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IMPLEMENTATION and EVALUATION of A TOKEN ECONOMY PROGRAM IN A HOSPITAL BASED TRANSITIONAL LIVING COMMUNITY

by

Louis F. Cuoco

A dissertation submitted to the Graduate Faculty in Social Welfare in partial fulfillment of the requirements for the degree of Doctor of Social Welfare, The City University of New York.

1998

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4/27/98
Date

Chair of Examining Committee

4/27/98
Date

Executive Officer

Irwin Epstein, Ph. D.

Paul Kurzman, Ph.D.

Andrea Savage, D.S.W.
Supervisory Committee

The City University of New York

Abstract

IMPLEMENTATION and EVALUATION of a TOKEN ECONOMY PROGRAM IN A HOSPITAL BASED TRANSITIONAL LIVING COMMUNITY

by

Louis F. Cuoco

Advisor: Professor Irwin Epstein

The object of this study was to describe and evaluate the impact of a program innovation on the clients of an established project for the homeless chronic mentally ill men. The program, a transitional living community, provided its clientele with a full range of psychiatric treatment, rehabilitation, and case management services. The introduction of the Token Economy Program (TEP) was an attempt at enhancing the program's efficacy and reducing the clients' length of stay.

The author describes the process of introducing to staff elements of a behavioral technology as a supplemental tool to the eclectic approach of the program. Demographic, and diagnostic data were collected on all clients admitted to the program. Three self report symptom scales were utilized first at baseline, and then at either the time of discharge or at the end of the six-month study period. Finally, token earnings were recorded for each of the clients during the study period and analyzed in relation to the diagnostic, demographic, length of stay, and symptom reductions achieved. Diagnostic, demographic and length of stay data from a previous cohort of program clients are also examined.

Symptom scores improved for all clients participating in the TEP. However, the introduction of the TEP did not reduce the time the clients required to complete the program.

A change in the diagnostic and demographic profile with regard to substance use, and criminality between the first TLC cohort and the TEP group was noted, playing a significant role in achieving an appropriate and timely discharge. Furthermore, conclusions concerning the applicability of a modified TEP to subgroups within this client sample are drawn.

ACKNOWLEDGMENTS

Each and every journey begins with an end in mind, if not in sight. It can be a lonely and tedious task, especially when traveling alone. A journey, however, has the potential for being a joyous and enlightening time particularly when one meets fellow travelers who share in the experience.

Tackling this initially nightmarish task, was one such journey. There were many who provided guidance, support and opportunity to learn and grow. First, I would like to thank Dr. Frank Lipton who entrusted me with the initial program that made all subsequent work possible. Dr. Stephen Sands and John Spielberger, MSW who were tremendously helpful, particularly in the early stages of project development. Dr. Arthur Anderson and Jeffrey Rubin, CSW whose friendship, support and efforts' were invaluable. Dr. Chester Feuerstein who has been and remains a guiding light.

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Chapter I: Introduction

"In an ideal democratic society, good government takes care of those who are unable to take care of themselves." (Katz, 1983 p. xix)

> "Fundamental differences do exist among policies developed to deal with different kinds of social welfare problems, and these differences in policy correspond to varying images of the citizens who are in need. These images consist of such elements as the degree of personal responsibility attributed to the person who experiences the problem, the diagnosed seriousness of the problem, and its supposed etiology. ... such images significantly depend upon historical, intellectual and social developments that are sometimes unique in a given society . . . " (Rochefort, 1986. p 2.)

The focus of this work is on the introduction and evaluation of a program innovation utilized in the treatment of homeless, chronic mentally ill men. What follows is a brief review of the rise of homelessness among the severe and persistently mentally ill, contributing factors, and the introduction of a technology to facilitate maximum utilization of a relatively scarce resource, the Transitional Living Community (also referred to as the Continuing Treatment Program), which exists within the continuum of care for the severe and persistently mentally ill.

In the United States there had not been a significant increase in Homelessness from the 1930s until the 1980s (Hopper & Hamburg, 1986). In the 1990s this upward trend in homelessness has continued (Kondratas, 1991; Prabucki et.al. 1995; Hopper et. al. 1997). Some estimates have placed the number of homeless in the United States as high as 2.2 million individuals (Prabucki, et. al. 1995). According to Shern et.

al. (1997) "the best epidemiological estimates indicate that about one-third of the homeless individuals have a mental illness". There is general agreement in the literature (Levine and Rog, 1990; Tessler and Dennis, 1989)that one third of the homeless adult single population suffers from a serious and persistent mental illness such as schizophrenia, mood disorders, and schizoaffective disorder. In New York City, from 1985 - 1989 approximately 10,000 homeless individuals resided nightly in HRA operated shelters. Of these one third were categorized as mentally ill (Susser, Gonover, & Struening, 1989). Further, these disorders rendered them functionally disabled in the social, educational, vocational and residential spheres of life.

Homelessness is a diffuse and insidious problem affecting diverse populations in diverse environments. Due to the awesome impact and the recent awareness in the public and political arenas the plight of the homeless is an issue widely discussed and largely misunderstood. Homelessness has only been recognized as a widespread social phenomenon and gripping problem during the past eighteen years. Definitions of homelessness cover a wide spectrum of individuals which are clearly consisting of several different subgroups who have taken varied routes to this end. There are many roads which lead to Homelessness. Beitchman (1993) cites three major social changes occurring during the 1970s and 1980s, each of which had been identified as the major "cause" of homelessness: 1.) the loss of more than one million units of inexpensive housing due to demolition or conversion to middle or upper income housing and the suspension in the development of new low income housing by the federal government; 2.) the loss of hundreds of thousands of manufacturing jobs in the shift from an industrial to a service economy and resultant dislocation and structured unemployment of low income workers; 3.) the discharge of more than two thirds of the nation's 700,000 state psychiatric patients into the community without provision for adequate housing or services.

Representative Henry Gonzalez, chairperson of the 1982 and 1984 Congressional hearings on the "Homeless in America" summed up the plight of the Homeless, as follows: "The homeless are the ultimate throwaway of a throwaway society. They are people whose skills are limited, whose resources are overwhelmed, whose economic contribution is very small. So, we as a society have simply thrown them away, like so many disposable parts. We do not know how many there are, or have much idea of why they have become exiles on the streets or how to organize a system that would do more than keep them alive from day to day. Human beings are entitled to a life that is decent and fulfilling. It's not enough that we merely give a warm bed and hot meal to the exiles of the street, but that is all we are doing. Tragically, even that is much more than was happening one year ago (hearing on "Homeless in America", 1984, p.4.)."

Talbott and Lamb (1984) among others have pointed to the historic nature of homelessness and how it reflects the "interaction between the most vulnerable of our population and the scarcity or plenty of our resources. Those members of society least able to care for themselves have always been at greatest risk for the loss of residence and affiliation... today their ranks are swelled by the addition of thousands of people suffering from severe and chronic mental disorders... who have been discharged or diverted from institutions" (p 2).

Diversion from State Psychiatric Centers has challenged acute care facilities and community based organizations to provide services of increased scope. Bachrach (1986) has pointed to the evolution of general hospital psychiatry during this period, and the growing number of homeless mentally ill as a consequence of deinstitutionalization. Unfortunately this option of last resort had been poorly planned. While the acute care psychiatric unit plays a vital role in the provision of service it may be most "...effectively implemented in a pluralistic service system where the general hospital unit is one of many facilities responding appropriately but differentially to the individual needs of the homeless mentally ill." (p 342)

An illustration of institutional strain under the burden of deinstitutionalization is the experience of New York City's municipal hospital system. One Health and Hospitals Corporation (HHC) report (Crisis in Mental Health: Issues Affecting HHC's Psychiatric Inpatient and Emergency Room Services. Summary Data January 1989.) cited that 24% of its psychiatric inpatients were homeless; between fiscal years 1983 and 1988 its average length of stay for inpatient treatment had risen by 35.9% while its inpatient capacity increased by 66%. In addition, the number of Emotionally Disturbed Persons (EDP) brought to its facilities between 1976 and 1988 had increased by 1600%(from 1,070 per annum to 17,617). This is correlated with a reduction of 28.5% of New York State Psychiatric Center beds between the years 1978 and 1988. Included in this number are 22% less beds available to New York City: a 52% reduction in transfers of HHC patients to New York State Office of Mental Health facilities between the years 1981 and 1988. In fiscal year 1988, only 49% of the HHC patients requiring intermediate or long term psychiatric care were transferred to State Psychiatric Centers.

A variation on this theme was experienced in Washington State, where the State Psychiatric Hospital population had decreased by nearly 70 percent between the years 1965 and 1975. However in the late seventies through the mid 1980's the State Psychiatric population began to increase once again (Seling and Johnson, 1990). This in part can be attributed to a lack of funding to community based programs. Gralnick (1987) states that "advocates of deinstitutionalization often condemn local communities for not providing the services needed to make it work. State and national governments are also blamed for their reluctance to supply the necessary funds and facilities"(p.2). It is well documented that cost savings attributed to the downsizing of the Psychiatric Centers have not followed the patients into the community. In New York State, "reinvestment" money, defined as funds saved due to the closure of state psychiatric center chronic care beds, was to have been invested into community based programs on the local level. In the past three fiscal years reinvestment funds have been repeatedly reduced or eliminated from the Governor's Budget (Association of Community Living Agencies in Mental

Health Newsletter, 1998).

"Poor Planning, inadequate funding, community opposition, fragmentation of services, and other factors have made it difficult to determine the extent to which a comprehensive system of community-based services can serve the functions that have been historically carried out by the state hospitals." (Okin, 1995 p. 569) Okin continues, "Can the functions and role of the state hospitals be completely replaced? Specifically is it possible to provide treatment in community settings to the entire cohort of long term state hospital patients? Is it possible to develop an acute care system in the community, including psychiatric units in general hospitals that can treat all voluntary and involuntary patients?"(p. 569). Okin's study, carried out between 1978 to 1993, compared Western Massachusetts to the rest of the state. It concluded that the role and function of the state hospital can be "completely replaced" under certain circumstances, specifically when a comprehensive system of community based services is in place. This experiment carefully targeted specific services (Inpatient; non-inpatient emergency, Case management and support, skill development and employment, Residential services and Clinical outpatient services)for the care of the severely and persistently mentally ill patient.

The cost per capita for services provision was $64.17, approximately five percent more than for the rest of Massachusetts. Indirect evidence of a positive impact on quality of life was also reported. Rosenheck, Frisman and Gallup (1995), called for a multimodal approach to service delivery to this patient population which would "provide assertive outreach, general health care, mental health care, substance abuse treatment, residential treatment, housing support, income assistance, and psychosocial rehabilitation" (p. 1131). They augmented this argument with the addition of evaluating the impact of specific treatment elements.

Effective treatment of the severely and persistently mentally ill homeless requires the utilization of a variety of techniques and practices to facilitate each patient's maximum adaptation to the community and the reduction of distress. Continuing treatment/Transitional living programs, such as the program described in this work, and others(Columbia University Community Services' TLC [Transitional Living Community], The Catholic Charities' Brooklyn Women's Shelter TLC, Federation Employment and Guidance Services' Willow Avenue Shelter) each utilize some combination of milieu, case management, client centered, occupational/ activities therapy, pharmaco-therapy and psycho-educational approaches (Lipton, 1990 personal communication). This combination of treatment modalities generally provides symptomatic relief to this persistently impaired population and readies them for placement into a less structured residential, treatment, and rehabilitative environment. The purpose of this work is to report on the impact of adding to the foregoing interventions, the programmatic use of behavior modification techniques, specifically the use of a Token Economy Program. This technique has the potential to augment and enhance treatment effectiveness and patient readiness for discharge. These outcomes may be achieved by reinforcing those patient behaviors which increase the frequency and duration of positive patient-staff interactions. It can be demonstrated that while traditional milieu therapy provides effective symptomatic relief and enhances social and occupational skills, these same treatment gains can potentially be achieved more rapidly and cost effectively using a Token Economy Program (TEP) (Glynn & Muesser, 1986). Moreover, the serious and persistent mentally ill have been found to conform to behavioral principles in TEP learning environments and are therefore capable of benefitting from these highly structured intervention programs (Fisher et al, 1978).

This study describes and evaluates the implementation of one such program. The chapter which follows describes the relevant literature on the use of Token Economy Programs (TEP), with a variety of patient, client, and consumer populations. The literature review illustrates the range of service settings, design features, and the results of these studies. Particular emphasis is given to TEP usage with severe and persistently mentally ill adults.

Chapter three provides the history of the program, and its service setting. Program services are fully described, along with the roles and functions of staff, and the unit's treatment and rehabilitation philosophy. Baseline patient demographic and diagnostic data are recounted with outcome data on this pre-TEP cohort.

Chapter four introduces the TEP concept as an addition to the unit's therapeutic tools with the potential to increase patient and staff involvement in therapeutic activities. An overview of learning theory and TEP program components is also included.

Chapter five begins with a description of the orientation process which preceded implementation of the TEP. Included are the negotiations which took place between the author, staff and patients, and the compromises in the resultant study design. The differential program and evaluation model was also employed to specify the stage of program development achieved prior to the TEP implementation. In addition, elements of exchange theory are discussed when problems in implementation are analyzed.

Chapter six, the "methodology chapter", is a formal presentation of the study hypotheses, a description of the study design, sampling methods, the measures and instruments utilized, and the data analysis.

Quantitative analysis of the data is presented in chapter seven. The final chapter concludes with an in depth analysis of the data, and a discussion of some of the qualitative components of the study which were introduced in the implementation chapter. Recommendations for future studies are made.

Chapter II: Literature Review

The published literature on TEP's emphasizes its capacity to facilitate more rapid and demonstrable treatment gains than do more traditional intervention models such as either psychopharmacology or milieu type treatment.(Paul & Lentz 1977; Elliot et. al., 1979; Fisher et. al., 1978). Programmatically and administratively, TEPs are an attractive alternative to more traditional treatment methods due to their promise of being a more cost effective method than other means (Erickson, 1974; Erickson & Paige, 1973).

TEPs have been utilized in numerous settings and with a variety of target populations. Target populations have ranged from acute and chronic inpatient psychiatric units to special education classes in the school system (Barrowclough, 1991). They include elements of the criminal population (Rice, Quincey & Houghton, 1990) in assorted prisons. TEPs have been incorporated in residential and treatment facilities for individuals who had sustained severe head trauma (Wesolwski & Zencius, 1992), and in those that serve the mentally retarded (Chen, 1989; Chen, 1990; Hughes & Boyle, 1991). Efforts to utilize this technology have met with varying degrees of success, primarily on the community based or outpatient side. TEPs have been successfully incorporated into educational, rehabilitative and psychiatric treatment plans. They have become a useful addition to the educator, rehabilitation specialist, and clinician's armamentarium. Problems ranging from inattentiveness in school, aggressiveness (Jones, Downing, Latowski et.al., 1992), inappropriate sexual advances (Wright, Herzog & Seymour, 1992) and other socially inappropriate behaviors (Lund 1992, Varella-Mallou et.al., 1992) to nocturnal enuresis (Ronen, Wazner & Rahav, 1992), and polydipsia have been addressed utilizing TEP along with other educational, rehabilitative and treatment methods. In the helping professions, TEPs traditionally appear to be primarily focused on in - patient psychiatric units to facilitate improved patient management and secondarily to foster improved social and occupational skills (Ayllon & Azrin, 1965; Atthowe & Krasner, 1968; Cochran, 1969; King et. al., 1960).

Each of these studies demonstrated significant changes in patient participation and cooperation. Changes were noted in a variety of ward routines ranging from activities of daily living to the control of bed wetting. Measures of social responsiveness were significantly increased, and length of stay was similarly decreased. Liberman (1972(a)) observed that findings such as these have been replicated many times in different hospitals. In his view, a Token Economy is a microcosm of society in which the environment is structured to utilize a direct relationship between behavior and reward, to teach the patient that food, comfort and the privileges of society must be achieved through competence in work, personal appearance, and social interaction. In the past, hospitalized patients have traditionally been rewarded for passivity, docility and apathy. Needs and comforts were provided for them unconditionally, whether their behavior proved to be adaptive or bizarre. The token economy seeks to alter this situation by making the hospital more like the real world. Work as we have defined it in this context, must be performed in order to afford additional pleasures. The selection of reinforcers is broad; any therapeutic activity for the purposes of the study presented in this work is used. The critical principle is that the receipt of tokens is contingent on some therapeutic activity which include but are not limited to: individual and /or group sessions; activities of daily living; and medication compliance. Particular deficits or excesses are carefully identified and goals defined.

The TEP is a formalized conditioning procedure which utilizes tokens (generalized reinforcers) as a currency to be exchanged for a wide range of back-up reinforcers. Receipt of the tokens by clients is made contingent upon behaviors that staff consider to be adaptive. Kazdin (1989) defines a token economy as a "reinforcement system based on tokens". (p 120) Kazdin continues by stating "The tokens need to be established as conditioned reinforcers, because they have no reinforcing properties in their own right (p 121)".

Hagen in his excellent review article entitled "Behavioral Therapies and the Treatment of Schizophrenia" (1975) cites Ayllon and Azrin (1968 a) on the advantages of tokens over direct reinforcement: "(1) They bridge the delay between the desired response and the delivery of reinforcement, thereby maintaining the response in strength; (2) they allow the response to be reinforced at any time, where as primary reinforcement is typically restricted as to time and place; (3) they allow sequences of responses to be reinforced without interruption due to the delivery of the reinforcer. (P 79)"

Kazdin (1989) adds that tokens "can often develop behaviors at a higher level than that developed by other conditioned reinforcers such as praise, approval, and feedback (p. 123)." Tokens are backed by a variety of reinforcers therefore, they are much less subject to satiation than other reinforcers. (Kazdin, 1989; Carlson, Hersen, & Elsler, 1972) In other words, "a reinforcer loses its effect when it is given in excessive amounts. This phenomenon is referred to as satiation"(Kazdin, 1989, p. 107). Kazdin and Bootzin (1972) also suggest that tokens may have a summative effect and provide additional incentive value resulting from their association with each of a number of primary reinforcers. Primary reinforcers for purposes of this discussion are items such as food or water, as opposed to secondary reinforcers such as tokens or praise.

In 1961, Ayllon and Azrin of Anna State Hospital in Illinois were the first to implement a ward-wide TEP for schizophrenics. Within five years of publication of their results (Ayllon & Azrin, 1965) numerous hospitals within the Veterans Administration had incorporated Token Economy Programs (Stenger & Peck, 1970). Interest in this treatment method seemed to have increased during the 1970s with numerous articles (Krasner & Atthowe, 1971; Carlson et. al., 1972; Hall & Baker, 1973; Gripp & Magaro, 1971) touting the efficacy of this method on a wide spectrum of problem behaviors, specifically in the treatment of hospitalized chronic schizophrenic patients.

In addition, the TEPs reviewed thus far had a number of common features: multiple target behaviors that are clearly defined;

multiple reinforcing events; and some medium of exchange in the form of points, tokens, or credit cards that are used to reward the quality and / or the rate of a preferred behavior.

TEPs however, had suffered a steady decline in popularity from the 1980s into the 1990s. One strong proponent of the efficacy of TEPs, Corrigan(1991,1995) suggests that in more recent times TEPs have been both infrequently used and often implemented poorly. He also cited several surveys which show similar declines in operational TEPs. In the United States during the 1970s the Veterans Administration operated 27 TEPs, by 1983 only ten medical facilities were operating TEPs. Similarly, in 1973, Great Britain had also 27 operational TEPs, but by 1984 only one remained. In addition, an overwhelming majority of TEPs had been studied on inpatient settings, but only three studies had been published on outpatient settings between 1980 and 1991, one of which was conducted with chronic mentally ill patients. Corrigan(1991) attributed this decline of TEP utilization to a series of misconceptions concerning behavioral technologies in general and TEPs specifically. These criticisms include: token economies are ineffective; their benefits do not readily generalize to other settings; they do not foster individual treatment plans; patients subjective experience of TEPs is humiliating; they are abusive in nature; concerns about milieu management are irrelevant to service delivery in the 1990s; and finally, that effective TEPs are impractical.

As the experimental design possibilities of the TEPs became more apparent in the earlier period (1960s and 1970s), studies combining a token economy system, plus the use of phenothiazines (neuroleptic medications) had proven to be considerably more effective than either alone in the psychiatric treatment for chronic schizophrenics. (Heap et. al., 1970; Birkey et. al., 1971; Gripp & Magaro, 1971; Shein & Zeiberg, 1971; Maley et. al., 1973)

In the fifteen years following Ayllon and Azrin's landmark work, a plethora of outcome studies were published. Hagen (1975) in his early review, cautions us about the "lack of rigor in many investigations" (p 79). Hagen also states,"...even the best studies have generally not included naive raters, reports of reliability on dependent measures, rotating treatment staffs, or attempts to control for expectancy, enthusiasm of staff, and activity level of patients. Thus none is impervious to criticism". (p 80) Accordingly, it would be helpful to review these studies by the type of experimental design of the token economy programs utilized. These are: (1) Single Group Case Studies; (2) Time Series Studies; and (3) Controlled Group Studies.

Single Group Case Studies: The majority of articles focusing on outcomes involving TEPs are case studies. At the time these studies were not considered rigorous or controlled research.

Time Series Studies: Time series designs are an interesting contrast to the Single Group Case Study demonstration studies cited below. Instead, they sometimes utilize an A-B-A own control type of design or build in the systematic introduction of various types of treatment over a series of time. Examples of such work are the studies conducted by Ayllon and Azrin (1965); Atthowe and Krasner (1968, b); Baker, Hall and Hutchinson (1974); Lloyd and Barlington (1968); Winkler (1970); Wincze, Leitenberg and Agras (1972). One criticism made in reviews of these works was that in each of the within-group comparison studies the same staff members were responsible for both the management of the token economy and making the observations during both the treatment and control phases, thus creating the potential for experimental bias.

The research conducted by Baker, Hall and Hutchinson (1974), was the only study from those cited above to conclude that token reinforcement did not emerge as a therapeutic agent. The remaining reports claimed that the Token Economy was responsible for producing dramatic changes in a wide variety of behaviors.

Controlled Group Studies: One of the most vulnerable and crucial aspects of controlled group studies is the formation of the control group. Criticism of these studies included: none of the studies paid sufficient attention either to staff variables (including experience, training, and expectations) or to non specific effects of treatment (such as activity levels, staff-patient contact; and reliability for the dependent measures used). Few studies have compared reinforcement procedures with other therapeutic treatments.

Shein and Zeidberg (1971) were the first to implement the matched subjects design according to age, diagnosis, and chronicity of illness. Their results demonstrated that the patients in the token program not only increased self care and work behaviors but also required less medication. However, there was no assessment of the reinforcement control of behavior by altering contingencies. Therefore, the effectiveness of reinforcement procedures was singly rather than repeatedly demonstrated.

Hartlage (1970) compared contingent reinforcement with individual therapy. He concluded that contingent reinforcement was the more effective treatment for chronic schizophrenia, as indicated by measures of hospital adjustment and interpersonal relations. Marks, Sonoda, and Schalock (1968) also compared relationship therapy (defined as individual one hour sessions, five days per week) with contingent token reinforcement on social behavior, work competence, and communication skills. Each patient received both treatments consecutively with the order being reversed for half of the patients. Both treatments were effective in this study as well, as indicated by improvement on personality and behavioral measures. There were no significant differences between treatment modalities.

Gripp and Magaro (1971) compared schizophrenic patients in the token economy to controls on two other wards. It was discovered later that eighty percent of the patients were not on medications during the program, but because twenty percent were on medications, the token program and the pharmacotherapy were confounded.

Marks, Sonoda, and Schalock (1968) reported no significant differences between token procedures and control programs. However, these studies lacked critical procedures or had controls that did not allow for a fair comparison. The efficacy of the TEPs that were designed to prepare patients for community living and to keep them in the community once discharged generally resulted in token programs being more effective. However, some of these studies were criticized in the literature for being poorly designed, having no follow-up post discharge or having other treatment procedures simultaneously utilized. Nonetheless, no studies reported control programs that were more effective than token procedures.

The Continuing Treatment Program provides an environment where a TEP would both encourage reality adaptation and increase self esteem through successive approximations of positive, functional behaviors. In addition, it would orient the client toward individual rehabilitation goals. Utilization of social learning and contingency reinforcement behavior modification models in the proposed TEP will facilitate behavioral change and decrease length of stay prior to placement.

In the author's experience, the factors which influence community based placement fall within many spheres. They include but are not limited to: the patient's history of suicidal and/or homicidal behavior; medication compliance; the frequency, duration and extent of recent or remote substance abuse; his/her age, and medical condition; history and degree of criminality; and fire setting. Since these variables fall outside of the study's sphere of control, the outcome variable of greatest concern will be the patient's readiness for discharge.

Chapter III: Continuing Treatment Program - Overview and Service Setting

Overview

New York State has funded Community Support Services programs which serve the chronic mentally ill since 1979. In the wake of deinstitutionalization, these programs have been a mechanism for linking comprehensive mental health and support services to these individuals who reside in the community. In 1986, then Governor Mario Cuomo signed legislation that permanently established these programs. The New York State Office of Mental Health promulgated regulations that established client eligibility criteria, state and local responsibilities, and statistical reporting requirements for CSS-funded providers of service (Telson & Cuoco, 1993).

Case management has become an important programmatic feature for ensuring continuity of care for the chronically mentally ill who reside in the community. Intensive case managers (ICMs) are defined as systems coordinators, service brokers and supportive / travel companions for their clients (Kanter, 1989). In February 1986 the host facility, an acute care hospital with a long tradition of serving the sick and poor, began operating a CSS-funded case management program out of its Psychiatric Emergency and Admitting Services. Since its inception, the program had successfully secured ongoing outpatient psychiatric treatment, entitlements, and residential placement for a majority of its clients.

This writer (who was director of the CSS Programs from 1986 to 1990) and the staff in the Case Management Program observed that some of the patients who were discharged from the emergency rooms and from the psychiatric inpatient units were deemed not sick enough, since they were not considered to present as a danger to themselves or to others or to warrant involuntary admission; and when given the choice of a voluntary admission to the hospital they would usually refuse it as an option. These patients also were considered too ill for placement into the state licensed community based residential programs. The following characteristics rendered these individuals poor clinical and financial risks to the community based providers of structured residential programs for the serious and persistently mentally ill: manifestations of acute (though not dangerous) psychotic symptoms; lack of a history of treatment compliance; and frequently, the lack of entitlements in the form of Medicaid, Social Security Disability and or Supplemental Security Income. These always homeless, often very disturbed patients remained so. (See discussions in Beitchman, 1993; Bachrach et. al. 1988; Lipton, Nutt, & Sabatini, 1988)

In assessing the needs of the chronically mentally ill in 1981, Talbott (1981) proposed that the successful management of this population within the community would require many of the same services traditionally provided in psychiatric hospitals (i.e., housing, food, medical and psychiatric treatment, and social and vocational rehabilitation). In line with Talbott's view of enhanced community support, CSS proposed a new link to community living for this population. In January 1988, in conjunction with the New York City Department of Mental Health, Mental Retardation, and Alcoholism Services, and the Human Resources Administration's Office of Health and Mental Health Services, the facility's CSS program opened New York City's first Continuing Treatment Program (this program and others which have followed are also known as Transitional Living Communities). This innovative program was designed to better achieve transition of serious and persistently mentally ill homeless men to the community.

Service Setting & Program Description

The CTP utilized a thirty bed specialized, self contained unit located within the 965 - bed shelter for homeless men operated by the New York City Human Resources Administration on the facility's campus. The building had served as a Psychiatric Hospital from 1932 to 1986, and its design was well suited to a residential or day hospital function. Client eligibility required a history of documented homelessness, a history of a DSM III-R Axis I psychiatric disorder, and an absence of recent significant substance abuse. This last criteria, as we will shortly see, was impossible to screen for. One third of the program's beds were designated for Project HELP patients who were treated on the facility's Homeless Inpatient Unit. Project HELP is a Psychiatric Outreach Program specifically designed to assess and facilitate access to appropriate medical and psychiatric services, including emergency room transport, to homeless street-bound adults. The remaining two-thirds of the TLC's beds were allocated for individuals residing within the New York City municipal shelter system. Referrals for the latter group were made by case-workers in specialized teams placed in the shelter system under the auspices of the New York State Office of Mental Health, and several private not for profit groups. Admission followed a careful referral and screening process. Participation was entirely voluntary.

Continuing comprehensive psychiatric care, psycho-social rehabilitation and intensive case management services were provided to the population described above. The unit was staffed by CSS personnel on a 24-hour per day, 7 day per-week basis. A master's level primary therapist (Social Worker or ABD Clinical Psychologist) was responsible for coordinating all treatment services and housing applications. In addition, the primary therapist provided individual and family psychotherapy and counseling. A psychiatrist performed diagnostic assessments, coordinated consultations with the hospital's medical and psychology services, and prescribed and monitored medications. Nursing staff, who were on-site twenty four hours a day, dispensed medication and provided assistance and training with activities of daily living. Vocational and activity therapists performed evaluations and led a wide range of rehabilitation and socialization groups. The groups ranged from the practical in preparation for community based living (i.e. budgeting, cooking and marketing) to the expressive (role playing, music and art therapy). Intensive Case Managers accompanied clients to benefits agencies, various treatment consultations, and housing interviews and assisted in all phases of applications.

Upon admission a treatment plan was formulated with services specific to the unique bio-psycho-social needs of the client. In conjunction with the client the multi-disciplinary team thoroughly assessed and evaluated short and long term needs. A treatment contract was negotiated during this mutual assessment process specifying realistic behavioral, social and treatment expectations the team and the patient had of each other.

The goals of the CTP were threefold: First, continued psychiatric treatment and psycho-social rehabilitation to result in a higher level of functioning, a better understanding of both the method and the course of treatment, and prophylactic measures utilized to combat future exacerbations leading to continuity of treatment after discharge. Second, securing all necessary entitlements which include Public Assistance, Medicaid, Veterans' Benefits, Social Security Disability and/or Supplemental Security Income, and Food Stamps. Third, location of a viable domicile. Operationally, this meant placement into the next level of "least restrictive environment". This category included a broad range of settings from Single Room Occupancy Hotels without supportive services to Supervised Community residences. In 1987, further downsizing of the State Psychiatric Centers placed additional demand on programs such as this one, and a fourth goal was created, to transition all patients through the CTP within a six month time frame. Clients optimally spend between three and nine months at the program. After discharge, clients received at least three months of follow-up, which were performed by their ICMs.

Demographics and Client Profile (January 1988-January 1990)

One hundred and eighteen were enrolled during the first twenty four months of program operation. Demographic data collected at intake from clients and available records illustrated that: the mean age at admission was thirty nine years; seventy five percent of the clients were American born; more than fifty percent were African American, and eighty five percent were never married (Table III-1). In addition, most of the clients had at least some high school but had worked only at odd-jobs. Most had never served in the military, and nearly fifty percent had criminal records (Table III-2).

Table III-1. Age, race, birth place, and marital status of CTP population (N=118)

Variable	N	%
AGE (years)		
18-29	24	20
30-39	41	35
40-49	34	29
50-59	18	15
60-69	01	01
Race		
Black	62	53
White	41	35
Hispanic	12	10
Other	03	02
Birth place		
United States	89	75
Other	29	25
Marital status		
Never married	100	85
Married	0	0
Div. or sep.	13	11
Widowed	5	4

On admission to the program, eighty three percent of the clients carried a diagnosis of schizophrenia (Table III-3). A substantial proportion of all program clients had an extensive history of illness, and many had been hospitalized in state institutions over many years. Ninety five percent had at least one prior psychiatric hospitalization. Usually, medication could successfully treat these clients' positive symptoms (hallucinations, disorganization, paranoia, and affective disturbances). However, many continued to be delusional and have thought disorders, even when they achieved a baseline level of functioning, despite careful adjustment of medication. Even more commonly, clients manifested numerous negative symptoms; among them were apathy, negativism, concrete thinking, lack of insight, poor self care, and poor object relatedness. Fifty three percent of the clients had a history of serious alcohol or drug abuse at some time during their lifetime.

Table III-2: Education, work history, criminal record, and veteran status of CTP population (N=118)

Variable	N	%
Education		
None	2	2
Grades 1-8	8	7
Grades 9-12	39	33
High School diploma	39	33
Some college	23	19
College degree	7	6
Work History		
No significant work	5	4
Odd jobs only	68	58
At least one long-term job	45	38
Criminal record		
Felony conviction	19	16
Misdemeanor only	35	30
No criminal record	64	54
Veteran status		
Yes	28	24
No	90	76

Two- thirds of the clients arrived at the program via the shelter system, and twenty five percent were initially brought to the facility by Project HELP and referred directly from the hospital. The remaining eight percent of the population were not referred through planned channels, but came instead from the facility's general psychiatric inpatient census or from off the streets. The mean length of stay for all clients was 116 days (Table III-4).

Client placement in a community-based residence was considered "successful" if the client remained in the residence for at least three months or transferred to an appropriate higher level of care (Table III-5). Of the seventy nine clients who were referred from shelters, sixty seven percent were successfully placed, after a mean length of stay of one hundred and fifty four days. The remaining third of shelter clients left against medical advice or were discharged. Of the twenty nine Project HELP clients, sixty nine percent were successfully placed; their average length of stay was one hundred thirty one days. Among the "other" clients, sixty percent were successfully placed after an average length of stay of one hundred seventy six days.

Table III-3: Psychiatric diagnosis and history of substance abuse of CTP population on admission in first 24 months of operation (N=118).

Variable	N	%
Psych. diagnosis		
Schizophrenia	98	83
Affective disorder	15	13
Atypical psychosis	5	4
History of subs. abuse	63	53

Clients in the Project HELP group were only slightly more successful in completing the program than those in either the shelter or other categories, but their average length of stay was markedly shorter. This difference can be at least partially attributed to the fact that they were enrolled in the program after being treated for an average of thirty days in an inpatient setting. Prior inpatient care allowed for thorough medical and psychiatric assessment and treatment resulted in these clients being psychiatrically stabilized at the time of admission.

Table III-4: Referral source and mean length of stay of CTP population (N=118).

Referral source	N	%	Mean LOS (days)
Shelter	79	67	122
Homeless Psych. Unit	29	25	99
Other	10	8	127
Totals	118	100	116

The longer length of stay for successfully placed shelter or "other" clients can be attributed in part to minimal or erratic treatment before their CTP admission. Many of these individuals had avoided, resisted, or been ignored by the system. Likewise, most were either not receiving medication long enough to be considered at psychiatric baseline. Therefore, the CTP was treating this group initially in a way similar to an inpatient mode and then stabilizing them on medication, while providing all additional rehabilitation services.

Table III-5: Placement status and LOS of CTP population (N=118) by referral source.

	Not Placed			Placed		
Referral source	N	%	Mean LOS (days)	N	%	Mean LOS (days)
Homeless Psych. Unit	20	69	131	9	31	28
Other	6	60	176	4	40	53
Shelter	53	67	154	26	33	57

Clinical Issues

The CTP as it stood during these first twenty four months offered a unique combination of structure, supervision, guidance, and autonomy to the population of homeless, serious and persistently mentally ill men that it served. The diversity of clients' historical and clinical characteristics presented the staff with a wide variety of problems in working to stabilize, socialize, and place them in viable settings. This writer has identified several major categories of issues that were the focus of attention at the CTP. In each of these areas the issues are different from those that manifest themselves when the clients are in hospitals, in other shelters, on the streets, or in transit.

Entering the Program

The CTP acknowledged the psychiatric disabilities of each client; it also required of clients a level of commitment and motivation to their rehabilitation that would ultimately result in acquiring the skills necessary for successful community based living. The program had to continually balance restrictiveness and freedom for the clients to successfully become engaged and maintain active participation. Men who were felt to require continuing treatment, but who could not be placed in the community immediately, were the ones referred to the CTP. It had been the task of the program to enable these often quite disturbed and isolated patients to form attachments to staff and feel comfortable on the unit so that they could remain in treatment.

There is always some risk involved in placing hospitalized individuals in a less restrictive setting. If the individuals are not motivated to remain in treatment there is a good chance they will elope directly after admission. Some Project HELP patients continued to subscribe to their delusions that they had jobs, places of residence, and responsibilities in the community and would leave the program. Others consciously manipulated the inpatient staff, well aware that as soon as they were discharged from the hospital they will return to the streets. The manipulations took the form of acting cooperatively on the inpatient unit with medications and stating that their interests were congruent to that of the treatment staff. In other words, the patient would clearly state his need for ongoing treatment, engagement in a rehabilitative process and eventual residential placement. These options, from the patients' perspective, were superior to the prospects of continued inpatient care on a closed (locked) unit either in an acute care facility or in a State Psychiatric Center. In the first nine months of the CTP's operation, three Project HELP patients left within 24 hours of admission, and another left within 48 hours. Three other patients left between 3 and 10 days after admission. Elopement of clients (abruptly leaving the unit without notice)from the unit within a short time after admission often had wide repercussions including the decreased motivation and disappointment of staff. To address the disturbance of morale created by early elopement, the program worked to improve its screening system for new patients. The motivation of future patients was assessed in greater depth by having them attend the program accompanied by hospital staff while they were still inpatients. The CTP staff could address patients' fears and reservations, while evaluating their social skills and potential to interact with peers. In the fifteen months that followed these changes, only one Project HELP patient eloped within two weeks of admission.

For the most part, patients who have been residing in shelters have had an easier time adapting to the CTP than have patients from the Homeless Psychiatric Unit. In the shelters they had been responsible for self-care, their own meals, arranging their own time schedules, and for dealing with ICMs, benefits officers, and shelter staff. Many of these men were already somewhat motivated for treatment, were taking medication, and perceived the program as providing a safer and more comfortable atmosphere than that of other shelters where they could receive ongoing medical and mental health care.

Early departure, and sometimes elopement among this shelter population most often occurred between 2 and 6 weeks after admission. Sometimes the structure and rules of the CTP were perceived as overly demanding and restrictive. Those who resisted returning before curfew, having to wake up early, sharing in responsibility for keeping the unit clean, participating in assigned groups, and socializing with staff and peers were more likely to return to another shelter. Patients were permitted scheduled passes and two unplanned overnight absences; those who stayed out were evaluated, counseled, and reminded of the rules. Every effort was made to plan passes to accommodate the patients' activities to avoid mandatory discharge after three absences.

Commitment and Compliance

Once individual patients made a commitment to remain at the CTP, whether they gained admission from the hospital, the shelter system, or elsewhere, they were asked to utilize all of their resources to work toward the goal of residing in the external community. This commitment required a variety of skills and motivations. The voluntary nature of the program continually emphasized to the patients that staff are there to assist them, but that there is also much that is required of them.

Medication.

One of the fundamental principles of the program was that patients would continue taking the medication prescribed by their inpatient or outpatient psychiatrists or comply if it was prescribed at the CTP. Patients were evaluated at the time of admission by their primary therapist and within the first week of the program were given a schedule of activities and were to meet with each of their individual workers.

Patients were then interviewed by the staff psychiatrist with the entire treatment team within the first week of admission, ensuring that they would feel comfortable when meeting the team to discuss the treatment plan. At that point, patients already knew and had begun to develop a relationship with the various staff members in the room. The information provided by the treatment team to the psychiatrist permitted the psychiatrist to make a more informed diagnostic and medication assessment. The entire team would also clarify questions about the history and mental status together while patients were made aware that the team would be collaborating on their behalf. The team psychiatric evaluation also allowed the entire staff to participate in an academic discussion of patients' psychiatric diagnoses and prognoses.

The psychiatrist would continue to meet on a regular basis with each patient. Daily morning reports and bimonthly team meetings provided the psychiatrist with immediate notification of any alteration in a patient's clinical status. When patients were started on new medication, or when medications were changed, they were seen frequently enough so that any adjustments could readily be made.

The nursing staff were responsible for medicating clients.

This policy ensured that the clients took their medications as prescribed and that problems with compliance would be quickly identified. All efforts were made to give medications on the simplest possible regimen. If clients could be medicated at the hour of sleep only or once in the morning and once at night, they would be much more likely to get their entire day's medication and to continue on the same regimen after placement.

The Project HELP patients in treatment at the CTP tended to be compliant with medication. These individuals generally had been on a strict medication schedule in the hospital, and they were used to taking the medication without difficulty. Medication side effects and dosages had generally been adjusted while in the hospital, and Project HELP patients were usually on an appropriate regimen. Patients who had been in outpatient treatment for a period of time usually presented in a similar fashion.

Patients who were started on medication only recently before admission to the program tended to require more frequent meetings with the psychiatrist for dosage adjustment and reassurance. These individuals also tended to have histories of erratic medication compliance. The most problematic patients, in fact, were those who were very resistant to taking medication, because of either their denial of illness or oppositional and antisocial personality traits. In working with these patients, the team approach had been crucial. The psychiatrist's interventions were reinforced by the primary therapist and the entire staff, who conveyed consistent psychoeducational messages.

Substance use.

Another fundamental principleHospitals of the program was that patients would not have a significant drug or alcohol abuse problem. For practical purposes, this excluded individuals who had abused drugs or alcohol within 6 months prior to admission. This restriction was necessary because persons with Axis I diagnoses of substance abuse require treatment settings that can focus specifically on those problems, including staff specially trained in working with substance abuse, additional monitoring mechanisms, and laboratory screening. Given the easy availability of alcohol and illegal substances, it was important that CTP clients made a commitment to remaining substance free.

Because of prescreening, the vast majority of Project HELP patients at the CTP had no current substance abuse problems. Patients admitted from the shelters or the streets, however, often did have substance abuse histories that were not obtained at intake, because of either denial or deception. When further clinical assessment or the receipt of old records revealed that substance abuse was a significant problem, patients received special substance abuse counseling. When more intensive treatment was required, clients were referred to Alcoholics Anonymous or similar self-help groups discussing illegal substances, as well as day treatment programs if necessary. Patients who brought drugs or alcohol onto the unit were immediately discharged and referred to another facility if acute treatment was required. This was an infrequent occurrence.

Traveling.

Many homeless mentally ill people have a propensity to travel, particularly when they have the capacity to care for themselves to some extent and are able to use the resources available in various locations. For the most part, Project HELP patients who are referred to the CTP have not had a significant history of wandering. Although they may have been homeless for a long period of time, their traveling usually involved going to different areas of the same city. Clients who have lived in the shelter system, however, have been much more likely to have some history of traveling. We have worked with men who know and are known to a number of agencies and clinics in another city that they consider their place of residence outside of New York. There are also clients who have routinely visited shelters in cities throughout the country. One example of this was a then 52 year old, single white male who suffered from chronic paranoid schizophrenia. This bright, articulate, and likeable individual had lived in shelters and had been periodically hospitalized in New York, Boston, Chicago, and Los Angeles. Approximately two months in to his stay on the unit, and after receiving back SSI/SSD payments, the patient disappeared. The standard procedures were followed including: filing a missing person's report with the local authorities; contacting the area emergency rooms; contacting next of kin; and alerting the homeless outreach programs who checked the patient's favored hangout spots. Several weeks later the author received a call from the Social Security Administration concerning this patient and inquiring about one of the program's case managers. The patient who was delusional at the time accused the case manager of blocking delivery of the patient's SSI/SSD benefits. The patient was shocked that the Social Security Administration investigator did not know of the case manager who was a member of the popular 1960s era folk group "Peter, Paul and **Malcolm**". The patient had been hospitalized for an acute exacerbation of his chronic illness.

The impulse to leave for another city is usually the direct result of patients being unable to handle an acute emotional stressor. Often this has involved the illness or death of a family member or close friend. Most commonly, however, patients have prepared to move when they seem to be doing too well (i.e., when they are about to be placed or when they have begun to successfully confront long-standing psychodynamic issues in psychotherapy)as in the aforementioned case.

Whenever there had been an indication that a patient with an inclination to travel was in distress, the CTP staff directly and consistently addressed the cause. In this context, staff had also emphasized how traveling is in direct contradiction to a stable life in the community. In most circumstances, this intensive approach averted elopement. When patients left but then returned to the CTP - in one case after a 1-month cross-country bus trip and in another after a 1-year stay in familiar shelters in Philadelphia - we readmitted them and then worked to help them understand their behavior, rather than taking a punitive approach.

Handling money.

Although clients were not responsible for paying rent or for meals at the shelter, they did need money for things such as clothing, entertainment, toiletries, and cigarettes. For the most part, the population that the CTP served was eligible for Social Security benefits. For clients who were already receiving benefits when admitted, usually no additional work was required. When benefits were not already in place, however, patients were required apply or reapply for Social Security and for temporary public assistance. The ICMs provided crucial assistance to patients in negotiating the often confusing and time-consuming repeated contacts with benefits agencies.

Sometimes problems arose even when individuals were already receiving benefits. In some cases, there was a representative payee who could not be located, was unavailable, or uncooperative. The responsibility then fell on the CTP to clarify the relationship between the patient and the payee. CTP staff would intervene to the extent necessary to provide funds for the individual and ensure that benefits would continue once placement was arranged. Although the CTP could not become a substitute representative payee, we had been able to arrange protective payee status, whereby the CTP did not have power of attorney but did receive patients' benefits checks on their consent and notification of the agency.

Sometimes patients who were receiving their own benefits had difficulty setting priorities and handling their funds. Budgeting and money management groups were quite effective in addressing these problems and educating patients. When patients spent money on alcohol or drug binges they were evaluated and referred for special substance abuse treatment. Some patients, however, spent large amounts of money in other ways, most commonly for prostitutes and exorbitantly priced or inappropriate items of clothing. These patients often required intensive work with their primary therapists and close supervision by case managers. Sometimes the case manager would hold on to a patient's bank book with his consent and assist him with all deposits and withdrawals. In certain cases, a patient was so irresponsible and unable to control his spending that an application would be submitted by the psychiatrist to Social Security stating that the patient could no longer handle his funds and required a payee.

Unmanageable behavior.

Sometimes patients manifested behavior that could not be managed on an open unit with a small nursing staff and no seclusion or restraint. When a patient decompensated and became extremely agitated or physically or sexually aggressive toward peers or staff, hospital police were notified and the individual was immediately brought to the psychiatric emergency room. We found that a close working relationship and open communication with emergency room staff guaranteed that patients received the appropriate acute care and hospital admission when necessary.

Occasionally patients exhibited bizarre behavior that was not acutely dangerous but that posed a threat to the orderly functioning of the unit. Most commonly this involved patients who collected items from the street and warehoused them on the unit. Such problems were addressed by the primary therapist, and all staff would work with these patients to modify this behavior. If the behavior persisted despite these interventions and existed in conjunction with other evidence of disorganization and an inability to function, patients were referred to the emergency room. When patients were simply uncooperative, they were discharged from the CTP and offered follow-up support services.

Families.

Despite their homeless status, many of the CTP patients had family members who had at some time been actively interested in and involved with them. Whenever possible, we endeavored to gain consent to contact family members. In our experience, family members were often extremely helpful sources of information about the psychiatric histories and presentations of patients and often provided key information for the understanding of their current situations.

Whenever patients maintained continuous contact with family members, the primary therapist was available to work on problems and misunderstandings in family sessions. Much more commonly, however, both Project HELP and shelter patients had been estranged from family members because of their psychiatric disturbances and had chosen isolation. When contact was initiated with these family members, we assured them the program would continue to take responsibility for the patient's long-term psychiatric treatment and rehabilitation and for other areas that in the past had been difficult for family members to negotiate, such as benefits. Although numerous family members continued to maintain their distance or simply did not have the capacity to provide either emotional or financial assistance, we found that in many cases they were quite helpful. Parents, siblings, and children provided small sums of money to their patient-relatives and, even more importantly, had become actively involved in providing emotional support and input about placement.

On a number of occasions family members assumed complete responsibility for CTP patients. A 54-year-old white man with a 30-year history of schizophrenia, who had impulsively moved to New York from Boston and was hospitalized by Project HELP for severe self-neglect, did not return to the CTP from a scheduled weekend visit with his sister. The sister phoned to say that because her brother was psychiatrically stable she would house him and arrange for his follow-up treatment. In another instance, a 39-year-old man with at least a 2-year history of atypical psychosis was contacted by a brother who was visiting from their native Yugoslavia. The brother made arrangements for the client to return with him to the family farm after a 20-year absence. In a third case, when it was learned that a 35-year-old man with an Australian accent and a 6-year history of psychosis had not, as he originally claimed, been born in Salt Lake City, his legal status changed. Whereas he had received Social Security in the past, he successfully completed a work program at the host facility, applied for a job, but was found to be an illegal immigrant due to be deported. CTP staff worked closely with the Australian Consulate, which was able to contact the patient's estranged father in Sydney. The father paid for the patient's airfare home and agreed to provide temporary housing and arrange psychiatric follow-up.

Placement.

Successful placement in the community requires that an individual patient be matched with a facility in which his particular needs can be met. At one end of the spectrum are patients who are marginally functional and require a highly structured setting; at the other end are patients who can handle a great deal of autonomy. To be most effective, primary therapists seek to acquire thorough knowledge of both the patient's level of functioning and the range of available housing options to arrange a placement that will be successful over time.

Sometimes however, patients do not wish to cooperate with placement applications because they feel that the proposed settings are too structured or restrictive. Placement sites that have rules about how patients spend time or money are most often perceived this way. Patient resistance is usually due to substantial denial or limited insight into their illness and its consequences. With these patients CTP staff made every effort to explain the need for the suggested level of care and to patiently work with them. Applications were pursued when the patient was agreeable and motivated.

Despite the success of the CTP in stabilizing patients psychiatrically and ensuring that their benefits were secure, some patients who did well at the CTP were difficult to place. Most often these were individuals with histories of felony convictions, particularly for violent crimes, and severe substance abuse. Even when patients had these problems long in the past, many placements rejected them without considering their current clinical status. The CTP was committed to working with these patients to explore every available option. Unfortunately, however, sometimes patients who had been repeatedly rejected, whereas their peers were successfully placed, became so frustrated that they simply moved to another shelter or to a single-room occupancy hotel. Unfortunately, on two occasions such clients reverted to abusing substances they had not used in years.

In this chapter we have seen the nature and scope of the services provided to the patients enrolled in the program. In addition, the multiple challenges posed to both patients and staff alike to meet the needs of multiple consumers including: the host facility; the municipal shelter system; the community based organizations which provide residential and outpatient treatment services; and the agencies which administer the entitlements.

The host facility and the municipal shelter system confronted the program with a most difficult challenge, to substantially reduce length of stay. The hoped for result, was the increased availability of a viable treatment and rehabilitation option. The following chapter, addresses this issue by introducing the Program Innovation, the incorporation of the Token Economy.

Chapter IV: Token Economy Program as Program Innovation: Purpose, Components, and Implementation Plan.

1. Purpose

The goal of this program innovation was first, to promote patient rehabilitation and decrease subjective distress facilitating the patient's readiness to leave; second, to improve client management on the unit; and, finally to increase patient/staff interaction and motivation.

Patients can only be returned to the community when they learn specific behaviors and incorporate a functional set of social and occupational schema which will enable them to cope with both their illness and with the demands of living in the community.

The learning that would occur with the addition of a behavior modification structure would be further enhanced by the consistent and nurturing CTP environment. Staff consistency in applying the unit behavioral rules and allocating tokens and other rewards would be necessary to achieve the TEP program and overall CTP program objectives. To this end, all staff members were thoroughly oriented in both the techniques required to implement TEP, and the rationale that underlies behavioral modification techniques. This fostered an environment of consistently predictable contingencies for both positive and dysfunctional behaviors to outcomes.

Ultimately, the learning that would occur within the TEP would help achieve the overall long term CTP client goals of relapse prevention, functional adaptation to the community, decreased distress, and enhanced self esteem.

The primary underlying goal of this study was to determine the relative merits of using a Behavior Modification program with the CTP client population and develop a TEP that is effective within that environment. Cost effectiveness and efficacy for TEPs has been demonstrated in a variety of inpatient settings. (Paul & Lentz, 1977; Elliott, et. al., 1979; Fisher, et. al., 1978). The programs outlined in these studies effectively managed their patient populations and achieved rapid behavior and rehabilitative improvement utilizing behavioral technologies.

In reviewing these articles and exploring the operational TEP functioning in the host facility, it was noted that most existing TEPs focused on the needs of inpatient psychiatric units. For behavior modification and learning to occur within an outpatient setting, a rehabilitative focus would have to replace the primarily management goals of an inpatient unit TEP. With this focus in mind, it was determined that a TEP in the CTP would allow for both increased client maintenance and rapid achievement of rehabilitative goals. This will be explored further in another portion of this paper.

A token economy at the CTP, when used in combination with other behavioral strategies, would significantly enhance current treatment and facilitate a more rapid transition to the community. A token economy offers advantages over other reinforcers such as candy or cigarettes. First, tokens are potent reinforcers and can often develop behaviors at a higher level than developed by other conditioned reinforces such as praise, approval and feedback. In general, both the cognitive limitations and the degree of material deprivation sustained by the study's targeted client population make tangible reinforcers, such as tokens, a more powerful tool. Second, tokens bridge the delay between target response and back-up. Third, because tokens are backed up by a variety of reinforcers, they are less subject to satiation than other reinforcers. Fourth, tokens can easily be administered without interrupting the target response. Fifth, tokens permit administering a single reinforcer to individuals who ordinarily have different reinforcer preferences. Those preferences can be used in the exchange of back-up reinforcers. Finally, tokens permit parceling out other reinforcers (i.e. activities) that have to be earned in an all or none fashion. These advantages clearly identify a token economy at the CTP as a necessary and effective treatment strategy that will enhance learning, treatment, and rapid achievement and retention of long term rehabilitative goals.

2. Introduction of Technology

A series of meetings were held with the interdisciplinary staff of the Unit to discuss the goals and objectives of the existing Program and the potential utility of this technology in advancing them. In addition, exploration into the ramifications of incorporating this technology from a knowledge and values based perspective was held. Theoretical, ethical, philosophical and technological issues raised by staff did have a dramatic impact on the form, implementation and outcomes of this study. It was the author's intent to incorporate, to the extent possible, their suggestions and to heed their objections. Further, these meetings served as training for their respective roles in the process. Some of these elements are described more fully below.

Treatment Contracts.

All patients were to negotiate a treatment contract with their primary therapist upon admission to the program. This contract contained the individual treatment, learning, and rehabilitation goals. In addition, it delineated the expectancies of performance to outcome contingencies that were to be in operation during the patient's stay on the unit. The primary therapist was to dispense those token credits that were applicable when objectives and intervention plans detailed in the patient's individual treatment plan were adhered to. This was perhaps the most critical aspect of the behavioral modification program, since clear contingencies between behaviors, outcomes and incentive values had to be established to build and maintain sufficient motivation to achieve positive change within the program.

Token Economy.

All clinical staff were to participate in the disbursement of credits to individual patients. Patients could earn credits through meeting or exceeding individual treatment goals and maintaining performance in CTP Programmatic goals. (See Token Incentive Values and reinforcement schedule) Credits could then be used to purchase tangible rewards, such as items in the CTP store, or for reinforcing events such as movies or group trips. The token credits need only to be established as conditional reinforcers, as they have no real reinforcing properties in their own right. The value of the goods and the events maintain the intrinsic motivation to perform up to program and individual standards. Thus, the advantage of using tokens is in the variability and individual application of the tokens to those patients who value each outcome differently.

Social Reinforcement.

In order to achieve maximum treatment gains in a behavior modification program, clinical staff must use social reinforcers such as verbal praise, attention, appropriate physical contact (e.g., hand shakes) to augment the material, extrinsic outcomes of the token - credit system. Including social reinforcement to a behavior modification plan allows for immediate reinforcement of target behaviors and avoidance learning (by withholding social reinforcement) for noxious behaviors.

Feedback.

Motivation is central to any behavioral treatment construct. In any learning situation, motivation is a function of behaviors meeting standards which will achieve desired outcomes. Both social reinforcement and the token - credit system are designed to deliver immediate feedback to patients that will increase their desire to achieve individual treatment goals.

Avoidance Learning.

One of the primary goals of a learning - behavioral treatment plan is to re-establish the linkage between contingent behaviors and outcomes. In order to achieve long term incorporation of social and rehabilitation/occupational behaviors both positive and negative outcomes must be utilized to mimic those of society. These are illustrated below. Within the context of the program there can be two levels of avoidance learning: Level One entails the withholding of intrinsic and extrinsic social reinforcement and token credits. The aim of this is to extinguish dysfunctional behaviors and reorient the patient toward achieving positive outcomes. This goal is incorporated within both the token credit system and social reinforcement system. Inappropriate behaviors would simply be ignored and no outcomes would be gained. Therefore, attention seeking behavior would not be rewarded by either positive or negative rewards, and have a greater probability of extinction.

Level Two involved the presentation of negative outcomes and were to be used when the patient was in danger of harming himself or others. In addition, situations involving substance abuse, verbal or physical abuse of other clients and/or staff, and missing curfew would all fall into this second category. Behaviors such as these would precipitate undesirable consequences which would include "time outs", program suspensions etc.

Prompting.

Clinical staff were to continually encourage, or prompt, patients toward target, goal behaviors. Token credit sheets and prompt signs on the unit provided an additional source of visual prompts. Prompts could range from gentle reminders to attend various sessions, or attend to activities of daily living, such as bathing and grooming, to confronting the patient over the need to fulfill his contingency contract. Prompting, combined with verbal praise served to strengthen expectancies and leads to higher frequencies of target behaviors.

Shaping.

Many goals are initially beyond the reach of some patients. For example, interacting appropriately in social situations may, at first, be too difficult a task for any schizophrenic and delusional patients. However, by first targeting simple social interaction behaviors on the unit and training patients to approximate a series of successive, successful simple interactions, a chain of behaviors can be established. Once this chain has been established, long term, complex behavioral goals such as appropriate social interaction can be achieved by even the very withdrawn individual. Shaping was to be included by the primary therapists into the contingency contracts and treatment plans.

Transfer of Learning.

Changes produced in the clinical setting must be directly applicable to the community setting for any treatment to be considered effective. Therefore, target behaviors and goals must focus on skills necessary for successful community living. To facilitate this, group and individual treatment plans must address the following cognitive learning skills:

"1. Alternative solution thinking is the ability to generate different options (solutions) than can solve problems in interpersonal situations.

2. Means-end thinking is the awareness of the intermediate steps required to achieve a particular goal.

3. Consequential thinking is the ability to identify what might happen as a direct result of acting in a particular

way or choosing a particular solution.

4. Causal thinking is the ability to relate one event to another over time and to understand why one event led to a particular action of other persons.

5. Sensitivity to interpersonal problems is the ability to perceive a problem when it exists and to identify the interpersonal aspects of the confrontation that may emerge (Kazdin, p.244)." This will enable patients to continue to successfully adapt to their environment long after the behavioral treatment has ceased. Reinforcers in the environment are then recognized and utilized by the patient to continue to shape successful, functional behaviors in the community.

Client Participation.

To further the goals of increased patient - staff interaction, both groups participated in the operation of the TEP. Patients were to operate the unit store under the supervision of staff. This was to serve as an additional analog to the "real world". The patients were also to maintain their own token credit sheets and also arbitrate disputes over token distribution practices through the patient appeal board. This was to allow for a significant degree of patient control and operation of the program. Further, it was to serve as a model for how individual problems could be appropriately resolved in the community proper. However, patients declined to form the Appeal Board (see Implementation of TEP Chapter for a full discussion). Moreover, having a greater stake in the program theoretically should have increased the patients' investment in the outcomes, and yield a greater willingness to participate.

Administration.

Wherever possible, patients were encouraged to operate various aspects of the TEP themselves. This was to decrease the demands made of the staff and encourage functional participation in the program. All levels of the clinical staff were to participate in and monitor the disbursement of token credits and social reinforcement within their own specialty. For example, Nursing staff were to monitor and dispense tokens for morning care (i.e. bathing, making beds), while primary therapists were to encourage patients with social reinforcement and the dispensation of tokens for meeting individual treatment goals. Activity therapists were to dispense token credits for attending groups and other activities.

Token credits were dispensed on a daily and weekly basis for behaviors that approximated target program and individual goal behaviors. These were accumulated on a token - credit sheet on a weekly basis and were to be traded in daily for store items (see reinforcement schedule). On a weekly basis, participation in special events was based on the accumulation of credits.

The patient appeal board, was to consist of one staff member and three patients. Its purpose was to arbitrate disputes arising over the dispensation or cashing in of credits. Patients who felt that they had been unjustly treated or denied tokens, could present their respective cases to the appeals board. In the event that the patient remained dissatisfied after the board had heard his case, he could make a final appeal to the program's associate director who would have the power to resolve the matter.

The patient store maintained incentive items such as candy, cigarettes or other items which were purchased with petty cash. Participation in the store was to be decided on a weekly basis by the proposed appeals board. However, participation was eventually based upon a patient’s willingness to help run the store. All other rewards were dispensed by the primary therapist so that control over the extrinsic rewards could be monitored and maintained. This insured that patient behavior to goal contingencies would be directed toward rehabilitation and long term learning goals. Thus, the short term learning that occurred could be incorporated into a long term treatment strategy.

Table IV-1 presented below was proposed to the staff as the value scale for the dispensing and debiting of tokens. Its presented in its original form to provide the reader with a normative scale for a Token Economy. The Implementation Chapter which follows discusses the debates which ensued and the compromise resulting in the elimination of all negative token values. Negative behaviors therefore only carried whatever pre-existing penalties which had been associated with them. Therefore, the double jeopardy associated with the loss of tokens was eliminated.

Table IV-1: TOKEN INCENTIVE VALUES:

TARGET BEHAVIORS	POS. VALUE	NEG. VALUE
Acting Bizarrely		3
Acting Appropriately	3	
AM Care		
Showering & Shaving	2	2
Personal Grooming	2	2
Making Bed	2	2
Room Maintenance	2	2
Medication Compliance (Daily)	1	2
Therapy Attendance (Individual)	2	2
Therapy Attendance (Group)	2	2
Off-Unit Program Attendance	2	2
Community Meeting Attendance	2	2
Volunteer Activities		
Community Area Maintenance	2	
Other volunteer activities	2	
Breaking Curfew		25
Substance Abuse		40
Threatening verbal and/or physical behaviors		60

Individual Target Behaviors.

Housing, entitlements and treatment - compliance to individual intermediary goals - individual contracts. Tokens were to be allocated on the basis of fulfillment of the initial contract and meeting interim treatment - learning goals.

Table IV-2 **REINFORCEMENT SCHEDULE**

Backup Reinforcers	Required token-credit
Cigarettes	3
Events	
Hospital	15
Movies	15
Sports	variable
Theater	variable
Eligibility for Work Program	10
TV and Community Room Activities	1
Food (cake & candies)	8
Restaurant Gift Certificate	40
Appeal Board	60
Pass for extended curfew (1 hour)	30
Running Store with staff	60
Gift Certificate	variable

Table IV-3 Avoidance Learning Contingencies - Level Two

In-house suspension from activities and Day-room	-10
Time-out (3 hours)	-20
Isolation from all Non-Tx activities & privileges	-50

Some back-up reinforcers were perceived to have different value, based upon the event or the rarity of such an item.

Prompts

Signs on the Unit

Token Credit Sheet

4. DISCUSSION

One of the most important determinants in the use of a TEP in the continuing treatment program is the potential to enhance the scope and quality of patient care. Often, patients who appear quiet and withdrawn receive the least amount of attention. Metaphorically speaking "the squeaky wheel gets the grease." From a phenomenological standpoint, the patient who seems to have the most potential for acting out receives the most attention. This is a critical concern in the CTP, where approximately 83% of patients of the pre-TEP group, and

71.5% of the TEP group had a diagnosis of schizophrenia and suffered from varying degrees of social withdrawal and therefore demanded little attention. The remaining 18% of patients in the pre-TEP and 28.5% of the TEP groups generally suffered from major affective disorders and atypical psychosis. Frequently, patients in these diagnostic categories "acted out" as their only effective means of communicating their wants, needs, or subjective distress. In addition, almost 65% of these clients had a secondary diagnosis reflecting significant histories of alcohol and substance abuse disorders. The external rewards of the token credit system were intended to allow more equal levels of staff attention to all participating patients. In addition, the lack of response or negative consequences to acting out would decrease staff attention and ultimately diminish as a patient's behavior was structured to the contingencies of the program.

For many patients, social approval or disapproval did not appear to be an intrinsic reinforcer which could be manipulated to motivate the withdrawn and vegetative. It was felt that extrinsic rewards, such as tokens (and the values of back-up reinforcers) would help influence the patient to participate in group and other community activities more readily. In a study by Baker, Hall, Hutchinson & Bridge(1977), they reported that social withdrawal among the patients improved considerably. A full 75 percent of the patients reached "normality" after 12 months of treatment in the areas of social mixing and increased interest in the environment.

A TEP at the continuing treatment program was also to enhance patient reality adaptation skills and facilitate rehabilitation into society. It has been noted that even some of the most de-socialized and disorganized patients became concerned and articulate when it came to receiving their entitlement checks. According to Fisher et. al. (1978) "In their roles as consumers in a token economy, disturbed, chronic psychiatric patients obey complex economic principles which have been found to apply to behavior of normal participants in a rational economy". Thus, 'The Store' would play a central role in both reality adaptation enhancement and rehabilitative training for future placement into a community setting, where such concrete skills are necessary. In addition, 'The Store' would act as an analog to job situations in the community where environmental, interpersonal and intra-psychic stressors often defeat the most motivated patients. Those issues that arise during the course of working in the unit store could then become rehabilitative goals and would be incorporated into the behavioral modification program by the primary therapists. As patients successfully negotiated their problems "On the Job" in the unit store, they gained skills which were helpful in negotiating community based settings as well.

Those patients who successfully negotiated both the programmatic and individual behavior goals in effect completed their "job on the unit" and fulfilled their behavioral contracts. Ostensibly, they also were building self-esteem through successful completion of goals. This also applied to those who eventually qualified for outside, part-time employment. Most of the patients residing on the unit equated being a "man" with having a good job. And if having a job makes the patients feel like men, which then gives them an increased feeling of self worth, it can only be therapeutic to have work arrangements made under close, personal supervision by primary and activity therapists.

It was generally felt that most patients were not ready to hold down a job upon admission to the CTP. Different patients maintained a variety of levels in terms of their functional abilities. This was the point where the individual treatment component of the TEP (i.e., therapeutic modality) was to come into play. To allow patients to receive tokens for personal hygiene and the care of bedside areas has already been established as a technique that is effective in teaching and reinforcing these basic skills (Elliott-Kubgerkessm, 1978). However, the token economy for the CTP unit was to go beyond patient maintenance. It was designed to facilitate individual and social growth, and readiness for future job skill development. The point of all TEPs is to create an analog society within a behavioral learning framework.

The TEP had the potential to enhance not only maintenance of the patient on the unit, but his long term rehabilitation, self esteem, and his eventual resettlement into the community. Increased involvement and participation, by both patients and staff, was to facilitate a more structured and nurturing environment from which the patient could more readily assimilate into the community.

The program elements reviewed in this chapter constitute the original items to have been included in the study. As we will see in the following chapter, the program innovation's content changed significantly. Engagement of staff and patients in the philosophy, technology, and actual work items became an equal task to that of the TEP's implementation.

Chapter V: IMPLEMENTATION: Staff Training, Patient Orientation and TEP implementation.

The challenge of implementation of a Program Innovation requiring change not only in the routine of the unit, but its practice as well was to prove to be formidable. It first required an analysis of the developmental stage(s) of the program; engagement of administrative staff as to the prospective value of such an innovation; orientation and education of staff (clerical and clinical), and orientation of clientele.

Initial Phase: Discussions with Administrative Staff.

Over the past thirty years researchers have argued that clinicians should place a greater emphasis on research particularly as more attention has been focused on the public responsibility of social programs, and that the demands for evaluation from all quarters have increased(Suchman, 1968; Tripodi, Fellin,& Epstein 1978; Weissman, Epstein & Savage 1983). Budget cuts and/or the threat of cost cutting measures to be imposed on social programs have abounded on the local, state, and federal levels. Paradoxically, consumers of Mental Health services have less in the way of resources available to them today then in the past(Katz, Sabatini & Nardacci, 1993).

At this particular juncture the program was faced with yet another in a series of crises involving program utilization. The length of stay remained at approximately six months in duration, while the Municipal Shelters were overflowing with seriously and persistently mentally ill individuals. The funding sources were strongly suggesting that it be reduced to approximately 120 days. Further, the acute care psychiatric divisions of the Municipal Hospitals were experiencing increased difficulties with the same population in their mission to discharge clients to appropriate community based settings. This presented the program's administration with the pressure to transition its clientele in a more expeditious manner, and with the challenge of doing so in a way that would not compromise the quality of its services. In an attempt to "identify the people whose support was most crucial to the program" (Abramson p 181 in Weissman et. al. 1983), in this instance the program innovation, the author met with the Director of the CSS programs, and the Associate Directors of both the Continuing Treatment and the Case Management Programs. This series of meetings took place over a six week period. The goals were to discuss the concept of utilizing a Token Economy Program and to obtain meaningful feedback. The overall Program Director was in favor of utilizing the TEP. Trained as a Clinical Psychologist, the director was well versed in the potential benefits of such a program. However, the Associate Director in charge of the Continuing Treatment Program was not as sanguine. The TEP presented, at least theoretically, a shift in the paradigm of service delivery he was familiar with, and a potential drain on the Program's already limited resources. He believed it would be "hard to sell to the staff", and would be "perceived as research, and not service delivery". This posed the issue of potentially competing agendas, whereby research could in fact supplant that of service delivery. The author argued that this process could enhance services by providing a means of maximizing the potential for client: staff interaction, and also by utilizing the environment as a therapeutic agent via the reinforcement of various behaviors on the unit. Therefore, the therapeutic potential of this program would be additive in nature. As Abramson points out it is imperative that "one must understand what sort of cooperation and resources the proposed program (or innovation) will need in order to decide who the significant actors will be." (p 181) Many discussions ensued, and articles, albeit on inpatient settings, shared on the potential efficacy of the TEP. During the process, the author learned of several additional concerns of the administration.

First and foremost, that staff had been somewhat demoralized over pay freezes, cuts due to attrition, and pending layoffs. This shift in the equity of the exchange between organization and staff had the potential to negatively impact on services delivery as several authors have pointed out. Among them Weissman, Epstein and Savage (1983, p 45) who state "... individuals, groups, and organizations make contributions to social agencies in the hopes of gaining certain rewards. In so doing they also incur costs... It holds that organizational actors try to maximize their rewards and minimize their costs in all of their transactions. Thus if workers or clients seem to be giving more than they are getting from the agency, they can be expected to take actions to rectify the balance through lowering their costs or raising their rewards." The administrative staff had been concerned about a drop in service levels, and an increase in absenteeism. Explorations into the former through interviews with staff attributed the drop-of to two factors: 1.client apathy towards program offerings; and 2. off-site appointments in the pursuit of entitlements and residential services, which competed with morning program.

The absenteeism issue was more difficult to address. Unless abuse could be established, within the guidelines established in the contract between the Union and the Corporation that governs the facility, then neither charges nor corrective actions could be levied by the administration. The case was made by the director that the staff were a dedicated lot, and had in fact chosen to work with this difficult client population. The TEP through its system of tangible rewards could increase staff contact with the clients, and facilitate the type of contact (individual and group sessions)which the Associate Director believed would be most beneficial to the clients. This shared goal became the base upon which further cooperation would be built. The "exchange" also presented itself as an opportunity for the Associate Director to gain collegial status, an intangible reward, with the Director and the author. This process of dialoguing with the administrative staff was to become an ongoing feature of the research.

Analysis of Program Developmental Stage.

> "... almost all social programs are involved in solving sequentially the problems of program initiation, contact, and implementation; and a program must effectively deal with each of these stages before it can move onto the next." (Tripodi, Fellin & Epstein 1978, p 25)

The context of the above referenced meetings with the administrative and supervisory staff of the program provided the author with the opportunity necessary to the developmental stage or stages that utilize program resources. A dominant program stage is defined by Tripodi, Fellin and Epstein (1978, p 36) as "... that stage to which more than 50 per cent of program activities, efforts, and resources are devoted. Two or more stages may be sufficiently overlapping within a particular program so there may be no single dominant stage." In this instance the program's resources were divided into two major efforts: 1. the recruitment of additional clientele. This activity required ongoing outreach to the Municipal Shelters throughout the City, and to the inpatient units with identified patients who ostensibly were both categorically and diagnostically eligible for admission. 2. The provision of the full range of services fully described in Chapter III. Given the organizational and fiscal difficulties, these two activities required ongoing effort on the part of the line staff, and vigilance by the administrative staff.

Initial Phase: Orientation of staff and clients.

The initial phase for the application of the TEP at the CTP was a three-step orientation process. First, a series of three orientation sessions were conducted with the clinical staff of the unit on the theoretical underpinnings and usages of Token Economy Programs. Second, meetings were held with the clerical staff to discuss the record-keeping aspects of the TEP. Third, orientation meetings were held with the CTP

Clients during regularly scheduled Community Meetings.

Staff Orientation.

The clinical staff consisted of one part time Board Certified Psychiatrist; three full-time Primary Therapists. Of the latter, two were Master's level Social Workers, and one an ABD in Clinical Psychology. There were two Master's level Activities Therapists; one Head Nurse (Registered Nurse with a Bachelor's Degree), a Licensed Practical Nurse and one Nurses Aide. In addition there were two Bachelors' level Case Managers.

The orientation for this group was originally intended to be one session only, and of one hour and a half's duration. This writer co-presented with the Program Director, a Clinical Psychologist. The material presented in Chapters II and IV, was covered in detail. The theoretical underpinning of Learning Theory was reviewed. Populations which ranged from the developmentally disabled to the mentally ill, were used to illustrate the efficacy of TEPs and the multiplicity of service settings they had been employed in.

The program innovation was presented primarily as an opportunity for staff to: increase the amount of therapeutic time spent with each patient by providing the patient with additional incentives to attend each of the therapeutic, rehabilitative, and recreational activities on the unit. In addition, the design was presented with its series of positive and negative values attached to the behaviors outlined in Chapter IV of this work. This stimulated great debate among the staff, and with the presenters. The anxiety aroused was dealt with over a series of three sessions.

The first issue raised was impressionistic in nature. Several of the staff had little or no exposure to behavioral tools and likened all Behavioral Methods to a stereotypical, negative view. Visions of Kubrick's "A Clockwork Orange" dangled ominously in the background of the first two sessions. This fear of anything that even faintly resembled aversive therapy had implications for the project. A prime example of this were the numerous objections to debiting a client's TEP account when he was engaged in negative behaviors. Staff posited that this aspect of the program could jeopardize the therapeutic alliance that each staff member was either developing or had already established with the client. This argument was furthered to include that staff would be avoided as they would then be associated with negative consequences.

Lewis'(1986) discussion of the style of service delivery would best characterize the objections posed by the Primary Therapists who were Social Workers, "... style transmits warmth, and color of the human involvement in the helping process." (p 171). If their actions were to be interpreted by the clients, and almost as importantly by themselves, as punitive and withholding rather than nurturing and supportive, then this was a questionable therapeutic or helping relationship. If the purpose of the Token Economy was to simply increase the amount of therapeutic activities the clients participated in, then a modified version of the classic model could be advantageous. The modified version would have negligible impact on the relationship between clients and staff, while reaping all of the potential benefits of a rewards system.

Another aspect to be factored in was that of an age old bias against research. Most of the individual practitioners were comfortable with things as they were. The primary therapists were mostly concerned that this would impact on how they functioned as Therapists. Would the sanctity of the therapeutic session hour be violated by behavioral dictates?. The MSWs each had a great deal of experience working with chronically mentally ll individuals(3-5 years post masters).

Their approach was an eclectic one with great emphasis placed on the need for addressing the bio-psycho-social aspects of the client's illness. Further, there were definitive leanings towards psycho dynamic factors once an individual reached his psychiatric baseline. The efficacy of their collective practice was never studied and there was some concern over how the outcomes of the study would reflect upon them as practitioners. Therefore, the spoken question for them was "will I have to change my practice?". The unspoken one, "will I be seen as ineffective?" also loomed.

The Psychologist was less concerned with changing his method of practice, as he was familiar with the full range of behavioral models. His preferred paradigm in working with this sub-population of the chronically mentally ill, was the Psychiatric Rehabilitation Model (Farkas & Anthony, 1989; Lieberman, 1988). This model as exemplified by Farkas and Anthony, places a great deal of emphasis on the individual's motivation, and offers him/her the opportunity to make choices about, develop competence, and make changes in four main areas: social, educational, vocational and residential. This is largely a self-directed approach. Professionals assist first in assessing an individual's "Rehabilitative Readiness", and if ready with jointly formulating a Rehabilitation Plan with clearly defined goals. The professional then serves as coach, counselor, and progress monitor. The psychologist's concern was that the "Program Innovation" was not moving far enough in this direction. This and the following issues impacted on the design as well as the implementation of the project. What was to evolve was a more fluid design based in the clinical concerns, organizational (unit's) culture, and the impact of the Health and Hospital Corporation's fiscal woes. Other staff voiced concerns about the additional work this would require, i.e. dispensing tokens, tracking of token spending, record keeping....the unit store.

Clerical Staff Orientation.

The unit had the capacity for keeping track of numerous types of data. Built into the funding of the CSS Project was the capacity for computerization. Data collection and analysis had been established as a programmatic norm early on in the history of the host program, and shared with staff on a regular basis (Telson & Cuoco, 1993). This allowed the clerical component of the unit to keep track of demographic, diagnostic, and length of stay information as a matter of course. Therefore, the addition of one field of data per patient entered on a monthly basis proved to be a simple and workable task.

Client Orientation.

The discussion of what value a Token Economy would have for the Unit, the establishment and staffing of a Unit Store, and the purpose of a Client Council, took several weeks and eight Community Meetings to accomplish.

The concept of a Token Economy was not easily comprehended by the CTP's Clientele. However, when it was represented in the currency of goods and privileges it was enthusiastically grasped. The patients saw this as an opportunity to supplement the grooming kits they received on the unit; to obtain additional privileges in the form of overnight, weekend, and movie passes; to obtain various foods and clothing. However, their willingness to be active partners in operating other aspects of the program ended there. Several of the patients voiced concerns over being seen by their peers as "the man" or agents of the unit. If they were to be a part of the Clients' Council, they would be further identified with the staff vis-a-vis other clients. This meant possible alienation due to distrust, and elimination from some of the off-site activities that clients would engage in (of both a legal and elicit nature), or worse. Patients did in fact volunteer to be a part of the staff that conducted the Unit Store's business. That was not interpreted to be a conflict in roles, as there would be little or no opportunity either to betray the trust of a peer, or rule against him if a dispute with staff arose.

Implementation: Middle Phase

The issues presented above delayed the implementation process for what seemed like an eternity. There were endless debates over relatively minor issues. No longer being Director of the Programs clearly made implementation a more onerous task. Not being on-site, made data collection sporadic at best. First efforts to collect information using a more sophisticated test battery were nearly impossible. Initially, a mix of objective and self report type instruments were to be utilized. They included: the Structured Clinical Interview, and The Brief Psychiatric Rating Scale which were to be administered by staff. These instruments are described in detail in Chapter VI; and The SCL-90 R, Beck's Depression Inventory, and the Social Anxiety and Distress Scale also described in Chapter VI, were of the self report type. The SCI was sporadically collected, and the BPRS not at all. The former had to do with trained Case Management staff taking on extra cases on the inpatient units and thereby leaving little time for this additional work. Each battery administered by the Case Managers would take from one half hour to one and one half hours to complete. The lower time frame would occur only if the patient was on the unit, relatively communicative, cooperative, and able to read. The BPRS is a tool used primarily by Psychiatrists. The unit psychiatrist, who was employed on a half time basis, made it clear that he had barely enough time to complete his clinical work.

Thus while the TEP was functional, only data pertaining to demographics, diagnostics, length of stay, client disposition, token dispensation and redemption was systematically and reliably collected. Measures of change that were reliable, valid and of the self report variety were sought. In addition, other measures of utilization including demographic data and lengths of stay were collected. Several options were discussed in depth to assess the viability of data gathering that would not be too onerous for staff, too taxing on clients and remain reasonably good measures of change.

The dispensing and redeeming of Tokens was working smoothly. Clients and staff alike enjoyed this positive, more tangible therapeutic exchange (Weissman, 1983). An early benefit of the TEP was that Staff began to report in their weekly meetings (Correspondence with A. Anderson, 1992) an increase in Group Attendance. However, no real change was realized in attendance of individual sessions. Staffing shortages and therefore expansion of duties and responsibilities would have a major impact on the form this project would ultimately take. This coincided with the first of a series of major budgetary issues facing the parent corporation of the facility. A wage and hiring freeze was imposed in 1992. Therefore, staff who left for other opportunities were not being replaced, and those who remained were overworked and becoming increasingly demoralized. The added impact in terms of the actualization of the innovation design was preliminarily discussed above. Finally in Spring of 1993, the Director, the author's successor, stated that he was leaving in early 1994 to pursue work in Honduras. A full scale vector analysis was not necessary to conclude that a modification of the design was imperative. This left seven months to redesign, implement, and collect relevant data to evaluate the effects of the project. The scope of the project would be re-defined in a less rigorous manner as opposed to the purer version originally proposed. It also meant that each faction within the program had to be re-engaged. Relationships with the author had to be re-established, re-defined and re-evaluated. Therefore, the author hosted several meetings with the CTP staff to discuss the efficacy of their work with CTP clients (Telson & Cuoco, 1993; Cuoco, 1993) providing a longitudinal perspective dating back to February of 1986. This served as a morale booster for the staff who remained employed on the Unit. They obtained positive feedback on the work that they had done over the course of the years, with reports of the continued success of the overwhelming majority of clients they had placed. It also served to re-establish the author's history as founder of the CTP with old and newer staff alike. It was also an opportunity to express appreciation for the staffs' present day efforts in very trying political and fiscal times.

Implementation: End Phase.

Self report instruments had long been accepted as viable measures of client symptomotology. Thus the SCL-90 R, The BDI and the SAD could be correlated with other aspects of care. Token earnings, disposition at discharge, and the results of the self report instruments would all be included in an attempt at assessment of client outcomes. Once decided upon as a realistic solution to both time and resource problems an implementation schedule for the research component was arrived at. The self assessments would be conducted in accordance with the following schedule: upon admission for new clients and/or in month one for existing clients; and upon discharge at any point during the six month period under study or at the end of month six. The author, the Program Director, and the Associate Director of the CTP would conduct all self assessment sessions. This would eliminate all burden from the staff in relation to the Project.

The six month period for the study was multiply determined. First, length of stay was to be of six months duration. The purpose of the CTP was to place formerly homeless men with chronic mental illness into bona fide residential settings, with the full array of concrete services, and ongoing treatment and rehabilitation services, as appropriate. It would achieve this by providing more intensive treatment, rehabilitation and case management to individuals who were unable to make this transition directly from either the shelters or the acute inpatient psychiatric units. The unit was thereby faced with particular pressure from its three funding sources (the Human Resources Administration, the New York City Department of Mental Health, and the Health and Hospitals Corporation) to facilitate the process in as expeditious a way as possible. The second element, the six month time frame, would be a realistic test of the TEP as an element in reducing length of stay.

The third factor impacting on the six month time span had to do with the pending departure of the Program Director, through whose good graces the author retained access to the Program. This clearly would limit access to patient charts, statistics, and other important features of the outcomes that required review.

The final form which the TEP study assumed was also multiply determined. The mitigating factors discussed in this chapter ranged from the pragmatic(i.e., stringent time limits; staff reductions and availability; patient participation in the store and on the client counsel) to more organizational and philosophical concerns.

These field conditions limited the scope of the study. The methodology section presented in Chapter VI reflects these issues.

Chapter VI. METHODOLOGY

Introduction.

1. Hypotheses.

TEP will reduce the amount of time required in an outpatient Continuing Treatment Program for the client to successfully transition into the community. To test this hypothesis, the results will be compared to the length of stay of patients residing in the program for the first twenty four months of its operation. This period is prior to the inception of the TEP and for which data was available (see Chapter III).

a. There will be a reduction over time in the symptoms that are reported by the patient and observed by the investigator. The symptoms will be measured utilizing the Self Report tools described in the "Instruments Section" below. The instruments will be administered at specified periods throughout the six month period of the study.

b. An inverse correlation exists between the number of tokens earned by the patient and the symptomatology observed and reported via the test instruments. Therefore, fewer and less severe symptoms will correspond to a greater number of token credits earned.

c. A pre-CTP profile will emerge consisting of demographic, historic, diagnostic and symptomatic data that can be utilized to predict successful outcome in such a program.

2. Study Design and Sample Method.

Evaluation of the TEP is an exploratory descriptive case study design. Random assignment of the subjects was neither possible nor desirable given the realities described in the previous chapter about the existing program. In addition, time constraints did not allow for a delay of implementation. If it were possible, a time series design would have been utilized to measure behavior and outcomes prior to TEP implementation. Therefore, data were gathered from all subjects who were clients on day 1 of the study and those admitted to the program over a six month period. To be selected each subject met an admission criteria that was based upon the following:

Categorical - all clients were homeless, adult males who were either participants in the Project Help Initiative or clientele of the HRA Shelter System.

Diagnostic Criteria - all patients had to have a DSM III-R, Axis I diagnosis of a major psychiatric disorder, of a chronic or potentially chronic nature. The patient was to be functionally disabled and amenable to services as admission to the program was voluntary. This selection process and the criteria outlined above was the standard process by which patients were admitted into the program. The integrity of the program in relation to its mandate to serve a specific patient population was in no way altered. All potential consumers of these services were screened by a senior MSW in consultation with the unit's psychiatrist.

3. **Measures and Instruments.**

Five measures were used to assess the progress or lack thereof of the patients who entered the program. Correlations will be drawn between the number tokens earned and the scores recorded in the instruments listed below.

Instruments:

A. Self Report Questionnaire: Within one week of admission or upon day 1 of the study period, and prior to discharge or at the end of the study period the Symptom Distress Check List Revised (SCL-90-R Derogates et. al 1973, 1983) was administered either by the investigator, the program director, or the Associate Director who headed the unit. It provided the patient's perspective of what he perceived to be his problems and symptoms.

B. Beck's Depression Inventory (BDI): On the same time schedule as the above instrument, the BDI was administered. This 21 item scale assesses the presence and severity of the various components of depression. This includes the affective, cognitive, motivational, psychomotor and vegetative symptoms experienced by the patient. The BDI has good to excellent reliability and validity. In addition, the BDI has had significant positive correlation with clinicians' ratings and has demonstrated itself to be sensitive to clinical changes. (Beck, 1967)

C. Social Avoidance and Distress Scale (SAD): The SAD is a 21 item measure of social anxiety. The SAD assesses two aspects of anxiety, one's subjective experience of distress, discomfort, fear, and anxiety; and the deliberate avoidance of social situations. The SAD unlike the other two measures described above does not have sub-scales. Watson and Friend (1969) assessed the internal consistency by correlating each item with the total score on the SAD. The average item to total score correlation was .77. Validity of the SAD had also been demonstrated. This instrument was given at the same time intervals as the aforementioned ones.

D. Interview of Subject: Monthly, the psychiatrist was to complete a Brief Psychiatric Rate Scale (Overall & Gorham, 1962). The BPRS measures various aspects of psychiatric assessments of psychopathology, and past and current social adjustment. This measure was not completed (see Chapter VII).

E. Qualitative Analysis: minutes of meetings held with staff introducing the technology, their reactions and input, were analyzed as to its impact on the original program design implementation, and evaluation. These findings were discussed briefly in the previous chapter, and will be discussed more fully in the discussion chapter.

4. Data Analysis.

The focus of data analysis in this study is on the description of change in patient characteristics while undergoing treatment. In addition, the analysis could provide a predictive measure in the form of a patient's clinical readiness to leave.

In evaluating psychiatric treatment, or any helping intervention, it is logical to build in several different rating scales. Each posses internal validity, reliability, and a unique perspective on the phenomenon under study. This adds dimension and allows for correlations between observed behaviors and the numbers of tokens earned, and its relationship to the client's length of stay.

All the data were keyed for analysis using the Statistical Package for Social Sciences (SPSS) program package, version 7.5 for Windows. Descriptive statistics and frequency distributions were obtained for all variables for the purpose of describing the study sample with respect to diagnosis, demographic and background characteristics, length of stay in the Continuing Treatment Program, pretreatment and post-treatment symptom scores, and discharge characteristics.

The first research hypothesis concerned the significance of pretreatment to post-treatment reductions in scores on fourteen (14) symptom scales. This hypothesis was tested by means of multivariate repeated measures analysis of variance. The within subjects independent variable in this analysis was time of testing (pretreatment vs. post-treatment). The use of the multivariate analysis was designed to control the accumulating probability of Type I Errors associated with performing hypothesis tests for fourteen different dependent variables. Both the multivariate and the univariate tests were carried out at the .05 level of significance.

The second research hypothesis concerned the relationships between the number of tokens earned by clients and the magnitude of their symptom reductions. This hypothesis was tested calculating pretreatment to post-treatment symptom reduction scores for each client on each of the fourteen symptom scales, then calculating the Pearson correlations between the symptom reduction scores and the number of tokens earned. Each of the correlation coefficients was evaluated in a one-tailed significance test at the .05 level.

Either Pearson correlations or multivariate analysis of variance were used to explore the relationships between symptom reduction scores and client demographic and background characteristics. In the case of demographic variables which are interval measures (e.g., client age, client years of education) Pearson correlations were used. In the case of demographic variables that are categorical scale measures, multivariate analyses of variance were used. All tests were two-tailed tests at the .05 level.

Chapter VII: Evaluation Findings.

The study reported here was designed to document the efficacy of a token economy program in the Continuing Treatment Program, a specialized self contained unit for homeless chronically mentally ill men located in a Municipal Shelter on the campus of a large municipal hospital. It was expected that the TEP would result in significant reductions in the symptoms experienced by patients. It was also anticipated that the implementation of the TEP would reduce the amount of time typically required for patients to make the transition into the community. In this chapter, the results of the study are presented. The results have been organized under five major headings, as follows:

1. Description of patient sample;
2. Pretreatment to post-treatment changes in symptom scores;
3. The relationship between tokens earned and symptom reduction;
4. Socio-demographic correlates of symptom reduction; and
5. The time required by patients to make the transition back to the community.

1. Description of Patient Sample

The patient sample employed in the present study consisted of twenty eight individuals who were either present or who entered the Continuing Treatment Program between July 1993, and December 1993. These twenty eight patients were all present, took part in the TEP, and for whom complete data on pretreatment and post-treatment symptom scores were available for.

The patients were all men. They ranged in age form 20 to 50 years of age at the time of their admission. The average age of the sample was 37.7 years (SD = 10.2 years). Table VII-1 presents the frequency distribution of the diagnoses of these clients. The data this table also indicates that the clients represented a broad range of psychotic disorders with the modal diagnostic category being paranoid schizophrenia.

Table VII - 1
Frequency distribution of client diagnoses

DSM Classification	Diagnosis	n	%
295.30,,295.32	Schizophrenia - Paranoid Type	11	39.3
295.70	Schizoaffective Disorder	5	17.9
295.92,,295.94	Schizophrenia - Undifferentiated	4	14.3
296.34	Major Depressive Disorder- Recurrent,, Severe,,with Psychotic Features	1	3.6
296.40	Bipolar I Disorder - Most Recent Episode Manic	2	7.1
296.60	Bipolar I Disorder - Most Recent Episode Mixed	1	3.6
298.90	Psychotic Disorder NOS	4	14.3

Table VII-2 presents frequency distributions on several client demographic and background characteristics. The data in Table VII-2 indicates that the modal category with respect to marital status was "never married." Three-quarters of the sample fell into this category. The sample consisted of white (39.2%) and black (42.9%) clients. More than three-quarters of the clients (78.6%) were born in the United States. The majority of the clients had a criminal history (53.6%). The majority of the clients did not have a history of concomitant drug use(71.4%). However, the majority of the clients (60.8%) did have significant problems with alcohol. Twelve clients were categorized as having a history of alcohol abuse (42.9%), and another five clients were classified as alcohol dependent (17.9%). All but one of the clients had a history of previous psychiatric hospitalizations. Twenty-one of the clients (75.0%) had been hospitalized in both acute and chronic care settings, and another six of the clients (21.4%) had been hospitalized in acute care settings only. Client's years of education ranged from 8 through 16 (college graduate). The mean years of education was 11.3 years (SD = 1.9 years).

With respect to the discharges of these clients from the Continuing Treatment Program, twenty of the discharges were planned (71.4%). The largest proportion of clients were discharged to an Office of Mental Health licensed residence (46.4%). The modal category with respect to the treatment to which the clients were referred was clinic treatment (31.1%), followed by continuing day treatment (25.0%).

Table VII - 2
Client demographic and background characteristics

Variable	Value	n	%
marital status	never married	21	75.0
	separated	2	7.1
	divorced	5	17.9
	widowed	0	0
ethnic group	white	11	39.3
	black	12	42.9
	Hispanic	4	14.3
	other	1	3.6
U.S. born	yes	22	78.6
	no	6	21.4
criminal history	yes	15	53.6
	no	13	46.4
drug use history	dependence	3	10.7
	abuse	4	14.3
	in remission	1	3.6
	none	20	71.4
alcohol use history	dependence	5	17.9
	abuse	12	42.9
	in remission	2	7.1
	none	8	28.6
	social use	1	3.6
prior psych. hospitalizations	acute care only	6	21.4
	acute & chronic care	21	75.0
	no inpatient history	1	3.6
discharge type	planned	20	71.4
	ama	8	28.6
discharged to	family dwelling	3	10.7
	own apartment	1	3.6
	OMH residence	13	46.4
	adult home	1	3.6
	SRO	4	14.3
	inpatient psych. hosp.	2	7.1
	refused	4	14.3

Table VII - 2 (continued)
Patient demographic and background characteristics

Variable	Value	n	%

treatment referred to at discharge	cont. day program	7	25.0
	clinic treatment	9	32.1
	IPRT Prog.	2	7.1
	inpatient psych. Tx	2	7.1
	refused	8	28.6

2. Pretreatment to Post-treatment Symptom Reduction

The first research hypothesis stated that the clients participating in the TEP program would demonstrate significant reductions in symptoms from the beginning of the program to the end. The symptom measures included the Beck Depression Inventory, the Social Avoidance and Distress Scale, and the twelve symptom scales of Symptom Checklist 90-R. In order to test this hypothesis, a one-way multivariate repeated measure analysis of variance (MANOVA) was employed. This statistical procedure was utilized in view of the large number of dependent variables, in order to control the accumulating probability of Type I Errors associated with multiple hypothesis tests.

The results of the MANOVA are presented in Table VII-3. The multivariate test for pretreatment to post-treatment symptom reduction was highly significant (F- 673.22, *df* - 14, *p*-.000). Univariate tests indicated that the reductions were significant on seven of the fourteen dependent variables, as follows: the Beck Depression Inventory (F-4.67, *df*-26, *p*<.025); SCL-90-R anxiety (F-4.67, *df*- 26, *p*<.025); SCL-90-R paranoia (F-8.67, *df*-26, *p*<.005); SCL-90-R psychoticism (F-6.00, *df*-26, *p*<.025); SCL-90-R GSI (F-8.31, *df*-26, *p* <.005); SCL-90-R PST (F-5.61, *df* - 26, *p*<.025),,and SCL-90-R obsessive - compulsive (F-8.68,,*df*-26,, *p*<.005).

Table VII - 3

Multivariate repeated measures analysis of variance of pretreatment and post-treatment symptom scores

multivariate test

Wilks'' Lambda	F	df	p
.001	673.22	14	.000

means and univariate tests

	pretreatment		post-treatment		F
variable	mean	SD	mean	SD	(26)
Beck Depression	13.92	11.13	9.85	10.13	5.89*
Social Avoidance	9.85	6.49	8.70	5.40	1.97
Symptom Checklist:					
somatic	50.22	13.84	46.74	11.46	4.12
obsessive-compulsive	55.11	12.09	49.30	10.68	8.68**
isolation	57.96	12.94	54.59	11.51	2.52
depression	58.56	13.54	55.26	10.48	2.87
anxiety	58.70	12.73	54.19	11.17	4.67*
hostility	50.70	11.34	49.22	9.56	0.56
phobias	60.19	11.95	56.92	11.50	4.02
paranoia	58.30	13.06	51.93	10.59	8.67**
psychoticism	60.81	10.76	56.88	11.10	6.00*
GSI	57.93	13.72	53.00	11.41	8.31**
PSDI	58.81	11.19	57.03	10.00	0.46
PST	54.59	12.51	51.22	11.95	5.61*

* $p < .025$
** $p < .005$

These findings clearly support the hypothesis that clients in the TEP would manifest significant reductions in psychiatric symptoms over the course of the program.

3. Relationship between Tokens Earned and Symptom Reduction

The second research hypothesis stated that reductions in symptom scores would be related positively to the number of tokens earned by the client during the course of treatment in the Continuing Treatment Program. The number of tokens earned during the course of participation in the Program ranged from 4 to 917,.with a mean of 211.0 (SD- 122). Thus there was certainly adequate variability in terms of tokens earned to provide a meaningful test of this hypothesis.

In order to test the hypothesis,, change scores were calculated by subtracting the post-treatment score on each symptom measure from the corresponding pretreatment measure. By calculating the change scores in this manner,, a positive change score would represent a reduction in symptomatology,, and a positive correlation between tokens earned and the reduction in symptoms would support the research hypothesis.

The Pearson correlations between tokens earned and reductions in symptom scores are presented in Table VII-4. None of the correlations in Table VII-4 is significant. Thus,, the hypothesis was not confirmed. It cannot be concluded on the basis of the data in the present study that there is any relationship between the number of tokens that a client earns in the TEP program and the reduction in the symptoms that the client experiences.

Table VII - 4

Pearson correlations between reduction in symptom scores and number of tokens earned by client during Continuing Treatment Program (n=28)

correlations with tokens earned

reduction in	r
Beck Depression Inventory	-.27
Social Avoidance	.04
Symptom Checklist	.18
somatic	
obsessive-compulsive	.09
isolation	.04
depression	.02
anxiety	-.02
hostility	.31
phobia	.04
paranoia	.02
psychoticism	.03
GSI	.08
PSDI	.29
PST	.10

(no significant correlations)

Table VII -5

Pearson correlations between reduction in symptom scores and the background variables of age and years of education

Correlation with:

reduction in	age r	years of Education r
Beck Depression Inventory	.04	-.33
Social Avoidance	-.15	-.38
Symptom Checklist		
somatic	-.06	-.33
obsessive-compulsive	-.05	-.35
isolation	.19	.42*
depression	.01	.62**
anxiety	-.22	-.48*
hostility	-.29	-.40*
phobia	.05	-.28
paranoia	.28	.39*
psychoticism	.41*	-.15
GSI	.16	-.50**
PSDI	.16	-.37
PST	.12	-.36

* _p_ <.05

** _p_ <.01

(no significant correlations)

4. Sociodemographic Correlates of Symptom Reduction.

A research question was posed regarding the possible relationship between client sociodemographic characteristics and the reductions in symptoms achieved during the course of treatment at the Continuing Treatment Program. In order to address this question, two different statistical procedures were utilized. In the case of interval scale background variables, such as age and the number of years of education, Pearson correlations were calculated between the pretreatment and post-treatment reductions in symptoms and the background variables. These correlations are presented in VII-5.

The data in VII-5 indicates that client age was correlated significantly with the reductions in only one of the 14 symptom scales, the SCL-90-R psychoticism scale (r=.41. P<.05). Older clients tended to manifest greater reductions on this scale. Therefore age does not appear to be strongly related to client improvement.

Significant correlations were observed between the client's years of education and reductions in six of the fourteen symptom scales: SCL-90-R isolation (r=-.42, p<.05); SCL-90-R depression (r=-.62, p<.01); SCL-90-R anxiety (r=-.48, p<.05); SCL-90-R hostility (r=-.40, p<.05); SCL-90-R paranoia (r=-.39, p<.05); and SCL-90-R GSI (r=-.50, p<.01).

All these significant correlations are negative, indicating that clients with relatively more years of education tended to improve less during their course of treatment at the Continuing Treatment Program than clients with relatively less education.

With respect to client Sociodemographic and background variables that have categorical measurement scales, one-way multivariate analyses of variance (MANOVAs)were used to determine the significance of relationships with symptom reductions. Seven such MANOVAs were run, with the following independent variables: marital status (having the values: never married, separated, or divorced); ethnic group (white, black, Hispanic, and other); born in the U.S. (Yes vs. No); criminal history (yes vs. No); drug use history (dependence, abuse, and none); alcohol use history (dependence, abuse, in remission, and none); and prior psychiatric hospitalizations (acute care only vs both acute and chronic care). Of these analyses, only one yielded a significant multivariate test for the effect of the background characteristic. This was the MANOVA for prior psychiatric hospitalizations (F =3.80, df = 14 and 11, p =.016). However, this analysis yielded no significant (p<.05) univariate tests.

Therefore, the analyses of client demographic and background characteristics indicated that the only factor which seems to be consistently negatively related to client success in TEP is the client's years of education.

5. Time Required to Make the Transition to the Community. The clients' length of stay in the Continuing Treatment Program ranged from 61 days to 534 days, with a mean of 245.0 days (SD = 144.4 days). It was expected that, on average, the clients' involved in the TEP program would make the transition to the community more quickly than the clients did prior to the initiation of the Token Economy Program. Records for the two year period reported on in Chapter III of this work indicated that the average length of stay on the unit was 116 days. Thus, the expected decrease in length of stay did not occur. However it should be noted that the client cohorts studied before and after the inception of the TEP program were quite different with the TEP group manifesting substantially higher incidence of alcohol abuse, drug abuse and criminality. Thus the comparison of the two with respect to length of stay is questionable.

Summary of Data Analysis.

The clients participating in the Token Economy Program at the Continuing Treatment Program manifested significant reductions in psychiatric symptoms from pretreatment to post-treatment. The symptom reductions achieved by these clients were not related to the number of tokens that the clients earned during the program. Symptom reductions were not related significantly to most client demographic and background characteristics, but reductions in several symptom areas were related to one background variable, the client's years of education. The introduction of the Token Economy Program did not reduce the time that clients required to complete the program and return to the community.

Chapter VIII: Discussion and Recommendations

The present study was undertaken to explore and evaluate the impact of a program innovation, the Token Economy, on the homeless chronic mentally ill clients of an established project. In the course of the study a parallel process emerged with respect to implementation of the innovation. This chapter will review the findings, and offer suggestions for future research, policy and practice.

Program Development Stage as a Factor in Implementation

The implementation of the program innovation described above was a lesson in ongoing negotiations and compromise. It is a good example of how field conditions, and the developmental stage of a program (Tripodi, Fellin & Epstein, 1978) impact on the research and/or evaluation process.

Initially, the TEP had a more ambitious summative design. It included: a control group which would be the 50 clients who went through the program prior to the implementation of the TEP; an experimental group, sample size of 50; the time period was to be dependent on the course of treatment - rehabilitation of the sample; there was to be a greater mix of self report and observational instruments utilized to allow for self report vs. professional assessment comparisons; a more stringent testing schedule was to be utilized (quarterly) as opposed to admission and discharge; a council comprised of clients and staff to address disputes regarding the operation of the TEP was to have been formed; tracking of levels earned and levels lost was to have been recorded; and the loss of tokens as a consequence of behavior was to have been included in the design.

The introduction of the program innovation became an additional challenge for staff to revisit the latter two stages in the "Differential Evaluation" Model, as initially described by Tripodi, Fellin, & Epstein (1978) and extended by Bielawski and Epstein (1984), Program Implementation and Program Stabilization. The former speaks primarily to the engagement of the clientele, service delivery, and the application of a change technology. In this instance the "change technology" in the form of a Token Economy Program, and its introduction to staff and clients. The program stabilization phase presented with another set of opportunities.

Examination of the developmental sequence was performed from the vantage point of introducing a potentially more efficient method of transitioning clients from TLC to community. The resistence encountered highlighted a major difference between the initiation stage of the program's development and its stabilization stage.

> The "existence of special interest groups in the stabilization stage that may resist and/or advocate for changes. Groups of clients, senior staff members, other agencies in the services network, or groups of unserved applicants may have strongly held opinions about the need for changes in the program" (Bielawski & Epstein, 1984).

This was true as well of the TLC. The effect of that influence resulted in the further modification of the innovation, and not necessarily for the worse. According to the developmental models proposed by Tripodi, Fellin, and Epstein (1978), and Patti (1978) the program had reached the fourth stage of program development,"program stabilization", prior to the introduction of the innovation. Program stabilization is defined as "The point at which a program achieves a degree of autonomy from its external environment is also likely to mark the beginning of its stabilization phase"(Patti, cited in Bielawski and Epstein 1984). Patti cites Clark and Wilson's definition of autonomy to further define this stage "the extent to which a {program} possesses a distinctive area of competence, a clearly demarcated clientele or membership, and an undisputed jurisdiction over the function, service, goal issue or cause... Autonomy gives an organization a reasonably stable claim to resources and thus places it in a more favorable position to compete for these resources" (Clark & Wilson, cited in Patti, 1978, p. 280; cited in Bielawski & Epstein, 1984). The program occupied a niche in the service delivery system developed for the homeless chronic mentally ill, and demonstrated reasonable success. However, it was facing critical issues, among them long delays in the hiring of replacement staff, no cost of living increases, and added pressure to shorten length of stay.

The elimination of some of the original programmatic and research design features resulted in a study that was more consistent with the knowledge and values base which had guided the TLCs practice principles (Lewis 1982) for the five years leading up to this study. A prime example of this was the author's intent to utilize negative consequences (i.e. loss of tokens, loss of levels) when a client engaged in a variety of negative and/ or uncooperative behaviors. This was perceived as a threat to a therapeutic value held by program staff (unconditional positive regard), and having implications for the program's tonal quality (friendly, accepting, non-threatening). Staff clearly stated that their clients should not experience them as "punitive enforcers" of an "unempathic" system. In addition, they posited that the therapeutic alliance could be damaged if they were to assume this role.

Symptom Reduction

Clients who participated in this program manifested significant reductions in psychiatric symptoms from pretreatment to post-treatment. On seven of the fourteen scales clients demonstrated significant improvement. These findings were in the symptom areas considered to be most debilitating by clients (Caro et. al. 1993) who are intent on leading a more normalized community based existence. They include: the Beck Depression Inventory; SCL-90 obsessive compulsive scale; SCL-90 anxiety; SCL-90 paranoia; SCL-90 psychoticism; SCL-90 GSI; and the SCL-90 PST. Consequently, one can assume that the program did have a positive impact on the reduction in symptoms reported.

However, the study demonstrated no significant correlations between the number of tokens earned and reduction of symptoms. This effect may be partially explained as a function of the program's outpatient setting. Corrigan (1991) noted that only three investigations of the effects of token economies on "severe mentally ill populations" in community settings had been published since 1980. He posited that several barriers exist preventing transfer of TEPs strategies from inpatient settings to community programs, and by extension, their efficacy. These include: "outpatient access to competing reinforcers, supplemental income that help outpatients purchase these reinforcers, ... and interference of contingency contracts by family or friends" (p. 17).

The availability of reinforcers from a variety of sources in the setting, allowed for more selective involvement in the TEP, and therefore not an equivalent setting to an inpatient unit or other closed setting.

The program was effective in working with a broad based group of clients. Older clients, however, tended to achieve greater reductions on the SCI-90-R psychoticism scale than their younger counterparts. A great deal of research into the course of illness of individuals suffering from debilitating psychiatric illnesses, particularly Schizophrenia, indicate that psychiatric symptoms of these older adults appear to be relatively stable with gradual lessening of positive symptoms. (Sajatovic, Popli, and Semple, 1996) Therefore, the response observed in this study may be also attributable to the aging process among the chronic mentally ill.

Of the other client sociodemographic and background variables collected and correlated with the 14 symptom scales, only education seemed to play a statistically mediating significant role, and a negative one. Clients who were relatively better educated improved less on six of the symptom scales during their stay on the unit. This may be attributed to better educated individuals having once achieved a higher level of functioning and privilege in their pre morbid state, and therefore less likely to engage in what may be perceived as an artificial TEP process. An alternate theory is that these patients tended to be more verbal, and perhaps resistant to adjustments in their medication regimen.

Diagnostic and Demographic Change: impact on length of stay

The length of stay for this cohort was 245 days as opposed to a length of stay of 154 days for all clients placed during the first 24 months of the program's existence. Comparing the study sample with the client cohort presented in chapter III reveals: clients with schizophrenic disorders decreased from 83% to 71.5%; Major Affective Disorders remained relatively unchanged from 13% to 14.3%; However, there was a marked increase in the percentage of individuals with Atypical Psychotic Disorders from 4% to 14.3%. In addition, the combined history of chemical and alcohol abuse/dependence of the first cohort was 53%. In contrast, the study population had a 76% incidence of significant chemical and or alcohol abuse/dependence. Criminal history also increased from 46% to 53.6%. These variables represent increased risk to success in any potential Residential Program, and therefore prolonged the discharge process increasing the length of stay. The shift in diagnostics among the patient population reported on in this study is consistent with state-wide reports of increases in substance abuse and criminality among the homeless chronic mentally ill. It also coincides with the New York State Office of Mental Health's recognition of these factors and its eventual piloting of two initiatives. The first being the 1994 Mentally Ill Chemical Abuse (MICA) Enhancement Program, whereby licensed residential programs could obtain an additional $6,000 per patient bed to provide "enhanced" services to these difficult to place individuals. The enhancements were to include a range of programmatic individual and group based services, toxicology screening, to be provided on-site by specially trained staff. If individuals could contain their substance seeking behaviors during the initial phase of the community based treatment/rehabilitation process, then minimizing the risks associated with those behaviors would make the patients more attractive to the residential programs. The second initiative began in 1995, with Project Links. This program sought to take chronic mentally ill offenders and place them in community based programs. However, the funds were targeted to Case Management and linkage services as opposed to funding enhancements in residential programs. Despite extensive outreach and training with New York City Residential Providers (ACL NYC: Regional Minutes 1996), this initiative has been met with much skepticism, and minimal participation by licensed residential programs.

Token Economy Program: efficacy as a function of setting

The literature is replete with examples of TEPs resulting in symptom reduction. These explorations were conducted primarily on closed (inpatient, developmental settings, jails) units with either control groups for comparison, or utilizing A-B-A designs. Future studies could compare the Transitional Living Community presented with other operational TLCs utilizing the same symptom measures and also incorporating the following: recidivism post discharge from the TLC for both hospitalizations and incarcerations; employment; and life satisfaction. This would yield more precise conclusions regarding the role of the TEP on symptom reduction, length of stay, and discharge readiness for the homeless chronic mentally ill.

Conclusions

There is a vast population of severely mentally ill individuals living on the streets and in shelters across the United States. Many of these people have been marginally functional during most of their lives. Many have significant substance abuse problems and have been convicted for criminal activity. Some have never had families, others have highly disturbed ones, and still others have alienated those people who might be able to help them.

Society imparts the same freedoms to these individuals as to anyone else who is not criminally incarcerated or committed to a hospital. Thus they have the right to take or not take medication, use alcohol and drugs, travel at will, spend money as they choose, and interact or not interact with anyone they choose. After many decades of receiving what is now considered restrictive and even coercive care in hospitals, this population has been enfranchised. They have been redefined as "consumers" of mental health services, who may acknowledge their disabilities and seek treatment voluntarily.

The state now rightly recognizes that mental illness does not detract from personhood. Unfortunately, in the efforts to rectify past wrongs there is a tendency to overlook the actual consequences of mental illness. Individuals with chronic thought disorders, delusions, paranoid ideation, social withdrawal, irritability, impaired attention and concentration, or poor impulse control do not easily enter the community. They have a difficult time taking advantage of available services or even caring for their own most basic needs. The level of denial and the lack of insight and judgement among this group are extreme, which further alienates them from the functioning mainstream.

The CTP was designed to offer severely mentally ill individuals an opportunity to genuinely enter the community. In conjunction with medications to dramatically alleviate the symptoms of acute psychosis, rehabilitative techniques including the use of TEPs can only be accomplished over time. This is a process which can only be entered into through partnership between clients and staff, and built from many seemingly mundane interactions that foster confidence and trust.

Clients must to some degree accept the narcissistic injury of mental illness in order to remain on medication and accept help. They may then start the long process of putting their disturbance in perspective and developing self-esteem. The development of meaningful object relations can only be built on this fragile and complex foundation. At every stage clients must tolerate enough stress to prevent flight into psychosis, escape into drug abuse, or return to the vast, impersonal public spaces of the city.

Staff must also have the capacity to tolerate substantial stress. Working with clients who are disturbed and regressed in an intensive therapeutic environment may be taxing. Clients may persistently exhibit bizarre, disorganized, oppositional, or withdrawn behavior, and progress may be very slow. Because many clients have past histories of dangerous behavior, including assault and murder, staff may be frightened and wary. The work of rehabilitating and socializing the serious and persistently mentally ill requires a deep commitment and a united and communicative staff with proper supervision and back-up support.

The CTP has significantly helped many disturbed individuals by acknowledging and accepting their psychiatric disabilities and offering treatment. Clients have taken advantage of nurturing, limit setting, and reality reinforcement in a safe, predictable environment. The majority have been able to move on to appropriate placements, where they have remained. Other programs offering similar long-term care have become increasingly available, and the need for extended transitional care is obviously great.

Certain problems, however, remain. Some individuals, despite their best efforts to engage in treatment and cease maladaptive behavior, may be too vulnerable to be allowed to enter the community. Many others cannot or will not tolerate the demands of organized society and return to the streets or the shelters, without any plan to work toward a goal. Although these people are not dangerous, their disturbances do not diminish. The financial and psychological costs to society of their bizarre and disorganized behavior, drug abuse, and criminal activity are profound. Over two hundred years of humanitarian and scientific insights and progress cannot be ignored by mental health professions, government, and law when challenged with finding a method to effectively work with this population. TEPs when combined with other therapeutic and rehabilitative techniques have the potential to achieve the aforementioned goals. The TEP utilized at the CTP, although a clear departure from the classical model, was effective in ameliorating client reported distress in seven of fourteen symptom scales. Older clients with less education benefitted most. This humanistic twist on a behavioral model, as part of an eclectic blend of therapeutic and rehabilitative elements, may have a place in other Transitional Living Programs as well as in Residential Programs for the seriously and persistently mentally ill.

APPENDIX

BDI

Name: ______________________________ Date: __________

On this questionnaire are groups of statements. Please read each gr of statements carefully. Then pick out the one statement in each group best describes the way you have been feeling the PAST WEEK, INCLUDING TO Circle the number beside the statement you picked. If several statements the group seem to apply equally well, circle each one. Be sure to read al the statements in each group before making your choice.

1 0 I do not feel sad.
1 I feel sad.
2 I am sad all the time and I can't snap out of it.
3 I am so sad or unhappy that I can't stand it.

2 0 I am not particularly discouraged about the future.
1 I feel discouraged about the future.
2 I feel I have nothing to look forward to.
3 I feel that the future is hopeless and that things cannot improve.

3 0 I do not feel like a failure.
1 I feel I have failed more than the average person.
2 As I look back on my life, all I can see is a lot of failures.
3 I feel I am a complete failure as a person.

4 0 I get as much satisfaction out of things as I used to.
1 I don't enjoy things the way I used to.
2 I don't get real satisfaction out of anything anymore.
3 I am dissatisfied or bored with everything.

5 0 I don't feel particularly guilty.
1 I feel guilty a good part of the time.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.

6 0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.

7 0 I don't feel disappointed in myself.
1 I am disappointed in myself.
2 I am disgusted with myself.
3 I hate myself.

8 0 I don't feel I am any worse than anybody else.
1 I am critical of myself for my weaknesses or mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.

9 0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

10 0 I don't cry anymore than usual.
1 I cry more now than I used to.
2 I cry all the time now.
3 I used to be able to cry, but now I can't cry even though I want tc

11 0 I am no more irritated now than I ever am.
1 I get annoyed or irritated more easily than I used to.
2 I feel irritated all the time now.
3 I don't get irritated at all by the things that used to irritate me

12 0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my iterest in other people.
3 I have lost all of my interest in other people.

13 0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions than before.
3 I can't make decisions at all anymore.

14 0 I don't feel I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel that there are permanent changes in my appearance that make me look unattractive.
3 I believe that I look ugly.

15 0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.

16 0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to go back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.

17 0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.

18 0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetite is much worse now.
3 I have no appetite at all anymore.

SAD

For the following statements, please answer each in terms of whether it is true or false for you. Circle T for true or F for false.

T F 1. I feel relaxed even in unfamiliar social situations.

T F 2. I try to avoid situations which force me to be very sociable.

T F 3. It is easy for me to relax when I am with strangers.

T F 4. I have no particular desire to avoid people.

T F 5. I often find social occasions upsetting.

T F 6. I usually feel calm and comfortable at social occasions.

T F 7. I am usually at ease when talking to someone of the opposite sex.

T F 8. I try to avoid talking to people unless I know them well.

T F 9. If the chance comes to meet new people, I often take it.

T F 10. I often feel nervous or tense in casual get-togethers in which both sexes are present.

T F 11. I am usually nervous with people unless I know them well.

T F 12. I usually feel relaxed when I am with a group of people.

T F 13. I often want to get away from people.

T F 14. I usually feel uncomfortable when I am in a group of people I don't know.

T F 15. I usually feel relaxed when I meet someone for the first time.

T F 16. Being introduced to people makes me tense and nervous.

T F 17. Even though a room is full of strangers, I may enter it anyway.

T F 18. I would avoid walking up and joining a large group of people.

T F 19. When my superiors want to talk with me, I talk willingly.

T F 20. I often feel on edge when I am with a group of people.

T F 21. I tend to withdraw from people.

T F 22. I don't mind talking to people at parties or social gatherings.

T F 23. I am seldom at ease in a large group of people.

T F 24. I often think up excuses in order to avoid social engagements.

T F 25. I sometimes take the responsibility for introducing people to each other.

T F 26. I try to avoid formal social occasions.

T F 27. I usually go to whatever social engagement I have.

T F 28. I find it easy to relax with other people.

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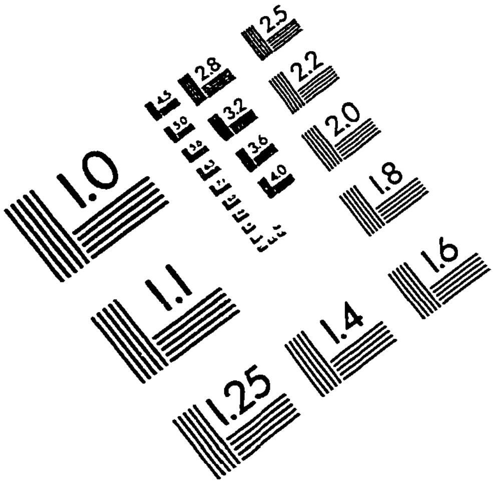
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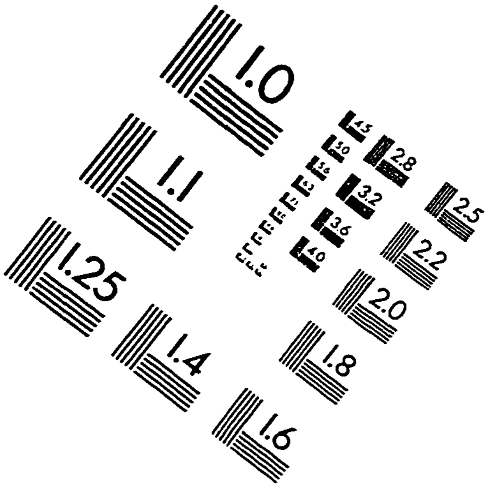
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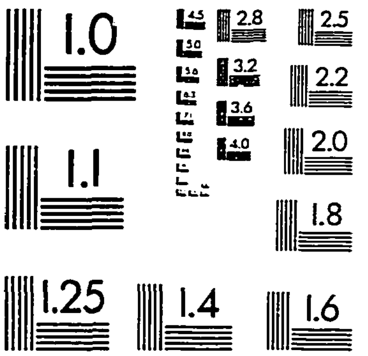
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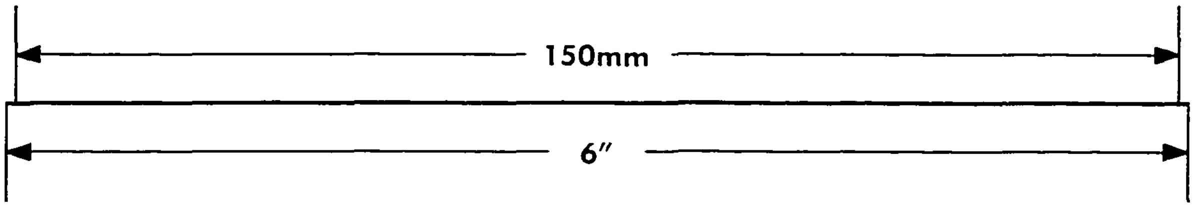

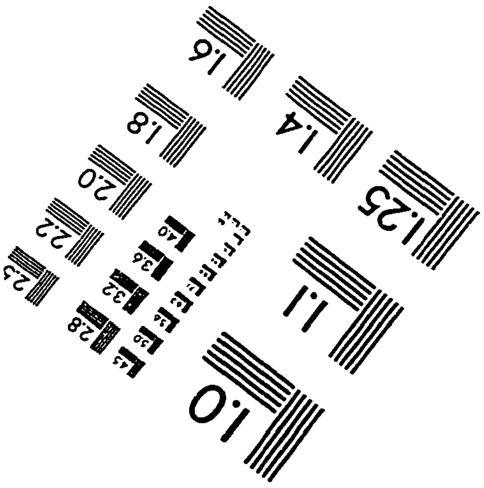
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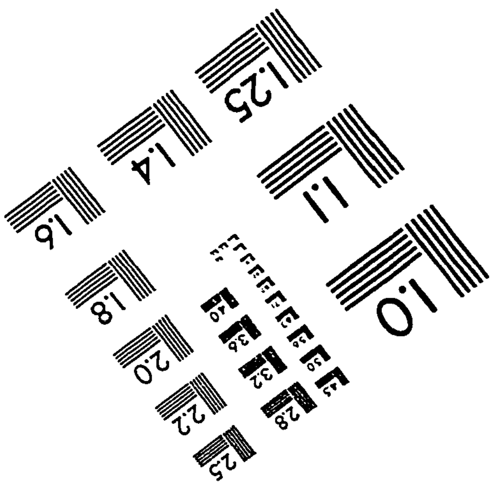
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