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MAJOR REVIEW (ORIG)

Psychosocial Management of First-Episode Psychosis and Schizophrenia: Synopsis of the US Department of Veterans Affairs and US Department of Defense Clinical Practice Guidelines

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Abstract

***Background*: Despite the large number of people treated for first-episode psychosis and schizophrenia within the Departments of Defense (DOD) and Veterans Affairs (VA), neither the DOD nor VA had established formal recommendations for the treatment of these conditions. This gap led Congress to require the development of clinical practice guidelines (CPG) for the treatment of schizophrenia. This paper reports on the psychosocial and rehabilitative recommendations presented in the VA/DOD Clinical Practice Guidelines for Management of First-Episode Psychosis and Schizophrenia.**

***Study Design*: The CPG was developed by an interdisciplinary panel of mental health and primary care providers from DOD and VA following methods specified by the VA/DOD Evidence-Based Practice Guideline Work Group. The panel formulated key questions and identified critical outcomes that guided a comprehensive search of the literature published from November 2011 to December 2021. The evidence considered was limited to systematic reviews, meta-analyses, and randomized clinical trials. Recommendations were based on the evaluation of the evidence using Grading of Recommendations Assessment, Development and Evaluation (GRADE) methods.**

***Study Results*: The review process produced 4 psychosocial/rehabilitative treatment recommendations for first-episode psychosis (early intervention services, family interventions, individual placement and support (IPS), and cognitive behavioral therapy for psychosis) and 11 recommendations for schizophrenia (family and caregiver services, assertive community treatment, IPS, smoking cessation, skills training, cognitive training, psychotherapies, aerobic exercise, yoga, weight management, and telephone-based care management).**

***Conclusions*: The VA/DOD CPG reflects the expansion of treatments for first-episode psychosis and schizophrenia and highlights the challenges in developing clinical practice guidelines.**

Key words: first-episode psychosis; schizophrenia; serious mental illness; treatment guidelines; evidence-based practices; psychosocial; systematic review.

Introduction

Clinical practice guidelines (CPG) provide research-based recommendations for treating disorders and typically assess the strength of current scientific evidence for each recommendation. Since the 1992 IOM report outlining guideline development,[1] over 3000 guidelines

from more than 20 countries have improved care quality and encouraged evidence-based practices,[2–4] including several guidelines for identifying, assessing, and treating schizophrenia.[5–10]

Despite the substantial number of individuals treated, neither the Department of Defense (DOD) nor Department of Veterans Affairs (VA) had established formal recommendations for the treatment of first-episode psychosis or schizophrenia, leading Congress to mandate the development of treatment guidelines for schizophrenia.[11]

A DOD report found that 3943 active-duty service members experienced a first-episode psychosis (FEP) between 2018 and 2020 and estimated the prevalence of FEP among US active duty service members to be 95 per 100 000.[12] Over half of these service members (57%; $n = 2320$) were separated from service within 1 year of initial diagnosis.[12] VA administrative records do not make a distinction between individuals with a true first episode versus individuals who sought care in VA after receiving treatment elsewhere. Rather than FEPs, VA reports on early psychosis which applies to individuals under the age of 30 who have a relevant ICD-10 diagnosis and no such diagnosis in the previous 3 years. Based on this definition, 4.1% of Veterans treated in VA for a psychotic disorder, independent of diagnosis, were experiencing an early episode.[13]

Based on 2021 records, VA provided care for almost 74 000 Veterans with schizophrenia (90.3% men and 9.7% women).[14] Of these individuals, 7.5% were under age 35, 50.1% were between 35 and 64, and 42.4% were 65 and over. Additionally, 54.5% were White, 35.4% Black or African American, 1.3% Asian, 0.8% Native American or Alaskan Native, and 8.1% multiracial or from other or unknown races. Individuals of Hispanic ethnicity made up 9.0%, and 68.4% had some degree of service-connected disability.

This paper presents psychosocial recommendations in the VA/DOD Clinical Practice Guidelines for Management of First-Episode Psychosis and Schizophrenia.[15] The CPG's recommendations for psychopharmacological and somatic treatments are summarized separately.[16]

Methods

The VA/DOD Evidence-Based Practice Guideline Work Group oversees the development of VA/DOD CPGs. A multidisciplinary workgroup of clinicians representing psychiatry, psychology, clinical pharmacy, internal medicine, primary care, nursing, and clinical social work, was also selected by VA and DOD leadership. All workgroup members completed conflict-of-interest disclosure forms for the previous two years and verbally affirmed disclosures throughout the project. Appendix A contains the guideline workgroup and development team members.

To guide the systematic evidence review, the workgroup developed 20 key questions (KQs). The guideline workgroup organized each KQ by the PICOTS framework[17] (ie, populations, interventions, comparison groups, outcomes, timing, and settings of interest) and chose critical and important outcomes for each KQ. This manuscript focuses on findings and recommendations related to KQs evaluating the effectiveness of psychosocial interventions.

A systematic search of peer-reviewed English language literature published from November 1, 2011, to December 1, 2021, was conducted. Systematic reviews (SRs) and meta-analyses were prioritized and supplemented with randomized controlled trials (RCTs). Inclusion criteria required at least 85% of participants to experience prodromal symptoms or be diagnosed with first-episode psychosis, schizophrenia, schizophrenia spectrum disorders, or schizoaffective disorder, or the study needed to include a schizophrenia-specific subgroup analysis. SRs were only included if they assessed the quality of the evidence or reported in a manner that allowed the workgroup to judge the overall risk of bias, consistency, directness, and precision of evidence. An SR was not used if it was impossible to assess the overall quality of the evidence in the review. Search methods and results are detailed in the full CPG.[18]

The guideline workgroup used the Grading of Recommendations Assessment, Development and Evaluation (GRADE) method to assess evidence quality and rate the strength of recommendations.[19–21] Each study was assigned a rating of *Good*, *Fair*, or *Poor* based on criteria that vary depending on study design. The detailed rating criteria can be found in Appendix VI of the USPSTF procedure manual.[22] The overall quality of the body of evidence was then assessed for each critical and important outcome by considering the overall study quality, as well as the consistency, directness, and precision of the evidence. It was rated as *High*, *Moderate*, *Low*, and *Very Low* for each critical and important outcome.

In the GRADE system, the ultimate strength of a recommendation is based on the lowest quality of evidence rating for any critical outcome in the literature reviewed for a particular recommendation. Special consideration was given to cases where withholding a treatment posed marked harm. The workgroup determined the recommendation strength (strong or weak) based on confidence in evidence quality, the balance of desirable and undesirable outcomes, values and preferences, and implementation considerations, such as resource use, equity, acceptability, and feasibility.

Recommendation strength is defined as the extent to which one can be confident that the desirable effects of an intervention outweigh its undesirable effects. The phrase "we recommend" is used for strong confidence, "we suggest" for weak confidence, and "there is insufficient evidence to recommend for or against" when inferences could not be drawn from the studies reviewed. A recommendation's strength is distinct from its clinical importance; a weak recommendation is still evidence-based and important to clinical care.

Table 1. Clinical Practice Recommendations, Strength of Recommendation, and Critical and Important Outcomes

Recommendations	Critical outcomes	Important outcomes
First Episode Psychosis—Recommendation Strength: Strong For (Improved Outcomes are Bolded)		
We recommend treatment/management with early intervention services for individuals with first-episode psychosis.	-Symptom reduction: **positive, negative,** and cognitive symptoms **-Remission**	-Reduction in self-harm -Functional status: vocational, educational, social, **general** -Treatment adherence **-Relapse, recurrence, and hospitalization** -Medication-related adverse events, including serious adverse events, metabolic symptoms, and cardiac events (specifically QTc prolongation) -Impact on family
We recommend the use of family interventions (including problem-solving-based self-learning, education, and mutual family support) for individuals with first-episode psychosis.	**-Impact on family** **-Relapse, recurrence, or hospitalization**	-QoL, wellbeing, and recovery -Functional status: vocational, educational, social, general -Reduction in self-harm -Symptom reduction or remission: **positive**, negative, and cognitive symptoms -Treatment adherence
First Episode Psychosis—Recommendation Strength: Weak For (Improved Outcomes are Bolded)		
We suggest the use of the Individual Placement and Support model of supported employment for individuals with first-episode psychosis with a goal of employment and/or education.	**-Work domains and employment** -Functional status: **vocational**, **educational,** social, general	-QoL, wellbeing, and recovery -Reduction in self-harm (including suicide) -Symptom reduction: positive, negative, and cognitive symptoms -Remission -Relapse, recurrence, and hospitalization **-Treatment adherence**
We suggest cognitive behavioral therapy for psychosis in combination with pharmacotherapy for individuals with prodromal and early psychosis.	-Symptom reduction or remission: **positive**, negative, and cognitive symptoms -Functional status: vocational, educational, social, general	-QoL, wellbeing, and recovery -Reduction in self-harm -Relapse, recurrence, and hospitalization -Treatment adherence -Treatment discontinuation (for any reason), including by provider
Schizophrenia—Recommendation Strength: Strong For (Improved Outcomes are Bolded)		
We recommend the use of psychosocial interventions provided to a primary support person or family member to decrease the risk of relapse and hospitalization for individuals with schizophrenia.	**-Impact on family** **-Relapse, recurrence, or hospitalization**	-QoL, wellbeing, and recovery -Functional status: vocational, educational, social, general -Reduction in self-harm **-Symptom reduction** or remission: positive, negative, and cognitive symptoms -Treatment adherence
We recommend the use of service models based on standard Assertive Community Treatment in individuals with schizophrenia evidencing severe functional impairments and/or risk for repeated hospitalizations.	-Housing, housing stability, and homelessness **-Relapse, recurrence, and hospitalization**	-Functional status: **vocational**, educational, social, general -QoL, wellbeing, and recovery -Reduction in self-harm (including suicide) -Symptom reduction or remission: **positive, negative**, and cognitive symptoms -Treatment adherence
We recommend the use of the Individual Placement and Support model of supported employment for individuals with schizophrenia with a goal of employment.	**-Work domains and employment** -Functional status: **vocational**, educational, social, general	-QoL, wellbeing, and recovery -Reduction in self-harm (including suicide) -Symptom reduction: positive, negative, and cognitive symptoms -Remission -Relapse, recurrence, and hospitalization -Treatment adherence
We recommend a face-to-face individualized smoking cessation intervention tailored specifically to the patient for individuals with schizophrenia.	**-Increased uptake of primary, secondary, and tertiary disease prevention** (e.g., prevention guidelines adherence, including immunizations**, giving up or not starting smoking**, routine screenings [cervical and breast cancer]) as well as early treatment and adherence -Morbidity	-Mortality

Table 1. Continued

Schizophrenia—Recommendation Strength: Weak For (Improved Outcomes are Bolded)		
We suggest skills training for individuals with schizophrenia evidencing severe and persistent functional impairments and/or deficits in social, social-cognitive, and problem-solving skills.	-**Symptom reduction** or remission: positive, **negative**, and cognitive symptoms -Functional status: vocational, educational, **social**, general **-Social cognition (emotion processing, social perception bias, attribution, mentalizing, facial recognition, auditory recognition, processing, or both)**	-QoL, wellbeing, and recovery -Reduction in self-harm -Relapse, recurrence, and hospitalization -Treatment adherence -Treatment discontinuation (for any reason), including by provider
We suggest cognitive training programs for the treatment of cognitive impairment and negative symptoms for individuals with schizophrenia.	**-Cognition (processing speed, verbal memory, visuospatial memory, working memory, attention, reasoning, and problem-solving)** **-Social cognition (emotion processing, social perception bias, attribution, mentalizing, facial recognition, auditory recognition, processing, or both)** **-Negative symptoms** -Functional status: vocational, educational, social, **general**	-Treatment adherence and discontinuation -Relapse, recurrence, and hospitalization
We suggest the following psychotherapies and psychotherapeutic interventions in combination with pharmacotherapy for individuals with schizophrenia: • Cognitive behavioral therapy for psychosis, • Acceptance and mindfulness-based therapies, • Metacognitive therapy, or • Positive psychology interventions.	-**Symptom reduction** or remission: **positive, negative, and cognitive symptoms** -Functional status: vocational, educational, **social**, **general**	**-QoL, wellbeing**, and recovery -Reduction in self-harm **-Relapse**, recurrence, and **hospitalization** -Treatment adherence -Treatment discontinuation (for any reason), including by provider
We suggest adding aerobic exercise to treatment as usual to reduce symptoms for individuals with schizophrenia.	-Symptom reduction or remission: **positive, negative**, and cognitive symptoms	-Reduction in self-harm (including suicide) **-QoL**, wellbeing, and recovery -Functional status: vocational, educational, social, general -Relapse, recurrence, and hospitalization -Anxiety and stress -Treatment adherence -Serious adverse events, including **metabolic symptoms** and cardiac events
We suggest offering yoga as an adjunct to other evidence-based treatments for positive and negative symptoms for individuals with schizophrenia.	-Symptom reduction or remission: **positive, negative**, and cognitive symptoms	-Reduction in self-harm (including suicide) **-QoL**, wellbeing, and recovery -Functional status: vocational, educational, social, general -Relapse, recurrence, and hospitalization -Anxiety and stress **-Treatment adherence**
We suggest the use of dietary interventions, exercise, individual lifestyle counseling, and/or psychoeducation for metabolic side effects of antipsychotic medication as well as the delivery of weight management services that are based on a chronic care model (e.g., Enhancing Quality of Care in Psychosis) for individuals with schizophrenia.	-Change in side effect symptoms based on standard tests or rating scales (Barnes, Simpson-Angus, AIMS, DISCUS) **-Medication-related adverse events**, including serious adverse events, **metabolic symptoms**, and cardiac events (specifically QTc prolongation)	-QoL, wellbeing, recovery -Treatment discontinuation (for any reason), including by provider **-Treatment adherence**
We suggest using telephone-based care management to reduce rehospitalization days for individuals with schizophrenia.	-Symptom reduction or remission: positive, negative, and cognitive symptoms	-Functional status: vocational, educational, social, general -Reduction in self-harm (including suicide) -QoL, wellbeing, and recovery **-Treatment adherence** -Relapse, recurrence, and **hospitalization** -Serious adverse events, including metabolic symptoms and cardiac events

Table 1. Continued

Recommendation Strength: Neither For Nor Against		
There is insufficient evidence to recommend any specific supported housing intervention over another for individuals with schizophrenia experiencing housing insecurity.	-Housing, housing stability, and homelessness -Relapse, recurrence, and hospitalization	-Functional status: vocational, educational, social, general -QoL, wellbeing, and recovery -Reduction in self-harm (including suicide) -Symptom reduction or remission: positive, negative, and cognitive symptoms -Treatment adherence
There is insufficient evidence to recommend for or against the use of the Clubhouse model for vocational rehabilitation to increase employment outcomes for individuals with schizophrenia.	-Work domains and employment -Functional status: vocational, educational, social, general	-QoL, wellbeing, and recovery -Reduction in self-harm (including suicide) -Symptom reduction or remission: positive, negative, and cognitive symptoms -Relapse, recurrence, and hospitalization -Treatment adherence
There is insufficient evidence to recommend for or against the use of targeted peer-provided interventions for individuals with schizophrenia.	-Treatment adherence	-QoL, wellbeing, and recovery -Functional status: vocational, educational, social, general -Relapse, recurrence, and hospitalization -Reduction in self-harm (including suicide) -Symptom reduction or remission: positive, negative, and cognitive symptoms -Exercise and nutrition
There is insufficient evidence to recommend for or against Illness Management and Recovery in combination with pharmacotherapy for individuals with schizophrenia.	-Symptom reduction or remission: positive, negative, and cognitive symptoms -Functional status: vocational, educational, social, general	-QoL, wellbeing, and recovery -Reduction in self-harm -Relapse, recurrence, and hospitalization -Treatment adherence -Treatment discontinuation (for any reason), including by provider
There is insufficient evidence to recommend for or against virtual reality interventions, including avatar therapy, for individuals with schizophrenia.	-Symptom reduction or remission: positive, negative, and cognitive symptoms	-Functional status: vocational, educational, social, general -Reduction in self-harm (including suicide) -QoL, wellbeing, and recovery -Treatment adherence -Relapse, recurrence, and hospitalization -Serious adverse events, including metabolic symptoms and cardiac events
There is insufficient evidence to recommend for or against the use of motivational interviewing or shared decision-making to improve medication adherence for individuals with schizophrenia.	-Treatment adherence	-Symptom reduction or remission: positive, negative, and cognitive symptoms -QoL, wellbeing, and recovery -Functional status: vocational, educational, social, general -Treatment discontinuation (for any reason), including by provider -Reduction in self-harm (including suicide) -Relapse, recurrence, and hospitalization
There is insufficient evidence to suggest case management to improve preventive screening and/or medical outcomes for individuals with schizophrenia.	-Increased uptake of primary, secondary, and tertiary disease prevention (e.g., prevention guidelines adherence, including immunizations, giving up or not starting smoking, routine screenings [cervical and breast cancer]) as well as early treatment and adherence -Morbidity	-Mortality
There is insufficient evidence to recommend specific, integrated, non-integrated, or psychosocial treatments in addition to usual care for individuals with schizophrenia and comorbid substance use disorder.	-Substance use -Symptom reduction or remission: positive, negative, and cognitive symptoms	-Reduction in self-harm (including suicide) -QoL, wellbeing, and recovery -Relapse, recurrence, and hospitalization -Functional status: vocational, educational, social, general -Treatment adherence

Results

The CPG contains 4 psychosocial recommendations/suggestions for first-episode psychosis and 11 for schizophrenia. **Table 1** summarizes guideline recommendations, their strength, and the critical and important outcomes examined for each intervention. For all recommended and suggested interventions, the workgroup determined that the benefits of the intervention outweighed the potential harms, patient values and preferences varied but were generally favorable, and implementation was feasible at VA.

Interventions for Prodromal/First-Episode Psychosis

Early Intervention Services

Recommendation. We recommend treatment/management with early intervention services for individuals with first-episode psychosis.

Evidence Summary. Early intervention services (EIS) aim to detect and treat psychosis early, reducing untreated psychosis duration and improving long-term outcomes. A meta-analysis of 10 RCTs, including individuals with a study-defined diagnosis of first-episode psychosis or early-phase schizophrenia spectrum disorders, showed all EIS programs were team-based, with 4-6 components, including psychopharmacology and family psychoeducation.[23] Common elements included CBT, family therapy, vocational counseling, social skills training, and crisis management. The meta-analysis found EIS improved remission rates, reduced relapse, hospitalizations, and total, positive, and negative symptom severity, and enhanced school/work involvement, global functioning, and quality of life.[23] A small RCT in Japan that studied first-episode psychosis related to schizophrenia or bipolar disorder also reported higher remission and lower treatment dropout rates with EIS compared to treatment as usual (TAU) but found no differences in symptom severity, functioning, or quality of life.[24]

A review of 1 RCT and an SR of 3 RCTs found insufficient evidence to recommend a specific EIS duration. Studies on extending EIS beyond 2 years indicated possible benefits for positive symptom improvement and service engagement but showed no impact on hospital admissions, recovery, or school/work status.[25,26]

Implementing EIS in the DOD would require policy changes, though similar services are already in place at the VA. The VA's Early Psychosis Intervention Coordination (EPIC) ensures high-quality care aligned with Coordinated Specialty Care (CSC). EIS and CSC both aim to provide timely treatment for individuals with emerging mental health conditions, but they differ in scope and structure. EIS is a broad approach that includes various early detection and intervention programs for a range of mental illnesses, whereas CSC is a specialized, team-based model designed specifically for first-episode psychosis (FEP). While both emphasize early detection, symptom management, and functional recovery, CSC integrates structured, multidisciplinary care into a coordinated framework that is more intensive and targeted for psychosis, encompassing a variety of evidence-based interventions within a recovery-oriented, shared decision-making approach. The components of CSC are described in **Table 2**.

Family Interventions

Recommendation. We recommend the use of family interventions (including problem-solving-based self-learning, education, and mutual family support) for individuals with first-episode psychosis.

Evidence Summary. EIS for individuals with FEP includes family services, but this recommendation focuses on family services as a stand-alone intervention. A meta-analysis of 11 RCTs found that compared to TAU, family services for FEP reduce psychotic symptoms, relapse, and hospitalization days while improving functioning.[27] An RCT comparing a family-facilitated, problem-solving self-learning program (PBSP) to group family psychoeducation and TAU for early-stage psychosis (i.e., brief psychotic disorder, psychotic disorders with featured delusion/hallucination symptoms, and delusional disorders for ≤ 5 years) showed PBSP reduced hospital days compared to TAU and lowered psychotic symptoms and caregiver burden compared to both psychoeducation and TAU.[28]

A range of family services are available in VA. Veteran-Centered Brief Family Consultation, family psychoeducation, and behavioral family therapy are available at most VA medical centers, and multifamily groups are available at a few.

Individual Placement and Support (IPS)

Recommendation. We suggest the use of the IPS model of supported employment for individuals with first-episode psychosis with a goal of employment and/or education.

Evidence Summary. IPS helps individuals secure and maintain competitive employment by emphasizing rapid job searches without prevocational training and offering ongoing post-employment support.[29] While EIS for FEP includes supported employment and education, this recommendation focuses on IPS as a stand-alone intervention. Four RCTs show that IPS outperforms TAU across employment domains. One study comparing IPS with workplace skills training to TAU found IPS improved employment rates, school engagement, and treatment

Table 2. Components of Coordinated Specialty Care for First-Episode Psychosis

Intervention	Description
Team-Based Care	All CSC providers are trained in the principles of team-based care for youth and young adults with FEP and participate in weekly team meetings to improve coordination and quality of care. Team members receive ongoing supervision, consultation, or both to maintain fidelity to the CSC model.
Recovery-Oriented Psychotherapy	Individual psychotherapy for FEP is based on cognitive-behavioral treatment principles. It emphasizes resilience training, illness and wellness management, and general coping skills pertinent to young adults experiencing a first psychotic episode. Psychological interventions are essential for symptomatic and functional recovery and might aid in the prevention of comorbidities, such as SUDs.
Family Psychoeducation and Support	FEP can devastate the individual's relatives and other support persons, who struggle to adjust to changed circumstances and new demands. Family psychoeducation and support teaches family members or other individuals providing support about psychosis and its treatment and strengthens their capacity to aid in the individual's recovery.
Supported Employment Services	For young adults, FEP can impede attempts to obtain or maintain employment. Supported employment services are offered to all clients who want to work to help them choose and get a job that aligns with their career goals. Supported employment emphasizes rapid job placement in the client's preferred work setting. Ongoing support is also available to help the individual maintain employment.
Supported Education Services	The experience of FEP can disrupt school attendance and academic performance. Supported education services facilitate an individual's return to school as well as the attainment of expected educational milestones. Supported education emphasizes rapid placement in the individual's desired school setting and provides active coaching and support to ensure the individual's educational and academic success.
Pharmacotherapy and Primary Care Coordination	Guideline-based use of medication optimizes the speed and degree of symptomatic recovery by individuals with FEP and minimizes the likelihood of side effects. Pharmacotherapy is best initiated following a thorough medical evaluation to assess all possible causes of psychosis. Pharmacotherapy typically begins with a low dose of a single antipsychotic medication and involves monitoring for symptom response, side effects, and attitudes toward medication at every visit. Consideration of the use of a long-acting injectable as part of a holistic approach is common practice. CSC places special emphasis on monitoring and managing cardiometabolic risk factors, such as smoking, weight gain, hypertension, dyslipidemia, and pre-diabetes. Prescribers maintain close contact with primary care providers to ensure optimal medical treatment for risk factors related to cardiovascular disease and diabetes.
Case Management	Case management assists clients with solving practical problems and coordinates services across multiple areas of need. Case management involves frequent in-person contact between the provider and the individual and family members, with sessions occurring in clinic, community, and home settings, as required.

adherence.[30] Two other studies showed the advantages of IPS over TAU for employment status at 6 months,[31,32] though only one impacted educational status.[31] Beyond six months, IPS resulted in better employment outcomes and more days worked than TAU.[33] These studies varied in their definition of FEP. For example, one was specific to first episode schizophrenia, one included any DSM psychotic disorder, and two included anyone who was participating in an early psychosis program.

While IPS is required in VA, it is unavailable in DOD. Participation in employment or education by active-duty service members is infeasible under current rules. Patient values and preferences may vary based on their personal goals and desire for work. Further, paid employment might negatively impact entitlements such as supplemental security income outside the VA.

Cognitive Behavioral Therapy for Psychosis (CBTp)

Recommendation. We suggest cognitive behavioral therapy for psychosis in combination with pharmacotherapy for individuals with prodromal and early psychosis.

Evidence Summary. CBTp emphasizes resilience training, illness and wellness management, and general coping skills pertinent to young adults experiencing a first psychotic episode. A meta-analysis reported that CBTp reduces the rate of transition to a psychotic disorder and attenuates psychotic symptoms in the 6–24 months of follow-up for individuals at high risk of psychosis.[34] However, confidence in the quality of the evidence was very low, and the shortage of CBTp trained providers in VA poses a significant implementation challenge. However, access to CBTp in VA has increased with the implementation of the national TelePsychosis Consultation service that offers CBTp via telehealth.

Interventions for Schizophrenia

Family and Caregiver Services

Recommendation. We recommend the use of psychosocial interventions provided to a primary support person or family member to decrease the risk of relapse and hospitalization for individuals with schizophrenia.

Evidence Summary. Family and caregiver services encompass a broad range of services, including family psychoeducation, consultation, and therapies. The recommendation was based on a review of two RCTs[35,36] and three meta-analyses that reviewed 61 RCTs in total.[27,37,38] These services contribute to lower relapse and hospitalization rates, decreased psychiatric emergency service utilization, and a reduction in hospitalization days.[27,28,37] Caregivers also experience benefits, including reduced perceived burden, global morbidities, expressed emotion, and negative caregiving experiences.[28,35,38] For individuals with co-occurring schizophrenia and substance use disorders, Family Intervention for Dual Disorders resulted in reduced psychiatric symptoms and alcohol and drug abuse severity.[36]

Assertive Community Treatment

Recommendation. We recommend the use of service models based on standard Assertive Community Treatment (ACT) in individuals with schizophrenia evidencing severe functional impairments and/or risk for repeated hospitalizations.

Evidence Summary. The ACT model's critical elements include an interdisciplinary team, shared caseloads, frequent contact, low patient-to-staff ratios, and assertive community outreach. VA's ACT services are collectively known as ICMHR (Intensive Community Mental Health Recovery) Services, include Mental Health Intensive Case Management (MHICM), Rural Access Network for Growth Enhancement (RANGE), and Enhanced Rural Access Network for Growth Enhancement (E-RANGE).

Two RCTs provided moderate quality evidence on adapted versions of ACT. Those receiving a culturally adapted ACT model in China were less prone to relapse and hospital readmission compared to TAU.[39] Additionally, they demonstrated greater reductions in general, positive, and negative symptoms and significant functional improvements, such as an increased likelihood of re-employment and a shorter time to employment. Similarly, individuals in South Africa receiving adapted ACT had a longer time to hospital readmissions, fewer readmissions, and fewer hospital days compared to those receiving TAU.[40] This intervention was modified by increasing the caseloads to 80 patients per team given limited resources.

Individual Placement and Support

Recommendation. We recommend the use of the Individual Placement and Support (IPS) model of supported employment for individuals with schizophrenia with a goal of employment.

Evidence Summary. Evidence suggests that IPS outperforms TAU across various employment domains. One RCT[41] and an SR of six RCTs[42] demonstrated that IPS improves work outcomes, including achieving competitive employment and the amount of time worked in competitive employment up to 18 months post-treatment.

Smoking Cessation

Recommendation. We recommend a face-to-face individualized smoking cessation intervention tailored specifically to the patient for individuals with schizophrenia.

Evidence Summary. Tobacco use in individuals with schizophrenia is approximately 5.3 times higher than the average population.[43] An SR of three RCTs demonstrated improved tobacco cessation at 6 and 12 months following individualized face-to-face interventions when compared to TAU.[44] Trials using adjunctive pharmacotherapy were included in the review, and all studies used biochemically verified smoking cessation as their primary outcome and self-report use as a secondary outcome.

Skills Training.

Recommendation. We suggest skills training for individuals with schizophrenia evidencing severe and persistent functional impairments and/or deficits in social, social-cognitive, and problem-solving skills.

Evidence Summary. Skills training (ST) is a therapeutic approach designed to enhance interpersonal and communication skills. The evidence supporting this recommendation comes from studies that evaluated various forms and combinations of interventions, encompassing conventional social ST, cognitive behavioral social ST, supportive goal ST, social cognition training, and life ST. Intervention included behavior-based instruction, role modeling, rehearsal opportunities, feedback, reinforcement, and encouragement for home practice. Skills training interventions are widely available in VA, including the national rollout of social skills training.

An SR of 25 RCTs[45] that compared social skills training with various comparators and 10 small RCTs[46–55] generally found reductions in overall symptoms and negative symptoms. ST has demonstrated improvements in social cognitive impairment,[46,47,55] facial and emotional recognition skills,[51] and social and general skills functioning.[45,47,48,50] However, one SR did not find significant outcomes related to relapse, functional decline, dropout rate, or noncompliance in the four social skills training studies included.[56] Further, the workgroup's confidence in the quality of the evidence that did support skills training was very low.

Cognitive Training

Recommendation. We suggest cognitive training programs for the treatment of cognitive impairment and negative symptoms for individuals with schizophrenia.

Evidence Summary. There are two main types of cognitive training—compensatory and restorative. Compensatory programs teach general strategies and

skills, often using multiple methods to enhance cognitive performance and behavior. Restorative approaches leverage neuroplasticity, using exercises that start with basic sensory processes and advance to complex cognitive tasks.

A meta-analysis of 130 RCTs (n = 8851) found that cognitive training (CT) improves symptom severity, global functioning, cognition, processing speed, attention, executive function, social cognition, and memory compared to other treatments.[57] Interventions with active, trained therapists and structured development of cognitive strategies were more effective on cognition and functioning.[57] These factors, along with cognitive exercises and transfer to real-world procedures, form the four core elements of cognitive remediation.[58] Interventions that included all four elements showed the greatest benefits in cognition and functioning.[57] Higher baseline symptom severity, lower premorbid IQ, and fewer years of education were associated with larger improvements.

Studies combining compensatory and restorative approaches report gains in cognitive composite scores, verbal learning and memory, social cognition, and processing speed.[46,47,59,60] Compensatory approaches alone improved total cognitive function,[61] cognitive strategies,[62,63] verbal learning,[49] verbal fluency,[61] executive functioning, and visual attention.[64] Restorative-only approaches also showed improvements in total cognitive scores and emotional intelligence.[65]

Several studies[46,47,49,62,63] and a meta-analysis of 130 RCTs[57] have shown cognitive training improves negative symptoms. An RCT in China found that combining compensatory cognitive training with medication self-management reduced negative symptoms more effectively than TAU, while cognitive training alone had no impact.[61]

Psychotherapies

Recommendation. We suggest the following psychotherapies and psychotherapeutic interventions in combination with pharmacotherapy for individuals with schizophrenia: cognitive behavioral therapy for psychosis, acceptance and mindfulness-based therapies, metacognitive therapy, or positive psychology interventions.

Cognitive Behavioral Therapy for Psychosis (CBTp). CBTp, like other forms of CBT, is structured, time-limited, and goal-oriented. Various CBTp protocols have emerged, with some highly tailored (eg, for command hallucinations). The treatment focus of CBTp is exploring and restructuring beliefs about distressing psychotic experiences, promoting behavior change to reduce maladaptive safety behaviors, encouraging participation in care, and using coping strategies.

Two meta-analyses and 4 RCTs provided evidence for CBTp in schizophrenia.[56,66–70] A network meta-analysis comparing CBTp to TAU favored CBTp in improving overall, positive, and negative symptoms, and reducing relapse and functional decline.[56] Other RCTs also support the positive impact of CBTp on symptom reduction.[66,70] CBTp, when accompanied by SlowMo, a smartphone app that provides strategies for slowing down and feel safer, resulted in greater improvement in symptoms, QoL, and mental wellbeing compared to TAU.[67]

Comparisons of CBTp to other active interventions yield mixed findings. One meta-analysis reported CBTp to be superior to TAU and active controls (eg, supportive counseling or psychoeducation) in reducing hallucinations and delusions.[68] An RCT found CBTp to be more effective in reducing symptoms and improving social functioning compared to supportive therapy.[69] However, a network meta-analysis indicated no advantage of CBTp over other active interventions (eg, acceptance and commitment therapy, psychoeducation, supportive therapy, social skills training), except when compared to family therapies.[56] CBTp improved negative symptoms more than family therapies, while family therapies reduced functional decline more than CBTp.[56]

Acceptance and Mindfulness-Based Psychotherapies. Acceptance and mindfulness-based therapies belong to the "third wave" cognitive and behavioral therapies, targeting the client's relationship with their own experience to help them examine internal processes and learn to live more effectively with the full spectrum of emotion and cognition.[71] Acceptance, in these therapies, is the "willingness to experience affect without needless escape, avoidance or constraint,"[71] and mindfulness is defined as, "paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally."[72] Acceptance and mindfulness-based therapies are widely accessible among active duty service members and Veteran populations because most providers in these healthcare systems are trained in at least one of these modalities.

A meta-analysis of 16 studies (8 acceptance-based, 8 mindfulness-based) found acceptance interventions reduced overall and depressive symptoms and lowered hospitalization rates compared to TAU but showed no impact on positive, negative, or anxiety symptoms, social functioning, or QoL.[73] A network meta-analysis found no difference between Acceptance and Commitment Therapy and TAU, CBT, or social skills training.[56]

Mindfulness studies in the meta-analysis reduced overall and negative symptoms, the likelihood of hospitalization, and the number of days hospitalized.[73] They also improved social functioning and QoL, but did not impact positive, depressive, or anxiety symptoms.[73] Integrated Coping Awareness Therapy (I-CAT) uses positive psychology and mindfulness to increase positive emotions and resiliency. An RCT found it reduced total, negative, and disorganized symptoms and improved purpose, resilience, work, and social functioning compared to TAU.[74]

Mindfulness-Based Stress Reduction improved hope, psychological well-being, and functional recovery compared to psychoeducation.[75] A similar Mindfulness-Based Psychoeducation Programme enhanced emotion reappraisal but did not affect psychiatric symptoms.[76] Adding mindfulness to Integrated Rehabilitation improved inhibitory control and mindfulness.[77] Progressive muscle relaxation showed short-term benefits for psychotic and anxiety symptoms and QoL but didn't sustain these gains at a 3-month follow-up.[78]

Metacognitive Therapy. Metacognitive therapy (MCT) is a manualized, group intervention aiming to increase cognitive awareness through structured cognitive exercises and psychoeducation on cognitive bias. According to Beck et al.,[79] cognitive insight involves evaluating and correcting distorted beliefs and misinterpretations (self-reflectiveness) and addressing the tendency to be overconfident in one's conclusions (self-certainty). A meta-analysis of 10 metacognitive interventions found that MCT improves cognitive insight, particularly self-reflectiveness, and enhances clinical insight.[80]

Cognitive insight also improved in a feasibility study with mental health nurses delivering MCT[81] but not in a study conducted in Japan.[82] MCT significantly reduces positive symptoms,[81–83] improves social functioning,[81,83] enhances general functioning,[82] and improves aspects of social cognition, such as more functional attributions and theory of mind, first-order false beliefs.[84]

A study comparing Metacognitive Reflection and Insight Therapy (MERIT) with a tailored version demonstrated technology's potential to enhance outcomes.[85] The tailored group used a smartphone app to record social interactions, allowing clinicians to personalize treatment with real examples. While tailored MERIT did not improve social functioning or positive, negative, and depressive symptoms compared to standard MERIT, it reduced disorganized symptoms and negative metacognitive beliefs.

MCT is not widely available in VA or DOD settings because few providers have been trained in it, and neither VA nor DOD have a training program for this intervention.

Positive Psychology Interventions. Originally developed for individuals without a mental health diagnosis, positive psychology interventions aim to achieve recovery beyond symptom remission. These interventions utilize different methods across programs but generally center on enhancing positive emotions and helping people flourish, indirectly improving symptomatology.[86] A meta-analysis of four RCTs examined positive psychology interventions for schizophrenia spectrum disorders and concluded that these interventions improve QoL, overall symptom reduction, and positive and negative symptoms, with sustained improvements in negative symptoms at the 6-month follow-up.[87]

Aerobic Exercise

Recommendation. We suggest adding aerobic exercise to treatment as usual to reduce symptoms for individuals with schizophrenia.

Evidence Summary. Three meta-analyses that included 50 RCTs concluded that aerobic exercise, in conjunction with TAU, improves positive and negative symptoms and QoL compared to TAU alone.[88–90] Aerobic exercise also improved negative symptoms more so than other active exercise conditions.[90] In a study comparing aerobic exercise to non-aerobic stretching, no differences in symptoms were found, but BMI and cardiorespiratory fitness improved with aerobic exercise.[91] Dauwan and colleagues[88] observed variations in the effects of group and individual aerobic exercise, noting more robust effects for those participating in supervised programs, with better adherence in supervised and structured programs. Lack of access to exercise equipment and/or safety concerns in some neighborhoods may impact implementation in both VA and DOD.

Yoga

Recommendation. We suggest offering yoga as an adjunct to other evidence-based treatments for positive and negative symptoms for individuals with schizophrenia.

Evidence Summary. Yoga typically involves a series of physical postures, breathing techniques, and mindfulness practices designed to unite the body and mind. Two SRs found that yoga reduced positive and negative symptoms,[90,92] and two smaller, low-quality studies found that yoga improved QoL[93] and medication adherence.[94]

Weight Management Services

Recommendation. We suggest the use of dietary interventions, exercise, individual lifestyle counseling, and/or psychoeducation for metabolic side effects of antipsychotic medication as well as the delivery of weight management services that are based on a chronic care model (eg, Enhancing Quality of Care in Psychosis) for individuals with schizophrenia.

Evidence Summary. Weight gain, a symptom of metabolic dysfunction often induced by prescribed medications, is a critical side effect in schizophrenia, with significant health consequences, including cardiovascular morbidity, diabetes, and reduced life expectancy. The use of dietary interventions, exercise, individual and group lifestyle counseling, psychoeducation, or a combination of these have been found to be effective for weight loss and should be considered in parallel with pharmacologic strategies to manage weight.[16,95,96] A meta-review of six meta-analyses that evaluated non-pharmacologic interventions for weight loss identified individual lifestyle

counseling followed by exercise alone as the most effective intervention for weight reduction.[95]

Chronic care models (eg, Enhancing Quality of Care in Psychosis [EQUIP]) increase the use of weight services and improve weight outcomes in schizophrenia.[96] EQUIP uses clinic kiosks where patients enter their weight at each visit, with data automatically sent to providers and care managers for potential referrals. Overweight individuals receive guidance on wellness program referrals or medications with lower weight-gain risk. The program includes group-based weight management tailored to schizophrenia-related cognitive deficits and applies an evidence-based quality improvement framework. EQUIP participants were 2.3 times more likely to use weight services and experienced greater weight loss than those at control sites.

VA's MOVE! Weight Management Program is available at all medical centers. EQUIP participants reported satisfaction with the weight management program, especially sharing experiences, learning to cook, and exercising with other Veterans. However, many did not engage due to reluctance toward group interventions, perceived lack of need, transportation barriers, unawareness of services, or severe symptoms preventing attendance or engagement in group therapy.[96]

Telephone-Based Care Management

Recommendation. We suggest using telephone-based care management to reduce rehospitalization days for individuals with schizophrenia.

Evidence Summary. The Information Technology Aided Relapse Prevention Programme in Schizophrenia (ITAREPS) is a weekly, phone-based monitoring and disease management intervention to identify early signs of relapse, initiate early intervention of relapse, and prevent hospitalization.[97] If early warning signs are detected via telephone assessment, nurses prompt individuals to increase their medication dosage and/or take additional medications and then verify this during a home visit. A study testing ITAREPS found no difference in the number of relapses but reported a significant reduction in rehospitalization days in the ITAREPS group compared to routine nursing care at 12 months.[97] The same study found lower total symptom severity at relapse favoring ITAREPS.

Telephone Intervention Problem Solving (TIPS) is an 8-session, telenursing practice conducted weekly via telephone following hospital discharge.[98,99] The intervention supports solutions for daily life problems among individuals with schizophrenia and offers coping alternatives. An RCT examining TIPS reported greater self-reported medication adherence in the TIPS group versus controls at two months. Another TIPS study found no significant differences in pill-count adherence between groups at six months.[98] However, those in the TIPS intervention were more likely to have serum antipsychotic levels within the therapeutic range at six months (54.7% versus 32.7%) than those in the control group.

The limited evidence on telephone-based support suggests a reduction in rehospitalization days and improved medication adherence. The patient focus group noted individuals might not want to receive weekly calls from a health care provider or might find the intervention cumbersome, which could contribute to limited engagement. Further, consideration should be given to unhoused individuals or those with housing instability who might have inconsistent telephone access.

Treatments for Schizophrenia with Insufficient Evidence Nine interventions were reviewed but did not have sufficient evidence to recommend for or against. The workgroup recognized the importance of supported housing for those experiencing housing insecurity. However, the evidence comparing specific housing interventions did not show significant differences between interventions on critical outcomes,[100,101] and the quality of the evidence was deemed to be low due to limiting factors such as generalizability to the US population.[102]

The Clubhouse model is a form of psychiatric rehabilitation designed to foster community, support meaningful activities, and offer job opportunities. An SR of 7 RCTs found the Clubhouse model to improve social functioning, quality of life, and negative, depressive, and anxiety symptoms but not impact vocational outcomes.[103] However, all the studies were conducted in China, making the generalizability of the findings to a military and Veteran population questionable. Further, implementation of an accredited Clubhouse within VA or DOD would be difficult as legislation would be necessary to give either Department the authority to offer Clubhouse programs.

While literature outside of the evidence base for this review suggests that peer support and interventions positively impact recovery and quality of life,[104–108] the evidence-base for peer-provided interventions in this review was limited due to the small number of studies which met the inclusion criteria. Further, the studies included had small sample sizes with methodological limitations, including high attrition and lack of blinding/randomization.[109,110]

Illness Management and Recovery is designed to assist individuals with serious mental illness by teaching self-management strategies. The body of evidence examined had limitations, including small sample size, low participation, loss of participants to follow-up, and lack of information on outcome assessor blinding.[111–113]

Virtual reality (VR) interventions, including avatar therapy, for individuals with schizophrenia were reviewed. VR can be described as a modernized,

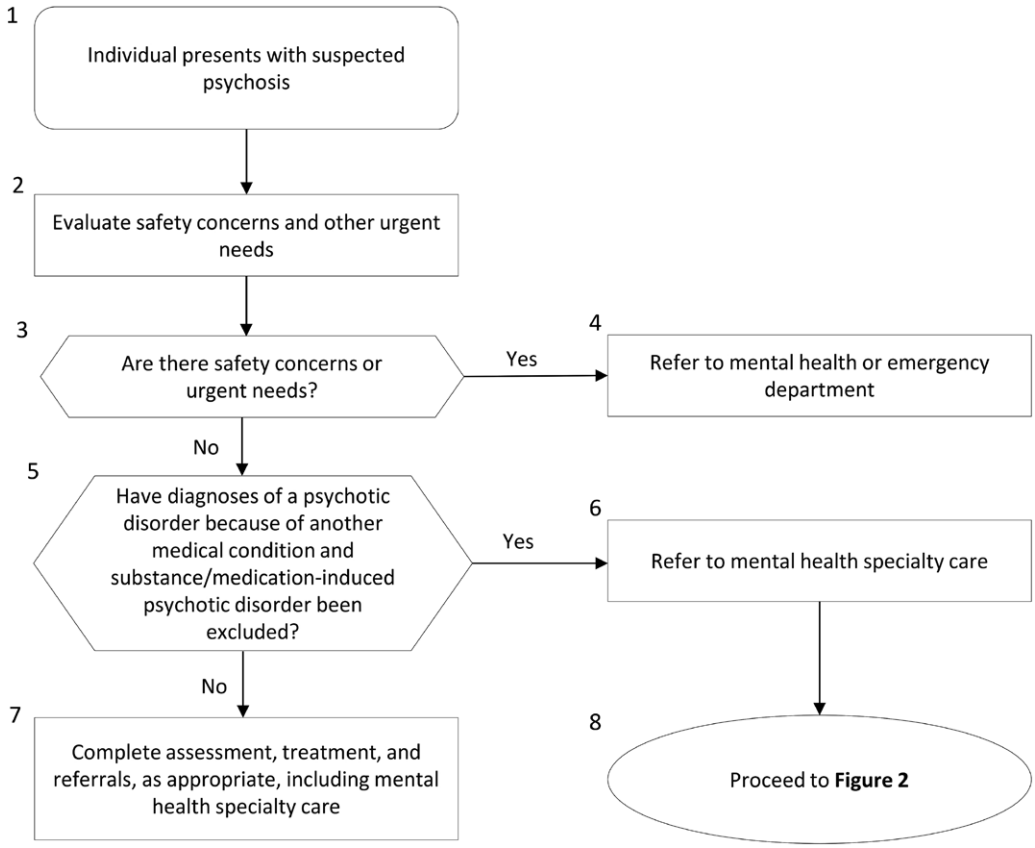

Figure 1. Primary Care Evaluation and Management of Suspected Psychosis or Possible Schizophrenia.

computer-simulated, real-time, three-dimensional, virtual experience. The quality of evidence for both virtual reality interventions and avatar therapy was very low, with small sample sizes, inconsistent findings, and biases.[114–116] Simulator sickness, which includes dizziness, nausea, headache, and eyestrain, was identified as a harm of these interventions.

A number of interventions, including motivational interviewing,[117–119] shared decision-making,[120] and self-management education[121] were reviewed as potential interventions to improve adherence to antipsychotic medications. Results were mixed, contributing to the inability to make a recommendation for or against the use of these interventions.

There is insufficient evidence to suggest case management to improve preventive screening and/or medical outcomes for individuals with schizophrenia, Unfortunately, no studies that met search criteria and addressed collaborative care, interdisciplinary treatment, systematic monitoring, or reminder systems were identified for individuals with schizophrenia. Studies of educational programs for lifestyle interventions for blood pressure and cholesterol, and self-management education for medical adherence showed no improvement compared with TAU.[121,122] (219, 272) The quality of evidence reviewed was low, had some significant limitations, and lacked secondary or tertiary prevention studies.

Lastly, the workgroup could not recommend a psychosocial treatment in addition to usual care for individuals with schizophrenia and comorbid substance use disorder. The reviewed interventions did not improve substance use outcomes, treatment adherence, or self-harm when compared with TAU.[123]

Discussion

This CPG followed a rigorous methodology and minimized bias from low-quality evidence through the exclusive use of systematic reviews and RCTs. As a result of these methodological decisions, we have very strong confidence in the efficacy of psychosocial interventions with "weak for" and "strong for" recommendations. Some of these interventions have been recommended as part of other schizophrenia guidelines[6,8,124,125] for many years, such as supported employment, family interventions, and assertive community treatment, whereas others are newer, such as aerobic exercise and yoga. However, the same methodological decisions that increase our confidence in the efficacy of these recommended interventions may have resulted in potentially effective psychosocial treatments

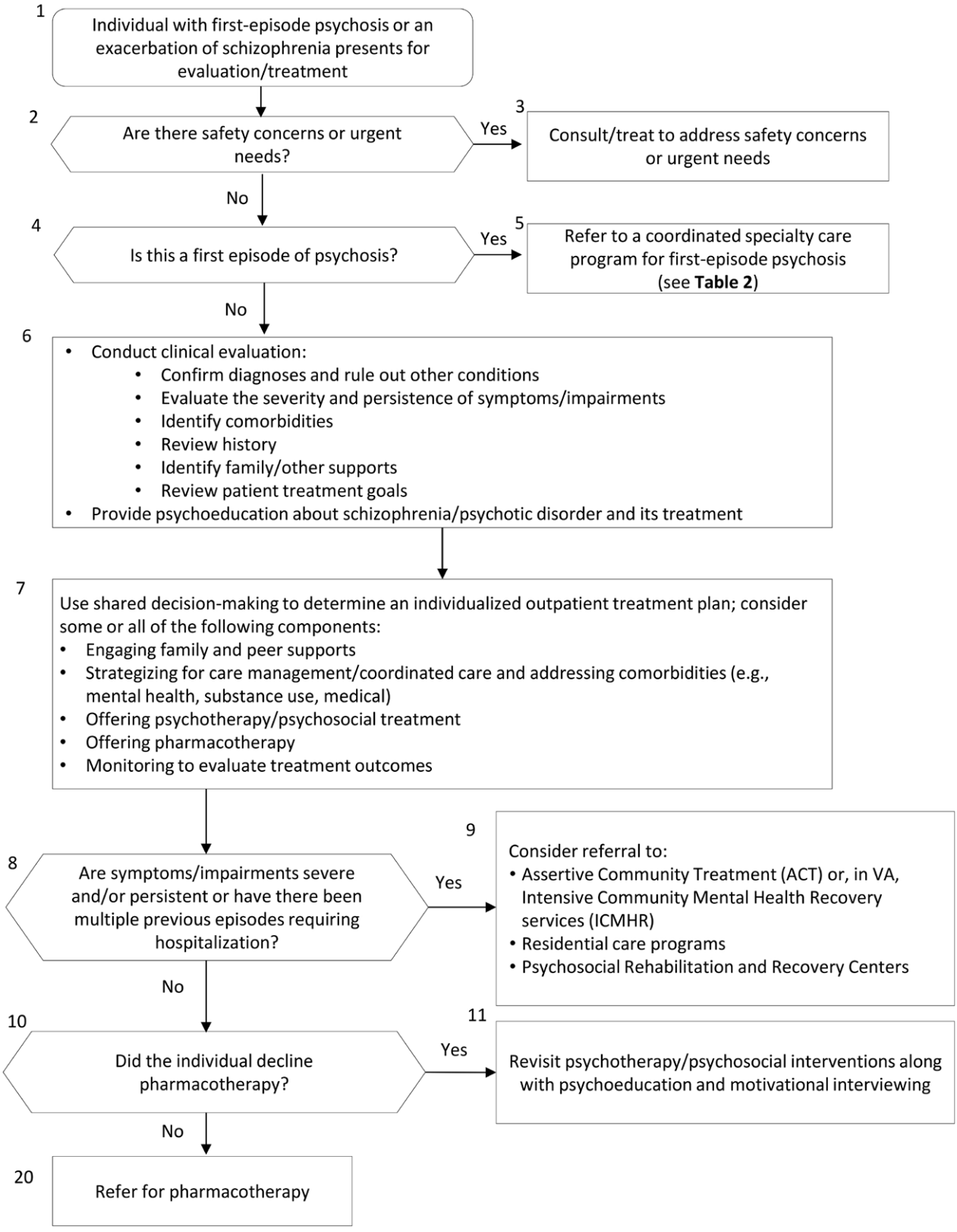

Figure 2. Evaluation and Management of First-Episode Psychosis and Schizophrenia by Mental Health.

not having sufficient evidence for a recommendation and others being absent from the evidence base entirely.

For example, this CPG excluded articles with fewer than 85% of study participants who met the inclusion criteria diagnoses (e.g., FEP, schizophrenia). Although some psychotherapies target symptoms (e.g., CBT-psychosis), diagnosis or symptom-focused psychosocial interventions for schizophrenia are not always the norm. The workgroup could not consider studies of transdiagnostic interventions designed to improve domains such as housing, employment, social skills, and other pragmatically oriented psychiatric rehabilitation interventions if less than 85% of study participants met the inclusion criteria diagnoses.

Other evidence syntheses have selected different thresholds; for example, the AHRQ systematic review for schizophrenia set a 90% threshold for pharmacological interventions, but only 50% for non-pharmacological treatments.[126] Further, diagnostic-specific CPGs may be more difficult for providers to understand and implement given the complex presentations and comorbidities of many individuals seen in clinical practice.[127]

Another methodological process that may have resulted in the lack of inclusion of effective interventions is the restriction to 20 key questions and a priori creation of search terms. The key questions were selected by a vote of workgroup members, and then search terms including intervention names were generated. Some questions leading to effective interventions may not have been prioritized, and despite the broad expertise of the workgroup, there may have been interventions that were unknown by workgroup members and not included as search terms. An iterative process in which the development of key questions and identification of search terms was guided and informed by the literature was outside the scope of the protocol.

These recommendations do not include the important concept of recovery as a targeted outcome. The term "mental health recovery" is defined as an orientation or process in which individuals living with psychiatric disabilities live meaningful lives in their community of choice despite the presence of psychiatric symptoms and deficits.[128] Recovery is an inherently individual experience[129] with no single operationalization and a range of measurement approaches. The studies reviewed in this CPG rarely included measures of recovery that could be meaningfully combined to draw conclusions about the effect of these interventions on recovery. These concepts are, therefore, absent from the recommendations. We strongly encourage the adoption of patient-centered, recovery-oriented orientations in service delivery, such as those described in the Canadian Treatment Guidelines for Schizophrenia.[125]

All the recommendations are based on studies of psychosocial/rehabilitative interventions combined with pharmacotherapy. However, decisions to engage in all psychosocial treatments should be made collaboratively with individuals with schizophrenia without a priori requirements such as adherence to pharmacotherapy. Similarly, shared decision-making should be used to determine an individualized treatment plan including one or more psychosocial interventions. The CPG provides algorithms designed to facilitate understanding of the clinical pathway and decision-making process used in managing patients with FEP or schizophrenia (see **Figures 1** and **2**).

This CPG differs from other treatment guidelines primarily due to its focus on the unique needs of service members, Veterans, and military healthcare systems. Notably, very few of the reviewed papers focused specifically on service members, Veterans, or VA/DOD settings. However, the workgroup factored in the unique characteristics of these populations when discussing patient values, preferences, and implementation within DOD and VA systems. This CPG is designed to address the distinctive challenges faced by service members and Veterans, integrating considerations related to the population, military culture, and system-specific implementation. Another key distinction lies in the implementation context. These guidelines are tailored for implementation within the VA and DOD healthcare systems, taking into account factors such as deployment, reintegration challenges, and access to VA-specific resources and services. In contrast, other guidelines cater to broader populations and healthcare settings, with less focus on institutional factors like VA/DOD infrastructure.[7,8]

Cultural considerations also set this CPG apart. The workgroup took into account patient values and preferences and considered military culture, including the stigma surrounding mental health in the armed forces, and the influence of command structures, while general guidelines focus more broadly on cultural competence. Overall, these guidelines are specifically tailored to address the distinct challenges faced by the military and Veteran community with the goal of providing more relevant and effective care, though continued research is necessary to refine these guidelines further for optimal outcomes.

CPGs such as this one can be important tools for helping providers sift through the sometimes overwhelming body of evidence when collaborating with an individual on a course of treatment. We recommend following the seminal words of Sackett et al. (1996) when describing evidence-based medicine as the use of the best external evidence, such as CPGs, combined with clinical expertise and client preferences.[130] The importance of combining experience and client preferences with evidence as part of decision-making is also echoed in the American Psychological Association's guidance on CPG use, along with ensuring respect for the individual differences among those who receive care, a recognition of the importance of a wide range of non-specific treatment factors known to be associated

with outcomes, such as the strength of the working alliance, and the understanding that new and effective interventions will emerge that may not be covered by existing CPGs.[131] To that end, we offer this CPG as a tool for providers and systems to understand effective psychosocial and rehabilitative treatments for individuals with schizophrenia in balance with other sources of evidence.

Finally, this CPG presumes that these interventions are readily available. While this is largely true in the VA,[132] many of these interventions are often unavailable for those who need them. Implementation of the interventions at VA was considered by the workgroup in determining the recommendations. However, implementation of these services outside VA was not considered and may be challenging given the unique characteristics of Veterans with FEP or schizophrenia. We hope this CPG can contribute to the realization of implementation of all recommended treatments for those with schizophrenia, wherever they seek care.

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Appendix A

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