contractor licensed to provide substance abuse services in the State of Florida that receives any

public funding as defined above. Contracted Community Mental Health providers are public providers.

Record Key: Two or more data elements that are used together to uniquely define a record from other records in a specific table.

Record Type: A new data element generated within the data warehouse to identify different types of admission or discharge records, where '1' is for mental health, '2' is for substance abuse, and '3' is for the state hospital.

Relational Key: A data elements which are used to relate two record types, e.g., Discharge record to Admission record, or Outcome Measure record to Enrollment.

SAPTBG: An acronym for Substance Abuse Prevention Treatment Block Grant.

SAIS: An acronym for the Substance Abuse Information System (formerly known as SISAR)

SISAR: An acronym for State Integrated Substance Abuse Report.

TANF: An acronym for Temporary Assistance for Needy Families.

TASC: An acronym for Treatment Alternatives for Safer Communities.

Treatment Services: These are services that a client can receive during an episode of care. They include all levels of residential care, outpatient, Day/Night, Overlay, and Juvenile Justice Overlay. Inmate Programs are also treatment programs, but are only to be considered as part of the outcome measure analysis if an agency is contracted to provide the service. Methadone Maintenance and Aftercare are also a treatment programs, but are not considered in the outcome measures analysis.

Year: Year refers to the state fiscal year that begins July 1 and ends June 30.

Provider Types

Providers are classified into one of three types:

- **ADM Providers** have a department contract for mental health and/or substance abuse services;

- **Other Public Providers** have no department contract for substance abuse services but receive other state, federal, or local government funding for substance abuse services; and
- **Private providers** receive no state, federal, or local government funding for substance abuse services.

Data Sets

There are nine (9) types of information required for submission by all department contracted mental health and substance abuse treatment providers in the state. All but one of these is reported by client, using social security number as a link. District specific contract performance measures are not included in the following list. Questions concerning district specific measures must be addressed to the appropriate district.

Provider

This data set contains information about provider organizations.

Enrollment

This information is collected to determine the target group with which an individual will be associated. Clinical, legal, and fiscal characteristics are included.

Admissions (Mental Health)

This information provides a basic set of data about the individual characteristics so the system can describe who is being served. Examples are sex, ethnicity, diagnosis and county of residence.

Admissions (Substance Abuse)

This information provides a basic set of data about the individual characteristics so the system can describe who is being served. Examples are sex, ethnicity, diagnosis and county of residence.

Placements (Substance Abuse Only)

This information is client information for each program during an episode of

care.

Service Events

This information includes the types, amounts, and location of services.

Outcomes (Mental Health Only)

These are assumed to be the results of various influences in the clients' lives, including mental health services.

Discharges (Substance Abuse)

Termination of an episode of care, reported to the Program Office. It requires data reflecting the current client status. Substance Abuse Outcome Measures are derived from this information.

Satisfaction Surveys (BHRS and FCBS)

These are survey forms completed by clients and family members distributed by providers and mailed to the Florida Mental Health Institute (FMHI) by the client or family or collected by providers in a manner that preserves the client/family anonymity from the provider.

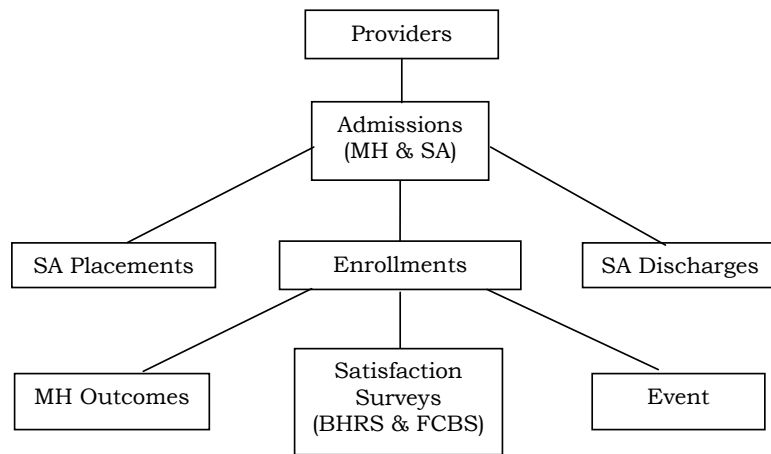
Data Warehouse:

The data sets discussed in the previous section are maintained in the Alcohol, Drug, and Mental Health Data Warehouse, commonly referred to as ADMDW. The data warehouse is a relational database which stores all the data records submitted by both community mental health and substance abuse providers. A fundamental design basis of the data warehouse is that each record is related to other records using key data elements. Simply put, one record is associated with another to simplify the storage and retrieval of data. In each chapter about specific data records, these relationships are explained.

The relationship also requires that a data record, referred to as a "parent" record, must be in place before the next type of record, referred to as a "child" record, can be accepted into the warehouse. The diagram, which follows, shows all the record sets. It also shows the relationships that exist between

the different data sets, which record must be in place before the following record can be placed (or loaded) into the data warehouse. For example, an admission record (a "parent" record) must be properly loaded to the ADMDW before a substance abuse placement, an enrollment, or a substance abuse discharge record ("child" record) can be loaded.

Figure 6: Data Warehouse Relational Structure



Data Submission Requirements

Table 1. Schedule of Mental Health and Substance Abuse Data Collection, below, shows the collection frequency, and submission frequency, as well as the client groups for which data is to be collected, by type of information collected.

Table 1. Schedule of Mental Health and Substance Abuse Data Collection

Type of Information	Collection Frequency	Submission Frequency	Required for Which Clients?
Mental Health Admission	Individual's First service, or as data elements change	Monthly	All ADM or Medicaid mental health clients
Substance Abuse Admission	First service of the individual	Monthly	All substance abuse clients
Enrollment	At admission for either mental health or substance abuse services; updated as required.	Monthly	Those meeting any mental health or substance abuse target population criteria <u>and</u> whose ADM services are being funded by DCF with ADM funds, matching funds, Medicaid, or TANF.
Events	Each service provided	Monthly	All enrolled clients
Substance Abuse Placement	When new placement starts or is completed	Monthly	All substance abuse clients
Substance Abuse Discharge	Discharge from the agency's substance abuse program and the episode of care is completed.	Monthly	All substance abuse clients
Mental Health Outcomes	Base measures are collected at admission, discharge and every 3 months (using admission month anniversary as the trigger). Functional Scale data (FARS, CAFAS & CFARS) is considered a district option and is not collected at the state level.	Monthly	All enrolled mental health clients

Satisfaction (BHRS and FCBS)	For mental health and substance abuse the relevant surveys are distributed 6 months post admission, annually post admission and at discharge.	Monthly	All enrolled mental health and substance abuse clients
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Each contracted provider will be required to maintain an auditable source of each reported data set. For those providers who use data entry personnel to enter data obtained from clinical or administrative staff, optional forms are provided in the Appendices of this manual for use by the staff collecting the data. The forms containing the completed information must appear in the client record in a uniform manner and include the clinician’s signature. If an electronic medium is used to store the information, the name and social security number of the clinician that provided the information must appear next to the entry. This is in lieu of the clinician signing the form.

Table 2. Data Submission Requirements, below indicates which data sets are required by provider type and when each data set is due to the department. The requirements for private providers are a change from the earlier policy stated by the Substance Abuse Program Office.

Table 2. Data Submission Requirements

Data Set	Public With DCF Contract for Mental Health or Substance Abuse Services	Public Without DCF Contract for Substance Abuse Services	Private Agencies for Substance Abuse Services
Provider Organization	X Due when substance abuse license is approved by the department or Agency is first contracted for Mental Health services.	X Due when substance abuse license is approved by the department.	X Due when substance abuse license is approved by the department.
MH Admissions	X Due 15 days after month that client is admitted.	X Due 15 days after month that client is admitted.	X Due 30 days after each quarter.
Enrollment	X (1) Due 15 days after month that client is enrolled.		
SA Admission	X Due 15 days after month that client is admitted.	X (2) Due 15 days after month that client is admitted.	X (2) Due 30 days after each quarter.
SA Discharge	X Due 15 days after month that client is discharged.	X Due 15 days after month that client is discharged.	X Due 30 days after each quarter.
SA Placement	X Due 15 days after month that client is placed.	X (2) Due 15 days after month that client is placed.	X (2) Due 30 days after each quarter.
Service Events	X (1) Due 15 days after month that client is provided service.		
MH Outcome	X (1) Due 15 days after month that client is evaluated or discharged.		
Satisfaction Surveys	X (1) BHRS and FCBS forms Due 15 days after month that client is admitted (Send To FMHI).		

- (1) Only for clients whose cost of care is paid for, in whole or in part, by a contract with the Department for mental health and substance abuse services, the statutorily required local match, or Medicaid.
- (2) Required for clients who receive screening services that do not result in a service placement. Only these data sets are completed, if "Immediate Discharge" is checked on the admission data set.

All data sets specified in Table 2, except for the satisfaction surveys that are required of public providers with contracts for mental health and/or substance abuse services, ***must*** be submitted in one of the ways shown in Table 3.

Table 3. Method of Data Submission

Method of Submission (By Order of Preference)	Format
cc:Mail	Zipped and encrypted
Department's electronic bulletin board	Zipped and encrypted
Diskette: certified mail with return receipt requested and mark "Confidential"	Zipped and encrypted

When the data is zipped and encrypted, the encryption code will be called into the Program Integration and Information Systems (PDMHI) and given to one of the staff. The encryption code can be left on the voice-mail.

Private providers that do not have the capability to collect this data electronically can have the requirement waived by the district Alcohol, Drug Abuse, and Mental Health Program Office. These agencies will submit copies of the admission, placement and discharge forms to the PDMHI for data entry quarterly. Providers will meet the guidance above for submission of forms.

Documentation of the data provided to the department must be included in the client's medical record or case record. The provider's staff that is responsible for collecting this data for the agency must sign the documents.

Data Integrity

The data elements listed in the enrollment, admission, discharge and event sections should be obtained through client interview and/or collaborating information. The person collecting the data is responsible for using all available evidence to provide a factual basis for reporting the information required by the data collection instruments. The United States General Accounting Office (GAO) "yellow book" standards describe the following types of evidence to support the collection of valid and reliable data:

- Physical evidence obtained through direct observation;
- Testimonial evidence obtained through interviews;

- Documentary evidence which consists of assessments, service/treatment plans, schedules, records, physician's orders, etc. (or derived from authoritative sources such as professional journals or research reports); and
- Evidence which is considered reliable and which supports summative conclusions should be:
 1. Sufficient, meaning that there is enough factual, adequate, and convincing evidence to lead a prudent person to the same conclusion as the rater. Determining sufficiency requires good judgment. While elaborate documentation to support non-controversial matters is not necessary, the rater should assure themselves that there is sufficient evidence to support his/her ratings or findings in a particular area.
 2. Competent, meaning that it is reliable and the best information attainable through use of reasonable review methods. In evaluating the competence of evidence, the rater should consider whether there is any reason to doubt its validity or completeness. The following presumptions are useful in judging the competence of evidence, but should not be considered sufficient within themselves to reach a conclusion:
 - a. Evidence corroborated from several sources provides greater assurance of accuracy than that secured from a single source.
 - b. Evidence developed under a good system of organization or control is more likely to be accurate than that obtained where such control is weak or unsatisfactory.
 - c. Evidence obtained through direct physical observation, examination, inspection, and computation is more reliable than evidence obtained indirectly.
 - d. Relevant, referring to the relationship of evidence to its use. Facts or opinions used to prove or disprove an issue should have a logical, sensible relationship to that issue.

- e. Ultimately the data collector/rater is responsible for gathering enough information to render an opinion that is based on sufficient, competent, relevant information or evidence which would lead another professional to a very similar or the same conclusion.

Use of Social Security Number

JULY 17, 1995, Department of Children & Families Policy:

POLICY AND PROCEDURES

USE OF SOCIAL SECURITY NUMBER

The following guidelines are provided for using a person's Social Security Number (SSN) when reporting data to the Mental Health and Substance Abuse Program Offices. A person's refusal to divulge his/her SSN should never be used as a reason to deny services to that person. The serving agency, however, must make every reasonable effort to obtain the correct SSN.

For all agencies, the use of the SSN is mandatory. Place the Social Security Number (SSN) in the field titled "client SSN". The field titled "client number" will include the number that the agency uses as its internal client number.

If it is not possible to obtain the person's actual SSN, the provider must use the following methodology for creating a pseudo-SSN. The accepted methodology to create a pseudo-SSN is given below.

Digit 1 9

Digit 2 Sex [1] = male, [2] = female

Digit 3 Race [1] = White, [2] = Black, [3] = American Indian,
 [4] = Asian/Pacific Islander, [5] = Alaskan, [6] = Other

Digits 4-5 Month of Birth (use leading zeros for Months 1-9)

Digits 6-7 Day of Birth (use leading zeros for days 1-9)

Digits 8-9 Year of birth (use leading zeros where necessary)

In those cases where the exact birthday cannot be obtained, determine the person's approximate age (ask, "How old are you?", or give your best guess), then code the birthday as January 1 of the appropriate year. For example, if the person says that he or she is 35 years old, but does not remember his or her birthday, and the current year is 1999, then use 010164 as the birthday.

If a pseudo-SSN must be used for a person, and the true SSN becomes known at a later date, a letter should be sent to the Mental Health or Substance Abuse Program Offices in Tallahassee, listing the true SSN and the Pseudo-SSN that it replaces. The admission date for the episode of care should also be listed. The person's true SSN should be used from that time forward. The Mental Health and Substance Abuse Data unit will update the data that was previously submitted.

Where to get help

Technical assistance is available through the State Mental Health and Substance Abuse Programs. Providers can contact any of the following individuals via telephone or e-mail:

Appendix A: For Substance Abuse Outcome Measures and Data, SAIS, Substance Abuse Validation, and Substance Abuse Error Corrections, contact:

Appendix B: Ronald A. Morrell (850) 922-4272, x216
(ronald_morrell@dcf.state.fl.us)

Appendix C: For SAIS, Provider Information/ID, Federal Data Reporting, and Data Processing, contact:

Appendix D: Sherry Catledge (850) 922-4272, x212
(sherry_catledge@dcf.state.fl.us)

Appendix E: For SAIS, Substance Abuse Validation, ASAM Validation and Data Processing, contact:

Appendix F: Phyllis Bellamy (850) 922-4272, x210
(phyllis_bellamy@dcf.state.fl.us)

Appendix G: For Integrated Data System (IDS), Client Enrollment, Mental Health Data Error Corrections, contact:

Appendix H: John Lord (850) 922-4272, x227
(john_lord@dcf.state.fl.us)

Appendix I: For Mental Health/Substance Abuse Software Application contact:

Appendix J: Marv Rubenstein (850) 487-1303, x121
(marv_rubenstein@dcf.state.fl.us)

Appendix K: For Children's Mental Health Outcome Measures, contact:

Appendix L: Jennifer Shepard (850) 487-1303, x120
(jennifer_shepard@dcf.state.fl.us)

Appendix M: For Adult Mental Health Outcome Measures, contact:

Appendix N: Jim Noble (850) 487-1303, x118
(jim_noble@dcf.state.fl.us)

Appendix O: For Mental Health Outcome Measure Algorithms, contact:

Appendix P: Ted Harrell (850) 922-4272, x204
(ted_harrell@dcf.state.fl.us)

Appendix Q: For BHRS and FCBS, contact:

Appendix R: Amber Golden-Thompson (850) 487-2920, x125
(amber_golden@dcf.state.fl.us)

Appendix S:

Chapter 2. Provider Data Set

General Considerations for the Provider Data Set

This is used to create and maintain the provider agency's demographic information. It has been developed to allow the system to hold certain provider information that can be linked to any other data provided to the ADM Central Offices by that specific provider agency.

Who submits provider data?

Provider data are required from all agencies that contract with district ADM offices for either community mental health or substance abuse services. Additionally, any agency licensed to provide substance abuse services by the Department is also required to submit provider data.

General policies related to the provider data

All provider information must be provided to ADM Central Office by the district ADM office or the provider agency when the agency first submits data to DCF. This information is also provided to the ADM Central Office when there is a change made to the provider information, e.g., a change of address, name, status, etc.

Deleted: All ADM provider agencies submit provider data. This includes agencies that have contracts with the Department of Children and Families (DCF) as well as agencies that are licensed by the DCF.¶

Relationship of Records in the Provider Data Set to Records in Other Data Sets

"Parents" of provider data

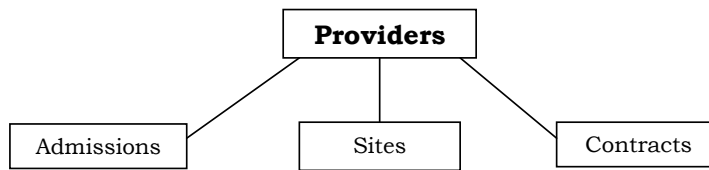
Provider data are the "parent" of all other data. This means that the ADM data warehouse will only accept other data if there is a record for the agency on the state database.

Deleted: As such, they have no parent.

"Children" of provider data

The "children" of provider data are: admission data, site data, and contract data. None of these records is accepted by the ADM data warehouse unless a provider record is present on the state database.

Provider Relationship Diagram



Basic Instructions for the Provider Data Set

Instructions for All Agencies

This is used to create and maintain the provider agency's demographic information. It has been developed to allow the system to hold certain provider information that can be linked to any other data provided to the ADM Central Offices by that specific provider agency. This information must be provided by telephone when the Agency first submits data to DCF. This information is provided electronically to the ADM Central Offices with the first submission of data and when there is a change made to the Provider information, e.g., a change of address, name, status, etc.

Instructions for Substance Abuse Agencies

All licensed providers are required to be registered with the Substance Abuse Data Office before submitting data. To register, an agency must call Sherry Catledge at (850) 922-4272, extension 212. Registration is normally accomplished during the call. Once the registration information is collected, the Substance Abuse Data Office will mail or fax the provider a completed registration form for verification. The Substance Abuse Data Office will issue a unique Provider Number that must be referenced whenever reporting substance abuse data.

The unique provider number in most cases is the Federal Tax Identification Number assigned by the US Internal Revenue Service (IRS). This ID number is a nine digit number (ten characters counting the dash). The same federal ID number for public providers with department contracts can also be found in the contract document between the provider and the department.

Instructions for Specific Provider Data Elements

01. Provider Status

This item indicates if the provider agency is actively providing services at the current time.

02. City

This item indicates the city in which the provider agency's administrative offices are located.

03. County

This item indicates the county in which the provider agency's administrative offices are located.

04. Director's name

This item indicates the name of the Chief Executive Officer of the provider agency.

05. District

This item indicates the DCF district in which the provider agency's administrative offices are located.

06. Liaison Name

This item indicates the name of a provider agency employee who functions in the role of data liaison between the provider and the ADM program.

Deleted: perform

07. Liaison Phone

This item indicates the telephone number of the person who is the data liaison.

08. Liaison Extension

This item indicates the telephone extension of the person who is the data liaison.

09. Program Type

This item indicates the type of programs offered by the provider agency from the following list: Substance Abuse (SA), Adult Mental Health (AMH), Children's Mental Health (CMH), SA/AMH combination, SA/CMH combination, SA/AMH/CMH combination, and AMH/CMH combination.

10. Provider Identification Number (Tax ID)

The Provider Identification number is the 10-digit (including the dash) Federal Employee Identification Number (FEIN - example: 59-1234567). It should be identical to the first ten digits of the SISAR Provider ID, if the agency has one. When using the software provided by the ADM Central Offices, the Provider ID number will automatically appear on each data entry screen, if the Agency Registration component has been completed.

11. Provider Name

This item indicates the name (short title) of the provider agency.

12. Provider Type

This item indicates whether the provider agency is Private or State-Funded (receiving state, Medicaid, or matching funds).

13. State

This item indicates the state in which the provider agency's administrative offices are located.

14. Street Address

This item indicates the street address of the building where the agency's administrative offices are located.

15. Zip Code

This item indicates the postal zip code for the building where the agency's administrative offices are located.

Deleted: Z

For more specific technical information see Part 2 of the ADM Measurement and Data Handbook. This provides file layout specifications for the electronic submittal of data.

Chapter 3. Mental Health Admissions Data Set

Mental health admission data are used to document both the initial admission of enrolled clients.

Mental Health Admissions Basic Instructions

Client demographics is collected on every client admitted to a provider contracted by DCF to provide mental health services, unless a Substance Abuse Information System (SAIS) admission record has been completed on that client. For those providers who use data entry personnel to enter admission data obtained from clinical or administrative staff, an optional form is provided in Appendix A.

Who submits mental health admissions data?

All providers that have a DCF contract to provide mental health services to enrolled persons must submit admissions data on those individuals, unless the client is being reported in the Substance Abuse Information System (SAIS)

General policies related to mental health admissions data

1. Once the initial admission record is completed, this data set will not be submitted again, unless information on the client changes.
2. If a client is being reported in SAIS, then a Mental Health Admissions record is not required.
3. No admission records are submitted for family members who attend activities solely because someone in their family is a client of the agency.

Relationship of Records in the Admissions Data Set to Records in Other Data Sets

“Parents” of mental health admission data

Provider data are the “parents” of mental health admission data. This means that the ADM data warehouse will only accept a mental health

admission if there is a record of the admitting provider on the state database.

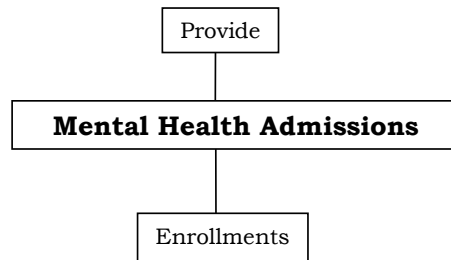
“Children” of admission data

The “children” of mental health admission data are enrollment data. Enrollment data will not be accepted by the ADM data warehouse unless an admission record is present on the state database for the client being enrolled.

"Orphan" admission data

The warehouse will reject an admission record as an orphan record, if there is no matching Provider ID in the provider data set.

Mental Health Admissions Relationship Diagram



Basic Instructions for the Mental Health Admissions Data Set

Mental health admissions data are collected when the client is admitted to the provider agency.

Instructions for Specific Admissions Data Elements

01. Provider Identification Number (Tax ID): – (mandatory key)

The Provider Identification number is the 10-digit (including the dash) Federal Employee Identification Number (FEIN - example: 59-1234567). It should be identical to the number provided in the Agency Registration component, and to the first ten digits of the SAIS Provider ID, if the agency has one. When using the software provided by the ADM Central Offices, the Provider ID number will automatically appear on each data entry screen, if the Agency Registration component has been completed.

02. Social Security Number (mandatory key)

Enter the client's Social Security number. If the client's Social Security number is unavailable or the Client refuses to give his/her number, then use a pseudo-social security number. The construct for the pseudo-social security number is as follows:

- Digit 1 9
- Digit 2 Sex [1] = male, [2] = female
- Digit 3 Race [1] = White, [2] = Black, [3] = American Indian,
 [4] = Asian/Pacific Islander, [5] = Alaskan, [6] = Other
- Digits 4-5 Month of Birth (use leading zeros for Months 1-9)
- Digits 6-7 Day of Birth (use leading zeros for days 1-9)
- Digits 8-9 Year of birth (use leading zeros where necessary)

The client's Social Security Number is also required to retrieve and update/change an existing record.

03. SAIS ID/Client Number (optional)

This is the client identifier used in the SAIS system if the client has received, or is receiving, substance abuse services. This field is completed when the agency has previously assigned a SAIS ID to a client who is now receiving ADM services.

The SAIS ID is not the Social Security Number, but a number assigned by the clinic or agency so that each client entering any clinic within the agency has an unduplicated and unique number. The initial client number assigned at the time of first admission to the clinic or agency must always be used for that client and can never be assigned to another client. This applies to all re-admissions, transfers, and discharges to and from any clinic within the agency. Only numbers or alpha characters can be used. Hyphens and blank spaces cannot be accepted.

04. Date of Admission (mandatory key)

Date of Admission is the date that the person is registered with the Agency for the current episode of services.

05. Date of Discharge

This item is no longer used. The date of discharge will come from the outcome measures record using the date of evaluation.

06. Date of Birth (mandatory)

Enter the birthday in month (1-12)/day (1-31)/year format, also known as MMDDYYYY (for the submission of data via electronic file, the Field Specifications Table in Part 2 shows the file layout on this variable as YYYYMMDD). If the exact date of birth is not known, determine the person's age as closely as possible, then enter the codes for January 1 of the year that would create the approximate age. Thus, if the person's age is about 50, and it is 1999, enter 01/01/49.

07. Admission Type (mandatory)

Enter the code that matches the type of admission for this person. Involuntary admissions are only made under court order. If there is no court order, the admission must be coded as voluntary.

[1] = Voluntary, initial (new) admission [3] = Involuntary, initial (new) admission

[2] = Voluntary, re-admission with the [4] = Involuntary, re-admission with

the agency.

08. Sex (mandatory)

Enter the appropriate code, either [1] = Male or [2] = Female

09. Race (mandatory)

Enter only the appropriate codes shown below:

- | | |
|-----------------------|-----------------------------------|
| [1] = White | [4] = Asian/Pacific Island Native |
| [2] = Black | [5] = Alaskan Native |
| [3] = American Indian | [6] = Other |

10. Ethnicity (mandatory)

If the person is of Hispanic descent, enter the most appropriate of codes 1-4. If the person is Haitian, enter 5. Otherwise, enter 6.

- | | |
|--------------------|-------------------------|
| [1] - Puerto Rican | [4] - Other Hispanic |
| [2] - Mexican | [5] - Haitian |
| [3] - Cuban | [6] - None of the above |

11. County Of Residence (mandatory)

Enter the two-digit number that represents the county where the person lived either immediately before or at the time of admission with the agency. The codes conform to the alphabetical listing of the counties, e.g., [01] = Alachua, [02] = Bay,..., [67] = Washington. If the person's home is somewhere outside Florida, enter [99]. If the person is homeless, enter [88], even if they live in a Florida county. Thus, a homeless person in Dade County is coded as [88], not [13].

- | | | | |
|-----------------|------------------|----------------|-------------------|
| [01] = Alachua | [19] = Franklin | [37] = Leon | [55] = St. Johns |
| [02] = Baker | [20] = Gadsden | [38] = Levy | [56] = St. Lucie |
| [03] = Bay | [21] = Gilchrist | [39] = Liberty | [57] = Santa Rosa |
| [04] = Bradford | [22] = Glades | [40] = Madison | [58] = Sarasota |
| [05] = Brevard | [23] = Gulf | [41] = Manatee | [59] = Seminole |
| [06] = Broward | [24] = Hamilton | [42] = Marion | [60] = Sumter |

[07] = Calhoun [25] = Hardee [43] = Martin [61] =
 Suwannee
 [08] = Charlotte [26] = Hendry [44] = Monroe [62] = Taylor
 [09] = Citrus [27] = Hernando [45] = Nassau [63] = Union
 [10] = Clay [28] = Highlands [46] = Okaloosa [64] = Volusia
 [11] = Collier [29] = Hillsborough [47] = Okeechobee [65] = Wakulla
 [12] = Columbia [30] = Holmes [48] = Orange [66] = Walton
 [13] = Dade [31] = Indian River [49] = Osceola [67] =
 Washington
 [14] = DeSoto [32] = Jackson [50] = Palm Beach [88] = Homeless
 [15] = Dixie [33] = Jefferson [51] = Pasco [99] = Out-of-
 state
 [16] = Duval [34] = Lafayette [52] = Pinellas
 [17] = Escambia [35] = Lake [53] = Polk
 [18] = Flagler [36] = Lee [54] = Putnam

12. Zip Code (mandatory)

Enter the zip code for the client's place of residence.

Chapter 4. Substance Abuse Admissions Data Set

General Considerations for the Admissions Data Set

Who submits admissions data?

All licensed substance abuse providers, public or private, who provide a substance abuse service and maintain individual client records are required to submit admission data.

General policies related to admissions data

Except as indicated below, admission data are required for each client admitted to a provider's substance abuse program. This includes clients admitted to a level of treatment, Treatment Alternatives for Safer Communities (TASC), intervention, interim or targeted prevention services. Substance Abuse admission data are designed to collect socio-demographic characteristics, treatment history, and other valuable data on individuals who receive substance abuse services.

Exceptions:

4. For clients only receiving an initial screening (general assessment), providers will report modified admission data with Immediate Discharge marked "YES". Clients whose screening is paid for by the ADM contract, local match or Medicaid must also have enrollment and service event data submitted.
5. For clients receiving detox services (under seven days), providers will report modified admission data. Clients whose detox services are paid for by the ADM contract, local match or Medicaid must also have enrollment, service event, and discharge data submitted.

Relationship of Records in the Admissions Data Set to Records in other Data Sets

“Parents” of admission data

Provider data are the “parent” of admission data. This means that the ADM data warehouse will only accept an admission record if there is a record of the admitting provider in the state database.

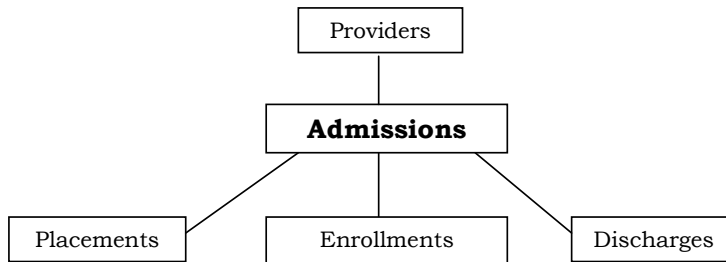
“Children” of admission data

The “children” of admission data are discharge data, enrollment data, and placement data. None of these records is accepted by the ADM data warehouse unless an admission record is present in the state database.

“Orphan” admission data

The warehouse will reject an admission record as an orphan record, if there is no matching Provider ID in the provider data set.

Admissions Relationship Diagram



Replacement Records

The admission record can be updated or corrected and replaced in the data warehouse. After an admission record is submitted, if it is determined that an

error was made, it is possible to correct the error. Two conditions must be met for a record to be considered a replacement record. First the key data elements are not changed; and second, a non-key data element(s) are the ones corrected.

If a duplicate record is submitted during the same load, the record is considered a duplicate record. If a new record is submitted in a later load, the record is considered a replacement record. The newer record is regarded as the correct record for the purposes of updating the data warehouse.

Basic Instructions for the Admissions Data Set

The modified admission data set consists of the following ten data elements: Client social security number, Client identifier (ID), Provider identifier (ID), Admission data, County of residence, ZIP Code, Primary substance problem, Route of admission (Primary substance), Frequency of use (Primary substance), and Age at first use (Primary substance). The instructions are the same as normal.

Instructions for Specific Admissions Data Elements

1. Client Social Security Number (Mandatory Key)

Enter the client's Social Security Number (SSN). If the pseudo-SSN is used, following the instruction located on page 85. When the client's correct social security number is known, report it to the Program Office.

2. Client Identifier (ID) Number (Mandatory)

Enter the client number assigned by the agency.

3. Provider Identifier (ID) (Mandatory Key)

The unique agency identifier in most cases is the FEDERAL TAX IDENTIFICATION NUMBER assigned by the US Internal Revenue Service (IRS). This ID number is a nine digit number (ten digits counting the dash). This same federal ID number for public agencies, which have a department contract, is also found in the contract document between the provider and the department.

Occasionally, an ADM contract provider will subcontract with another provider to provide some, or all, of the services that the department is purchasing. It is essential that the subcontractor uses the contractor's provider ID (and associated site code on the Placement form) for persons who are receiving these subcontracted services. Additionally, the contractor must call the Substance Abuse Central Office for the assignment of a unique site code that will identify the subcontractor. (See list of contacts on page 86)

4. Date of Admission to Agency (Mandatory Key)

Enter two digits each for the month, day, and four-digit year of the client's first day of face-to-face contact for the current substance abuse episode (MMDDYYYY).

5. County of Residence (Mandatory)

Select the correct county of residence for the client (refer to Mental Health Admissions on page 97 for county listing). Normally, clients will come from a county served by the agency. If they are homeless, from out of state, or come from a county outside the agency's service area, enter the appropriate selection.

6. Prior Admissions

Enter the number of admissions to any substance abuse treatment provider that occurred before the current admission (except targeted prevention). The codes range from 0 for none, to nine. If more than nine, enter 9. If unknown, leave blank.

Do not count detoxification as a service admission. Detoxification is defined as a service of less than seven consecutive (7) days. After six (6) days the person must be admitted to either an intervention or a treatment placement.

7. Highest School Grade (Education Level)

Enter the client's highest school grade completed at the time of admission. The code can range from 00 for none to 18. Enter a GED or high school equivalency as 12. Please use leading zeroes as needed.

[00] = Usually applies to infants and preschooler

[01] = First Grade

[02] = Second Grade, etc.

[12] = 12th Grade or General Education Degree

[16] = Completed undergraduate studies (BA or BS, etc.)

[17] = More than 4 years of college

[18] = No formal schooling, but received special education

8. Employment Status

Indicate the client's employment status at the time of admission to the program. To qualify as being employed, the client's earnings must be subject to income taxes. Welfare payments and stipends are not taxable; therefore, the client whose sole source of income is derived from these funds would not be considered employed.

[1] = Employed Full Time: Client is working 35 hours or more a week (including Armed Forces).

[2] = *Employed Part Time: Client is working less than 35 hours a week.*

[3] = *Unemployed, Seeking Employment: Client is actively looking for work (within the past 30 days) or on layoff from his/her job.*

[4] = *Not In The Labor Force: Client is a homemaker, student not looking for work, preschool, disabled, retired, institutionalized, or an inmate/prisoner.*

[5] = *Unemployed, Not Seeking Employment: Client is unemployed*

and has not looked for work in the past 30 days, or does not plan to look for employment.

[6] = Unknown

9. Marital Status

Indicate the client's marital status (according to Florida Law) at the time of admission.

Persons whose only marriage was annulled are classified as never married. Individuals living as married under official common law are counted as married. Individuals reported as separated, either legally or otherwise absent from their spouse because of marital discord, etc., are classified as separated.

[1] = Never Married

[4] = Divorced

[2] = Married

[5] = Separated

[3] = Widowed

[6] = Unknown

10. Zip Code of Residence (Mandatory)

Identify the client's home/residence zip code at admission. If the client is homeless, enter 99999. If the client's zip code is known but unavailable, enter 88888. If the client is from outside the state, use the out-of-state zip code. If the client is from outside the country, enter 77777 for the zip code. If the zip code is unknown, leave the item blank.

If the client is in prison, local jail, or a detention facility, attempt to obtain the zip code of the client's last known residence. Do not enter the prison, local jail, or detention facility's zip code, use the unavailable code instead.

11. Number of Dependents Age 17 and Under

Indicate the number of dependents aged 17 and younger claimed by the client on his or her income tax or other government program such as Medicaid. Dependents are any child(ren) age(s) 17 and under for whom the client is the custodial parent or legal guardian. Enter 0 if there are no dependents ages 17 and under. If more than nine, just enter 9. Leave the

item blank if the number is unknown. When in doubt, error on the side of counting the dependent.

12. If Pregnant, Trimester at Admission

Determine whether the client is pregnant at the time of admission. If the client is pregnant, indicate the trimester of pregnancy. The first trimester is the first three (3) months of the pregnancy, the second trimester is the fourth, fifth, or sixth month, and the third trimester is the seventh, eighth or ninth month of pregnancy.

13. Given Birth (Postpartum) within Last 12 Months

Indicate "1" (yes) if the client has given birth in the last 12 months. Postpartum is the period following childbirth. If the baby is one year old or less, the response to this question would still be "yes". If the baby is older than one year, the response is "2" (no).

[1] = Yes

[3] = Unknown

[2] = No

Blank = Not Applicable/Not collected

Questions 14, 15, & 16. Perceives Harm to Health

Does the client perceive drugs (Q14), alcohol (Q15), or tobacco (Q16) as being harmful to his or her overall health? The therapist should not answer these questions without the client being present.

[1] = Yes

[3] = Unknown

[2] = No

Blank = Not collected

17. Uses tobacco products at Admission

Indicate whether the client is currently smoking tobacco products or using any other tobacco product such as chewing tobacco.

[1] = Yes

[3] = Unknown

[2] = No

Blank = Not collected

18. Primary Source of Income

Indicate the client's primary source of income at the time of admission. For selection 1 (Salary), when several sources are known, use the highest dollar figure source to determine which is primary. This should only reflect the income generated by the client. Client income would not include that of a spouse, a parent, etc. Adolescents with a source of income should be coded appropriately. Code "illegal" income as "other".

- [1] = Salary [5] = Other
[2] = WAGES/TANF [6] = None
[3] = Retired/Pension/SSI [7] = Unknown
[4] = Disability

Selection 2 (WAGES/TANF) is used for those clients in the WAGES program or who receive TANF cash assistance. Selection 4 (Disability) is used for those clients whose primary source of income is SSDI. Clients who receive SSI should be coded with selection 3 (Retired/Pension/SSI). Adolescents with no personal income would be 6 = None.

19. Annual Personal Income

Indicate the annual personal (gross) income of this client, alone and regardless of age, which has been received in the last 12 months prior to admission. If the client has two or more sources of income, the income from each source would be added together to arrive at the total. No income is coded 00. Income over \$98,000 is coded 98. Unknown income level is coded 99.

ROUND NUMBERS TO THE NEAREST THOUSAND

20. Annual Family Income

Indicate the annual family (gross) income of this client's household (related or unrelated individuals living together) in the last 12 months prior to admission. If several members of the household have income, the income

from each source should be added together to arrive at the total. Income from family living outside the client's household would not be counted. For example, if a client is still living at home with his or her parents, the income of the client and the parents would be counted. However, if the client were no longer living at home, the parents' income would not be counted. Indicate 00 for no income, 98 for incomes over \$98,000. Unknown income level is coded 99.

ROUND NUMBERS TO THE NEAREST THOUSAND

21. Times Arrested During 24 Months Prior to Admission

Enter the number of times the client was arrested and booked during the 24 months prior to this admission. The codes range from zero (0) for none to nine (9). If the client was arrested and booked more than 9 times, enter 9. Do not include arrests for traffic infractions unless they are for driving under the influence of alcohol or drugs, or if the traffic arrest led to a booking. This item does not imply conviction and relates to alleged offenses. If the client is currently incarcerated, do not count it on this item. Current incarceration is counted under #27, Criminal Justice Status.

22. Primary Referral Source

Enter one response to indicate the agency, individual or situation through which the client is committed or referred for admission. When both legal type and individual (self) referral categories are involved in an admission, the legal referral takes priority over the other types of referrals. All adolescent clients being admitted to TASC would indicate JUVENILE JUSTICE, as the referral source (unless your agency has a direct contract with the Dept. of Juvenile Justice for another arrangement or TASC is being used for case management of non-DJJ clients). See

Table 4, below for the related codes.

Table 4. Primary Referral Source Codes and Descriptions

Code	Description
<p>[01] Individual (Self-Referral) (The definition has changed from previous years)</p>	<p>This includes only those persons that are requesting substance abuse services on <i>their own behalf</i> and have <i>not been referred</i> by any of the other referral sources that are listed below.</p>
<p>[02] Substance Abuse Care Provider</p>	<p>This includes any agency or other health care provider whose principal objective is the treatment of clients who have substance abuse problems, or a program whose activities are related to prevention, education and/or treatment of alcoholism or drug abuse.</p>
<p>[03] Mental Health Provider</p>	<p>This includes psychiatric hospitals or institutions, community mental health centers and licensed health care professionals who provide counseling, psychological, or psychiatric treatment.</p>
<p>[04] Juvenile Justice</p>	<p>This includes clients referred by the state's juvenile justice system. This may be a direct or indirect referral. Juvenile TASC should use this to admit individuals to their caseload. All adolescent TASC juvenile assessment center clients are considered juvenile justice referrals. If the TASC case manager is referring a juvenile justice client to you for substance abuse treatment, the referral source is TASC.</p>
<p>[05] County Public Health Unit</p>	<p>This includes physicians or other licensed health care professionals associated or working with the county's public health unit.</p>
<p>[06] School (Educational)</p>	<p>This includes a school principal, counselor, teacher, student assistance program (SAP), the school system, or education agency.</p>
<p>[07] Employer/EAP (Employee Assistance Program)</p>	<p>This includes an employee, a supervisor, or an employee counselor.</p>

[08] Other Social Service /Health/Community Referral	This includes family and friends or a federal, state or local agency that provides aid in the areas of poverty relief, unemployment, shelter, social welfare or other types of health/community services. Community and religious organizations are included in this category.
[09] TASC/(Assessment Centers)	This includes referrals from the Treatment Alternatives for Safer Communities (TASC) program. All juvenile justice clients placed in outpatient or residential treatment from a TASC program should be coded as a TASC referral.
[10] Probation/Parole/ Controlled Release Authority	This includes referrals from a judge, prosecutor, probation or parole officer, or other personnel affiliated with the criminal justice system. This also includes work release and/or home furlough participants.
[11] DUI/DWI	This source is for those clients referred to a treatment provider as a result of either a DUI/DWI issue [e.g. driving under the influence (DUI) or driving while intoxicated (DWI)] or a condition for reinstatement of driving privileges.
[12] Pretrial	This includes clients who are referred in lieu of or deferred from prosecution; pretrial release before official adjudication. The client need not be officially designated as "on probation".
[13] Prison/Jail	This includes clients currently in a prison, a jail or a correctional facility.
[14] Other Court Order /Recognized Legal Entity	This includes clients who have been referred as a result of civil commitment (Chapter 397) or other police, law enforcement, defense attorney or other non-voluntary referral not identified above.
[15] DCF/Dependent	This includes individuals referred by the department's Office of Family Safety and Preservation (FSP), which includes foster care and protective supervision. This may be a direct or indirect referral. For example, the family may bring in a client, but at the suggestion of a FSP counselor.

[16] CINS/FINS	Child/Family-In-Need-Of-Services is a child or family for whom there is no pending DCF investigation into an allegation or suspicion of abuse, neglect or abandonment; no pending referral alleging the child is delinquent; or no current supervision by the department for an adjudication for dependency or delinquency. The child must also, pursuant to Chapter 39, F.S., be found by the court to be a persistent run away, a habitual truant, or to have persistently disobeyed the reasonable and lawful demands of parents or legal guardians.
[17] Addiction Receiving Facilities (ARFs)	A community-based, secure facility, designed for persons found to be substance abuse impaired as described in section 397.675, F.S., and who are in need of detoxification assessment, stabilization, and short-term treatment.
[18] Outreach Program	A formal or informal program designed to refer specific groups of individuals into treatment through a variety of programs. The programs can range from going out into the community to seek these individuals out or being referred by agencies to a substance abuse provider under a formal agreement.

23. Living Arrangement

Indicate the client's living arrangement at the time of admission. Homeless includes those living in shelters. Dependent living includes halfway houses. Institutions include prisons, jails, mental health facilities or a Department of Juvenile Justice facility.

Adolescents living at home with parent(s) are coded as 2-Dependent living.

- | | |
|--|---------------------------------|
| [1] = Homeless (living in shelter
or on the streets) | [4] = Independent Living |
| [2] = Dependent living | [5] = Institution |
| [3] = Foster Care | [6] = Unknown |
| | Blank = Not Collected |

24. Co-Dependent

The definition for this item is not a clinically based diagnosis. Use the administrative definition below to determine if a client is co-dependent.

Appendix T: Code [1] - YES if client:

1. is seeking services due to problems arising from his/her relationship with a substance abuser and the individual is not a substance abuser,
2. and has his/her own client record.

Appendix U: Code [2] - NO if client:

Appendix V: is receiving substance abuse services due to his/her own abuse problems.

Dependent children of clients receiving substance abuse services should be coded as YES if they are not in treatment as a substance abuser themselves.

25. Insurance Type (Primary Health Insurance)

Enter one of the following to indicate whether or not any of these sources are expected to cover the cost of the services at admission. If more than one applies, enter the primary method used to pay for the services. It is not necessary that alcohol or drug abuse treatment be specifically covered by the client's insurance. A juvenile client covered by his/her parent's health insurance is recorded as having health insurance.

[1] = None

[5] = Healthy Kids

[2] = Medicare

[6] = HMO

[3] = Medicaid

[7] = Other

[4] = Private Insurance (Commercial)

[8] = Unknown

26. Days Waiting to Enter this Admission

Indicate the number of days the client waited to get into the agency's treatment placement. Do not include normal time periods based on the

agency's internal policy for "processing" a client prior to admission. A 000 indicates no time waited and 999 indicates unknown. Blank will indicate not collected.

27. Criminal Justice Involvement

This question is intended to capture all clients currently involved in the criminal justice or juvenile justice systems. These clients do not necessarily have to be referred by components of the criminal justice system, but will admit to being currently involved with the system. Examples of involvement include:

- a) A probationer seeking treatment on his or her own.
- b) client referred to your agency through the criminal justice system.

[1] = Yes [2] = No [3] = Unknown

28. Needs Mental Health Treatment

Indicate whether, in the opinion of the admitting counselor, the client is in need of mental health services OR is currently receiving mental health services. Another form of this question would be whether this client is or could be **dually diagnosed** with both the need for substance abuse and mental health treatment. This question is for general data collection purposes. Although it is not intended to require a clinically based determination, it is expected that the determination would be in accordance with DSM IV

[1] = Yes [3] = Unknown
[2] = No Blank = Not collected

29. Substance Problems (Mandatory)

NOTE: Primary Problem is a mandatory entry, along with its associated questions.

Identify and enter the substance(s) which is/are primarily responsible for contributing to the client's need for admission.

If the client is admitted to a methadone maintenance modality, the primary problem must be a narcotic (heroin, non-prescription methadone, or any other narcotic). If a client is receiving legally prescribed methadone from another clinic and is admitted to the reporting clinic for dosage adjustment or termination, the primary problem must be the narcotic for which the client originally received methadone. The prescribed methadone should not be identified as the client's problem drug under "non-medical methadone", "other" drug, etc.

Indicate the primary, secondary, and tertiary degree of the substance creating the abuse problem. Clinical judgment will ultimately determine the degree of impairment that a substance causes for an individual client. In determining the degree of impairment, the following considerations should be made:

- a. Patterns of drug involvement;
- b. Degree of present and past physical, mental, and social dysfunction related to the substance and;
- c. Degree of present or past physical or psychological dependence, regardless of the frequency of use of a specific substance.

If there is no secondary or tertiary drug use, leave these and related items blank.

DEFINITIONS:

[01] NONE

[02] ALCOHOL

[03] COCAINE/CRACK (For Crack, use smoking for route of administration)

[04] MARIJUANA/HASHISH

This includes THC and any other cannabis preparations or derivatives

[05] HEROIN

[06] NON-PRESCRIPTION METHADONE

[07] OTHER OPIATES AND SYNTHETICS

This includes codeine, Dilaudid, morphine, Demerol, opium, Darvon, and

any other non-prescription drug with morphine-like effects.

[08] PCP - PHENCYCLIDINE

[09] OTHER HALLUCINOGENS

This includes LSD, DMT, STP mescaline, psilocybin, peyote, etc.

[10] METHAMPHETAMINE

This includes the amine derivative of amphetamine that is used in the form of

crystalline hydrochloride as a stimulant. This includes crank.

(Does not

include "ICE", see below.)

[11] OTHER AMPHETAMINES

This includes Benzedrine, Dexedrine, Preludin, Ritalin, and any other amines

and related drugs. (Does not include "ICE".)

[12] OTHER STIMULANTS

[13] BENZODIAZEPINE

This includes Valium, Librium, Diazepam, Flurazepam, Chlordiazepoxide, Clorazepate, Lorazepam, Alprazolam, Oxazepam, Temazepam, Prazepam, Triazolam, Clonazepam, and Halazepam.

[14] OTHER TRANQUILIZERS

[15] BARBITURATES

This includes Phenobarbital, Seconal, Nembutal, etc.

[16] OTHER SEDATIVES OR HYPNOTICS

This includes chloral hydrate, Placidyl, Doriden, etc.

[17] INHALANTS

This includes ether, glue, chloroform, nitrous oxide, gasoline, paint thinner,

etc.

[18] OVER-THE-COUNTER

This includes aspirin, cough syrup, Sominex, and any other legally obtained,

non-prescription medication used for purposes other than specified on the

label.

[19] ICE

This includes the crystalline form of methamphetamine usually heated and

inhaled. (This drug type should not be confused with Ecstasy.)

[20] OTHER

[21] UNKNOWN/DENIES DRUG USE

30. Usual Route of Administration

Indicate the client's usual route of administration or method of ingestion of the primary, secondary, and tertiary substance of abuse into the client's system. If more than one route of administration is used, enter the most frequent route for each drug.

[1] = Oral

[2] = Smoking

[3] = Inhalation

[4] = Injection (IV or Intramuscular)

[5] = Other

31. Frequency of Use

Indicate the client's amount, number of, or frequency of use of the primary, secondary, and tertiary substance of abuse during the month prior to admission.

[1] = No Past Month Use (no use past 30 days)

[2] = 1-3 Times in Past Month (30 days)

[3] = 1-2 Times Per Week

[4] = 3-6 Times Per Week

[5] = Daily

32. Age of First Drug or Alcohol Use

Enter the client's age of first use of the primary, secondary, and tertiary drug. For alcohol, record the age of the first use. If unknown enter best estimate.

The recorded age should reflect willful use. A value of zero (00) indicates a newborn with a substance dependence problem.

Indicate 99 if unknown. A blank indicates the information was not collected.

33. Other IV Substance Use

If the client has not already indicated (4) Injection as the usual route of administration on Item 30, indicate whether the client is currently or has a history of intravenous drug/substance abuse.

[1] = Yes

[3] = Unknown

[2] = No

Blank = Not collected

34. Immediate Discharge

Immediate discharge was added for those facilities, such as certain TASC or assessment centers, where the client is immediately discharged after receiving a very limited service (e.g., assessment only), and determined not to be in need of additional services at this time.

When "Yes" is selected, a discharge record is not required.

[1] = Yes Blank = Not collected

[2] = No

When Immediate Discharge is marked 'YES', no discharge form is required. The Central Office will generate the discharge record administratively.

Chapter 5. Substance Abuse Placement Data Set

General Considerations for the Placement Data Set

Who submits placement data?

All licensed substance abuse providers, public or private, who provide a substance abuse service and maintain individual client records are required to submit placement data.

General policies related to placement data

Placement data are required for each client for whom an admission record is submitted. The placement data can be submitted both when the placement is opened and again when it is closed, or only once when the placement is closed.

Aftercare Placement Reporting: The following reporting procedures are established for reporting aftercare services.

Appendix W: When a client is first admitted to an agency, an admission, enrollment (if applicable), placement(s), and service event (if applicable) records are submitted. When the client has completed the treatment services and aftercare services are planned for the client, the client will be discharged and the current episode of care concluded.

Appendix X: The client is subsequently readmitted to the agency and new admission, enrollment (if applicable), placement (PlacType = '22'), and service event (if applicable) records are submitted. This must be done within 30 days of discharge. If the client hasn't changed the target population group, no new enrollment record is required. If it is determined that the client no longer needs aftercare services, the client will be discharged with the appropriate discharge code.

Appendix Y: If the client, who is in aftercare, is determined to be in need of further treatment services, the client will be discharged from aftercare

and readmitted to the agency for those services. The appropriate data records will be submitted on the client.

Appendix Z:

Clarification of Code '22': The placement code '22' will be interpreted in the following manner. If the placement record is opened at the beginning of the episode of care, the placement will be considered to be 'Case Management' for the client, and not 'Aftercare'. A placement that is opened either the end of the episode of care or the only placement within the episode of care will be considered as 'Aftercare'.

Relationship of Records in the Placement Data Set to Records in other Data Sets

"Parents" of placement data

Substance Abuse Admission data are the "parent" of placement data. This means that the ADM data warehouse will only accept a placement record if there is a substance Abuse admission record for the client in the state database.

"Children" of placement data

Placement data do not have "children" records.

"Orphan" placement data

The warehouse will reject a placement record as an orphan record, if there is no substance abuse admission record in the warehouse with matching Provider ID, Social Security Number, and Admission date.

Basic Instructions for the Placement Data Set

Instructions for Specific Placement Data Elements

1. Client Social Security Number (Mandatory Key)

Enter the client's Social Security Number (SSN). If the psuedo-SSN is used, following the instruction located on page 85. When the client's correct social security number is known, report it to the Program Office.

2. Client Identifier (ID) Number (Mandatory)

Enter the client number assigned by the agency.

3. Provider Identifier (ID) (Mandatory Key)

The unique agency identifier in most cases is the FEDERAL TAX IDENTIFICATION NUMBER assigned by the US Internal Revenue Service (IRS). This ID number is a nine digit number (ten digits counting the dash). This same federal ID number for public agencies, which have a department contract, is also found in the contract document between the provider and the department.

Occasionally, an ADM contract provider will subcontract with another provider to provide some, or all, of the services that the department is purchasing. It is essential that the subcontractor uses the contractor's provider ID (and associated site code on the Placement form) for persons who are receiving these subcontracted services. Additionally, the contractor must call the Substance Abuse Central Office for the assignment of a unique site code that will identify the subcontractor. (See list of contacts on page 86)

4. Date of Admission to Agency (Mandatory Key)

Enter two digits each for the month, day, and four-digit year of the client's first day of face-to-face contact for the current substance abuse episode.

5. Site Identifier (ID) (Mandatory)

Enter the site ID. The Substance Abuse Data Office issues the site ID. The contractor will contact Sherry Catledge (contact information on page 86) of the Substance Abuse Data Office for the issuance of the site ID.

The site ID is used for two purposes: to track the physical location where services are being provided and to identify subcontractors.

6. Placement (Mandatory Key)

Enter the placement (care/service/modality) to which the client is being admitted. This is not the cost center service, but rather the type of

substance abuse service (modality or level of care) the agency is licensed to provide to clients.

The client can be placed in multiple placements simultaneously. For example, a TASC case manager/monitor would admit a client to the Intervention-TASC placement. The same client might also be admitted to a Residential II placement while at the same time having an open placement record for Intervention-TASC. A placement "form" must be completed for each type of placement.

The definitions of placements are consistent with the licenses for substance abuse programs. They include those proposed in the revised administrative rule, Chapter 65E-30, Florida Administrative Code.

All program components are categorized as follows:

- a. Detoxification programs are those which utilize medical or psycho-social treatment procedures and a supportive counseling regiment to assist clients in their efforts to withdraw from the physical and/or psychological effects of the abuse of alcohol and mood altering drugs. They are short-term services, rarely lasting more than seven days.
- b. Residential programs are those which provide a structured, live-in therapeutic environment within a non-hospital setting on a 24-hour-a-day basis, and
- c. Nonresidential programs are those which provide a non-live-in therapeutic environment with a structured schedule of daily, weekly, or hourly activities depending on the level of care.

For the purposes of substance abuse data reporting, medication (methadone) programs are included in categories (a) and (c), as appropriate and as defined herein.

If there is a question of placement type, please refer to your license. Your choices are limited to only the placement types your facility is licensed to provide. **[If there is a question about the correct placement, contact the district licensing authority before contacting the Substance Abuse**

Data Office.] Clients needing services other than those you are licensed to provide should be referred to other providers licensed to provide these services. See Table 5, below, for relevant codes.

Table 5. Placement Codes and Descriptions

RESIDENTIAL	
[01] Residential Level I	Level I provides a range of assessment, treatment, and rehabilitation services, and access to ancillary service in an intensive therapeutic environment with an emphasis on treatment.
[02] Residential Level II	Level II provides a range of assessment, treatment, and rehabilitation services, and access to ancillary services for persons who meet the criteria for admission to a less intensive therapeutic environment with an emphasis on rehabilitation. <u>All juvenile justice residential care should be Level II.</u>
[03] Residential Level III	Level III provides a range of assessment, rehabilitation, and treatment services, and access to ancillary services for persons who meet the criteria for admission to services on a long-term and continuing care basis, where, depending upon the characteristics of the clients served, the emphasis is on habilitation, rehabilitation, or treatment
[04] Residential Level IV	Level IV provides rehabilitation and treatment services and access to ancillary services for persons who meet the criteria for admission to a transitional living environment with an emphasis on rehabilitation and moving into independent living in the community.
[05] Residential With Host Family	This level of care is also referred to as Day or Night Treatment with Residential Host Family Element. This provides temporary residence for clients in a host family setting. It includes a schedule of services and activities of a minimum of 5 days per week and a minimum of 6 consecutive hours each day with an emphasis on assessment, rehabilitation, and treatment services and access to ancillary services.

[06] Supported Housing	Supported housing represents an administrative function. It provides for the placement and monitoring of clients participating in non-residential services and persons who have completed or are completing substance abuse treatment and who need assistance and support in securing independent or supervised living within a live-in environment.
DETOXIFICATION	
Detoxification Services are those that utilize medical or non-medical treatment procedures and a supportive counseling regimen to assist clients in their efforts to withdraw from the physiological effects of substance abuse. Detoxification services include:	
[07] Residential Detoxification	These services provide live-in environment within a non-hospital setting (even though the physical location may be part of a hospital) on a 24-hour-a-day basis and offer one or more of the following levels of care: a. Sobering-up services; b. Non-medical detoxification; and c. Medical detoxification.
[08] Addiction Receiving Facility (ARF)	An ARF is a community-based, secure facility operated on a 24-hour-a-day basis that is designated by the department for persons found to be substance abuse impaired, as described in Section 397.675, F.S. The program may include detoxification, assessment, stabilization, and short-term treatment.
[09] Outpatient Detoxification	These services are provided by appointment during scheduled operating hours with an emphasis on providing counseling and ancillary services.
[10] Methadone	Methadone detox services utilize methadone in decreasing doses to assist clients undergoing physical withdrawal from an opioid drug; they provide counseling and ancillary services for the following duration: a. Short-term, not to exceed 30 days; and b. Long-term, not to exceed 180 days
NON-RESIDENTIAL	
[11] Outpatient (Non-Residential)	Outpatient services provides assessment, treatment, and accessibility to ancillary services for persons who meet the criteria for admission to a therapeutic environment which includes individual, group, and family counseling by appointment during scheduled operating hours.

[12] Day/Night	Day or Night services provide a range of assessment, habilitation, rehabilitation, treatment, and accessibility to ancillary services. They are provided for persons who meet the criteria for admission to a therapeutic environment, which includes a schedule of services and activities, a minimum of four days per week and a minimum of four consecutive hours each day.
INMATE PROGRAMS:	
[13] Inmate Programs	These are provided within incarceration facilities operated by the Florida Department of Corrections or local governing authorities. Services include inmate assessment, the development of treatment plans, treatment, evaluation and monitoring of inmate participation, and discharge planning.
INTERVENTION	
Intervention: Intervention services target groups or individuals. The focus is the reduction of known risk factors associated with the onset or progression of substance abuse and other related problems. Intervention Services include:	
[14] Community-Based/School	These programs provide, at a minimum, early identification and screening and may include short-term counseling, support services, and referral services. This can also include non-TASC case management.
[15] TASC (Treatment Alternatives for Safer Communities) and Juvenile Justice Assessment Centers	TASC provides identification, screening, court liaison, referral, and tracking of criminal and juvenile justice clients with a history of substance abuse. Applicable to adults and juveniles.
[16] Employee Assistance Programs	These programs are operated by entities that provide early identification, referral, and tracking services for employees of organizations or businesses that are involved in substance abuse.
MEDICATION MAINTENANCE/METHADONE MAINTENANCE:	
[17] Medication Maintenance/ Methadone Maintenance	Programs that use Federally approved opioid medications in the treatment of persons who are dependent upon opioid drugs. The approved medications are Levo-Alpha-Acetyl-Methadol (LAAM) and Methadone. These medications are used to stabilize and maintain clients on an optimal dosage level to prevent withdrawal symptoms.

<p>Medication Maintenance and Methadone Maintenance Services: 1) Comprehensive Maintenance provides assessment, rehabilitation, treatment, and accessibility to ancillary services in conjunction with LAAM or methadone on an outpatient basis. 2) Satellite Maintenance is a methadone dosing station operated by a primary, comprehensive maintenance provider on an outpatient basis for clients who do not have access to the primary maintenance provider because of travel distance or other hardship.</p>	
PREVENTION	
<p>Prevention Programs: Programs that involve strategies that preclude, forestall, or impede the development of substance abuse problems. Prevention services promote responsible personal and social growth of individuals and families toward full human potential and include:</p>	
[18] Primary Prevention Services	<i>(Not to be used)</i>
[19] Targeted Prevention Services	<p>These programs consist of multiple, structured contacts over time to specific individuals or groups identified as having behavioral, biological, or environmental at-risk characteristics. Targeted prevention is designed to promote protective factors and skill building activities, reduce risk factors including the risk of establishing patterns of use. Examples of targeted prevention include, but are not limited to, services such as Alpha, Beta, and alternative services.</p> <p>Alternative services are designed to provide structured, drug-free activities involving multiple contacts over a specified period of time to individuals or groups identified as having specific risk factors for substance abuse, in order to reinforce positive behaviors and to promote drug free behaviors.</p>
SPECIALIZED SERVICES	

[20] Overlay-Juvenile Justice	This type of placement is related to the setting in which the licensed substance abuse service is provided. All juvenile justice clients should have a referral code of "04-Juvenile Justice" . An example of an overlay service would be a substance abuse provider agency that is under contract with the Dept. of Juvenile Justice (DJJ) to provide substance abuse services at a DJJ Halfway House. The substance abuse provider agency is licensed to provide outpatient and thus the provider agency's staff is allowed to provide these outpatient services off-site at the DJJ facility which is not licensed as a substance abuse facility.
[21] Overlay-Other	This type of placement is related to the setting in which the licensed services are provided. See example above under Overlay-Juvenile Justice. In most cases, Overlay-Other is used for correctional facilities and jails.
[22] Aftercare /Continuing Care	A placement that provides services to individuals who have completed treatment and who are in need of continued observation and support. These are typically rendered under an outpatient or intervention program.
[23] Interim Services	Interim Services are those minimal services provided to a person while the person is waiting for admission into a substance abuse treatment setting. For programs receiving DCF substance abuse funding, these are required within 48 hours after service is requested for pregnant women and IDUs, when treatment services are not available within seven (7) days.
[24] TBA	To be announced. Do not use this code. It is for future use.

7. Begin Date (Mandatory Key)

Enter the date the client is placed in this level of care.

8. End Date

Enter the placement ending date. **Important:** All placements must be closed prior to a discharge from the episode of care being completed.

Chapter 6.

Enrollments Data Set

General Considerations for the Enrollments Data Set

Who submits enrollment data?

Providers who are contracted with the district ADM office to provide either Community Mental Health or Substance Abuse services are required to submit enrollment data.

General policies related to enrollment data

The purpose of enrollment is twofold: It identifies: 1) the person for which the department, Medicaid, local match, and/or TANF is paying, and 2) the target population to which the person belongs. Performance outcomes are only derived (SA) or submitted (MH) for enrolled clients.

Persons to be enrolled: Client enrollment data must be submitted for all people receiving substance abuse and/or mental health services whose cost of care is funded, in whole or in part, by one of the appropriate funding sources. The fund sources are the district's ADM contract, local match, or Medicaid (under the following options: Targeted Case Management, Community Mental Health Services, Medicaid/Medicare Crossover, or HMO). When completed, the enrollment data will identify the target population in which a person is counted.

Individuals are enrolled by one of the four program areas, including Adult Mental Health, Children's Mental Health, Adult Substance Abuse, and Children's Substance Abuse. A client who is less than the age of 18 at the time of enrollment is considered a child. Upon reaching 18 years of age (s)he must be re-enrolled as an adult, except that a client who is a court-ordered dependent or delinquent may still be considered a child while (s)he is 18, 19, or 20 years of age.

When to Submit a New Enrollment Record: A new enrollment record is prepared at admission to an agency for either mental health or substance abuse services or when the client's target population changes. If any funding source except [10] = Not Applicable is selected, the record is completed and submitted for inclusion in the data warehouse. When funding source [10] is selected, it is documented in the client record but not submitted.

When to Submit a Replacement Enrollment Record: A replacement record is a record where the Provider ID, Social Security Number, Admission Date, and Target Population remain the same, but other information in the enrollment record changes. A replacement record is used to either correct or update information when one or more of the following enrollment items change: the fund source, client characteristics, or client identification items 8 thru 12 on page.133. A decision flowchart on page will aid in determining if a new enrollment record or a replacement record is needed to update the data warehouse.

Documentation Requirements: Enrollment information must be available for all clients whose care is being paid for, in whole or in part, by the department's ADM contract, local match, or Medicaid. If the agency maintains electronic client documentation, a paper copy of the enrollment form is not required to be in the client's medical record, but the provider must furnish the information when requested for monitoring or audit purposes.

Determining Client Eligibility for Enrollment: The provider will determine which clients' care is being paid for, in whole or in part, by the department's ADM contract, local match, or Medicaid.

Relationship of Records in the Enrollment Data Set to Records in other Data Sets

“Parents” of Enrollment data

Mental Health and Substance Abuse admissions data are the “parents” of enrollment data. This means that the ADM data warehouse will only accept an enrollment record if there is an admission record for the client on the state database.

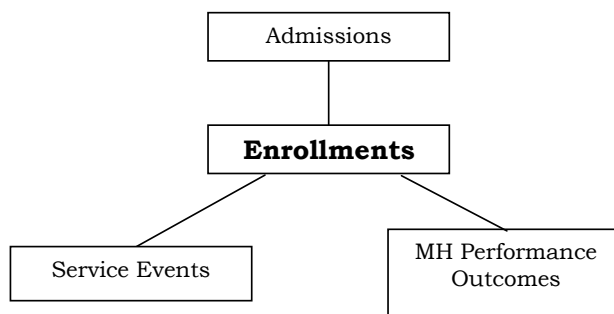
“Children” of Enrollment data

The enrollment data set has the Service Event data set and Mental Health Performance Outcomes as “children” data sets. A client enrollment record must be present in the state database for the service events or Mental Health performance associated with the client to be accepted into the data warehouse.

“Orphan” Enrollment data

The warehouse will reject an enrollment record as an orphan record, if there is no admission record in the warehouse with matching Provider ID and Social Security Number, and where Admission Date is equal or prior to the Enrollment date.

Enrollments Relationship Diagram



Required Data for All Enrollees

Providers must submit admission, discharge, placement, service event and outcome data for all enrolled clients. Failure to submit this required data will result in the provider being out of compliance and subject to the penalties for non-compliance given in the section on compliance on page 70.

Client Enrollment Instructions for Specific Data Elements

1. Social Security Number (Mandatory Key)

This number must match the number reported in the demographic section.

Enter the client's Social Security number. If the client's Social Security number is unavailable or the client refuses to give his/her number, then use a pseudo-social security number. The construct for the pseudo-social security number is as follows:

- Digit 1 9
- Digit 2 Sex [1] = male, [2] = female
- Digit 3 Race [1] = White, [2] = Black, [3] = American Indian, [4] = Asian/Pacific Islander, [5] = Alaskan, [6] = Other
- Digits 4-5 Month of Birth (use leading zeros for Months 1-9)
- Digits 6-7 Day of Birth (use leading zeros for days 1-9)
- Digits 8-9 Year of birth (use leading zeros where necessary)

The client's Social Security Number is also required to retrieve and update/change an existing record. If a pseudo SSN is created, it must match the number that the provider agency reports to the ADM Central Offices on client Admission. If not, the record will be considered an orphan, and will be rejected, resulting in inaccurate data reporting at all levels of the ADM system.

2. Funding Information (Mandatory)

For clients who are receiving substance abuse services, the provider must check one of the following items: [2], [3], [5], [6], [8], or [9]. The substance abuse funding categories [2], [3], [6], [8], or [9] include TANF funding for substance abuse services.

For clients who are receiving mental health services, the provider must check one of the following items: [1], [3], [4], [6], [7], or [9]. The mental health funding categories [1], [3], [6], [7], or [9] include TANF funding for mental health services.

If item [10] = Not Applicable, is selected, then document in client record and do not submit. When selecting a funding source, there is no correct response insofar as contract compliance is concerned.

3. Client ID Number/SAIS ID (Mandatory)

This number is the Client ID number used in the Substance Abuse Data System. This number must match the number specified in Substance Abuse Data System admission data. This is a 10-digit client identifier used in the SAIS system if the client has received, or is receiving, substance abuse services. This field is completed when the agency has previously assigned a SAIS ID to a client who is now receiving ADM services.

The SAIS ID is not the Social Security Number, but a number assigned by the clinic or agency so that each client entering any clinic within the agency has an unduplicated and unique number. The initial client number assigned at the time of first admission to the clinic or agency will always be used for that client and can never be assigned to another client. This applies to all readmissions, transfers, and discharges to and from any clinic within the agency. Numbers or an alphanumeric combination can be used (Example:

ABC010178). Hyphens and blank spaces within the client ID are not accepted.

4. Date of Admission (Mandatory Key)

Date of Admission is the date that the person is registered with the agency on an active basis. This item should match the admissions (demographic) data set.

5. Date of Birth (Mandatory)

This is the person's birthday in month (1-12)/day (1-31)/year (four digit) format, also known as MMDDYYYY. If the exact date of birth is not known, determine the person's age as closely as possible, then enter the codes for January 1 of the year that would create the approximate age. Thus, if the person's age is about 50, and it is 1998, enter 01/01/48.

6. Enrollment Date (Mandatory Key)

This is the date when the provider determines that the cost of care is paid for, in whole or in part, by the department's substance abuse program, local match, or Medicaid. The enrollment date must be on or after the Admission Date and before the Discharge Date.

7. Age at Enrollment (Mandatory)

The client's age at the time of enrollment.

8. SSI/SSDI (Mandatory)

If the client is receiving social security income or social security disability income, indicate so using one of the following codes:

- [1] = current recipient
- [2] = past recipient
- [3] = applicant
- [4] = not applicable
- [5] = unknown

9. Family Income (Mandatory)

Determine the taxable income for the individual and all family members living in the same household. Use a two (2) digit code to indicate the income in thousands: e.g., [07] = \$7,000, [16] = \$16,000, [98] = \$98,000 or more; [99] = unknown. Use codes [00] – [99]. Use leading zeros.

(NOTE: Be consistent with ADMI form)

10. TANF (Mandatory)

Is the person ADM/TANF funded WAGES or non-WAGES recipient/family member?

[1] = Current WAGES recipient/family [4] = Not applicable

[2] = Past WAGES recipient/family [5] = Unknown

[3] = WAGES applicant/family [6] = Non-WAGES funded by
ADM/TANF

A child is considered a recipient if his/her parent receives TANF funds.

11. Number of Persons In Household (Mandatory)

This refers to the number of persons that are living in the house (1-9; 9 = 9 or more)

12. Detoxification (Optional)

The provider indicates whether this person is in or is being admitted for substance abuse detoxification services.

[1] = Yes [2] = No [3] = Not Applicable

13. District of Admission (Mandatory)

Enter the number of the DCF district that contains the physical location where the provider will deliver (or has delivered) services to this client. The

number should be 01-15, using a leading zero if the district number is 1 through 9 (for example, 01, 02, 03, etc.).

14. Provider Identification ID (Mandatory Key)

The Provider Identification number is the 10-digit (including the dash) Federal Employee Identification Number (FEIN - example: 59-1234567). It should be identical to the number provided in the Agency Registration component, and to the first ten digits of the SAIS Provider ID, if the agency

has one. When using the software provided by the ADM Central Offices, the Provider ID number will automatically appear on each data entry screen, if the Agency Registration component has been completed.

15. Site ID (Optional)

Site ID of the provider agency: site where the client is being enrolled (for substance abuse agencies, use the same site ID as reported on substance abuse placement data).

Enter the two-digit Site Code which is found in the provider data set. These codes are used to distinguish between various provider sites with the same Federal Tax ID, although not all mental health agencies have designated site codes for all their sites. Substance abuse site codes are assigned by the Substance Abuse Central Office. If there is only one physical location for an agency, the Site Code is most likely to be "00". The district liaison can provide this information upon request.

16. District Payer

Enter the code e.g., [01] thru [15] indicating the DCF district which is paying for the services provided to this person.

Characteristics Instructions

Client characteristics are used to determine the target population to which the

client is assigned. Each characteristic that is applicable to the client should be checked. The annotated lists below contain brief narratives describing the characteristics, the groups to which the characteristics are applicable, and any special instructions related to the characteristics.

AD = Adult, CH = Child, and the number indicates the characteristic number.

Adult Characteristics

AD01 Whether the client has a primary diagnosis or diagnostic impression of psychoactive substance use disorder.

This characteristic applies to adult substance abuse clients. This can either be validated by an assessment done by a clinician or it can be based on the judgement of the person doing the initial assessment.

AD02 Whether the client's current primary, secondary or tertiary drug of choice is administered through injection.

This characteristic applies to adult substance abuse clients. This can be documented by information contained in the client's record, or by self-report.

AD03 Whether the client has a history of intravenous substance use.

This characteristic applies to adult substance abuse clients. This is documented by either self-report by the client, or information on file in the client's record.

AD04 Whether the client is pregnant or has one or more dependents age 17 or younger for whom she/he is custodial parent, legal guardian or primary caretaker.

This characteristic is intended for use with adult substance abuse clients. It can also be used when appropriate with adolescent clients. This is

documented by either self-report by the client, documents from a referring agency, or by information on file in the client's record.

AD05 Whether the client or his/her dependent is a client of Family Safety and Preservation Services.

This characteristic applies to adult substance abuse clients. This should be documented by a referral from Family Safety and Preservation Services. If a client self-reports they are also a client of Family Safety and Preservation, this is also acceptable.

AD06 Whether the client has a court mandate for substance abuse treatment services.

This characteristic applies to adult substance abuse clients. A copy of the court order, referral, or other appropriate documentation requiring substance abuse treatment services can serve as evidence for this characteristic.

AD07 Whether the client is under community supervision of criminal justice entity.

This characteristic applies to adult substance abuse clients. Documentation for this characteristic can either be a referral from the criminal justice entity, self-report by the client, or information contained in the client's record.

AD08 Whether the client has no current substance use, but has been determined to be at risk of abusing alcohol or other drugs.

This characteristic applies to adult substance abuse clients. This is based on the presenting reason why the client is being assessed. It can also be based on the clinical judgement of the person doing the assessment.

AD09 Whether the client has a diagnosis or diagnostic impression of Axis I or Axis II mental disorder.

This characteristic applies to adult mental health and substance abuse clients. Evidence of this characteristic is an evaluation by a licensed mental

health person. Information in the client's record can also serve as documentation.

AD10 Whether the client has an Incompetent to Proceed Court Order due to psychiatric disability.

This characteristic applies to adult mental health clients. A copy of the court order or other appropriate documentation of the court order in the client's file is needed.

AD11 Whether the client has a Not Guilty by Reason of Insanity Court Order.

This characteristic applies to adult mental health clients. A copy of the court order or other appropriate documentation of the court order in the client's file is needed.

AD12 Whether the client is on a Conditional Release due to mental illness.

This characteristic applies to adult mental health clients. A copy of the court order or other appropriate documentation of the order in the client's file is needed.

AD13 Whether the client receives Supplemental Security Income (SSI) due to psychiatric disability.

This characteristic applies to adult mental health clients. Some form of documentation showing the client is receiving Supplemental Security Income due to psychiatric disability is required. Evidence can be the letter

of notification or payment documentation. If the client self-reports that he/she is receiving payments, it is acceptable until it can be confirmed.

AD14 Whether the client receives Social Security Disability Income (SSDI) due to psychiatric disability.

This characteristic applies to adult mental health clients. Some form of documentation showing the client is receiving Supplemental Security

Disability Income due to psychiatric disability is required. Evidence can be the letter of notification or payment documentation. If the client self-reports that he/she is receiving payments, it is acceptable until it can be confirmed.

AD15 Whether The client receives Disabled Veterans income due to psychiatric disability.

This characteristic applies to adult mental health clients. Some form of documentation showing the client is receiving Disabled Veterans Income due to psychiatric disability is required. Evidence can be the letter of notification or payment documentation. If the client self-reports that he/she is receiving payments, it is acceptable until it can be confirmed.

AD16 Whether a client receives other type of disability income due to psychiatric disability.

This characteristic applies to adult mental health clients. The client will need to provide some form of documentation from a third party, which indicates payments are being made. A third party can be a disability insurance policy, a pension fund, or some other form of disability payment. If a client self-reports that he/she is receiving payments, it is acceptable.

AD17 Whether or not a client receives Social Security for reasons other than psychiatric disability and has psychiatric disability

This characteristic applies to adult mental health clients. Evidence can consist of either a copy of the award of disability by the Social Security Administration or proof of receipt of payments from Social Security. A client could also be eligible for Social Security due to age. The psychiatric disability would have to be documented by an evaluation by a licensed mental health professional.

AD18 Whether a client has documented evidence of long term psychiatric disability, and does not need, is unable to apply or refuses to apply for disability income

This characteristic applies to adult mental health clients. It is intended to account for clients who already receive some form of retirement or other income that makes them ineligible for disability from the Social Security because they earn too much income. The long-term psychiatric disability is documented by an evaluation conducted by a licensed mental health professional.

Long term psychiatric disability can be assessed from either the client's current or future status. First, long term is defined as six months or longer. If a client presents with a mental health issue and it has been on going for more than six months, a long-term psychiatric disability could be applicable. If the client presents a mental health issue and the future prognosis is longer than six months duration, a long term psychiatric disability could be applicable.

AD19 Whether a client does not receive disability income due to psychiatric disability, but has application in process or has received such income within last 5 years

This characteristic applies to adult mental health clients. Documentation for this characteristic would be either a copy of the application or the self-report of submitting the application. Evidence of receiving payments can consist of payment notices, or a copy of the award of disability from Social Security. Third party payments (e.g., disability insurance) are also applicable within this characteristic.

AD20 Whether a client meets criteria for admission to mental health receiving facility.

This characteristic applies to adult mental health clients. The criteria for admission to mental health receiving facility are the same as the Baker Act criteria.

AD21 Whether a client shows evidence of recent severe stressful event and problems with coping.

This characteristic applies to adult mental health clients. The characteristic can be documented through evidence in the client's record, by client self-report, or by the referring party, e.g. police report.

AD22 Whether a client has a mental health presenting problem.

This characteristic applies to adult mental health clients. The characteristic can be documented by the client assessment done by a mental health clinician.

Children's Characteristics

CH01 Code for DSM IV diagnosis

This diagnosis must be made by a licensed mental health professional or a staff member supervised by a licensed professional and consist of the first three digits.

CH02 Number indicating a client's score on Children's Global Assessment Scale (C-GAS).

Enter the child's score from the CGAS. The number should be 1-99, inclusive. Refer to the scale to determine the child's current level of functioning.

CH03 Whether a client has diagnosis of schizophrenia (295), other psychotic disorder (298), major depression and mood disorder (296) or personality disorder (301)

This diagnosis must be made by a licensed mental health professional or a staff member supervised by a licensed professional and consist of the first three digits.

CH04 Whether a client is currently classified as SED student by a local school district

This information may be obtained through the child's school.

CH05 Whether a client is currently receiving Supplemental Security Income (SSI) for psychiatric disability

This information may be obtained through the Social Security Administration, by the child's parent, or by previous documented information in the child's file.

CH06 Whether a client has allowable DSM diagnosis other than those listed in CH01 above and C-GAS score is 50 or below

This diagnosis must be made by a licensed mental health professional or a staff member supervised by a licensed professional and consist of the first three digits.

CH07 Whether a client has allowable DSM diagnosis other than those listed in CH01 above and C-GAS score is above 50

This diagnosis must be made by a licensed mental health professional or a staff member supervised by a licensed professional and consist of the first three digits.

CH08 Whether a client is currently classified as Emotionally Handicapped student by a local school district

This information may be obtained through the child's school.

CH09 Whether a client has current referral for placement in Emotionally Handicapped program in accordance with Individuals with Disabilities Education Act (IDEA)

This information may be obtained through the child's school.

CH10 Whether a client has verified maltreatment per Florida Department of Children & Families, Family Safety and Preservation Program Office, or similar agency in another state

This information should be documented in the child's record/case notes

CH11 Whether a client has no current substance use, but has been determined to be at risk of abusing alcohol or other drugs

This characteristic applies to adolescent substance abuse clients. It can be based on an assessment conducted by the school or a community agency

involved with identifying adolescents at risk of abusing alcohol or other drugs.

CH12 Whether a client has primary diagnosis or diagnostic impression of psychoactive substance use disorder

This characteristic applies to adolescent substance abuse clients. This can either be validated by an assessment done by a clinician or it can be based on the judgement of the person doing the initial assessment.

CH13 Whether a client is currently under the supervision or custody of Department of Juvenile Justice or other criminal justice agency

This characteristic applies to adolescent substance abuse clients. Evidence of this characteristic can consist of a referral from the Department of

Juvenile Justice or an other criminal justice agency. A copy of the referral is also permissible.

CH14 Whether a client is currently a client of the Family Safety and Preservation Program

This characteristic applies to adolescent substance abuse clients. Evidence of this characteristic can consist of a referral (or a copy there of) from the Family Safety and Preservation Program.

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BIOGRAPHICAL SKETCH

Jane G. Allgood

Education

Ph.D. Candidate, The Florida State University, Tallahassee, Florida.
Expected completion May 2003.

Master of Social Work, The Florida State University, Tallahassee,
Florida. Concentration in clinical social work. 1998

Master of Public Administration, North Carolina State University,
Raleigh, NC. Concentration in policy analysis and program evaluation.
1979

Bachelor of Arts, Political Science, The College of Charleston,
Charleston, SC. 1977

Teaching Experience

Graduate Teaching Assistant, Florida State University,
School of Social Work. 1997 – 2001 and 2002 - present

University Teaching Associate, Florida State University,
Program for Instructional Excellence and the School of Social Work.
1998 - 1999

Adjunct Instructor, Vance-Granville Community College,
Henderson, NC. 1980

Practice Experience

MST Consultant, MST Services, Mt. Pleasant, South Carolina. 1/2001 to
5/2003

Admission and Discharge Coordinator (Social Worker), Apalachee Center
for Human Services, Tallahassee, Florida. 1999

Residential Counselor, Capital City Youth Services, Tallahassee, Florida.
1997 - 1998

Research Experience

Grant Manager, Florida State University, School of Social Work. 1999 – 2000

Graduate Research Assistant, Florida State University, School of Social Work. 1996 – 2000

Senior Research Associate
Research Associate, Bureau of Prisons, U.S. Department of Justice,
Federal Correctional Institution, Butner, NC and Tallahassee, FL. 1981 – 1986

Managerial and Administrative Experience

Medical/Health Care Program Analyst, Bureau of Managed Care, Agency for Health Care Administration, Tallahassee, Florida. 1993 - 1996

Executive Director, Salvita, Inc., Tallahassee, Florida. 1989 - 1993

Regional Director, American Diabetes Association, Tallahassee, Florida.
1988 – 1989

Human Services Program Manager and Human Services Program Specialist, Department of Health and Rehabilitative Services, Tallahassee, Florida 1986 – 1988

Presidential Management Intern, Bureau of Prisons, U.S. Department of Justice, Federal Correctional Institution, Butner, NC. 1979 – 1981

Peer Reviewed Publications and Current Submissions

Allgood, J., Mathiesen, S., & Delva, J. (2002 submitted for review). Adolescent marijuana abusers and access to family-based services.

Delva, J., Allgood, J., Morrell, R., & McNeece, C. A. (2002). A statewide follow-up study of alcohol and illegal drug use treatment. *Research on Social Work Practice*, 12(5), 642-652.

Love, C.T., Allgood, J.G., & Samples, F.P. (1986). The Butner research projects: The first 10 years. *Federal Probation*, December.

Recent Reports

Delva, J., McNeece, C.A., & Allgood, J. (October 1, 1999). Evaluation of the state of Florida substance abuse treatment services: Final report. Report submitted to the Substance Abuse Program Office of the Department of Children and Families. Tallahassee, FL.

Delva, J., McNeece, C.A., & Allgood, J. (April 14, 1999). Six-month evaluation of the state of Florida substance abuse treatment services: Methodology report submitted to the Substance Abuse Program Office of the Department of Children and Families. Tallahassee, FL.

Peer Reviewed National and International Presentations

Allgood, J. & Smith, T. E. (January 2001). Time Interval from Age of First Use to First Treatment Episode: Survival Analysis. Presented at the Fifth Annual Conference for Social Work and Research. Atlanta, Georgia.

Allgood, J. & Smith, T. E. (January 2001). Adolescent Substance Abuse Treatment in Florida: Urban/Rural Differences. Poster presentation at the Fifth Annual Conference of the Society for Social Work and Research. Atlanta, Georgia.

Delva, J., Allgood, J., & McNeece, C.A. (January 2000). Evidence of effectiveness of substance abuse treatment: Results of a six-month follow-up study. Presented at the Fourth Annual Conference of the Society for Social Work and Research. Charleston, South Carolina.

Delva, J., Allgood, J., McNeece, C.A. (December 1999). Results of Florida's Six Month Follow-up Study: Methodological and Data Issues. Presented at the Florida Conference on Behavioral Healthcare Evaluation, Orlando, FL.

Delva, J., Allgood, J., McNeece, C. A. (September 1999). The effects of mental health problems on the effectiveness of substance abuse treatment: Results of a six-month follow-up study. Manuscript presented at the World Congress of the World Federation for Mental Health, Santiago, Chile.

Additional Presentations

Allgood, J. G. and Abell, N. (November 1998). Challenging students in the classroom: Raising the bar on expectations. Presented to the faculty and students, FSU School of Social Work.

Allgood, J. G. and Girton, M. (August 1998). Confronting increasing incivility in the classroom. Presented at the Program for Instructional Excellence Fall 1998 Conference. Florida State University, Tallahassee, Florida.

Allgood, J.G. (August 1996). The effects of managed care on health care for children in Florida. Presented at the Governor's Symposium for Children's Health Care, St. Petersburg, Florida.

Lane (Allgood), J.G. and Moore, W. (November 1978). Emergence of a Republican party in South Carolina: A longitudinal study of county political chairmen. Paper presented to the South Carolina Political Science Association, Newberry, SC.

Community and University Service

Student Representative, Doctoral Program Committee, School of Social Work, Florida State University. 1997-2001.

Refuge House, Tallahassee, FL. Developed and presented a 4 hour workshop on domestic violence and mental health. November 1999

Capital City Youth Services, Tallahassee, FL. Developed and presented an in-service training on the use of the most current family therapy techniques. 1997

Florida Department of Agriculture. Facilitated a three-day team development of a model for a juvenile justice facility. 1995

Member, Management Committee, Board of Directors for the Panhandle Healthy Start Coalition, Tallahassee, FL. 1996

Member, Mayor's Task Force on Drugs and Street Crime, Tallahassee, FL. 1989-91.