BlueCross BlueShield of Alabama

Name of Blue Advantage Policy:

Prescription Digital Therapeutics for Substance Abuse

Policy #:	736	Latest Review Date: October 2020	
Category:	DME	Policy Grade: A	

BACKGROUND:

Blue Advantage *medical policy does not conflict with Local Coverage Determinations (LCDs), Local Medical Review Policies (LMRPs) or National Coverage Determinations (NCDs) or with coverage provisions in Medicare manuals, instructions or operational policy letters. In order to be covered by Blue Advantage the service shall be reasonable and necessary under Title XVIII of the Social Security Act, Section 1862(a)(1)(A). The service is considered reasonable and necessary if it is determined that the service is:*

1. *Safe and effective;*
2. *Not experimental or investigational*;*
3. *Appropriate, including duration and frequency that is considered appropriate for the service, in terms of whether it is:*
   - *Furnished in accordance with accepted standards of medical practice for the diagnosis or treatment of the patient's condition or to improve the function of a malformed body member;*
   - *Furnished in a setting appropriate to the patient's medical needs and condition;*
   - *Ordered and furnished by qualified personnel;*
   - *One that meets, but does not exceed, the patient's medical need; and*
   - *At least as beneficial as an existing and available medically appropriate alternative.*

Routine costs of qualifying clinical trial services with dates of service on or after September 19, 2000 which meet the requirements of the Clinical Trials NCD are considered reasonable and necessary by Medicare. Providers should bill* ***Original Medicare* *for covered services that are related to* ***clinical trials*** *that meet Medicare requirements (Refer to Medicare National Coverage Determinations Manual, Chapter 1, Section 310 and Medicare Claims Processing Manual Chapter 32, Sections 69.0-69.11).*

POLICY:

Blue Advantage will treat prescription digital therapeutics for patients with substance use disorder as a **non-covered** benefit and as **investigational**.

Blue Advantage does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Advantage administers benefits based on the members' contract and medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.

DESCRIPTION OF PROCEDURE OR SERVICE:

The World Health Organization defines substance abuse as "the harmful or hazardous use of psychoactive substances", which include alcohol, cocaine, marijuana, stimulants, benzodiazepines and opiates. Treatments for drug addiction include behavioral counseling and skills training, which can be given as part of a cognitive-behavioral approach. The first prescription mobile app, developed to supplement or replace individual or group therapy, delivers a cognitive-behavioral approach developed specifically for substance use disorder in a series of interactive lessons.

Substance Use Disorder

The World Health Organization defines substance abuse as "the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs", which include alcohol, cocaine, marijuana, stimulants, benzodiazepines and opiates. The American Psychiatric Association, in the Diagnostic and Statistical Manual of Mental Disorders, details 11 problematic patterns of use that lead to clinically significant impairment or distress. Mild substance use disorder (SUD) is defined as meeting 2 to 3 criteria, moderate as 4 to 5 criteria, and severe as 6 or more criteria.

1. Often taken in larger amounts or over a longer period than was intended.
2. A persistent desire or unsuccessful efforts to cut down or control use.
3. A great deal of time is spent in activities necessary to obtain, use, or recover from the substance's effects.
4. Craving or a strong desire or urge to use the substance.
5. Recurrent use resulting in a failure to fulfill major role obligations at work, school, or home.
6. Continued use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by its effects.
7. Important social, occupational, or recreational activities are given up or reduced because of use.
8. Recurrent use in situations in which it is physically hazardous.
9. Continued use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.

10. Tolerance.
11. Withdrawal.

Treatment

Treatments for drug addiction include behavioral counseling, skills training, medication, treatment for withdrawal symptoms, treatment for co-occurring mental health issues, and long-term follow-up to prevent relapse. For patients with primary opioid use disorder (OUD), medication assisted treatment is the most common approach. U.S. Food and Drug Administration (FDA)-approved drugs for opioid use treatment include a full opioid agonist (methadone), a partial opioid agonist (buprenorphine), and an opioid antagonist (naltrexone). These are used to suppress withdrawal symptoms and reduce cravings, and may be used in combination with counseling and behavioral therapies.

One common psychosocial intervention is cognitive-behavioral therapy (CBT). CBT is an established therapy based on social learning theory that addresses a patient's thinking and behavior. CBT has proven positive effects for the treatment of SUD. There are two main goals of CBT: first, recognize thoughts and behaviors that are associated with substance abuse, and second, expand the repertoire of effective coping responses. Specific goals for SUD and OUD include a better understanding of risk factors for use, more accurate attributions of cause and effect, increased belief in the ability to address problems, and coping skills. Specific skills may include motivation, drink/drug refusal skills, communication, coping with anger and depression, dealing with interpersonal problems, and managing stress.

The community reinforcement approach (CRA) is a form of CBT that has a goal of making abstinence more rewarding than continued use. CRA increases non-drug reinforcement by teaching skills and encouraging behaviors that help improve employment status, family/social relations and recreational activities. CRA was originally developed for alcohol dependence and cocaine use, and has been shown to be more effective than usual care in reducing the number of substance use days.

Contingency management may also be a component of addiction treatment. Contingency management, also known as motivational incentives, provides immediate positive reinforcement to encourage abstinence and attendance. Positive reinforcement may range from a verbal/text acknowledgement of completion of a task to monetary payment for drug-negative urine specimens. Contingency management is based on the principles of operant conditioning as formulated by B.F. Skinner, which posits that rewarding a behavior will increase the frequency of that behavior. Contingency management is typically used to augment a psychosocial treatment such as CRA.

The combination of CRA plus contingency management was shown in a 2018 network meta-analysis of 50 RCTs to be the most efficacious and accepted intervention among 12 structured psychosocial interventions, including contingency management alone, in individuals with cocaine or amphetamine addiction. Positive reinforcement with voucher draws (e.g., from a fishbowl) of variable worth that range from a congratulatory message to an occasional high dollar value are as effective as constant monetary vouchers. Studies conducted by the National Drug Abuse Treatment Clinical Trials Network have shown that intermittent reinforcement with

incentives totaling $250 to $300 over 8 to 12 weeks both increases retention in a treatment program and reduces stimulant drug use during treatment.

Software as a Medical Device
The International Medical Device Regulators Forum, a consortium of medical device regulators from around the world which is led by the FDA, distinguishes between 1) software in a medical device and 2) software as a medical device (SaMD). The Forum defines SaMD as "software that is intended to be used for one or more medical purposes that perform those purposes without being part of a hardware medical device". FDA's Center for Devices and Radiological Health is taking a risk-based approach to regulating SaMD. Medical software that "supports administrative functions, encourages a healthy lifestyle, serves as electronic patient records, assists in displaying or storing data, or provides limited clinical decision support, is no longer considered to be and regulated as a medical device". Regulatory review will focus on mobile medical apps that present a higher risk to patients.

- Notably, FDA will not enforce compliance for lower risk mobile apps such as those that address general wellness.
- FDA will also not address technologies that receive, transmit, store, or display data from medical devices.

The agency has launched a software pre-cert pilot program for SaMD that entered its test phase in 2019. Key features of the regulatory model include the approval of manufacturers prior to evaluation of a product, which is based on a standardized "Excellence Appraisal" of an organization, and its commitment to monitor product performance after introduction to the U.S. market. Criteria include excelling in software design, development, and validation. Companies that obtain pre-certification participate in a streamlined pre-market review of the SaMD. Pre-certified organizations might also be able to market lower-risk devices without additional review. In 2017, FDA selected 9 companies to participate in the pilot program, including Pear Therapeutics.

KEY POINTS:

This evidence review was created with a search of the PubMed database through May 6, 2020.

Author, year, country	Study Design	Population Characteristics	Interventions	Comparators	Clinical Outcomes, Length of Follow-Up
Campbell et al (2014) FDA Summary DEN160018	RCT	507 adult patients with self report of drug use, with a subset of 305 who did not have primary	12 weeks of TAU + CCRA (62 modules on a desktop) + CM for module completion	12 weeks of TAU consisting > 2 individual or group therapy sessions per week	TES reduced drop-out from the treatment program (hazard ratio=.72 [95% CI:

		use of opioids treated at community health centers	and negative drug screen (n=255)	(n=252)	0.57 to 0.92], P=.010), and the odds of achieving abstinence was 1.62 fold greater in the group with CCRA and contingency management group (p=.010). TES benefit was only observed in pts who were not abstinent at baseline. 6 month follow up
Christensen et al (2014) FDA summary K173681	RCT	170 opioid-dependent adults	12 weeks of CCRA (69 modules on a desktop in the clinic) + CM + buprenorphine/ naloxone (n=92)	12 weeks of CM + buprenorphine/ naloxone (n=78)	9.7 more days of abstinence in 84 days, in the CCRA group (67.1 days) than in the control group (57.4 days, P=.01), No significant difference between the two groups in the longest abstinence (5.5 days P=.214). No significant improvement on the overall

					Addiction Severity Index (P>16). 12 week follow up

Summary of Evidence
For individuals with substance use disorder who receive a prescription digital therapeutic, the evidence includes 2 pivotal randomized controlled trials (RCTS). Relevant outcomes are symptoms, morbid events, change in disease status, quality of life, and medication use. Mobile digital technology is proposed to increase access to evidence based cognitive-behavioral treatments, particularly in rural areas or where there are other limitations to specialist care. Although it is theoretically appealing to replace in-person counseling with computer based therapy, there are a number of limitations in the current evidence base that limit any conclusions regarding efficacy. Specifically, one of the trials assessed the combined intervention of computer-based learning and a reward for abstinence. Since reward for abstinence alone has been shown to increase both abstinence and retention, the contribution of the web-based program to the overall treatment effect cannot be determined. The treatment effect on abstinence was not observed at follow-up, raising further questions about the relative effects of the rewards and the web program. The second trial, conducted in patients with primary opioid use disorder, did not meet a primary objective of longest days of abstinence. While both RCTs reported a positive effect on the intermediate outcome of retention, the relationship between retention and relevant health outcomes in these trials is uncertain. In addition, both trials were conducted with an earlier technology (a desktop in a clinic) and were unblinded, so there are issues of possible performance bias and questions about generalizability of these results. Given all of these limitations, further study in well-designed trials is needed to determine the effects of prescription digital therapeutics on relevant outcomes in patients with substance use disorder and opioid use disorder. The evidence is insufficient to determine the effects of the technology on health outcomes.

Practice Guidelines and Position Statements
The 2018 Principles of Drug Addiction and Treatment from the National Institute on Drug Abuse describes evidence-based approaches to drug addiction treatment. Behavioral therapies include cognitive-behavioral therapy (alcohol, marijuana, cocaine, methamphetamine, nicotine), contingency management (alcohol, stimulants, opioids, marijuana, nicotine), community reinforcement approach plus vouchers (alcohol, cocaine, opioids), motivational enhancement therapy (alcohol, marijuana, nicotine), the matrix model (stimulants), 12-step facilitation therapy (alcohol, stimulants, opiates) and family behavior therapy.

U.S. Preventive Services Task Force Recommendations
Not applicable.

KEY WORDS:
reSET-O®, reSET®, substance use disorder, prescription mobile app,deprexis, vorvida, Modia, cognitive behavioral therapy, CBT

APPROVED BY GOVERNING BODIES:
In 2017, reSET® (Pear Therapeutics), received de novo marketing clearance from the FDA to provide CBT as an adjunct to contingency management, for patients with substance use disorder who are enrolled in outpatient treatment under the supervision of a clinician (DEN160018). This is the first prescription digital therapeutic to be approved by the FDA.

In 2018, reSET-O® (Pear Therapeutics) was cleared for marketing by the FDA through the 510(k) pathway as a prescription-only digital therapeutic to "increase retention of patients with opioid use disorder (OUD) in outpatient treatment by providing cognitive behavioral therapy, as an adjunct to outpatient treatment that includes transmucosal buprenorphine and contingency management" (K173681). FDA determined that this device was substantially equivalent to existing devices. The predicate device was reSET®.

In July 2020, deprexis®(Orexo Digital Therapuetics) received FDA EUA approval. Deprexis is a 12 week digital cognitive behavorial therapy program for mild to moderate to severe depression.

In July 2020, VORV!DA®(Orexo Digital Therapuetics) received FDA EUA approval. VORV!DA is a 24 week digital cognitive behavorial therapy program for problematic drinking.

Modia™ (Orexo Digital Therapuetics) is currently in development for use in patients with opioid use disorder. This includes a 24 week digital therapy support program.

BENEFIT APPLICATION:
Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

CURRENT CODING:
E1399	Durable Medical Equipment Miscellaneous

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POLICY HISTORY:

Adopted for Blue Advantage, October 2020.
Medical Policy Group, March 2021

This medical policy is not an authorization, certification, explanation of benefits, or a contract. Eligibility and benefits are determined on a case-by-case basis according to the terms of the member's plan in effect as of the date services are rendered. All medical policies are based on (i) research of current medical literature and (ii) review of common medical practices in the treatment and diagnosis of disease as of the date hereof. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment.

This policy is intended to be used for adjudication of claims (including pre-admission certification, pre-determinations, and pre-procedure review) in Blue Cross and Blue Shield's administration of plan contracts.