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CRITICAL INGREDIENTS OF INTENSIVE CASE MANAGEMENT:

JUDGMENTS OF RESEARCHERS/ADMINISTRATORS, PROGRAM MANAGERS AND CASE MANAGERS

By

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Abstract

Critical Ingredients of Intensive Case Management: Judgments of Researchers/Administrators, Program Managers and Case Managers

by

Richard W. Schaedle

Advisor: Professor Irwin Epstein

Intensive Case Management (ICM) did not evolve from a single, well-defined model format but from different case management models. As a result, it has been vaguely defined as meaning more "intense" than usual case management, thus highlighting the lack of consensus about ICM's definition and parameters. Despite these differences, ICM programs aspire to a set of common principles and core operational functions derived from the concept of continuity of care. Recent literature reviews have found mixed results regarding studies examining ICM effectiveness (e.g., psychiatric hospitalizations, etc.). It has been difficult to make comparisons between studies because operational definitions have not been standardized.

This study attempted to construct a program theory that unifies the various ICM practice orientations and specifies its operationalization so that more effective implementation

and evaluation can occur. An integrative approach was used that synthesized information from the existing literature and by surveying three distinct stakeholder groups (researchers/ administrators, program managers, case managers) for their perspectives.

Twenty-two researchers/ administrators who were considered experts, 21 ICM program managers and 46 ICMs working in 4 separate programs in New York City rated the importance of 68 program elements. Respondents identified 32 out of 68 program components as critical. A preliminary fidelity index was developed from these results. In addition, empirically derived norms for 12 model specifications were operationalized (e.g. ideal caseload size, etc.). Agreement among all respondents on ratings of importance was high (intraclass r = .92), although there was less agreement for some areas and respondent groups. Consensus was highest among ICMs, followed by program managers and experts.

Significant findings included the perceived importance of a bachelors degree in human services, access to psychiatric consultation, optimum caseload size of 1:11, access to funds for client purchases and 85% of contacts occur in the community. Under treatment foci, a number of practice elements from the Personal Strengths and Rehabilitation perspectives were identified as critical. Additional suggestions from respondents focused on ICMs

participating in the hospitalization/discharge process, how revenues are derived, and the lower success rates ICM has with clients suffering from character disorders and severe substance abuse. Results reinforced the idea that ICM is a "client driven" intervention in contrast to typical case management programs that are "system driven".

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Embarking on the completion of a Doctoral program is a journey requiring great sacrifice not only of the student but also for those involved in a student's personal and professional life. I would first like to acknowledge the love and support given to me by my wife, Miriam Velez, and my children, Isabella and Sophia. I sacrificed a great deal of time with them while working toward my Doctorate. I would especially like to thank my wife for her sensitivity, insights and advice, all of which were helpful since she had completed her Doctorate five years earlier.

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While I doubt very many people will ever read this document, I hope that the information contained in it does influence how Intensive Case Management programs are constructed and operated. This document is for the benefit

of people suffering from a terrible illness, whose pain and suffering many of us will never know since we have never walked in their shoes.

Finally, I would like to dedicate this dissertation to my father, Gregor Schaedle. Without his hard work, dedication, and role modeling, I would never have been able to achieve what I have accomplished today.

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Chapter I

Introduction

This study seeks to advance social work practice by focusing on the development and evaluation of a community based intervention aimed at the seriously mentally ill. Intensive Case Management (ICM) is one form of community support developed during the era of deinstitutionalization. This program model aspires to a set of common principles, regardless of the underlying practice philosophy chosen by administrators. The model includes a set of core functions such as outreach, assessment, service planning, linkage, monitoring, and client advocacy. It also contains certain operational features such as low client staff ratios; in vivo treatment; frequent and intense contact; and open-ended lengths of service. These principles are derived from the concept of continuity of care that defines the boundaries of intensive case management and unifies its various practice approaches.

Many studies have been undertaken asking whether ICM works as a community support intervention. Recent literature reviews have found mixed results in terms of outcomes regarding psychiatric hospitalizations, total costs of care, client symptoms and treatment compliance. The evaluations

undertaken to date have focused primarily on the relationship between program inputs and outputs with little regard for the transforming processes or throughputs that occur in the middle (Chen, 1990). In addition, research has been negatively affected by the lack of basic program description and documentation regarding implementation. Because operational definitions have not been standardized, it is difficult to make comparisons between studies. We do not know if failure implies that the theory on which ICM is based is incorrect or whether the failure is related to problems of implementation.

The question arises about what core set of program ingredients define ICM as unique and whether a consensus exists about these elements. To answer these questions, an attempt must be made to identify the critical ingredients of ICM so that "program fidelity" can be documented and implementation standardized. Fidelity allows us to determine whether programs that espouse the same philosophy or approach are actually adhering to the same principles that make the program model unique.

Program theory highlights the importance of identifying the critical elements of intensive case management. Program theory is the "construction of a plausible and sensible model of how a program is supposed to work" (Bickman, 1987). Chen (1990) describes program theory "as a specification of

what must be done to achieve desired goals, what other important impacts may also be anticipated, and how these goals and impacts are to be generated." A good program theory will describe the elements and components of a program.

Often, program outcome failures are either due to the wrong theory or to poor program implementation (Suchman, 1967, Weiss, 1972). Program theory failure cannot be distinguished from program implementation failure unless there is evidence that the program was implemented with fidelity (Bickman, 1987). As a result, evaluators often find themselves in the position of developing the program theory to create valid measurement and design plans. Only when programs are implemented with integrity can evaluations then be considered a test of the program's theory.

The aim of this study will be to identify the critical elements for ICM based on the core functions and operational features identified in the literature and by surveying stakeholders who are currently working in ICM. By making explicit what these core elements are and by developing operational definitions for them, the author hopes to increase the substantive knowledge regarding the ICM model so more effective implementation and evaluation research may occur.

Chapter II

Historical Context

Policy regarding the "treatment" of persons with chronic mental illness evolved in a historical context that has taken several directions since the 18th century. Before the mid 1800s, destitute individuals suffering from chronic mental illness fell under the system of poor laws and received no differential treatment or entitlements. They were either placed in a local almshouse with the rest of the indigent population or in private dwellings at the town's expense (Rochefort, 1993). The care provided in county institutions and on rural farms was inadequate and a number of problems existed with these arrangements. Persons with mental illness were often preyed upon by other residents or staff in poorhouses and living conditions were reported to be ghastly. Some were exploited for their labor by local farmers or by businesspeople with political connections (Trattnor, 1994).

During the early 1800s, a large segment of the medical community began to subscribe to the phrenological theory as an explanation for insanity. The theory held that insanity was due to physical lesions of the brain and thus could be considered as physical in nature. In addition, insanity also

had an important psychological element that could be caused by emotional and environmental factors. These ideas promoted the belief that the mentally ill suffered from a condition requiring a separate treatment facility designed to provide humane care.

By the mid 19th century, a reform movement led by Dorothy Dix focused on promoting a policy that would segregate persons with mental illness from other residents within poorhouses. Awareness about the number of insane persons and the new theories regarding its etiology led to the founding of a new wave of mental hospitals. In 1865, the New York State Legislature was the first to authorize funds for the opening of the Willard Asylum for the Insane. By 1890, the State of New York passed the State Care Act under which the State assumed complete responsibility for the care and expense of all the insane poor (Katz, 1986). Over the next sixty years, State asylums were expanded to house and treat over 90,000 individuals in New York State.

At the time, the idea of creating State institutions to care for the mentally ill was considered a radical approach. While most progressives favored segregating individuals with mental illness from county poorhouses, there were nevertheless major disputes between county superintendents and State officials about whether asylums would improve conditions for the mentally ill. Initially, asylums were

Initially, asylums were small and reputed to be responsive to patients in their care. By the 1890s, however, demand for beds had so outstripped supply that large facilities were being constructed with up to 2,000 beds. County superintendents complained that asylums were costly, dehumanizing and located too far from patients' families. They advocated for the advantages of small county institutions that provided warmth, accountability and access to family and friends. In contrast, State policy makers distrusted local institutions reputed to be poorly managed. They were committed to the views of "experts" on mental illness who advocated removing the mentally ill from poorhouses so that they could receive "treatment". State officials were also intrigued by the advantages of centralization and economies of scale that large asylums could provide (Rothman, 1980). Ultimately, the controversy about whether responsibility for care should remain with the local county or State had less to do with the issue of quality care than with the expansion of State power over local government.

During the 1920s, public opinion regarding State Hospitals began to change. Asylums had become overcrowded, the buildings began to deteriorate and treatment and quality care were rarely provided. The institutions became impersonal, restrictive and dehumanizing settings where the

main focus was on warehousing many of the mentally ill. Hospitals for the insane now resorted to using drugs, surgery and mechanical restraints (Rochefort, 1993). Four new therapies originating in the 1930s attracted special interest and fueled the progressive anti-institutional movement rooted in religious humanitarianism and secular reform. These were insulin-coma therapy, metrazol-shock treatment, electroshock therapy and lobotomy, all of which were administered to tens of thousands of patients during the 1930s, 1940s and 1950s (Rochefort, 1993). Scandalous exposes of conditions and treatments at state institutions were becoming more frequent and difficult to ignore.

During the 1950's and early 1960's three concurrent developments led to profound changes in State policies regarding persons with mental illness. First, breakthroughs in psychopharmacology for mental illness resulted in the manufacture of new classes of medication shown to be effective in controlling the positive symptoms of severe mental illness. This innovation led to the belief that persons with severe mental illness could function in the community.

While new advances in psychopharmacology occurred, the community mental health movement began to gain strength and advocate for change (Stroul, 1986). This movement championed

the idea that persons with severe mental illness should be reintegrated into their communities along with new treatment approaches that would avoid isolating patients for extended periods. This concept formed the basis of the Community Mental Health Centers Act passed by Congress in 1963. Community mental health centers were to be created throughout the nation to facilitate the treatment of mental illness in the least restrictive setting possible.

Finally, during the 1960s Congress created numerous federal welfare entitlements (Medicare, Medicaid, Supplemental Security Income, Social Security Disability Insurance) which were to provide medical insurance for the poor, and fund outpatient treatment for people with mental illness. These entitlement programs would provide the funding mechanisms that would enable patients to be discharged from hospitals into the community (Mechanic, 1987).

New drugs coupled with the community mental health movement and the creation of Medicaid unleashed a new State policy called "deinstitutionalization" of the mentally disabled. The fiscal incentives to State government for deinstitutionalization were powerful. State hospitals were expensive to maintain and a significant drain on State tax revenues. Deinstitutionalization would allow patients to reintegrate themselves into the community so that they could

receive treatment in the least restrictive setting. At the same time Medicaid and SSI would pay for the services necessary to maintain patients in the community while relieving States of the fiscal burden of maintaining State Hospitals. The number of patients in State mental hospitals throughout the United States declined from 559,000 in 1955 to less than 150,000 in the early 1980s (US Dept. of Health and Human Services, 1980). In New York State alone the number of patients in State institutions declined from 95,000 in 1955 to 6,000 in 1997 (N.Y.Times, October 4, 1997).

As the policy of deinstitutionalization was carried out during the 1970's, attention began to shift from the deplorable conditions at large mental hospitals to the problems arising from the lack of community support systems for the mentally ill (Stroul, 1986). Without community support programs in place to treat and support individuals with mental illness, patients released from institutions found themselves in poorly run nursing homes, boarding houses, municipal shelters and on the street (Harrington, 1985). Localities were not equipped to respond to this new problem because they lacked the necessary planning expertise and financial resources. The inability to meet discharged patients' basic human needs for shelter, food, clothing, income and medical care led to a substantial increase in the

number of homeless mentally ill during the 1970's. Newspaper articles and films with titles such as "Deinstitutionalization: Out of Their Beds and Into the Streets" and "Back Wards to Back Alleys" highlighted the human tragedy of patients released from institutions (Santiestevan, 1975; Trotter & Kuttner, 1974).

Significant Federal financial support for outpatient treatment services and preventive mental health programs necessary to address the problems of the mentally ill never materialized. According to a Ralph Nader study group, community mental health centers (CMHC) were never held accountable for the objectives that they were originally created for. CMHCs often treated patients who were higher functioning and able to participate in traditional psychotherapy (Trattner, 1994). In retrospect, however, CMHCs were generally not organized to assume responsibility for the severely mentally ill and were never designed to provide all the needed support services required by this population (Stroul, 1986). In addition, State involvement in the development of the CMHC system was low, and largely uncoordinated with the deinstitutionalization process (Shern et al., 1989). What was needed was a full range of treatment and support services designed to maintain chronic patients in the community.

Many experts agreed that the lack of supportive and rehabilitative programs in the community were responsible for the problems of deinstitutionalization. Adequate care for persons with chronic mental illness needed to include supportive housing, socialization, social rehabilitation, vocational rehabilitation, employment opportunities, educational services, income maintenance, social services, medical and nursing care, transportation and homemaking services (Talbott, 1978).

The National Institute of Mental Health began to address the problems of deinstitutionalization and community based care in 1974 with the formation of an internal task force focused on long term solutions. As a result of its work, the Community Support Services (CSS) initiative was launched in 1977 to assist States and local communities in developing the array of supports and services required by the severely mentally ill (SMI). NIMH defined the concept of CSS as "an organized network of caring and responsible people committed to assisting a vulnerable population meet their needs and develop their potentials without being unnecessarily isolated or excluded from the community" (US Dept. of Health and Human Services, December 1980). The population targeted were "adults eighteen and over, with severe and/or persistent mental or emotional disorder that

seriously impairs their functioning relative to such primary aspects of daily living as personal relations, living arrangements or employment, but for whom long term twenty-four hour care in a hospital, nursing home or protective facility is unnecessary or inappropriate" (NIMH, 1980).

The CSS strategy drew its ideas from the medical model, rehabilitation model and social support model in an attempt to address the biopsychosocial needs of individuals with long-term mental illness. The strategy emphasizes ten essential components crucial to providing adequate opportunities and services for persons with long-term mental illness (US Dept. of Health and Human Services, September 1980).

- **Location of Clients/Outreach-** Locate clients, reach out to inform them of available services and assure their access to needed services and community resources by arranging for transportation, if necessary, or by taking the services to the clients.

- **Assistance in Meeting Basic Human Needs-** Help clients meet basic human needs for food, clothing, shelter, personal safety, general medical and dental care, and assist them to apply for income, medical, housing and other benefits which they may need and to which they

are entitled.

- **Mental Health Care-** Provide adequate mental health care including diagnostic evaluation; prescription, periodic review and regulation of psychotropic drugs as needed; and community-based psychiatric, psychological and/or counseling and treatment services.

- **24-Hour Crisis Assistance-** Provide 24-hour, quick response crisis assistance directed toward enabling both the client and involved family and friends to cope with emergencies while maintaining the client's status as a functioning community member to the greatest possible extent. This should include round-the-clock telephone services, on call trained personnel and options for either short-term or partial hospitalization or temporary community housing arrangements for crisis stabilization.

- **Psychosocial and Vocational Services-** Provide comprehensive psychosocial services which include a continuum of high to low expectation services and environments designed to improve or maintain client's abilities to function in normal social roles. Some of these services should be available on a indefinite

duration and should include, but need not be limited to, services that train clients in daily and community living skills; help clients develop social skills, interests and leisure time activities; and help clients find and make use of appropriate employment opportunities and vocational services.

- **Rehabilitative and Supportive Housing-** Provide a range of rehabilitative and supportive housing options for persons not in crisis who need a special living arrangement. The choices should be broad enough to allow each client an opportunity to live in an atmosphere offering the degree of support necessary while also providing incentives and encouragement for clients to assume increasing responsibility for their lives.

- **Assistance/Consultation and Education-** Provide back-up support, assistance, consultation and education to families, friends, landlords, employers, community agencies and others who come in frequent contact with clients to maximize benefits and minimize the problems associated with the presence of these persons in the community.

- **Natural Support System**- Recognize and involve natural support systems such as consumer and family self-help groups, consumer run service alternatives, neighborhood networks, churches, community organizations, commerce and industry.

- **Grievance Procedures/ Protection of Client Rights**- Establish grievance procedures and mechanisms to protect client rights both in and outside of mental health or residential facilities.

- **Case Management** -Facilitate effective use by clients of formal and informal helping systems by designating a single person or team responsible for helping the client to make informed choices about opportunities and services, assuring timely access to needed assistance, providing opportunities and encouragement for self-help activities and coordinating all services to meet the client's goals.

The underlying philosophy of the CSS concept is based on value and respect for the individual and focuses on positive expectations for growth and improvement. These ideas are fostered by creating opportunities for clients so that they might realize their potential for growth and

independence through client self-determination, individualization of services, normalizing services and service settings and providing services in the least restrictive setting while simultaneously maximizing mutual and self-help (Stroul, 1984).

NIMH stressed that the components of CSS be organized into a coherent and integrated system, however, it refrained from specifying the particular philosophical, programmatic or therapeutic approach for service delivery. Rather, CSS was to be a function-specific initiative based on a set of core values necessary to provide adequate community support services. Thus, specific facilities, organizational arrangements, models, approaches and therapeutic interventions used to fulfill these functions remain at the discretion of the local government provider (Stroul, 1986). The CSS initiative would provide the framework within which innovative, programmatic strategies could be created for the care of chronic mental patients. New program models encompassing a wide range of treatment modalities, both traditional and innovative, began to evolve in a variety of service settings.

During the 1970s and 1980s, as government attempted to address the problems of deinstitutionalization by increasing resources for new programs, NIMH and other policy makers began to grapple with the problems of a decentralized,

fragmented and uncoordinated community service system. Countless individual programs had been developed to provide specialized services or to serve narrowly defined target groups. This resulted in system fragmentation that when combined with the nature of mental illness, impeded client access to services (Spitz, Spring 1987). In addition, policy makers became concerned about cost containment and maximizing the impact of service delivery. The proposed solution to these problems was case management, which became a key element of the CSS service strategy since it would provide the mechanism for coordinating all system efforts (Intagliata, 1982).

Chapter III

LITERATURE REVIEW

Case management has been applied by many disciplines, primarily social work, mental health, geriatric, primary care and trauma medicine (Austin, 1983). Professional discussions of case management in mental health date back to the late 1800's where it had been practiced in Europe as an alternative to institutionalization (Trattnor, 1994). In the United States it was originally known as case coordination and focused on the "coordination of community services and the creation of new welfare resources indispensable to the helping process" (Lubove, 1965). Case management is derived from social work's historical tradition and the work of Mary Richmond during the era of settlement houses and charity organization societies (Greene, 1992). The intervention is grounded in the social work tradition as a problem-solving activity with roots in the profession's value base. These values include respect for the individual, client self-determination and equal access to resources (Grisham, White & Miller, 1983; Modrcin, Rapp & Chamberlain, 1985). Social work's emphasis on the person in the environment and the casework relationship fit in comfortably with

definitions of case management.

Case management has presented difficult dilemmas for the social work profession. Questions have arisen about whether it represents client advocacy or resource management? Arguments continue about whether case management deserves to be a professional social work domain since many interpret it as a generic method suited to paraprofessionals. In addition, social work cannot lay sole claim to case management since several other professions are vying for leadership in this area (Johnson & Rubin, 1983).

Policy makers, program developers and client advocates have looked to case management to solve some of the most intractable problems faced by the SMI in a fragmented, decentralized mental health system. During the 1980s, case management services were mandated by Congress for all individuals with SMI who receive substantial amounts of public funds or services under Public Law 99-660 (Title V, State Comprehensive Mental Health Services Plan, Omnibus Health Act of 1986). Managed Care organizations have begun to incorporate intensive case management into their service regimen and the National Alliance for the Mentally Ill (NAMI) rates ICM as one of the nine critical components of care necessary for comprehensive services to the seriously mentally ill (Psychiatric Services, 1997). While case

management has been widely acknowledged as a valuable and necessary service, until recently there has been substantial disagreement over its definition, purpose and effectiveness.

The term case management has been criticized as "overused, subject to too many program-linked interpretations, or so lacking in operational clarity as to defy meaningful comparison" (Raiff & Shore, 1993). Prior to the 1980s, the field had been poorly studied. More recent research on model demonstration projects were setting specific with their own terminology and personnel standards. Frequently, the particular characteristics of a case management system were shaped by the context in which it was expected to operate. Rapp and Chamberlain (1985) have concluded that case management is a "variety of idiosyncratic programs" that appear "to be applied to a number of practices that lack specific definitions". There has been no standardization of measurement instruments, operational definitions or outcome criteria. Evaluation research has usually focused on systems level objectives concerned with effectiveness, efficiency and cost-related measures of interest to funding providers. Proponents have also been unclear about whether the focus for study should be on direct practice, administration or systems change. As a result, much of the literature on case management has

emphasized program outcome studies rather than specific intervention strategies.

Definition of Case Management- Recently, a consensus has formed that case management consists of a recognized core set of functions (Raiff & Shore, 1993). The Encyclopedia of Social Work refers to case management as a "boundary spanning approach" which focuses on achieving continuity of care and ensuring that clients receive appropriate services (Rubin, 1987). Moxley (1989) defines case management "as a designated person or team who organizes, coordinates, and sustains a network of formal and informal supports and activities designed to optimize the functioning and well-being of people with multiple needs".

The intervention has been described as both a micro and macro approach, in that both individual practice and community practice are integrated. Thus, the case manager must interact with a series of social system layers (Intagliata, 1982).

Objectives of Case Management- A variety of objectives have been associated with case management programs for the SMI. The most frequently cited objective is the enhancement of continuity of care for clients. Test (1979) has identified two dimensions related to this concept. The first

is that clients are provided with comprehensive and coordinated care. Comprehensiveness can be evaluated by the level of intensity and breadth that exists (Applebaum & Austin, 1990). The larger the caseload, the less intense the case manager-client relationship is. Breadth refers to the range of services that the case manager can provide.

The second dimension is longitudinal, and implies that the case management system provide comprehensive, integrated services over time and responds to changes in a client's circumstances. An additional objective frequently cited is the enhancement of accessibility and accountability within the client's service system. The case manager is charged with negotiating the system and is designated as the responsible agent for the overall effect of the system (Baker & Northman, 1981). By improving the level of coordination, case management enhances the efficiency of the service system.

Ideology- Ideology plays an important part in the case management concept. Frequently cited components include a client centered orientation that focuses on the client's strengths; teaching clients the skills necessary for community integration; taking full responsibility for clients; flexibility of services over time; a focus on moving clients toward independence; and an open-ended commitment determined by the client's needs.

Functions of Case Management- Raiff and Shore (1993) report that the most common functional definitions of case management include initial client outreach and engagement; assessment and diagnosis of needed services, programs and resources; developing a service strategy; linking clients to services and community resources; implementation and coordination of effort so that needs are jointly addressed; and monitoring and evaluation of fit between client and service.

Structure of Case Management- Two structural elements have been specified as essential to case management (Intagliata, 1982). The first is a case manager who provides coordination and integration of services at the client level. An important dimension of this is the status given to case managers. There is an ongoing debate about whether the case manager should be a professional or a paraprofessional. Generally, case managers have typically been trained in the human services field. Depending on the level of expectations, organizations employ both para- professionals and professionals.

The second structural element cited as essential is the designation of a core agency responsible for coordination and linkage of programs at the local systems level. Compliance with coordination efforts depends on a formal set of contracts issued by a specified local agency that binds

providers to deliver specified services to clients. Generally, the core agency is a State or local government authority responsible for setting case management objectives and standards and negotiating and implementing the contracts with local programs.

Additional structural elements considered important are the level of supervision provided for case managers, whether the program uses the individual versus team approach for clients and the characteristics of the client caseload. Caseload size will often depend on program objectives, case manager training and the level of client pathology.

Case Management and the Service System- Contextual factors influence how case managers perform their functions. Implementation is often shaped by the unique local contexts in which programs operate. For instance the range of services available to clients affects case manager activities much more than their formal job description (Intagliata, 1982). In addition, there is a concern with the reciprocal transactions that occur between individual and environment. Case management is thus concerned with the theoretical framework of the person-in-situation perspective that calls for an eclectic range of intervention techniques that can be tailored to the complex situation of the client (Rothman, 1991; Meyer, 1987).

O'Connor (1988) points out that a case management

system embodies the practice component and the resources, arrangement and administrative structures necessary to implement a case plan. Thus, the case management program operates on the micro, meso, exo and macro level. The case manager must simultaneously attend to all these levels by working with the client (micro), connecting the client to community resources (meso level), and remaining familiar with agency rules and regulations (exo level). These activities occur within the context of the client's social and economic environment (macro level).

While case management is shaped by the system, it can also serve as a "systems intervention tool" (Austin, 1990) that influences the entire mental health system through referrals, coordination and advocacy.

Organizational Setting- Another important factor in understanding case management is the organizational setting in which the program operates. Several types of settings have been identified. The freestanding case management agency operates autonomously and is solely focused on case management functions. Establishing credibility and maintaining funding are the primary obstacles. A second organizational setting is a special case management unit located in an institution or an agency with multiple services. This setting can afford the advantages of immediate recognition and better access to services.

Managers in this setting may, however, have to struggle with political issues that arise between different departments within the agency.

Admissions Criteria- Case management programs must specify the target group eligible for its services. Programs can employ eligibility criteria that define the disability and the functional impairments required for admission. In mental health, case management programs are typically geared toward populations who are identified as "heavy users" of the system with a history of noncompliance.

Funding- Different financing arrangements are used for case management reimbursement. Funding can be as fragmented as the service system that case managers are meant to coordinate. One method is to pool funds from several sources with State and local government authorities providing deficit financing for programs that offer open-ended services. Another is to set a capitated rate for services in which the provider agrees to provide a minimum level of services. A third variation is the fee for service approach. Funding mechanisms often rely on Medicaid reimbursement for fee for service or capitated reimbursement systems.

Professional Orientation and Education- Social work, psychology and nursing are the most frequently cited reference groups for case managers (Austin, 1983). Educational levels for case managers range from high school

degrees to doctoral degrees. This factor normally influences the task requirements and case load ratios that case managers are required to take on. Ideally, staff with different professional backgrounds will be responsible for tasks that coincide with their level of education, experience and skills. In depth orientation and in service-training are often provided and considered by some to be imperative (Raiff & Shore, 1993).

Generally, there are two staffing options followed. In one a single case manager carries out the complete set of functions required. In the other, a multidisciplinary team approach is used in which different members of the team carry out some functions but a single case manager is responsible for linkage and coordination.

Case Management Models

A wide range of case management models exist in mental health that fit on a continuum ranging from those that provide minimal services (e.g., outreach, assessment, planning, and simple referral) to more comprehensive programs that include client advocacy, direct casework, developing natural support systems, monitoring of program quality, education on self-care, crisis intervention and medication management (Korr & Cloninger, 1991).

Case management prototypes have been classified as either "client-focused" or "system focused." Client focused models emphasize relationships between case manager and client and how they interact. Systems models focus on the service environment, organizational structure and resources (Raiff & Shore, 1993). Generally, case management prototypes that are client focused fall under the following three categories; broker, service management and managed care. In the broker model, the case manager is charged with linking clients to services through referrals. The case manager has no financial authority regarding the purchase of services and may have little influence on the quality of how these services are delivered. The Broker model was the first approach to case management that emerged soon after the deinstitutionalizaton process began.

The service management approach incorporates a cost control function. Case managers are authorized to purchase services for clients and work within a budget cap set for each client. The third approach uses a managed care model in which the provider takes over the financial risk of providing necessary services and is obliged to keep costs below a prepaid amount (Applebaum & Austin, 1990).

Ross (1980) initially proposed three models for client focused case management programs that varied the level of service intensity to clients. Differences between the models were based on the functional components that included the following:

- **Minimal Model-** Functions for this model included outreach, client assessment, case planning and referral to service providers.
- **Coordination Model-** Functions for this model included outreach, client assessment, case planning, referral to service provider, advocacy for client, direct casework, developing natural support systems and reassessment.
- **Comprehensive Model-** Included all of the above functions plus advocacy for resource development, monitoring quality, public education and crisis intervention.

Ross (1980) defined the major differences among the models as related to the increasing amount of control over provider agencies that case managers can have in the coordination and comprehensive model. The comprehensive model represents a more intensive form of case management.

Several typologies of case management programs have been developed since Ross's (1980) initial proposal. Robinson and Bergman (1989) and Chamberlain and Rapp (1991) identified four client-focused models through their own literature and methodological reviews of outcome research: The Broker model, The Personal Strengths model, the Rehabilitation model and the Program of Assertive Community Treatment (PACT) model. Their typology of case management focuses on the ideological differences underlying program models by categorizing the functional and philosophical variables.

A second typology characterizes case management as using different staffing dimensions; the Generalist model, the Specialist model, the Therapist model, the Family model, the Psychosocial Rehabilitation Center model, the Supportive-Care model, and the Volunteer model. This typology focuses on staffing patterns but does not incorporate other program dimensions (Levine & Fleming, 1985). A third typology developed by Harris and Bergman (1993) describes four prevalent models found today: Clinical case management, Contextual case management, Rehabilitation case management, and the Strengths case management. The models are classified based on whether they are empirically based (Clinical & Rehabilitation models) or consistent with the interpretive school of thought (Personal Strengths and

Contextual). Finally, Honnard (1985) describes a typology based on the focus of the model: role-focused, service focused, client- focused, and goal focused. Programs are categorized on whether the emphasis is placed on case manager roles, case manager activities, the target population, or client/agency goals.

For the purposes of this review, we will focus our attention on four models that have been widely written about and studied in the literature. These models are client focused, provide a certain degree of service intensity and are longitudinal in nature. The programs derived from these models were designed to address the gaps in continuity of care that resulted from the failings of the original Broker model.

- **Clinical Case Management**- This model emphasizes the "Interactional phenomenon" in which "the relationship between patient and case manager is the essential ingredient" (Harris & Bergman, 1988). The model recognizes clinical case management as a modality of mental health practice and moves the case manager beyond systems coordinator, service broker, or supportive companion. It requires the case manager to have special skills comparable to those required in psychotherapy, psychopharmacology, or psychosocial rehabilitation. Using the biopsychosocial model of mental illness, the clinical case manager model integrates clinical knowledge, personal involvement and environmental interventions to maintain the patient in the community (Kanter, 1989). The model recognizes that case managers must often act as clinicians by providing direct services.

- **Personal Strengths Model-** This model emphasizes the social problems of the individual with mental illness. It is based on the assumption that successful people can develop and use their own potential and have access to resources needed to do this. Since the SMI have difficulty organizing and interacting with their world, the case manager must help the client in identifying their strengths and creating situations where success can be achieved. The second assumption is that human behavior is a function of the resources available to the individual. The SMI may need help in securing resources important for growth and development to take place (Modrcin et al., 1985). Rapp (1993) has proposed six principles important to this model: (1) the focus is on the individual rather than pathology; (2) the case management relationship is primary and essential; (3) interventions are based on patient self-determination; (4) the community is viewed as a reservoir of resources, not as an obstacle; (5) contacts with patients occur in the community, not in the office; (6) the SMI can learn, grow and change.

- **Rehabilitation Model-** This model views case management as focused on the client's goals and needs, rather than preestablished system goals. Although strengths are identified and enriched, the model primarily focuses on evaluating skill deficits which act as barriers to success. By teaching the necessary skills required to overcome barriers, the client can remedy deficits and attain their goals (Anthony et al. 1988).

- **Full Support Model-** This model emphasizes a proactive, assertive approach in helping SMI individuals improve their level of functioning in the community. Case management functions not only entail advocacy, coordination, systems planning, monitoring and support functions but also supportive psychotherapy, symptom management, symptom education, crisis intervention, family education /collaboration and support. Clinical management is combined with teaching coping skills and providing support. A leading example of this approach is the Programs in Assertive Community Treatment (PACT) model in which the assertive outreach approach incorporates case management as a central function. Under PACT, treatment, rehabilitation and other services are provided by one treatment team containing specialists in either vocational rehabilitation, nursing, social work, psychiatry. It is important, however, to note that PACT is not a case management

> model. In the Full Support model, much of the philosophy of PACT is implemented by one or several case managers who seek to utilize local resources rather than provide all services in-house. Robinson and Bergman (1989) utilized the term "Full Support" to highlight its comprehensive approach and differentiate the case management functions from the PACT model.

These models share common approaches in several areas. The core functions universally covered are outreach, assessment, service planning, linkage, monitoring and client advocacy. Although all models are client centered, only the Personal Strengths approach is client directed. The other models attempt to incorporate clients' "perceived needs" into the service plan. All models look to the environment for natural resources and formal and informal services. All models have adopted an in vivo approach by which case management functions are brought to the client in their natural setting, such as the home, shelter etc. Staff to client ratios are kept as low as possible, ranging from 1:10 to a high of 1:25. In most of the models, there is an emphasis on the development of a close working relationship and case managers have frequent contacts with clients, ranging from every day to a minimum of once per week. Case management is also viewed as an open ended-service, without time limited boundaries.

Most of the models maintain that case management requires a master's level degree, however, because of budget

constraints, staff with baccalaureates or associates degrees are often hired and supervised by masters level coordinators. The most frequent professional discipline required is social work, except for the Full Support model that requires a variety of mental health professionals to create a team. The Rehabilitation model prefers staff trained in rehabilitation practice.

All models are focused on the functional elements of client assessment except the Clinical and Full Support models which stress clinical assessment. Some models have expanded the core functions to include systems advocacy (Clinical, Broker, Personal Strengths, Rehabilitation), crisis intervention (Clinical, Personal Strengths, Full Support), symptom management (Clinical, Full Support) and skills training (Rehabilitation).

Significant differences exist between the models in relation to their underlying philosophies. Each program model operationalizes the functions of case management differently. The Clinical approach stresses that clinical services are provided by the case manager; Personal Strengths uses a mentor approach and systems advocacy to improve quality of life; Rehabilitation aims at improving living skills by remedying deficits to overcome barriers; and Full Support attempts to reduce symptomatology and improve functionality.

In terms of staff structure, the Clinical and Rehabilitation models have case managers working individually with a specified caseload while the Personal Strengths model has an individual case manager working with a team. The Full Support model uses an interdisciplinary team to perform case management as one of its functions. While all models focus on treatment resistant SMI clients, the Full Support model makes this client population its main focus.

In terms of outcome measures, most have examined five basic dimensions, community tenure, cost, vocational achievement, goal attainment, and level of functioning. The Personal Strengths model uses four primary indicators: living index, vocational achievement, community tenure, and number of clients enrolled. In the Rehabilitation model, the service plan contains an evaluation component related to goal achievement. Other outcome measures are hospitalization and emergency room usage, cost, and system performance. The Full Support program evaluates hospital utilization, level of functioning, client symptomatology, client satisfaction and costs (Robinson & Bergman, 1989).

These models of case management use different philosophical, structural and service components to serve the SMI. The core case management functions take on very different meanings when examined in the context of a models

underlying focus. The models can be understood as distinct cultures that represent divergent images of the individual and the world they live in (Fallot, 1993). Nevertheless, the models share many cultural and structural features. These are low client/staff ratios; in vivo site for treatment; frequent and intense contact meant to forge regular and strong ties with clients; and open-ended lengths of service. The programs generated from these models represent a refined application of case management that can be classified under the heading "intensive case management".

Rather than develop a typology of case management models that accentuates the differences among various approaches, Raiff and Shore (1993) proposed a unifying model of case management called "Advanced" case management. They attempt to transcend the philosophical differences by identifying common program attributes that they describe as "typically pragmatic, mid-range conceptual constructs." The authors seek to tie together the core case management functions while allowing room for theoretical diversity so that the model can be used with different populations. They believe that a program or case management practice is advanced if it displays innovation on five dimensions: client, practitioner, organization, model of service delivery, and/or attention to quality assurance.

In terms of the client, case management interventions are intense rather than casual, and case managers have small caseloads so that frequent contact can occur. The authors conceptualize "Advanced" case management as a form of intensive case management and describe the service as open-ended, available as needed, and frequent (daily too once every two weeks). Contacts must also occur in vivo to produce the interactive intensity required by the process. Another important aspect of the client dimension is expanding services to "secondary" consumers, such as family members. These services may range from supportive to educational and advocacy activities.

The advanced case management practitioner will have a greater scope and proficiency to their work and will be competent at client and systems advocacy, crisis intervention, in vivo outreach and assessment, counseling, and knowledge about accessing entitlements and support systems. Advanced staff can use "clinical" approaches for their practices (Bachrach, 1992) and are associated with "autonomous practice, broad responsibility, and high task complexity" (O'Connor, 1988).

The advanced case management organization is characterized as having a low staff-client ratio, however, this cannot be the only criterion. Advanced programs should

also match staff to clients based on different levels of need. Advanced programs use data designed to monitor client status, movement, pattern of service provisions and link this to individual outcomes. These programs also seek the highest and most appropriate level of professional staff and supply mandated training as well.

Advanced models of service share an ability to articulate a program design that targets a specific group, identify a system level goal and explains the preferred mechanism for intervention. These program types are not static, but innovative in that they cross-fertilize, expand the knowledge base and respond to changing social agendas.

Finally, Advanced Case Management focuses on providing quality services. Quality assurance includes a plan of evaluation that makes explicit what the case management goals are and allows for effective monitoring of program and standards of practice. There are at least three dimensions that can facilitate this objective: structure, process, and outcome (Collard, Berman, & Henderson, 1990). Structural measures include standards related to individual licensure, training, staffing arrangements and the best match between staff and client. Process measures look at the sequence and coordination of case management activities. Other important measures are scope of service, its most important aspects, timeliness, comprehensiveness, involvement with secondary

consumers and teamwork. Quality outcomes also focus on the change that has taken place because of case management activity. Common indicators for this are measures of client improvement and satisfaction, compliance with service plan goals, indicators of continuity of care and the interaction between these variables.

The models reviewed so far are theoretically based and critics contend that they lack the definitional consensus and conceptual clarity necessary for creating effective program interventions. Rothman (1991) attempted to address these issues by formulating a more systematic case management model that was empirically based. His intent was to create firm cognitive boundaries around an important intervention that had been shortchanged by its conceptual shortcomings. Rothman used a multi step process, the details of which will be described later in this review, which would explicitly define a case manager's practice.

Rothman's (1991) model encompasses fourteen functions depicted in a time phased process. The functions often overlap with each other because they are grouped together. The first function is the access mode, meaning how does the agency obtain its clients. This access mode emphasizes agency receptiveness to clients and outreach by the agency in identifying clients who are in need. Evaluation and

acceptance should involve a quick turnaround time. The next functions, intake, assessment and goal setting, interact and overlap with one another. Intake involves identification of the client's problem and situation. Assessment involves greater precision in problem identification and clarification of a client's social, psychological and physical functioning. Professionals from several disciplines may need to be included in the assessment process. Goal setting focuses on establishing the service goals derived from the assessment.

Following this, intervention planning, resource identification and indexing are used to achieve the stated goals. Intervention planning encompasses both treatment planning and service planning aimed at linking clients to appropriate services. The emphasis here is on client participation in identifying their needs. Resource identification and indexing involve obtaining information on relevant service resources and organizing the data.

Rothman's research (1987) suggests that the next function, linking, must be active and facilitative, with the case manager serving the role of "traveling companion." Monitoring and reassessment overlap and involves decisions about whether current arrangements are working for the client. Monitoring requires a substantial investment of time

while reassessment should be required at established intervals. Outcome evaluation occurs when the client is ready to leave the services.

The function of interagency coordination deals with establishing relationships among agencies that will facilitate the linkage function. Case managers also must engage in the functions of counseling and therapy. Counseling involves giving clients information and advice while therapy emphasizes the "here and now" by helping client's cope with day-to-day living situations. Both functions overlap to a certain degree. Advocacy is another important function involving affirmative or assertive approaches to assisting clients to receive those services to which they are entitled.

Rothman's (1991) objective was to make case management more systematic, consistent and efficient. He does, however, stress the importance of flexibility, longitudinality and the cyclical and dynamic process inherent in case management services. The model is intended to incorporate the widest range of fundamental functions in case management so that a practice theory for highly impaired, long term clients can be constructed.

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These model descriptions provide further evidence of case management's coming of age and the move to develop

programs that incorporate highly sustained levels of case manager activities directed toward the seriously mentally ill. The models can be categorized under the heading of intensive case management (ICM), which is a derivative of generic case management and focused on the full range of client needs in the community (see appendix A). ICM seeks to fulfill those needs from the client's perspective by working with clients in their community rather than from an agency office (McGurrin & Worley, 1993). Unfortunately, differences among the models have been emphasized more than their similarities, resulting in confusion about the definition and boundaries of the ICM program format. As a result, the field has been viewed in a concrete, antitheoretical manner with little reference to its conceptual antecedents (Hill, 1990).

While Raiff and Shore (1993) attempted to address the disparities in the field by creating a unifying conceptual framework for "Advanced" case management, they did not operationalize critical structural and organizational elements necessary to developing a program model aimed at the seriously mentally ill. The concepts they developed provide the foundation for a practice model that can be applied to a variety of human service settings and populations. Rothman's (1991) attempt to bring greater conceptual clarity to case management through empirical data

also succeeded in creating a practice model that defines the fundamental practice principles inherent to intensive case management. Unfortunately, it also failed to define the structural and organizational aspects necessary to developing a coherent intensive case management program theory.

The aim of this study will be to operationalize the structural and organizational components critical for the development of a coherent intensive case management program theory and identify important practice elements from the different case management models already developed. The author believes that an ICM program model can be developed that incorporates essential elements from the different practice models described in order to meet the multiple needs currently addressed by the different models (Mueser et al., 1998).

Theoretical Perspectives on Case Management

An important first step in creating a program theory for intensive case management is to start with a coherent and logical conceptual framework that can inform both practice theory and program structure. There are two theories that lay the foundation for this requirement, social network theory and the concept of continuity of care.

Social network theory provides a broad overview that can explain the effects of case management on the outcome of psychiatric illness. The theory hypothesizes that an important function of case management is to reconstruct a community for clients by establishing a set of professionally based social networks and social supports that may have been damaged or simply be inadequate to dealing with the challenges of the illness. The case manager thereby creates a new safety net for the client. Creating a new social support network also produces the added effect of social control that increases the likelihood that clients will follow treatment recommendations. In essence, the role of the case manager is to recreate the buffering role that a family may provide in the expanded stress-vulnerability-family coping model of psychiatric disorder (Mueser & Glynn, 1995). The theory leads to testable hypotheses about the relationship between

distinctive aspects of the client's social network and outcomes. For instance, characteristics regarding case manager to client caseloads, frequency of contacts and the relationship between client and case manager would all effect client outcome.

Different case management models "construct social safety nets that differ in the nature of the ties between case manager and consumer, in whether they explicitly target different parts of the lay and treatment community, and in how comprehensive social and treatment interactions are intended to be" (Pescosolido et al., 1995). Social network ties of particular configurations and content can effect a patient's recovery (Thoits, 1995), and provide an understanding of how environmental conditions can increase or decrease the effectiveness of a medical treatment known to be efficacious. Finally, social network ties may not necessarily be positive or supportive since they can exert social control. Too much or too little social support and control can have poor consequences for client outcomes depending on the client's situation.

Continuity of care, meanwhile, provides a focused framework that circumscribes the boundaries of intensive case management approaches and unifies the various ICM practice principles developed to date (Bachrach, 1993).

Continuity of care focuses on maximizing the therapeutic potential of the patient through individualized care rather than mass care. There is an emphasis on the ideals of comprehensiveness, longitudinality, and relationship as essential aspects of service delivery (Bachrach, 1981, 1986, Harris & Bachrach, 1988, Test, 1979, Torrey, 1986). Comprehensiveness refers to obtaining or providing the array of services needed by persons with serious mental illness. Longitudinality refers to the provision of case management services over time, a necessary feature due to the persistence of the illness. Relationship is based on the assumption that individuals with mental illness are best served when they establish a secure and dependable supportive relationship with a case manager. These ideals are common in the literature on intensive case management irrespective of which specific practice approach is described. Intensive case management represents the application of the abstract concepts of continuity of care.

There are nine interdependent principles that form the basis of continuity of care in the treatment of the seriously mentally ill. The first is an administrative climate that endorses, supports and legitimates services for this target group. Continuity of care does not exist if members of the target group are excluded from the system of care. Second, continuity of care requires that clients have

access to the services they need. Geographical, financial and psychological barriers preventing clients from having access to services must be eliminated. Third, continuity of care depends on providing a full complement of services. Continuity of care does not exist if essential services are unavailable. The service system must recognize all of the target population's needs, including medical and psychiatric care, housing, rehabilitative interventions, leisure activities, crisis care, social supports and asylum.

Fourth, mental health services must be individualized for clients. Each individual has their own constellation of service needs depending on their circumstances. Fifth, the system of care must be flexible in its program offerings. Continuity of care is not possible when clients are forced into predetermined standards of time and space. No single program or intervention is always suitable for all clients. Clinical considerations are paramount, and cannot be undermined by arbitrary rules. Sixth, various organizations and agencies serving the client must be linked together in a dependable way. Unless communication is established for interagency cooperation, continuity of care cannot exist.

Seventh, each client must be allowed the opportunity to develop a dependable and supportive relationship with a case manager who can help the client navigate through the system of care. Continuity of care cannot be provided unless

relational needs of the client are met. Eighth, the client must be encouraged to participate in the creation of his or her service plan. Continuity of care is not possible if the client's needs, wishes and hopes are ignored. Ninth, the system of care must address the cultural realities of each client. There can be no continuity of care unless these cultural orientations are understood and valued. While these principles are rarely implemented in their purist form, they are nevertheless theoretical guidelines that can be used in planning programs.

Because case management lacks a specific training focus, it must be defined in terms of its functions rather than based on education that its practitioners receive. The concept of continuity of care provides the theoretical framework for addressing what those functions are. Intensive case management functions correspond very closely to the principles of continuity of care described above, so much so, that they can be described as the action components of the concept. In addition, the principles of continuity of care transcend specific intensive case management approaches and provide considerable unity to the field (Bachrach, 1993).

In terms of function, the intensive case manager is expected to increase client access to programs and entitlements. They devote much effort to arranging for

clients to receive a variety of comprehensive services. No matter what the underlying practice principles of the program, the case manager helps clients keep appointments, organize housing placements, and link them to appropriate social and rehabilitative programs. Similarly, an orientation to client centered programming is the foundation of all case management efforts. Advocacy and outreach are increasingly identified with case management and illustrate the person orientation of the field, particularly with homeless and disaffiliated SMI (Cohen, 1990, Lamb & Bachrach, 1992). Case managers also serve as the linkage mechanism within the system of care and are expected to coordinate disparate program offerings for client benefit (Intagliata, 1982). Finally, case managers are often the principal member of a client's social network (Goering, et al. 1988) and are expected to be effective neighborhood workers who understand and respond to the cultural realities that influence their client's lives.

Clearly, the notion that case management is a mere brokering of services no longer reflects practice reality. Using the functionalist perspective, the intensive case management models described earlier fall along a philosophical continuum, with brokering and clinical approaches at opposite poles. If we assume that the correct

way to do case management in mental health ultimately depends upon the needs of the patient and on the system's willingness to respond to them, then implementing case management services to SMI populations will require that it be intensive in nature. The concept of continuity of care allows us to view the practice of intensive case management in a more flexible and uniform manner.

A Review of Intensive Case Management Outcome Studies

In response to questions raised by critics, researchers have investigated whether Intensive case management (ICM) interventions are effective. What follows is an examination of four primary literature reviews focused on outcome studies for ICM programs that targeted SMI populations. It should be noted that numerous literature reviews have included studies of PACT under the case management heading. These studies will be excluded from review here because they do not represent ICM services but a treatment approach that uses case management functions as a part of a complete package of treatment services.

Narrative literature reviews were conducted by Chamberlain & Rapp (1991), Solomon, (1992) Scott and Dixon (1995), and Mueser et al. (1998) and cover outcome studies on ICM programs conducted from 1980-1996. Twenty studies identified as intensive case management programs were reviewed by the authors. Eleven of the studies reviewed were randomized control trials, five were a quasi-experimental design with one or more comparison groups and four used a matched group design.

In terms of reducing the rates of psychiatric hospitalization, the results were mixed. There was some

indication that ICM did reduce use of inpatient services. Many findings were not, however, statistically significant. Several studies did show significant reductions in mean number of hospitalizations (Bond et al., 1988; Borland et al., 1989; Bigelow & Young, 1991; Macias et al., 1994, McGurrin & Worley, 1993) and in average number of days hospitalized (Borland et al. 1989; Surles et al., 1992; Wright et al. 1989; Bush et al. 1990; Quinlaven et al., 1995). Other studies reported no difference in average hospitalizations (Bush et al., 1990; Hornstra et al., 1993; Muijen et al., 1994, Modricin et al., 1988) or average number of days hospitalized (Bigelow & Young, 1991; Hornstra et al., 1993; Lehman et al., 1993; Muijen et al., 1994) and one study (Curtis et al., 1992) actually reported an increase in hospitalization usage.

Scott & Dixon (1995) reported that they were unable to draw firm conclusions about hospitalization rates due to the lack of replication studies on clearly defined and well implemented ICM program models. It was also unclear whether the case management intervention explicitly targeted reductions in hospital use and to what degree the program could exercise control over hospital admission decisions. Thus we did not know whether reduction in hospital use resulted from explicit focus on this variable, from the intensity of services provided or from the program's ability

to control access to hospitalization.

The literature reviews suggest that the ICM programs using the Full Support model had the most success in terms of lowering hospitalizations for experimental subjects. Of the twelve studies using a Full Support model, five reported a significant decrease in hospitalization rates. Of the two ICM programs using the Rehabilitation model, one found no difference in hospitalization rates (Goering et al. 1988) while the other did not measure this outcome. The three programs using the Strengths model did show decreases in hospitalizations, although only one study reported the decrease to be statistically significant. In addition, one of the studies used the Strengths model with a psych rehab day program.

In summary, these results suggest that the Full Support model can reduce hospitalizations because of its emphasis on community tenure and the provision of alternate services. Results for the Rehabilitation model showed no statistical significance in reducing hospitalization rates while only one study examining the Personal Strengths model showed a significant decline. Chamberlain and Rapp (1991) speculate that this may be due to the emphasis on improved client functioning and circumstances that the Rehabilitation and Personal Strengths models take rather than a reduction in rehospitalization

The literature did show clear evidence that ICM increases the use of other mental health services by clients. Scott and Dixon (1995) report that six of the seven studies examining this outcome showed significantly positive effects (Morse et al. 1988, 1992; Borland et al., 1989; Jerrell and Hu, 1989; Hornstra et al, 1993; Quinlaven et al. 1995). When interpreting these results, it is important to consider how rich or poor the surrounding service environment is and to remember that there is a historically weak link between community services and outcomes.

In terms of reducing costs of care, it is difficult to draw conclusions from the studies examined. Four studies reported that ICM approaches were less costly than comparison conditions (Bond et al., 1988; Burns et al. 1993, Muijen et al., 1994, Quinlaven et al. 1995). Borland et al. (1989) reviewed cost patterns over five years of ICM services for seventy-two patients. They found there were significant reductions in cost for hospitalizations and precommitment evaluations, however, the costs of structured residential care increased significantly throughout the period examined. When the costs of ICM services were added to this, no significant savings in total treatment costs were realized. Mueser et al. (1998) point out that models emphasizing rehabilitation or personal strengths may not offer immediate cost savings that a full support model can,

however, eventually they may foster greater independence. Thus, the follow-up period should be determined by the theory since the time frame of a cost analysis is critical.

The results of ICM services for other outcome domains such as reduced symptoms and treatment compliance suggest poor to uneven results at best (Chamberlain & Rapp, 1991). In terms of instrumental role functioning for specific life domains such as vocational functioning, residential stability and independence, more promising results were found. Mueser et al. (1988) concluded in their review that ICM had no beneficial effect on social functioning and that clients experienced moderately positive effects on quality of life outcomes. These results may be due to case management being a system management service rather than a clinical service. In addition, it appears that no matter what the model's focus (e.g., hospitalizations, functional abilities, service usage), just defining the principle focus is enough to achieve results on that dimension (Chamberlain & Rapp, 1991).

What may account for the variation in outcomes found across the studies? Perhaps the answer to this question lies in the methodological and implementation differences that exist across the studies reviewed. Differing patient characteristics, follow-up duration, outcome measures and

attrition rates all affected the findings reported (Muester, et al., 1998). Many ICM programs employed different practice principles that had not been replicated or were program hybrids using different components from different models. Caseload size and program composition often varied significantly across studies. This made it difficult to discern the effects of interventions. Let us examine several studies in detail so we can note the implementation differences.

In the Quinlaven (1995) study, which used a full support approach, client to case manager ratios were 1:15 and the program used a team approach with an emphasis on obtaining representative payee status for clients. Client:staff contact was intense in nature and in one instance reached twenty-four contacts in one month for one client. The results of this intervention were a decrease in hospitalizations and an increase in outpatient usage. The Hornstra (1993) study reported utilizing a psychiatric rehabilitation approach in which client to case manager ratios ranged from 30:1 to 9:1. The authors found no difference in hospitalization rates with patients in a standard case management program and proposed that inner-city clients have a poorer prognosis.

Borland et al. (1989) used a full support approach in which case manager to client ratios were 1:9 and two person

teams were organized under the supervision of a nurse. There was an emphasis on obtaining representative payee status for clients and the program had access to crisis beds. Readmissions to hospitals decreased by 75% over five years. Curtis et al. (1992) used mental health aides who received training in case management and were under the supervision of psychiatrists who were team leaders. Case loads were 35-40 clients per case manager and clients were visited once per week during the first month and monthly after that if necessary; otherwise, telephone contact was maintained weekly. This study found an increase in hospitalizations compared to clients assigned to routine aftercare. Finally, Goering et al. (1988) used a rehabilitation approach with case manager caseloads averaging between fifteen and twenty clients. Results suggested that while there were no differences in hospitalization rates between the control group and the experimental group, clients receiving case management had better occupational functioning, housing stability and were less socially isolated after two years.

Table 1 compares some basic program conditions described in twenty studies completed on ICM. The information contained in the table gives a cursory look at how different program implementation actually was between studies.

In terms of caseload ratios, the ICM programs studied

Table 1
Program differences among studies focused on ICM

Investigators	Type of Study	Location	Groups studied	Caseload ratio	Team or individual responsibilit.	Casemanager qualifications	Frequency of contacts	Treatment philosophy	Client characteristic	Time in hospital	Crisis availability
Bond et al. (1988)	Exp.	Indiana (3 sites)	Assertive case mngmt vs. aftercare	Not specified	Team	Unknown (Training in program philosophy)	1X per week	Full support	SMI/3 hosp. within 2 yrs.	Exp. < Control (2 of 3 sites)	Not specified
Borland et al. (1989)	Pre-post	Spokane WA.	Single grp.	1:9	Individual	Nurses	min. 1X per week	Full support	SMI/3 hospit. within 2 yrs.	Decrease	On call 24hrs.
Curtis et al. (1992)	Exp.	New York	ICM vs. CSS vs. aftercare	1:35	Multidiscip. Team	Mental health aides with training/ psychiatrist/PA/ MSW supervisor	1X per week first month/ later 1X per month if necessary	Not specified	In-patient stay greater than 7 days. Axis 1 diagnosis	ICM > vs. Aftercare	Not specified
Degen et al. (1990)	Pre-post	Conn.	Single grp.	1:10	Multidiscip. Team	Para/MSW/RN/ Psychiatrist (Training in program philosophy)	Not specified	Full support	SMI/ Multiple hosps.	Decrease	On call 24hrs.
Burns et al. (1993)	Exp.	United Kingdom	Outreach case management vs. aftercare	Not specified	Multidiscip. team	Social worker/ Nurse/ Psychologist/ Psychiatrist	Not specified	Not specified	Axis I / Not in treatment previous 12 months	No outcome for hosp.	Not specified
Bush et al. (1990)	Exp.	Atlanta, GA.	ICM vs. standard casemangmt	Not specified	Individual	Not specified	Not specified	Full support	Axis I / Multiple hosp.	Decrease	Not specified
Drake et al. (1997)	Quasi-Exp	Wash. D.C.	ICM vs. Standard CM	Not specified	Team	Not specified (Training in program philosophy)	Not specified	Full support Behavioral substance abuse tx.	Dually diagnosed & Homeless	ICM = Standard CM	Not specified
Goering et al. (1988)	Matched Group	Toronto, Canada	ICM Vs. Standard CM	1:15/20	Individual	Paraprofessional/ RN/ MSW/ Occ. Therapist (Training in program philos.)	Not specified	Rehab. Model	SMI / Multiple hosp.	No outcome for Hosp.	Not specified
Hornstra et al. (1993)	Matched Group	Kansas City, MO	ICM vs. Standard CM	1:9/30	Individual	Not specified	Not specified	Full support	SMI/ at least 1 hosp. in last six years	ICM = Standard CM	Not specified
Lehman et al. (1993)	Exp.	Baltimore, MD.	ICM vs. Standard CM	1:15	Not specified	Not specified	Not specified	Rehab. Model	Dually diagnosed	ICM = Standard CM	Not specified

Table 1 (cont.)
Program differences among studies focused on ICM

Investigators	Type of Study	Location	Groups Studied	Caseload Ratio	Team or individual responsibility	Casemanager qualifications	Frequency of contact	Treatment Philosophy	Client characteristic	Time in hospital	Crisis availability
Macias et al. (1994)	Exp.	Logan, UT	Strenths Case Mgmt. + Psychosocial Rehab (PR) vs. PR alone	1:20	Individual	Paraprofess.	Avg. 1X per week	Strengths Model	SMI	SCM + PR < PR	No
McGurrin et al. (1993)	Matched Grp.	2 Penn. Counties	ICM vs. Standard CM	1:15	Individual	Not specified	2X per week	Not specified	SMI	ICM < Standard CM	On call 24hrs.
Morse et al. (1990)	Exp.	St. Louis, MO	ICM vs. Standard CM	1:10	Team	Not specified	1-2Xs per week	Full Support	SMI/ Multiple Hosp. or Homeless	Not measured	Not specified
Muijen et al. (1994)	EXP.	London, England	Community Nursing Team (CNT) vs. Generic CNT	1:10	Team	Nurses / Paraprofess.	3X per month	Full support	SMI/ 2 Hosp. within 2yrs.	CNT = generic care	Not specified
Rapp et al. (1985)	Pre-post	Lawrence, KS	Strengths Case Mngmt.	1:5	Individual	Students	Not specified	Stregths model	SMI/ Recent Hosp.	Decrease	Not specified
Sands et al. (1994)	Matched Grp.	Phil., PA	ICM vs. ACT	1:20	Individual	Not specified (3 weeks of training)	1-2Xs per week	Full Support	SMI/ Multiple Hosp.	ICM = ACT	Not specified
Solomon et al. (1995)	Exp.	Phil., PA	ICM vs ICCM	1:11	Individual	Para-proffess. with training	Not specified	Full support	SMI	ICM = ICCM	Not specified
Surles et al. (1992)	Pre-post	New York, NY	Single group	1-10	Individual	Para and prof. (3 weeks training)	Min. 1Xper week	Strengths Model	SMI/ Recent Hosp. or Homeless	Decrease	On call 24hrs.
Quinliven et al. (1995)	Exp.	San Diego, CA	ICM vs Standard CM vs. No CM	1:7	Team	Nurse & Para-prof.	Not specified	Full support	SMI/ 3 Hosp. in last 2yrs.	ICM < Standard CM & No CM	Not specified
Aberg-Wistedt et al. (1995)	Exp.	Stokholm, Sweden	ICM vs. Standard CM	1:10	Team	Nurse, Social Worker & Para-prof.	Min. 4 hours per week	Full Support	SMI & recent Hosp.	ICM = Standard CM	On call 24hrs.

had caseload ratios that ranged from 1:5 to 1:35. The differences in caseload ratios signify a wide range of opinion about what ratios constitute an intensive case management intervention. The programs used either a team approach or the case manager assumed sole responsibility for clients. The differences in these approaches had major ramifications on how the service is delivered to clients and how the work impacts the case managers.

Case manager qualifications varied extensively. Three programs used only nurses, four used para-professionals while five used a team approach generally consisting of a mix of professional and para-professional staff. Eight studies did not provide information about staff composition at all, thus highlighting how poorly some studies were documented. Six programs provided their staff with extensive training on the principles of the case management model being used while other programs either provided no training or did not report this. Frequency of client contact was reported in only half the studies and was generally stated to be 1-2 contacts per week.

The programs studied used either the Full Support, Strengths or Psychosocial Rehabilitation model. Generally, the majority of studies did not provide in-depth information about how and what model components were implemented while serving clients. Clients enrolled in the studies were

exclusively seriously mentally ill individuals and fourteen of the studies required a recent hospitalization. Only five studies indicated whether the program had a 24-hour crisis response capability.

Clearly, implementation of ICM was quite different across studies. The assessments provided information on whether the program succeeded or not in terms of a statistically significant change. The studies provided little information about why the ICM program may or may not have succeeded (Chen, 1990). In addition, the studies failed to use a prior theory in terms of formulating ICM program elements, rationale, and causal linkages. Program evaluations are less useful when the theoretical basis of the program has not been developed or put into effect. Useful evaluations require clear program objectives, testable assumptions linking program components and sufficient resources for implementation efforts (Wholey, 1987).

While the results for ICM services appeared tentative at best, Scott and Dixon's (1995) review of the effects of PACT services on individuals with schizophrenia found that PACT consistently reduced hospitalization rates, increased program retention and was less costly than traditional delivery systems (e.g., CMHCs or hospital based aftercare).

There may be several reasons for the discrepancy in outcomes. PACT may be a more effective model at treating SMI individuals in the community since it has a wider, more comprehensive focus. In addition, PACT originates from a single model that has been clearly defined and evaluated (Stein & Test, 1980). The existence of a well-developed program theory has allowed for successful replication at other program sites. This increases the chances of faithful replication and may explain why consistently positive results have emerged across PACT studies. McGrew et al. (1994) have found that greater program fidelity has been linked to effectiveness for PACT.

In contrast, ICM programs originated from several practice modalities that make comparisons more difficult. The programs studied have not been clearly defined and differ conceptually and/or programmatically in terms of assessment procedures, use of resources, case manager to client ratios, client authority and goals for service. Different program characteristics can lead to different outcomes. The failure to document program interventions and faithfully replicate those elements creates problems in interpreting outcomes (Bachrach, 1982). Without adequate description, it is difficult to interpret contradictory findings in replication studies. Whereas PACT has greater clarity regarding its intervention elements, the ICM studies

clearly suggest a lack of consensus about what program elements are critical and how they are operationalized.

Future ICM research needs to document programs that are better specified and more faithfully carried out so that research results can be interpreted and generalized more effectively. This process begins by identifying the critical ingredients of intensive case management crucial to successful implementation regardless of the underlying practice philosophy.

Identifying Critical Ingredients for Programs

Program fidelity is defined as conformity to prescribed elements and the absence of nonprescribed elements (McGrew et al., 1994). Program fidelity assumes that there is a particular set of elements necessary for "success". It is a heuristic device that aids researchers by providing a measuring rod against which similarities and differences found in programs can be identified and explained (Ritzer, 1983). Identifying critical program elements allows researchers to begin to explore whether there is a common underlying mechanism that can predict success across programs. Fidelity is necessary to achieve internal validity and allow for a comparison of program interventions (Moncher & Prinz, 1991).

The precursor to fidelity is the clear conceptualization and operationalization of a program theory. Implementation is tied to defining what the critical ingredients are for a given intervention (Bickman, 1987). Following this, operational definitions for the critical ingredients identified can be developed. By making these variables explicit, implementation of a program type can be standardized and prevent what Bond (1991) characterized as "program drift." From this, a program fidelity scale can be created and validated to determine the degree to which a

specific program meets the standards for a program model. Fidelity measures also enable us to identify the critical ingredients of models in multisite studies with varying degrees of implementation fidelity (McGrew et al. 1994; Ryan et al., 1994).

Historically, ICM program developers have chosen to borrow and adapt elements from models that have features that fit the needs of their particular locality. There is an ongoing tension between the need for adaptation and faithful program implementation. Bachrach (1980) has taken the position that while model programs share certain structural elements, they cannot be readily reproduced or generalized. The search for reproduction, she argues, is a quest for quick and easy solutions to the widespread neglect of the SMI. Several factors contribute to this; 1) the difficulty in separating a particular program from its cultural context, 2) deciding which program elements to duplicate, 3) the existence of the "Hawthorne effect", 4) and the problem of separating program elements from the staff who implement them.

Bachrach's points are valid and support the argument for adaptation to local environments, however, they do not justify ignoring critical program ingredients that can promote effective outcomes. While a laundry list of important program elements may not ensure success, the lack

of a program theory will in all likelihood enhance the chances for failure. In the words of Suchman (1967), the model program's value lies in its ability to "indicate the probable success of the planned program, to try out procedures, and to suggest modifications". In addition, studies done by McGrew and Bond (1995) on the critical ingredients for ACT appear to contradict Bachrach's assertions about program reproduction. Their work has shown that a successful program model can be faithfully replicated and that it has improved client outcomes. Bachrach (1980) herself concedes that it is important to examine programs in concert to determine what elements they share so that we can filter out the structural principles that are generalizable.

Finally, while adaptation to local conditions is important, there is a point where program modification runs the risk of losing the effective components of the original model (LaChance & Santos, 1995). Program developers must balance the need for program adaptation with the need for program fidelity. Without it, research on programs becomes difficult because we cannot identify what the similarities and differences are between interventions (Chamberlain & Rapp, 1991).

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There are several methods available for determining the critical ingredients of a program model. Sachrest et al.

(1979) have described three standards of comparison in program implementation: the first is an "average" criterion based on normative conditions in other programs; the second is a criterion based on what is perceived as the "ideal" program as specified by either authors of the approach or by participants and staff of the program; and the last approach is based on theoretical analysis and expert judgement of "goodness of fit." The third approach is to systematically deconstruct a program model to manipulate specific aspects experimentally in order to evaluate their effect on outcome (McGrew et al., 1995)

What follows is an examination of three separate studies designed to capture the characteristics of a program type so that an "ideal" model could be constructed and replicated. The studies attempted to define program models by asking experts, administrators and staff to identify important program practices that make the models unique and effective.

Rothman (1991) attempted to design an empirically based case management practice model by using a multi step process that would explicitly define a case manager's practice. He first set about identifying thirteen case management functions collected from diverse literature sources. He next

surveyed forty-eight case managers to adjust the list based on their experiences (Rothman, 1987) and then constructed an initial case management model from the field survey and research synthesis. The initial model was then reviewed and refined by means of a select panel of experienced case managers who were rated as highly competent. A new working model was constructed and field tested through structured practice application by agency based case managers. Subsequently, a parallel appraisal and critique of the working model were conducted by surveying fifteen case managers from the original field survey. The final step was the construction of a case management model from the applied field test and second survey.

Not one of the original thirteen functions listed earlier in this literature review were eliminated. The functions were, however, reconstructed and two additional elements were added. The relationship between functions was made more dynamic and some functions overlapped others. Rothman's (1991) model is derived from practice experience and the findings of existing social research. It focuses on typical practice functions performed in case management and attempts to sequence the steps that need to be taken to implement case management. Definitions for functions were primarily based on field interviews with case managers and refined by findings from the research synthesis.

One of the criticisms mentioned earlier in trying to relate this model to the development of an ICM program theory is its sole focus on practice related to individual clients and how it applies to a variety of program settings serving different populations. Structural and organizational definitions as well as case manager interactions with the environment on behalf the client remains outside the framework of this practice model.

Ellison et al. (1995) attempted to resolve some confusion regarding the definition of case management for the mentally ill by conducting a survey of case management programs. The authors sought information that described the characteristics of the programs, the case managers, their clients and the systems in which the programs were operating.

Ellison et al. (1995) attempted to define case management programs using a "people-program-system" scheme for identifying program practices. "People" included characteristics of the target populations and case managers. Program characteristics included staff structure, staffing ratio, documentation, program context and client contact. Program philosophy, case manager focus and activities were also investigated to provide an in depth description of a program. System dimensions included policies, funding

mechanisms, management, resource availability, work force development, coordination and evaluation.

Sample case management programs were identified from Community Support Program directors in each state and from state chapters of the Alliance for the Mentally Ill (AMI). Several thousand nominations were received from which programs were randomly sampled within each state. The authors developed a survey instrument from a comprehensive list of dimensions describing case management programs generated by a literature review. The dimensions were sent to an advisory committee and a panel of experts on case management for review and feedback. The final draft of the survey sought to gather information on case management activities; characteristics of case managers; supervisors and the target population; program characteristics; and characteristics of the mental health service system.

The survey was then pilot tested at one site and the reliability of the instrument was assessed by asking a second staff member to complete the survey independently. An interater agreement of 73% was achieved. The survey was mailed to 550 programs and an administrator of the program was asked to complete the survey and return it. 323 surveys were returned for a response rate of 61%.

Approximately 42% of the programs sampled were programs serving rural areas while 37% served cities. The median

number of clients served was 140 and the programs had an average annual budget of $1,061,284. Nearly all (90%) programs surveyed were within a larger agency that offered other services.

Case managers in the survey were predominantly young (69% aged 20-39) female (70%), white (81%), possessed a bachelors degree (58%) and identified with social work as a profession (43%). Supervisors were older (46% aged 20-39), more likely to be male (42%), and white (89%). Supervisors possessed higher levels of education (73% with masters degree) and less often identified with social work (25%). Supervisors had on average eleven years of experience working with a psychiatric population.

Other characteristics of mental health case management showed that programs had ten full time equivalent case managers with an average salary of $20,559. Supervisors had an average salary of $29,873. Average case manager to client ratios were 1:30 with a range of 1:1 to 1:300. Case managers were available to see clients on weekdays (89%) and to a much lesser extent at other times. The primary diagnosis of clients served were schizophrenia or other psychotic disorder (63.4%), major affective disorder (22.4%), substance abuse (18.7%), personality disorder (14.3%) or other (17.2) (i.e. MRDD etc).

Considering program characteristics, values rated as

most important, meaning they were ranked first only, were individualization (15.9%), normalization (14%), empowerment (11.8%) and dignity (11.5%). There was a considerable amount of diversity in the values ranked first. The most important mission of case management- that is, those ranked first only- were preventing hospitalization (42.2%), improving quality of/ satisfaction with life (18.3%) and improving client functioning (6.8%). There was considerably less variability in mission statements. Mission statements ranked lower were several clinical statements (prevent crises, reduce clinical symptoms) and statements related to the service system (ensure continuity of services, improve quality of service system).

In terms of focus, the responses indicated most frequently were: (1) assessing client needs, planning, linking, and monitoring client services (59.3%); (2) problems of daily living (39.4%); (3) multidisciplinary team approach (39.1%); (4) using all community resources available (36%). When asked to describe which case management approach was in use, the Personal Strengths model received the greatest response (12%) followed by PACT (10%).

Case management activities receiving the greatest responses were linking clients to services, crisis intervention, planning services and assessment, in that order. To the surprise of the authors, the case management

services engaged in less consistently were monitoring service provider use, counseling, developing relationships, skill teaching, advocating for system change and clinical treatment.

Attempts to reduce the data through factor and cluster analysis were not particularly successful. It appeared that program activities were the most interrelated and reducible (four factors accounting for 40% of variance). The analyses suggested that case management activities, values, and mission statement were largely independent and uncorrelated. The authors note that the scaling of the data was dichotomous- that is, programs indicated whether the item was present or not and could only rank a limited number of values, missions, and activities.

Finally, when asked to rate the availability and effectiveness of mental health services, ratings were clustered around a score or two (good), with effectiveness of rehabilitation services receiving a score of 1.6 (fair) and treatment and case management receiving a high of 2.2. Ellison et al. (1995) concluded that despite the perception of ambiguity connected to case management, in practice there were consistencies that pointed to an "ideal type" of case management.

The primary mission of case management is preventing hospitalization. This underscores the fact that case

management serves as a mechanism for keeping clients in the community, minimizing hospital costs, and promoting efficiency. Other features identified as ideal can be drawn from the consistency of activities reported such as linking clients, performing assessments, providing support, intervening in crises and developing service plans. The relatively inconsistent reporting for monitoring, advocacy, counseling or relationship building activities suggests that "system-driven" goals predominate present day case management. Of course, average caseloads of 1:30 also do not allow for many of these activities. In addition, values reported were not necessarily consistent with the primary activities of case management. This was further confirmed by the findings that missions, values, and activities could not readily be factor or cluster analyzed. This probably reflects the contradictions placed on case management to be client driven while focusing on system goals.

While this study provided a snapshot of case management as it occurs across the country, it is of limited use in terms of constructing a program theory for ICM. It appears that the focus of the study was predominantly on traditional case management programs that were initially developed in response to deinstitutionalization. Simply averaging the data for all respondents does not capture the different types of case management programs in existence. To construct

an ideal case management type from this information ignores the important program variations developed to serve different subpopulations of the mentally ill. In addition, information was collected from only one program source, the administrator. This may bias the results since program administrators often reveal information about their programs that do not necessarily reflect the day to day reality. Finally, the study provides valuable information about the mission and values of case management programs but does little to shed light on the best methods of achieving those goals.

McGrew and Bond (1995) created a fidelity measure for PACT by identifying the critical ingredients for that model. They used an adaptation of the approach suggested by Sachrest et al. (1979) in which twenty-two experts on PACT were asked to be interviewed concerning the critical ingredients of the model. Clients and line staff were not included in the research protocol. The experts included seventeen individuals who had been investigators in prior PACT research, four of whom were also collaborators from the original PACT project. Nine of the individuals had held clinical or administrative positions in PACT programs and six had been administrators in state departments of mental health. Interviews were conducted by telephone except for

two conducted by mail.

McGrew and Bond (1995) initially identified PACT program criteria from published model descriptions, quality assurance forms and from their descriptive analysis of three programs. They converted these criteria into items on a semi-structured interview scale called the Critical Components of Assertive Community Treatment Interview (CCACTI). The experts rated criteria on a 7-point semantic differential scale (1= very unimportant, . . . , 4= neither important nor unimportant, . . . , 7 = very important). Experts were also allowed to identify critical ingredients that were not on the original list developed by McGrew and Bond (1995). The CCACTI scale consisted of seventy-three items that the authors organized into eight groups. These were: team structure, other structure, discharge, retention and engagement, hospitalization and coordination of services, treatment goals and foci, service elements, program capacity, and client characteristics. Experts were also asked to identify ideal staffing patterns for PACT teams assuming a maximum caseload of fifty clients and to judge the degree of responsibility that staff and clients should have regarding various treatment decisions.

Results of the study showed consistent ratings of importance by the experts interviewed. Intraclass correlation for the total CCACTI for experts averaged across

all items was .94. Intraclass correlations for the subsections ranged from .70 to 1.0 with the least consensus for team structure, program capacity, and client characteristics, with intraclass correlations reported as .70, .75, and .77 respectively. These results showed a consensus about what elements are important to ACT.

The authors pointed out that many experts prefaced their responses to ratings by noting that their ratings were general in nature and would change for different client mixes, diagnoses, settings, and goals. The mean importance rating for all items on the scale was 6.3. The experts identified 54 of the 73 items as critical to PACT. 79% of the items obtained a mean rating of six (important) or greater on the scale, and nearly all items (93%) were rated as at least somewhat important (>5). Nine experts identified additional ingredients not mentioned in the CCACTI scale. The authors noted that most of these suggestions were refinements of more general themes already covered in the interview scale.

The authors ranked the norms for ideal model specifications according to the coefficient of variation. While there were few surprises regarding actual model specifications, there was wide variance in the experts judgements regarding the program structure subscale. In terms of staffing, psychiatry, nursing and social work were

viewed as essential disciplines by sixteen of the nineteen experts who proposed an ideal team.

While there were areas of disagreement regarding program structure (e.g., team size, team composition), the experts generally agreed with each other about the importance of individual elements of the PACT model. Overall, the results indicated consistent agreement with the published literature. Few additional critical ingredients were proposed by the experts, suggesting that the authors composed a comprehensive checklist of critical domains which accurately identified important program criteria for PACT. What is more important, estimated values for model elements that had never been operationalized before were identified by the experts (e.g., hours of psychiatrist & nurse time). This introduced a possible standard for PACT programs that could be debated and researched within the literature.

It should be noted that the expert sample for this study was neither universal nor random. Different results could have been obtained by interviewing another sample of experts. The authors maintain, however, that the high degree of consensus in this sample argues against major differences in results. The experts sampled also interpreted the items idiosyncratically, or made qualifications based on different assumptions. Some items were not clearly operationalized which may have contributed to problems with interpretation

and comparability across experts. The demarcation between critical and noncritical items was arbitrary. For example, a mean importance rating of 6.5 would have yielded forty three-critical ingredients instead of the fifty-four yielded in this study.

The authors note that with so many ingredients considered as critical, it may be impossible for program administrators to follow all of them. An alternative to this would be to ask the experts to prioritize standards by rank order. The fifty-four ingredients yielded in this study may represent the exceptional PACT program. Using a rank order system would yield the minimum critical ingredients for an effective PACT program. For program administrators who must make certain tradeoffs due to budget and other setting specific constraints, this would represent a benchmark standard that could be used in making program decisions. Availability of resources and location is another important factor driving changes in models. Staff composition, structure and process may be different for urban and rural locations. Population is also a factor since severe caseloads will require lower staff:client ratios than less severe clients. Two programs that function similarly in different cities may have significantly different outcomes because of the availability of services. Other factors to consider are model evolution and stage of program

development. Practice wisdom and empirical evidence may lead to a deemphasis for some critical criteria and introduce new criteria into the mix. In addition, programs that have a track record and mature caseloads can shift the mix of program goals for clients. Finally, who is interviewed will affect the critical ingredients chosen. Future studies using this methodology may find it worthwhile to interview other stakeholders such as clients or line staff, two important groups involved in the ICM equation.

Statement of the Problem

Based on the literature review, it appears that the lack of consensus regarding the efficacy of ICM is because programs have been implemented differently across studies. There is little agreement about what constitutes an intensive case management program (Ryan et al. 1997). ICM did not evolve from a single, well-defined model format such as PACT, but from different case management models that have different values and practice orientations. In particular, there has been little attention paid to what structural format or practice orientation is effective and how this should be operationalized. If program implementation and documentation are inadequate, we cannot validly test the effectiveness of the intervention nor make comparisons of outcomes across studies. The literature is filled with examples of interventions considered ineffective when in fact the intervention was never really attempted.

This highlights the need to assess what organizational and practice elements are most effective for ICM (Mowbray & Bybee, 1998). This study will attempt to construct a program theory for ICM that attempts to unify the various case management practice orientations previously used to develop ICM programs and specify its operationalization so that a clearer definition can be developed for a term that has been

vaguely defined as meaning more "intensive" than usual case management. Mueser et al. (1998) have suggested in their review of community support programs that it may be better to develop a hybrid model to meet the needs currently addressed by different case management models.

Several studies have sought to construct an empirically based, ideal case management type. Unfortunately, we are unable to construct a valid ICM program theory from these endeavors. Rothman's (1991) study focused on constructing an ideal practice model but did not address critical structural, client and environmental components. Ellison et al.'s (1995) study provided valuable information on the state of case management programs today by averaging data from programs across the country regardless of focus, mission or client subpopulation. The result, however, is the construction of an ideal mental health case management program that has components that may be irrelevant to heavy users of the mental health system that ICM was designed to serve. McGrew and Bond's (1995) study regarding the critical ingredients of ACT provides a more useful guide to constructing an ICM program theory. It addresses both structural, practice and environmental issues important to serving heavy users of the mental health system.

This study will seek to construct an ICM program theory by using an integrative approach that synthesizes

information from the existing literature and surveys stakeholders for their perspectives, ideas and expectations regarding what is effective for ICM. The literature highlights the underlying causal processes while surveying stakeholders generates consensus regarding critical program elements (Bickman, 1990).

Three distinct stakeholder groups will be surveyed (researchers/administrators, program managers, case managers) to identify the critical ingredients for ICM. The study will also seek to identify whether the elements that program managers and case managers identify as ideal actually exist within their respective programs. The perspective of each stakeholder group will be influenced by the position they occupy in the program model hierarchy. Researchers/administrators are experienced in the initial design and/or implementation of ICM programs or have researched the program model. Program managers and case managers occupy a lower position in the hierarchy and are in a unique position to identify criteria essential to the day to day workings of the program.

Chapter IV

Research Design

Introduction

The purpose of this study was to advance our knowledge about the critical components of ICM and develop operational definitions for these elements. Ultimately, this level of model specification can contribute to the development and refinement of an ICM program theory that will in turn lead to more effective implementation and research. It will also lay the groundwork for the development of a fidelity index that can be subsequently validated and utilized to empirically validate other ICM programs.

Statistical methods were used to analyze respondents responses to questionnaires. This allowed the author to quantify responder's ratings of importance for ICM ingredients and analyze intraclass correlations for responders within their group and between groups (e.g., line staff versus experts). Following the analysis of the data, two focus groups with managers and case managers who participated in the survey were held. The purpose of the focus groups was to provide insight into the meaning of the quantitative data and enrich the discussion section regarding the findings.

Subjects

Thirty researchers/administrators working with ICM, identified through the literature by their administrative or research experience with the model, were asked to rate a Critical Ingredients of ICM (CIICM) scale designed to measure the importance of various components of the ICM model. While all three respondent groups (researchers/administrators, program managers, intensive case managers) are considered experts in terms of their knowledge of ICM, for the sake of simplicity, the author will refer to researchers/administrators as experts.

In addition, twenty-three program managers and forty eight-case managers working in eleven NY City ICM programs were invited to complete the CIICM scale. Experts were selected by nonrandom "purposive" sampling because the population of individuals fitting these criteria were small. Program managers consisted of virtually the entire population of individuals involved in this job activity in NY City ICM. Case managers were selected from a nonrandom sampling of four of eleven ICM programs operating in NY City (Smith, 1990). It should be noted that it will be difficult to generalize the results of this study to larger expert, management and case management populations working with ICM throughout the country because of the sampling methods used.

Following the data collection and analysis, the author

convened two separate focus groups, one for program managers and one with case managers. Focus groups for experts were not conducted because they were scattered across the country. Five case managers and seven program managers who participated in the study took part in the focus groups. Responses to questions were anonymously reported. Sampling used for creating the groups was a nonrandom convenience method. The author approached individuals whom he believed would be interested in participating.

Program Description

Since program managers and case managers from the New York City ICM program were sampled, a description of the program's operating philosophy and structure is appropriate. NY City ICM is a joint initiative of the New York State Office of Mental Health and the New York City Department of Mental Health. Its mission is to overcome barriers to services and provide the continuity of care necessary to enable SMI individuals who are heavy users of the mental health system to remain in the community. It seeks to accomplish this through linkage, advocacy and the brokering of services to clients. The State Office of Mental Health has outlined 29 ICM principles that make up the functions and structure of the program (Appendix B). The State has also defined what clients are eligible for the service and the minimum qualifications for appointment as a case manager (Appendix B).

ICM in NY City uses elements from both the "personal strengths" and "rehabilitation" model. There is a strong focus on client strengths rather than deficits, and an attempt to incorporate the values of the psychosocial rehabilitation model. These elements are combined with a philosophy of persistent engagement aimed at developing a lasting relationship with the client. The belief is that a

combination of these strategies will overcome barriers to services and provide continuity of care to the SMI in community settings (Rapp & Wintersteen, 1989). We do not know to what extent the philosophy and functions of the NY City program model are practiced by case managers in their daily work. A study conducted by Donahue et al. (1993) on NY State ICM programs focused on program outcomes (hospitalizations, etc.) but indicated no evaluation of case manager practice on the program level.

The adult ICM program has operated in New York City since 1988 and serves approximately 2,100 seriously mentally ill (SMI) individuals. Ten years of operating experience make this program an ideal candidate for a study of this type since program managers and case managers have acquired significant levels of experience. Services are provided through a network of 175 case managers who maintain a 12:1 case manager to client ratio and are available to clients in the community twenty four hours a day, seven days a week. There is no time limit for receiving services and many clients have been enrolled in the program since its start.

There are eleven distinct ICM programs operating throughout NY City, five of which are voluntary agencies under contract with the NY City Department of Mental Health. The remaining six are run by the New York State Office of

Mental Health. A unique aspect of ICM in NY City is the designation of certain ICM programs to provide case management services to a specific population, such as the SMI homeless, MICA and Forensic populations. Administrators believed that programs focused on a particular client population would develop a higher level of expertise and thus improve the success rate for reintegrating clients with multiple problems into the community. Of the eleven operating ICM programs, four are focused on special needs populations, such as the homeless, MICA or forensic client. For this study, only programs focusing on a "generic" SMI population were surveyed.

NY City ICM case managers use multiple clinical components to achieve client goals. In the initial phase, engagement, assessment and planning issues are addressed regarding the client. The case manager must be acutely aware of the client's environmental barriers to reintegration and initiate interventions with the client to address them. The case manager also focuses on linking clients with community resources, consults with families and other caregivers and attempts to expand the social network of the client. The ICM also collaborates with physicians and hospital personnel regarding the client's treatment plan. Case managers can monitor clients between appointments and review with a physician the side effects of a client's medication.

Advocacy, in which case managers articulate client strengths and deficits and advocate for the client's best interests, is another crucial component of NY City ICM. Interventions with clients include intermittent counseling, training clients in independent living skills and providing clients with psychoeducation regarding their disability. Finally, case managers spend significant amounts of time monitoring and intervening in client crises to prevent relapses and promote stability (Kanter, 1989).

As a service intervention, NY City ICM was designed to encompass a client centered philosophy that targeted mentally ill individuals who were frequent users of inpatient mental health services, had been incarcerated or were homeless. Reimbursement for the program is based on a partial capitation rate with 74 percent of a program's funding derived from Medicaid and the remaining funds provided by City and State agencies. Case managers are required to meet with clients a minimum of four times per month for Medicaid reimbursement. In addition, NY City ICM programs have emergency money available for case managers to purchase needed goods for clients in crisis.

Approximately 60 percent of the case managers in NY City are NY State Office of Mental Health employees who are civil servants and earn incomes of more than $45,000 per year. The remaining 40% of case managers are employed by

voluntary agencies who have contracts with the NY City Department of Mental Health to provide ICM services. These case managers generally earn between $25-30,000 per year. Case managers are required to have four-year bachelors degrees in human services and at least four years of experience working with the mentally ill. Correlative with the salary differentials between State and voluntary employees, more State case managers have masters degrees.

As for supervision, the NY City ICM program model stipulates that a case management coordinator supervise 8-12 case managers in a team format. The minimum qualifications for appointment to a coordinator's position are a master's degree in a human services field and four years experience in providing direct services to mentally disabled clients. Larger programs have funded a Directors position to oversee the work of three or more coordinators.

As for function and structure, very little variation should exist among the eleven ICM programs in NY City. The State has attempted to insure this by requiring that ICM programs follow the specific program structure outlined in Appendix B and by requiring all case managers in NY City to participate in a uniform training module. Of course, some program differences are bound to occur since there are different administrative and personnel structures in the State and voluntary agencies. For instance, the differences

in pay scales will attract case managers with different levels of experience and education. This will in turn affect case manager's attitudes and competence. This may also influence respondents' identification of what elements are critical to ICM. Different target populations may also lead to program and case management differences since client needs may vary. Again, this may influence which criteria are identified as critical to program implementation.

Another major advantage to examining NY City ICM is the degree to which the program has been evaluated. The New York State Office of Mental Health (SOMH) conducted a five-year study (1989-1993) evaluating the program's effectiveness. SOMH accomplished this by tracking client's rates of utilization for mental health services, social support networks, functional status, psychiatric symptomatology, use of community services, social support networks and unmet need for service (Donahue et al, 1993). The study used a matched group design in which 197 clients were compared with a cohort group not enrolled in ICM and for which SOMH had Medicaid data indicating both State and acute care hospitalization rates. Reported characteristics of clients in the study were; gender, male- 61%, female-39%; Race, white- 75%, black-24%, Hispanic-5%; Diagnosis, Schizophrenia-56%, Affective Disorder-12%, Psychosis n.o.s.-18%. The study reported that 52% of clients were

mentally ill chemical abusers (MICA).

The results of the comparison provided convincing evidence that New York City ICM significantly reduced client's inpatient use of State operated psychiatric centers. By contrasting the mean number of days hospitalized prior to enrollment in ICM with the final six month study interval, SOMH researchers noted that the mean number of days ICM clients were hospitalized dropped by 19 days compared to 7 days for the comparison group. In addition, there was no corresponding rise in the hospitalization rate at acute care facilities for ICM clients, indicating that the reduction in State hospitalization rates was not offset by a higher utilization rate in general hospitals.

Additional data indicated that there were decreases in the total number of life areas where unmet needs existed, significantly greater use of community resources, a decrease in the rated level of psychiatric symptomatology and a significant decrease over time of problem behaviors.

To assure quality services and provide for some degree of program uniformity, all case managers in NY City are required to attend a formal fifteen session training course on the philosophy, goals, definition, principles and components of NY City Intensive Case Management. The training curriculum (Bromberg et al., 1990) was developed by

faculty at the Hunter School of Social Work under contract to the NY City Department of Mental Health (Appendix C). Visiting instructors are hired to teach the sessions corresponding to their area of expertise. Continued employment as a case manager is contingent upon completing the training. No formal studies have been done to investigate the degree to which the training curriculum is operationalized in the programs, however, the author believes that the training has had an influence on the way the programs operate. While the fidelity between ideal practice and implementation is never perfect, most research on the dissemination of technology and implementation indicates a great deal of slippage between a technology's components and its implementation (Seekins & Fawcett, 1984).

The Hunter curriculum is based on the case management practice orientation of the Personal Strengths model (Rapp & Wintersteen 1989) and the Psychosocial Rehabilitation model (Anthony, 1979). The aim of the training program is to teach the philosophical goals of these practice orientations to case managers and to provide them with technical information necessary for maximum job effectiveness. In addition, the program seeks to prepare case managers to become change agents within the mental health system. It does so by introducing the principles and values of the Personal Strengths and Rehabilitation models and new treatment

technologies for working with this population.

Instrumentation

The study by McGrew and Bond (1994) focused on identifying the critical ingredients of Assertive Community Treatment (ACT) by administering a semi-structured 7-point semantic differential scale that they created from published model descriptions and descriptive analysis of ACT programs. The study was especially significant because it suggested that program fidelity can be measured with conventional psychometric strategies.

This study attempts to use a similar strategy by starting with the measure developed by McGrew and Bond (1994) and modifying it to measure program specifications for ICM. Thus, it made sense to adapt the ACT measure because of its construct validity and the considerable overlap of program ingredients that exist between ACT and ICM program interventions. Modifications were made based on descriptions in the literature about ICM programs and published model descriptions. Changes did of course affect the reliability and validity of the measuring device. The author believed, however, that interitem reliability for the ICM instrument would be high despite alterations to the questionnaire. In addition, results from the measure would allow for the creation of an index of fidelity for ICM that could eventually be validated.

In gathering demographic data, the questionnaires used for experts, program managers and case managers were administered to respondents with the understanding that they would remain anonymous. Respondents were asked to check off whether they were in the expert, managerial or case manager category and report the number of years experience they had with ICM and the number of years of experience they had in human services. In addition, respondents were asked to check off the highest level of education they had completed and to report what type of degree they had obtained.

The measure contained statements covering all relevant aspects of the conceptualization of ICM. The criteria selected were converted into items on a structured questionnaire called the Critical Ingredients of Intensive Case Management (CIICM) scale (see Appendix D). Respondents rated criteria on a 7-point semantic differential scale (1=very unimportant,....., 4=neither important nor unimportant,....., 7=very important). The instrument contained eighty items, organized into seven broad subsections. These were as follows; personnel structure, other structure and organizational components, discharge, retention and engagement, treatment goals and foci, service elements, client characteristics and ideal model specifications. Generally the greater the number of

questions forming a definition, the more reliable that concept's measurement will be. When relevant, respondent's judgements of ideal model specifications were also obtained (e.g., ideal case manager to client ratio).

The first subsection consisted of items addressing ICM structure. Questions A1, A2 and A4 were related to the issue of how ICM services are provided to clients. The three approaches were using a team of case managers for direct client services, or using a team just for treatment planning but assigning only 1 ICM for direct services, or assigning only 1 ICM to have sole responsibility for clients. There is considerable debate about whether a team approach versus individual case manager responsibility is more effective for clients. Research on the full support model, which uses a team approach, appears to show that clients who develop multiple relationships with team members develop a deeper bond with the program. In addition, burnout among team members may be lower because of peer support (Bond et al., 1991). NY ICM follows a variation of the third approach presented. The Hunter curriculum explicitly states that the programs use a team format in which six to ten ICMs and a coordinator meet weekly for information exchange, networking, mutual support and peer supervision. Clients do not, however, meet with all the team members, but only with their assigned ICM.

Item A3 was related to the role of the coordinator and whether they provide direct services to clients or are solely responsible for oversight of case managers and administrative functions. This question was taken from the CCACTI instrument used by McGrew and Bond (1995). Coordinators who provide direct services will have less time for supervisory duties but in turn will be more familiar with issues faced by case managers.

Item A5 is concerned with access to psychiatric consultation for case managers. This question is taken from the CCACTI instrument and is important because ICMs are working with issues related to diagnoses, medication and side effects. While the Hunter curriculum focuses on the course of severe and persistent mental illness and psychopharmacology and medication compliance, it does not stipulate whether ICMs should have a program psychiatrist available for onsite consultation.

Item A6,A7,A8, A9 and A12 were related to the importance of a case manager's training background and degree level. McGrew and Bond's (1995) CCACTI questionnaire surveyed experts regarding core disciplines essential to ACT and its objectives. Our focus was on how critical it is for a case manager to have a background in nursing, rehabilitation or social work and whether a bachelors degree or masters degree is more appropriate to carrying out the

case manager functions. ICMs may find it necessary to provide direct service content and this may require extensive training and specialty credentials leading to professional status. The case manager's level of training must be consistent with his or her responsibilities. Failure to ensure such a match can lead to role confusion and burnout (Bachrach, 1993).

Item A10 was concerned with the importance of a supportive administrative climate. Bachrach (1993) suggests that there can be no true continuity of care when clients are denied access to care. Denial of care would also seem to make case management unnecessary since there are no services with which to link clients. The Hunter training curriculum approaches this issue from another point of view by assuming that there will be barriers to care which the ICM will need to recognize and eliminate through advocacy. Administrative support is an essential part of the advocacy process because case managers often run into roadblocks requiring administrative interventions.

Item A11 relates to the issue of the case manager's cultural competence in working with clients from varied backgrounds. The Hunter curriculum devotes a full session to this issue, highlighting the importance of eliminating culturally-based barriers between case manager and client and between the client and service providers (Lefley, 1990).

Bachrach (1993) also points out that the system of care must relate to the cultural realities of the individual in order for true continuity of care to exist.

Item B1, B4, and B7 are concerned with the issue of in vivo treatment focus and were taken from the CIACT questionnaire. There is general agreement in the literature that the focus of intensive case management should be on providing services in the home and community. The question arises, however, about whether office visits should be excluded in all circumstances.

Item B2, B5, B9, relate to the importance of office based supports for ICMs (i.e., desks, telephones, vehicles etc.) and were taken from the CCACTI questionnaire. There are two points of view regarding this issue. If the in vivo philosophy of ICM is followed, then the necessity for these supports should not be important. In contrast, one could also argue that the difficulty inherent in intensive case management work would require as much support as possible, especially in relation to vehicle access.

Item B3 focuses on the importance of low client: staff ratios and is taken from the CCACTI questionnaire. A consensus in the literature has emerged that in order for the case manager to develop the relationship necessary to fulfill his or her primary function, small client: staff ratios are necessary (Bachrach, 1993, Raiff & Shore, 1993,

Kanter, 1989). In addition, there is general agreement that caseload size should be determined by the specific type of case management services to be provided (e.g. intensive vs. standard) and the outcomes expected (Harris & Bergman, 1988).

Item B6 is concerned with an issue not usually mentioned in the literature on case management as important. The question was taken from the CCACTI questionnaire and relates to the importance of access to funds for client emergency purchases. This intervention can be especially useful during the engagement phase and help establish the case manager's credibility as a helping agent.

Item B8 and B12 were all taken from the CCACTI questionnaire. B8 relates to the importance of controlled admissions so that case managers are not overwhelmed all at once with new cases. B12 is concerned with around the clock staffing availability to clients in crisis, an area in which there is consensus that crisis intervention services must be available to clients in an ICM program (Kanter, 1989, Raiff & Shore, 1993). Finally, item B10 is concerned with an important staffing issue related to case manager turnover. High staff turnover can be an important indicator of burnout (Kirk et al., 1993). It can also negatively affect outcomes since clients will be shuttled from one new case manager to another, thus preventing the development of a close

relationship necessary for change and the alleviation of a client's sense of isolation. This principle is sometimes called "continuity of caregiver" (Torrey, 1986).

The second subsection looks at discharge, retention and engagement issues for the model. Items C1 and C5 relate to the style of engagement used in ICM. The Hunter training curriculum stresses the requirement that the case manager persistently pursue clients while maintaining respect for the client's personal boundaries. This is also an area of focus in the CCACTI scale and the literature, which highlights the need for outreach to this population (Teague et al., 1995).

Items C2, C3, and C4 relate to issues of discharge of clients from ICM. C2 and C3 were both taken from the CCACTI scale and are derived from the concept of longitudinality that refers to the provision of case management services over time, a necessity considering the nature of the illness (Test, 1979). C4 investigates the importance of graduation from ICM and whether this is an idea that can be introduced for certain clients who have made major improvements in their lives. McRae et al. (1990) investigated what happens to clients after five years of ICM services and found that ICM had stabilizing, long lasting effects.

The third subsection addresses questions of hospitalization and coordination of services. Item D1 and D4

are concerned with the importance of intervention with clients while they are in the hospital and collaboration with hospital caregivers on the treatment plan. Involvement with clients at this stage can have important effects on client outcomes after discharge (Kanter, 1989, Raiff & Shore, 1993). Both questions were taken from the CCACTI questionnaire.

Item D2 is also from the CCACTI questionnaire and relates to a major outcome used to assess ICM effectiveness, prevention of hospitalization. The question is an important indicator regarding the degree to which case managers focus on this objective. The Hunter curriculum also identifies this outcome as a principle goal of ICM.

Item D3 rates the importance of coordination with other service providers and is taken from the CCACTI questionnaire and the Hunter curriculum. The literature highlights the importance of developing a service plan and linking with other providers to achieve treatment plan goals (Rothman, 1991). This requires proactive outreach to other service providers and collaboration and coordination regarding treatment goals.

Subsection four was for case managers to identify important treatment goals and foci. For instance, which aspects of the four most commonly used case management practice orientations are critical (i.e., clinical,

strengths based, rehabilitation approach, full support) and should they all be integrated into an ICM program? Rather than promote a program model that adheres to one clearly defined core group of practice principles, the author was interested in identifying a program theory that can integrate critical practice functions from different practice orientations. The twenty-seven questions in this section can be subdivided under the four case management practice orientations described in the literature. To some extent, all of the orientations are related to the statements presented, however, each practice orientation has a core group of concepts that it adheres to as critical to its orientation.

Items E1, E2, E3, E4, E7, E8, E9, E10, E12, E17 and E26 can be grouped under all four practice orientations because they are basic to each philosophy. These are related to advocacy, obtaining basic social supports, collaboration with family, obtaining appropriate mental health services, increased client functioning and integration into the community and client self determination.

Items E18, E19, and E20 are concerned with three core Clinical case management practice functions and the importance they have to the ICM model (Kanter, 1989). It should be noted that item E18 is also a core component of the other models. Studies of patient satisfaction suggest

that patients value their relationship with their case manager more than other program characteristics (Solomon & Draine, 1994). Items E13, E15, E16, E22, and E24 relate to the core practice functions of the Personal Strengths model. Item E11, E13, E14, E21, and E23 are concerned with the core practice functions of the Rehabilitation model and how they relate to the ICM program model. Items E5, E6, E14, and E25 relate to the core practice functions of the Full Support practice model. It should also be noted that items E2 thru E17 were taken from the CCACTI questionnaire. All other questions in this subsection, except for E5, E13, E20, and E25, relate to the Hunter curriculum.

The fifth section covered issues related to service elements. Item F1 is concerned with the importance of client engagement in psychotherapy services and is taken from the CCACTI questionnaire. The clinical case management orientation views this as an important factor, especially for clients who have progressed beyond survival issues and are beginning to explore areas of personal growth (Kanter, 1989). Item F2 and F4 focus on client participation in treatment, widely recognized in the literature as an important factor in clients achieving their goals. This question is taken from the CCACTI questionnaire and is also taught in the Hunter curriculum. Item F3 and F5 focus on the issues of assessment and were taken from the CCACTI

questionnaire. The Hunter curriculum devotes an entire session to this issue as well.

The sixth subsection addresses client characteristics appropriate for this program model. Item G1 thru G4 are from the CCACTI questionnaire and relate to the importance of specific client characteristics for admission into ICM. There is a consensus that ICM is meant for a specific group of treatment resistant clients who are heavy users of the mental health system (Surles et al. 1987; Shern, et al., 1989).

The seventh subsection contains three open-ended questions that ask respondents to write in answers. The first question asks respondents to identify critical ingredients that are not on the proposed list. This was taken from the CCACTI scale and allows respondents to identify other critical ingredients that have not been discussed in the literature. The remaining two open-ended questions ask respondents to describe the characteristics of clients who do well or poorly in ICM. The answers provided to these questions will allow us to begin to explore the relationship between specific patient characteristics and their response to this model of community care. Persons with mental illness are a diverse population in need of a variety of approaches to community care (Mueser et al., 1998). For instance, research indicates that case management may not be

effective with character-disordered clients (Harris 1990).

The next section of the questionnaire asked respondents to operationalize ideal specifications for the ICM program model (e.g. caseload ratios, contacts per week). Many of these areas have not been previously operationalized in the literature. All questions except H4, H12 and H13 were obtained from the CCACTI questionnaire. Question H1 focuses on identifying the percentage of contacts with clients that should occur in the community. This issue has been widely discussed in the literature with the emphasis on home and community visits (Test & Stein, 1976; Witheridge, 1989). Data reported by Harris & Bergman (1988) indicate that community visits allow the case manager to accurately assess the client's level of functioning and improve treatment planning.

Question H2 and H3 and H6 are concerned with identifying the maximum, ideal and minimum caseload number for an intensive case manager. A wide range of studies reporting to evaluate ICM indicated having caseloads ranging from 1:10 to 1:30. We can conclude that there is a wide divergence of opinion on the issue of caseload size in ICM. Harris and Bergman (1988) have reported data suggesting that intensive case management activity would call for case manager to client ratios of 1:12 or 1:15 rather than the higher ratios commonly reported as practical.

Questions H4 and H5 relate to ideal number of meetings that a case manager would have either individually with a supervisor, or with the team if the program were to follow a team format. This is another issue that has not been operationalized in the literature. Question H7 seeks to operationalize the amount of time that a coordinator would spend on direct services if that position were to have a caseload. Question H8 allows us to operationalize the average number of visits per week for clients to better understand the demands on case manager's time and more accurately determine caseload ratios.

Question H9 is concerned with the ideal amount of time that a psychiatrist should be available to case managers for consultation. Questions H10, H11, H12 relate to the amount of time that should elapse before the program considers discharging clients for services. These questions are based on the scenarios of a client either refusing services, having a missing status or graduating from the program. While the literature is clear that for this type of service, the program model should follow the "no-close" philosophy, there are circumstances under which discharge from ICM is warranted so that this valuable service can be used by other clients.

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As suggested by McGrew and Bond (Personal

communication, December 1997), this study not only attempted to identify ideal ICM program criteria, but also asked program managers and case managers whether critical ingredients they identify actually exist in their programs. In a column furthest to the right, respondents reported this by circling the appropriate 4-point semantic scale provided (Never, rarely, sometimes, always). These results allowed the author to compare the degree of congruence between respondents idealized concepts of ICM with the reality of the program in which they are working.

Finally, emergent questions generated by the data analysis were used for focus groups held after the data collection. The interview questions were open ended in nature and designed to probe for possible explanations underlying outcomes. The focus groups enabled the investigator to gain valuable insights into the personal experiences and contextual issues of participants who work in ICM and to add depth and detail to the discussion section.

Procedure

Once the CIICM questionnaire had been completed, a pilot test was run to improve the questionnaire's clarity and incorporate useful suggestions for change. The author contacted Gary Bond, Ph.D. and John McGrew, Ph.D, authors of the original "Critical Ingredients of Assertive Community Treatment: Judgements of Experts" (1995) and Eleanore Bromberg, DSW, director of the Downstate Intensive Case Management Project at the Hunter College School of Social Work to review the questionnaire. Suggestions were made to change the wording of certain statements, however no major additions or deletions were made to the instrument.

Next the author mailed a cover letter explaining the purpose of the study, a consent form and the CIICM instrument to thirty respondents whom the author had identified as experts on ICM through the literature review. Expert respondents were chosen if they had published a research article on ICM and/or if they had played a key role in the development of an ICM program. The overlap between the role of researcher and administrator was considerable since many researchers studied programs they had developed and administered. Only 1 expert respondent could be identified solely as an administrator who had not published on ICM.

One to two weeks after the initial mailing, experts

were contacted by telephone by the author to learn if they had received the mailing and to answer questions related to the study. No written consent was required of respondents because respondents could elect to remain anonymous. A second follow up call was made one month after the initial mailing to improve the return rates. Out of thirty experts, twenty-two (73%) returned completed questionnaires to the author over a two-month time span.

For NY City ICM program managers, the CIICM scale was either mailed to program managers with a cover letter and consent form or distributed to them directly. Program managers were asked to voluntarily participate in the study and return the CIICM scale in a self addressed, stamped envelope after completing it. Participation in the study was anonymous. Twenty-three program managers were contacted to participate and twenty-one (91%) completed and returned the questionnaire to the author.

The author also distributed the scale to forty-eight case managers, of whom 46 (95%) ICMs agreed to participate. IRB approval was obtained from four separate ICM organizations in NY City; South Beach Psychiatric Center, Creedmoor Psychiatric Center, Partnership of Hope and Visiting Nurse Services. Permission was then obtained from program directors at each site to attend their ICM program staff meeting. The author made a brief presentation to case

managers regarding the purpose of the study and explained that participation in the research was voluntary and anonymous. After answering questions about the scale, an informational consent form was distributed along with the questionnaire. The author left the room to ensure that the process remained anonymous. Once completed, the questionnaires were collected by a volunteer and the name of the program was marked on the data sample.

Following the collection of the survey forms and data analysis, the author contacted the program manager from one sample site to request the opportunity to present the preliminary results of the study. In addition, case managers were asked for their reactions to the results. Five case managers participated in the focus group. The author also obtained permission to present the preliminary findings to a monthly coordinators meeting to obtain feedback about the data. This group included 7 program managers. The groups were held several months after the survey had been collected to allow time for data analysis and to generate meaningful questions about the results. The focus groups with case managers lasted approximately two hours and 27 open-ended questions were asked with prompts. The same questions were used in the focus group with program managers that lasted approximately 1 hour. Responses to questions were hand

recorded by the author as the presentation and discussion unfolded. Group participants were assured anonymity regarding their responses.

Data Analysis

The returned questionnaires were coded and entered into an SPSS database. A series of descriptive and correlational statistical programs were performed. In addition, confimatory factor analysis was used to determine whether scale items could be reduced to a smaller number of variables.

Frequency distribution tables were created to display demographic data for the respondents. A table was constructed describing the total number of participants in each category (i.e., expert, manager, line staff). Tables were also created to describe the percentage of respondents that had bachelors, masters or doctoral level degrees and which discipline respondents obtained their degree in.

A table describing the importance ratings for critical items in order of mean importance was created for the eight subsections in the CIICM instrument. Another table listing the noncritical items in order of importance was also constructed for the eight subsections. In both tables, the mean rating and standard deviation of the item for all respondent groups were presented. In addition, the percentage of all respondents and each respondent group rating the item as very important (7) were displayed.

For responses rating whether the item actually occurs in the program or practice of the ICM, a table was

constructed identifying the mean rating, its standard deviation and the percentage of program managers and case managers who rated the item as always occurring (4). Only items rated as always occurring by 50% or more of all respondents (program managers & ICMs) or items rated as critical were included in this table. In addition, items rated both critical and always occurring were highlighted in bold.

Finally, a table was constructed displaying the intraclass correlations for the entire CIICM scale and for all respondents. Correlations were also calculated for individual subsections of the scale and for each respondent group (experts, program managers and case managers). This statistical method is appropriate for ordinal data and allows us to discover the strength of the relationship between instrument variables and respondent variables. Those correlations signifying the alpha if a particular item was deleted were identified.

In an effort to surface critical ingredients not included in the CIICM instrument and characteristics of clients who benefit or do not benefit from ICM, responses were coded and grouped together according to the major themes that emerged from these responses. The suggestions were then cited in the results and discussion sections.

Norms for the ideal model specifications based on mean

respondent judgments were displayed in a fourth table, with the mean, standard deviation and coefficient of variation listed for all respondent group. Items were ranked by the coefficient of variation.

Chapter V

Results

Categories- The study included 89 subjects who were subdivided into three categories; experts, program managers and case managers. Table 2 presents the frequency and percentages of each category of respondents. Experts represented 25% of subjects surveyed, program managers 23% and case managers 52% of the total sample.

Discipline- Table 3 presents the frequency and percentage of disciplines represented in the sample group. Nearly half of the entire sample had a degree in social work (48%) while the second highest discipline reported was psychology (26%). Other disciplines represented were rehabilitation (4%), nursing (3%), medicine (3%) and education (4%).

In terms of differences between respondent groups, it should be noted that 62% of program managers obtained their degree in social work. This differs significantly from the results obtained by Ellison's (1995) nationwide survey of case management programs. In that survey only 25% of case management supervisors were identified as having a degree in social work. Among case managers, most held a degree in social work (39%) with psychology a close second (33%). Among experts, the distribution of disciplines was similar

Table 2 Category of Respondents

	Frequency	Percent
Experts	22	24.7%
Program Managers	21	23.6%
ICMs	46	51.7%
Total	89	100%

Table 3 Discipline of Respondents

	Frequency	Percent
Social Work	43	48.3%
Psychology	23	25.8%
Rehabilitation	4	4.5%
Education	4	4.5%
Nursing	3	3.4%
Medicine	3	3.4%
Other	6	6.7%
System Missing	3	3.4%
Total	89	100%

Table 4 Education of Respondents

	Frequency	Percent
Doctorate	19	21.3%
Masters	47	52.8%
Bachelors	20	22.5%
System Missing	3	3.4%
Total	89	100%

to the results of the overall sample.

Educational levels- Table 4 presents the type of degree held by all respondents. The doctorate degree was obtained by 21% of the sample while 53% of the sample had a masters degree and 22% obtained a bachelors degree. No respondent had a degree below the bachelors level. For the expert category, the majority of this group held a doctorate (77%) while the remainder held masters degrees (23%).

For program managers, the majority held a masters degree (86%) and no manager fell below this degree level. In terms of case managers, 52% reported obtaining a masters degree while 44% held a bachelors degree. There were no case managers holding a high-school or associates degree. Ellison (1995) reported that among case management programs they surveyed, 58% of case managers possessed a bachelors degree. We can infer from this that case managers in NY City ICM have higher educational levels than case managers from around the country.

Case management experience- Respondents across the entire sample reported having a mean of 9 years experience in ICM and a mean of 20 years experience in human services. Experts had a mean of 13 years experience in ICM, and 24 years in human services while program managers had a mean of 8.5 years experience in ICM and 21 years of experience in human services. Case managers had a mean of 7 years

experience in ICM and 18 years experience in human services. Case managers interviewed in a focus group after the results were gathered reported that prior experience in mental health, especially inpatient experience, was an important asset to doing their work effectively.

The demographic results indicate that the sample group is highly educated and experienced in intensive case management, with over 76% of all respondents holding a masters degree or higher. As expected, most experts held a doctorate degree while all program managers had a masters degree due to the job requirement that NY City ICM supervisors possess this level of training. What was surprising was that over half (52%) the case managers in this sample possessed a masters degree. One reason for this is that two of the four ICM programs sampled were operated by the NY State Office of Mental Health. The majority of case managers at these sites have a masters degree and are earning more than $45,000 per year. High salaries and educational benefits provided by the State may affect the level of education and experience intensive case managers have at those program sites. In two separate focus groups held with ICMs and program managers, those who were employed by the State reported that case managers were encouraged to study for their masters degree to increase their knowledge

base and credibility with other treatment providers. In addition, many had significant experience and had obtained their degree before becoming ICMs. In addition, a significant number had transferred from inpatient and outpatient units in the State mental health system.

Based on the information provided by the Ellison (1995) survey, intensive case managers in NY City cannot be compared to case managers across the country because of different program and educational characteristics. Intensive case managers in NY City are, however, in a unique position to judge what makes for an effective ICM program based on their length of service with this program format and their level of education. In addition, the positive outcomes reported by the Donahue et al. (1993) study on this program add some degree of validity to program manager's and case manager's judgements.

Intraclass Correlation

The consistency of respondents ratings of importance were calculated for all respondents and for individual respondent groups. In addition, correlations were calculated for the entire scale and for each subsection of the scale. Ratings of importance for all respondent groups for sections A-G on the CIICM scale were highly consistent with an intraclass correlation of .92. Intraclass correlations for

each respondent group for sections A-G ranged from .94 for case managers, .88 for program managers and .85 for experts.

Table 5 highlights the intraclass correlations for individual subsections. For all respondents, intraclass correlations for subsections ranged from .39 to .87 with the least consensus for engagement, retention and discharge (.39). Only one item in this subsection was rated critical by respondents and there was considerable disagreement on the topics of graduation from ICM, time limits and a "no close" policy with no required discharge point. High levels of consensus existed for the personal strengths (.86), rehabilitation (.87), clinical (.81) and full support practice methods and for client characteristics (.84). Consensus was also relatively strong for other structure and organizational components (.77), service elements (.76) and hospitalization and coordination of services (.78). Moderate levels of consensus existed for the personnel structure (.67). The moderate to high correlations indicate that the scale is reliable and that there is a high degree of agreement among respondents on rank order of importance. Thus, we can be fairly confident in interpreting the results of respondent's ratings.

Interestingly, agreement regarding ratings of importance for the entire scale and for most of its subsections were highest among case managers, followed by

Table 5. Intraclass correlations for the CIICM scale for all respondents and for experts, program managers and ICMs.

Item	All Respondents	Experts	Program Managers	ICMs
All items (Sections A thru G)....	.92	.85	.88	.94
Personnel structure (1)	.67	.65 (a)	.49 (b)	.79
Other structure and org. components (2)....	.77	.62	.73	.80 (c)
Engagement, retention & Discharge (3).....	.39 (d)	.35 (e)	.38	.48 (f)
Hosp. and coordination of services (4).....	.78	.72 (g)	.78 (h)	.82
Treatment goals & foci				
Full Support (5).....	.81 (i)	.57 (j)	.80	.86
Personal Strengths (6).	.86	.61 (k)	.85	.92
Rehabilitation (7).....	.87	.72 (l)	.84	.93
Clinical case management (8).....	.81	.62 (m)	.74	.90
Service elements (9)..	.76 (n)	.57	.78 (o)	.82 (p)
Client characteristics (10).....	.84	.88	.23 (q)	.87

a) Alpha if item A2 deleted
b) Alpha if item A2 deleted
c) Alpha if item B4 deleted
d) Alpha if item C3 deleted
e) Alpha if item C3 deleted
f) Alpha if item C2 deleted
g) Alpha if item D1 deleted
h) Alpha if item D1 deleted
i) Alpha if item E9 deleted
j) Alpha if item E9 deleted
k) Alpha if item E9 deleted
l) alpha if item E9 deleted
m) Alpha if item E9 deleted
n) Alpha if item F1 deleted
o) Alpha if item F1 deleted
p) Alpha if item F5 deleted
q) Alpha if item G4 deleted

program managers and experts. Consensus among experts was strongest regarding client characteristics (.88). Moderate agreement ranging from .57 to .72 was achieved for all other subsections except for engagement, retention and discharge (.35) an area that provoked disagreement. Experts may have been less likely to agree on these program components because of different backgrounds, research and practice orientations. This is also an area filled with tension since client driven and system driven goals often are in conflict with each other.

Among program managers there was a higher degree of agreement regarding the entire scale and its subsections. Areas in which there was less agreement were around personnel structure (.49), engagement, retention and discharge (.38), and client characteristics (.23).

For case managers, agreement regarding ratings of importance was high across all subsections except for engagement, retention and discharge (.48). Greater consensus among ICMs may be explained by several factors. ICMs may have developed a strong consensus about what is important to an effective ICM program based on their years of experience in providing direct services to this client population. In this sample, case managers had a mean of 7 years direct practice experience working in ICM and slightly more than half had obtained a masters degree. In a focus group held to

discuss these results, ICMs reported that experience obtained on the job was the most influential factor in their choice of critical ingredients. A focus group with program managers confirmed that experience was more influential than training. Several managers said that they only recalled parts of the training that are relevant to their work. We can infer that years of experience in direct practice will have a greater influence on an ICMs opinions than an 8 day training program attended seven years ago. While ICMs credited the Hunter training program for providing them with the foundation to ICM, they readily admitted modifying program components that the State and Hunter had designated as important if they felt these were ineffective to their work. Finally, we should not lose sight of the fact that there was a great degree of overlap regarding importance ratings between experts and case managers. Of the 25 items rated by experts to be critical, 16 were also rated critical by ICMs.

Importance ratings

Respondents mean ratings of importance for CIICM items are shown in Tables 6 and 7. Table 6 displays ratings for CIICM items identified as "critical," meaning that the item was rated as very important (rating of 7) by at least 50% of all respondents (experts, program managers & case managers

combined). Table 7 presents the ratings for the items judged "noncritical" on the CIICM scale. Within the subsections, items are presented in ascending order according to the mean rating of importance. Mean importance ratings refer to the item stem in the CIICM subsections A thru G, (i.e. access to vehicle). They do not relate to ideal model specifications ("X" months before eligible for graduation) in subsection H of the CIICM questionnaire.

The overall mean importance rating for all items on the CIICM scale was 5.93. Respondents identified 32 of the 68 items in subsections A thru G as critical (50% or more respondents rating item very important). Forty-three of the 68 CIICM items (63%) obtained a mean rating of six (important) or greater on the scale, while 48 items (70%) were rated at least somewhat important (rating 5 or greater). Experts identified 25 items as critical while program managers identified 44 items as critical and case managers identified 24 items as critical.

Regarding personnel structure, only 3 (25%) of the 12 items in this subsection were rated as critical by all respondents. Respondents rated "case managers having at least a bachelors degree in human services" (6.41) as the most important item of this subsection. Interestingly, only 36% of experts rated this as very important (rating of 7)

Table 6. Ratings for critical items in order of mean importance for all respondents; experts; program managers; case managers.

Item	Mean (SD)	Percent of Respondents Rating Item Very Important: All	Experts	Program Managers	Case Managers
Personnel Structure					
Case managers have at least a bachelors degree in human services	6.41 (1.10)	67%	36%	81%	72%
Case managers have access to psychiatric consultation provided by ICM program	6.39 (1.17)	66%	77%	67%	61%
Case Manager is culturally competent	6.28 (1.04)	52%	50%	67%	46%
Other Structure & Organizational Components					
Administrative Climate that supports services for this client group	6.51 (.88)	63%	73%	71%	54%
Small client: staff ratios	6.48 (.88)	63%	64%	76%	57%
Case managers have access to funds that can be used for client purchases	6.38 (.99)	61%	36%	86%	61%
Secretary and support staff	6.33 (.96)	58%	9%	86%	70%
Case managers have access to a vehicle	5.87 (1.70)	54%	41%	67%	54%
Engagement, Retention & Discharge					
ICM is assertive and persistent in engaging client	6.56 (.84)	68%	77%	71%	63%

Table 6. (cont.) Ratings for critical items in order of mean importance for all respondents; experts; program managers; case managers.

Item	Mean (SD)	Percent of Respondents Rating Item Very Important: All	Experts	Program Managers	Case Managers
Hospitalization & Coordination of Services					
ICM coordinates treatment with other service providers.....	6.75 (.53)	77%	95%	95%	76%
ICM works with hospital to coordinate dischare plan.....	6.66 (.56)	70%	73%	81%	63%
ICM works to prevent hospitalization.....	6.59 (.71)	67%	77%	76%	59%
ICM works with clients in the hospital.....	6.36 (.79)	54%	54%	71%	46%
Treatment Goals & Foci					
ICM assists client in obtaining basic needs.....	6.80 (.50)	84%	82%	90%	76%
Relationship between patient and case manager.....	6.76 (.55)	80%	77%	95%	74%
ICM advocates for client.....	6.75 (.53)	80%	82%	90%	76%
Identify and build on clients strengths.....	6.70 (.57)	75%	86%	95%	61%
ICM assists client in obtaining outpatient mental health services....	6.57 (.84)	71%	45%	90%	74%
Assist in obtaining entitlements.....	6.54 (.64)	62%	59%	67%	61%
ICM engages family, provides education and support.....	6.50 (.72)	63%	64%	81%	54%
Teach clients skills required to overcome barriers.....	6.45 (.71)	57%	41%	67%	61%

Table 6. (cont.) Ratings for critical items in order of mean importance for all respondents; experts; program managers; case managers.

Item	Mean (SD)	Percent of Respondents Rating Item Very Important: All	Experts	Program Managers	Case Managers
Treatment Goals & Foci (cont.)					
Increase community integration for clients	6.44 (.67)	54%	64%	62%	46%
ICM focuses on increasing client's functioning	6.43 (.81)	60%	45%	81%	56%
Develop and utilize naturally occuring resources in the community	6.41 (.67)	52%	59%	62%	43%
Assist clients with living skills	6.41 (.67)	51%	54%	62%	43%
ICM provides individualized treatment services	6.21 (54)	54%	59%	52%	52%
Service Elements					
Client involvement in treatment planning	6.51 (.68)	61%	59%	71%	56%
Client consulted prior to major treatment decisions	6.49 (.74)	60%	54%	76%	54%
Periodic follow-up assessments after admission	6.44 (.83)	56%	59%	81%	43%
Comprehensive assessments at admission	6.31 (.99)	55%	45%	76%	50%
Client Characteristics					
Clients have a severe and persistent mental illness	6.32 (.93)	52%	59%	76%	37%
Specific ICM admission criteria exist.	6.29 (.98)	52%	32%	86%	46%

versus 81% for program managers and 72% for intensive case managers. One expert said that "degree" was not a critical variable and another reported that having a degree is important only if the person is part of a team. One possible explanation for these views is that experts associate intensive case management as focused on tasks involving environmental support and modification that require minimal training. Case management has often been defined in terms of its functions and not by education, which may contribute to the belief that para professionals are qualified to carry out this role.

NY City ICM programs, however, require all case managers to have a bachelors degree in human services and at least 4 years experience with the mentally ill. We can infer from these results that program managers and case managers believe these requirements to be the minimum qualifications necessary for meeting the expectations placed upon intensive case managers. These results also appear to confirm O'Connors (1988) assertion that ICM requires a minimum level of education and experience that enable the case manager to execute "autonomous practice, broad responsibility, and high task complexity". In addition, education and experience would appear to enable the ICM to be an effective advocate since credibility is important when dealing with professionals from other institutions.

Responders next rated intensive case manager's access to psychiatric consultation provided by their organization as critical (6.39). Ratings of importance were consistent across all three respondent groups. Working with a seriously mentally ill population, most of whom are on medication, may require access to psychiatric consultation. ICMs must often address client's concerns for information about medication and side effects. In a focus group, one case manager stated "psychiatrists come and go, they all have their ideas about medication, but we know our clients and what meds they do well on, I've seen too many clients decompensate because of med changes." ICMs who are knowledgeable about their client's condition and have consulted with an in-house psychiatrist are in a better position to help clients with issues related to psychiatric care. This issue can also have important ramifications in the context of a Medicaid managed care environment where direct advocacy based on accurate information may be essential to a client's well being.

The third item rated as critical in the personnel subsection is the issue of cultural competence (6.28). Most experts and program managers rated this item as very important. One program manager wrote on the scale that "the cultural representation needs to be reflective of the population. Many consumers do not buy into treatment because the service providers are not a part of their community".

Slightly less than half of the case managers gave this a rating of 7 (very important), however the item was nevertheless rated important (mean 6.17). In a focus group with program managers, several reported that the scores among case managers may have been lower because ICMs feel uncomfortable with this issue and resent having to face the reality of it.

These results confirm the importance of ICMs understanding not only the client's cultural orientation, but also more subtle factors such as a client who is acculturated to institutional environments or being homeless.

Nine items in the personnel structure subsection were rated as noncritical (Table 7). Having a "full time director" (5.86) and access to a "program nurse who can administer antipsychotic injections in the field" (5.74) were rated as important but not critical. Program managers did not value a nurse on staff (4.81) as much as experts (6.00) and case managers (6.04).

Remarkably, not one of the three separate approaches used to provide direct service to clients was rated as critical. The three approaches were: placing the locus of responsibility for clients solely with the ICM; providing direct services through a team of ICMs; or sharing client information for treatment planning but assigning only one

ICM to work with the client. The team approach for direct services to clients received the highest rating (5.60) and was rated as critical by program managers. Client caseloads shared for treatment planning (5.53) was rated as the next highest by all respondents. This option appeared to be favored more by experts. Assigning an ICM sole responsibility for a client caseload received a mean score of (4.92). There was a clear divergence between experts and case managers on this issue, with 57% of experts who responded to this question rating it as somewhat unimportant (3) or less. In contrast, case managers appeared to be more favorable toward an ICM assuming sole responsibility for clients, with over 75% rating this as important (6) or higher. One expert responded that the choice between individual responsibility and a team approach is related to the training and skill of the case manager, meaning that a skilled case manager would have less need for a team. In the focus group with case managers, there was a consensus that the case manager should have primary responsibility for clients and use the team format for sharing information and treatment planning only. For example, a team of three ICMs covering 36 clients would make it difficult for each ICM to form strong relationships with all clients. Logistically, it would be impossible for all three ICMs to visit each client weekly. ICMs also pointed out that manipulative clients

would not benefit from this type of arrangement and that many clients prefer developing one relationship in order not to have to retell their story repeatedly.

The wording of these items may also have created some confusion and influenced the results obtained from respondents. For instance, some program managers who preferred caseloads shared for treatment planning may have confused this with the team approach for direct services. The mean scores for these two items were quite close (5.85 and 5.90). Experts may have interpreted sole responsibility for client caseloads as isolating ICMs while case managers, whose frame of reference is primary responsibility but shared treatment planning may have interpreted sole responsibility in a more positive way.

While no one approach was rated as critical, we can infer from the above factors that the general preference was for ICMs to use the team approach for sharing information and treatment planning but assigning only one ICM for direct services. One program manager preferred the term "peer supervision" to shared treatment planning. It appears that this issue may need further study with more refined measurement tools.

In terms of educational background for ICMs, a masters degree in social work (5.09) was rated as somewhat important, while a degree in nursing (4.51) and

Table 7. Ratings for non-critical items in order of mean importance for all respondents; experts; program managers; case managers.

Item	Mean (SD)	Percent of Respondents Rating Item Very Important: All	Experts	Program Managers	Case Managers
Personnel Strucuture					
Full time director.....	5.86 (1.27)	38%	32%	48%	37%
Access to program nurse who can give anti-psychotic injections in the field.	5.74 (1.47)	38%	45%	29%	39%
Program uses a team approach for direct services to clients.....	5.60 (1.59)	38%	23%	52%	39%
Caseloads shared for treatment planning	5.53 (1.54)	30%	36%	33%	26%
Case managers have a masters in social work.....	5.09 (1.46)	19%	9%	33%	17%
Case manager has sole responsibility for their client caseload.....	4.92 (1.92)	20%	4%	19%	28%
Some case managers have a nursing degree.....	4.51 (1.61)	9%	18%	5%	6%
Case managers have a degree in rehabilitation.....	4.32 (1.43)	2%	0%	5%	2%
Program coordinator provides direct services to clients.....	4.23 (1.85)	11%	23%	5%	9%
Other Structural & Organizational Components					
Contacts with clients occur mostly in the community.....	6.19 (1.05)	47%	36%	76%	39%
Low case management staff turnover.....	6.16 (1.11)	46%	41%	57%	43%
Case manager available 24 hours, 7 days	5.92 (1.54)	47%	59%	62%	35%

Table 7. (cont.) Ratings for non-critical items in order of mean importance for all respondents; experts; program managers; case managers.

Item	Mean (SD)	Percent of Respondents Rating Item Very Important: All	Experts	Program Managers	Case Managers
Other Structural & Organizational Components					
Adequate office space, equipment and furniture	5.90 (1.28)	34%	0%	57%	39%
Admit clients into the program at a controlled rate	5.78 (1.07)	29%	4%	43%	35%
Avoid contact with clients in the office	4.16 (1.47)	4%	4%	5%	4%
ICM office located in a separate location away from other agency programs	4.09 (1.82)	7%	0%	5%	11%
Engagement, Retention & Discharge					
On-going case management is assertive and persistent in nature	6.16 (1.02)	44%	50%	57%	35%
Clients are graduated from ICM	5.41 (1.71)	28%	4%	57%	26%
"No close" policy, no required dischare point	5.34 (1.55)	20%	41%	14%	13%
ICM services are time limited	3.55 (2.06)	6%	0%	9%	6%
Treatment Goals & Foci					
Work with clients on remedying deficits.	6.33 (.78)	47%	27%	62%	50%
Increase community tenure	6.28 (.76)	44%	77%	43%	28%
ICM monitors medication compliance	6.28 (.85)	49%	50%	67%	41%
Case manager's knowledge of psychosocial rehabilitation	6.22 (.88)	45%	32%	67%	41%

Table 7. (cont.) Ratings for non-critical items in order of mean importance for all respondents; experts; program managers; case managers.

Item	Mean (SD)	Percent of Respondents Rating Item Very Important: All	Experts	Program Managers	Case Managers
Treatment Goals & Foci					
Client self determination.....	6.19 (.93)	46%	27%	67%	46%
Assist clients in obtaining services from non-mental health programs.....	6.18 (.79)	38%	45%	48%	30%
Case manager's knowledge of psychopharmacology.....	6.06 (.92)	38%	27%	38%	43%
Emphasis on social problems of the individual.....	6.06 (1.03)	36%	27%	38%	39%
Assist clients in obtaining jobs.....	5.74 (.92)	24%	36%	33%	13%
ICM is dependent on other services.....	5.48 (1.49)	28%	9%	38%	33%
Obtain representative payee for client..	5.06 (1.27)	11%	9%	9%	13%
Case manager's ability to provide psychotherapy.....	4.62 (1.66)	11%	14%	5%	13%
ICM assumes responsibility for client's life.....	3.77 (1.75)	6%	4%	9%	4%
Service Elements					
Client engaged in psychotherapy services	5.44 (1.62)	33%	9%	48%	37%
Client Characteristics					
Client has documented risk for rehospitalization.....	6.09 (1.02)	39%	50%	52%	28%
History of poor utilization/cooperation with mental health services.....	5.86 (1.19)	35%	23%	48%	35%

rehabilitation (4.32) received a neutral rating (neither important nor unimportant). In focus groups with program managers and case managers, the consensus was that a masters degree was not necessary to do ICM work but that experience was essential. The idea that a program coordinator should provide direct services to clients received the lowest rating (4.23) within the personnel structure. Experts and case managers were somewhat more inclined to this approach with 40% of the former and 30% of the latter rating this as important (6) or higher while just 5% of program managers rated this as important (6) or higher.

Five items (42%) out of 12 under the other structure and organizational components subsection were identified as critical to ICM. An administrative climate that supports services for this client group was identified as very important (6.51). This is a clear validation of Bachrach's (1993) assertion that both government and private sector administrators must endorse, support and legitimate services for the seriously mentally ill in order for an ICM program to be effective at coordinating care. One program manager related that ten years earlier there was a concerted effort by both agency and government administrators to access management personnel in welfare, social security, INS and Medicaid to assist ICMs in cutting through the red tape that

presented barriers for their clients. As the administrators left, the long hours and delays that clients and ICMs faced returned. In addition, an ICM wrote "ICMs do not and cannot flourish in an atmosphere of mistrust, hostility and fear vis-a-vis the administration".

Small client: staff ratios were also identified as critical with a mean rating of 6.48. Harris and Bergman (1988) report that there has been a general assumption among planners that acceptable staff-to-patient ratios in case management programs may range between 1 to 20 and 1 to 40. They point out, however, that case manager to client ratios must reflect the scope of services to be provided and the outcomes expected. Experts, program manager and case managers agree that if the ICMs mission is to provide comprehensive care and reduce hospitalization utilization for a seriously mentally ill population, case loads must remain small. We can infer that if these guidelines are not followed, the program changes from an intensive case management format to a traditional broker case management model.

Another area rated as critical by respondents was the need for intensive case managers to access funds for client purchases (6.38). NY City ICM has budgeted $500 per client for emergency expenditures related to food, lodging, clothing, medical services etc. The ability to help clients

with their practical needs enables the ICMs to engage clients more quickly and establish the trust and working relationship necessary for change to take place. It is important to note that only 35% of experts rated this item as critical versus 86% of program managers and 61% of case managers. This is an area that is usually not mentioned in the literature and may have been overlooked by researchers and program planners working on case management.

Another organizational component rated as critical is the need for a secretary and support staff (6.33). While 86% of program managers and 70% of case managers rated this item as very important, only 9% of experts rated this as very important. Two important reasons may explain this discrepancy. Experts may view support staff as relatively unimportant for a program whose main focus is on providing services to clients in vivo. This ignores paperwork requirements that an ICM program may face. For instance, NY City ICM programs are required to bill Medicaid for 74% of their program's budget. This requires a billing system to be in place and certain charting standards that can meet audit requirements. Program managers and case managers in the focus groups reported that it is very difficulty to serve clients and handle all agency paperwork issues without support staff. This may be especially critical for larger programs (i.e., 20 or more case managers) so that they can

operate efficiently.

The last item rated as critical in this subsection is case managers access to a vehicle (5.87). As one ICM wrote, "transportation is a major issue". While 41% of experts rated this as very important, 67% of program managers and 54% of case managers rated this very important. It should be noted that this item had a standard deviation of 1.70, indicating a wide range of opinions regarding this issue. One might ask why access to a vehicle is critical to performing ICM work. One explanation is that if a case manager has 12 clients, all of whom must be seen 1 to 2 times per week, a vehicle will reduce travel time between client locations. Another explanation is that 3 of the 4 program sites sampled were outside Manhattan. The South Beach Psychiatric site is located on Staten Island, an area that can be characterized as suburban with a less dense public transportation system than in Manhattan. ICMs at the Queens, Brooklyn and Staten Island sites may also be communicating that traveling via public transportation through these counties is inefficient and hampers their ability to carry out their job function. We can infer from the data that except for the most densely urban areas, access to a vehicle should be considered an important adjunct to making case management efficient. Large capital outlays can be avoided by leasing vehicles or reimbursing

employees for the use of their own vehicles.

Seven items on the other structural & organizational components subsection were rated as noncritical. Surprisingly, "contacts with clients occur mostly in the community" was not rated as critical (6.19), but it was, nevertheless, rated as important. Thirty-six percent of experts and 39% of case managers rated this as very important (rating of 7), while 76% of program managers rated this as very important. Again, the consensus appears to be that while providing services in the home and community is important, strict adherence to avoiding office visits may be somewhat counterproductive and should not necessarily be seen as wrong.

Low case management staff turnover (6.16) was rated as noncritical but nevertheless important. Only program managers rated this as critical, perhaps indicating their concern for continuity regarding the relationship between an ICM and client. Low turnover also reduces the work load for program supervisors who must then hire and retrain new staff.

Having a case manager available 24 hours, 7 day per week was rated important (5.92) but not critical. There was a difference of opinion on this item between case managers and the other two respondent groups. While most experts

(60%) and program managers (62%) indicated that this was critical, only 35% of case managers rated this as very important (7). One possible explanation for these differences is that case managers are infrequently contacted by clients in crisis during the off hours, thus making 24 hour availability unnecessary. Another possible cause is that case managers may downplay the importance of this item because of the inconvenience it can cause in their personal life.

ICMs in the focus group stated they could not understand these results. Even if the on-call system is used infrequently, they stated it should still be in place. One ICM said that being available for crises "is the whole point for us being there". There may have been a problem with the wording of the item that led to some confusion among ICMs. The item could have been misinterpreted to mean that only the client's ICM should be the only one on call 24 hours/ 7 days per week. Three ICMs wrote comments on the scale about this, one of whom indicated that "individual case managers should not be on call 24-7, but a rotating on call service should be available 24-7".

Adequate office space, equipment and furniture were rated important but not critical (5.90). There were no experts who rated this very important. Thirty-nine percent of case managers rated this as very important and 57% of

program managers felt this was critical. Expert ratings appear consistent with the *in vivo* philosophy of ICM in that the majority of an ICMs work is done outside the office. This is, however, an abstract issue for experts. We can infer that this is especially important to program managers since they do most of their work in the office.

"Admitting clients into the program at a controlled rate" was rated important (5.78) but not critical. Program managers and case managers may have been more concerned with this issue since it impacts directly on their workload. "Avoiding contacts with clients in the office" was rated a mean of 4.16. We would expect this rating since "contacts with clients occurring mostly in the community" was rated important. The rating appears to reinforce the idea that office contacts are acceptable as long as they are a small percentage of all contacts.

The item "locating an ICM office in a separate location, away from other agency programs" was rated a mean of 4.09. It should be noted that the standard deviation for this item was 1.82, indicating that there was a wide range of opinion on this issue. One expert stated that this was a "dumb idea". Locating an ICM program directly in an institution may add credibility to the program but also compromise it in certain ways due to political issues. Meanwhile, a freestanding ICM program can operate with more

autonomy but may lack credibility. There does not appear to be any consensus on this issue.

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The engagement, retention and discharge subsection included 5 items, only one of which was identified as critical. As expected, all respondents rated "ICM as assertive and persistent in engaging client" as critical (6.56). This style of engagement appears to be especially crucial to an effective ICM program. Interestingly, "ongoing case management is assertive and persistent in nature" was also rated important (6.16) but not critical. Fifty percent of experts and 57% of program managers rated this as critical, however only 35% of case managers rated this critical. One explanation for this discrepancy may be the difficulty case managers face in balancing the need to persistently pursue clients while maintaining respect for the client's personal boundaries. Case managers may feel that under certain circumstances "pursuit" can border on harassment. Focus group participants agreed with this, and said that assertive and persistent outreach depends on the phase of the case manager's relationship with the client. Some clients are hostile and persistent engagement will be perceived as harassment. One ICM stated that assertive and persistent engagement wasn't necessary for the clients whom she has worked with for over 8 years.

"Clients are graduated" received a mean rating of 5.41. This item provoked major disagreement between experts who rated this as somewhat unimportant (3.40) and program managers (6.33) and case managers (5.95) who rated this as important. The latter two respondent groups believe that graduation can be introduced for certain clients who have made major improvements in their lives. In the focus groups, one ICM said that graduation should occur for clients who become self sufficient, otherwise dependency results and this defeats the whole purpose of ICM. In contrast, a program manager stated that "clients had been shafted by the service system" and that for some clients there should be an expectation that they will be in ICM for extended periods, possibly for more than a decade. Another manager reported that consensus regarding this issue may be low among case managers because they are reluctant to take on new and difficult cases that can result in more work.

If graduation is incorporated into an ICM program, we must ask how lasting the positive changes are and whether clients should be stepped down to a less intensive from of case management instead of withdrawing support all at once. McRae et al. (1990) have found that clients who have had ICM services withdrawn do display stabilizing effects after five years of service. In addition, NY City is a service rich environment for mental health services. Clients may reside

in community residences, skilled nursing facilities or be transferred to supportive case management programs, all of which can provide varying degrees of support after ICM services are withdrawn. The responses to this item also highlight the degree of tension that exists between designing a program that is strictly client driven and meeting the system priorities that exist at a time of limited resources. Finally, case managers may be suggesting through their responses that while graduation may be a useful discharge mechanism to have, it must be used with great care and in the interest of the client.

""No close" policy, no required discharge point" received a mean rating of 5.34. It was surprising that this item was not rated as critical, especially when one considers the literature's emphasis on providing open-ended services to clients. Not even a majority of experts rated this item as critical (41%). One interpretation is that respondents believe that under certain circumstances clients can be discharged from ICM. These circumstances might include clients who can make an informed decision about refusing services, clients who are readmitted for long-term hospitalization or incarceration and clients who are missing for some time. Again, these are judgement calls best left to the discretion of case managers and their supervisors provided they have the experience and qualifications to make

them.

Conversely, "ICM services are time limited" received a rating of 3.55, indicating that this item was somewhat unimportant. Respondents ratings of this item and the one above clearly support the view that open-ended services to clients are important, but that certain exceptions to this should exist.

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The hospitalization and coordination of services subsection included 4 items. All four were rated as critical to an ICM program. The item receiving the highest mean rating was "ICM coordinates treatment with other service providers" (6.75). This clearly is one of the most important activities that an ICM enters into with a client. Clients with SMI must receive assistance in negotiating a fragmented mental health and government benefits system. It should also be noted that the Ellison survey (1995) reported this as a case management activity receiving the greatest response nationwide.

Two critical items related in this subsection were "ICM works with hospital to coordinate discharge plan" (6.66) and "ICM works with clients in the hospital" (6.36). These ratings reaffirm the literature's emphasis on the importance of working with clients while they are in the hospital so that effective discharge planning occurs and a relationship

between ICM and client begins. ICMs participating in the focus group reported that translating this goal into action can sometimes be difficult. ICMs may at times feel intrusive and experience resistance from hospital personnel who feel the ICM is scrutinizing their work. In these times of cost containment, the ICMs goals for the client may differ from those of the hospital and several ICMs reported that hospitals will discharge a patient suddenly without telling the ICM. This problem may be expecially true in urban areas were ICMs are working with several large, bureacratic hospitals.

Not surprisingly, "ICM works to prevent hospitalization" was rated as critical by all respondents (6.59). Program managers and case managers agree on the importance of this indicator as a principal goal of ICM. This ratings also coincide with Ellison's (1995) survey of case management programs across the country indicating that preventing hospitalization was the most important mission of case management.

Thirteen of 26 items on the treatment goals and foci subsection were identified as critical. "ICM assisting clients in obtaining basic needs" received the highest rating in this subsection (6.80). This item relates to all four major practice philosophies examined by this study

(Clinical, Personal Strengths, Rehabilitation, Full Support) and highlights the significance of an ICM focusing on basic needs important to survival in the community. By locating low-income housing and securing benefits for clients, ICMs perform important work that can alleviate the poverty from which many clients suffer.

The next item rated as critical was the "relationship between the client and ICM" (6.76). This rating reaffirms the importance of providing clients who are SMI the opportunity to establish a dependable and continuing relationship with a case manager who can help them navigate through the system of care. Without providing for these relational needs, continuity of care for the client does not exist. Deitchman (1980) refers to the importance of the relationship as psychological survival, enabling the client to have a relationship with someone whom they can confide in and depend on. These results also conicide with the findings of McGrew et al. (1996) in which clients rated the relationship with a casemanagers as very important.

We should note that while the importance of the relationship was reaffirmed, several ICMs wrote about the difficulty of meeting the expectations placed on them by the service system and the client. One ICM countered that "at present, extent of responsibility of ICM to client is poorly defined and overly global" thus indicating that some ICMs

may feel somewhat overwhelmed by the responsibility of their work. Another related that "in practice, ICMs are often unable to manage critical elements such as medication, drug involvement and chronic, uncooperative clients".

It is interesting that the Ellison (1995) survey found the case management activity "developing relationships" a service less consistently engaged in by programs across the country. This may indicate that most programs Ellison surveyed were engaged in traditional broker case management. It also highlights the important differences between ICM and more traditional forms of case management provided across the country.

"ICM advocates for the client" was rated at 6.75 and reaffirms the importance of addressing barriers facing clients. Ellison (1995) found this mission ranked fairly low across programs he surveyed, thus indicating another important difference between ICM and traditional case management.

"Identifying and building on client's strengths" was rated critical by all respondents (6.70). This is a core component of the personal strengths practice model which seeks to mainstream clients to the greatest degree possible. "ICM assists client in obtaining outpatient mental health services" was rated 6.57. While most case managers and program managers rated this as critical, it was surprising

that the majority of experts did not. This activity highlights the importance of linking clients to mental health service so that they can remain stable in the community. There was greater consensus among respondents regarding the next critical item, "assisting clients in obtaining entitlements" (6.54). This function is critical in terms of obtaining financial supports so that clients can live in the community.

"ICM engages family, provides education and support" was also rated as critical by all respondents (6.50). This aspect highlights the need to involve the client's support network to facilitate community tenure and change. One expert commented that ICMs needed to check with clients about whether they are ready for family involvement. "Teaching clients skills required to overcome barriers" received a mean rating of 6.45 and focuses on a core component of the rehabilitation approach. This item is an important factor in the client's development of self esteem. "Increasing community integration for clients" was rated critical (6.44), however, only 46% of case managers rated this as very important. Perhaps this indicates the frustration and difficulty case managers face in integrating clients who are severely ill into a society that traditionally ignores this subpopulation. In the focus groups with ICMs and program managers, there was a general

agreement that the community often reacts poorly to living and working with clients due to the stigma of mental illness. In addition, some case managers reported that their clients may already be integrated in the community but do not want the ICM involved in certain areas of their life for fear of the stigma this involves.

"ICM focuses on increasing client's functioning" received a critical rating of 6.43, while "assisting clients with living skills" was rated 6.41. Both items are core components of the rehabilitation approach. In terms of increasing client functioning, one expert made the comment that ICMs must be careful about defining this since it is often a professional goal rather than a client goal that receives the focus. "Developing and utilizing naturally occurring resources in the community" was rated 6.41. This is an important facet of the personal strengths approach. Finally, "ICM provides individualized treatment services" was rated 6.21 and highlights the importance of tailoring mental health services for individual clients.

Thirteen of the 26 items on the treatment goals subsection were rated as noncritical. Two of these noncritical items fall under the rehabilitation approach. "Working with clients on remedying deficits" was rated 6.33 while a "case manager's knowledge of psychosocial

rehabilitation" was rated 6.22. It appears that expert respondents rated these items somewhat lower than program managers and case managers. While not critical, we need to keep in mind that there was a consensus that it is important for case managers to have adequate skills in this area.

One item that can be categorized under both the rehabilitation and personal strengths focus was "assisting clients in obtaining jobs" (5.74). Only 13% of case managers rated this as very important, perhaps indicating the difficulty case managers face in translating this goal into reality. Participants in the focus group reported that clients often have difficulty holding a conventional 9-5 job and that the goal of enlisting clients into mental health treatment and securing a stable living environment is the primary objective. In addition, ICMs pointed out that some clients are reluctant to seek employment for fear that their benefits will be cut off. Clearly, new forms of employment that allow for the nature of the disability are needed so that people with mental illness can succeed in the work place.

The remaining two noncritical items falling under the personal strengths practice model were "assisting clients in obtaining services from nonmental health programs" (6.18) and "emphasizing the social problems of the individual" (6.06). Again, while these ratings were noncritical, they

were nevertheless rated as important and have major philosophical ramifications for how ICMs conduct their activities with clients.

Four noncritical items relate to the full support model. "Increasing community tenure" received an importance rating of 6.28. While 77% of experts rated this as critical, only 28% of case managers rated it critical. Perhaps this difference in philosophy suggests that case managers feel a client's welfare may require hospitalizations from time to time. "ICM monitors medication compliance" was rated at 6.28, with 49% of all respondents rating it as critical. This is a clear indication that medication compliance is important to helping clients trying to stay out of the hospital. "Obtaining representative payee for client" (5.06) and having the "ICM assumes responsibility for client's life" (3.77) are also key components of the full support model and received relatively low ratings from all respondents. Concerning the latter item, one expert stated, that the ICMs focus should be on "doing with, not for clients" while another reported that assuming responsibility for the client is "inappropriate and not empowering". There appears to be a consensus among respondents that the ICM should focus on encouraging client responsibility rather than taking a paternalistic stance toward them.

Two noncritical items important to the clinical approach were the "case manager's knowledge of psychopharmacology" (6.06) and a "case managers ability to provide psychotherapy" (4.62). While knowledge of psychopharmacology is important so that ICMs can effectively interact with medical staff and educate clients, little consensus existed on the value of an ICM providing psychotherapy to clients. There was a major difference in opinion on this issue between experts and respondents working in ICM. While 60% of experts rated this as somewhat unimportant (3) or less, 70% of program managers rated this as somewhat important (5) or higher and 80% of case managers rated this somewhat important (5) or higher. Perhaps program managers and ICMs who have master's degrees believe in the value of directly providing psychotherapy to clients. In addition, it would be interesting to explore whether program managers and ICMs are including the concept of counseling under the psychotherapy heading.

The last two noncritical items fall under all four practice orientations. "Client self determination" was rated important but not critical, with only 27% of experts rating this item as very important (rating of 7). There is an interesting contradiction here since experts earlier rejected the idea that the "ICM assumes responsibility for the client's life". Perhaps experts nevertheless view ICM as

somewhat more paternalistic than program managers and case managers. "ICM is dependent on other services" was rated 5.48, with only 9% of experts rating this as very important. Questions may arise about why this item was rated only somewhat important, especially since ICM, unlike ACT, relies on linking clients to other services. Perhaps experts are trying to say that ICMs must provide the service themselves when it does not exist in the community. In addition, the wording of this item may have been vague, with one expert reporting that this was an "unclear question". Program managers and case managers rated this item higher and may be more aware of ICMs interdependence with other program resources.

For the service elements subsection, four of the five items were rated as critical. "Client involvement in treatment planning" was rated 6.51 and "client consulted prior to major treatment decisions" was rated 6.49. This reaffirms the literature's emphasis on client participation in treatment so that clients own their goals and are motivated to achieve them.

"Periodic follow-up assessments after admission" was rated 6.44. There was somewhat of a difference in viewpoint between program managers and case managers on this issue. Eighty one percent of program managers rated this as very

important versus 43% of ICMs. ICMs in the focus group stated that their less enthusiastic response to assessments may have been a negative reaction to the burden of doing paperwork. ICMs reported seeing change occur at a slow rate and they questioned the need for follow-up assessments every six months. In contrast, program managers reported that assessments were valuable for monitoring client progress and decisions related to continued enrollment or discharge from ICM. Managers are also faced with program audits that require this. "Comprehensive assessments at admission" received a rating of 6.31. The ratings for both items reaffirm the importance of the assessment process so that accurate service plans and treatment goals can be developed.

The only item in this subsection rated noncritical was "client engaged in psychotherapy services". Only 9% of experts rated this as very important, whereas 48% of program managers and 37% of case managers rated this as critical. While experts appear to de-emphasize psychotherapy for the SMI, program managers and case managers may be more inclined to using adjunctive psychotherapy for clients who are progressing in their treatment beyond community survival. Focus group participants agreed with this, saying that "medication is not the complete answer" and that psychotherapy is a "great tool to help the client manage their life".

Finally, two of the four items in the client characteristics subsection were identified as critical. "Clients have a severe and persistent mental illness (SPMI)" (6.32) and "specific ICM admission criteria exist" (6.29) both reaffirm the consensus of the literature that ICM is meant for a specific target group of clients. One expert commented that these criteria were necessary because ICM is " a limited resource". We should note that only 37% of ICMs rated "clients have severe and persistent mental illness" as very important (7). ICMs and program managers in the focus groups stated that this result may have been due to the abstract nature of the question. Some case managers may have interpreted the question as to whether their clients actually have a severe and persistent mental illness. All focus group participants agreed that SPMI was the right target group for ICM.

Interestingly, "client has documented risk for rehospitalization" (6.09) and "history of poor utilization/cooperation with mental health services" (5.86) were both rated noncritical. There seems to be a consensus that it is important to admit clients into ICM who are frequently rehospitalized. There appears to be less of a consensus for the idea that the program be targeted to resistant clients. Perhaps ICM is less successful with

clients who are noncompliant, however, one expert said that targeting resistant clients "was basic to the ICM philosophy". Another expert commented that if rehospitalization is "what it takes to get a ICM, then we are reinforcing the crisis model, you get attention when you are not doing well".

Ratings of Actual Occurrence

Program managers and case manager's ratings of whether items actually occur in their program or practice with clients are shown in Table 8. The items included in this table are those that were rated critical and/or always occurring in their program. Items in bold were identified as both critical and always occurring in the ICM program. "Always" was defined as any item in which 50% or more of program managers and case managers rated the item 4 (always) on a scale of 1 - 4 (1= never, 2=rarely, 3= sometimes, 4= always). Within subsections, items are ordered according to the degree to which they occur in the ICM program or case manager's practice.

The overall rating for this section of the CIICM scale was 3.24. Program managers and case manager identified 29 items (43%) as always occurring in their programs. Of these 29 items, 22 (69%) overlap with the 32 items identified as

Table 8. Items identified as critical (*) and/or identified by at least 50% of program managers and ICMs as always occuring in their program or practice with clients (+). Items in bold were identified as both critical and always occuring in ICM program.

	Mean rating and percent of program managers and ICMs rating whether item always occurs in program.		
Item	Mean	(SD)	Percentage of PMs and ICMs
Personnel Strucuture			
Case managers have at least a bachelors degree in human services	**3.78**	**.42**	**73%**
+ Full time director	3.35	.97	63%
* Case manager is culturally competent	3.28	.59	34%
* Case managers have access to psychiatric consultation provided by ICM program	3.01	.96	36%
Other structure & organizational components			
+ Case manager available 24 hours, 7 days	3.78	.65	85%
Case managers have access to funds that can be used for client purchases	**3.63**	**.52**	**64%**
+ Contacts with clients occur mostly in the community	3.54	.50	54%
Secretary and support staff	**3.44**	**.73**	**55%**
* Administrative climate that supports services for this client group	3.30	.65	40%
* Small client: staff ratios	2.89	.84	22%
* Case managers have access to a vehicle	2.52	1.03	15%
Engagenment, Retention & Discharge			
ICM is assertive and persistent in engaging clients	**3.74**	**.56**	**76%**
+ On-going case management is assertive and persistent in nature	3.51	.56	52%

Table 8. (cont.) Items identified as critical (*) and/or identified by at least 50% of program managers and ICMs as always occuring in their program or practice with clients (+). Items in bold were identified as both critical and always occuring in ICM program.

	Mean rating and percent of program managers and ICMs rating whether item always occurs in program.		
Item	Mean	(SD)	Percentage of PMs and ICMs
Hospitalization & Coordination of Services			
ICM works to prevent hospitalization	**3.62**	**.49**	**60%**
ICM coordinates treatment with other service providers	**3.51**	**.53**	**51%**
* ICM works with cients in the hospital	3.45	.52	45%
* ICM works with hospital to coordinate discharge plan	3.07	.68	25%
Treatment Goals & Foci			
ICM assists client in obtaining basic needs	**3.88**	**.37**	**87%**
ICM advocates for client	**3.82**	**.39**	**81%**
ICM assists client in obtaining outpatient mental health services	**3.73**	**.45**	**73%**
Relationship between patient and case manager	**3.71**	**.45**	**69%**
Identify and build on client's strengths	**3.70**	**.49**	**70%**
ICM focuses on increasing client' functioning	**3.65**	**.48**	**64%**
+ICM monitors medication compliance	3.61	.49	61%
Assist in obtaining entitlements	**3.57**	**.53**	**58%**
ICM provides individualized treatment services	**3.54**	**.66**	**60%**
Assist clients with living skills	**3.53**	**.53**	**54%**
Increase community integration for clients	**3.51**	**.50**	**51%**
+ Work with clients on remedying deficits	3.51	.56	54%

Table 8. (cont.) Items identified as critical (*) and/or identified by at least 50% of program managers and ICMs as always occuring in their program or practice with clients (+). Items in bold were identified as both critical and always occuring in ICM program.

Item	Mean rating and percent of program managers and ICMS rating whether item always occurs in program. Mean	(SD)	Percentage of PMs and ICMs
Treatment Goals & Foci (cont.)			
Teach clients skills required to overcome barriers	**3.46**	**.61**	**51%**
* ICM engages family, provides education & support	3.41	.62	46%
* Develop and utilize naturally occuring resources in the community	3.21	.62	28%
Service elements			
Periodic follow-up assessments after admission	**3.72**	**.51**	**73%**
Client involvement in treatment planning	**3.55**	**.55**	**57%**
Clients consulted prior to major treatment decisions	**3.51**	**.53**	**51%**
* Comprehensive assessments at admission	3.42	.63	48%
Client Characteristics			
Clients have severe and persistent mental illness	**3.83**	**.57**	**75%**
Specific ICM admission criteria exist	**3.72**	**.60**	**69%**
+ Client has a documented risk for rehospitalization	3.57	.61	52%

critical to an ICM program. Fifty-one of the 68 CIICM items (75%) obtained a mean rating of 3 (sometimes) or greater on the actually occurring scale. Only 1 item received a rating below 2 (rarely).

Only 1 item in the personnel structure subsection was identified as both critical and always occurring. As expected, this was all ICMs have a minimum bachelors degree in human services. Cultural competence on behalf of the case managers and access to psychiatric consultation were two critical ingredients from this section that were not rated as consistently occurring in programs. In fact, only 46% of case managers rated cultural competence as critical. Cultural competence is a difficult skill to measure and subject to change depending on the ICM and client involved. Since it was rated as critical, these results may suggest that employees in NY City ICM could benefit from further training or a change in hiring practices that promote a better mix between case manager and client. The "full time director" item was not identified as a critical ingredient but appears to occur consistently in NY City ICM.

Two items in the other structure and organizational components subsection were rated both critical and consistently occurring. These were access to funds for

client purchases and secretary and support staff. While not identified as critical, ICM employees report that someone is consistently available 24 hours a day, 7 days a week to clients according to NY State Office of Mental Health regulations. In addition, ICMs report that most contacts do occur in the community.

ICM employees appear to feel that more support from all levels of administration would be beneficial to their work as only 40% report that this is consistently occurring. While small client: staff ratios were rated as critical, only 22% of ICM employees responding to this item report that this is consistently happening in their program. While caseload ratios of 1:12 have been mandated by the NY State Office of Mental Health, in reality caseload ratios may be higher. Employees who are out on extended sick leave or vacation have caseloads that the active employees must cover. In addition, normal staff turnover increases the need for coverage as supervisory personnel take time to hire qualified employees. This is a clear example of how a specified program component may be difficult to achieve. In setting caseload ratios, program planners need to be aware that caseloads will often rise above their targeted rate. Finally, while access to a vehicle was rated as critical, only 15% of employees report consistent access to one.

"ICM is assertive and persistent in engaging clients" was rated as critical and 76% of ICMs reported this consistently occurring within their programs. In addition, 52% of ICMs reported that "ongoing case management is assertive and persistent in nature" as always occurring. Surprisingly, only 35% of case managers rated this item as critical but they nevertheless are conducting this activity regularly.

Regarding hospitalization and coordination of services, "ICM works to prevent hospitalization" and "coordinates treatment with other service providers" were both rated as critical and consistently occurring. Two other items rated as critical, "ICM works with clients in the hospital" (45% rated always) and "ICM works with hospital to coordinate discharge plan" (25% rated always) appear to be occurring less consistently, despite the fact that most ICMs feel this is very important. One factor that might explain this is that case managers who work with hospital personnel may not be included in patient treatment and discharge plans since hospital personnel might view them as a post hospitalization service provider rather than as a consultant with valuable information. In addition, hospital personnel may be overwhelmed with cases in this age of cost cutting, thus

making it difficult for ICMs to consistently work with someone who actually knows the client. ICMs in the focus group reported that this was a major systems problem, with unexpected and inappropriate discharges occurring to satisfy systems related goals. As regards working with clients in the hospital, program managers reported that they cannot bill for ICM services after 30 days of inpatient care. Case managers may be giving priority to clients in the community because of the perception that the client is "safe and well cared for" in the hospital.

Eleven of the 13 items rated as critical under the treatment goals subsection were also rated as consistently occurring. This subsection appears to have the highest level of congruence between what was rated as ideal and what was actually occurring. "Advocacy" and "obtaining basic needs for clients" received the highest ratings for always (4) occurring. "Assisting clients with living skills", "increasing community integration for clients" and "teaching clients skills required to overcome barriers" appeared to be occurring less consistently in programs, since only a little over 50% of employees rated this as always happening (4). "ICM engages family, provides education and support" was rated critical, however, only 46% of respondents rated this as actually occurring. Perhaps many ICM clients arrive in

the program having "burnt out" their family support network and thus no longer have a relationship with their family. This can affect the degree to which an ICM can engage in this task. Focus group participants stated that families are often resistant to becoming involved and will not cooperate. "Developing and utilizing naturally occurring resources in the community" was rated as consistently happening by only 28% of respondents. The difficulty of putting into effect this central component of the personal strengths practice model may reflect the lack of resources available to the mentally ill and the difficulty of integrating clients into a society that is not receptive to this population group. As one focus group participant related "it's difficult, there is a lot of hostility out there".

Finally, 61% of ICM employees reported that they consistently engage in "monitoring medication compliance", an item not rated as critical by respondents. In fact, only 41% of ICMs rated this as a very important activity. This apparent contradiction may be tied to the fact that "preventing hospitalizations" was rated critical and that achieving this goal often means monitoring medication compliance. ICMs who participated in the focus group reported that from their point of view, this should have been a critical component of the program. They reported always checking client's medication supplies and talking to

clients about the importance of medication. In addition, ICMs may also be expressing that while they find it necessary to monitor medication, it can be a sensitive and difficult topic for both case managers and clients to engage in. It might suggest that some ICMs view this as a paternalistic activity that they would prefer to avoid but nevertheless realize is very important to their work.

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Three out of the 4 items identified as critical under the service elements subsection were also identified as consistently occurring in programs. Surprisingly, while only 43% of case managers identified "comprehensive follow-up assessments" as critical, 73% reported always conducting them. In contrast, only 48% of ICMs reported always conducting a "comprehensive assessment after admission". Follow-up assessments are easier to conduct since case managers are more knowledgeable about their clients. It may also indicate that comprehensive assessments at admission may be difficult to conduct if the referral source, which most often is a hospital, provides inadequate information. Focus group participants confirmed this, reporting that they are often unable to obtain complete assessments from outside agencies.

Fifty one percent of ICMs reported always "consulting clients prior to major treatment decisions" and 57% reported

always "involving clients in treatment planning". These percentages might not be as high as one would expect. Perhaps this reflects the inability of psychotic clients to actively participate in treatment decisions or the lack of a consistent effort by ICMs to include clients in this activity. Participants in the focus groups agreed with these interpretations, stating for example that paranoid patients are often unwilling to participate.

Two of the items identified as critical in the client characteristic subsection were also identified as consistently occurring in ICM. The programs appear to be following the eligibility and admission criteria that exist. One item not rated as critical but identified as consistently occurring was "client has a documented risk for rehospitalization", thus indicating that ICM programs are adhering to serving the target population they have been mandated to serve.

Additional Critical Ingredients Not Included in the CIICM Questionnaire

Respondents were given the opportunity to suggest critical ingredients that were not listed on the CIICM scale. Nine experts, 16 program managers and 22 ICMs identified additional ingredients. Most suggestions provided

by experts and program managers were refinements of program components already identified by the CIICM questionnaire. Suggestions from experts tended to be focused on broader issues while program managers and ICMs had more detailed suggestions related to case manager competence and the interaction of the program with other systems.

Two experts reported that the program components listed "looks pretty comprehensive" and that the questionnaire "identified the essential elements". One expert suggested that knowledge of "crisis intervention theory" should have been included while another added the "capacity to admit/discharge patients from inpatient care". Three other suggestions were the availability of alternative placements to inpatient care, dual diagnosis services and team morale and functioning. Finally, one expert said that the CIICM instrument was weak in the area of environment and the role of the ICM in working with other professionals and support systems.

Among program managers, several suggestions were made about the attitude of the ICM toward substance abusers, clients with criminal histories and the ICMs level of motivation to do case management. In terms of practice related issues, experience in crisis theory, contact with collaterals (not just family members), participation in

social activities and groups were items suggested for the scale. Two items related to case management skills were experience of ICM and ongoing training for ICMs. Moving to more systemic issues, central coordination of outreach services, rosters, and a clear policy regarding consent for referral were mentioned as important items. Finally, program managers were concerned with issues of billing for services. They mentioned the type of billing policy (capitated versus fee for service), collateral contacts as a percentage of the direct service formula, and the ability to charge Medicare as important items to include in the scale.

Among ICMs, several suggestions were made regarding practice issues such as clients meeting with ICM and referral sources prior to admission, leisure/recreational activities that an ICM provides and money management. Three suggestions were made to include items that reflect on an ICMs job experience with the mentally ill, salary level and access to cellular phones. Another ICM suggested that ICMs have access to individuals in agencies that clients regularly work with to help them in cutting through red tape for entitlements etc.

Characteristics of Clients Who Do Well in ICM

Respondents were given the opportunity to identify characteristics of clients who appear to benefit most from

ICM services. Fourteen experts, 15 program managers and 37 case managers responded to the question. Suggestions were coded and grouped under five general categories; diagnosis, relationship, clinical history, client insight/motivation and system. Interestingly, program managers and case managers appeared to place greater emphasis on the client's level of insight and motivation than experts did. Nine program managers and 19 ICMs made comments related to client insight while experts focused more on client preferences and how the service system had failed the client.

With regard to diagnosis, answers ranged from almost any client with serious mental illness to more specific diagnoses such as schizophrenia. Included in this were patients with Axis I diagnoses who were willing to accept medication or clients who are "passive and dependent-unfortunately". Patients with complicated diagnoses, such as dual diagnosis or character disorders were seen as less able to benefit from ICM.

The client's ability to form relationships was seen as an important factor in determining outcome in ICM. Patients who can forge an effective/working relationship were seen as more likely to benefit from the service. Interestingly, among experts there was also a focus on the ICMs' abilities and characteristics that determined whether engagement with clients succeeded. One expert said that the client needed to

be treated as an equal partner in the process. In contrast, program managers and case managers placed the responsibility for success more on the client. They focused on the ability of the client to maintain a relationship, citing those clients with family or significant other support, and the ability to bond with the ICM as important indicators of success.

The third grouping of responses related to the client's clinical history. Experts cited clients who need a great deal of assistance to perform ADLs, who had a history of medication noncompliance or who were in crisis as benefiting from ICM services. In addition, clients with a history of high service utilization, housing instability and those who refused standard outpatient treatment were also seen as benefiting from ICM services. Program managers cited clients who were medication compliant, had a positive premorbid history, had "hit bottom" or were "burnt-out schizophrenics" as indicators predicting success in ICM. Case managers mentioned abstinence from illicit drug use, medication compliance, higher functioning clients and clients with fewer hospitalizations as successful candidates.

No experts provided responses related to client insight and motivation, however, program managers and case managers reported this as an important indicator of success. Program

managers wrote about willingness to participate in treatment, openness to change, motivation, insight into one's illness, clients who are goal directed, and clients who can engage in reality testing as important characteristics for success. Case managers also focused on the client's level of insight and their level of motivation to improve as important factors to client success in ICM. Critics may counter that this places too much of the responsibility for success on the client and that clients with these characteristics may not need an ICM.

As for system issues, experts and program managers cited client access to employment, adequate housing and linkage to mental health services as important indicators for success in ICM. Several case managers also cited the importance of informing clients about the service and obtaining their consent for services.

Characteristics of Clients Who Do Poorly in ICM

Respondents were also given the opportunity to identify client characteristics that indicate a poor prognosis in ICM. Twelve experts, 18 program managers and 38 ICMs chose to identify these characteristics, all of which were coded and grouped into four broad categories; diagnosis, system, relationship, insight/motivation and clinical history. Suggestions from experts fell under the diagnosis and system

categories while no characteristics fell under the last three. Program managers and case managers emphasized diagnosis, relationship, clinical history and insight/motivation.

Under diagnosis, clients with borderline personality disorder, other types of Axis II disorders, and clients with intractable substance abuse disorder were most frequently identified as having a poor prognosis. One expert qualified their statement by adding that it is difficult to know ahead of time which clients will or will not benefit from ICM. They suggested that "clients should be admitted even if one suspects that it may not work out and that ongoing reviews would determine whether the intervention is not working." One program manager mentioned severely dysfunctional borderline families as often sabotaging services while another said that ICM could be counter productive for borderlines because of its 24-hour nature. A number of ICMs reported that clients who abuse substances often do poorly in ICM because they manipulate the service and drugs prevent them from complying with psychiatric treatment.

At the system level, two experts believed clients do not do well in ICM because of deficiencies in the service system. One said that "there are only system rejects- societies rejects- we can't reach them, not that they are unreachable". Another stated that clients who are not

treated with respect by the ICM program would not do well. Finally, one expert mentioned that clients who need "heavy/intensive residential and inpatient structure/staffing" would not do well with ICM. This was confirmed by a case manager who suggested that some patients who are severely psychotic and do not respond to medications or have severe substance abuse problems only benefit from structured institutional settings. Interestingly, no program managers mentioned system issues as characteristics of why clients do poorly.

With regard to relationship issues, poor support systems, client resistance and inability to sustain relationships were characteristics mentioned as indicating poor outcomes. For client insight/motivation, program managers and ICMs mentioned lack of insight into the illness, denial of substance abuse, noncompliance with treatment, and poor motivation as indicators of poor prognosis in ICM.

Finally, ICMs suggested that a client's clinical history also affects their success rate in ICM. Factors cited for poor prognosis were multiple hospitalizations, noncompliance with medication, being unresponsive to medications and poor impulse control.

Model specifications

Norms for ideal model specifications based on mean judgements for all respondents are shown in Table 9. They are ranked according to the coefficient of variation (standard deviation divided by mean). We should note that several experts were either reluctant or did not provide answers to this section. One stated that model specifications "depend on how the program is organized and what else is available... on the mission, goals of ICM". Another expert commented that "I'm not a good source for this. ICM was a cultural change strategy for me, not a rigid program. There are many ways it can work." A third stated that these specifications "depend on the case managers skill and training, and other community resources". Finally, one expert stated "these attempts at generalization really do a disservice to the notion of ICM whose essence is its particularity in addressing individual patient needs. As such, all these parameters depend on the characteristics of the teams caseload. Caseloads differ greatly- so the"right" answers to these questions differ greatly as well".

Regarding interjudge variability, respondents exhibited the lowest coefficients of variation (greatest consensus) in their specification for the "percentage of contacts that should be carried out in the community". The mean was 85%,

Table 9 Responders judgements of ideal model specifications for intensive case management displayed in order of the coefficient of variation.

Model specification	Mean	Standard Deviation	Coefficient of Variation	N
Percentage of contacts in community....	85.52	12.01	.14	75
Ideal caseload size.....	10.77	2.26	.21	82
Minimum number of clients per case manager.....	9.13	2.13	.23	79
Maximum cases per case manager.....	12.85	3.45	.27	85
For case managers who have sole responsibility for clients, number of supervision sessions with coordinator per week.....	1.22	.64	.52	71
Average number of contacts with client per week.....	1.51	.86	.57	71
For a team of case managers sharing a client caseload, number of team meetings per week.....	1.52	1.01	.67	78
Minimum number of years before client graduates.....	2.79	2.49	.89	61
Minimum time in hours per week psychiatrist should be available to ICMs for consultation.....	10.76	10.19	.95	76
Minimum number of months client is missing before discharge.....	3.37	3.42	1.01	75
Minimum number of months client refuses ICM services before stopping engagement	2.80	2.86	1.02	77
Time program coordinator spends on direct services to clients (Hrs. per week)	6.22	6.85	1.10	73

thus reaffirming the literature's emphasis that most client contacts should occur in the community. Surprisingly, this percentage exceeds the 75% specification for ACT found in the McGrew and Bond study (1995). Several experts commented that this item "depends on the client mix, location etc".

The next lowest coefficient of variation was "ideal caseload size". The mean for this model specification was 11 clients to 1 case manager. There was somewhat of a difference in the ideal caseload size between experts (12:1) and program managers and case managers (10.5:1). This difference did not appear to be significant considering the coefficient of variation was only .21. Perhaps one of the most significant contributions of this study is the introduction of an ideal ICM caseload size for debate in the literature. The reviews of ICM studies to date indicate a wide variation in caseloads (1:10 to 1:30), thus making it difficult to compare the effects of the intervention across studies. The results from this study support Harris and Bergman's (1988) research asserting that the scope of activity for ICMs requires caseload ratios at the lower end of their suggested range of 1:12 to 1:15. The norms for minimum and maximum caseload size ranged from 1:9 to 1:13 with good consensus among all respondents for these model specifications.

Less consensus existed for "average number of contacts

with client per week" (1.51). Several experts commented that this depended on the caseload size, whether clients are in crisis, their level of functioning and problems faced. Nevertheless, these results conform with the 1-2 contacts per week reported in ICM outcome studies. Number of supervision sessions with coordinator per week if case manager has sole responsibility" (1.22) and "number of team meetings per week if caseloads are shared" also exhibited less consensus (1.52). Experts said that this depended on need, experience of the ICM etc. Until now, these model specifications have not been clearly operationalized and this may account for increased variability.

"Minimum number of years before client graduates" achieved a mean of approximately 3 years, although the variability for this was high. In fact, only 61 of the 89 respondents chose to answer this question, perhaps indicating that some respondents were uncomfortable answering this or did not believe that graduation should be a factor in terms of program design. Interestingly, 68% of expert respondents chose not to answer this question, perhaps because it does not fit in with their ideal conception of ICM. One expert commented that "never withdraw services because client is doing well. That means that help is withdrawn as a punishment for doing well- theirs is a chronic illness which waxes and wanes". Another reported

"3-5 years based on length of time client is stable in major areas of functioning eg. housing, interpersonal, school or job etc. and the length of their illness". Program managers and ICMs, who were generally more receptive to the idea of graduation, stated that it should be a flexible decision based on the needs of the client.

"Minimum number of months client is missing before discharge" received a mean rating of 3.37 months while "minimum number of months client refuses ICM services before stopping engagement" was rated a mean of 2.80 months. Variability among respondents on these items was high and expected. How long should engagement go on before it becomes harassment, especially for clients who can make an informed decision? If a client is missing for long periods and remains on the program's caseload, how does this affect funding for the program? One expert said that the ICM should "never stop trying, open ended-until client responds", while another commented "the key is to examine what specifically is being done during the engagement process, not how much time we should give it". The author believes it was important to introduce these variables since there has been little discussion in the literature about these program issues.

"Minimum time in hours per week psychiatrist should be

available to ICMs for consultation" was rated a mean of 10.76 hours. Surprisingly, this comes close to the 13 hours of psychiatric time specified for ACT (McGrew & Bond, 1995), thus indicating one area in which there is a high degree of similarity between the two program models. It should be noted that the standard deviation of 10.19 showed wide variability among respondents on this issue. Experts commented that the psychiatrist should always be on call while one specified "10 hours per 100 clients".

Finally, little consensus existed for "time program coordinator spends on direct services to clients" with a mean rating of 6.22 hours. One expert commented that coordinators should not provide direct services since this function is a full time job, while another stated "the more the better- and should be done with the ICM and not 1:1 with the patient. This is the best opportunity to model staff attitudes, demonstrate treatment approaches, show values in action and observe how the line case manager is really doing the job." Generally, coordinators reported that providing direct services to clients was unnecessary because it would compromise the coordinators ability to provide supervision and quality assurance. Based on the lack of consensus, it should probably be left up to the program coordinator's discretion about whether they carry a caseload or not.

Confirmatory Factor Analysis

Analyses were performed to determine whether the items contained in the CIICM scale could be reduced to a smaller number of variables. Factor analyses were conducted separately for each subsection of the scale and one final factor analysis was conducted for all items in subsections A thru G.

A five-factor solution for the 12 items in the Personnel Structure subsection was performed and accounted for 69% of the variance in original data. There were seven items loading high (>.500) on Factor 1 (24% of variance). Of these, only 4 items were conceptually related and grouped under the variable skill level. These were "ICM is culturally competent, ICM has a master's in Social Work, ICM has access to psychiatric consultation provided by ICM program and some ICMs have a degree in nursing." The four items achieved an alpha score of only .50 (A11, A9, A5, A7). Another variable loading high on Factor 3 (11% of variance) was the availability of nurses ("access to program nurse who can give anti-psychotic injections in the field; some case managers have a degree in nursing), however the alpha for these items was only .39. The remaining factors were difficult to interpret.

A similar analysis of the 12 items under other structure and organizational components resulted in four

factors accounting for 67% of the total variance. Six structural items related to client services (ICM access to funds for client purchases, low staff turnover, small caseloads, administrative support, in vivo contacts and 24 hour/7day availability) loaded high on Factor 1 (33% of variance). The alpha for these items (A10, B1, B3, B10, B12) was moderately high (.73). The remaining 3 Factors were difficult to interpret.

Factor analysis of the 5 items under engagement, retention and discharge resulted in 2 Factors accounting for 64% of the variance. On Factor 1, items related to engagement ("no close policy, no required discharge point; ICM is assertive and persistent in engaging clients; on-going case management is assertive and persistent in nature") loaded high but the alpha for these items was only .50. Items related to discharge ("ICM services are time limited; no close policy, no required discharge point; clients graduated from ICM") loaded high on Factor 2 but resulted in a alpha of .16.

Factor analysis of the 4 items in the hospitalization and coordination subsection all loaded high on Factor 1 accounting for 62% of the variance. The alpha for items related to coordination of services ("work with hospital to coordinate discharge plan; ICM works to prevent hospitalizations; ICM coordinates treatment with other

service providers") was .71, thus indicating that coordination of services is a primary activity of ICM. These results are in line with Ellison's et al. (1995) findings that linking clients to services was a major case manager activity.

Coordination of services was also a major theme in the treatment goals and foci subsection. Factor analysis of the 26 items resulted in 7 Factors accounting for 71% of the variance. Direct services focused on linkage and coordination encompassed the following items; "ICM advocates for client", "assists client in obtaining basic needs", "assist client in obtaining outpatient services", "assist in obtaining entitlements", "increase community integration", "assist client in obtaining services from nonmental health programs", "assist clients in obtaining jobs". These items all loaded high on Factor 1 (35% of variance) and achieved a alpha of .81. Factor 2 was not interpretable, while "developing and utilizing naturally occurring resources in the community" loaded high on Factor 3 (7% of variance). Two items related to the full support practice focus loaded high on Factor 4 (6% of variance); "ICM assumes responsibility for clients life", "obtain representative payee status for clients", and achieved an alpha of .48. Finally, "case manager's knowledge of psychopharmacology" loaded high on Factor 5 (5% of variance) while the remaining two Factors

were not interpretable.

A Factor analysis of the items in the service elements subsection was performed resulting in 2 factors accounting for 72% of the variance. Four items ("clients consulted prior to major treatment decisions; comprehensive assessments at admission; client involvement in treatment planning; periodic follow-up assessments after admission") loaded high on Factor 1 (50% of variance). Two of the items focused on client involvement in treatment planning achieved an alpha .76 while items related to assessment achieved an alpha of .51. "Client engaged in psychotherapy services" was the only item loading high on Factor 2 (22% of variance).

A similar analysis of the 4 items in the client characteristic subsection reveals that all 4 items loaded high on Factor 1 and accounted for 68% of the variance. The items were "clients are seriously and persistently mentally ill", "documented risk for rehospitalization", "ICM admission criteria exist", and "history of poor utilization/cooperation with mental health services." The items achieved an alpha of .84. We can interpret these results to mean that Factor 1 measures the type of client appropriate for ICM services.

In terms of the model specification subsection, 5 factors accounted for 76% of the variance. Five items from this subsection (H2, H5, H7, H10, H11) loaded high on Factor

1 (26% of variance) but only two of the items were related. The items were focused on the issue of discharging clients and were "minimum number of months client refuses ICM services before stopping engagement" and "minimum number of months client is missing before discharge". The two items achieved an alpha of .91. There were no items loading over .500 on Factor 2 and Factor 3 and 4 were not interpretable. Factor 5 (9% of variance) included two items (number of client contacts; % of client contacts in community) related to client contacts but the alpha was only .00.

Finally, a factor analysis was attempted for all items in subsections A thru G. Nine Factors accounted for 65% of the variance. Thirty-five items loaded high on Factor 1 and accounted for 27% of the variance. These items were grouped together according to their conceptual relationships. "Administrative climate that supports services for this client group" and "ICM advocates for client" loaded high on Factor 1 and achieved an alpha of .36. Cultural competence also loaded high on Factor 1. Two items ("contacts with clients occur mostly in the community; ICM is assertive and persistent in engaging clients") related to engaging clients achieved an alpha of .36. Seven items ("ICM works with hospital to coordinate discharge plan; ICM works to prevent hospitalization; ICM coordinates treatment with other service providers; ICM assists client in obtaining basic

needs; ICM assists client in obtaining OPD mental health services; ICM assists in obtaining entitlements; increase community integration for clients") related to coordination and linkage of services for clients also loaded high on Factor 1 and achieved an alpha of .87.

In terms of practice focus, two items related to the full support model ("ICM monitors medication compliance; increase community tenure"), 4 items from the rehabilitation model ("work with clients on remedying deficits; assist clients in obtaining jobs; assist clients with living skills; ICMs knowledge of psychosocial rehabilitation), two items from the personal strengths focus ("identify and build on client's strengths; assist clients in obtaining services from non-mental health programs) and two itmes from the clinical model ("relationhip between patient and ICM; ICM's knowledge of psychopharmacology") all loaded high on Factor 1. Only those items related to the rehabilitation focus achieved a moderately high .69 alpha.

Three items related to client participation in treatment planning ("client self-determination; clients consulted prior to treatment decisions; client involvement in treatment planning") also loaded high on Factor 1 and achieved an alpha of .67. Two items focusing on client assessment ("comprehensive assessment at admission; periodic follow-up assessments after admission") achieved an alpha of

.51 while three items focused on client characteristics ("clients have a serious and persistent mental illness; clients have a documented risk for rehospitalization; specific ICM admission criteria exist") achieved an alpha of .81.

Nine items loaded high on Factor 2 and accounted for 9% of the variance but only two of the items were conceptually related. These were "case manager's ability to provide psychotherapy" and "client engaged in psychotherapy services", both of which achieved a correlation of .73. Factor 3 and 4 were not interpretable, while "developing and utilizing naturally occurring resources in the community" was the only item loading high on Factor 5 (4% of variance). "Caseloads shared for treatment planning" loaded high on Factor 6 (4%). There were no items loading above .500 on Factors 7 and 8 while "contact with clients occur mostly in the community" loaded high on Factor 9 (3% of variance).

The attempt to reduce the data by factor analysis and determine if the scale formed a coherent substructure was only partially successful. Certain structural items that directly affect services to clients were measured and achieved moderately high alphas. Another major set of activities that appeared reducible and achieved high alphas were the coordination and linkage of services for clients.

In addition, items related to client participation in treatment planning and the minimum number of months a client refuses services or is missing before discharge from ICM were measured and achieved moderately high alphas. Factor analysis also measured the type of client characteristics that ICM was designed to serve. In terms of practice focus, a number of items from both the Personal Strengths, Clinical and Rehabilitation loaded high on several factors.

Critical Items Relevant to the Construction of an ICM Fidelity Measure

Based on judgements of respondents regarding the critical components of ICM, 27 CIICM criteria are proposed for the construction of an ICM fidelity measure (see Table 10). In addition, 1 supplemental criteria derived from the actually occurring ratings scale (ICM monitors medication compliance) and 1 item that did not achieve the critical threshold were included in the proposed fidelity measure. A number of critical items were not included because, while they may be equally important to program effectiveness, they are difficult to measure since they have not been operationalized adequately. For example, "ICM provides individualized treatment services" is a critical ingredient that has not been adequately operationalized and thus is not currently included. It should also be noted that this list of criteria is heavily weighted toward structural aspects of the ICM model for which behavioral anchors can be developed rather than clinical criteria that are more difficult to develop measures for.

As we can see in table 10, the first dimension, personnel structure, addresses the composition and structure of the ICM program staffing. The focus here is on hiring bachelors level staff trained in a human service field (i.e. social work, psychology, sociology). Unfortunately,

Table 10

Program Criteria for Fidelity to ICM

Personnel Structure and Composition

H1 ICMs have bachelors degree in human services and experience working with the mentally ill.
H2 Program psychiatrist available to ICM for consultation at approximately 10 hours per week per 200 clients.
H3 ICMs are trained in cultural competence, skill training methods and developing environmental supports.

Organizational Boundaries

O1 Ideal caseload size of 11:1 (max 13:1).
O2 ICMs have access to funds that can be used for client purchases.
O3 ICM program provides 24 hour on-call staff for crisis intervention.
O4 ICMs have access to a vehicle.
O5 ICM is involved in planning hospital discharges.
O6 ICM is involved in hospital admissions.
O7 ICM visits clients who are hospitalized.
O8 ICM performs collateral contacts with other service providers.
O9 Explicit admission criteria focused on serving the seriously mentally ill.

Nature of Service

S1 ICMs work with clients to obtain stable housing, entitlements and outpatient mental health treatment.
S2 Average number of contacts per week with clients are 1.5 visits (program wide).
S3 85% of client contacts occur in the community.
S4 ICM works with client's family to provide support/skills.
S5 Clients involved in treatment planning and consulted prior to major treatment decisions.
S6 Clients undergo comprehensive assessments at admission.
S7 ICMs monitor medication compliance.
S8 Identify client strengths, develop and use naturally occurring resources in the community (i.e. employment, education, volunteer work).
S9 Increase client functioning utilizing skills training methods (i.e. behavioral practices, role playing, social and tangible reinforcement, shaping, coaching).

years of experience with the mentally ill were not incorporated into the CIICM scale for judgement, however, based on the information provided by ICMs in follow-up focus groups, program planners should consider this factor when hiring personnel. Psychiatric consultation is another critical staffing issue, however, the number of hours per week a psychiatrist is hired for consultation should be flexible and based on program need and resources. Ten hours of psychiatric time per 200 ICM clients is a reasonable ratio that can provide program planners with a frame of reference. Training in cultural competence was another critical item to which the author also added training in skills training methods and developing environmental supports. Training in the latter two components is central to several items identified as critical to the rehabilitation and personal strengths approach.

The second dimension, organizational boundaries, addresses critical program components, especially as they relate to the program's responsibility to clients. Important criteria are caseload size, percentage of contacts in vivo, access to funds for client purchases, access to transportation, the ICMs working relationship with the hospital, collateral contacts and the ICM target population. One item that was not rated as critical but merits inclusion in a fidelity index is 24 hour, 7 day per week on-call

availability for crisis intervention. Most experts and program managers rated this as very important while only 35% of case managers rated this as critical. Follow-up discussions with ICMs and program managers indicated that this criteria is critical to program effectiveness. The item was probably misinterpreted by ICMs to mean that only the ICM assigned to the client should always be on-call. A number of case managers made written comments on the scale suggesting that they were only in favor of an on-call system that rotates this responsibility among ICMs.

The third dimension, nature of services, addresses the range and nature of the ICM's treatment approach. Criteria specify what the ICMs responsibilities are in terms of coordination and linkage, frequency of contact and in what context, inclusion of the client in treatment planning, assessments, and monitoring medication compliance. In addition, the ICM must place an emphasis on identifying client strengths, matching these strengths with naturally occurring resources and utilizing crucial aspects of the rehabilitation approach to teach clients skills important to community living. We should note that while medication compliance was not rated as critical by respondents, it was nevertheless included in the Fidelity criteria for two reasons. The first is that monitoring medication compliance is closely tied to the critical item "ICM works to prevent

hospitalization". The second is that monitoring medication compliance was rated as always occurring by 61% of ICM program staff, thus indicating how important this item is in relation to preventing hospitalizations.

The author hopes that the criteria selected for measuring program fidelity will introduce concepts for debate in the literature about what criteria are important to an effective ICM program. The development of a fidelity measure can promote the operationalization of criteria so that program indicators can be developed for effective monitoring and evaluation. For certain criteria, the use of quantitative indicators are available since they fully represent the construct. However, a number of criteria concerned with the nature of the services provided to clients may require further development of the constructs so that quantitative indicators for measurement can be developed.

Chapter VI

Discussion

The primary purpose of this study was to determine the critical ingredients of intensive case management as judged by experts, program managers and case managers. The results suggest that there is a consensus among these stakeholders about what important program components are necessary to developing an effective ICM program. Experts who have researched, published and/or were high-level administrators involved in the implementation of ICM were sampled from across the country. Program managers and case managers were sampled from four separate ICM program sites in New York City that had been well-documented. These program sites had been part of a five-year longitudinal research study indicating that the programs were successful in reducing hospitalization rates and unmet client needs. These findings add a certain degree of validity to respondent's judgements.

Intraclass correlations for the entire scale were high, thus enabling us to be confident about interpreting the results of respondent's importance ratings. The subsection with the lowest consensus, engagement, retention and discharge was congruent with the lack of consensus and

operationalization in the literature around topics of graduation, time limits and when to discharge clients from ICM. A high level of consensus existed for practice orientations, other structure and organizational components, service elements, client's characteristics, while more moderate levels existed for personnel structure. Not surprisingly, consensus was highest among case managers, followed by program managers and then experts. Critics will contend that consensus regarding critical program components may not be as high as it appears. Consensus among experts was lower and all program managers and case managers in this sample had undergone the same training and were working in programs developed from the same model format. We should note however, that the degree of overlap between case managers, program managers and experts in terms of identifying the same critical ingredients was relatively high (16 items overlapped among all three sample groups). In addition, the educational level and years of experience that program managers and case managers had in ICM would argue against placing too much importance on the influence of a training program on respondents judgments. Participants in both focus groups confirmed this by saying that on the job experience was paramount to their choice of ideal program components.

Importance ratings obtained from all respondents identified 32 out 68 program components as critical to an effective ICM program. In addition, estimated values for model specifications were obtained from respondents. Many of these values, such as ideal caseload size, percentage of contacts in the community, number of contacts with clients per week, have not been previously operationalized. These specifications can serve as important indicators of whether an ICM program is faithful to the program model. At the least, they introduce into the literature important standards for ICM programs that can be discussed.

The portrait of ICM that emerges from the responses provided by experts, program managers and case managers is largely consistent with the published literature. There were, nevertheless some areas of surprise. One of the significant findings of this study was the importance that program managers and ICMs gave to having a bachelors degree in human services as a prerequisite to becoming an ICM. In fact, focus group participants went even further by stating that 4 years of prior experience in mental health was an important criterion. The literature has tended to ignore or downplay the importance of case manager qualifications, placing greater importance on intangible qualities like case manager attitudes, life experience and motivation. The point

of ICM, however, is to reintegrate clients into the community by using a wide range of complex skills that require broad responsibility for clients and autonomous practice. Competence must be developed through education and experience so that ICMs can exercise independent judgement. Thus, if ICMs are to succeed in their mission, we cannot ignore the importance of these recommendations. Finally, we should also note that while a bachelors degree with experience was deemed necessary, having a masters degree was seen as only somewhat important, thus undermining the notion that ICMs need to become a specialized professional field.

Access to psychiatric consultation provided by the ICM program was another significant finding and highlights a similarity between ICM and ACT. The minimum mean time that a psychiatrist should be available for consultation was only two hours less than what was recommended for ACT (11hrs. versus 13hrs.). Variation tended to be high around this item and these results need to be interpreted with caution. For instance, many programs may not have the resources to hire a psychiatrist and the question arises about how many hours are needed in relation to a program's caseload size. Nevertheless, program planners should make the resources available to implement this core component.

While none of the three approaches to providing direct services was rated as critical, we should note that data

from respondents and focus group participants appears to suggest a preference that ICMs retain primary responsibility for their caseload while meeting as a team to share information for treatment planning. These findings coincide with Mueser et al. (1998) observations about ICM in their review of case management programs. We should note that the findings on how direct services should be delivered may have been affected by the way different respondent groups interpreted the items.

Another significant finding relates to client:staff ratios and the attempt to operationalize this program component. Respondents identified an optimum caseload size of 11:1 and this item had the highest degree of consensus among all model specifications. Respondents appear to believe that if ICMs are expected to deliver comprehensive services with certain outcomes, then this caseload ratio is justified. The review of ICM studies found a wide range of caseload sizes, ranging from 1:10 to 1:30. Questions need to be raised about whether programs utilizing caseloads at the higher end of this range should even be considered an ICM program. The results of this study have relevance for determining what caseload size should constitute an ICM program, and respondents indicated that in most circumstances caseload size should not exceed 13:1. We must also remember that the target number will always be exceeded

at some point due coverage required for vacation, sick leave and normal staff turnover.

In contrast to the above, Sherman and Ryan (1998) recently noted that it is important to distinguish between the capacity to provide intensive services and the actual intensity of the services provided. They question the assumption that low caseload numbers are necessary except for brief periods when the consumer begins to receive services. Their study on intensity levels indicated that caseloads can be fluid and range from 9:1 to 40:1 based on client level of need (acuity of the case mix) and the length of time a client has been enrolled in ICM. Rather than resort to a fixed caseload, the acuity of the case mix and the number of cases should determine the time required to serve the caseload, otherwise, fixed caseloads matched with enforced productivity standards will lead to clients being overserved and dependent on ICM.

Three problems arise with this perspective. The first is a problem with implementation since expanding and contracting caseload sizes based on varying levels of client acuity may not be as practical or efficient as it seems. The second is the impact of this policy on the casemanager: client relationship and continuity of care. We can infer that fluctuating caseloads might prevent the ICM from forming a close and consistent relationship with clients

since contacts decrease when clients begin to make improvements. Third, this perspective may underestimate the level of need and the duration of services required to address client problems beyond mere survival issues.

While this perspective warrants further research, the author believes that if the concern is about wasting case management resources due to overserving clients, then we should first focus on graduating clients who are stable and can use existing community services before expanding caseload sizes.

There were three important organizational components designated as critical by respondents that have often been overlooked in the literature on ICM. The first is the need for ICMs to access funds for client purchases. Using program funds for client emergency purchases can facilitate the establishment of a relationship. The second is the importance of support staff to aid ICMs with paperwork and billing functions and the third was access to a vehicle, both of which enable ICMs to spend more time with clients. Having all three of these components in place appears to improve the efficiency of an ICM.

While neither "contacts with clients occur mostly in the community", and "24 hours/7 day availability" were rated as critical, these results should be interpreted with caution since they were, nevertheless, rated as important to

an ICM program. For instance, respondents had the highest level of consensus for the 85% of "contacts that should occur in the community", a level that even surpassed the 75% recommended for ACT (McGrew & Bond, 1995). Traditionally, the literature has emphasized that all contacts with clients should occur in vivo, however, these results confirm the findings obtained by McGrew and Bond (1995) that office contacts are acceptable as long as they are infrequent. Concerning case manager availability, focus group participants reported that this was very important. This contradiction may suggest that some case managers interpreted this item to mean that they should always be available to clients rather than an on-call system in which case managers rotate this responsibility.

Another important finding resulting from the survey was the importance of balancing assertive and persistent ongoing case management with maintaining respect for the client's personal boundaries. ICMs need to be cognizant about when pursuit begins to border on harassment of the client, an area that has received little mention in the literature. Much of this also depends on the phase of the ICMs relationship with the client, since the initial phase may require more assertiveness than a client who has been engaged for many years. Finally, we must also begin to explore the issue of consent for service and the idea that

clients who have a mental illness and are stable, should have the right to refuse ICM services if they are competent to do so. An attempt by ICMs to exert too much social control of the client can backfire and have negative consequences.

Another item seldom receiving mention in the literature was the issue of graduation for clients who have remained stable for long periods. While not critical, program managers and case managers clearly felt this was important whereas experts appeared to distance themselves from this, perhaps due to ideological notions of what ICM stands for. Respondents suggested a mean of 3 years enrollment in ICM before graduation should be considered. The Saylers et al. (1998) study on client outcomes after ICM has been withdrawn provide some support to the notion of graduating clients. Only clients who were judged not to need ICM services were transferred to a less intensive form of care. Sherman and Ryan's (1998) study on the intensity and duration of ICM services also indicated that using the Denver Acuity Scale can improve identification of clients ready for graduation and lowers the probability of decompensation after graduation.

In addition, our notion of graduation should not necessarily be about withdrawing all case management services at once, but perhaps stepping clients down to less

intensive forms of the service. Graduation may also be easier to facilitate in communities that are rich in mental health services. Finally, we should remember that graduation is a decision that should made by the client, the ICM and their supervisor in order to guard against system driven objectives that seek to institute time limits for ICM.

Surprisingly, the "no close policy, no required discharge point" was only rated as somewhat important, although the literature's concept of continuity of care emphasizes ongoing, open-ended services. We can infer that because ICM is a limited resource, respondents have come to the conclusion that under certain circumstances discharge is advisable so that the service can be made available to others. Obviously, clients who are readmitted for long term hospitalizations or incarcerated for lengthy periods should be discharged and, we might add, eventually readmitted to ICM. Under certain circumstances, discharge for refusal of services and for clients who are missing may also make sense. These are judgements calls that are best left to the ICM and program manager.

While the literature's emphasis on working with clients in the hospital was reaffirmed in this study, program managers and case managers reported difficulty carrying out

this mandate. Resistance by hospitals to ICM involvement is a serious obstacle to delivering effective services to the client. Perhaps mandating that ICMs be allowed to participate in decision making related to hospital admissions and discharges would facilitate a greater working relationship between ICMs and hospitals. As cost-cutting and managed care become increasingly powerful forces influencing hospitalization decisions, ICM input into this process may force these institutions to refocus on the client's needs.

Items were rated for four separate practice orientations; personal strengths, rehabilitation, full service, and clinical. Eleven out of 26 of the items rated were common to all practice orientations. Of the items rated critical, 3 items from the personal strengths model and 3 from the rehabilitation model were unique to those orientations. Not one of the full support or clinical items was rated critical. These results, as well as comments made by experts on the scale and responses generated from program managers and ICMs in focus groups, appear to suggest that the full support and clinical practice methods may be less applicable to the ICM model. Again, we must interpret this with caution since it can be argued that NY City ICMs were trained in the personal strengths/rehab concepts and thus are predisposed to using these clinical interventions. We should also note, however, that 5 items unique to the

personal strengths and rehabilitation orientations were not rated as critical and that 2 items from the full support model were rated as important. This would suggest that there was no wholesale adaptation of the components from personal strengths and rehabilitation model by ICMs. Experts also preferred items related to the personal strengths and rehabilitation model, thus lending more credibility to the choices made by ICMs and program managers.

The two items rejected as inappropriate to ICM in the full support model were obtaining representative payee for clients and assuming responsibility for the clients life. This may highlight the major philosophical difference between ICM and ACT, in that the ACT philosophy is more paternalistic toward clients while the ICM philosophy is more client driven in its orientation. Judgements regarding the appropriateness of the clinical model to ICM may be more difficult to make since there were only 2 items unique to this included in the treatment goals subsection. However, we note that the lower ratings of items in other subsections related to provision of psychotherapy and level of education, both central to the clinical model, provide added support to the belief that components of this model may not be the most appropriate for ICM either. We should note that in contrast to experts, ICMs and program managers did support the notion that psychotherapy can be of benefit to

their clients. It would be interesting to replicate this study with other ICM programs in different parts of the country to see if the preference for the personal strengths and rehabilitation practice methods are duplicated.

We should also mention that in recent years there has been a greater focus on assisting clients in obtaining jobs. The results of this study found only a small percentage of ICMs rating this as very important. Perhaps there are not enough employment opportunities available to clients or clients may be reluctant to seek employment for fear of endangering their benefits. If ICMs are to focus on this objective after a client's survival needs have been addressed, communities will need to make the effort to come up with innovative forms of employment that allow for the special needs of individuals with mental illness. These results may also support Bond's (1992) assertion that to have a significant impact on employment, programs must integrate a substantial vocational component into their service.

Concerning client characteristics, the results of this study were consistent with the literature's focus that ICM is meant for a seriously mentally ill target group who is at risk for rehospitalization. In addition, as for targeting ICM toward resistant clients, experts rated this as only somewhat important in contrast to program managers and case

managers who rated this as important. Perhaps experts were saying that ICM should be available to a broader category of clients or that ICM may not be as effective with resistant clients.

A unique facet of this study was an attempt to ask program managers and case managers to rate the degree to which CIICM items actually exist in the programs they work in. This enables us to examine the degree of congruence between the ideal and actual. The greatest discrepancy between the ideal and actual ratings were in the personnel, other structure and organizational components, and hospitalization and coordination subsections. Congruence between ideal and actual appeared higher for engagement, retention and discharge and treatment goals, service elements and client characteristics.

One of the important findings from this section that supported the need for caseload ratios of 11:1 was the fact that only 22% of ICMs reported actually having a small case manager:client ratio. This occurred despite the fact that ratios in New York State have been set at 12:1. These results support the inference that caseload ratios will often be inflated above the target because certain staff will be on leave for various reasons. Responses from focus group participants reported that caseload ratios are

regularly inflated to between 13 and 15 clients per ICM due to employee absence.

Another interesting outcome was the high degree of congruence in the treatment goal subsection, with 11 of the 13 items rated as critical also rated as consistently occurring. We should be cautious in interpreting the self ratings for treatment goals since many of these items asked respondents to rate the degree to which the item was present in their practice with clients. These self-ratings may be subject to inflation and should be checked by actual observation of what a case manager does in their practice with clients.

One item in which there was a contradiction between ideal and actual rating was the monitoring of medication compliance. Although it was not rated as critical, it nevertheless was consistently occurring since it is closely related to the objective of lowering client hospitalization rates. Thus, this serves as an example of how program goals will influence ICM actions.

Finally, while including clients in treatment planning and decision making were rated as critical and have always been emphasized in the literature, it was surprising to see that only a little over half of the respondents reported this as always occurring in their practice. Again, we may be faced with a situation in which desirable goals are

difficult to translate into reality. Whether these results are due to characteristics of the client or the lack of effort by the ICMs is an issue requiring further study and direct observation.

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Additional critical ingredients were collected, however, the number suggested by respondents suggest that the CIICM scale can serve as a checklist of domains to determine if the program satisfies the criteria for an ICM program. Most of the items suggested by respondents for inclusion into the CIICM scale were refinements of existing items. There were several useful recommendations made in terms of practice interventions. Two important items not listed on the scale had to do with allowing ICMs input into the hospitalization/discharge process and how the ICM program should generate its revenue for survival. Certainly, the hospital issue has major ramifications for improving the working relationship between ICMs and hospitals. It is questionable, however, as to whether hospitals would ever allow such input into their systems unless the ICM program was part of a managed care entity that controlled reimbursement.

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The billing issue directly affects the viability of a program and influences how the case managers conduct their

work. Previous studies on NY State ICM indicate that a capitated model of reimbursement is preferable to a fee for service system because much of an ICMs work involves collateral contacts (Shern et al. 1994). This is an important issue that can affect a case manager's practice with clients and it appears to have been given little attention in the literature.

Again, with regard to the characteristics of clients and the influence this has on outcomes, there was a general agreement that clients with character disorders and those with severe substance abuse problems appear to benefit less from ICM services than individuals who strictly have an Axis I diagnosis. Perhaps clients with these disorders have difficulty forming a consistent relationship with an ICM, a critical aspect predicting success for this intervention. This would appear to support a study by Harris (1990) indicating that case management may not be effective with character-disordered clients. There also is a discrepancy between experts and program managers on the issue of where responsibility for success lies. In general, responses from experts indicated that the responsibility lies with the attributes of the program, ICMs and the system in which this whole drama unfolds. In contrast, program managers and case managers felt that responsibility for success had more to do with the characteristics of clients. In all likelihood, the

system, program, ICM and client all play a part in the outcome of the intervention. In addition, we must also keep in mind that ICM may not be effective with all client subgroups.

The results of this study help to clarify many of the differences between ICM and the "average" case management program identified across the country by Ellison et al. (1995). ICM clearly seeks to engage clients who are not able to benefit from traditional mental health interventions by ensuring continuity of care and advocating for the improvement of services to clients. Values such as assertiveness, proactive intervention, comprehensiveness, and person orientation are central to the ICM concept whereas less than 25% of programs responding to Ellison's survey (1995) ranked these values among the top five values for their program. In terms of mission, increasing service usage, preventing crises, engaging clients not seeking services, developing natural supports and providing stable relationships are all hallmarks of ICM. According to Ellison's survey (1995), however, less than 10% of all case management programs specified these mission statements as first, second or third in importance. This suggests that the nature of ICM is "client driven" while the typical case

management programs surveyed by Ellison (1995) were engaged in "system driven" goals primarily devoted to preventing hospitalizations through linkage activity. These differences not only highlight the unique aspects of ICM but also indicate how ICM can achieve more positive outcomes with clients than traditional case management programs. Ellison's (1995) attempt to define and construct an "ideal" type of case management by averaging responses from programs across the country was ineffective since the frequencies for all but 3 of the items he sampled were reported as less than half of the sample.

The findings in this study also have relevance to the notion that there is little that differentiates ICM from ACT except for the way direct services are delivered to the client (Mueser et al., 1998). While there is a great deal of similarity between these models of community care, this study clearly highlights some differences as well. First and foremost, it appears that ICM is more focused on getting clients to take responsibility for themselves whereas ACT appears to be more paternalistic in its approach to the client. In a study on the critical ingredients of ACT (McGrew & Bond, 1995), experts rated "team assumes responsibility for much of client's life" at 5.5 while in this study, an "ICM assumes responsibility for the client's

life" was rated a mean of 3.7. These results confirm the literature's emphasis that an orientation to client centered practice is the foundation of all case management efforts.

Some would argue that the provision of a psychiatrist in an ICM program would further blur any distinction. We should note, however, that a psychiatrist in ICM would only provide consultation services to case managers and not treatment for clients. Whereas ACT seeks to directly provide a broad range of services to the client, ICMs seek to engage clients in services that already exist in the community. The lowest rated item on the critical ingredients scale for ACT was "dependent on other services" (3.4) whereas on the CIICM scale this item was rated 5.5. This is an important distinction that has other ramifications as well. Perhaps the need for ACT is greatest in communities that have too few services or the services are too disbursed for clients to be linked to. In that case, developing ICM programs in such environments may do a disservice to clients since ICM was never designed to directly provide all of the comprehensive care clients need.

Of course, another important difference is the way the service is delivered. In ACT, a core group of professionals including a psychiatrist, nurse and social worker work as a team to provide comprehensive services to the client whereas in ICM, ideally a bachelors level case manager with

significant experience in mental health is charged with linking and coordinating clients to existing services in the community. Any similarity that ICM has to the team format is generally related to ICM team meetings where information is exchanged and treatment planning occurs. We should also note that there may be differences in the types of clients that ACT and ICM serve. In New York City, ACT was designed for the most treatment resistant clients, for instance clients that fail to benefit from ICM and are in need of a higher level of care than what ICMs can provide. Finally, there are significant differences between the programs in terms of cost. In New York City, one year of ACT services can cost $8,000 per client whereas 1 year of ICM services generally costs $5,000 per client. While it is important to figure out the overall cost of care that each client will incur, (i.e. aggregating outpatient, inpatient, ACT or ICM costs), we cannot overlook the possibility that ICM may be more cost effective with certain clients in certain environments.

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As with any study, there are several limitations to this one that effect generalizability to other ICMs across the country. First, the sample of respondents was neither universal nor random. While 73% of experts sampled chose to return the questionnaire, a higher participation rate may

have yielded different results. In addition, the author chose to sample case managers and program managers from four ICM program sites in New York City that were developed from the same program format and in which all employees had undergone the same training. Different results might be obtained with another sample of respondents at different ICM programs across the country. We should note, however, that the moderate to high degree of consensus among all respondents argues against finding major differences from other respondent groups. The case manager sample was also highly educated, thus limiting the generalizability to other case managers across the country, but this also highlights the strength of this study since we were sampling an experienced and well-educated group of case managers.

Second, some respondents reported that a number of the items on the scale were not operationalized clearly, e.g. dependent upon other services, individualized treatment. As a result, some respondents may have interpreted the items in ways not intended by the author and this certainly effects interpretation and comparability across respondents.

Finally, like the McGrew and Bond (1995) study on the critical ingredients of ACT, this study also divided items into critical and noncritical categories by using the 50% threshold. This demarcation should be viewed with caution since items that were found to be rated important (6) should

also receive attention based on their merits. For instance, monitoring medication compliance, while not rated critical, was nevertheless rated as always occurring consistently in programs because it is so closely tied to the critical goal of reducing hospitalizations.

There are many potential factors that could change the results obtained in this study. Different program goals will drive the design and affect which program components are emphasized. Resources can affect caseload ratios and whether a program has access to psychiatric consultation. Geographic location can affect many organizational components and how ICMs conduct their work. The type of population served will affect caseload size and the question arises about whether certain client subgroups may not benefit as much from ICM. In addition, there are historical trends underway that may place greater focus on certain program components than others (i.e. vocational and addiction services). Another trend may place greater focus on identifying which models are appropriate for which client, or possibly blending different model components found effective into a new type of community support intervention.

The phase that a program or client is in also changes the treatment focus from survival goals to goals that are more growth oriented. Who is surveyed will also affect which

program components are rated as critical. While this study attempted to incorporate other stakeholder groups, one of the most important stakeholders, consumers, were not included in the study. Finally, how the tension between adaptation and faithful implementation is resolved will affect which program components are ultimately implemented since local conditions influence program design. By incorporating program managers and ICMs into the study, however, we hope that there was a balance achieved between expert's doctrinaire beliefs and the practical wisdom and flexibility that line staff develop through experience.

In the end, this study provides a useful blueprint on how to develop an effective ICM program. A fidelity index was also developed from the program elements that were identified as critical in order to enable program planners and researchers to validate the instrument, set certain standards of operation, and promote more effective evaluation research on ICM. As State Medicaid programs move to private managed care models, it is critical that the Social Work profession promote the development of effective program interventions that adequately address the comprehensive biopsychosocial needs of the seriously mentally ill.

Appendix A

Typology of Intensive Case Management Models

	Clinical	Personal Strengths	Rehabilitation	Full Support	Advanced Case Management	Rothman Model
Philosophy	·Interactional Phenomenon ·Client Centered	·Client Directed ·Mentor ·Advocacy/Empowerment	·Client Centered ·Integrate Rehabilitation approach into case management	·Service centered ·Clinical focus	Clinical Focus Client Centered	·Clinical Focus ·Client Centered
Assessment	·Clinical diagnostic ·Intervention	·Strengths ·Life Domains	·Strengths ·Life Domains ·Deficits ·Functional Skills ·Goals	·Life Domains ·Clinical Diagnostic ·Intervention	Clinical Diagnostic Life Domains Intervention	·Life Domains ·Clinical Diagnostic
Staff Structure	·Individual	·Individual with group supervision	·Individual	·Team	Individual	·Team
Range of Responsibility	·Core + Clinical ·Advocacy ·Crisis Intervention ·Symptom Management	·Core ·Advocacy ·Crisis Intervention	·Core ·Advocacy ·Skills Training	·Core + Clinical ·Total Care ·Direct Assistance ·Symptom Management ·Medication Management ·Crisis Intervention	Core + Clinical ·Advocacy Crisis Intervention	·Core + Clinical ·Advocacy
Target Population	SMI	SMI/non-compliant	SMI	SMI/heavy users/ recidivists	Various chronic pop.	Various chronic pop.
Outcomes	·Hospital Utilization ·Symptoms ·Level of Functioning ·Client Satisfaction	·Client Satisfaction ·Indep. Living ·Voc. Status ·Goal Attainment ·Community Tenure ·Social Support	·Instrumental Role Functioning ·Symptoms ·Housing ·Social Adjustment ·Goal Attainment ·System Performance	·Hospital Utilization ·Level of Functioning ·Symptom Management ·Client Satisfaction Cost	·Goal Attainment ·Process ·Client Satisfaction ·Level of Functioning	·Goal Attainment ·Process ·Level of Functioning
Staff Ratio	1:15	1:15/20	1:10/25	1:10	1:10/15	Varies according to population served
Staff Credentials	Masters + Experience	Supv.-Master or PhD CM *- BA or MA	BA or MA	Professional Degree for each discipline	Masters + Experience	BA or Masters

*Core Services = Client identification and outreach, individual assessment, service planning, linkage with requisite services, monitoring of service delivery and client advocacy.

*CM = Case Manager

Appendix B

New York State ICM Program Description

The Intensive Case Management (ICM) program is a mechanism which is designed to "make the system work" for an individual client. ICM must incorporate several principles in accomplishing these objectives:

- Engaging clients who have previously chosen not to use mental health services by providing options that are responsive to their needs and preferences.
- Reducing inappropriate inpatient treatment by providing whatever services or supports are necessary to prevent or resolve crises in clients' own place of residence.
- Helping to achieve their own goals concerning where and how to live.
- Helping clients to achieve their own employment goals and to make satisfying use of their leisure time.

ICM services must be tailored to the circumstances, needs and desires of each individual served. A clearly specified goal should be established for every client in at least one (and probably more than one) of the above areas, and should change as progress is made or circumstances change.

ICM Principles

ICM services will operate according to the following principles.

1. Services are available 24 hours a day, 7 days a week, 365 days a year.
2. A low staff- to- client ratio is maintained (1:12).
3. Services are delivered in the community, not in the office.
4. Services are not time-limited, but provide clients with what they need, for as long as they need it.
5. Responsibility is clearly defined for specific clients.

6. Nature and intensity of services vary with changing needs and circumstances.

7. Services are unique for each individual, and respond to the client's definition of his or needs and desires.

8. Case managers take on an active advocacy stance for their clients and teach clients to advocate for themselves whenever possible.

9. Case managers have a strong commitment to rehabilitation and to maintaining clients in the community.

10. Case managers are skilled and experienced and are given the authority to cross boundaries between service delivery systems.

11. Ensuring access to non-mental health services and helping to develop natural support networks (including peers, family members, neighbors, etc.) are high priority.

12. Flexible funds are available to make emergency purchases of goods or services which are critical to maintaining a client in the community.

13. Case managers are willing and capable of providing services themselves if no other services are available.

14. Each client will be chosen from the Regional ICM Roster.

15. Each client's assessment must minimally contain client goals, objectives, strengths and skill deficits.

16. Identification of resources which are required to meet the needs identified in the assessment process and the source of the resources is required.

17. A written plan will be coordinated and integrated, and the plan will be reviewed with clients.

18. A determination of the need for services, i.e., financial benefits, legal, housing, educational, etc. will be made and linkages with such services will be ensured for the client.

19. Treatment plans will be coordinated with service providers.

20. Case management records will be maintained.

21. Case managers will provide services that prevent or resolve crisis in order to prevent unnecessary use of emergency rooms and inpatient services.

22. Case managers will provide or arrange for Medication Education that will help the client understand the importance of taking the prescribed medications.

23. Case managers will assist clients in learning to use fiscal such as: Food stamps, scholarships, etc. and assist them if necessary and only as necessary, to apply for and secure such benefits.

24. Case managers will provide or arrange for community support and education.

25. A "no reject" policy for ICM clients must be ensured, and service dolllars are to be spent in a manner to guarantee full access to services by these clients.

26. Client records should be kept in a manner which allows for ease of audit and potential reimbursement.

27. Agency will participate in any ICM evaluation system.

28. Agency will provide periodic progress reports as required by NYS Office of Mental Health.

Client Eligibility

The ICM program is targeted to the seriously and persistently mentally ill who have a diagnosable mental illness that is marked by impairment in several essential functions which seriously interferes with the ability to function independently, appropriately and effectively. The illness and impairment in functioning is one that persists or manifests itself over a prolonged period of time. The areas in which functional limitations in capacity are manifested as a result of the individual's psychiatric impairment are the following:

- self care
- social functioning
- activities of daily living
- economic self sufficiency
- self direction
- concentration

Many of the seriously and persistently mentally ill (SPMI) would include CSS eligible clients. There is a subset of the SPMI population who go unserved or underserved in the existing system. These people are our most difficult to treat clients with indicators in their histories such as repeated hospitalization, resistence to treatment, problems with medication compliance, frequent crisis, absence of a social or constructive family network, the display of severe psychiatric symptomolgy when confronted with only mild to moderate degrees of strss, need for daily structure and/or difficulty in self monitoring. These people are those for whom NY State Office of Mental Health (NYSOMH) has targeted its ICM program. NYSOMH has developed the following guidelines to identify four representative subpopulations for planning purposes:

1. High Risk/Heavy Users- This population is typically known to staff in emergency rooms, acute inpatient units, state psychiatric centers as well as to providers of other acute and crisis centers. Persons in this group most often use inpatient and emergency services when they access services at all.

   Patients who cycle in and out of State Hospital psychiatric inpatient care for relatively short periods of stay (less than 90 days) fall into this group. Many have multiple disabilities including drug abuse, alcohol abuse or developmental disabilities.

   Also included in this group are "High Risk" patients including those who are homebound. These individuals are known to be seriously disabled ye generally do not access services until they are no longer able to be maintained in their homes by relative, family or friends.

2. Extended Care State Psychiatric Center Patients- These are long term inpatients, i.e., 90 days or longer, who could be discharged but are not because of the absence of needed resources in the community. Many of these patients are in psychiatric treatment/rehabilitation units and include the ambulatory elderly who do not need a skilled nursing facility (SNF) level of care, but require psychiatric treatment or rehabilitation services to be able to live appropriately in the community.

3. Mentally Ill Individuals Who are Homeless- Specifically, individuals who are homeless and mentally ill and who live on the streets or in shelters. These

individuals are frequently unattached or ineffectively attached to the mental health care system. Within this group is considerable diversity.

Within these three representative subpopulations, there are other high priority target groups such as individuals who are mentally ill chemical abusers and addicts (MICA), forensic patients and persons who are mentally ill/mentally retarded (MI/MR).

Role and Qualifications of the Intensive Case Manager

ICM is a planning and problem solving function that overcomes obstacles faced by the consumer such as systems regidity, fragmented services, underutilization of services and lack of accessibility to certain services and resources. In contrast to traditional case management approaches, which are often tied to single disciplines or to a single service system, Intensive Case Managers are intended - and empowered- to cut across organizational and disciplinary boundaries.

ICM is thus a means by which the expectation for adaptability and flexibility can be shifted from clients to the system of mental health service providers, both public and private.

Case managers will be expected to:

- Do outreach to engage clients;
- Monitor and coordinate the delivery of necessary evaluations and assessments in order that each client's needs are identified;
- Coordinate and participate in the development of an individualized, goal-oriented service plan;
- Provide coordination and assistance in crisis intervention and stabilization;
- Assist the individual in achieving objectives and maximizing independence and productivity through on-site support, training and assistance in use of personal and community resources;
- Assist in developing formal and informal community supports and networks of relatives, friends and others;

- o Advocate for changes in the system.

Minimum Qualifications for Appointment to Intensive Case Manager

A bachelor's degree in human services field* or a NYS teachers certificate for which a bachelor's degree is required and four years of experience in providing direct services to mentally disabled patients/clients or in linking mentally disabled patients/clients to a broad range of services essential to successfully living in a community setting, (e.g. medical, psychiatric, social, educational, legal, housing and financial services).

A master's degree in human services field* may be substituted for two years of the required experience.

* For purposes of qualifying for these titles a "Human Services Field" includes Social Work, Psychology, Nursing, Rehabilitation, Edcuation, Occupational Therapy, Physical Therapy, Recreation or Recreation Therapy, Counseling, Community Mental Health, Child and Family Studies, Speech and Hearing and Sociolgy.

Minimum Qualifications for Appointment to Coordinator of Intensive Case Management Services

A Master's degree in a human services field* and four years of experience in providing direct services to mentally disabled patients/clients or in linking mentally disabled patients/clients to a broad range of services essential to successfully living in a community setting (e.g. medical, psychiatric, social, educational, legal, housing and financial services). Two years of this experience must have involved supervisory or managerial experience for a mental health program or major mental health program component.

Appendix C

Hunter School of Social Work
Intensive Case Management Training Program Curriculum

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Appendix D

Critical Ingredients for Intensive Case Management

Please rate the degree to which the following statements are important or unimportant to an effective ICM Program. In the column furthest to the right, rate the degree to which this presently occurs in your ICM program or practice.

Organizational Structure	Very Unimportant	Unimportant	Somewhat Unimportant	Neither	Somewhat Important	Important	Very Important	Does this presently occur in your program or practice with clients? Never/ rarely/ sometimes/ always			
A1) Case Manager has sole responsibility for their client caseload.	1	2	3	4	5	6	7	1	2	3	4
A2) Program uses a team approach for direct services to clients.	1	2	3	4	5	6	7	1	2	3	4
A3) Program Coordinator provides direct services to clients.	1	2	3	4	5	6	7	1	2	3	4
A4) Caseloads shared for treatment planning.	1	2	3	4	5	6	7	1	2	3	4
A5) Case Managers have access to psychiatric consultation provided by ICM program.	1	2	3	4	5	6	7	1	2	3	4
A6) Case managers have at least a bachelors degree in human services.	1	2	3	4	5	6	7	1	2	3	4
A7) Some case managers have a nursing degree.	1	2	3	4	5	6	7	1	2	3	4
A8) Case managers have a degree in rehabilitation.	1	2	3	4	5	6	7	1	2	3	4
A9) Case managers have a masters in social work.	1	2	3	4	5	6	7	1	2	3	4

Please rate the degree to which the following statements are important or unimportant to an effective ICM Program. In the column furthest to the right, rate the degree to which this presently occurs in your ICM program or practice.

Organizational Structure (cont.)	Very Unimportant	Unimportant	Somewhat Unimportant	Neither	Somewhat Important	Important	Very Important	Does this presently occur in your program or practice with clients? Never/	rarely/	sometimes/	always
A10) Administrative climate that supports services for this client group.	1	2	3	4	5	6	7	1	2	3	4
A11) Case manager is culturally competent.	1	2	3	4	5	6	7	1	2	3	4
A12) Access to program nurse who can give anti-psychotic injections in the field.	1	2	3	4	5	6	7	1	2	3	4
B1) Contacts with clients occur mostly in the community.	1	2	3	4	5	6	7	1	2	3	4
B2) Adequate office space, equipment and furniture.	1	2	3	4	5	6	7	1	2	3	4
B3) Small client:staff ratios.	1	2	3	4	5	6	7	1	2	3	4
B4) ICM office located in a separate location, away from other agency programs.	1	2	3	4	5	6	7	1	2	3	4
B5) Case managers have access to a vehicle.	1	2	3	4	5	6	7	1	2	3	4
B6) Case managers have access to funds that can be used for client purchases.	1	2	3	4	5	6	7	1	2	3	4

Please rate the degree to which the following statements are important or unimportant to an effective ICM Program. In the column furthest to the right, rate the degree to which this presently occurs in your ICM program or practice.

Organizational Structure (cont.)	Very Unimportant	Unimportant	Somewhat Unimportant	Neither	Somewhat Important	Important	Very Important	Does this presently occur in your program or practice with clients? Never/	rarely/	sometimes/	always
B7) Avoid contact with clients in the office.	1	2	3	4	5	6	7	1	2	3	4
B8) Admit clients into the program at a controlled rate.	1	2	3	4	5	6	7	1	2	3	4
B9) Secretary and support staff.	1	2	3	4	5	6	7	1	2	3	4
B10) Low case management staff turnover.	1	2	3	4	5	6	7	1	2	3	4
B11) Full time director	1	2	3	4	5	6	7	1	2	3	4
B12) Case Manager available 24 hours, 7 days.	1	2	3	4	5	6	7	1	2	3	4
Discharge, Retention & Engagement											
C1) ICM is assertive & persistent in engaging clients.	1	2	3	4	5	6	7	1	2	3	4
C2) ICM services are time limited.	1	2	3	4	5	6	7	1	2	3	4
C3) "No close" policy, no required discharge point.	1	2	3	4	5	6	7	1	2	3	4

Please rate the degree to which the following statements are important or unimportant to an effective ICM Program.
In the column furthest to the right, please rate the degree to which this presently occurs in your ICM program or practice.

Discharge, Retention & Engagement (cont.)	Very Unimportant	Unimportant	Somewhat Unimportant	Neither	Somewhat Important	Important	Very Important	Does this presently occur in your program or practice with clients? Never/	rarely/	sometimes/	always
C4) Clients are graduated from ICM.	1	2	3	4	5	6	7	1	2	3	4
C5) On-going case management is assertive and persistent in nature.	1	2	3	4	5	6	7	1	2	3	4
Hospitalization & Coordination of Services											
D1) ICM works with hospital to coordinate discharge plan.	1	2	3	4	5	6	7	1	2	3	4
D2) ICM works to prevent hospitalization.	1	2	3	4	5	6	7	1	2	3	4
D3) ICM coordinates treatment with other service providers.	1	2	3	4	5	6	7	1	2	3	4
D4) ICM works with clients in the hospital.	1	2	3	4	5	6	7	1	2	3	4
Treatment Goals & Foci											
E1) ICM advocates for client.	1	2	3	4	5	6	7	1	2	3	4
E2) ICM assists client in obtaining basic needs.	1	2	3	4	5	6	7	1	2	3	4
E3) ICM engages family, provides education & support.	1	2	3	4	5	6	7	1	2	3	4

Please rate the degree to which the following statements are important or unimportant to an effective ICM Program. In the column furthest to the right, rate the degree to which this presently occurs in your ICM program or practice.

Treatment Goals Foci (cont.)	Very Unimportant	Unimportant	Somewhat Unimportant	Neither	Somewhat Important	Important	Very Important	Does this presently occur in your program or practice with clients? Never/	rarely/	sometimes/	always
E4) ICM focuses on increasing client's functioning.	1	2	3	4	5	6	7	1	2	3	4
E5) ICM assumes responsibility for client's life.	1	2	3	4	5	6	7	1	2	3	4
E6) ICM monitors medication compliance.	1	2	3	4	5	6	7	1	2	3	4
E7) ICM assists client in obtaining outpatient mental health services.	1	2	3	4	5	6	7	1	2	3	4
E8) ICM provides individualized treatment services.	1	2	3	4	5	6	7	1	2	3	4
E9) ICM is dependent on other services.	1	2	3	4	5	6	7	1	2	3	4
E10) Assist in obtaining entitlements.	1	2	3	4	5	6	7	1	2	3	4
E11) Work with clients on remedying deficits.	1	2	3	4	5	6	7	1	2	3	4
E12) Increase community integration for clients.	1	2	3	4	5	6	7	1	2	3	4
E13) Assist clients in obtaining jobs.	1	2	3	4	5	6	7	1	2	3	4

Please rate the degree to which the following statements are important or unimportant to an effective ICM Program. In the column furthest to the right, rate the degree to which this presently occurs in your ICM program or practice.

Treatment Goals Foci (cont.)	Very Unimportant	Unimportant	Somewhat Unimportant	Neither	Somewhat Important	Important	Very Important	Does this presently occur in your program or practice with clients? Never/	rarely/	sometimes/	always
E14) Assist clients with living skills.	1	2	3	4	5	6	7	1	2	3	4
E15) Identify and build on client's strengths.	1	2	3	4	5	6	7	1	2	3	4
E16) Assist clients in obtaining services from non-mental health programs.	1	2	3	4	5	6	7	1	2	3	4
E17) Increase community tenure.	1	2	3	4	5	6	7	1	2	3	4
E18) Relationship between patient and case manager.	1	2	3	4	5	6	7	1	2	3	4
E19) Case manager's ability to provide psychotherapy.	1	2	3	4	5	6	7	1	2	3	4
E20) Case manager's knowledge of psychopharmacology.	1	2	3	4	5	6	7	1	2	3	4
E21) Case manager's knowledge of psychosocial rehabilitation.	1	2	3	4	5	6	7	1	2	3	4

Please rate the degree to which the following statements are important or unimportant to an effective ICM Program. In the column furthest to the right, rate the degree to which this presently occurs in your ICM program or practice.

Treatment Goals Foci (cont.)	Very Unimportant	Unimportant	Somewhat Unimportant	Neither	Somewhat Important	Important	Very Important	Does this presently occur in your program or practice with clients Never/	rarely/	sometimes/	always
E22) Emphasis on social problems of the individual.	1	2	3	4	5	6	7	1	2	3	4
E23) Teach clients skills required to overcome barriers.	1	2	3	4	5	6	7	1	2	3	4
E24) Develop and utilize naturally occuring resources in the community.	1	2	3	4	5	6	7	1	2	3	4
E25) Obtain representative payee for client.	1	2	3	4	5	6	7	1	2	3	4
E26) Client self determination.	1	2	3	4	5	6	7	1	2	3	4
Service Elements											
F1) Client engaged in psychotherapy services.	1	2	3	4	5	6	7	1	2	3	4
F2) Clients consulted prior to major treatment decisions.	1	2	3	4	5	6	7	1	2	3	4
F3) Comprehensive assessments at admision.	1	2	3	4	5	6	7	1	2	3	4

Please rate the degree to which the following statements are important or unimportant to an effective ICM Program. In the column furthest to the right, rate the degree to which this presently occurs in your ICM program or practice.

Service Elements (cont.)	Very Unimportant	Unimportant	Somewhat Unimportant	Neither	Somewhat Important	Important	Very Important	Does this presently occur in your program or practice with clients? Never/	rarely/	sometimes/	always
F4) Client involvement in treatment planning.	1	2	3	4	5	6	7	1	2	3	4
F5) Periodic follow-up assessments after admission.	1	2	3	4	5	6	7	1	2	3	4
Client Characteristics											
G1) Clients have severe and persistent mental illness.	1	2	3	4	5	6	7	1	2	3	4
G2) Client has a documented risk for rehospitalization.	1	2	3	4	5	6	7	1	2	3	4
G3) Specific ICM admission criteria exist.	1	2	3	4	5	6	7	1	2	3	4
G4) History of poor utilization/ cooperation with mental health services.	1	2	3	4	5	6	7	1	2	3	4

Please take the opportunity to suggest critical ingredients that have not been listed above.

_____

_____

_____

What are the characteristics of clients who do well in ICM?

_____

_____

What are the characteristics of clients who do poorly in ICM?

_____

_____

Ideal Model Specifications

H1) What percentage (%) of client contacts should occur in the community? _____

H2) Maximum cases per case manager? _____

H3) Ideal caseload size? _____

H4) If case manager has sole responsibility for clients, number of supervision sessions with coordinator per week? _____

H5) If a team of case managers share a client caseload, number of team meetings per week? _____

H6) Minimum number of clients per case manager? _____

H7) Amount of time program coordinator spends on direct services with clients (Hrs. per week)? _____

Ideal Model Specifications (cont.)

H8) Average number of client contacts per week? _____

H9) What is the minimum time in hours per week that a psychiatrist should be available to ICMs for consultation? _____

H10) Minimum number of months client refuses ICM services before stopping engagement? _____

H11) Minimum number of months client is missing before discharge? _____

H12) Minimum number of months or years client is in ICM program before they are eligible for graduation? _____

What is your relationship or position in ICM? (circle one) Expert Administrator Director or Coordinator Case manager

Number of years involved with or employed in ICM? _____

Number of years experience in human services? _____

What is the highest level of education you have completed? (circle one) High School Associates Bachelors Masters Doctorate

Discipline in which you obtained your degree? Social Work Rehabilitation Nursing Psychology Medicine Education other (specify) _____

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Autobiographical Statement

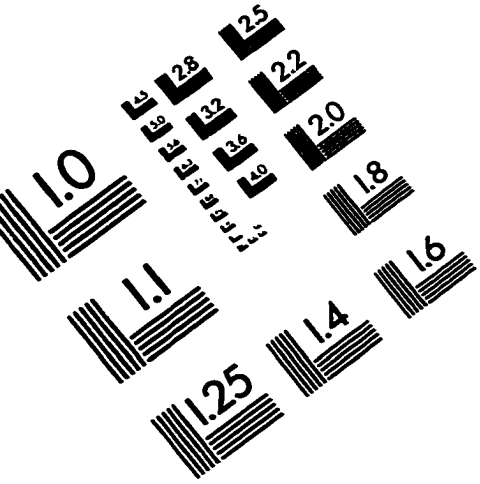
Born in New York City, Richard Schaedle attended New York University's Stern School of Business with a degree in Finance, International Business and subsequently became a member of the New York Futures Exchange, a subsidiary of the New York Stock Exchange.

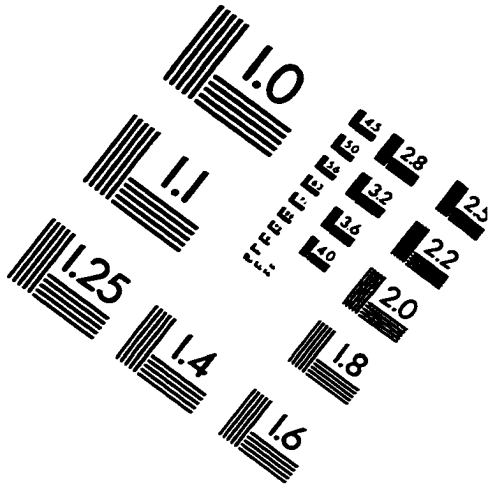
After working on Wall Street for 7 years the author changed careers and went on to work as a substance abuse counselor for the Regent Hospital and as an HIV pre and post test counselor for the New York City Department of Health. The author also worked at the Center for Urban Community Services assisting mentally ill homeless women in their efforts to move out of the New York City Shelter system into supportive housing programs. During this time, Mr. Schaedle studied for his master's degree in Clinical Social Work at Columbia University's School of Social Work.

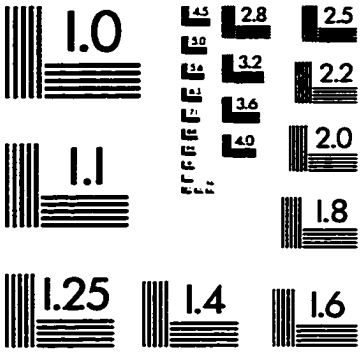
Following graduation, the author began working at the New York City Department of Mental Health's Crisis Intervention Services office. This department has administrative oversight and planning responsibilities for Mobile Crisis teams, Intensive Case Management, Assertive Community Treatment and disaster mental health relief operations (e.g. TWA Flight 800, etc.). In 1995, the author began his studies for the Doctorate degree in Social Welfare at the Hunter School of Social Work, completing the requirements for the degree in February, 1999.

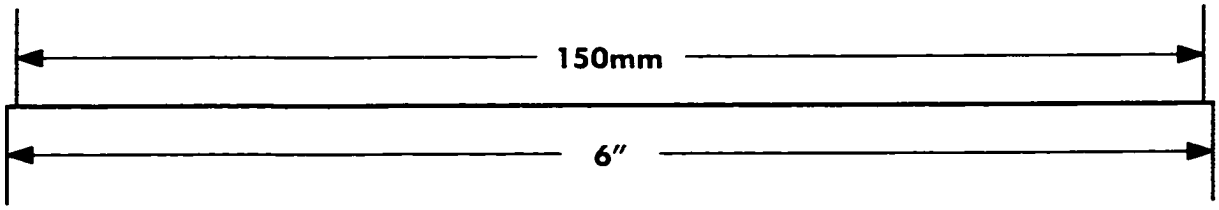
Mr. Schaedle resides in Boerum Hill, Brooklyn with his wife and two children.

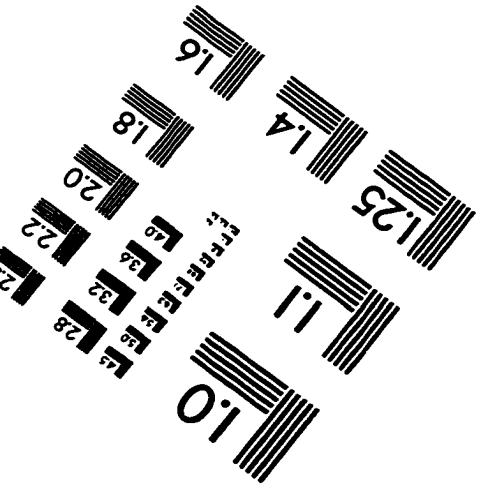
IMAGE EVALUATION
TEST TARGET (QA-3)

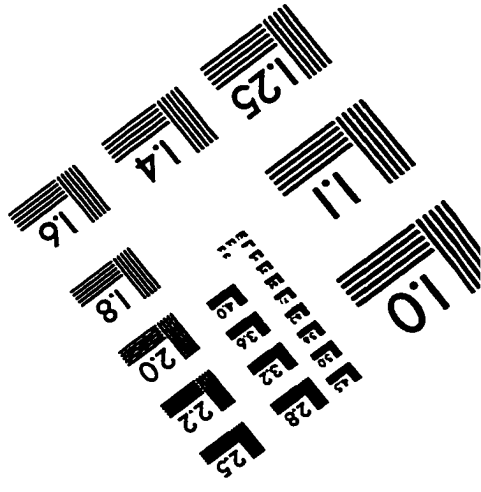












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