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ABSTRACT

The purpose of this thesis is to evaluate recovery outcomes defined by the Illness Management and Recovery Model (IMR) for the ongoing Assertive Community Treatment (ACT) team, which operates under the Betty Hardwick Center in Abilene, Texas. The ACT Team is designed to be a community-based model of care for individuals experiencing psychosis and serious mental illness (SMI). IMR is a structured, evidence-based psychosocial intervention designed to help individuals with SMI understand and manage their symptoms, achieve personal recovery goals, improve their quality of life, and gain a sense of empowerment and self-efficacy. The IMR model is an integrated, curriculum component of ACT that focuses on empowering clients to take an active role in their recovery process. This thesis aims to evaluate the IMR component that the ACT team has already integrated to evaluate efficacy of the ACT model in promoting IMR-defined recovery outcomes in individuals with SMI and psychosis.

Evaluating IMR Defined Recovery Outcomes in Clients Receiving ACT Team Services

A Thesis

Presented to

The Faculty of the School of Social Work

Abilene Christian University

In Partial Fulfillment

Of the Requirements for the Degree

Master of Science

By

Ella Crimmings

May 2024

This thesis, directed and approved by the committee for the thesis candidate Ella Crimmings, has been accepted by the Office of Graduate Programs of Abilene Christian University in partial fulfillment of the requirements for the degree

Master of Science in Social Work



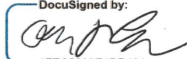
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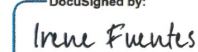
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This thesis is dedicated to the people who loved and supported me both through the process of writing it and throughout my journey as a case manager on the ACT Team on which this thesis is based. Mom, Dad, Madeline, Evan, Cece, Kelsey, Ilianna, Christian, and Melanie; you all poured into me so that I could pour into my clients, and ultimately, into this body of work. Thank you for everything.

ACKNOWLEDGMENTS

The completion of this thesis would not have been possible without the hard work and advise of my thesis board. Dr. Alan Lipps, Irene Fuentes, and Katherine Hennecke were all integral to the development of this thesis into a proper piece of research. Thank you all for sacrificing your time and expertise.

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CHAPTER I

INTRODUCTION

Defining Recovery in a Mental Health Context

The formal definition of *recovery* means “to get back: regain” or “to restore (oneself) to a normal state.” However, in the mental health field, recovery does not mean that the individual has completely overcome the illness; instead, it is seen as “gaining and retaining hope, developing an understanding of one’s abilities and disabilities, engaging in an active life, and acquiring personal autonomy, social identity, meaning and purpose in life, and a positive sense of self” (Priory Group, 2023). Many mental health systems are incorporating recovery into planning initiatives, with some states renaming existing programs as “recovery-oriented” services. Measuring recovery is challenging, with internal and external factors, self-managed care, and empowerment being crucial. The mental health system plays a vital role in facilitating recovery, necessitating the measurement of its impact.

Unlike a mere elimination of symptoms, recovery in this context revolves around cultivating coping mechanisms to a meaningful and productive life amid the challenges posed by mental illness. A pivotal facet of recovery is the management of symptoms. This entails deploying a spectrum of interventions, including medication and therapy, to mitigate and regulate the manifestations of mental illness. While symptom control is essential, recovery goes beyond that by focusing on functional improvement. The goal is to empower individuals to partake in daily activities and develop skills conducive to

independent living, ranging from work and education to relationships and self-care, necessitating developing or reacquisition skills conducive to independent living (Onken, 2002).

ACT is a widely recognized and evidence-based approach to delivering comprehensive, community-based mental health services for individuals experiencing SMI) particularly those with co-occurring psychosis. (Substance Abuse and Mental Health Services, 2008). People with SMI often face challenges in managing their symptoms, daily functioning, and achieving recovery outcomes. ACT was developed as a response to the limitations of traditional mental health services, which frequently failed to provide the ongoing, intensive support that individuals with SMI need to thrive in their communities (Substance Abuse and Mental Health Services Administration [SAMHSA], 2008).

The IMR model enhances ACT's effectiveness by empowering clients to take an active role in their recovery process. IMR is a structured, evidence-based psychosocial intervention designed to help individuals with SMI understand and manage their symptoms, achieve personal recovery goals, improve their quality of life, and gain a sense of empowerment and self-efficacy. IMR, developed as an evidence-based practice, defines recovery as a "highly individualized process marked by the regaining of a meaningful life despite the presence of mental health challenges" (SAMHSA, 2008). It reframes recovery beyond symptom management to encompass broader aspects such as social integration, vocational pursuits, and cultivating a positive sense of self. IMR recognizes that recovery is not synonymous with cure but emphasizes the possibility of

living a fulfilling life even while managing an ongoing mental health condition.
(SAMHSA, 2008).

Severe mental illnesses and psychotic disorders present significant challenges in terms of management and recovery. Innovative and comprehensive treatment approaches are needed to address these challenges. The integration of IMR within ACT programs can create a powerful approach that optimizes the recovery outcomes of individuals with serious mental illness and psychosis. IMR is designed to foster self-efficacy and self-management among clients. It empowers clients to manage their illness, make informed decisions about their care, and actively engage in their treatment process (SAMHSA, 2008).

Research Question

This thesis aims to investigate the relationship between Assertive Community Treatment (ACT) and Illness Management and Recovery (IMR) in the context of recovery outcomes in clients experiencing Serious Mental Illness (SMI) and psychosis. Specifically, ACT clients are currently active at The Betty Hardwick Center. The primary research question guiding this study is: “How does the integration of The ACT Team Model and IMR contribute to achieving IMR-defined recovery outcomes in clients experiencing SMI and psychosis?”

Purpose of the Study

This study aims to comprehensively address critical objectives related to the assessment of efficacy, examination of recovery factors, quality improvement, and supporting evidence-based decision-making in the context of ACT teams and implementing IMR practices.

Objective 1: Assessment of Efficacy

The primary objective of this study is to evaluate the effectiveness of ACT teams in promoting recovery outcomes among individuals with Serious Mental Illnesses (SMIs) and psychosis. The assessment thoroughly examines the impact of IMR interventions on symptom reduction, functional improvement, and overall well-being. By employing validated measures and empirical analysis, the study seeks to contribute robust evidence to the existing body of knowledge regarding the efficacy of ACT teams in fostering recovery.

Objective 2: Examination of Recovery Factors

This study delves into the multifaceted factors influencing recovery within the context of ACT and IMR. By investigating the role of social support, medication management, therapeutic interventions, and community engagement, the research aims to uncover the mechanisms that either facilitate or hinder the recovery process. Understanding these factors is essential for tailoring interventions to individual needs and improving overall recovery outcomes.

Objective 3: Quality Improvement

As part of the study's commitment to enhancing mental health services, a key objective is to inform quality improvement initiatives within The Betty Hardwick ACT Team and similar mental health services. Identifying areas for improvement or optimization will contribute to elevating the overall quality of care the team provides. The study aims to provide actionable insights that can be incorporated into practice to enhance care delivery and support.

Objective 4: Supporting Evidence-Based Decision-Making

In alignment with evidence-based practice principles, the study seeks to provide empirical evidence that supports informed decision-making in mental health care.

Policymakers and practitioners can leverage the study's results to make data-driven decisions about resource allocation, training, and service delivery. By bridging the gap between research and practice, the study aims to contribute to improving mental health services.

CHAPTER II

LITERATURE REVIEW

This literature review delves into the intersection of IMR and ACT team services, exploring the landscape of defined recovery outcomes for clients. As mental health practitioners continue to navigate the complexities of providing comprehensive care, understanding the efficacy and implications of IMR within the context of ACT becomes essential for refining and optimizing recovery-oriented practices.

This review critically examines existing research, theoretical frameworks, and empirical evidence related to implementing IMR in conjunction with ACT team services. By synthesizing current knowledge and identifying gaps in the literature, this exploration aims to offer insights into the effectiveness, challenges, and potential areas for improvement in utilizing IMR to define recovery outcomes within the unique setting of ACT services. The goal is to contribute valuable perspectives and evidence-based considerations that can inform clinical practice and future research endeavors in the evolving landscape of mental health recovery, specifically regarding the ACT Team Model and IMR.

The following search criteria were used to gather information relevant to the research question. A literature search was conducted using academic databases accessed through the Abilene Christian University Library. Google Scholar was also used to identify relevant studies that could not be accessed by the Abilene Christian University Library. Boolean search terms were input into search fields. To begin the search process,

keywords of “ACT Team,” “IMR,” and “recovery” were used to identify relevant research. The EBSCOhost search interface entered keywords and phrases into APA PsychoInfo and Medline.

Methodological filters were used to limit search results to randomized clinical trials or treatment outcome studies. Inclusion criteria for identified studies included the following: must be an outcome study; must be peer-reviewed; must include Assertive Community Treatment or IMR as an intervention or component of an intervention; must report relevant information and must be published in English. Studies evaluating the benefits of ACT or IMR on recovery were found through an electronic database search. Peer-reviewed outcome studies pertinent to the selected topic and in the last 10 to 20 years were gathered using both academic database searches and references from published studies.

Mental Illness

The landscape of mental illness is intricate, comprising a diverse array of conditions that impact cognitive, emotional, and behavioral facets of life. *Serious mental illness (SMI)* is a term utilized to describe psychiatric disorders characterized by significant impairment, necessitating continuous treatment and support. This is the population typically served by ACT Teams, as they often specialize specifically in psychotic disorders. As I delve into this domain, I turn to the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)*, a foundational guide for mental health professionals in diagnosing and categorizing mental health conditions (APA, 2022).

Major depressive disorder (MDD) is a pervasive mood disorder, and when psychosis intertwines with its manifestations, the severity escalates. In the context of MDD, psychotic features might include hallucinations or delusions, specifically with hallucinations that can involve any sensory modality (APA, 2022). Delusions may manifest as distorted beliefs significantly impacting an individual's perception of reality, marking the condition as a serious mental illness (APA, 2022).

Schizophrenia, a psychotic disorder, showcases the features of psychosis outlined in the *DSM-5*. Hallucinations, such as hearing voices or experiencing visual stimuli absent to others, and delusions, persistent false beliefs, form the bedrock of schizophrenia (APA, 2022). Disorganized thinking further compounds the condition, leading to profound functional impairment. The pervasive nature of psychosis in schizophrenia underscores its classification as a serious mental illness (APA, 2022).

Bipolar disorder is a mental health condition characterized by extreme mood swings, including emotional highs (mania or hypomania) and lows (depression) (APA, 2022). In simple terms, bipolar is a disorder in which a person experiences periods of unusually intense emotion, changes in sleep patterns and activity levels, and unusual behaviors that are significantly different from their typical behavior. These mood swings can affect a person's energy levels, ability to function, and behavior, and they are more severe than the normal ups and downs that most people experience.

Psychosis more of a symptom rather than a distinct diagnosis, characterized by delusions, hallucinations, disorganized thinking (speech), grossly disorganized or abnormal motor behavior (including catatonia), and negative symptoms. Essentially, it

involves a loss of contact with reality and significant impairment in thinking, perception, and judgment (APA, 2022).

Recovery

Recovery is seen as a journey that goes beyond the mental health system, and the mental health system can either promote or impede recovery. In the clinical realm, recovery for individuals grappling with SMI and psychosis transcends mere symptom alleviation. It encompasses a dynamic process to reinstate and enhance overall well-being, functionality, and quality of life (Onken, 2002).

The Substance Abuse and Mental Health Services Administration (SAMHSA) launched a plan to transform the mental health care delivery system in how recovery is reached in clients. The plan emphasizes the need to practice innovation and attitude change. It promotes a psychiatric rehabilitation model where mental health professionals work closely with individuals to help them develop skills and support for reaching their goals. The plan also advocates for evidence-based medicine in the recovery process. Considering the individual, interpersonal, and socioenvironmental influences, the stress-vulnerability framework is suggested to organize change. The model focuses on modulating stress levels and stabilizing symptoms through various interventions. IMR utilizes this as a primary model for client education on how their mind affects their body. The recovery model emphasizes collaboration, choice, and problem-solving and suggests studying processes such as goal setting, skills training, and building relationships. The plan recognizes the growing strength and expectations of individuals with persistent mental illness who embrace recovery principles and improved treatment options. SAMHSA's plan emphasizes the importance of innovation and attitude change in mental

health care. This framework aligns with my study's objective of evaluating recovery outcomes within ACT team services.

Consumer involvement, a focal point in Doughty and Tse's study (2010), underscores the importance of consumer-led services demonstrating effectiveness comparable to traditional services. This insight is pertinent for the study as it delves into the role of IMR in defining recovery outcomes. Considering the evolving landscape of consumer involvement, the study can benefit from understanding the implications of consumer-led services on client satisfaction and hospitalization rates. Over the past two decades, the recovery movement has sought to empower people with personal experiences of mental illness to increase their activity in and control over mental health services. New recovery models were constructed based on the needs of consumers as they defined them, and in 1989, the unique contribution consumers could make to mental health services was recognized at a national level in the United States. The notion that consumers could participate and provide valuable services to other people was based on several ideas: firstly, that consumers might better identify or understand the issues associated with mental illness arising for their peers and make unique contributions because of their personal experience; secondly, that they might encourage the participation of consumers in services, and that they could facilitate change in attitudes to mental illness (Doughty & Tse, 2010).

A systematic review considered the evidence involving consumers in the delivery and evaluation of mental health. This was based on research published between 1966 and 2001, including randomized controlled trials and comparative studies. They found that involving consumers as employees of mental health services led to clients having greater

satisfaction with their circumstances and less hospitalization. As the review included mostly uncontrolled studies, evidence on effectiveness needed to be more conclusive (Doughty & Tse, 2010). To make a strong case for their place in the array of services offered by the mental health sector, consumer-led services must demonstrate at least equivalent effectiveness to a traditional service concerning client outcomes. Consumer-led services reported positive outcomes for their clients as traditional services, for practical outcomes such as employment, income, education, or living arrangements, and in reducing hospitalizations and the cost of services. Results were varied for client satisfaction and recovery, and some negative findings were reported (Doughty & Tse, 2010). Involving consumers in services can provide employment opportunities and benefit both the consumer-staff members and the service.

Clarke et al.'s (2012) study examines the types of goals set by individuals in Australian mental health services and how they differ across stages of recovery. It is found that individuals with psychiatric disability regularly set goals and plan, even in the early stages of recovery (Clarke et al., 2012). The study also suggests a higher frequency of health goals in the moratorium stage, but as recovery progresses, the focus shifts toward occupational and educational goals. Physical health goals are the most frequently reported and essential goals. The study supports the hypothesis that individuals with lower self-rated recovery are more likely to set health goals. The Moratorium stage is characterized by a lack of hope and identity, resulting in fewer non-health-specific goals being set. The study suggests that health goals need to be addressed before establishing goals related to relationships, employment, and personal development (Clarke et al., 2012). Further exploration of approach and avoidance goals is recommended to

understand the complexity of the recovery process. There were 242 individuals with psychiatric disability in the study. Addressing health goals early in the recovery process aligns with IMR's emphasis on holistic well-being. The study's recommendations for further exploration of approach and avoidance goals will inform my research methodology and potentially contribute to a more nuanced understanding of recovery outcomes.

Some of the conclusions appear to confirm prior work in this field. The Recovery Goal Taxonomy (RGT) categorizes goals into domains and aligns them with principles for developing effective goals (Clarke et al., 2012). However, the study has limitations due to the small number of participants and the specific training of mental health workers. Future research should examine goal content over time with a different measure. More exploration is needed on the dual process of approach and avoidance goals in the recovery process (Clarke et al., 2012).

Davidson et al.'s (2005) conceptualization of recovery as a subjective perspective on living a fulfilling life aligns with the person-centered approach of IMR. This perspective is crucial in framing my study's approach, considering recovery not just as symptom alleviation but as a broader perspective on life with mental illness. The concept of recovery in psychiatry has become a central focus, with clinicians and consumers struggling to define and measure it, but it is suggested that both clinical and rehabilitation models of recovery are helpful for different purposes and populations. In the study, Davidson et al. (2005) reported that the concept of recovery in psychiatry had gained prominence in the last five years. The research involved 38 people.

The concept of recovery in the context of rehabilitation refers to the subjective perspective on living a fulfilling life despite enduring psychiatric disability. Evidence suggests that recovery is the norm rather than the exception for individuals with mental illness over time (Davidson et al., 2005). The authors contend that the Recovery Assessment Scale is a viable measurement tool for recovery, highlighting the need for more research in developing effective evaluation instruments. There are different interpretations of recovery, but both concepts have their usefulness. Recovery can be seen as a remission of symptoms and restoration of functioning or as a broader perspective on life with mental illness. The severity and duration of symptoms, as well as cognitive functioning, play a role in recovery. However, even after symptomatic recovery, individuals may still experience depression and low self-esteem (Davidson, 2005). It is crucial to shift the focus from the illness to the person to gain a better understanding of recovery. Different domains of recovery have been identified using empirical criteria. Rather than invalidating one concept in favor of the other, both concepts should be considered for their different purposes, resulting in a broader perspective on life with mental illness.

A research team led by Retta Andresen of the Illawarra Health and Medical Research Institute (2010) researched the question, “Do clinical outcome measures assess consumer-defined recovery?” The results highlight the importance of obtaining the client’s personal view of recovery progress. The overall pattern of relationships supports the validity of recovery as a measurable outcome. It would be informative to replicate the study using more widely used measures. Consumer-oriented definitions of recovery focus on attitude changes, a meaningful life, a positive identity, and taking responsibility for

one's well-being. The study found significant discrepancies between patterns of scores on recovery measures and traditional clinical measures. The MHRM "Overcoming stuckness subscale" was quite level across stages. The results emphasize the importance of considering the client's perspective on recovery progress. This allows for recovery-oriented care while also developing evidence for practice (Andresen et al., 2010).

Recovery is an essential aspect of mental health services for adults with serious mental illnesses, and social workers should consider using a standardized recovery instrument that aligns with their goals and the needs of the consumers they serve. By acknowledging the importance of considering the client's perspective in recovery-oriented care, I can draw on this study's insights to enhance the validity of my evaluation of IMR-defined recovery outcomes.

In "Recovery in Severe Mental Illnesses," Scheyett (2013) reported that recovery is an essential concept in mental health services for adults with serious mental illnesses. The article discusses the parameters for including reviews of quantitative instruments related to recovery. One limitation found in the instruments is a lack of testing for sensitivity to change over time. This evaluation of recovery instruments underscores the need for a comprehensive discussion on recovery interpretations. This insight is pivotal as my study aims to evaluate the effectiveness of IMR-defined recovery outcomes.

Understanding the nuances of recovery measurement instruments, as highlighted by this study, will contribute to the methodological rigor of my investigation. There is variation in the conceptualization of recovery and the quality of the tools. The consumer-based model aims to create a meaningful life for individuals with mental illnesses. Recovery is described as an active process of integrating mental health issues into daily existence

(Scheyett, 2013). The instruments measure different aspects of recovery and have different perspectives. Social workers should strive to promote recovery and may find recovery instruments helpful in their practice. The researchers evaluated 20 articles. The study highlights the need for a discussion on the various interpretations of “recovery” in the field of research. Further exploration and dialogue are required to better understand this important issue (Scheyett, 2013).

The researchers propose that the Illness Management and Recovery Scales and the Milestones of Recovery Scale were developed through collaborative efforts. The Consumer Recovery Outcomes System and the Recovery Process Inventory also used focus groups to identify items (Scheyett, 2013). A study led by Anna Tickle found that clinical psychologists are aware of recovery-oriented approaches but feel unable to incorporate them due to their limitations and the limitations of their circumstances. Risk is conceptualized in terms of harm to others, harm to self, and vulnerability, but other risks, such as stigma and social exclusion, are not considered (Tickle et al., 2012). The existing culture of mental health services emphasizes risk avoidance, limiting the implementation of recovery-oriented approaches. Services should broaden their conceptualizations of risk to include social exclusion and poverty to encourage the adoption of recovery approaches. The study challenges in adopting recovery-oriented approaches aligns with the contextual challenges my study may encounter within mental health services. Their insights into the need for cultural change within services emphasize the importance of understanding professional conflicts and dilemmas, providing valuable guidance for the implementation and interpretation of my study. The study highlights the professional conflicts and dilemmas faced by clinical psychologists in working within

this context. Understanding these issues can inform efforts to facilitate cultural change toward the adoption of recovery approaches in mental health services. This study provides a preliminary basis for theory development, but further research with a more diverse sample is needed to strengthen this assertion (Tickle et al., 2012).

The study “Mental Health Recovery: What Helps and What Hinders?” addresses these concerns, building empirical knowledge on what stimulates and hinders personal recovery. It captures consumer perspectives on a recovery-oriented mental health system, aiming to design and test indicators for assessing local mental health systems’ recovery orientation. (Onken, 2002). The text discusses the concept of mental health recovery and a national research project aimed at developing recovery-facilitating system performance indicators. The research project involves focus groups and aims to understand what helps and hinders recovery. The findings include themes such as basic material resources, self/whole person, hope/sense of meaning and purpose, choice, independence, social relationships, meaningful activities, peer support, formal services, and formal service staff (Onken, 2002).

Holistic well-being is another cornerstone of recovery, emphasizing the significance of addressing not only the symptoms but also the broader spectrum of an individual’s well-being, comprising physical health, emotional equilibrium, and social connections. Empowerment plays a vital role in the recovery process, encouraging active participation in treatment plans and decision-making processes and fostering a sense of control and autonomy. Community integration is deemed instrumental in a successful recovery. This involves active participation in social activities, community engagement, and the establishment of positive connections with others (Onken, 2002). The cultivation

of hope and resilience is integral to the recovery journey, instilling a positive outlook for the future and equipping individuals with the capacity to rebound from setbacks. Recovery is an ongoing process requiring sustained support from mental health professionals, family members, and peers. A robust support system is indispensable for maintaining progress and navigating the complexities of mental health challenges (Onken, 2002).

Assertive Community Treatment

The roots of ACT can be traced back to the deinstitutionalization movement of the mid-20th century, which aimed to shift mental health care from large psychiatric institutions to community-based settings. In the 1960s and 1970s, innovative mental health professionals began experimenting with new models of care that would provide more intensive and continuous support to people with severe mental illnesses in their communities (Couser et al., 2021). One of the pioneers of ACT was Dr. Stein and his team at Mendota State Hospital in Madison, Wisconsin, who developed an early version of the program in the 1970s (Couser et al., 2021).

The primary goals of ACT are to promote recovery, reduce hospitalizations, improve functioning, enhance community integration, and increase the quality of life for individuals with severe mental illness. ACT achieves these goals through a variety of interventions, including medication management, housing support, employment assistance, and social skills training. ACT comprises several key components, including a small multidisciplinary team, 24/7 availability, a low client-to-staff ratio, assertive engagement, comprehensive assessment, individualized treatment plans, intensive case management, flexible services, and ongoing evaluation (SAMHSA, 2008). The

continuous support provided by ACT teams, coupled with crisis intervention, has proven successful in preventing hospitalizations or minimizing their duration. This insight informs my study, emphasizing the significant role of ACT as a contextual backdrop for evaluating IMR-defined recovery outcomes.

ACT also places a strong emphasis on helping individuals with mental illness integrate into their communities. This includes finding suitable housing, securing employment or vocational training, and fostering meaningful social relationships. Finally, ACT aims to address the holistic needs of individuals, including physical health, substance use issues, and social determinants of health. By doing so, it enhances their overall well-being and quality of life (SAMHSA, 2008).

ACT has proven to be highly effective in improving the lives of individuals with severe mental illnesses in various ways. One of the primary goals of ACT is to reduce the frequency and duration of psychiatric hospitalizations. By providing continuous support and crisis intervention, ACT teams can often prevent hospitalizations or facilitate shorter stays when necessary (SAMHSA, 2008). ACT is designed to be a better alternative to hospitalization and outpatient clinics to treat individuals with severe mental illnesses like schizophrenia, bipolar disorder, and major depression. These approaches often resulted in fragmented care, frequent hospital readmissions, and inadequate support for individuals in the community (SAMHSA, 2008).

An essential aspect of the ACT model is that the client has a lot of interaction with mental health professionals on the team. ACT teams work closely with individuals to ensure they receive consistent medication management and therapy. This helps

stabilize their symptoms, improve their overall mental health, and enhance their quality of life (SAMHSA, 2008).

ACT's primary purpose is to offer a comprehensive program responsible for treatment, rehabilitation, and support services for individuals with severe and persistent mental illnesses, such as schizophrenia or bipolar disorder. The ACT team, consisting of clinical and rehabilitation staff, integrates their expertise to deliver mobile services directly to individuals recovering from their homes. This approach minimizes referrals to other programs, providing a seamless continuum of care. ACT is designated as Level of Care 4 (LOC-R = 4), catering to individuals with a diagnosis of schizophrenia, bipolar disorder, or major depressive disorder with psychotic features ($GAF \leq 50$ at intake). The admission criteria also include an ANSA indication of a LOC-R of 4. (SAMHSA, 2008). My study aims to evaluate IMR's impact on clients designated under ACT's Level of Care 4 (LOC-R = 4), catering to individuals diagnosed with schizophrenia, bipolar disorder, or major depressive disorder with psychotic features. The alignment of the study population with ACT's specific admission criteria ensures a focused evaluation, considering the unique challenges faced by individuals with severe and persistent mental illnesses (SAMHSA, 2008). This alignment strengthens the relevance of my study within the context of ACT's targeted approach.

Services at the ACT level aim to achieve specific outcomes: stabilization of symptoms or maintenance of stability, development of natural supports in the community sustaining improvement, acquisition of additional skills to continue progress toward recovery, and transition to a lower level of care while pursuing self-directed recovery goals (SAMHSA, 2008).

The client population served by ACT is characterized by individuals with severe and persistent mental illnesses, such as schizophrenia, bipolar disorder, and major depressive disorder. They often experience chronic symptoms, functional impairment, and significant social, occupational, and economic challenges. ACT clients typically have a severe and enduring co-occurring psychosis that significantly impairs their ability to function independently (SAMHSA, 2008). This population often experiences multiple psychiatric hospitalizations, emergency room visits, and encounters with the criminal justice system. ACT primarily targets individuals who face significant functional impairments in areas such as self-care, employment, housing stability, social relationships, and community integration. These impairments often result from the symptoms of mental illness and associated cognitive deficits.

A substantial portion of the client population served by ACT also experiences co-occurring substance use disorders, which further complicates their treatment and recovery. Effective ACT programs address both mental health and substance abuse issues concurrently. Many individuals served by ACT are homeless or at risk of homelessness, making stable housing a crucial component of their care (SAMHSA, 2008). Assertive engagement and ongoing support are provided to help clients secure and maintain appropriate housing options.

Individuals with SMI are disproportionately represented in the criminal justice system. ACT Teams often work collaboratively with the criminal justice system, providing support and interventions to reduce recidivism and promote successful reintegration into the community. ACT's comprehensive support and emphasis on community integration enable individuals with severe mental illness to live more

fulfilling lives. By assisting clients with securing stable housing, gainful employment, and meaningful social connections, ACT promotes improved quality of life and reduces the stigma associated with mental illness (SAMHSA, 2008).

Individuals with severe mental illness often face stigma and discrimination, leading to social isolation, limited opportunities, and reduced access to healthcare and support services. ACT teams work collaboratively with clients to address these challenges and enhance their social inclusion. Many individuals with severe mental illness experience barriers to accessing adequate healthcare, including limited insurance coverage, insufficient mental health resources, and geographical limitations (SAMHSA, 2008). ACT bridges this gap by providing comprehensive care directly in the community, ensuring regular access to necessary treatments and support. ACT emphasizes medication management, ensuring that individuals consistently take prescribed medications and monitor their effectiveness. This leads to improved symptom management, reduced relapses, and increased overall stability (SAMHSA, 2008). ACT supports individuals with severe mental illness in developing and maintaining social and occupational skills, ultimately fostering increased independence, engagement, and overall functioning in the community (SAMHSA, 2008).

Implementing IMR in the ACT Team Model

As I explore the unique contributions of ACT in promoting recovery and reducing the stigma associated with mental illness, the integration of IMR becomes an essential consideration. Bridging the gap in accessing adequate healthcare, addressing barriers to social inclusion, and emphasizing medication management within the community highlight the potential synergies between ACT and IMR. These aspects provide a rich

backdrop against which I can assess IMR's impact on social and occupational skills development, increased independence, and overall functioning within the community (SAMHSA, 2008).

IMR provides a foundational understanding of psychosis, delving into the nature of symptoms and the neurobiological underpinnings of the condition. By imparting knowledge about their illness, individuals gain insights that enable informed decision-making regarding treatment options. This newfound understanding fosters a sense of mastery over their condition, a crucial element in the recovery process (SAMHSA, 2010).

A cornerstone of IMR is the emphasis on medication adherence. By educating individuals about the purpose and potential side effects of prescribed medications, IMR facilitates informed decision-making. Adherence to medication regimens is paramount for stabilizing symptoms associated with psychosis and improving overall functioning. IMR integrates skill-building components tailored to the unique challenges faced by individuals with psychosis. Cognitive-behavioral strategies, problem-solving techniques, and stress management skills are imparted to enhance individuals' ability to cope with symptoms and navigate the complexities of daily life (SAMHSA, 2010).

Coping with the symptoms of psychosis requires a diverse set of strategies. IMR provides individuals with a toolbox of coping mechanisms, including relaxation techniques, mindfulness practices, and cognitive restructuring. These tools empower individuals to manage distressing thoughts, emotions, and behaviors effectively. IMR encourages individuals to set and pursue meaningful goals aligned with their recovery journey. These goals span various aspects of life, from education and

employment to social relationships and personal well-being. Goal setting becomes a powerful tool, empowering individuals to envision a positive future and take tangible steps toward its realization (SAMHSA, 2010).

Acknowledging the potential for social isolation linked to psychosis, IMR places significant emphasis on building and maintaining a robust support network. IMR equips individuals with the ability to recognize early warning signs of relapse and develop effective strategies for prevention or management. This proactive approach underscores the importance of individual agency in mental health management, ultimately reducing the likelihood of hospitalizations or setbacks (SAMHSA, 2010).

IMR actively contributes to the development of hope and self-efficacy. By offering concrete tools and skills, IMR instills confidence in individuals' ability to manage their mental health and actively work toward recovery. This process of skill acquisition and application significantly enhances an individual's belief in their capacity for positive change. Finally, recognizing the unique nature of everyone's experience with psychosis, IMR operates on a fundamentally individualized approach. Treatment plans are tailored to the specific needs, preferences, and strengths of each person. This personalized approach enhances engagement and fosters a sense of agency in one's recovery journey (SAMHSA, 2010).

Illness Management and Recovery

The Illness Management and Recovery (IMR) program aims to improve personal recovery outcomes for people with severe mental illnesses, but there is limited evidence of its effectiveness compared to other treatments. However, increasing program exposure and access to resources may enhance its benefits. A research team reported in

“Effectiveness of Illness Management and Recovery program on people with severe mental illnesses” that the IMR program has been established to address the challenges faced by people with severe mental illnesses (Goh et al., 2023). This review examined the effectiveness of IMR programs in improving health-related outcomes among people with SMIs. The results suggest that IMR has a modest advantage over other interventions in improving personal recovery and social functioning. However, there is limited evidence of the superiority of IMR compared to existing treatment plans (Goh et al., 2023). The low attendance rates in many studies suggest that there may be a threshold of exposure to IMR for its treatment effects to be observed. The researchers reviewed 14 studies. IMR could improve personal recovery compared to active and passive intervention groups. (Goh et al., 2023). The review acknowledges limitations, such as the exclusion of non-English publications and the lack of studies comparing IMR with other interventions. The review suggests that while the IMR program may not be significantly superior to existing treatment plans, it does show small to medium treatment effects (Goh et al., 2023).

The IMR scales, which measure illness self-management and pursuit of recovery goals, were found to have good reliability and validity, indicating that they can be helpful in treatment planning and assessing recovery in individuals with severe mental illness. In “Measuring Illness Management Outcomes” (Salyers et al., 2007), the researchers noted that the psychometric properties of the IMR Scales were evaluated in individuals with severe mental illness. The results suggest that these scales have adequate properties and can be helpful in treatment planning and assessing recovery. The survey asks questions about knowledge, time in structured roles, impairment of functioning through alcohol and

drug use, involvement of family and friends in treatment, and participation in self-help programs (Salyers et al., 2007).

Understanding the perceptions that individuals diagnosed with severe mental illness have of the treatment outcomes for the Illness Management and Recovery curriculum is extremely important when studying recovery outcomes. It was expected that individuals found the illness management and recovery curriculum positively impacted their treatment outcomes in the domains of coping skills and self-management, social functioning, recovery outcomes such as goal setting and attainment, and dual recovery.

Social workers promote the dignity and worth of a person and stress the importance of their human relationships. These values are at the heart of the recovery model and the IMR conceptual framework (Muesser et al., 2006) Recovery literature looks at several domains when exploring the outcomes of recovery and the recovery process. These domains include reduction of psychiatric symptoms, reduction in service utilization, cognitive improvements, increased ability to set and attain goals, improvements in social skills and supports, improved functioning in day-to-day life, and abstinence from or reduction in using non-prescribed mood-altering substances. The IMR conceptual framework broadly incorporates a broad spectrum of generally acceptable models and frameworks for treatment. IMR positively impacts individuals and their recovery, as well as social work practice, policy, and research.

In “Illness Management and Recovery,” the study noted that the IMR program is a curriculum-based rehabilitation program designed to help people with severe mental illness improve their self-management and achieve remission. However, a randomized

trial comparing IMR with usual treatment found no significant effects on functioning, symptoms, substance use, or service utilization. The trial included 198 participants diagnosed with schizophrenia or bipolar disorder. The program was implemented in community mental health centers in the Capital Region of Denmark. The trial found no statistically significant differences between the IMR group and the control group in terms of functioning, symptoms, or hospitalization days. The trial contributes to the evidence base of IMR, but caution should be exercised in interpreting the results (Dalum et al., 2018).

Beentjes et al. (2021) described identifying the minimal significant difference in patient-reported outcome measures in the field of people with severe mental illness. The focus of treatment for people with severe mental illness has shifted towards living a meaningful life (Beentjes et al., 2021). This study aimed to identify the patient-reported outcome measures that capture the most relevant and meaningful change because of the IMR model. The Mental Health Recovery Measure showed the highest effect/MID-SDc index. The study suggests that the IMR model can facilitate recovery using both illness self-management and personal recovery-oriented strategies. However, more research with a larger sample size is needed to confirm these findings. The study involved 91 potential participants (Beentjes et al., 2021). The interviewer-administered method of data collection in this study may have led to response bias. This bias could have influenced the gender difference observed in the study. Subjects may have inaccurately answered questions related to difficult topics such as sexual behavior or eating patterns. The length of the questionnaires may have also caused cognitive fatigue and biased the results. (Beentjes et al., 2021). IMR helps people with SMI develop tailored illness management

skills and achieve personal and clinical recovery, but little is known about participants' experience with IMR and how it relates to their recovery.

Another study analyzed participants' lived experience with the IMR model and their recovery process. IMR is designed to support individuals with SMI in their recovery process. The program focuses on developing tailored illness management skills to achieve personal and clinical recovery. The study aimed to describe participants' experience with the program, explore any changes they experienced, and examine how these changes relate to their recovery. The study revealed three main themes: social connection with other participants, discussing everyday lives with mental illness, and learning about recovery as a personal experience (Jensen, 2019).

Assertive Community Treatment

The concept of Assertive Community Treatment (ACT) emerged as a transformative model for providing mental health services to individuals with serious mental illnesses. ACT has been associated with lower rates of involvement with the criminal justice system among individuals with mental illness. By providing support and structure, it helps individuals avoid behaviors that may lead to legal issues (SAMHSA, 2008). Despite its intensive and comprehensive approach, ACT is cost-effective in the long run. By reducing hospitalizations and other crisis-related services, it can lead to significant cost savings for healthcare systems. ACT is well-suited for incorporating various wellness management approaches and recovery plans. These approaches align with SAMHSA's dimensions of wellness and contribute to individuals managing their mental illness while pursuing recovery goals (SAMHSA, 2008). By addressing emotional, spiritual, intellectual, physical, environmental, financial, occupational, and

social aspects, ACT promotes a holistic recovery experience. By integrating wellness dimensions and recovery-focused strategies, ACT supports individuals with severe mental illnesses on their journey toward stability, community integration, skill development, and self-directed recovery.

The adoption of a comprehensive, person-centered approach within ACT exemplifies a commitment to holistic care and overall well-being. The concept of “wellness” gained prominence in behavioral health during the 1990s. Soon after, SAMHSA proposed a comprehensive approach to wellness through eight dimensions: emotional, spiritual, intellectual, physical, environmental, financial, occupational, and social. These dimensions are interconnected, influencing mental health and overall quality of life. This holistic perspective aligns with ACT services, which play a crucial role in supporting individuals with severe and persistent mental illnesses. (SAMHSA, 2008). The convergence of SAMHSA’s wellness dimensions and ACT’s comprehensive approach accentuates the importance of a holistic view in promoting recovery. The studies suggest that integrating IMR within ACT can provide a nuanced understanding of how emotional, spiritual, intellectual, and other dimensions synergistically contribute to a holistic recovery experience.

ACT is conceptualized as a multidisciplinary community mental health treatment model focusing on immediate client needs and personal goals (Bond & Drake, 2015). By integrating mental health treatment, housing, rehabilitation, and other services, ACT aims to tailor support to individual needs. The shift to community settings enhanced client engagement and satisfaction, emphasizing timely and personalized services facilitated through frequent team meetings (Bond & Drake, 2015).

Bond and Drake's (2015) exploration of the evolutionary dynamics of ACT underscores the adaptability of this model. Understanding how IMR integrates within ACT requires acknowledging the ongoing evolution of the ACT framework. The study should discern how IMR aligns with and enriches the dynamic nature of ACT, potentially contributing to a more sophisticated and responsive mental health care approach. Decades of research following the initial study demonstrated ACT's effectiveness in promoting community reintegration for people with severe mental illness. Numerous randomized controlled trials and reviews concluded that ACT surpassed standard services in reducing hospitalization and increasing community tenure (Bond & Drake, 2015). Extensions of the ACT model to address homelessness, especially when integrated with evidence-based housing models, were generally adequate. Recent research has shifted focus to enhancing the recovery experience, emphasizing functional recovery and quality of life.

Despite these advancements, some areas remain unexplored, indicating ongoing progress in defining the ACT model. The development of fidelity scales, such as the Dartmouth ACT Fidelity Scale (DACTS), has enabled the operational definition of critical ACT ingredients. Research using these scales highlighted the importance of organizational components, with organizational features predicting significant reductions in hospital use. Current mental health services researchers emphasize the soundness of ACT's organizational features, which have been widely emulated. Despite losing its preeminence in recent years, ACT's contribution to providing a transparent, operationally defined treatment model with extensive research support remains exemplary (Bond & Drake, 2015).

While challenges and adaptations have emerged, the relevance of ACT persists, particularly in service systems and settings with diverse and complex needs. The ongoing evolution of ACT reflects its adaptability to changing concepts, environments, and empirical support, ensuring its continued impact in the field of mental health (Bond & Drake, 2015).

In “Assertive Community Programs for Patients with Severe Mental Disorder,” a research group led by Sonia Vidal (2020) noted that ACT was developed in the 1970s to treat patients with severe mental disorders in the community. This study aimed to understand the long-term effects of an ACT program on difficult-to-engage patients. The results showed sustained improvements in patients’ quality of life, social functioning, and symptomatology even years after discharge. The study also found that patients gained awareness of their mental disorders and the effects of medication. However, the lack of significance in recovery may be due to the small sample size.

The ACT program in Geneva targets explicitly patients who are refractory to care and challenging to engage. The study highlights the potential of ACT in resolving personal crises and improving adherence to care (Vidal et al., 2020). The research involved 29 patients. Patients in the study experienced long-term improvements in quality of life, social functioning, and symptom reduction. The lack of significance in recovery may be due to the small sample size, which reduces statistical power. Patients also showed improvements in daily life, interpersonal relationships, and integration into the community (Vidal et al., 2020). The team recommends that further studies are needed to explore predictors of long-term evolution in admissions and durations of ACT

interventions, as well as different typologies of evolution based on patient characteristics.

Salyer's (2007) study suggestions should influence the current process of revising the ACT fidelity scale. This article reminds us that, after nearly 30 years of ACT, many details of the model remain unspecified. Its recovery orientation is paramount among them (Salyers, 2007). Coercion is a flagrant violation of recovery values that can be specified, measured, and reduced. Other aspects of recovery orientation are subtler, but they probably also vary widely across teams in the absence of clear standards. Specifying values and quality in human service interactions is extremely difficult. Program manuals and fidelity scales generally emphasize structures and activities that are easily measurable (e.g., caseload size, number of meetings, and location of meetings), but they cannot address the attitudes of staff and the quality of relationships. ACT Teams should be intentional about how they should engage clients in recovery to avoid coercion (Salyers, 2007).

Concerns have been raised regarding the extent to which the services provided through the ACT model are based on an understanding of recovery as primarily a clinical phenomenon rather than a journey that is fundamentally about self-determination, social inclusion, citizenship, and civil rights. Until recently, the limited degree of social inclusion experienced by users of ACT has been assumed to result from individual functioning or inadequate practitioner training. These explanations negate the role of organizing conditions in shaping a systematic approach to everyday practice that diminishes opportunities for inclusion.

The study by Drake (2008) identifies critical areas where practices consistent with the current recovery vision and theories of social inclusion are superseded by accepted and legitimized forms of practice aligned with a medical model approach. The study explicates both how and why this happens during everyday practice (Drake, 2008). Coldwell and Bender (2007) described the effectiveness of ACT for homeless populations with severe mental illness. ACT is associated with significant improvements in rates of homelessness and levels of psychiatric symptom severity in homeless individuals with severe mental illness (Coldwell & Bender, 2007).

However, there is no significant difference in hospitalization between ACT and standard case management. The study found that assertive community treatment led to symptom severity reduction but not hospitalization reduction compared to standard case management. The findings support the use of assertive community treatment as a best practice for improving outcomes for homeless individuals with severe mental illness. The studies by Petterson et al. (2014) and Coldwell and Bender (2007) emphasize the co-occurring challenges of substance use and homelessness within the ACT clientele. A nuanced exploration of how ACT teams address these complex issues is necessary to comprehend recovery outcomes. This involves deciphering the effectiveness of ACT in engaging and retaining individuals facing substance use challenges, ultimately influencing their recovery journeys.

In “The Work of Recovery on Two Assertive Community Treatment Teams,” Salyers et al. (2010) noted that the concept of recovery in mental health services lacks clear definition and measurement strategies. Admission standards for ACT teams in Indiana ensure focus on the most disabled consumers. There were no differences between

teams in consumer reports of being active in treatment. Recovery involves hope, personal responsibility, social connection, and meaningful life activities (Salyers et al., 2010).

Community integration is linked to greater self-confidence and hopefulness.

Teams had to meet state standards for ACT certification and have a minimum level of ACT fidelity. Site visits, interviews, observations, and surveys were conducted. The work of recovery on ACT teams is influenced by staff beliefs and client needs. Nine staff were included in the analysis. The authors' conclusions potentially reinforce prior research on this topic: The coaching role for the team is consistent with self-determination theory, which emphasizes the importance of internal motivation for human potential. (Salyers, 2010). The text suggests using a combination of observer ratings, consumer and staff ratings, and shortened interviews to measure recovery orientation. Salyers et al. (2010) and Morse et al. (2020) highlight the challenges in integrating IMR within ACT, emphasizing the significance of time, training, and flexibility. This evidence urges a closer examination of the intricate dynamics involved in implementing IMR within the ACT. Addressing these challenges is pivotal for a seamless integration that enhances recovery outcomes.

Likewise, Kidd et al. (2009) described fidelity and recovery orientation in ACT. The study investigated the relationship between recovery-oriented service provision and fidelity to the ACT model among 67 ACT teams in Ontario. The findings showed that some ACT coordinators and staff, as well as ACT clients, needed to view certain aspects of recovery-oriented service provision as applicable to ACT (Kidd et al., 2009). This suggests a need for the uptake of recovery values and practices among staff and a lack of emphasis on these concepts by providers for clients and key supports. Aspects of the

researchers' findings appear to corroborate what was previously known about this field: This study's findings support the idea that ACT standards and recovery-oriented service provision have an inconsistent relationship (Kidd et al., 2009). The study's focus on ACT teams in Ontario limits the generalizability of the findings. The analysis was based on aggregate data and did not account for client, staff, and team-level variables.

A study by Pettersen (2014) investigates the fact that clients with severe mental illness who use substances are less engaged in treatment than those who do not use substances. ACT engages and retains clients with SMI and concurrent substance use at a higher rate compared with traditional treatment. The experiences of building trust, perceiving ACT as a safety net, and personal responsibility were essential factors for remaining in treatment. The study highlights the importance of trust, exclusiveness, and hope for the future in ACT. The analysis involved 12 ACT teams (Pettersen, 2014). Clients' perceptions of first-year experiences in ACT showed that service delivery in a caring manner, persistence, and practical assistance was crucial for engagement. These findings align with the results of my study on initial engagement in ACT (Pettersen, 2014). The study aimed to explore participants' experiences with a focus on relational factors, not to evaluate the ACT model. The study contends that additional studies are needed to understand how clients with severe mental illness and substance use view inclusion in treatment and identify factors that help them stay in treatment.

Another group led by Salyers et al. (2010) studied measuring the recovery orientation of assertive community treatment. Approaches to measuring recovery orientation are needed for programs struggling with implementing recovery-oriented treatment. ACT is recognized as an evidence-based practice that engages consumers with

severe mental illness. The study compared two ACT teams with high and low recovery orientation using surveys, treatment plan ratings, diaries, and interviews. The teams differed in survey measures, treatment planning, and use of control mechanisms. The study found that a combination of observer, staff, and consumer ratings, supplemented with interviews, may be the best approach for assessing recovery orientation on ACT teams. Nine staff were involved in the analysis (Salyers et al., 2010). The study assessed the level of control consumers have over their treatment by looking at factors such as involuntary outpatient commitment, guardianship, medication management, and family involvement. Team leaders reviewed the consumer roster to determine the number of consumers with each treatment mechanism (Salyers et al., 2010).

Kortrijk et al. (2009) described treatment outcomes in patients receiving ACT. The study found that patient characteristics such as age, education level, and motivation for treatment were associated with problematic functioning over time. Older patients had higher scores on the Health of the Nation Outcome Scales, possibly due to longer duration of mental illness. Model fidelity was associated with better outcomes, suggesting that ACT teams should improve their fidelity (Kortrijk et al., 2009). The findings (2009) demonstrate the importance of fidelity to the ACT model in achieving positive outcomes. Understanding recovery in ACT team clients requires scrutinizing how closely teams adhere to the model's principles. This involves exploring the correlation between model fidelity and improvements in symptomatic and functional outcomes over time.

Substance abuse and low education levels were found to hamper treatment outcomes. Implementing substance abuse treatment programs and improving fidelity with

the ACT model are recommended (Kortrijk et al., 2009). There were 139 patients in the research. The present study has two limitations. Firstly, the design does not consider other factors that may have influenced the outcomes. Secondly, there is a small number of women in the analysis due to an overrepresentation of male patients in the ACT teams. However, the differences found in the results suggest that sample size alone does not explain the findings (Kortrijk et al., 2009).

The objective of a study by Boden et al. (2009) was to determine if the implementation of assertive community treatment programs would improve symptomatic and functional outcomes five years later. The study reports that a five-year study was conducted on patients with first-episode psychosis to assess the outcome of a modified assertive community treatment program. The study found that there was no difference in symptoms or functioning between the group receiving the treatment and the group not receiving it (Boden et al., 2009). Contrary to expectations, the group receiving the treatment had a slightly higher risk of poor outcomes in terms of positive psychotic symptoms (Boden et al., 2009). Overall, the implementation of the treatment did not lead to improvements in the long-term outcome for these patients. There were 144 patients involved in the analysis.

Morse et al.'s (2020) findings on the effectiveness of ACT and IMR in clinician-rated illness self-management indicate that the integrated model enhances recovery outcomes. This nuanced perspective stresses the necessity of considering client perspectives and active involvement in their recovery journey. Integrating IMR into ACT Teams showed promising results in improving recovery and functioning for individuals with serious mental illness, although further large-scale studies are needed. In

‘Implementing Illness Management and Recovery Within Assertive Community Treatment,’ a research team reported that the feasibility of implementing illness management and recovery within assertive community treatment teams is supported by the findings of this study (Morse et al., 2020). The study suggests that ACT may be a promising platform for IMR. A small-scale cluster randomized controlled trial was conducted to test the implementation of IMR within ACT teams. The study found no significant differences between treatment conditions in terms of psychiatric rating, recovery assessment, and community integration. However, ACT and IMR together demonstrated better outcomes in terms of clinician-rated illness self-management (Morse et al., 2020). The study also found that completion of IMR sessions predicted better outcomes.

Overall, the study suggests that ACT with IMR could be effective in improving recovery for people with serious mental illness. Larger-scale efforts are needed to test the effectiveness of IMR further in ACT teams. The analysis involved 101 individuals with schizophrenia-spectrum or bipolar disorders (Devita, 2018). There was possible bias in clinician ratings due to lack of blinding to the intervention. The study did not find the main effect of treatment on client-rated illness self-management, psychiatric symptoms, or psychosocial functioning. The medium effect size was found for QLS-A, and the small effect size was found for client-rated illness self-management, consistent with prior research (Devita, 2018). They advocate that participants in the study were able to achieve moderate to high levels of IMR exposure within 12 months. However, there were challenges in implementing IMR across participants and teams, which should be addressed in future studies.

Another research team led by Salyers (2010), reported that this study examined the integration of ACT and IMR for adults with SMI. The study found that case management and crises often took priority over IMR, especially for new peer specialists. The study also highlighted the challenges of hiring and training peer specialists. The findings showed that consumers who participated in IMR had reduced hospital use, but the study acknowledged that outcomes may be influenced by other factors (Salyers, 2010). The study emphasized the importance of allowing time for start-up and familiarization with the new practices. Four high-fidelity ACT teams were included in the research. ACT programs achieved high fidelity scores, surpassing sites in the national project (Salyers, 2010). The studies by Vidal et al. (2020) and Salyers (2013) offer insights into the sustainability of recovery facilitated by ACT. The research on IMR-defined recovery outcomes should explore how the integration of IMR contributes to long-term improvements in quality of life, social functioning, and symptomatology.

Morse (2020) reported on implementing IMR within ACT teams as well. The study found that implementing IMR within ACT teams is generally feasible and offers meaningful benefits (Morse, 2020). However, there are barriers, such as the acuity level of individuals, competing psychosocial needs, transportation issues, and competing job demands for ACT staff. The study recommends actively engaging individuals, taking a flexible approach to providing IMR, and providing intensive training for the entire ACT team to facilitate implementation (Morse, 2020). Despite the challenges, adding IMR to ACT can be beneficial for people with serious mental illness. ACT teams should learn from this study to better support recovery. Eleven ACT teams were involved in the analysis. The study had several limitations, including not conducting interviews with

individuals in Stages 3 and 4, not being able to record interviews in one state, not recording demographic data on ACT staff, and not systematically assessing IMR fidelity. The evaluation also did not explore larger organizational or systemic factors that may have influenced implementation (Morse, 2020). It is recommended to use mixed methods approaches that include qualitative components and idiographic measures to capture the positive benefits sought by individuals with serious mental illness for their recovery goals.

CHAPTER III

METHODOLOGY

This study adopts a quantitative research design, employing a survey-based approach to comprehensively assess the impact of the integrated approach of ACT and the IMR model on recovery outcomes among ACT clients. The study targets a sample size of approximately 43 clients currently engaged in ACT within the Betty Hardwick Center located in Abilene, Texas. There are approximately 22 men and 21 women included in the study.

Inclusion criteria for participants are as follows: must be living in Abilene, Texas, must not be currently incarcerated or hospitalized, and must be diagnosed with SMI, particularly those with co-occurring psychosis, who are actively participating in ACT and IMR services at the Betty Hardwick Center. Clients in ACT often have a primary diagnosis of severe mental illness, such as schizophrenia, schizoaffective disorder, or bipolar disorder with psychotic features. Dual diagnoses involving substance use disorders or other co-occurring mental health conditions, like psychosis, are also prevalent. Prospective participants will be approached by mental health professionals on the ACT Team, and informed consent will be obtained voluntarily. The client population is ethnically diverse, reflecting the broader demographics of the community. The socioeconomic status of clients receiving ACT varies. Most clients experience challenges related to lower income, housing instability, or unemployment, while others may be more economically stable. Many have faced challenges in completing formal education due to

the impact of psychosis on cognitive and social functioning. Most clients included in the study have received a high school diploma but no higher education. Clients often experience housing instability, including homelessness or unstable living conditions. Family involvement for clients may vary, with few clients having solid familial support systems and most others experiencing strained family relationships. Criteria for ACT Team services include that clients have a significant history of psychiatric hospitalizations, emergency room visits, or involvement with the criminal justice system due to the nature of their severe mental illness. A common characteristic is that clients on the ACT Team may have struggled with engagement in traditional mental health services.

Quantitative Data Collection

The IMR Consumer Outcomes Survey was used to capture relevant information on participants' perceived outcomes related to recovery, quality of life, symptom management, and empowerment. Participants will be scheduled for survey completion sessions conducted in a confidential and conducive environment. Trained mental health professionals will facilitate the survey for clients and will be available to provide clarification if needed.

Data Analysis

Relationships between variables were explored using bivariate analysis, including correlations to examine associations between participation in ACT and IMR and recovery outcomes. Multiple regression analysis was employed to assess the predictive power of variables, such as engagement in ACT and IMR, on various recovery outcomes.

Prior to participation, participants received detailed information about the study, its purpose, and potential risks and benefits. Informed consent was obtained voluntarily. Strict measures were in place to protect the confidentiality of participants. The data was anonymized, and results were reported in aggregate form. Participant autonomy was prioritized throughout the study, ensuring that individuals could withdraw from the study at any point without consequences.

The study acknowledges the limitation of a relatively small sample size (approximately 43 participants) and interpreted findings with this in mind. Due to the specific population characteristics and the single-site nature of the study, caution was exercised in generalizing findings to broader populations.

Survey sessions were conducted with participants over the period of one month. The study's findings were interpreted through a detailed quantitative analysis. A comprehensive report was generated, emphasizing the impact of the integrated ACT and IMR approach on recovery outcomes. Implications for practice, policy, and future research will be discussed at the end of this document.

IMR Outcome Survey

An outcome survey was conducted to assess recovery outcomes specifically for clients on the ACT Team engaging in IMR practices. The survey targeted various dimensions, including:

- Symptom Management: Evaluating the individual's ability to cope with and manage the symptoms of their mental illness, considering the severity and effectiveness of coping strategies learned in the IMR program.

- **Functional Improvement:** Measuring changes in daily living skills, vocational pursuits, educational pursuits, and interpersonal relationships as indicators of functional improvement resulting from IMR interventions.
- **Goal Attainment:** Assessing the progress and attainment of personal goals set by participants in the IMR program, reflecting the individual's ability to work towards and achieve desired outcomes in their recovery journey.
- **Knowledge and Skills Acquisition:** Gauging the individual's understanding of mental health, treatment options, and the acquisition of coping skills imparted through the IMR program.
- **Medication Management:** This includes questions related to medication adherence, understanding of medication management, and the perceived effectiveness of prescribed medications for individuals managing mental illnesses.
- **Community Integration:** Exploring the individual's engagement in community activities, social relationships, and overall participation in community life as emphasized in IMR as a vital aspect of recovery.
- **Empowerment and Self-Efficacy:** Incorporating measures of self-efficacy, empowerment, and the individual's sense of control over their mental health and life because of participating in the IMR program.
- **Quality of Life:** The survey includes questions about the individual's subjective well-being, life satisfaction, and perceived improvements in their overall quality of life attributed to IMR practices.

By addressing these objectives and conducting a comprehensive assessment of recovery outcomes within the context of ACT teams and IMR practices, this study seeks

to contribute valuable insights that can inform practice, policy, and further research in the field of mental health care. The goal is to enhance recovery-oriented services and support for individuals with SMIs and psychosis, promoting a holistic and evidence-based approach to their well-being.

CHAPTER IV

RESULTS

Table 1 presents information pertaining to the frequencies with which participants rated themselves. As described earlier, the COS Outcome measure uses a rating scale in which lower ratings indicate larger potential problems. On the first item, for example, the largest proportion of participants indicated they had not developed a personal goal within the last three months. The largest frequency of lowest possible ratings was for the question asking about time spent in structured roles (e.g., work, parenting, volunteering, being a student, etc.). In fact, more than 80% of these participants indicated they spent no more than five hours per week engaged in such roles. Participants indicated that alcohol and drug use was proportionally smaller of a problem than responses to some other questions. However, approximately 30% of participants rated drugs as interfering with their lives. Table 1 tells about the prevalence of reported issues among participants:

- **Structured Roles:** A staggering 60.47% of participants report minimal engagement in structured roles. This could indicate a disconnection from social roles and responsibilities, which are often integral to a sense of purpose and community integration in mental health recovery.
- **Progress toward goals:** Divergent frequencies (32.56% reporting no goals, but 11.63% achieving goals) suggest diversity in motivation or opportunity to pursue personal objectives. This disparity could reflect varying stages of recovery or different levels of support and resources available to participants.

- Symptom Distress and Impairment: Moderate frequencies for high levels of symptom distress and impairment (25.58% and 23.26%, respectively) may hint at a pervasive, albeit varying, impact of symptoms on daily functioning.
- Alcohol and Drugs: The frequencies here indicate that while a majority report low interference from alcohol and drugs, a non-trivial proportion (30% for drugs) still find it problematic, highlighting areas for targeted interventions.

Table 1

Rating Frequencies

COS Question	Rating Frequencies				
	1	2	3	4	5
Progress toward goals	32.56%	6.98%	30.23%	18.60%	11.63%
Knowledge	11.63%	16.28%	32.56%	27.91%	11.63%
Family and Friends	37.21%	16.28%	16.28%	18.60%	11.63%
Outside Contact	4.65%	32.56%	39.53%	18.60%	4.65%
Structured Roles	60.47%	20.93%	6.98%	6.98%	4.65%
Symptom Distress	25.58%	23.26%	34.88%	13.95%	2.33%
Impairment	23.26%	18.60%	41.86%	11.63%	4.65%
Relapse Planning	25.58%	30.23%	27.91%	4.65%	11.63%
Relapse of Symptoms	32.56%	39.53%	4.65%	9.30%	13.95%
Psychiatric Hospitalizations	9.30%	23.26%	11.63%	4.65%	51.16%
Coping	6.98%	25.58%	34.88%	23.26%	9.30%
Self-Help	23.26%	39.53%	20.93%	13.95%	2.33%
Medication	20.93%	9.30%	13.95%	23.26%	32.56%
Alcohol	6.98%	9.30%	18.60%	11.63%	53.49%
Drugs	11.63%	18.60%	20.93%	0.00%	48.84%

The five-scale rating system was recoded so that participants marking a 1, 2, or 3 on the scale were coded as High (lower scores indicate larger problems), and those who marked 4 or 5 were coded as Low. Table 2 presents the results of summary statistics generated statistical data analysis. As can be seen by looking at the table, mean differences between those grouped into the High factor (lower scores indicate larger problems) and those grouped into the Low factor were rather small. The largest

difference pertained to relapse prevention planning. There was an approximate difference in means of eight, with the with the high group scoring higher on the symptom's variable (higher scores mean more symptoms) The small mean differences between High and Low ratings for most questions suggest that participants' perceptions of problems are not dramatically reflected in their symptom scores. This could indicate a potential resilience or adaptation to chronic issues, or it could reflect limitations in the sensitivity of the symptom measure used. A more pronounced mean difference in relapse prevention planning shows the importance of active engagement in relapse prevention strategies. This could point towards an area where intervention could have a meaningful impact on symptomatology.

Table 2

Mean Symptom Scores by Rating of COS Questions

COS Question	Rating	Mean	SD	N
Contact with people outside of your family	High	18.00	5.82	9
Contact with people outside of your family	Low	22.15	5.82	33
Involvement of family and friends in my mental health treatment	High	22.83	5.82	12
Involvement of family and friends in my mental health treatment	Low	20.63	5.82	30
Involvement with self-help activities	High	22.57	5.82	7
Involvement with self-help activities	Low	21.00	5.82	35
Knowledge	High	23.63	5.82	16
Knowledge	Low	19.81	5.82	26
Progress toward goals	High	23.92	5.82	12
Progress toward goals	Low	20.20	5.82	30
Relapse Prevention Planning	High	28.67	5.82	6
Relapse Prevention Planning	Low	20.03	5.82	36
Time in structured roles	High	25.75	5.82	4
Time in structured roles	Low	20.79	5.82	38
Using medication effectively	High	22.13	5.82	23
Using medication effectively	Low	20.21	5.82	19

Table 3 shows that very few statistically significant differences in symptom means existed between participants who rated questions as 3 or lower (more problems) and those who rated the items as either a 4 or a 5. Only one comparison produced a probability less than .05 (5%) indicating a likelihood that a true difference may occur between those who utilize relapse prevention planning and those who do not. Although confidence intervals indicate the true effect sizes are likely to substantially vary, the estimates may also suggest that using these ACT skills can be beneficial. For example, the Cohen's *d* effect-size for the Progress toward goals question is estimated to be .60, but the confidence interval suggests that the "true" effect falls between -.03 and 1.23 95% of the time in similar studies. Time in Structured Roles and Relapse Prevention Planning produced very similar estimates. The *t*-tests assess whether observed differences in means are statistically reliable and not due to chance.

Table 3

Test for Differences in Symptom Score Means by COS Question Rating Score (Low or High)

Question	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>	CI LL	CI UL
Progress toward goals	1.97	40	0.06	0.60	-0.03	1.23
Knowledge	-0.28	40	0.78	-0.10	-0.77	0.57
Involvement of family and friends in my mental health treatment	0.22	40	0.83	0.07	-0.54	0.67
Contact with people outside of your family	0.28	40	0.78	0.09	-0.53	0.71
Time in structured roles	1.86	40	0.09	0.70	-0.13	1.52
Relapse Prevention Planning	2.08	40	0.04*	0.65	0.02	1.27
Involvement with self-help activities	-0.33	40	0.74	-0.12	-0.75	0.51
Using medication effectively	0.14	40	0.89	0.05	-0.61	0.70

**p* < .05

A discussion of each individual variable is as follows:

- Progress toward goals: 32.56% reported the most minor progress, and 11.63% reported the most. This highlights a gap in achieving personal goals. Enhancing the goal-setting process within the act framework to be more collaborative and client-centered could address this gap.
- Knowledge: a moderate peak at 32.56%, feeling fair knowledge. This data indicates the need for expanded educational efforts. Tailored, interactive educational sessions could be more effectively integrated into ACT services.
- Family and friends: 37.21% experience a significant lack of family involvement in their mental health recovery. This suggests the need for interventions focusing on social relationships, such as family therapy and social skills training, within the act model.
- Outside contact: 39.53% have positive engagement, showing effective social integration. Act's community-based approach likely contributes to this success.
- Structured Roles: 60.47% report minimal progress in structured roles. This could indicate a lack of ability in this population to function in structured roles. The ACT team could increase focus on vocational rehabilitation and partnerships with community resources to improve this.
- Symptom Distress: 34.88% find moderate effectiveness in managing symptoms. This suggests the need for more individualized treatment planning and the integration of new therapeutic options within ACT services.

- Impairment: 41.86% perceive moderate impairment. This number highlights functional challenges that could be addressed through better healthcare and mental healthcare access within the ACT framework.
- Relapse of Symptoms: 39.53% report little progress in managing relapses. Underlines the importance of strengthening act's proactive monitoring and intervention strategies.
- Self-Help: 39.53% rate low progress in self-help. This suggests enhancing the ACT approach's focus on self-empowerment and peer support.
- Medication: 32.56% of clients take their medication correctly every day, with 23.26% taking it correctly most of the time. This indicates one of the ACT model's strengths, with the potential for further improvement through continuous support and education.

There is a positive correlation between the recovery outcome metrics and the factors potentially influenced by ACT. This suggests that higher involvement in self-help activities and more effective medication use are associated with better recovery outcomes. "using medication effectively" positively correlates with most of the recovery outcome metrics, indicating its potential significance in achieving recovery outcomes as defined by the IMR model. The "total score," which might represent an overall measure of recovery outcomes, also shows positive correlations with act-influenced factors, further suggesting the importance of these factors in recovery.

These findings suggest that ACT, through mechanisms such as increased Involvement in self-help activities and effective medication use, might help individuals achieve recovery outcomes as defined by the Illness Management and Recovery model.

Gender Differences in Recovery Outcomes

Regarding “progress toward goals,” women have a higher average score (2.96) than men (2.4). On the “knowledge” variable, women score higher on average (3.48) than men (2.7). For “coping,” women’s average score (3.39) is higher than the men’s average score (2.6). Women have a significantly higher total score (47.35) than men (37.15). Regarding “involvement with self-help activities,” women’s mean score (2.61) is higher than men’s (2.0). Women also have a higher average (3.65) than men (3.05) on the “using medication effectively” variable.

These differences suggest that women may be experiencing better recovery outcomes and might be more engaged with self-help activities and effective medication use compared to male clients. This could have implications for the ACT team’s approach, indicating a potential need to tailor strategies to support male clients more effectively or to understand barriers for this group. The results of the *t*-tests, which provide *p*-values for the comparison of recovery outcomes and factors influenced by ACT between genders, show the following:

- Progress toward goals: *p*-value = 0.191, not statistically significant.
- Knowledge: *p*-value = 0.027, statistically significant.
- Coping: *p*-value = 0.015, statistically significant.
- Total Score: *p*-value = 0.000754, statistically significant.
- Using Medication Effectively: *p*-value = 0.208, not statistically significant.

Progress toward goals and effective medication use do not show statistically significant differences between genders, indicating that these areas might not be the primary focus for gender-specific interventions based on the current analysis. The near-

significant result for Involvement with self-help activities suggests a trend where women might be more involved than men. However, the difference is not statistically significant at the conventional 0.05 threshold. It may still be worth exploring ways to encourage greater participation from male clients. The differences between genders in Knowledge, Coping, and Total Score are statistically significant. This indicates that women have a significant advantage in these areas compared to men. The team might consider this when planning interventions to enhance knowledge and coping strategies, particularly for men, or to investigate underlying reasons for these disparities. The Total Score, which might represent an overall measure of recovery outcomes, shows a statistically significant difference between genders. This suggests that the recovery process, as captured by the dataset, significantly favors women. The ACT team should consider this, potentially developing gender-specific supports or interventions.

Rating Frequencies

The rating frequencies indicate how participants evaluated different aspects of their experiences and conditions on a scale of 1 to 5, where lower ratings (1–3) signify higher perceived problems, and higher ratings (4–5) indicate fewer problems. A significant proportion of participants (60.47%) reported spending no more than 2 hours per week in structured roles (e.g., work, parenting), highlighting a potential concern regarding engagement in structured activities. Alcohol and drug use were considered less problematic compared to other areas, with 53.49% for alcohol and 48.84% for drugs rating them as not interfering with functioning at all within the last three months (rating 5). The progress toward goals and knowledge about managing their condition shows a

diverse response, indicating varied levels of awareness and motivation among participants.

There is a marked difference in the mean scores for relapse prevention planning, where the high group scored significantly higher (28.67) than the low group (20.03). This suggests that active engagement in relapse prevention planning increases symptom scores, indicating greater awareness or reporting of symptoms. The mean scores for time in structured roles and progress toward goals also show differences based on ratings, further emphasizing the impact of engagement in structured activities and goal setting on perceived well-being.

The statistical tests for differences in symptom scores between high and low ratings provide insights into the significance of these differences across various domains. The only statistically significant difference was observed in relapse prevention planning ($p = 0.04$), with a Cohen's d effect size of 0.65, indicating a moderate effect. This suggests that engagement in relapse prevention planning might impact symptom awareness or reporting. While other domains did not show statistically significant differences, the effect sizes and confidence intervals (e.g., for Progress toward goals with a Cohen's d of 0.60) suggest potential areas where intervention or support might yield benefits.

CHAPTER V

DISCUSSION

Data Interpretation

The data suggest that for most of the items on the IMR Recovery Outcomes survey, there is no significant difference in symptom scores between participants who rated themselves as having more problems (High) versus those with fewer problems (Low). However, the exception is with Relapse Prevention Planning, where participants who report being more proactive in planning to prevent relapse show significantly better symptom management. This could suggest that relapse prevention planning is a critical component of recovery that can lead to better mental health outcomes.

The practical implications for the ACT Team might be to prioritize and put more resources into relapse prevention planning, as it has a demonstrated correlation with symptom improvement. It is also important to note that the moderate effect sizes observed in some items, like PTG and Structured Roles, could be meaningful in clinical practice even if they are not statistically significant, especially considering individual differences and the clinical context of the data.

The “Outside Contact” metric revealed a significant lack of client engagement with broader community resources. This negative engagement suggests that strengthening connections with external support systems could further empower clients, aligning with the goals of IMR by fostering increased community engagement. A considerable percentage of clients reported minimal progress in structured roles, indicating a potential

challenge in functioning within structured environments. This demonstrates the need for increased focus on vocational rehabilitation and partnerships with community resources within act teams to address this gap effectively.

The study highlighted the importance of addressing substance use management within the ACT model. While the model excels in many areas defined by IMR, the findings show the need for targeted enhancements in substance use management to optimize recovery outcomes. The analysis also revealed insights into clients' perceptions regarding medication management, with a significant portion indicating proper adherence to medication regimes. This is one of the strengths of the ACT model, but there is an opportunity for continuous support and education to improve medication adherence among clients further.

The data identified correlations between recovery outcome metrics, intervention in self-help activities, and effective medication use. These correlations suggest that higher involvement in such activities is associated with better recovery outcomes, indicating the potential significance of these factors in achieving IMR-defined recovery outcomes. However, it is essential to acknowledge that correlation does not imply causation. While the findings suggest that act contributes to achieving recovery outcomes as defined by the IMR model, further research, possibly involving more longitudinal data analysis, is needed to establish its effectiveness. The variability in client experiences, especially concerning structure, socialization, and substance use, highlights areas where the act team could be strengthened to serve its clients better. By addressing these areas and leveraging the strengths of the act model, practitioners can better facilitate the journey towards recovery and improved quality of life for their clients.

Factors Affecting Data and Interpretation

Clients participating in ACT programs bring diverse backgrounds, including varying levels of illness severity and distinct personal circumstances. These differences are significant, as they can dramatically influence clients' perceptions of their progress and satisfaction with the treatment. Such variability creates a challenge in generalizing outcomes across a heterogeneous client population.

The length of time clients engage with ACT programs and the quality of their relationships with therapists are pivotal in recovery outcomes. A longer duration of participation often correlates with more substantial progress, while strong therapeutic relationships can enhance treatment adherence and satisfaction. These elements highlight the importance of fostering positive, long-lasting client-therapist connections within act frameworks. The study acknowledges the time each client received act team services should have been included in the surveyed data.

Different implementation of ACT across various settings can lead to divergent client experiences and outcomes. Factors such as program fidelity, staff training, and resource availability contribute to this variability, impacting the consistency and effectiveness of the treatment provided. This demonstrates the need for standardized best practices and quality assurance measures in ACT program delivery. External factors such as housing stability, financial resources, and access to comprehensive healthcare services significantly influence recovery trajectories. These social determinants of health can either facilitate or hinder Progress, making it imperative to address these underlying issues as part of a holistic treatment strategy.

Wide confidence intervals in data analysis suggest high uncertainty regarding the exact effect size, reflecting the potential variability in outcomes across the client population. While this uncertainty does not dismiss the presence of a natural effect, it highlights the complexity of accurately measuring the impact of ACT programs. Moreover, the distinction between clinical and statistical significance becomes crucial, as even non-significant p-values can accompany clinically meaningful effect sizes. For instance, despite a wide confidence interval, a moderate effect size may still indicate a substantial difference in symptom experience that is relevant in a clinical context.

Efficacy of ACT Teams

The efficacy of ACT teams can be assessed by analyzing the recovery outcomes reported in the survey. Specifically, statistical analyses focusing on psychiatric hospitalizations, symptom distress, and Progress toward goals can offer insights into the effectiveness of ACT services.

A key metric for ACT efficacy is reducing psychiatric hospitalizations. With 51.16% of respondents reporting no recent hospitalizations, statistical analyses could involve comparing these rates to baseline data or data from non-ACT services to evaluate the impact of ACT interventions. A lower hospitalization rate indicates ACT efficacy, suggesting adequate community-based support and crisis intervention.

Of the studied population, 32.56% of clients report the most minor Progress toward goals and a similar distribution in symptom distress management. This highlights areas for potential improvement for program implementation.

The data indicate that clients have difficulty setting and making Progress toward goals independently, which suggests a fundamental area where the ACT team can

improve. ACT teams, by design, offer a more intensive and personalized level of care that can support individuals in identifying their recovery goals, developing realistic steps toward them, and staying motivated throughout the process.

The fact that most clients report a high amount of symptom distress despite high medication adherence points to the complexity of recovery in SMI and psychosis. This complexity shows the importance of the ACT team, not just in managing medications but in providing comprehensive support that addresses the psychological, social, and functional challenges clients face. It highlights the need for the ACT team to employ a holistic approach that goes beyond medication management to include psychotherapy, crisis intervention, family support, and social rehabilitation.

The observation that most clients spend very little time interacting with the community or engaging in structured roles emphasizes the potential of the ACT team to facilitate community integration and participation. The team can play a crucial role in helping clients build social skills, find meaningful activities or employment, and establish supportive relationships outside the mental health system. This aligns with the broader goals of recovery-oriented care, which prioritize empowerment, self-determination, and integration into community life.

While the data point to significant challenges faced by individuals with SMI and psychosis in terms of goal setting, symptom management, and community integration, it also demonstrates the critical role of ACT teams in daily functioning. This support is essential for managing symptoms and medication and enhancing clients' quality of life through goal achievement, community participation, and the fulfillment of structured roles.

Interpretation of Results

Recovery, influenced by various elements, demands tailored interventions to facilitate progress effectively. Individual factors such as illness severity, personal resilience, and motivation significantly shape recovery outcomes. The survey data highlights the importance of individual engagement and empowerment, particularly in knowledge acquisition and self-help initiatives. This emphasizes the need to foster a sense of agency within clients to optimize recovery efforts.

Programmatic factors, including team structure and operations, most likely profoundly impact recovery trajectories. Elements such as staff-to-client ratios and service breadth play crucial roles. ACT's high efficacy in medication management and substance use reduction demonstrates its strength in integrated care, necessitating continued investment in these areas. Environmental factors, such as social support and community resources, significantly influence recovery. Challenges in family and friend relationships emphasize the importance of ACT teams' broader community engagement to foster supportive ecosystems conducive to recovery.

The study's findings provide actionable insights into potential areas for quality improvement within ACT practices. Enhanced goal setting and monitoring processes are necessary to ensure collaborative and realistic goals. Additionally, educational sessions and coping strategy workshops can address knowledge and coping ability gaps, optimizing recovery efforts. Actively involving family and community in the recovery process through initiatives like family therapy and community awareness programs can mitigate challenges in social relationships, enhancing overall support networks.

Enhancing the ACT Program through Better IMR Curriculum Integration

The incorporation of IMR principles into the ACT team framework signifies a critical advancement in the care of individuals with severe mental illnesses. Embedding more educational components of the IMR curriculum into client interactions could significantly improve the ACT program. This evolution from focusing solely on basic needs to a comprehensive educational strategy on illness management is vital for providing clients with the knowledge and tools for their recovery journey.

To enhance its effectiveness, there is a need to extend support beyond the ACT team, urging clients to forge connections with broader community resources. This approach minimizes reliance on the ACT team and fosters independence and community integration, which are crucial for recovery. Diverse experiences of symptom distress, functional impairment, and substance use among clients underscore the importance of a personalized, adaptable care model. Specifically, integrating substance use treatment within the ACT framework is essential for a holistic approach to the recovery of clients with SMI and psychosis.

Recommendations Leveraging the IMR Workbook

To achieve IMR recovery outcomes, the Act team should integrate the educational elements of the IMR workbook into the act program as much as possible. The focus should shift towards enhancing specific skills emphasized within the IMR curriculum, such as relapse prevention, medication management, and coping with symptoms. These skills are critical for empowering clients to manage their illnesses effectively and should be a primary focus of educational outreach and support. Peer-led initiatives and support should be grounded in the principles and practices of the IMR workbook. This ensures

that peer interactions offer empathy and understanding and reinforce the recovery process's educational components.

Encouraging a collaborative approach to decision-making, rooted in the IMR framework, ensures that treatment and recovery strategies align with clinical best practices and resonate with clients' recovery goals. This involves open dialogue and shared decision-making, guided by the structured insights provided by the IMR workbook.

Implications for Clinical Practice and Policy

Enhanced community engagement is crucial in improving the ACT model's effectiveness. Strengthening efforts to connect clients with community resources can foster a broader support network and increase engagement with outside contacts. By facilitating stronger community ties, individuals undergoing ACT treatment can experience a more comprehensive support system. Targeted interventions are another critical implication drawn from the study's findings. Case managers can strategically concentrate on IMR interventions by identifying areas with the highest frequencies of reported problems and the most considerable mean differences. For instance, increasing structured activities or focusing on goal-setting processes in these identified areas can significantly enhance treatment outcomes and client satisfaction.

Program development stands out as a significant policy implication derived from the study. The data suggests the potential value of incorporating relapse prevention planning into treatment programs. Developing structured and evidence-based programs around this aspect could yield substantial benefits for the population undergoing ACT treatment, reducing the risk of relapse, and promoting long-term stability.

While the quantitative analysis of the IMR consumer outcomes survey provides valuable insights, it is essential to supplement it with qualitative data to gain a deeper understanding of participants' lived experiences. Further research could explore factors contributing to higher levels of functioning despite reported problems, paving the way for more effective, resilience-oriented clinical interventions. By incorporating these recommendations into clinical practice and policy frameworks, the act model can further enhance its effectiveness in promoting individualized mental health recovery outcomes.

Improvements in ACT Team Practices

While ACT is widely recognized as an effective model for individuals with SMI and psychosis, there are complexities to consider when applying this model in conjunction with IMR, particularly for individuals with extreme SMI and psychosis. It is crucial to acknowledge that not all clients served by ACT teams are capable of being personally assertive in their care due to the severity of their mental illness and the associated functional impairments. This poses challenges in fully implementing the principles of IMR, which emphasize personal empowerment, goal-setting, and active involvement in treatment decisions. Individuals with extreme SMI and psychosis often face significant barriers to assertiveness in their care due to symptoms such as cognitive deficits, disorganized thinking, and lack of insight into their illness. These individuals may struggle to articulate their needs, set meaningful goals, or actively engage in treatment. In such cases, the traditional approach of expecting clients to assert their goals and improvements may not be feasible or practical.

The primary goal of the ACT team is to facilitate individuals' integration into the community by providing tailored support. This includes assistance with daily living

activities, social skills development, and access to community resources and opportunities. However, improvement is needed to encourage greater community engagement with clients. By incorporating more IMR curriculum information and worksheets, the ACT team can empower clients with the knowledge and skills necessary to participate actively in community life.

With 51.16% of clients reporting no recent hospitalizations, the ACT team appears to be effective in preventing crises and reducing the need for emergency interventions. Team members are available 24/7 to provide immediate support during times of distress, showcasing the proactive nature of the ACT team.

Ensuring medication adherence is a crucial component of the ACT team, and data indicates that a high percentage of clients regularly take their medication. The intensive nature of the ACT model effectively addresses medication adherence by collaborating with individuals to address barriers, monitor effectiveness, and support informed decision-making. Nevertheless, incorporating more IMR curriculum information and worksheets can enhance clients' understanding of the importance of medication adherence and empower them to take an active role in managing their treatment.

The ACT team also promotes rehabilitation and recovery by fostering empowerment, self-determination, and goal setting. Team members assist individuals in identifying strengths, values, and goals, supporting them in pursuing meaningful activities and roles in the community. However, integrating IMR curriculum information and worksheets can strengthen this aspect by providing structured tools for goal setting and tracking progress toward recovery. The ACT team offers long-term, ongoing support,

recognizing that recovery is gradual. The continuity of care helps individuals maintain stability, prevent relapses, and improve their quality of life.

CHAPTER VI

LIMITATIONS AND FUTURE RESEARCH

This study acknowledges several limitations that warrant discussion. One significant limitation of this study involves the extreme nature of many clients' psychosis, which inherently challenges their ability to set and work towards self-asserted goals. The severity and variability of psychotic symptoms can significantly impede individuals' capacity for self-directed recovery, making it difficult to gauge the effectiveness of ACT and IMR interventions purely from self-reported measures. This variability introduces a degree of uncertainty in evaluating the true impact of these interventions on recovery outcomes. The reliance on self-reported data from a population struggling with SMI and psychosis might limit the scope and reliability of the findings. The cognitive and emotional impairments often associated with these conditions can affect participants' ability to accurately recall and report experiences, potentially biasing the data collected. The study's design may not fully capture the complexity of the collaborative process between clients and ACT case managers. The importance of this relationship is paramount, as clients often rely heavily on their case managers to navigate their recovery process. The extent to which this collaboration influences recovery outcomes may not be sufficiently highlighted, underestimating its critical role in the effectiveness of ACT and IMR practices.

Future studies should consider incorporating more objective measures of recovery alongside self-reported outcomes. Utilizing a mixed-methods approach may also provide deeper insights into the efficacy of ACT and IMR interventions. Conducting longitudinal research could address some of the limitations related to the variability of psychosis and its impact on self-reported goals and improvement. Tracking recovery outcomes over extended periods would allow for a more nuanced understanding of how ACT and IMR practices influence the recovery trajectory for individuals with SMI and psychosis. Future research should explore the dynamics of the client-case manager relationship within ACT teams.

Studies focusing on effective collaboration mechanisms, including communication strategies, shared decision-making, and empowerment practices, could yield important insights into optimizing recovery outcomes. Investigating the role of case managers in facilitating or hindering recovery provides valuable guidelines for training and practice. By addressing these limitations and pursuing the suggested future research directions, ACT Teams continue to refine and enhance their effectiveness, ultimately improving recovery outcomes for individuals with SMI and psychosis. Collaboration between researchers, practitioners, and clients across a diverse scale will be essential in advancing this body of knowledge and practice.

REFERENCES

- American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders: DSM-5-TR* (5th ed.). American Psychiatric Publishing.
- Andresen, R., Caputi, P., & Oades, L. G. (2010). Do clinical outcome measures assess consumer-defined recovery? *Psychiatry Research*, 177(3), 309–317.
<https://doi.org/10.1016/j.psychres.2010.02.013>
- Beentjes, T. A. A., Teerenstra, S., Vermeulen, H., Goossens, P. J. J., der Sanden, M. W. G. N., & van Gaal, B. G. I. (2021). Identifying the minimal important difference in patient-reported outcome measures in the field of people with severe mental illness: A pre–post-analysis of the Illness Management and Recovery Programme. *Quality of Life Research*, 30(6), 1723–1733. <https://doi.org/10.1007/s11136-021-02779-4>
- Boden, R., Sundström, J., Lindström, E., Wieselgren, I.-M., & Lindström, L. (2009). Five-year outcome of first-episode psychosis before and after the implementation of a modified assertive community treatment programme. *Social Psychiatry and Psychiatric Epidemiology*, 45(6), 665–674. <https://doi.org/10.1007/s00127-009-0108-3>
- Bond, G. R., & Drake, R. E. (2015). The critical ingredients of assertive community treatment. *World Psychiatry*, 14(2), 240–242. <https://doi.org/10.1002/wps.20234>
- Clarke, S., Oades, L. G., & Crowe, T. P. (2012). Recovery in mental health: A movement towards well-being and meaning in contrast to an avoidance of symptoms.

Psychiatric Rehabilitation Journal, 35(4), 297–304.

<https://doi.org/10.2975/35.4.2012.297.304>

Coldwell, C. M., & Bender, W. S. (2007). The effectiveness of assertive community treatment for homeless populations with severe mental illness: A meta-analysis. *American Journal of Psychiatry*, 164(3), 393–399.

<https://doi.org/10.1176/ajp.2007.164.3.393>

Couser, G. P., Taylor-Desir, M., Lewis, S., & Griesbach, T. J. (2021). Further adaptations and reflections by an assertive community treatment team to serve clients with severe mental illness during COVID-19. *Community Mental Health Journal*, 57, 1217-1226. <https://doi.org/10.1007/s10597-021-00860-3>

Dalum, H. S., Waldemar, A. K., Korsbek, L., Hjorthøj, C., Mikkelsen, J. H., Thomsen, K., Kistrup, K., Olander, M., Lindschou, J., Nordentoft, M., & Eplov, L. F. (2018). Illness management and recovery: Clinical outcomes of a randomized clinical trial in community mental health centers. *PLOS ONE*, 13(4), 1-15.

<https://doi.org/10.1371/journal.pone.0194027>

Davidson, L., Lawless, M. S., & Leary, F. (2005). Concepts of recovery: Competing or complementary? *Current Opinion in Psychiatry*, 18(6), 664–667.

<https://doi.org/10.1097/01.yco.0000184418.29082.0e>

Doughty, C., & Tse, S. (2010). Can consumer-led mental health services be equally effective? An integrative review of CLMH Services in high-income countries. *Community Mental Health Journal*, 47(3), 252–266.

<https://doi.org/10.1007/s10597-010-9321-5>

- Drake, R., & Deegan, P. (2008). Are Assertive Community Treatment and recovery compatible? commentary on “ACT and Recovery: integrating evidence-based practice and recovery orientation on Assertive Community Treatment teams”. *Community mental health journal*. 44. 75-7. <https://doi.org/10.1007/s10597-007-9120-9>.
- Goh, Y. S. S., Ow Yong, J. Q. Y., & Li, A. Z. (2023). Effectiveness of Illness Management and Recovery program on people with severe mental illnesses: A systematic review and meta-analysis. *Frontiers in Psychiatry*, 14. <https://doi.org/10.3389/fpsyt.2023.1162288>
- Kidd, S. A., George, L., O’Connell, M., Sylvestre, J., Kirkpatrick, H., Browne, G., & Thabane, L. (2009). Fidelity and recovery-orientation in Assertive Community Treatment. *Community Mental Health Journal*, 46(4), 342–350. <https://doi.org/10.1007/s10597-009-9275-7>
- Kortrijk, H. E., Mulder, C. L., Roosenschoon, B. J., & Wiersma, D. (2009). Treatment outcome in patients receiving Assertive Community Treatment. *Community Mental Health Journal*, 46(4), 330–336. <https://doi.org/10.1007/s10597-009-9257-9>
- Monroe-DeVita, M., Morse, G., Mueser, K. T., McHugo, G. J., Xie, H., Hallgren, K. A., Peterson, R., Miller, J., Akiba, C., York, M., Gingerich, S., & Stiles, B. (2018). Implementing Illness Management and Recovery within Assertive Community Treatment: a pilot trial of feasibility and effectiveness. *Psychiatric Services*, 69(5), 562–571. <https://doi.org/10.1176/appi.ps.201700124>

- Morse, G., Monroe-DeVita, M., York, M. M., Peterson, R., Miller, J., Hughes, M., Carpenter-Song, E., Akiba, C., & McHugo, G. J. (2020). Implementing illness management and recovery within assertive community treatment teams: A qualitative study. *Psychiatric Rehabilitation Journal*, 43(2), 121–131.
<https://doi.org/10.1037/prj0000387>
- Mueser, K. T., Meyer, P. S., Penn, D. L., Clancy, R., Clancy, D. M., & Salyers, M. P. (2006). The Illness Management and Recovery program: rationale, development, and preliminary findings. *Schizophrenia bulletin*, 32 Suppl 1(Suppl 1), S32–S43.
<https://doi.org/10.1093/schbul/sbl022>
- Onken, S. (2002). Mental health recovery: What helps and what hinders? PsycEXTRA Dataset. <https://doi.org/10.1037/e545932012-001>
- Pettersen, H., Ruud, T., Ravndal, E., Havnes, I., & Landheim, A. (2014). Engagement in assertive community treatment as experienced by recovering clients with severe mental illness and concurrent substance use. *International Journal of Mental Health Systems*, 8(1). <https://doi.org/10.1186/1752-4458-8-40>
- Priory Group. (2023). *What is mental health recovery?*
<https://www.priorygroup.com/mental-health/what-is-mental-health-recovery#:~:text=From%20the%20perspective%20of%20the,a%20positive%20sense%20of%20self>.
- Salyers, M. P., Godfrey, J. L., Mueser, K. T., & Labriola, S. (2007). Measuring illness management outcomes: a psychometric study of clinician and consumer rating scales for illness self management and recovery. *Community Mental Health Journal*, 43(5), 459–480. <https://doi.org/10.1007/s10597-007-9087-6>

- Salyers, M. P., McGuire, A. B., Rollins, A. L., Bond, G. R., Mueser, K. T., & Macy, V. R. (2010). Integrating Assertive Community Treatment and Illness Management and Recovery for consumers with severe mental illness. *Community Mental Health Journal*, 46(4), 319–329. <https://doi.org/10.1007/s10597-009-9284-6>
- Scheyett, A., DeLuca, J., & Morgan, C. (2013). Recovery in severe mental illnesses: A literature review of recovery measures. *Social Work Research*, 37(3), 286–303. <https://doi.org/10.1093/swr/svt018>
- Substance Abuse and Mental Health Services Administration. (2008). Assertive community treatment: Building your program. DHHS Pub. No. SMA-08-4344. <https://store.samhsa.gov/sites/default/files/sma08-4344-buildingyourprogram.pdf>
- Tickle, A., Brown, D., & Hayward, M. (2012). Can we risk recovery? A grounded theory of clinical psychologists' perceptions of risk and recovery-oriented mental health services. *Psychology and Psychotherapy: Theory, Research, and Practice*, 87(1), 96–110. <https://doi.org/10.1111/j.2044-8341.2012.02079.x>
- Vidal, S., Perroud, N., Correa, L., & Huguelet, P. (2020). Assertive community programs for patients with severe mental disorders: are benefits sustained after discharge? *Community Mental Health Journal*, 56(3), 559–567. <https://doi.org/10.1007/s10597-019-00513-6>

APPENDIX A

Institutional Review Board Approval

The Institutional Review Board at Abilene Christian University states that Ella Crimmings' project titled "Evaluating IMR Defined Recovery Outcomes in Clients Receiving ACT Team Services" which is IRB #2023-231, is exempt under Federal Policy for the Protection of Human Subjects. This approval is dated January 16, 2024. Please contact the ACU Office of Research and Sponsored Programs at orsp@acu.edu with any questions.

APPENDIX B

Consumer Outcome Survey: Illness Management and Recovery

1. Progress toward goals: In the past 3 months, you have come up with ...

- ☐ No personal goals
- ☐ A personal goal, but have not done anything to achieve the goal
- ☐ A personal goal and made it a little way toward achieving it
- ☐ A personal goal and have gotten pretty far in achieving the goal
- ☐ A personal goal and has achieved it

2. Knowledge: How much do you feel like you know about symptoms, treatment, coping strategies (coping methods), and medication?

- ☐ Not very much
- ☐ A little
- ☐ Some
- ☐ Quite a bit
- ☐ A great deal

3. Involvement of family and friends in my mental health treatment: How much are family members, friends, boyfriends or girlfriends, and other people who are important to you (outside the mental health agency) involved in your treatment?

- ☐ Not at all
- ☐ Only when there is a serious problem
- ☐ Sometimes, such as when things are starting to go badly
- ☐ Much of the time
- ☐ A lot of the time and they really help with the consumer's mental health

4. Contact with people outside of your family: In a normal week, how many times do you talk to someone outside of your family (a friend, co-worker, classmate, roommate, etc.)?

- ☐ 0 times a week
- ☐ 1 to 2 times a week
- ☐ 3 to 4 times a week
- ☐ 5 to 7 times a week
- ☐ 8 or more times a week

5. Time in structured roles: How much time do you spend working, volunteering, being a student, being a parent, taking care of someone else or someone else's house or apartment? That is, how much time do you spend doing activities that are expected of you for or with another person? (This would not include self-care or personal home maintenance.)

- ☐ 2 hours or less a week

- ☐ 3 to 5 hours a week
- ☐ 6 to 15 hours a week
- ☐ 16 to 30 hours a week
- ☐ More than 30 hours a week

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6. Symptom distress: How much do symptoms bother you?

- ☐ Symptoms really bother me a lot
- ☐ Symptoms bother me quite a bit
- ☐ Symptoms bother me somewhat
- ☐ Symptoms bother me very little
- ☐ Symptoms don't bother me at all

7. Impairment of functioning: How much do symptoms get in the way of your doing things that you would like to do or need to do?

- ☐ Symptoms really get in my way a lot
- ☐ Symptoms get in my way quite a bit
- ☐ Symptoms get in my way somewhat
- ☐ Symptoms get in my way very little
- ☐ Symptoms don't get in my way at all

8. Relapse Prevention Planning: Which of the following would best describe what you know and have done in order to not have a relapse?

- ☐ Don't know how to prevent relapses
- ☐ Know a little, but haven't made a relapse prevention plan
- ☐ Know one or two things to do, but don't have a written plan
- ☐ Know several things to do, but don't have a written plan
- ☐ Have a written plan and have shared it with others

9. Relapse of symptoms: When is the last time you had a relapse of symptoms (that is, when symptoms have gotten much worse)?

- ☐ Within the last month
- ☐ In the past 2 to 3 months
- ☐ In the past 4 to 6 months
- ☐ In the past 7 to 12 months
- ☐ Hasn't had a relapse in the past year

10. Psychiatric hospitalizations: When is the last time you have been hospitalized for mental health or substance abuse reasons?

- ☐ Within the last month
- ☐ In the past 2 to 3 months
- ☐ In the past 4 to 6 months
- ☐ In the past 7 to 12 months
- ☐ No hospitalization in the past year

11. Coping: How well do you feel that you are coping with your mental or emotional illness from day to day?

- ☐ Not well at all

- ☐ Not very well
- ☐ All right
- ☐ Well
- ☐ Very well

12. Involvement with self-help activities: How involved are you in consumer run services, peer support groups, Alcoholics Anonymous, drop-in centers, WRAP (Wellness Recovery Action Plan), or other similar self-help programs?

- ☐ I don't know about any self-help activities.
- ☐ I know about some self-help activities, but I'm not interested.
- ☐ I'm interested in self-help activities, but I have not participated in the past year.
- ☐ I participate in self-help activities occasionally.
- ☐ I participate in self-help activities regularly.

13. Using medication effectively: How often do you take your medication as prescribed?

- ☐ Never
- ☐ Occasionally
- ☐ About half the time
- ☐ Most of the time
- ☐ Every day
- ☐ Check here if no psychiatric medications have been prescribed for you.

14. Functioning affected by alcohol use: Drinking can interfere with functioning when it contributes to conflict in relationships; to money, housing, and legal concerns; to difficulty showing up at appointments or paying attention during them; or to increased symptoms. Over the past 3 months, how much did drinking get in the way of your functioning?

- ☐ Alcohol use really gets in my way a lot.
- ☐ Alcohol use gets in my way quite a bit.
- ☐ Alcohol use gets in my way somewhat.
- ☐ Alcohol use gets in my way very little.
- ☐ Alcohol use is not a factor in my functioning.

15. Functioning affected by drug use. Using street drugs and misusing prescription or over-the-counter medication can interfere with functioning when it contributes to conflict in relationships; to money, housing, and legal concerns; to difficulty showing up at appointments or paying attention during them; or to increased symptoms. Over the past 3 months, how much did drug use get in the way of your functioning?

- ☐ Drug use really gets in my way a lot.
- ☐ Drug use gets in my way quite a bit.
- ☐ Drug use gets in my way somewhat.
- ☐ Drug use gets in my way very little.
- ☐ Drug use is not a factor in my functioning.