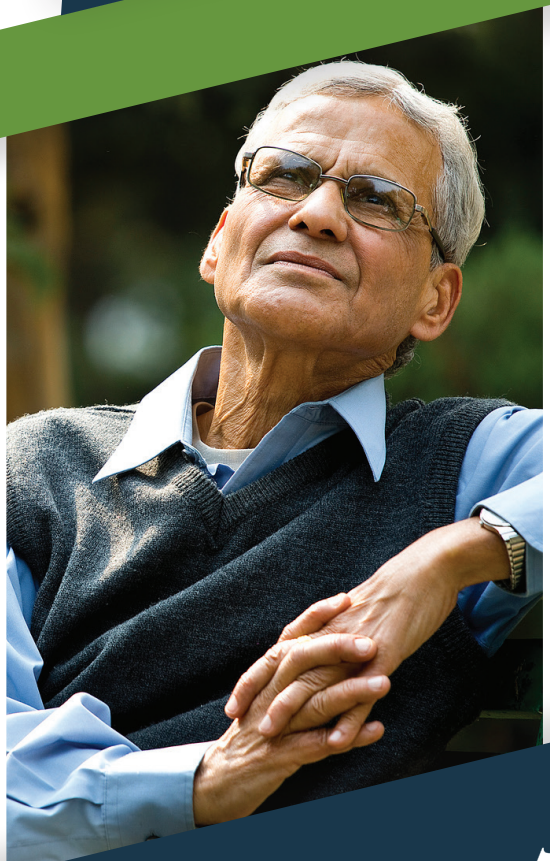
EVIDENCE-BASED RESOURCE GUIDE SERIES

Psychosocial Interventions for Older Adults With Serious Mental Illness



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Substance Abuse and Mental Health Services Administration

Psychosocial Interventions for Older Adults With Serious Mental Illness

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Psychosocial Interventions for Older Adults With Serious Mental Illness

Abstract

The older adult population in the United States is growing rapidly. Adults with serious mental illness over age 50 have high rates of medical comorbid conditions; significantly reduced life expectancy; and are more likely to be admitted to nursing homes and other long-term care facilities. As the older adult population increases, the need for behavioral health services and systems to serve the aging population will also increase.

The guide presents psychosocial interventions for older adults experiencing serious mental illness, including: Assertive Community Treatment, Cognitive Behavioral Social Skills Training, Functional Adaptation Skills Training, *Programa de Entrenamiento para el Desarrollo de Aptitudes para Latinos* (Functional Adaptation Skills Training Program for Latinos), Integrated Illness Management and Recovery, and Helping Older People Experience Success.

The guide provides considerations and strategies for interdisciplinary teams, peer specialists, clinicians, registered nurses, behavioral health organizations, and policy makers in understanding, selecting, and implementing evidence-based interventions that support adults with serious mental illness.

FOREWORD

Evidence-Based Resource Guide Series Overview

The Substance Abuse and Mental Health Services Administration (SAMHSA), and specifically, its National Mental Health and Substance Use Policy Laboratory (Policy Lab), is pleased to fulfill the charge of the 21st Century Cures Act to disseminate information on evidence-based practices and service delivery models to prevent substance misuse and help people with substance use disorders (SUDs), serious mental illness (SMI), and serious emotional disturbances (SEDs) get the treatment and support they need.

Treatment and recovery for SUD, SMI, and SED can vary based on several factors, including geography, socioeconomics, culture, gender, race, ethnicity, and age. This can complicate evaluating the effectiveness of services, treatments, and supports. Despite these complexities, however, there is substantial evidence to inform the types of resources that can help reduce substance use, lessen symptoms of mental illness, and improve quality of life.

The Evidence-Based Resource Guide Series is a comprehensive set of modules with resources to improve health outcomes for people at risk for, experiencing, or recovering from mental and/or substance use disorders. It is designed for practitioners, administrators, community leaders, health profession educators, and others considering an intervention for their organization or community.

A priority topic for SAMHSA is ensuring the availability of effective interventions for older adults with SMI. This guide reviews the related literature and science, examines emerging and best practices, identifies gaps in knowledge, and discusses challenges and strategies for implementation.

Expert panels of federal, state, and non-governmental participants provided input for each guide in this series. The panels included accomplished scientists, researchers, service providers, health profession educators, community administrators, federal and state policy makers, and people with lived experience. Members provided input based on their knowledge of healthcare systems, implementation strategies, evidence-based practices, provision of services, and policies that foster change.

Research shows that implementing new programs and practices requires a comprehensive, multi-pronged approach. This guide is one piece of an overall approach to implement and sustain change. Readers are encouraged to review the SAMHSA website for additional tools and technical assistance opportunities.

Content of the Guide

This guide contains a foreword and five chapters, as detailed below. The chapters are designed to be stand alone; they do not need to be read in order. Each chapter is brief and intended to be accessible to healthcare providers, healthcare system administrators, community members, policy makers, and others working to meet the needs of older adults experiencing serious mental illness (SMI).

The goals of this guide are to: (1) review the literature on practices, programs, and policies that improve care, increase treatment engagement and retention, and provide coordinated, client-centered, recovery-oriented services and supports for older adults experiencing SMI; (2) distill the research into recommendations for practice and education; and (3) provide examples of how practitioners can use these practices in their programs. The programs included in this guide focus on adults aged 50 and older with SMI.

FW	**Evidence-Based Resource Guide Series Overview** Introduction to the series.
1	**Issue Brief** Overview of current approaches and challenges to supporting care coordination and recovery among older adults with SMI.
2	**What Research Tells Us** Current evidence on effectiveness of the following practices: Assertive Community Treatment; Cognitive Behavioral Social Skills Training; skills training, including Functional Adaptation Skills Training and *Programa de Entrenamiento para el Desarrollo de Aptitudes para Latinos*; Integrated Illness Management and Recovery; and Helping Older People Experience Success.
3	**Guidance for Selecting and Implementing Evidence-Based Programs** Practical information to consider when selecting and implementing programs and practices to support older adults experiencing SMI.
4	**Examples of Programs for Older Adults Experiencing SMI** Case studies of programs currently implementing one of the evidence-based programs highlighted in this guide.
5	**Resources for Evaluation and Quality Improvement** Guidance and resources for implementing programs and practices, monitoring outcomes, and improving quality.

FOCUS OF THE GUIDE

Mental and emotional wellness are essential to healthy aging. The older adult population in the United States is growing rapidly, with the numbers of 65+ and 85+ expected to increase by almost 50% and over 100%, respectively, in the next 20 years *(Source: Urban Institute)*.

With these increases, the need for behavioral health services and systems will also increase. Mental and substance use disorders must be diagnosed and addressed to improve quality of life and increase longevity.

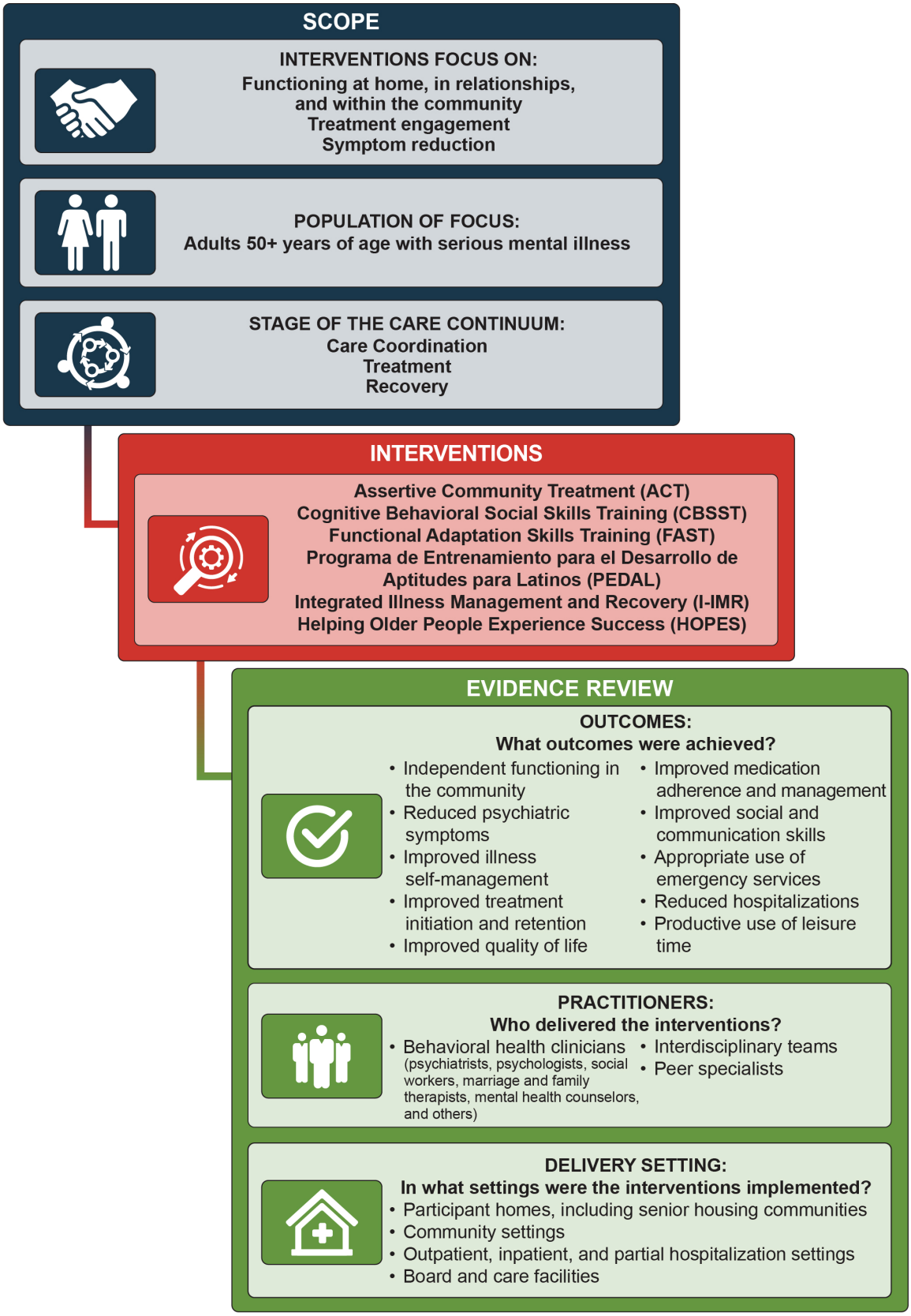
This guide presents psychosocial interventions for older adults experiencing SMI. Beyond the interventions described, efforts are needed to address existing systemic barriers to effective mental health promotion for and care of older adults.

These barriers can be reduced through:

- Integrated and coordinated care across providers and systems
- Improved education and training for providers on the special needs of older adults with SMI
- Increased availability of health promotion activities to prevent and treat comorbid health conditions

The framework below provides an overview of this guide. The review of treatment programs in Chapter 2 of the guide includes specific outcomes, practitioner types, and delivery settings for the programs.

GUIDE FRAMEWORK



CHAPTER 1

Issue Brief

The older adult population in the United States is growing rapidly, driven by both longer life spans and an aging baby boom generation (people born 1946-1965). By 2030, approximately 20 percent of the U.S. population—about 72 million people—will be aged 65 or older.[1] As this population increases, the need for behavioral health services and systems will also increase.[2, 3] Positive mental health outcomes are essential to healthy aging; mental disorders must be addressed to improve quality of life in older adults.

Serious mental illness (SMI) is defined as a mental, behavioral, or emotional disorder resulting in serious functional impairment that significantly interferes with or limits one or more major life activities.[4] The disorders meeting criteria for SMI discussed in this guide include schizophrenia-spectrum disorders, bipolar disorder, and severe or treatment-resistant depression with persistent functional impairment. This guide does not address disorders such as dementia, subsyndromal symptomatic depression (i.e., minor depression), anxiety disorders, or post-traumatic stress disorder.

Aging in America

In addition to getting older, the population of the United States is also becoming more diverse. The number of people of color increased from 7.8 million in 2009 to 12.9 million in 2019,[5] and is expected to reach 27.7 million in 2040.[6]

This guide defines older adults as those aged 50 and older.

Adults over age 50 with SMI have high rates of comorbid medical conditions, significantly reduced life expectancy, and greater likelihood of being admitted to nursing homes and other long-term care facilities.

Some of this chapter's sources provide data for adults 65 and older, rather than 50 and older, as these studies were more readily available.

Approximately one-quarter of adults with SMI live below the poverty line, and economic disparities are greater among people of color, with older adult Latino and Black populations experiencing greater rates of poverty than Whites.[7] Lower socioeconomic status (SES), commonly measured by levels of education, income, or occupation, is associated with lower self-rated physical health and accelerated aging (demonstrating issues with mobility, cognitive processing, and health conditions at an earlier age than would otherwise be expected) among adults aged 50 and older. Evidence suggests that for some older adults, low health literacy may be one factor that explains the association between low SES and poorer health outcomes.[8, 9] It is also associated with SMI. Individuals with SMI are less likely to obtain quality mental health care or experience improvements in mental health outcomes.[10, 11]

Approximately 1.2 million older adults live in institutional settings, such as nursing homes. While only 1 percent of those aged 65 to 74 live in these settings, the percentage increases to 7 percent for those aged 85 and over.[6] Furthermore, older adults with SMI are three and a half times more likely than those without SMI to reside in an institutional setting.[12]

Aging and Serious Mental Illness

The majority of older adults with SMI were initially diagnosed in late adolescence or early adulthood. However, some experienced the onset of illness in middle or older adulthood. The life expectancy of those with SMI is shorter compared to the rest of the population.[13, 14] However, many individuals diagnosed early with SMI now reach older adulthood, likely due to efforts to identify and address the risk factors (e.g., higher rates of tobacco use, obesity, hypertension, cardiovascular disease, diabetes, chronic obstructive pulmonary disease) that often lead to premature mortality.[15]

For people with SMI, many challenges of aging begin at 50 and older, including high rates of chronic health conditions, excess disability, and nursing home admission. The life expectancy of adults with SMI is between 11 and 30 years fewer compared to the general population.[13, 14] Older adults with SMI have substantially higher rates of diabetes, lung disease, cardiovascular disease, and other medical conditions compared to adults without SMI.[2] These conditions may seriously impact ability to function in the community and remain at home and may also impact mortality.[12]

Suicide is a serious public health concern among older adults.

The rate of suicide is particularly high among older men. In 2019, it was highest for men aged 85 and older (49.3 per 100,000), as compared to a rate of 13.9 per 100,000 in the general population.[16] Older adults are also more likely than other age groups to use more lethal means such as firearms (men) and medications (women). While many factors may contribute to a person thinking about or attempting suicide, certain diagnoses, such as bipolar disorder, are associated with higher rates of suicide compared to the general population.[17]

According to SAMHSA's National Survey on Drug Use and Health (NSDUH), in 2019, 3.4 million U.S. adults aged 50 and older (2.9 percent) had SMI.[18] Among this same population aged 50 and older, 1.5 percent had a mental illness and a co-occurring substance use disorder (SUD) in 2018 and 2019.[18] These data may underestimate the true prevalence of SMI, as the NSDUH survey excludes individuals experiencing homelessness who do not use shelters and residents of institutional group quarters, such as jails and prisons, residential care homes, nursing homes, mental institutions, and long-term care hospitals. It is well documented that individuals experiencing homelessness and those residing in long-term care facilities and jails experience higher rates of SMI and SUD than the general population.[19-21]

The prevalence rates of SMI for adults 50 and older differ by race and ethnicity. Prevalence was highest among Latinos (3.3 percent), followed by Whites (3.0 percent), Blacks (2.4 percent), and Asians (1.4 percent).[64] The age group with the highest prevalence of SMI is adults aged 50 to 54 at 4.6 percent.[64] SMI is also more prevalent among lesbian, gay, and bisexual (LGB) people than non-LGB people (5.6 percent vs. 2.9 percent).[64]

Although most older adults with SMI prefer to live in the community, their high rates of co-occurring chronic health conditions often result in transition to a long-term care facility sooner than their peers without SMI.[12] Additionally, older adults with SMI experience a higher rate of acute hospitalizations, which contributes to higher healthcare costs.[12]

The Aging Process

Aging is associated with biological, physiological, environmental, psychological, and behavioral changes, along with changes in social supports and networks.[23] It can also be accompanied by metabolic changes that increase vulnerability to medication side effects and the effects of alcohol, as well as new onset of or worsening of existing acute and chronic health conditions. Older adults may also experience increased exposure to life events associated with grief and loss, social isolation, and cognitive and sensory impairments.[22]

The aging process is not defined simply by the number of years a person has been alive. The process differs between individuals and is influenced by a variety of factors, including genetics, environment, diet, trauma,

Physical or cognitive decline associated with impaired functioning or disability is not a normal part of the aging process.

While the rates of some chronic physical or mental conditions, such as arthritis or dementia, increase with age, these conditions should not be viewed as a normal part of aging.[22]

and lifestyle. For some individuals with SMI, the aging process is accelerated and may be associated with reduced life expectancy, as compared to the general population.[24]

Older adults with SMI are more likely than older adults without SMI to face challenges that impact both physical and mental health. For example, older adults with SMI may have substantially higher rates of co-occurring conditions, such as dementia, hypertension, and SUD.[25, 26] They are more likely to experience adverse side effects of psychotropic medication, lack of access to quality health care, and social determinants (e.g., stigma, low income) that adversely affect health.[15] Among the most common causes of early mortality for all people with SMI are cardiovascular disease, diabetes, chronic obstructive pulmonary disease, and cancer.[27] They are also more likely to use tobacco and be overweight or obese compared to the general population.[28, 29] Other factors that may contribute to the reduced life expectancy of people with SMI include inadequate access to preventive health care, greater exposure to chronic stress and trauma, increased risk of suicide, and factors associated with low socioeconomic status.[27, 30] Policies and practices that consider social determinants of health are essential for improving the health and well-being of older adults.

Systems of Care for Older Adults

According to NSDUH, in 2019, among adults aged 50 and older with SMI, 6.5 percent received inpatient mental health services; almost one-half (46.4 percent) received outpatient mental health services; two-thirds (66.7 percent) received prescription medication for a mental disorder; and one-quarter (25.7 percent) did not receive any treatment.[18] Those who sought treatment were unlikely to be seen by a provider specifically trained in geriatrics.[32]

Source: Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion.

Older adults receive health care and social services from many types of settings and providers. Settings range from primary care, community mental health centers, community-based organizations, senior centers, Area Agencies on Aging, home health and non-medical care, acute care hospitals, assisted living facilities, nursing homes, and veterans' services. However, the behavioral health needs of this growing population exceed the capacity of the current workforce in these settings, most of whom are not trained to identify and address SMI in older adults.[2]

An **Area Agency on Aging** is a public or private nonprofit agency designated by the state to address the needs and concerns of all older people at the regional and local levels.[31]

Services and supports for older adults with SMI are often fragmented due to lack of coordination among providers and community-based organizations in different systems, as well as varying insurance and eligibility requirements for physical and behavioral health care. This fragmentation impedes access to effective care and limits treatment providers' ability to share information, control costs, ensure continuity of care, avoid conflicting treatments, or improve outcomes.[33, 34] Older adults with mental health needs may require services that span different provider systems, including behavioral health and substance use services, primary care, specialty medical care, rehabilitation therapies, aging-focused social services, long-term care, home care, subsidized housing, and transportation.

Health promotion programs that increase engagement in physical exercise and support dietary modifications, lifestyle changes, and preventive health care can lead to health benefits for older adults with SMI.[35, 36]

Integrated and coordinated care using a person-centered approach across providers and systems is critical to addressing the needs of this population and for linking individuals with essential mental health, medical, and community programs. Comprehensive care coordination improves communication among older adults with SMI, family members, and service providers. It also leads to improved treatment engagement and outcomes, more efficient care, and effective support systems. Integration of physical health, behavioral health, and home- and community-based services is key to providing essential preventive health and wellness services, treatment of comorbid health conditions, and peer support.[37, 38]

Communities can implement several strategies to strengthen the delivery of mental health services for older adults with SMI, across providers, organizations, systems, and sectors:[32, 39]

- Supporting a pipeline for training programs for community-based geriatric specialists, including psychiatrists, nurse practitioners, social workers, psychologists, and other health and mental health providers, to address the special needs of older adults with SMI.
- Establishing licensing requirements for all healthcare providers to have basic competency in quality behavioral health care for older adults.
- Offering continuing education and other incentives for providers in all disciplines to learn how to implement evidence-based behavioral health practices for older adults.
- Developing older adult behavioral healthcare competency standards and integrating them within the basic competencies of the disciplines and professions that serve the needs of older adults (e.g., psychiatrists, psychologists, social workers, nurses).
- Strengthening the role of, and reimbursement for, older adult peer support specialists to work as part of the care team.
- Providing training to family members and other caregivers so they can identify resources and services to better support older adults with SMI.
- Offering incentives to encourage more providers to enter and stay in the geriatrics field (e.g., loan repayment programs, retention incentives).
- Educating the primary care workforce on ways to care for older adults with SMI.
- Integrating geriatric content to address the needs of individuals with SMI, including skills-based learning, into health professional education and training programs.

Family caregivers are often the primary source of assistance to older adults with a mental illness, and a core component of successful treatment and recovery. Family members provide emotional support, assist with symptom management, and intervene during a crisis. For many older adults with SMI, family caregivers serve as advocates and are legally permitted to assist, or are heavily influential, in healthcare planning and decision-making.

Screening and Diagnosis

Older adults with SMI are especially at risk for missed or inaccurate diagnoses of medical disorders due to reduced access to health care, lack of preventive care, or misattribution of physical health symptoms to mental illness.[43] They are also more likely to report physical concerns, such as sleep difficulties, gastrointestinal issues, weight changes, fatigue, or general stress.[44, 45] Primary care and emergency department and inpatient hospital staff are more likely to mistake these symptoms as natural parts of aging or to causes other than the primary acute problem.[46] Psychiatric symptoms may also overlap with multiple co-occurring illnesses, making it difficult for providers to form an accurate diagnosis. For example, psychosis (presence of delusions and/or hallucinations, causing significant clinical distress or impairment in functioning) in older adults is often a symptom of another primary disorder, such as a neurological disorder, illicit substance use, prescribed medications, or delirium (disturbance in attention and awareness that develops quickly and tends to fluctuate in intensity during the course of a day), rather than a primary psychotic disorder or SMI.[47] A thorough evaluation of an individual's physical health, mental health, and medical history is therefore vital to understanding the underlying cause of a symptom and arriving at an accurate diagnosis.

Routine screening can help providers identify older adults with emerging or evolving symptoms of mental disorders and determine an appropriate treatment plan. Many screening tools validated in adults have also been validated in older adults, such as the Patient Health Questionnare-9 (PHQ-9)[48] for depression, the Alcohol Use Disorders Identification Test (AUDIT and AUDIT-C),[49] and the Positive and Negative Syndrome Scale (PANSS)[50] for schizophrenia. Additional screening tools have been created specifically for assessing mental illness in older adults, such as the Geriatric Depression Scale (GDS-15).[51, 52]

Screening and assessing older adults for mental illness can be challenging. Along with difficulties related to accurate diagnosis, many older adults experience stigma in seeking mental health treatment, such as a reluctance to seek treatment because they hold a negative attitude towards themselves for having a mental illness.[53] As a result of this stigma, they are more likely to visit their primary care physician for both mental and physical health needs, even though these providers may lack specialized training in assessment of or evidence-based interventions for SMI.[54]

While this guide does not focus on specific screening and assessment interventions for SMI in older adults, they are nonetheless critical for diagnosis and linkage to appropriate evidence-based treatment.

After Medicare and Medicaid legislation was passed in 1965, financial incentives increased admissions to nursing facilities, especially for individuals with mental disorders.[40] **Preadmission Screening and Resident Review (PASRR)** is a federal requirement to ensure individuals do not transition inappropriately to nursing homes for long-term care.[41]

The process requires that all applicants to Medicaid-certified nursing facilities be given a preliminary assessment to determine if the individual may have SMI or an intellectual or developmental disability (ID/DD). If the initial screen is suspicious for SMI or ID/DD, an in-depth evaluation will be conducted to determine the level of need, most appropriate setting for care, and recommended services, which inform the individual's plan of care. In 2019, 25.7 percent of individuals identified as having SMI were able to receive services in community settings, rather than in nursing facilities.[42]

Psychosocial Interventions

Effective interventions for SMI in older adults have been established in rigorous research studies. Some are adapted from evidence-based practices initially developed for young and middle-aged adults, and others were developed specifically to address the unique needs of older adults. These psychosocial interventions aim to improve mental health symptoms, overall functioning, and quality of life. Consistent with best practices in geriatrics, the primary focus of these psychosocial interventions is to optimize independent functioning and self-management. Implementation of effective interventions for older adults with SMI can help to reduce healthcare costs, prevent nursing home transitions, decrease hospitalizations, and improve physical and other health outcomes.[12, 57]

Telehealth and other online technologies, including smartphone applications, social media, and online interventions, can improve treatment adherence, self-efficacy, and clinical outcomes for older adults with SMI.[55, 56] Use of telehealth and other technologies can also reduce healthcare costs. Older adults are among the fastest growing users of technology, yet a persistent digital divide underscores the need for technology training and support tailored for the older person with SMI.

Psychosocial interventions for SMI in older adults vary in type, intensity, and duration. Types of interventions include the following:

- **Skills Training Interventions** help individuals with SMI learn behavioral techniques to help manage their illness, gain independent living skills, and improve interpersonal interactions with others.
- **Psychotherapy** can support people with various mental illnesses improve their daily functioning, well-being, and quality of life.
- **Intensive case management** typically involves a team of professionals that actively engages a person in the improved management of their symptoms, with the aim of increasing their daily functioning and quality of life.
- **Illness self-management** focuses on improving a person's ability to manage their physical and mental health conditions and encourages them to play an active role in their recovery.
- **Integrated care** blends medical care and behavioral health care in a common physical or virtual space, to encourage communication among providers and the patient, improve and ease care access, and better the patient's overall health and quality of life.
- **Peer support interventions** focus on older adult peers and networks sharing their experiences and supporting peers with SMI. Practitioners are increasingly developing and adapting these interventions for this population, and they may be combined or integrated with other interventions.
- **Interventions for family caregivers** address the concerns and mental health needs of family caregivers of older adults with SMI.

Psychiatric Collaborative Care is an evidence-based approach to managing mental disorders.[58] This integrated care model, consisting of a team of behavioral healthcare managers, psychiatrists, and other mental health professionals led by a primary care provider, was originally designed to manage common mental disorders in primary care; however, it is increasingly being applied in a range of settings to treat individuals with complex conditions, including older adults with SMI.[59] The Collaborative Care Model includes five essential elements: patient-centered team care, population-based care with active outreach, measurement-based treatment to target goals, evidence-based care, and accountability of providing quality and outcome driven care.[58] Billing codes are available to charge Medicare, Medicaid, and private insurers for the services.[60]

Many evidence-based treatments involve licensed mental health professionals, but they may also include older adult peer specialists, case managers, nurses, or other healthcare providers. Because of the diversity of providers, treatments may be implemented in a variety of settings, including individuals' homes, community settings, primary care and mental health clinics, and residential care settings. Additionally, some older adults may prefer to seek support from faith-based organizations rather than a licensed clinician. Religion and spirituality can be supportive tools in a person's recovery and can complement clinical-based services.[63]

SAMHSA's **SMI Adviser** supports the use and implementation of evidence-based screening and treatment for SMI through education and consultation. This tool provides:

- Consultations for mental health
- Online courses for clinicians on a variety of topics related to SMI
- Searchable knowledge base that anyone can use to look for resources and answers about SMI
- Resources for family members and individuals who live with SMI

Providers can use medications separately or in addition to psychosocial interventions. Medications are often an essential component of effective treatment. Appropriate medications depend on the mental disorder and symptom severity, and prescribers should consider an individual's medical history and potential interactions with other prescribed medications. Symptoms of SMI may change in older adulthood and necessitate medication adjustments. The medication regimen should be individualized and determined by a licensed provider in accordance with U.S. Food and Drug Administration guidelines.

Clinical management of SMI in older adults is complex and should consider the impact of aging, along with current physical and mental symptoms. This population often experience greater barriers to accessing mental health care than their younger counterparts. Examples include:

- Inadequate insurance coverage for treatment of mental disorders
- Shortage of trained geriatrics mental health clinicians
- Limited coordination among primary care, mental health, and aging service providers
- Stigma surrounding mental health disorders and treatment
- Lack of culturally and linguistically appropriate care
- Limited physical mobility and access to transportation

Culturally and linguistically appropriate treatment is respectful of and responsive to the health beliefs, practices, and cultural, linguistic, and other social and environmental needs of the individual.[61] Services that recognize the cultural and other needs of the individual can decrease disparities in access to behavioral health services, as well as improve client engagement in services, therapeutic relationships between clients and providers, and treatment retention and outcomes.[62]

Summary

Older adults with SMI have unique needs, including the increased likelihood of co-morbid physical and behavioral health conditions and social isolation. Additionally, healthcare and financing services for older adults with SMI are complex and include a wide array of settings. Use of evidence-based interventions to address SMI in this population is essential to mitigating these challenging and interrelated issues. Other critical elements include:

- SMI screening, assessment, referrals, and linkage to evidence-based programs and practices
- Education and training for professionals in evidence-based interventions
- Health insurance coverage for diagnosis and treatment of mental disorders
- Provision of integrated medical and mental health services

This guide synthesizes current evidence on psychosocial interventions for SMI in older adults to assist healthcare providers in many disciplines and settings, peer support specialists, family caregivers, and others working to improve the mental and physical well-being and quality of life of older adults.

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CHAPTER

2

What Research Tells Us

A review of the literature identified practices and programs used to provide care coordination and recovery supports for older adults experiencing serious mental illness (SMI). This chapter provides an overview of five practices, including a discussion of the typical settings, demographic groups, intensity and duration, and outcomes attributed to the intervention:

1. Assertive Community Treatment (ACT)
2. Cognitive Behavioral Social Skills Training (CBSST)
3. Skills training practices, specifically Functional Adaptation Skills Training (FAST) and Programa de Entrenamiento para el Desarrollo de Aptitudes para Latinos (PEDAL)
4. Integrated Illness Management and Recovery (I-IMR)
5. Helping Older People Experience Success (HOPES)

Each program or practice description also provides a rating, based on its evidence of various outcomes among older adults experiencing SMI.

Practice Selection

To ensure inclusion of the most useful interventions, authors required practices to meet the following criteria:

- Be clearly defined and replicable
- Developed or adapted specifically for older adults, or studied in populations aged 50 and older
- Be currently in use
- Include evidence of impact on targeted outcomes
- Have accessible implementation resources

CAUSAL EVIDENCE LEVELS

Strong Evidence

Causal impact demonstrated by at least ***two*** randomized controlled trials, quasi-experimental designs, or epidemiological studies with a high or moderate rating.

Moderate Evidence

Causal impact demonstrated by at least ***one*** randomized controlled trial, quasi-experimental design, or epidemiological study with a high or moderate rating.

Emerging Evidence

No study received a high or a moderate rating. The practice may have been evaluated with less rigorous studies (e.g., pre-post designs) that demonstrate an association between the practice and positive outcomes, but additional studies are needed to establish causal impact.

Evidence Review and Rating

The authors conducted a comprehensive review of published research for each selected intervention to determine its strength as an evidence-based practice. Eligible studies had to:

- Employ a randomized or quasi-experimental design, or
- Be a single sample pre-post design or an epidemiological study with a strong counterfactual (i.e., a study that analyzes what would have happened in the absence of the intervention)

Descriptive studies, implementation studies, and meta-analyses were not included in the review but were documented to provide context and identify implementation strengths and challenges for the practices.

Authors reviewed each individual study in this chapter for evidence of outcomes, such as improved social functioning, medication adherence, symptoms of a mental health disorder or condition, service utilization, and ability to live independently.

Causal Impact: Evidence demonstrating that an intervention causes, or is responsible for, the outcome measured in the study's sample population.

In addition, trained reviewers checked each study to ensure rigorous methodology, by asking questions such as:

- Are experimental and comparison groups demographically similar, with the only difference being that participants in the experimental group received the intervention and those in the comparison group received treatment as usual or no or minimal intervention?
- Was baseline equivalence established between the treatment and comparison groups on outcome measures?
- Were missing data addressed appropriately?
- Were outcome measures reliable, valid, and collected consistently from the participants?

Using these criteria, the authors used a two-step process to assess the strength of each study's methodology, and the causal evidence associated with each practice. Each study was given a rating of low, moderate, or high, based on the research methods. Only randomized controlled trials (RCT), quasi-experimental designs (QEDs), and epidemiological studies with a strong comparison were eligible to receive a high or moderate rating.

After authors assessed and rated all studies for a practice, they placed it into one of three categories based on its causal evidence level:

1. Strong evidence
2. Moderate evidence
3. Emerging evidence

This chapter includes a text box for each intervention that lists improved outcomes in older adults with SMI receiving that intervention. Authors also included additional findings that may be relevant for mental health professionals to consider when addressing the needs of individual clients, but these outcomes did not count towards grading either the study or the practice.

See Appendix 2 for more information about the evidence review process.

Research Opportunities

Providers face the challenge of limited evidence, particularly from RCTs, when selecting programs and practices designed specifically for older adults with SMI. The limitations in the current evidence base include:

- Some of the findings have not been replicated beyond a single RCT.
- More recent RCTs are currently in process, and results are yet to be published.
- Although many RCTs have been conducted on psychosocial interventions for people with SMI across the lifespan, most do not include enough older adults to evaluate if they are effective for the subgroup (i.e., adults aged 50 and older).
- Older Black, Indigenous, and other people of color are underrepresented in most of the current research on interventions for older adults with SMI, limiting the generalizability of findings to an ethnically diverse population.

- Research has not been conducted to identify effective approaches to implementing and sustaining evidence-based interventions addressing the needs of older adults with SMI.

Given the rapid growth of the older adult population, there is a need for more large-scale studies to better understand how to improve quality of life, functioning, and clinical outcomes for older adults with SMI, including for those with comorbid physical illness. As underscored by the 2012 Institute of Medicine Report on the mental health workforce for older adults, the growing numbers of older adults with SMI will require a workforce specifically trained to address the special needs of this high-risk group.[3] In addition, research is needed on interventions that leverage the use of technology, peer support, community-based outreach, and integrated psychiatric and medical care for older adults with SMI to extend the reach of geriatric specialty providers.

The studies discussed in this chapter confirm that psychosocial interventions are effective in older adults with SMI. Despite existing research supporting the impact of these evidence-based practices on key functional outcomes, there is a lack of uptake and implementation in usual care settings. A critical priority for future research is identifying optimal strategies that successfully implement, scale, and sustain these interventions in diverse community settings.

Assertive Community Treatment (ACT)

Overview

Assertive Community Treatment (ACT) is a team-based model that consists of a multi-disciplinary team working together to support adults with SMI. ACT aims to reduce hospitalization rates and help clients adapt to community living through intensive case management via an integrated team. The ACT team addresses the comprehensive needs of clients, including psychiatric medication, outpatient psychotherapy, employment, and housing.[1] Teams consist of approximately 10 to 12 providers, representing various disciplines. Team members meet regularly and maintain a small caseload.[2]

This intervention differs from general case management programs in that the ACT team provides comprehensive services directly to clients, rather than coordinating services across multiple, disconnected providers and agencies.[3] Services are flexible and delivered in the settings that the clients are comfortable with and at a frequency that they need. Treatment and support services are individualized, and the team proactively reaches out to clients, rather than expecting them to initiate engagement with services.[3]

Typical Settings

The ACT team meets with clients in the community where they already spend time, such as their homes or community institutions like libraries or parks.

Target Population

ACT is intended for adults with SMI who live in the community and experience challenges in engaging with traditional outpatient services that may not provide a cohesive team approach.

Practitioner Types

Typical ACT teams include case managers, behavioral health clinicians, psychiatric specialist prescribers, registered nurses, community health workers, and peer specialists, among others.

For example, the ACT team could consist of a substance use specialist, rehabilitation worker, social worker, psychiatric nurse, nurse specializing in care of physical health conditions, community mental health nurse, and psychiatrist.

Intensity and Duration of Treatment

ACT offers 24/7 support to clients for as long as they need services.

Scope of Evidence Review

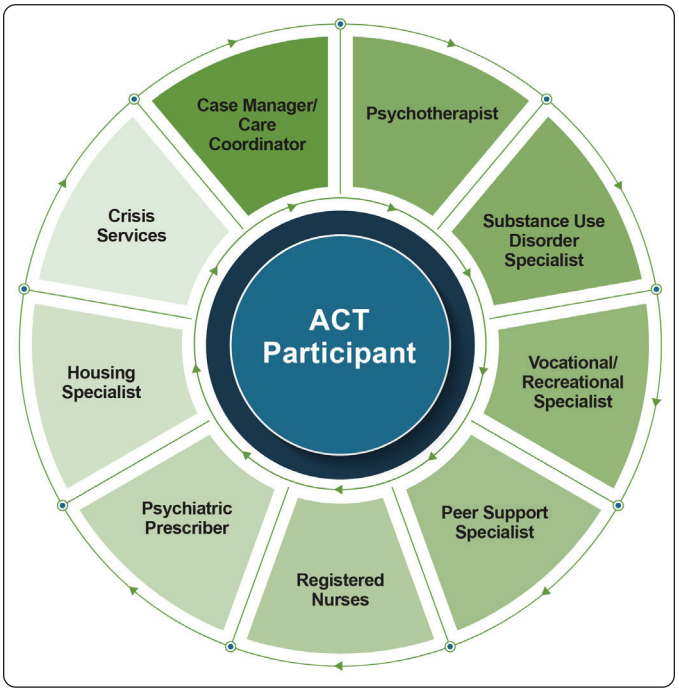
This review included two studies: one RCT for adults aged 60 and older, rated high for study design,[4] and one QED study that enrolled adults with an average age of about 50 years, rated moderate for study design.[5] Most outcomes in the studies were long-term (18 to 24 months).

Assertive Community Treatment (ACT)

Strong Evidence

Study Intervention Design

In the RCT reviewed, only minor modifications for older adults were made to the traditional ACT model, which has demonstrated effectiveness for adults with SMI.[6-11] These modifications included the use of ACT team members, such as a psychiatrist, who specialize in treating older adults.[4] Of note, however, another study—which did not meet inclusion criteria for review in this guide—found that older veterans receiving an ACT program not adapted specifically for the needs of older adults nonetheless benefited from it in terms of their ability to continue living in the community.[12] Similarly, the QED did not note any modifications made to the model to adapt for older adults.



Outcomes Associated With ACT

Studies included in this evidence review demonstrated that use of ACT for older adults experiencing SMI was associated with increased:

- Treatment initiation within 3 months of contact with a mental health worker[4]
- Treatment retention at 18 months of enrollment[4]
- Medication adherence at 24 months of enrollment[5]

Study Demographic Groups

Both studies met inclusion criteria for age and a focus on providing services to older adults with SMI. To participate in the study, the RCT required difficulty with functioning, and the QED required high hospital use in the past year. Clients with severe cognitive impairment (inability to speak, recall distant or recent events, or learn new information[13]) were excluded from the RCT.

Participants in the QED, which took place in a U.S. Department of Veterans Affairs setting, were predominantly male (89 percent), majority White (57 percent), and a substantial proportion had experienced homelessness in the prior year (22 percent) or had a current substance use disorder (43 percent). In analyses, ACT participants were matched to non-ACT participants on all demographic factors and a number of clinical indicators of symptom severity.

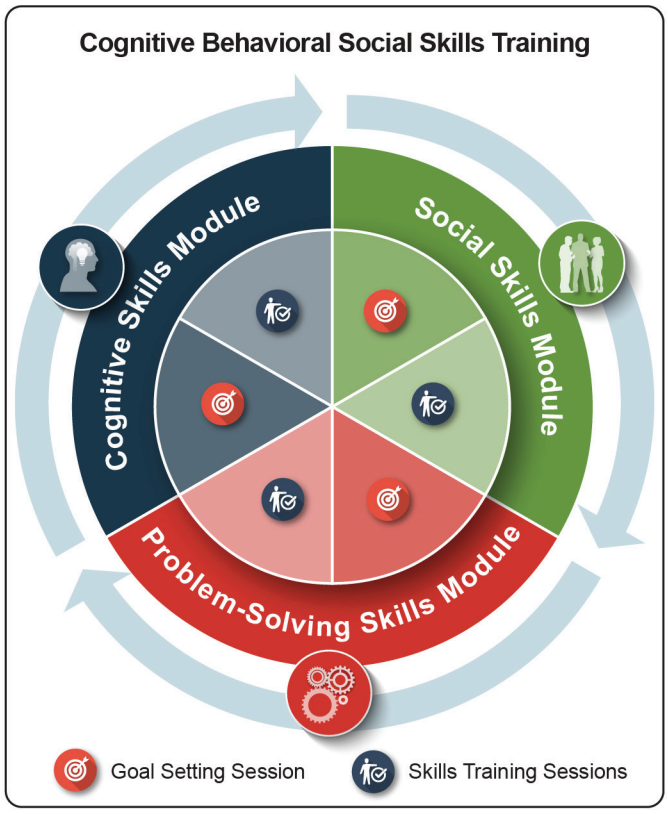
Cognitive Behavioral Social Skills Training (CBSST)

Overview

Cognitive Behavioral Social Skills Training (CBSST) is a treatment integrating cognitive behavioral therapy (CBT) and social skills training (SST) to address the needs of older adults with schizophrenia. CBSST aims to equip individuals with the skills to improve functioning and challenge defeatist beliefs through three modules:[14, 15]

1. **Cognitive Skills Module**—Based in CBT, individuals use thought challenging skills to examine their thinking and modify thoughts that interfere with healthy functioning behaviors. Targeted thoughts include beliefs about voices, events related to delusions, and defeatist beliefs that interfere with functioning behaviors, including self-efficacy beliefs and ageist beliefs (e.g., "I am too old to learn").[16] The primary skill taught is the 3C's:
   - Catch It (identify the thought)
   - Check It (examine evidence)
   - Change It (shift the thought)
2. **Social Skills Module**—To improve communication skills, individuals engage in behavioral role plays focused on expressing feelings in an assertive and clear way while advocating for one's needs with healthcare professionals; interacting with roommates, family, and friends; and engaging with service providers and support persons.
3. **Problem-Solving Skills Module**—Problem-solving skills are taught using the acronym SCALE:
   - Specify
   - Consider possible solutions
   - Assess the best solution
   - Lay out a plan
   - Execute and evaluate the outcome

Participants develop plans to solve real-world problems specific to older adults, such as scheduling activities, taking medication, finding a volunteer opportunity, or obtaining eyeglasses or hearing aids.



Typical Settings

Practitioners can conduct traditional CBT in a variety of settings, including outpatient, inpatient, and partial hospitalization options.

Target Population

CBSST is designed for community-dwelling, middle-aged and older adults with an SMI diagnosis.

Practitioner Types

A wide range of practitioners trained to deliver CBSST, such as psychologists, clinical social workers, or psychiatric nurses, may lead sessions.

Intensity and Duration of Treatment

The treatment consists of 24 or 36 (see below) weekly 2-hour group therapy sessions, with a lunch or snack break (the pilot program consisted of 12 sessions, 90 minutes each).

Scope of Evidence Review

Three studies were included in this review; of which, one was rated high,[16, 17] one moderate, [14] and one low for study design.[17] This gave the intervention an overall rating of strong support for causal evidence. Each study incorporated age-relevant modifications to CBSST. Modifications included repeating modules multiple times to compensate for age-related and SMI-related cognitive impairment, supporting increased skill acquisition, and encouraging engagement even with missed sessions. Content also identified and challenged ageist beliefs, included age-relevant role-playing situations, and focused on age-specific problems (e.g., finding transportation).[14]

Cognitive Behavioral Social Skills Training (CBSST)

Study Settings

These studies were conducted in outpatient settings, with one study providing transportation for participants to the intervention site. However, participants were recruited from both outpatient treatment centers and residential settings.

Outcomes Associated With CBSST

Studies included in this evidence review demonstrated that use of CBSST for older adults experiencing SMI was associated with statistically significant improvements in:

- Independent functioning in the community[15-17]
- CBSST skills acquisition[15-17]

Study Demographic Groups

Participants ranged in age from 42 to 81, and the majority were unmarried White males with a high school education, living in assisted community housing (e.g., board and care homes). Participants were both veterans and non-veterans.[15, 16, 18]

Participants were excluded if they had:

- Disabling medical problems that would interfere with testing
- Prior exposure to CBT
- A required level of care at baseline that would interfere with outpatient therapy (e.g., hospitalization)
- An absence of medical records to inform diagnosis
- A diagnosis of dependence on substances other than nicotine or caffeine within the past 6 months

Cognitive impairment was not an exclusion criterion, and one study demonstrated CBSST had comparable benefit to participants regardless of cognitive impairment.[18]

Mobile Adapted CBSST (MA-CBSST)[17]

CBSST has been adapted to use a supplemental mobile device to reduce provider contact hours. CBSST sessions were reduced from 120 minutes to 60 minutes for the 24 weeks of treatment. Handheld personal devices prompted text-based, module-specific homework adherence, and participants completed brief self-monitoring ratings on moods, voices, current activities, and medication adherence three times per day. In older adults with schizophrenia or schizoaffective disorder, skill knowledge and self-reported functioning did not differ significantly between CBSST and MA-CBSST groups, and improvements among MA-CBSST participants were significant compared to the control group.

Study Practitioner Types

In the studies included in this review, psychotherapists, including doctoral-level and master's-level practitioners with at least 2 years of CBT experience delivered sessions. Two practitioners led all group sessions. Two clinical psychologists provided training and supervision, including review of session videotapes.

Study Intensity and Duration of Treatment

Researchers taught each of the three modules weekly for four sessions. Each module was completed twice over 24 weeks. Subsequently, they increased the time for each module to 6 weekly sessions, increasing the duration of treatment to 36 weeks.[15] Overall, treatment adherence was high, with participants attending an average of 22 of the 24 group therapy sessions[14] or 30 of the 36 group therapy sessions.[15]

Social Skills Training: Functional Adaptation Skills Training (FAST) and *Programa de Entrenamiento para el Desarrollo de Aptitudes para Latinos* (PEDAL)

Overview

Functional Adaptation Skills Training (FAST) is a manualized behavioral intervention for older adults with schizophrenia or schizoaffective disorder. It is based on Social Cognitive Theory and the Social and Independent Living Skills Program.[19] The practice aims to improve patients' independence and quality of life by targeting six areas of everyday functioning:

1. Medication management
2. Social skills
3. Communication skills
4. Organization and planning
5. Transportation
6. Financial management

Practitioners teach the 6 areas over four 120-minute long sessions, with content repeated and reviewed to maximize benefit to those with age-related cognitive impairment.[19, 20] Group sessions consist of homework assignment and review, discussion around applying exercises to real world settings, and in-session practice of skills.

Each class is structured as follows[21]:

- Establish the class agenda
- Review the materials and skills learned in the previous session
- Review homework assignments (generalization)
- Hear a psychoeducational lecture teaching a new concept and/or skills
- Have group or self-practice (e.g., behavioral modeling, role-playing, hands-on practice with props)
- Develop individual homework

FAST was adapted to be culturally relevant for Latino older adults—specifically of Mexican descent—with schizophrenia or schizoaffective disorder. *Programa de Entrenamiento para el Desarrollo de Aptitudes para Latinos* (PEDAL) is based on the structure and content of FAST and shares the same aim to improve patients' independence and quality of life.[21]

PEDAL was adapted in three stages from the FAST protocol:

1. Measures, intervention materials, and manuals were directly translated into Spanish, back translated into English, and then compared by bilingual intervention group leaders. Modules were reviewed for cultural relevance and refinement by mental health professionals of Mexican descent.
2. Materials were modified to include culturally appropriate scenarios, roles, and icons. For example, they incorporated foods, songs, telenovelas/soap operas, and proverbs common in the Mexican tradition.
3. Format, content, and treatment goals were adapted to be based on Mexican values and cultural scripts. For example, materials incorporated concepts such as *simpatía* (the use of polite social relations) and *personalismo* (emphasizing warm relationships). In all modules, scenarios and examples were modified to reflect culturally normative gender roles among older adults of Mexican descent. The language of respect and hierarchical expectations in Latino culture were observed (i.e., use of formal style *usted* rather than the informal *tú*). Medication management sessions emphasized a sense of *orgullo* (i.e., pride) at contributing to the family by alleviating symptoms.

Typical Settings

Practitioners deliver FAST in board and care facilities, which house a sizable proportion of older adults with SMI. PEDAL participants live in the community with their families, and the intervention is delivered in outpatient psychiatric clinics, such as community mental health centers. Since the treatments are similar in structure, FAST and PEDAL have the potential to be delivered in both settings.

Target Population

FAST and PEDAL are designed to treat community-dwelling adults over age 40 with longstanding psychotic disorders (a diagnosis of schizophrenia, schizoaffective disorder, or psychotic mood disorder).

Practitioner Types

Trained research assistants (both FAST and PEDAL) and management or nursing para-professionals based in board-and-care facilities (FAST) lead group sessions. A wider range of mental healthcare professionals who are trained in the delivery of FAST or PEDAL and have experience conducting interventions in a group format could also lead sessions.

Intensity and Duration of Treatment

Group sessions for both FAST and PEDAL last 120 minutes and are held once weekly for 24 weeks. The pilot study for FAST was conducted semi-weekly for 12 weeks; the results indicated a need for a longer intervention duration. Following the weekly group sessions, participants receive monthly group sessions for 6 months to review and reinforce concepts learned during the intensive intervention.

Outcomes Associated With FAST and PEDAL

Studies included in this evidence review demonstrated that use of FAST and PEDAL for older adults experiencing SMI was associated with statistically significant improvements or reductions in:

- Functional capacity in the community[19, 21]
- Psychiatric symptoms[19]
- Social and communication skills[20]
- Emergency service use[22]
- Emergency service use for psychiatric reasons[22]
- Medication management[21]

Scope of Evidence Review

This review included two FAST RCTs[19, 20, 22] and one PEDAL RCT of older adults with schizophrenia, schizoaffective disorder, or psychotic mood disorder.[21] All three studies were rated high for study design.

Social Skills Training: Functional Adaptation Skills Training (FAST) and *Programa de Entrenamiento para el Desarrollo de Aptitudes para Latinos* (PEDAL)

Study Demographic Groups

The FAST participants were racially and ethnically diverse, living in board and care facilities, and mainly high school educated males.[19, 20]

The PEDAL participants were Latino, specifically of Mexican descent, and community-dwelling monolingual Spanish speakers or individuals who preferred to communicate in Spanish.[21]

Patients were excluded if they had a diagnosis of dementia or were a serious suicide risk, could not complete the assessment, or were participating in other psychosocial interventions or drug research at intake.

Study Practitioner Types

In the PEDAL RCT, therapists were bicultural and bilingual. The therapists in FAST were paired with a para-professional from the board and care facility management or nursing staff.

Integrated Illness Management and Recovery (I-IMR)

Overview

Integrated Illness Management and Recovery (I-IMR) is designed to assist older adults living with SMI and chronic medical conditions. The I-IMR program was developed by modifying the Illness Management and Recovery (IMR) program, which teaches physical illness self-management.[26] I-IMR aims to improve functioning and symptom outcomes for people with SMI and chronic medical conditions through the training of self-management for both psychiatric and general medical conditions by an I-IMR specialist, complemented by healthcare management provided by an onsite nurse or case manager.

The psychiatric focus of the intervention includes psychoeducation about illness and treatment, cognitive-behavioral approaches to increase medication adherence, training in relapse prevention, instruction about coping skills to manage persistent symptoms, and social skills training.[24]

The general medical illness component consists of an individually tailored curriculum that applies the same skills and strategies used for self-management of psychiatric illness. The psychiatric and medical components are fully integrated and administered concurrently with the perspective that "whole health" consists of common elements of mental health and physical health self-management. In addition, a nurse manager facilitates coordination and navigation of necessary preventive and ongoing health care.[25]

Typical Settings

I-IMR is administered in community mental health centers.

Target Population

I-IMR is intended for community-dwelling individuals aged 50 and older with SMI and co-occurring chronic health conditions.

Practitioner Types

An I-IMR specialist provides skills training. A nurse or health outreach worker provides complementary healthcare management.

Intensity and Duration of Treatment

I-IMR is delivered individually or in groups, through weekly sessions, over a period of eight months. Twice weekly sessions may also be offered. The program requires about 40 sessions to complete.

Scope of the Evidence Review

This review included an RCT, rated high for study design,[25] and a pre-post study, rated low for study design,[26] of older adults with SMI and co-occurring chronic health conditions. Two additional RCTs of I-IMR are currently underway.

Integrated Illness Management and Recovery (I-IMR)

Moderate Evidence

Study Demographic Groups

The studies included participants with:

- Diagnosis of schizophrenia spectrum, bipolar disorder, or major depression associated with pervasive impairment lasting at least one year across multiple areas of psychosocial functioning; and
- Diagnosis of diabetes, chronic obstructive pulmonary disease (COPD), congestive heart failure, ischemic heart disease, hypertension, hyperlipidemia, or osteoarthritis, with treatment received at a community mental health center for at least three months.

Outcomes Associated With I-IMR

Studies included in this evidence review demonstrated that use of I-IMR for older adults experiencing SMI was associated with statistically significant improvements in:

- Psychiatric illness self-management[25]
- Diabetes self-management [25]
- Use of hospitalization[25]
- COPD self-management[25]
- Community functioning[25]

Participants were majority White (97 percent), and 55 percent were female.[25]

Participants were excluded for previous participation in the IMR program, residence in a nursing home or psychiatric hospital, diagnosis of dementia, terminal illness with life expectancy of one year or less, or moderate to severe cognitive impairment.

Study Practitioner Type

An I-IMR specialist with a master's degree in social work conducted the intervention weekly for 8 months. The I-IMR specialist received 1.5 days of training in administering I-IMR. The training for the I-IMR specialist was based on the standardized program toolkit and manual.

Additionally, throughout the study, each specialist received a weekly call with a clinical psychologist with expertise in behavior change, motivational interviewing, and illness self-management.[25]

A primary care nurse was embedded 1 day per week at each mental health center to coordinate healthcare appointments, medication adjustments, transfer of medical records, and counseling on self-management and lifestyle changes for management of chronic health conditions. Participants met with the nurse healthcare manager twice per month to discuss progress and barriers to meeting health goals.[25]

Helping Older People Experience Success (HOPES)

Overview

The Helping Older People Experience Success (HOPES) program is designed to improve independent functioning of older adults with SMI living in the community and help them continue living in the community by teaching them social, community living, and healthy living skills. A nurse provides coordination of preventive care to individuals in the program.

Skills training is a main component in the HOPES curriculum, which includes the following skills modules[27]:

1. Communicating effectively
2. Making and keeping friends
3. Making the most of leisure time
4. Healthy living
5. Using medications effectively
6. Making the most of a healthcare visit
7. Living independently in the community

Each standalone module consists of six to eight component skills, with one skill taught each week. Programs offer the modules on a rotating basis, so clients can join throughout the year. Clients receive a workbook to reinforce skills and are encouraged to identify a support person, such as a family member, friend, or individual clinician, to help them practice skills learned in the training group.[27] Clients also set goals for preventive health care and managing chronic medical conditions through monthly meetings with a nurse.

Typical Settings

The skills training session can be held in a variety of settings, such as a mental health clinic, rehabilitation center, or senior center.

Target Population

HOPES was developed for community-dwelling older adults with SMI and enrolled in mental health treatment.

Practitioner Types

Rehabilitation specialists co-lead the skills training (e.g., one bachelor's-level clinician and one master's-level clinician or nurse manager). A registered nurse provides the monthly health management.

Intensity and Duration of Treatment

HOPES participants complete 2 years of skills training: the first year consists of intensive hour-long weekly sessions, and the second year consists of monthly maintenance sessions. Participants also receive individual meetings with a nurse and participate in trips into the community to practice social skills in a variety of settings.[27]

Scope of the Evidence Review

This review included four studies, three of which were associated with the same RCT, which followed HOPES participants for three years following enrollment and was rated high for study design.[27-29] The fourth study was a pre-post pilot trial of an individually tailored HOPES model, rated low for study design.[30] The studies focused on community-dwelling older adults with SMI enrolled in mental health treatment for at least 3 months.

Helping Older People Experience Success (HOPES)

Study Intervention Design

One of the goals of the HOPES program is to teach the participants effective social skills for day-to-day living and interactions with the general community. To accomplish this objective, periodic trips to the outside community were scheduled. enabling the patients to practice skills (e.g., conversational) they learned in the group sessions in real world settings. These trips, which were planned jointly by the coaches and patients, occurred biweekly during the intensive phase and monthly during the maintenance phase. During the latter phase, patients were also encouraged to plan their own group outings.

Study Demographic Groups

The participants in the four studies were aged 50 and older, experienced impairment in multiple areas of life, and had a diagnosis of major depression, bipolar disorder, schizoaffective disorder, or schizophrenia. The participants were overwhelmingly White (86 percent) and non-Latino (93 percent) and were majority female (58 percent). Men consistently benefited more from HOPES than women, for reasons that are unclear.

Outcomes Associated With HOPES

Studies included in this evidence review demonstrated that use of HOPES for older adults experiencing SMI was associated with statistically significant improvements in:

- Psychosocial functioning[27, 29, 30]
- Independent living skills[29, 30]
- Quality of life[30]
- Communication skills[30]
- Psychiatric symptoms[29]
- Health self-management[30]
- Productive use of leisure time[27, 29, 30]

Improved functioning and symptoms were maintained at 3-year follow-up. In addition, a secondary analysis of HOPES found that improved self-efficacy associated with HOPES was also associated with improved independent living skills.[31]

Exclusion criteria included residence in a nursing home, diagnosis of dementia, terminal illness with life expectancy of one year or less, or moderate to severe cognitive impairment. An additional RCT of HOPES is currently underway.

Study Practitioner Type

In the RCTs reviewed, one master's-level clinician and one bachelor's-level clinician co-led skills training sessions. A registered nurse provided the monthly health management, starting with a medical history and evaluation of healthcare needs, including preventive health care. In the pre-post trial, the coaches were trained to provide the intervention. They had varied professional backgrounds and included interns, case managers, and master's-level therapists.

The programs described in the text box below met criteria for inclusion in the evidence review based on published studies. However, they are programs developed in a research context and therefore do not have resources available to support implementation.

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CHAPTER

3

Guidance for Selecting and Implementing Evidence-based Practices

This chapter provides information for clinicians, program administrators, health profession educators, and other stakeholders interested in implementing evidence-based practices (EBP) for the psychosocial treatment of older adults with serious mental illness (SMI). The chapter:

- Reviews the steps to implement a new practice
- Describes the principles of age-friendly health systems and services
- Includes key practice selection and implementation considerations and strategies
- Provides implementation resources for the practices described in Chapter 2

Implementation of Evidence-Based Practices

Several general frameworks and guidelines exist to provide insight into how to implement new programs and practices.[2] A comprehensive mental health program planning and implementation process typically includes the following steps:

1. **Identify the EBP that best matches the need and context**—Identify the need that the practice will aim to address. Consider the population of focus, mental health conditions of the target population, delivery setting, and duration of the practice. Analyze these considerations and choose the practice that aligns most appropriately.

Evidence-based practice is a way of providing health care that is guided by thoughtful integration of the best available scientific knowledge with clinical expertise. This approach allows the practitioner to critically assess research data, clinical guidelines, and other information resources to correctly identify the clinical problem, apply the most high-quality intervention, and re-evaluate the outcome for future improvement.[1]

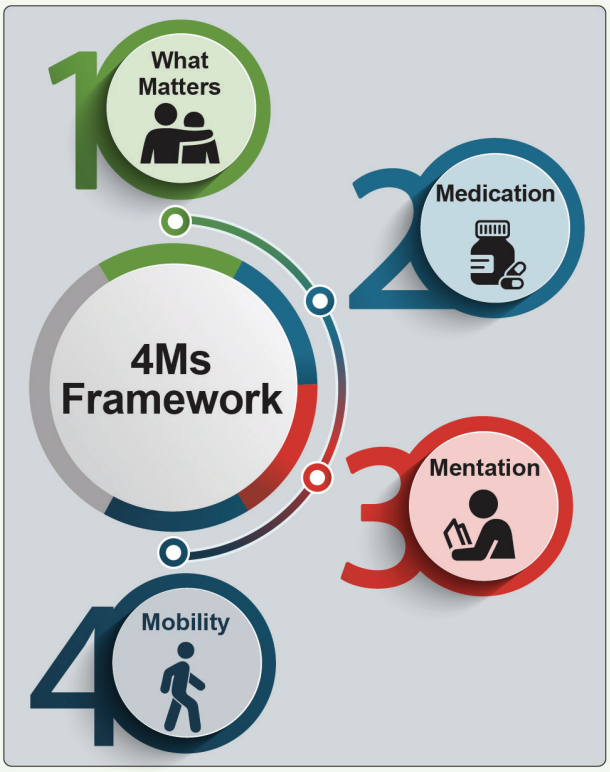
2. **Identify an implementation strategy**—Implementation strategies, which can be a single method or a set of methods, are the actions taken to overcome implementation barriers and enhance adoption, implementation, and sustainability of EBPs.[3] Identify an implementation strategy that considers the need and context outlined in Step 1.
3. **Plan the implementation process**—Identify current treatment gaps and internal capacity to implement a new practice through an organizational readiness and needs assessment. Identify external partners that may need to be engaged to supplement internal capacity. This process should include a review of qualitative and quantitative data and budget needs.

4. **Build buy-in and capacity**—Obtain support from organizational leaders, communicate goals and expectations, facilitate understanding about the chosen EBP among leadership, and engage program managers and staff in all steps of the implementation process. Select and train staff and supervisors to support implementation of the new practice. Offer trainings to new staff and booster trainings or coaching sessions for existing staff to enhance skills.
5. **Implement and optimize fidelity for the core elements of the intervention**—Pilot test any adaptations and refine, if needed, to ensure fidelity (i.e., the extent to which a practitioner adheres to the core components of the practice) before scaling up to full implementation.
6. **Evaluate the implementation process and outcomes**—Monitor practice change and quality of the implementation through observation, staff input, and data. Evaluate the implementation process and assess whether the practice is achieving key outcomes, such as reach, effectiveness, adoption, implementation fidelity, and maintenance (see details in Chapter 5).

Principles of Age-Friendly Health Systems to Support Implementation of Older Adult EBPs

To guide clinicians and health systems as they support older adults, the Institute for Healthcare Improvement (IHI) developed Age Friendly Health Systems: Guide to Using the 4Ms in the Care of Older Adults. This IHI guide outlines four interrelated evidence-based elements—known as the 4Ms—of high-quality care for older adults.

4Ms Framework for Older Adults With Serious Mental Illness



What Matters

Know and align care with each older adult's specific interests, goals, and care preferences across settings of care.

Medication

Evaluate the indications and doses of medications, prevent unintentional poisoning, minimize polypharmacy, and review the impact of medications on cognition and mobility.

Mentation

Identify, treat, and manage mental health concerns, including depression, dementia, delirium, and schizophrenia and other psychotic disorders, across settings of care.

Mobility

Ensure that older adults move safely in order to maintain daily functioning, improve quality of life and longevity, and engage in valued activities.

To effectively integrate the 4Ms as a set for older adults with SMI, systems should follow the Implementation of Evidence-Based Practices steps described above. Organizations may cycle through these steps many times to achieve sustainable age-friendly care.

When implementing the 4M framework, starting with "What Matters" involves understanding the specific needs and capacities of older adults in the health system. For all older adults, this includes knowing the individual older adult's age, language, race, ethnicity, religious and cultural preferences, and health literacy levels. In addition, specific to older adults with SMI, this includes understanding the SMI's impact on daily functioning to:

- Ensure healthcare needs are fully assessed and addressed
- Align care with preferred supported living environments
- Re-evaluate the indications and doses of psychiatric medications
- Minimize polypharmacy
- Carefully review the impact of prescribed medications on cognition and mobility

With this information in hand, providers should work to design and develop a plan of care consistent with the 4Ms. On an ongoing basis, it is important to adapt workflows to test and implement the 4Ms consistently across every setting and for every older adult served.

It is suggested to begin with a smaller sample of older adults. Scale up with modifications is also recommended, when necessary. Throughout implementation, providers should study performance by measuring progress and assessing the impact of the 4Ms while they improve and sustain provided care.

Factors to Consider When Selecting and Implementing an Intervention

When selecting and implementing interventions for older adults with SMI, there are several factors to consider, including

- Identification of needs and priority outcomes
- Treatment fidelity
- Adaptation of practices
- Treatment adherence and retention in care
- Practice sustainability

These factors are described below, along with recommended strategies to achieve optimal implementation.

Fidelity is the extent to which a practitioner adheres to the core components of the practice, and is crucial for reaching desired outcomes.[4]

Identifying Needs and Priority Outcomes of Older Adults

Consideration

Older adults often have different needs than younger populations. Moreover, within the older adult population, these needs vary across different age groups, functional capacities, and population characteristics.

These needs include co-occurring chronic health conditions, medical and psychiatric complexity, progressive conditions affecting functioning and cognition, limited options for supported living environments, loneliness and isolation, and adapting to losses and grief.

- **Assess needs and goals**: Needs assessment is the first step in practice identification and implementation. Organizations seeking to implement a practice should conduct a person-centered assessment for a range of factors in the population they serve, such as interests and desired outcomes, social determinants of health, strengths, ability to perform activities of daily living independently, and personal goals.

  For example, older adults with SMI may benefit from an assessment of their strengths and needs in the area of social support. Instruments and measures intended for the general population may not adequately identify the ways in which social support can reduce stressors specific to SMI or to older adults.[5] Additionally, they may not be validated in older populations.

  Specific considerations for older adults that may affect their ability to benefit from a practice include:

  - Chronic health conditions
  - Level of cognitive functioning
  - Living situation (e.g., at home, with or without caregivers, long-term care facility)
  - Significant losses, such as the death of a spouse
  - Social determinants of health (e.g., discrimination/social exclusion, racism, poverty, and decreased access to health care)
- **Select a practice**: Organizations should select a practice based on the needs, characteristics, and goals of the older adult population with SMI. The chosen practice should target identified needs and goals.
- **Measure**: After practice implementation, organizations should determine whether the practice is meeting its goals by measuring outcomes relevant to the goals. Organizations should consider a process for measuring outcomes that is feasible for their workflow and resources, including how often measurement will take place, which staff will collect information on outcomes, and where the data will be stored.

Strategies for Optimizing Program Fidelity

- **Monitor fidelity over time**: Without ongoing efforts to maintain fidelity of the evidence-based practice, its effectiveness will be compromised. Initially, high fidelity of the practice can diminish, even after only a few weeks following implementation.[4] Programs should consider measuring outcomes of implementation fidelity over time.

  Many practices described in this guide have built-in fidelity measures that can be implemented, either as a self-assessment tool or, if funding is available, by external expert evaluators. Practitioners should also frequently refresh their knowledge of the practice by attending trainings, webinars, and other continuing education opportunities.
- **Ensure that the organizational environment supports fidelity**: Organizations can maintain practice fidelity by examining their existing systems and environment to determine whether they enable staff to carry out the practice as intended. The organization must have the infrastructure needed to support correct use of evidence-based treatment practices, reduce clinician burden, and prevent burnout.

  Considerations may include level of staff education, characteristics of the older adult target population, the ability of clinicians to see individuals on a regular basis (e.g., once a week, or more often depending on the diagnoses and treatments selected), and time for clinicians to study the treatment modules and prepare for each session.
- **Develop in-house expertise**: It is often advantageous for an organization to select staff to undergo supervision, trainings, and certification in the adopted practice. In-house training and clinician supervision groups make professional development more accessible, help prevent burnout, and ensure continued fidelity to treatment. They can also help ensure a built-in support system and more attention to self-care for clinicians working with older adults with SMI. Organizations and clinicians may consider prioritizing training specific to older adults, as behavioral health conditions often present differently in this population.[6]

Adapting Practices

Consideration

Successful practice implementation often requires adapting an existing practice to ensure it is better suited for a particular population, setting, or organization. While maintaining practice fidelity is critical to achieving desired outcomes, certain elements of a practice may not be appropriate, feasible to implement, or relevant in specific contexts.

For example, an intervention or implementation strategy may need to be adapted for use in groups with different cultural identities, disabilities, and settings (e.g., rural or community-based). Adaptation may also need to consider long-term maintenance following implementation.

Basics of Adaptation

Why is the adaptation being made (e.g., better fit, expanded reach, feasibility, sustainability)?

What is being adapted (i.e., form vs. function and core components)?

Where is the adaptation made (e.g., at what level—organization, provider, patient)?

Who is involved in designing and delivering the adaptation (e.g., stakeholders, community, providers, educators)?

Strategies

- **Develop a plan for adaptation**: When considering adaptations, practitioners and program administrators should ensure that core components of the practice are maintained and fidelity is not compromised. When possible, they should consult with developers of the intervention for guidance in identifying core components that need to remain intact and those that can be tailored to the specific target population, setting, or context.
  - The practitioners should also seek input from stakeholders, including older adults, and monitor data to ensure the adapted intervention will achieve desired outcomes. Depending on the degree of adaptation of the originally validated intervention, the new version may or may not be as effective, underscoring the need for continued evaluation.

    ADAPT-ITT, consisting of eight sequential phases, is a systematic framework for adapting evidence-based interventions.[7] While it was initially designed for HIV-related interventions, the general process is applicable to many other practices.
- **Adapt the practice to better serve the population of focus**: The most cited reasons why organizations adapt a practice are for ensuring cultural relevance and addressing a new population of focus.[8]
  - ***Cultural adaptations***—Practice implementers should understand the influence of culture on aging and consider how to tailor psychosocial interventions to be compatible with older adults' race, ethnicity, cultural context, and values.[9] To make a practice more culturally appropriate, it is important to be flexible and sensitive to individuals' beliefs, attitudes, and preferences for care. It is also important to consider the preferred language, healing practices, lifestyle, and experiences of the cultural groups served.[10]
  - ***Telehealth and mobile technologies***—Telehealth and mobile technologies have the potential to enhance access, reach, and sustainability of evidence-based interventions. Clinicians and peer support specialists may use technology to deliver services to older adults via text messaging, videoconferencing, and social media.[11, 12] Use of these technologies may help improve self-management goals and increase support for individuals between clinical encounters. Prior to implementing technology approaches, providers must understand the older adults' access to, interest in, skill, and comfort level with these technologies. Providers should explain the technology and provide instruction and technological support as needed.[13]

THE EIGHT STEPS OF THE ADAPT-ITT MODEL

- **A** — **Assessment:** Conduct an assessment to understand the population of interest and organization-level capacity to implement the intervention.
- **D** — **Decision:** Select the intervention.
- **A** — **Adaptation:** If indicated, adapt the model to the specific population, setting, or context while maintaining fidelity to the core components of the intervention.
- **P** — **Production:** Produce a revised draft of the intervention guide maintaining fidelity to the core elements, behavioral theory, and internal logic of the initial intervention.
- **T** — **Topical Experts:** Engage subject matter experts in a review of the intervention guide produced in Production step.
- **I** — **Integration:** Integrate feedback from the Topical Experts and Production steps, and produce a second draft.
- **T** — **Train:** Train facilitators, recruiters and retention staff, interviewers, and data management staff to ensure consistent implementation and data collection efforts.
- **T** — **Test:** Pilot test the intervention and integrate findings into a third draft. Conduct a second pilot test to determine if the intervention will be effective in the organization's service delivery area and with the population of interest.

Program Financing and Sustainability

Consideration

Implementation of EBPs requires sustainable funding mechanisms. Estimates of implementation costs should include staff time and resources for planning, training, licensing and certifications, materials, technology needs, and service delivery.

Clinicians may experience challenges receiving adequate reimbursement, due to the longer duration of services needed to implement some of these interventions, as well as limited coverage for comprehensive components, such as team-based care.

Strategies

- **Review insurance policies**: Insurance policies differ in their requirements for reimbursement of mental health services and supports, including telehealth.

  Specific types of licensures are required to be able to bill and receive reimbursement from public and private insurance, including Medicare and Medicaid. Program administrators should seek and provide clarification around benefits in their states and common billing concerns.

- **Coordinate with state and local mental health and older adult services partners**: Multiple sources support behavioral health services for older adults. These include Titles III-B, III-D, and III-E of the Older Americans Act; the Community Mental Health Services and Substance Abuse Prevention and Treatment Block Grants; Affordable Care Act initiatives; and other flexible and targeted funding streams.[14]

  State agencies and local organizations, including state units on aging, state mental health authorities, and charitable foundations may have resources to provide training and technical assistance related to the implementation of EBPs.

- **Demonstrate impact**: Demonstrated effectiveness is a key factor for sustainability. By measuring outcomes and reporting on person-level and public health impact, program administrators can help explain the value of older adult services and secure organizational and community support.

Practice Resources

In addition to the overarching implementation guidance provided above, several resources are available to help organizations implement the practices described in Chapter 2. Some of these practices have not been widely disseminated or implemented. The list below provides a sample of available resources for each practice.

Although some are not specific to older adult populations, they provide general guidance on implementing the practices discussed in this guide.

Assertive Community Treatment (ACT)

SAMHSA's ACT Evidence-Based Practices KIT provides free implementation tools.

The Center for Evidence-Based Practices at Case Western Reserve University provides technical assistance, including fidelity evaluation, consultation, and training, for ACT teams as well as the Getting-Started Guide online.

The UNC Institute for Best Practices maintains a resource library, ACT listserv, and discussion board for ACT team members.

The SPIRIT Lab at the University of Washington offers several free online resources to aid ACT implementation, including sample worksheets and the Tool for Measurement of Assertive Community Treatment (TMACT) fidelity assessment.

SAMHSA's Mental Health Technology Transfer Center Network hosts events to support implementation, such as this archived presentation for ACT Team Leaders.

Cognitive Behavioral Social Skills Training (CBSST)

The CBSST website contains information about CBSST implementation and training opportunities.

Cognitive-Behavioral Social Skills Training for Schizophrenia: A Practical Treatment Guide provides user-friendly provider scripts, teaching tools, exercises, activities, and reproducible consumer workbooks.

Functional Adaptation Skills Training (FAST)

The SAMHSA-funded E4 Center of Excellence for Behavioral Health Disparities in Aging at Rush University Medical Center offers a library of resources to support implementation of evidence-based practices, including FAST.

Programa de Entrenamiento para el Desarrollo de Aptitudes para Latinos (PEDAL)

The E4 Center of Excellence for Behavioral Health Disparities in Aging at Rush University Medical Center offers a library of resources to support implementation of evidence-based practices, including PEDAL.

Integrated Illness Management and Recovery and Helping Older People Experience Success (I-IMR and HOPES)

The Center for Collaborative Mental Health Research offers training in I-IMR and HOPES, among other interventions, as well as program evaluation and consultation services.

Additional Resources

SAMHSA's Treatment Improvement Protocol (TIP) 26: Treating Substance Use Disorder in Older Adults is designed to help providers and others better understand how to identify, manage, and prevent substance misuse in older adults. The TIP includes:

- Descriptions of the unique ways in which the signs and symptoms of substance use disorder (SUD) manifest in older adults
- SUD screening tools, assessments, and treatments specifically tailored for older clients' needs
- Information on the interaction between SUD and cognitive impairment
- Strategies to help providers improve their older clients' social functioning and overall wellness

SAMHSA's brief on Older Adults Living With Serious Mental Illness: The State of the Behavioral Health Workforce provides an overview of workforce issues to consider when addressing the needs of older adults living with SMI. Information includes demographics, challenges faced by a provider workforce, and ideas for strengthening the geriatrics workforce to address SMI.

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CHAPTER

4

Examples of Programs for Older Adults Experiencing Serious Mental Illness

This chapter highlights three examples of organizations that provide psychosocial interventions for older adults with serious mental illness (SMI). Each organization is implementing an intervention with strong or moderate support for causal evidence, as detailed in Chapter 2, including:

- Assertive Community Treatment (ACT)
- Cognitive Behavioral Social Skills Training (CBSST)
- Integrated Illness Management and Recovery (I-IMR)

The chapter documents how each setting has implemented these practices as part of a comprehensive strategy to address the needs of their populations. Programs should implement interventions with fidelity to evaluated models. Fidelity is the degree to which a program delivers a practice as intended and must be maintained for desired outcomes.

However, many programs, including those highlighted in this chapter, adapt chosen interventions to better serve their clients. As clinical providers and program administrators modify these interventions to address the needs and constraints of their population, budget, setting, and other local factors, they should adhere to the evidence-based program's foundational principles and core components.

The examples highlighted in this chapter were identified through an environmental scan and in consultation with subject matter experts.

The examples detailed in this chapter:

- Include interventions identified in Chapter 2
- Can be replicated (are well-defined with guidance materials or a manual)
- Exemplify implementation with diverse populations

Vibrant Emotional Health – *Older Adult ACT Program*

Bronx, NY

Vibrant Emotional Health (Vibrant) offers a variety of programs for individuals and families, such as:

- Crisis support via call, text, or online chat
- Family resource centers and strengthening programs
- Personalized recovery programs for individuals with SMI
- Peer support programs
- Advocacy initiatives
- Behavioral health wellness consulting to businesses

Vibrant's Older Adult Assertive Community Treatment (ACT) program, established in 2014, focuses on helping older adults learn skills to achieve their goals, establish independence, and live meaningful lives in their communities.

Vibrant conducted a needs assessment revealing significant health disparities in the Bronx, and, therefore, selected this community as the focus for services.

Participants are referred from the New York City Department of Mental Health and Hygiene, which offers a single point of access to clients for resources across the city. The team serves up to 48 participants at a time. The ACT team has served 105 individuals since 2015.

Model Features and Elements

- The Older Adult ACT team includes all the services typically offered by a 24/7 multidisciplinary ACT team, with some slight modifications to meet the needs of older adults. These modifications include:
- Inclusion of a peer specialist who is an older adult with SMI
- Emphasis on connection with primary care, as many participants have medical comorbidities
- Inclusion of a substance use disorder specialist, as a great number of participants present with co-occurring substance use and SMI

Program Implemented

Assertive Community Treatment

Setting

Mobile, meeting older adults where they are, at home or in the community.

Population of Focus

Adults aged 50 and older with SMI and living in the Bronx.

Majority of participants are Black, American Indian, and other people of color; some experience homelessness.

Program Duration

Older adults participate in ACT for an average of 12 months.

Related Resource

Program Website

- Services more regularly provided in-home (or in-shelter), instead of in the community as would likely occur in a younger population
- Inclusion of an Aging Services Specialist rather than a Vocational Specialist, who can help participants not only find employment if desired, but also find volunteer or recreational opportunities, if deemed more appropriate
- During the COVID-19 pandemic, the ACT team continued to provide in-person services, but with personal protective equipment (PPE) provided for all staff and with social distancing. Tele-mental health approaches were used in some cases, though the team recognized that in-person services allowed them to better serve the population – detailed further below. Grief counseling was offered in response to deaths of important persons in participants' lives due to COVID-19.

Findings and Outcomes

- Vibrant's Older Adults ACT program has not yet been evaluated.

Lessons Learned

- The team can bill Medicaid for services, although program licensing requires the team to serve up to five clients who do not have Medicaid. Programs should consider additional financing options to accommodate this requirement if it exists in their state.
- Older adults with SMI in need of ACT services often face challenges with transportation. The team should consider how to address transportation barriers.
- Providing face-to-face services is vital for ensuring older adults with SMI are well supported. In-person visits allowed the team to better evaluate participants' overall well-being, including being able to:
  - Identify when participants were not adhering to prescribed medication regimens and/or engaging in substance misuse.
  - Allow for more complete assessments of changes in appearance or changes in living conditions that might not easily be identified through tele-mental health (i.e., the team could better assess whether food or other basic necessities were in adequate supply).
- Tele-mental health approaches, while valuable in certain instances, could not be relied upon to be able to identify cues that someone might be decompensating or otherwise struggling.
- Continuing face-to-face visits allowed the team to continue to support particularly high-risk participants to help them avoid inpatient treatment. For some high-risk participants, face-to-face visits were increased beyond the required number to ensure their needs were met.
- Ensuring staff feel safe and supported while providing services is critical. This included:
  - Engaging staff about their concerns and needs to identify ways to keep them safe and help them feel heard and supported.
  - Using cab services and ride sharing for service provision during the pandemic, as it allowed staff to more easily engage with participants and increased staff safety.
- The team supplemented their ACT training with trainings on HOPES and I-IMR (see Chapter 2 for more information on these programs).

Contra Costa County Behavioral Health Services – *Older Adult CBSST Program*

Contra Costa County, CA

Contra Costa County Behavioral Health Services offers a variety of programs to individuals and families of all ages. The older adult behavioral health clinic offers comprehensive evidence-based care and programs for adults with SMI. For those adults aged 60 and older, services include medication management, intensive care management, community support workers, and other services that blend behavioral and physical health care. In addition to providing services in the clinic, providers may travel to support clients in their homes, in board and care facilities, and in other clinical or community settings.

Contra Costa's Cognitive Behavioral Social Skills Training (CBSST) program, established in 2018, focuses on helping older adults learn skills needed to achieve large goals they thought were outside their capacity. Adults must be aged 60 or older, have an SMI, qualify for county behavioral health services, and be able to participate in a 1-hour group session.

The original CBSST program launch recruited 16 people that were split into 2 groups of 8 people, the maximum CBSST group size. They also ran two additional programs at a board and care facility.

Program Implemented

Cognitive Behavioral Social Skills Training

Setting

County-level older adult mental health clinic.

Population of Focus

Adults aged 60 and older with SMI.

Program Duration

18 weekly sessions with 1 hour of CBSST and a half hour of individual consultations with nurses.

Related Resource

Program Website

Model Features and Elements

- The team attended a 2-day CBSST workshop. After group sessions began, the team participated in monthly consultation calls for a year.
- After surveying older adults, the team presented CBSST as a launch event instead of a class. The team sent out personalized written invitations to older adults, presenting CBSST as a program focused on living in the present and setting goals for the future. The event included lunch, music, incentives, socialization with other older adults, an introduction to CBSST, and transportation to and from the event.

The program consists of the traditional three CBSST modules of 6 sessions per module (one thought challenge module, one social skills training module, and one problem-solving module) for a total of 18 sessions.

- The team starts with the social skills module, as many clients tend to be isolated before participating in the program. This built a foundation for the future sessions.
- Sessions include 1 hour of CBSST training and a half hour session one-on-one with a nurse or other clinician to address individual client needs.
- Transportation is provided to the clinic for those that may need it. For CBSST at board and care facilities, providers go to the facilities to lead the sessions.
- The program is funded through Medi-Cal (California's Medicaid program) and Prop 63 Mental Health Services Act (MHSA). Additional funding information in Lessons Learned.

During the COVID-19 pandemic, the team noticed the older adults had difficulty using technology. Instead of delivering the program through traditional tele-health mechanisms, the team mailed hard copies of worksheets that reinforced skills learned during the CBSST program to existing clients.

Findings and Outcomes

Contra Costa's CBSST program assesses clients at the beginning of the program and after each module set is completed (weeks 6, 12, and 18) using the Patient Health Questionnaire 9 (PHQ-9) for depression. The team used the Independent Living Skills Survey (ILSS) as well; however, participants found that the length of the survey made it challenging to complete.

Additionally, the program has demonstrated immense success in supporting clients in achieving their chosen large goal. For example, one person in recovery from alcohol use disorder, who was initially afraid of public speaking, became a weekly Alcoholics Anonymous (AA) leader for younger people. Other clients reported an increase in their ability to engage more actively in daily tasks and activities. The participants grew in their ability to support each other as they gained and strengthened their social skills.

As groups resume following the COVID-19 pandemic, leaders are noticing high skill retention; this is being attributed to the practical nature of the skills, as well as the success group members experienced toward achieving their goals.

Lessons Learned

- After initially presenting CBSST as a skills class and receiving little engagement, the team surveyed older adults to determine what they needed and wanted in a program. They found that tangible incentives were important to encourage engagement in the model. Therefore, they created the launch event and provided incentives such as gift cards, lotion, outings to stores, and transportation.
- Clients were placed in groups based on their learning styles and abilities to facilitate effective collaboration and learning support.
- Group leaders also chose their own goals for the program and participated in the sessions. The modeling helped motivate clients to work toward achieving their goals.
- The team did not initially have access to funding for training providers in CBSST. They had to justify the funding upfront and seek approval for it. The success of the program has shown the value of the training, and the program is able to receive funding for direct services through Medi-Cal (California's Medicaid program) and Prop 63 Mental Health Services Act (MHSA).
- Ongoing consultations to discuss challenges and barriers and problem-solve in real time supported the success of the program.

Santa Cruz County Behavioral Health Services – *Older Adult I-IMR Program*

Santa Cruz County, CA

Santa Cruz County Behavioral Health Services offers a variety of programs to individuals and families of all ages. The clinic offers several group programs to assist adults with cognition, function, and independence through the development of life skills, cooking skills, self-care, sleep training, daily structure, hobbies, and coping skills.

For those adults aged 50 and older, the clinic offers a specific group for Integrated Illness Management and Recovery (I-IMR) with a six-month commitment. While I-IMR was designed for adults aged 50 and older, Santa Cruz also provides this intervention to those younger in a different group setting.

Santa Cruz's I-IMR program was introduced to the clinic in 2017 as an opportunity to support clients experiencing an SMI and a medical diagnosis. The group meets in-person weekly to review and discuss program materials. I-IMR specialists, who are occupational therapists at Santa Cruz Behavioral Health Services, lead the program. It begins with approximately 12 program participants and results in 8 to 10 participants completing the program.

Program Implemented

Integrated Illness Management and Recovery

Setting

County-level older adult mental health clinic.

Population of Focus

Adults aged 50 and older with SMI and a diagnosis of diabetes, chronic obstructive pulmonary disease (COPD), congestive heart failure, ischemic heart disease, hypertension, hyperlipidemia, or osteoarthritis.

Program Duration

24 weekly sessions with 1.5 hours of I-IMR over a 6-month period.

Related Resource

Program Website

Model Features and Elements

- The team attended a 2-day I-IMR workshop and completed training to train other I-IMR specialists.
  - I-IMR specialists meet with group participants individually, outside of the group setting, to address any urgent client needs and develop clear and measurable goals. For example, if during one-on-one meetings the team noticed a client had difficulty passing a home inspection, they would develop a treatment plan more focused on home management.
- The team posted I-IMR flyers presenting the program as focused on goal-setting for those with an SMI.
  - Clinic case managers also referred clients that might be a good fit for the program to I-IMR specialists.
- The program consists of the traditional I-IMR curriculum and takes groups about 6 months to complete. The program is able to bill Medi-Cal (California's Medicaid program) for the group sessions.
  - At the start of a new session, I-IMR specialists give clients the option to meet for 2 hours with a brief break in between, or a 1.5-hour long meeting with no break. The clinic found clients preferred the 1.5-hour long meeting.

Each participant is given a binder with the I-IMR program curriculum and "practice" (homework-like activities). When needed, I-IMR specialists provide supplemental activities, such as presenting TED talks during group meetings.

During the COVID-19 pandemic, the team noticed that the older adults had difficulty using technology. The team tried to conduct tele-health meetings over the phone but noticed there was a lack of engagement among clients. In August 2021, they plan to begin in-person meetings again.

Findings and Outcomes

Many of Santa Cruz's I-IMR clients focused on setting goals related to weight loss, exercise, and smoking cessation. Other goals included diabetes management and healthy eating.

The team reported that clients continue to refer to program materials after program completion.

Additionally, the program has demonstrated success in supporting clients in developing small, manageable goals as they work to achieve their larger goals. For example, one participant wanted to lose 10 pounds as a long-term goal. The I-IMR Specialist worked with the client and developed a smaller goal of eating vegetables three times a week.

Lessons Learned

- I-IMR was initially planned to be led by clinic case managers; however, due to the case managers' workload, two occupational therapists lead it. This worked well for the clinic since they both had years of experience leading group sessions in both inpatient and community-based outpatient settings. Their prior experience in keeping clients engaged, managing difficult behaviors, and redirecting conversions was a benefit to implementation.
- The team was surprised by the lack of client education on their diagnoses. The I-IMR Specialist mentioned many of their clients needed additional information regarding their symptoms and treatment.
- The team noted clients enjoy and appreciate the accountability the group setting provides. Clients were engaged throughout the I-IMR curriculum and liked learning about the various medical conditions, even if they were not diagnosed with them.
- Clients enrolled in I-IMR are usually referred to the program and have I-IMR written into their treatment plan to manage their symptoms. The I-IMR Specialist can receive funding for direct services through Medi-Cal (California's Medicaid program).

CHAPTER

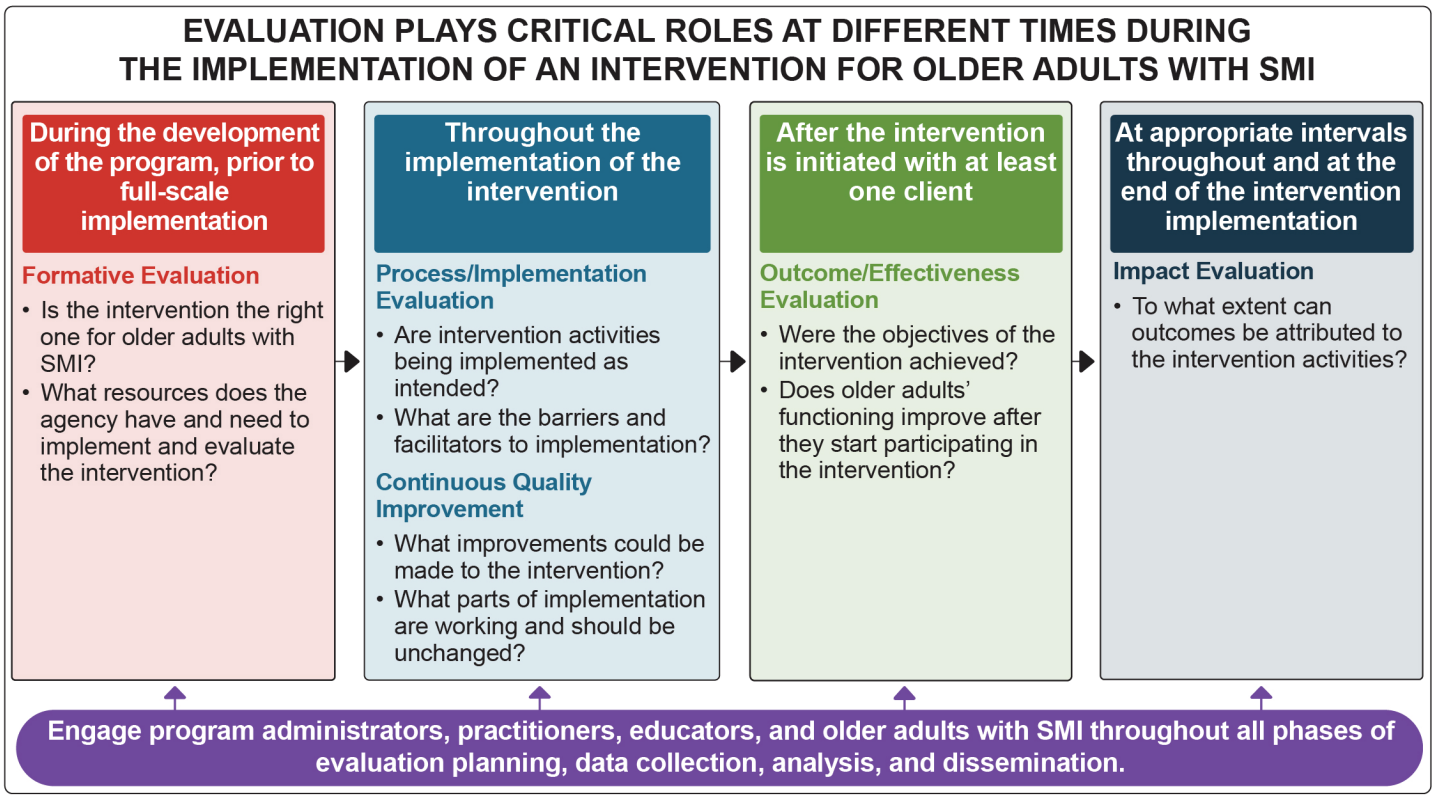
5

Resources for Evaluation and Quality Improvement

Evaluating a program can answer critical questions about how well an intervention has been implemented and determine what may or may not be working. Evaluation can also show how individuals are impacted by the intervention. This information can be helpful in making implementation adjustments, if necessary, and demonstrating the value of that intervention to justify its continuation and secure additional funding. In addition, stakeholders can use information gathered through evaluation to encourage implementation of that intervention in other settings or communities.

This chapter provides an overview of approaches to evaluate the implementation and outcomes for programs that support older adults with SMI. Program administrators, treatment providers, educators, and older adults with SMI should be engaged in developing evaluation tools and plans to ensure data collection is appropriate for the evaluated participants. This engagement can secure buy-in among stakeholders. Reporting findings back to providers and participants should be prioritized to promote transparency and inform care choices.

This chapter focuses on evaluation strategies for interventions, such as those discussed in Chapter 2. The chapter includes information on implementing a continuous quality improvement (CQI) process and an outcome-focused evaluation. Further, it provides specific evaluation resources, including potential outcomes to track.



Types of Evaluations

Researchers may conduct evaluation activities before an intervention is implemented to determine its feasibility (***formative evaluation***), during implementation (***process evaluation*** and ***CQI***), and after the treatment has been delivered to at least one client (***outcome and impact evaluations***). Each type of evaluation provides information about different aspects of the practice's effectiveness.

Preparing to Collect Data

The following steps can help clinics and practitioners prepare to collect and analyze data:

1. **Determine if the purpose of the data collection is evaluation or research.** Qualitative and quantitative evaluation and research enable administrators, educators, and clinicians to learn from older adults and obtain the perspective of those with lived experiences. Both evaluation and research can also involve collecting data from staff who deliver the treatment to obtain their perspectives on facilitators and challenges to implementation.

Qualitative and quantitative data are complementary. Each provides critical insight into if and how the intervention is operating and achieving the intended objectives.

Qualitative data include any non-numeric, text-based information, such as verbal, visual, or descriptive data. Qualitative data collection methods include interviews, focus groups, clinical observations, gathering data from documents and images, and open-ended survey questions and polling responses.

Quantitative data are any numeric data that can be processed by mathematical or statistical analysis. Quantitative data collection includes close-ended survey questions and polling responses, services and utilization data, and claims and encounter data.

While program evaluation supports program improvement, research systematically follows study protocols to develop generalizable knowledge. Research requires protocol and procedure approval by an Institutional Review Board (IRB) to adhere to human subject research protections. An IRB is a committee that applies research ethics by reviewing the methods proposed for research to ensure they are ethical. Most program evaluations and quality improvement projects do not require IRB approval, but administrators/ researchers/ educators should consult with their institutions during evaluation design to ensure they are following appropriate data collection procedures.

2. **Determine outcomes of interest.** An outcome is the change a program plans to accomplish through the implementation of an intervention. Evaluations exist across a continuum, from tracking staff qualifications and activities and the number of participants receiving an intervention to conducting satisfaction surveys and/or comparing mental health outcomes between older adults receiving different treatment options. Researchers conducting evaluation studies should engage stakeholders from within the community of older adults with SMI to identify appropriate processes and metrics to assess outcomes.
3. **Identify team members to conduct evaluation activities and capacity to conduct evaluations.** Regardless of the type of research or evaluation conducted, collecting and analyzing data takes time. Researchers or program staff conducting the evaluation need to identify team members who possess the skills to conduct evaluation activities and secure funding for evaluation trainings, data collection, analysis, and reporting.

Conducting Continuous Quality Improvement

Programs might want or need to introduce and adapt new treatment practices to meet the needs of older adults with SMI. Continuous quality improvement (CQI) can be used to systematically identify, document, and analyze barriers and facilitators to implementation, making it an important tool for improving outcomes.

CONTINUOUS QUALITY IMPROVEMENT (CQI)

What is CQI?

CQI involves a systematic process of assessing program or practice implementation and short-term outcomes and then involving program staff in identifying and implementing improvements in service delivery and organizational systems to achieve better treatment outcomes. CQI helps assess practice fidelity (the degree to which a program delivers a practice as intended). There are many potential CQI models and approaches (e.g., https://www.healthit.gov/faq/what-are-leading-continuous-quality-improvement-strategies-health-care-settings).

CQI differs from process evaluation in that it involves quick assessments of program performance, timely identification of problems and potential solutions, and implementation of small improvements to enhance treatment quality. CQI is usually conducted by internal staff. Process evaluation involves longer-term assessments and is best conducted by an external evaluator.

The Institute for Healthcare Improvement's PDSA Model for Improvement identifies a scientific method for testing small-scale changes in an action-oriented, cyclical manner. The stages are: planning it (Plan), trying it (Do), observing the results (Study), and acting on what is learned (Act).

Why use CQI?

CCQI takes a broad look at the systems in which programs or practices operate. Because of the pivotal role it plays in performance management, institutions beginning to implement new treatment, case management, and recovery practices for older adults with SMI are encouraged to implement CQI procedures.

What are the steps involved in CQI?

Although steps in the CQI process may vary based on objectives, typical CQI steps are:

- Identify a program or practice issue needing improvement and a target improvement goal
- Analyze the issue and its root causes
- Develop a plan to correct the root causes of the problem, including specific actions to be taken
- Implement the actions in the plan
- Review the results to confirm that the issue and its root causes have been addressed and short- and long-term treatment outcomes have improved
- Repeat these steps to identify and address other issues as they arise

Institute for Healthcare Improvement. (n.d.). *Science of improvement: Testing changes*. http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementTestingChanges.aspx

New Jersey Department of Children and Families. (n.d.). *Five Stages of Continuous Quality Improvement.* https://www.nj.gov/dcf/about/divisions/opma/CQI%20framework.pdf

U.S. Department of Health & Human Services Office of Adolescent Health. (n.d.). *Continuous Quality Improvement, Part 1: Basics for Pregnancy Assistance Fund Programs*. https://www.hhs.gov/ash/oah/sites/default/files/cqi-intro.pdf

Evaluation of Implementation Outcomes

The RE-AIM framework can assist program leaders in selecting, implementing, and evaluating evidence-based practices for older adults with SMI, including programs that address population-level change. RE-AIM stands for Reach, Effectiveness, Adoption, Implementation, and Maintenance.

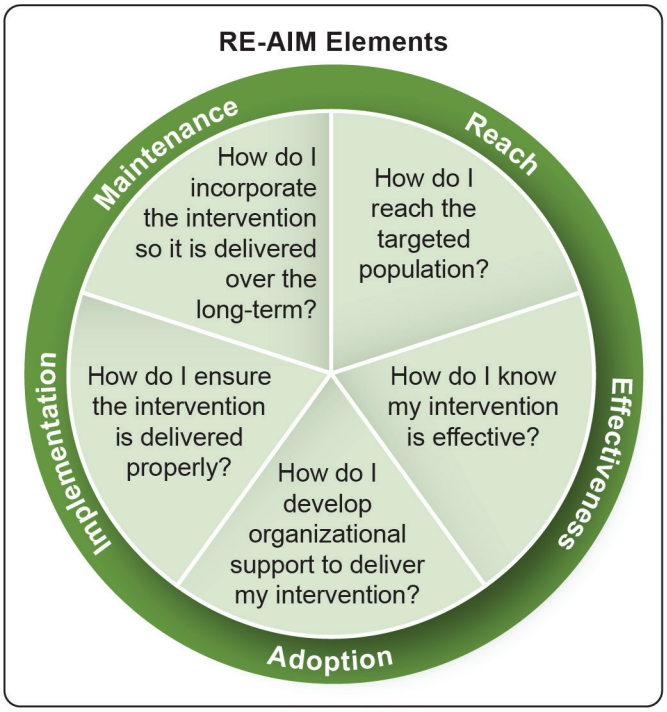
Organizations that successfully implement evidence-based practices are attentive to and perform well in the five RE-AIM elements. The five elements can be strengthened when they are preceded by a focus on Planning and Partnerships. This enhanced model is referred to as (P)RE-AIM.[1]

Planning and Partnerships calls for convening stakeholders, setting population-level behavioral health change goals, and selecting practices for implementation. *How do I find partners and plan?*

- Convene leaders to gain common understanding of issues and resources.
- Establish a collaborative building on successful efforts.
- Designate a lead organization.
- Recruit organizational partners to reach large numbers of older adults and link participants to other services.
- Establish service objectives and outcomes, an operational structure, and implementation and communication plans.

Reach refers to the ability of the practice to engage the population of focus, including identifying the total number of older adults in the program, the proportion of older adults participating from the population, and the representativeness of the population among those willing to participate in a practice. *How do I reach the population of focus with the practice?*[2]

- Define the numbers and characteristics of clients from partner organizations and potential partners and identify outreach strategies.
- Identify, recruit, and retain clients who can benefit from the practice.
- Embed the practice universally within partner organizations.



Effectiveness is defined as the impact of a practice on important health outcomes in real-world settings. *How do I know my practice is effective?*

- Identify evaluation needs and develop a plan.
- Define reporting requirements and process and analyze data.

Measuring effectiveness helps identify opportunities for improvement. Measurement methods from original studies are often used so local results can be compared with those from the original studies.

Effectiveness includes measures of:

- Impact or change in health status and health behaviors (e.g., risky use of medication and alcohol)
- Symptom severity (e.g., depressive symptoms), illness remission, psychosocial functioning, and quality of life
- Costs associated with delivering the practice and related outcomes

Adoption by target organizations refers to the total number of settings and staff members that implement the practice, the proportion of potential settings and staff members who are involved in implementation from the target organizations, and the representativeness of settings and staff (of all target organizations) who are willing to implement the prevention and early intervention practice. *How do I develop organizational support to deliver the program or practice?*

- Recruit a range of organizations suitable for implementing part or all of the practice.
- Manage training and interface with national program disseminators and trainers.

Implementation includes consistent delivery of the practice. At the aging or behavioral health service setting levels, implementation refers to the organizational and staff fidelity to various elements of the practice's protocol. At the individual level, implementation refers to the use of the practice strategies by the client population. *How do I ensure the practice is delivered properly?*

- Develop practice infrastructure with lead regional organizations (e.g., an Area Agency on Aging, mental health service system, a health system) and with local program sites (e.g., community service agencies, mental health centers, clinics).
- Schedule, promote, and conduct the practice.
- Design and implement quality assurance processes, including those that ensure fidelity.

Maintenance and sustainability consider the extent to which a practice becomes institutionalized. At the client level, maintenance is the long-term effects of a practice on outcomes after 6 or more months. *How do I incorporate the practice so it is delivered over the long-term?*

- Embed practices in organizations and service systems.
- Carry out plans to finance and sustain practices after initial grants.
- Establish a process for continuous quality improvement.[3]

Outcome Measures

One of the final important, but often challenging, steps in the process of implementing and evaluating programs is to determine whether they have yielded desired outcomes. An **outcome** is the change a program plans to accomplish through the implementation of an intervention.

The table below provides a list of potential outcomes, illustrative outcome indicators, and data sources that program administrators, practitioners, educators, and others may use to evaluate interventions, such as those identified in Chapter 2. Outcomes may be tracked at baseline and throughout the program duration through standardized instruments or through interviews with practitioners and participants.

Implementation outcomes, such as engagement and retention in services, may be obtained through administrative data, surveys, or interviews. Provider outcomes may be captured through surveys or interviews. Health outcomes may be tracked through administrative data and interviews.

Evaluations Include a Variety of Outcome Measures

The table below provides a sample of treatment program outcomes, indicators, and data sources.

Evaluations Include a Variety of Outcome Measures

Outcome	Illustrative Indicators	Illustrative Data Sources
Short-Term Outcomes		
Implementation of evidence-based programs	• Number of providers trained to implement evidence-based programs • Number of providers reporting use of the programs • Perception among providers that program is suitable for organization and client population	• Administrative data • Surveys/interviews of providers • Organizational surveys on practice change (e.g., Program Sustainability Assessment Tool) • Client experience/satisfaction surveys
Program fidelity	• Degree to which program is implemented as intended	• Surveys/interviews of providers • Observation checklists
Treatment initiation	• Number of older adults initiating treatment with new program/practice	• Attendance/administrative data
Intermediate Outcomes		
Improved treatment engagement and adherence	• Extent of client engagement in the recommended treatment regime and retention in program (e.g., session attendance, premature termination)	• Attendance/administrative data
Improved quality of life	• Independent living, meeting activities of daily living, meeting instrumental activities of daily living, and participation in social activities	• Client self-reported qualitative data
Change in severity of mental health concerns	• Measures of psychiatric symptoms, psychosocial functioning, etc.	• Client self-reported qualitative data • Structured clinical interview • Standardized scales administered by clinician (e.g., Patient Health Questionnaire)
Improved skills associated with psychosocial and help-seeking behaviors	• Engagement with peers in the community • Use of psychosocial skills outside of treatment sessions • Use of communication skills	• Client self-report qualitative data
Improved health self-management	• Measures of health promotion behaviors (e.g., physical activity, healthy eating) • Finding and working with a physician or other healthcare provider to prevent and address physical health concerns • Emergency service use	• Client self-reported qualitative data • Structured clinical interview • Standardized scales administered by clinician • Electronic health record data
Outcome	**Illustrative Indicators**	**Illustrative Data Sources**
Long-Term Population-Level Outcomes and Impacts		
Extent to which program is maintained over time	• Rates of program completion • Funding stability for program	• Health services data • Organizational surveys on practice change
Reduction in early mortality among older adults with SMI	• Rates of early mortality among older adults with SMI	• National, state, or community survey or surveillance data • Health system administrative data

Evaluation Resources

Evaluating Programs

- A Framework for Program Evaluation from the Program Performance and Evaluation Office at the Centers for Disease Control and Prevention summarizes essential elements of program evaluation.
- The Community Toolbox from the Center for Community Health and Development at the University of Kansas includes a step-by-step guide to developing an evaluation of a community program, specific tools, and examples.

Evaluating Program Sustainability

- Center for Public Health Systems Science at the Brown School at Washington University in St. Louis has developed a Program Sustainability Assessment Tool (PSAT) and a Clinical Sustainability Assessment Tool (CSAT) to measure progress towards sustaining new implementation efforts.

Quality Improvement and Continuous Performance Monitoring

- Institute for Healthcare Improvement's Quality Improvement Essentials Toolkit includes the tools and templates to launch a quality improvement project and manage performance improvement.
- The Network for Improvement of Addiction Treatment's (NIATx) model of process improvement specifically for behavioral healthcare settings is an approach to improve access to and retention in treatment.

Evaluating Programs for Older Adults

- The National Council on Aging offers considerations for program evaluation with links to additional resources.
- A joint brief from SAMHSA and the Administration on Aging on Using the RE-AIM Implementation Framework to Improve Behavioral Health is specific to older adults. It describes the RE-AIM model, which guides organizations in selecting and implementing evidence-based practices that are most likely to benefit their target population.

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2 Glasgow, R., Boles, S., & Vogt, T. (2021). *What is RE-AIM*. RE-AIM. https://www.re-aim.org/about/what-is-re-aim/

3 Institute for Healthcare Improvement. (2021). *How to improve*. http://www.ihi.org/resources/Pages/HowtoImprove/default.aspx

Appendix 1: Acknowledgments

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Appendix 2: Evidence Review Methodology

The authors followed a rigorous, systematic evidence review process in the development of this guide. This appendix provides an overview of the evidence review methodology used to identify the ratings for the programs included in the guide. Reviewers, in coordination with SAMHSA and experts, conducted a four-step process to select programs, identify related studies, review and rate studies, and identify program ratings.

Step 1: Program Selection

The authors identified five practices after a review of the literature and in consultation with experts. To include psychosocial interventions that would be most useful to those treating older adults with SMI, eligible practices were required to meet the following criteria for evidence review:

- Be clearly defined and replicable
- Developed or adapted specifically for older adults, or studied in the population aged 50 and older
- Be currently in use
- Have evidence of impact on targeted outcomes
- Have accessible implementation and fidelity supports

At the conclusion of this step, SAMHSA and the guide's Expert Panel reviewed the proposed practices identified by the authors and agreed on five for inclusion in the evidence review and rating process.

Step 2: Study Identification

Once the practices were selected, the reviewers conducted a comprehensive review of published research on these practices to identify studies of the selected practices. This review only included studies from eligible sources (i.e., peer-reviewed journals and government reports) that avoid clear conflicts of interest. The reviewers documented all potential studies identified through the literature search.

The studies identified in the literature search varied in type and rigor, so the reviewers assessed them further for inclusion in the evidence review. To be eligible for review and study rating, research studies had to:

- Employ a randomized or quasi-experimental design, or
- Be a single sample pre-post design or an epidemiological study with a strong counterfactual (a study that analyzes what would have happened in the absence of the intervention).

Literature reviews, descriptive reports, implementation studies, and meta-analyses were not included in the review, but were documented to provide context and identify implementation supports for the practices.

Additionally, to be eligible for further review and rating, studies had to:

- Be published or prepared in or after 2000
- Be a publicly available peer-reviewed or research report
- Be available in English
- Include at least one eligible outcome related to older adults with SMI
- Have a comparison/control group that is treatment as usual, or no/minimal intervention if using a randomized experimental or quasi-experimental design

Step 3: Study Review and Rating

Next, trained reviewers assessed each study to ensure the methodology was rigorous and therefore could demonstrate causation between the practices and the identified outcomes. Reviewers reviewed and documented each study to ensure:

1. Experimental and comparison groups were statistically equivalent, with the only difference being that participants in the experimental

group received the intervention and those in the comparison group received treatment as usual or no/minimal intervention.

2. For randomized experiments with high attrition and for quasi-experimental designs, baseline equivalence was established between the treatment and comparison groups.
3. For randomized experiments, randomization was not compromised. For example, ensuring that reassignment of treatment status, usually made to balance the distribution of background variables between treatment and control groups, did not occur.
4. Study did not have any confounding factors (factors that affect the outcome but are not accounted for by the study).
5. Missing data were addressed appropriately:
   - Imputation based on surrounding cases was considered valid.
   - Complete case analysis was considered valid and accounted for as attrition.
   - Using model with dummy as a covariate for missing data was considered valid.
   - Assuming all missing data points are either positive or negative was not considered valid.
   - Regression-based imputation was considered valid; mean imputation was not considered valid.
6. Outcome measures were reliable, valid, and collected consistently from all participants.
7. Valid statistical models were used to estimate impacts.
8. Program demonstrated improved outcomes related to older adults with SMI.

Based on the study design and these study characteristics, reviewers gave each study a rating for causal impact. Reviewers used the following scoring metric for each study, based on the eight factors above, to determine if a study rated:

- High support of causal evidence
- Moderate support of causal evidence
- Low support of causal evidence

Only randomized controlled trials, quasi-experimental designs, and epidemiological studies with a strong comparison were eligible to receive a high or moderate study rating.

Step 4: Practice Rating

After all studies for a practice were assessed for these criteria, the reviewers gave each practice a rating based on the number of studies with strong, moderate, or emerging support of causal impact. Causal impact is evidence demonstrating that an intervention causes, or is responsible for, the outcome measured in the study's sample population.

The practice was placed into one of the following categories based on the level of causal evidence of its studies:

- **Strong Evidence** - Causal impact demonstrated by at least ***two*** randomized controlled trials, quasi-experimental designs, or epidemiological studies with a high or moderate rating.
- **Moderate Evidence** - Causal impact demonstrated by at least ***one*** randomized controlled trial, quasi-experimental design, or epidemiological study with a high or moderate rating.
- **Emerging Evidence** - No study received a high or a moderate rating. The practice may have been evaluated with less rigorous studies (e.g., pre-post designs) that demonstrate an association between the practice and positive outcomes, but additional studies are needed to establish causal impact.

The four-step process described above resulted in identification and rating of three practices with strong evidence and two practices with moderate evidence for treating older adults with SMI. The rating given to each program is intended to inform decision-making about the adoption of new practices or clinical or system enhancements that will improve outcomes for older adults.

Photos are for illustrative purposes only.
Any person depicted in a photo is a model.

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