

were the most feasible strategies to implement to improve telehealth quality of care.

**Conclusions.** T2 clinicians are more comfortable managing DIMDs via telehealth but require ~1 more visit to confirm a diagnosis vs in-person. Significant barriers to telehealth remain including digital literacy, inconsistent caregiver presence, and lack of clear diagnosis guidelines. Clinicians see value in telehealth but it is still not as effective as in-person. Significantly more clinicians are in-office post-COVID and >50% recommend patients come in-person to confirm a DIMD diagnosis.

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## Curriculum Based CME Improves Healthcare Provider Knowledge and Competence in the Assessment and Management of Major Depressive Disorder

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**Objective.** This study examined whether curriculum based continuing medical education (CME) interventions can improve provider knowledge, competence, and confidence related to the assessment and treatment of patients with major depressive disorder (MDD).

**Methods.** The online CME curriculum consisted of 2 online activities, which used repeated pairs pre-/post-assessment study design and McNemar’s test ( $P < .05$  is considered significant) to assess educational effect. Clinicians who completed questions both pre- and post-assessment were aggregated across activities, stratified by 2 learning themes.

**Results.** Significant improvements ( $n=31-756$ ,  $P < 0.05-0.001$ ) were seen for knowledge/competence across all providers (psychiatrists, psychiatry NPs, psychiatry PAs, PCPs, primary care NPs, and primary care PAs) for both learning themes – “Appropriate depression medication selection and modification” and “Evaluating residual symptoms in patients with MDD”. Notable improvements:

- There was a 48% relative improvement among PCPs, 26% relative improvement among primary care NPs, 42% relative improvement among primary care PAs, 19% relative improvement among psychiatrists, 23% relative improvement among psychiatry NPs, and 24% relative improvement among psychiatry PAs ( $P < 0.001$ ) related to appropriate depression medication selection and modification.
- There was a 47% relative improvement among PCPs ( $P < 0.01$ ), 41% relative improvement among NPs ( $P < 0.01$ ), 18% relative improvement among psychiatrists, 33% relative improvement among psychiatry NPs, and 52% among psychiatry PAs ( $P < 0.001$ ) related to evaluating residual symptoms in patients with MDD.

**Conclusion.** Participation in CME interventions significantly improved knowledge/competence and confidence among

psychiatric and primary care providers. This study identified persistent gaps in clinician knowledge and competence related to MDD care that may guide future education.

**Funding.** Medscape Education, Takeda Pharmaceuticals

## Recognizing Practice Gaps Schizophrenia Diagnosis and Treatment: Results of a CME Accredited Survey

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**Background.** Schizophrenia is a severe chronic illness that affects approximately 1% of the population worldwide and is estimated to affect at least 3.5 million people in the United States. Although a range of antipsychotic medications exists for treating schizophrenia, outcomes have historically been poor, and evidence confirms that clinicians remain challenged to individualize treatment for patients living with schizophrenia.

This study was designed to understand the clinical practice gaps and perspectives of clinicians related to managing schizophrenia and help inform the development of education and tools to improve clinician knowledge, competence and confidence.

**Methods.** A survey instrument containing 24 multiple choice, knowledge and case-based questions was used to assess participants’ knowledge, attitudes, and confidence in the management of Schizophrenia. The survey was available online to US and global physicians without monetary compensation or charge. Respondent confidentiality was maintained, and the responses were de-identified and aggregated prior to analyses. Questions were grouped into clinical themes and analyzed. Data were collected from 8/11/2022 to 12/14/2022.

**Results.** In total, 560 psychiatrists, and 94 Primary Care Physicians answered all questions in the assessment. Physicians demonstrated gaps in the following areas:

Clinical Theme	Correct Answer	
	Psychiatrists (n=560)	Primary Care Physicians (n=94)
Diagnosis and Assessment	54%	38%
MOA of novel and emerging therapies	39%	32%
Treatment nonresponse	67%	55%
Individualizing treatment	50%	38%

**Conclusion.** This educational research on assessment of clinical practices revealed important knowledge and competence gaps amongst psychiatrists and PCPs who manage patients with

Schizophrenia. Addressing these gaps is critical to improving the management of patients.

**Funding.** Medscape Education, Cerevel Therapeutics

## 52-Week Open-Label Safety and Tolerability Trial of Centanafadine Sustained Release in Adults With Attention Deficit Hyperactivity Disorder (ADHD)

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**Introduction.** Centanafadine (CTN) is a potential first-in-class norepinephrine/dopamine/serotonin triple reuptake inhibitor (NDSRI) in development for ADHD. In 2 pivotal adult ADHD trials, CTN sustained-release (SR) 200 mg/d and 400 mg/d, administered twice daily (BID), significantly reduced Adult ADHD Investigator Symptom Rating Scale (AISRS) total score vs placebo, with favorable safety and tolerability. Long-term effects of CTN SR 400 mg/d in adult ADHD are reported here.

**Methods.** Adults meeting *DSM-5* criteria for ADHD who completed a pivotal trial or enrolled de novo were eligible for the 52-week, phase 3, open-label trial. Uncontrolled comorbid psychiatric disorder, undifferentiated diagnosis of ADHD, prohibited medicines, or positive alcohol or drug screen were exclusionary. All patients (pts) received CTN SR BID, titrated to 400 mg/d by day 8, and fixed thereafter. Safety was primarily assessed by adverse events (AEs); laboratory results, physical examinations, vital signs, ECG, Study Medication Withdrawal Questionnaire (SMWQ), and Columbia-Suicide Severity Rating Scale (C-SSRS) were also assessed. Efficacy was assessed by AISRS, Clinical Global Impression-Severity (CGI-S) and ADHD Impact Module-Adult (AIM-A). Analyses were based on observed results using descriptive statistics. Baseline was relative to the first CTN dose in the open-label trial.

**Results.** Of 662 pts enrolled (mean [SD] age 36.7 [10.1] years; 51.1% female; 82.9% White), 653 received CTN SR; 345 pts completed the trial. Common discontinuation reasons were pt withdrawal (119; 18%), AEs (81; 12.2%), and lost to follow-up (41; 6.2%); 22 (3.4%) pts discontinued for lack of efficacy. Treatment-emergent AEs (TEAEs) occurred in 401 pts (61.4%); 16 (2.5%) had severe TEAEs. Common TEAEs were insomnia (8.0%), nausea (7.7%), diarrhea, and headache (7.0% each). Serious TEAEs occurred in 12 pts (1.8%); none were CTN related. AEs of special interest (n=18; 2.8%) included rash (n=5; 1 severe), papule, rash erythematous, rash maculopapular, rash papular, and urticaria (n=1 each); 3 discontinued. Abuse potential-related AEs occurred in 31 pts (4.7%). No deaths occurred. SMWQ scores were low throughout. Suicidal ideation/behavior occurred in 13 pts (2.0%) per C-SSRS. There were no trends in laboratory, vital sign, or ECG changes. Baseline mean (SD) AISRS Total,

Inattentive, and Hyperactive-Impulsive scores were 34.4 [10.3], 19.2 [5.6], and 15.2 [6.0], respectively; mean (SD) changes at week 52 were -20.4 (11.9), -11.2 (6.6), and -9.2 (6.2). Baseline mean (SD) CGI-S score was 4.2 (0.9); mean (SD) change at week 52 was -1.5 (1.1). Baseline mean (SD) AIM-A score was 6.5 (1.8); mean change at week 52 was 1.23 (2.0).

**Conclusions.** Safety, tolerability, and exploratory efficacy results from this trial demonstrate that CTN SR 400 mg is a safe and effective long-term treatment for ADHD in adults.

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## A Review and Comparison of FDA-Approved Transcranial Magnetic Stimulation (TMS) Protocols for Depression

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**Introduction.** Transcranial Magnetic Stimulation (TMS) is a Food and Drug Administration (FDA) approved treatment that induces neuronal activity in the left dorsolateral prefrontal cortex. TMS was initially developed to treat major depression after studies of patients with depression revealed hypometabolism in this brain region. Since it was first FDA approved in 2008, several types of TMS have been developed and its clinical indications expanded. Given the dearth of literature guiding clinicians in understanding different forms of TMS and their protocols, this poster will review the common and unique aspects of several forms of TMS in an effort to aid clinicians in appropriately utilizing this safe and effective neuromodulatory treatment.

**Methods.** Specific keywords were used to conduct a thorough but nonsystematic review of multiple databases, including PubMed, Google Scholar, and PsychInfo. Articles describing protocols rather than direct comparisons were selected. The outcomes regarding protocol guidelines, advantages, disadvantages, safety, and side effects were included in the review.

**Results.** The FDA approved types of TMS include repetitive TMS (rTMS), deep TMS (dTMS), intermittent theta burst stimulation (iTBS), and accelerated TMS (aTMS). While rTMS is limited to cortical tissue, other forms of TMS reach subcortical neurons with aTMS using functional magnetic resonance imaging (fMRI) to specifically locate the target area. dTMS was approved in 2013 and its session time is half that of rTMS. Subsequently developed TMS types have even shorter sessions; iTBS sessions are only 3 minutes and aTMS is 9 minutes per session. Most TMS protocols require 8–9 weeks for full treatment, but aTMS only needs 5 days. All TMS protocols stimulate at 120% of resting motor thresholds except for aTMS which adjusts based on the patient using fMRI results. Efficacy is mostly similar with rTMS, dTMS, and iTBS