

Blue Cross Blue Shield of Massachusetts is an Independent Licenses of the Blue Cross and Blue Shield Association

## Medical Policy Digital Health Technologies: Therapeutic Applications

## **Table of Contents**

- Policy: Commercial
- <u>Coding Information</u>

Policy History

Information Pertaining to All Policies

Policy: Medicare

- Description
- <u>References</u>

Policy Number: 090

Authorization Information

BCBSA Reference Number: 3.03.02 (For Plan internal use only) NCD/LCD: N/A

## **Related Policies**

Digital Health Technologies Diagnostic Applications, #175

## **Policy**

# Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO Blue<sup>SM</sup> and Medicare PPO Blue<sup>SM</sup> Members

The use of Freespira is considered **INVESTIGATIONAL** for all indications including treatment of panic disorder and/or post-traumatic stress disorder.

The use of NightWare is considered **INVESTIGATIONAL** for all indications including treatment of nightmare disorder or nightmares from PTSD.

## **Prior Authorization Information**

#### Inpatient

 For services described in this policy, precertification/preauthorization <u>IS REQUIRED</u> for all products if the procedure is performed <u>inpatient</u>.

#### Outpatient

 For services described in this policy, see below for products where prior authorization <u>might be</u> <u>required</u> if the procedure is performed <u>outpatient</u>.

	Outpatient
Commercial Managed Care (HMO and POS)	This is <b>not</b> a covered service.
Commercial PPO and Indemnity	This is <b>not</b> a covered service.
Medicare HMO Blue <sup>sM</sup>	This is <b>not</b> a covered service.
Medicare PPO Blue <sup>SM</sup>	This is <b>not</b> a covered service.

## CPT Codes / HCPCS Codes / ICD Codes

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

## **CPT Codes**

There are not any specific codes for this service.

## The following HCPCS code is considered investigational for <u>Commercial Members: Managed Care</u> (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

#### **HCPCS Codes**

HCPCS codes:	Code Description
A9291	Prescription digital cognitive and/or behavioral therapy, FDA cleared, per course of treatment

## Description

#### Scope of Review

Software has become an important part of product development and is integrated widely into digital platforms that serve both medical and non-medical purposes. The 3 broad categories of software use in medical devices are:

- 1. Software used in the manufacture or maintenance of a medical device (eg, software that monitors x-ray tube performance to anticipate the need for replacement),
- 2. Software that is integral to a medical device or software in a medical device (eg, software used to "drive or control" the motors and the pumping of medication in an infusion pump),
- 3. Software, which on its own is a medical device referred to as "Software as a Medical Device" (SaMD) (eg, software that can track the size of a mole over time and determine the risk of melanoma).

The International Medical Device Regulators Forum, a consortium of medical device regulators from around the world led by the U.S. Food and Drug Administration (FDA) 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".<sup>1</sup> Such software was previously referred to by industry, international regulators, and health care providers as "standalone software," "medical device software," and/or "health software," and can sometimes be confused with other types of software.

The scope of this review includes only those digital technologies that are intended to be used for therapeutic application and meet the following 3 criteria:

- 1. Must meet the definition of "Software as a medical device" (SaMD) which states that software is intended to be used for a medical purpose, without being part of a hardware medical device or software that stores or transmits medical information.
- 2. Must have received marketing clearance or approval by the U.S. FDA either through the *de novo* premarket process or 510(k) process or pre-market approval and,
- 3. Must be prescribed by a healthcare provider.

#### **BCBSA Evaluation Framework for Digital Health Technologies**

SaMDs, as defined by the FDA, are subject to the same evaluation standards as other devices; the Blue Cross and Blue Shield Association Technology Evaluation Criterion are as follows:

- 1. The technology must have final approval from the appropriate governmental regulatory bodies.
- 2. The scientific evidence must permit conclusions concerning the effect of the technology on health outcomes.
- 3. The technology must improve the net health outcome.<sup>a</sup>
- 4. The technology must be as beneficial as any established alternatives.

5. The improvement must be attainable outside the investigational settings.<sup>b</sup>

<sup>a</sup> The technology must assure protection of sensitive patient health information as per the requirements of The Health Insurance Portability and Accountability Act of 1996 (HIPAA). <sup>b</sup> The technology must demonstrate usability in a real-world setting.

Other regulatory authorities such as the United Kingdom's National Institute for Health and Care Excellence (NICE) have proposed standards to evaluate SaMD.<sup>2</sup>.

## Summary

#### Description

Digital health technologies is a broad term that includes categories such as mobile health, health information technology, wearable devices, telehealth and telemedicine, and personalized medicine. These technologies span a wide range of uses, from applications in general wellness to applications as a medical device, and include technologies intended for use as a medical product, in a medical product, as companion diagnostics, or as an adjunct to other medical products (devices, drugs, and biologics). The scope of this review includes only those digital technologies that are intended to be used for therapeutic application and meet the following 3 criteria: 1) Must meet the definition of "Software as a medical device" which states that software is intended to be used for a medical purpose, without being part of a hardware medical device or software that stores or transmits medical information. 2) Must have received marketing clearance or approval by the U.S. Food and Drug Administration (FDA) either through the *de novo* premarket process or 510(k) process or pre-market approval and 3) Must be prescribed by a healthcare provider.

#### Summary of Evidence

For individuals with panic symptoms who receive Freespira, the evidence includes several single-arm studies. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. Panic symptoms in individuals with panic disorder and post-traumatic stress disorder (PTSD) have been associated with more shallow and rapid breathing, and Freespira is intended to lead to more regular breathing through biofeedback over a 4-week training period. There are 2 single-arm studies in individuals with panic disorder and 1 single-arm pilot study on the use of Freespira in individuals with PTSD. All of the studies report an improvement in symptoms but are limited by loss to follow-up that ranges from 24% to 58% and multiple limitations in the design and conduct. A well-designed blinded randomized controlled study with a clear design for testing a pre-specified hypothesis is needed. Given the high loss to follow-up and lack of a control group in these studies, the benefit of a 4-week program of respiratory biofeedback in individuals with panic disorder and PTSD is uncertain. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals with nightmare disorder or PTSD-associated nightmares who receive NightWare, the evidence includes a single trial. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. The single pivotal trial did not meet the primary efficacy endpoint. This trial failed to achieve recruitment goals and was likely underpowered. A well-designed blinded randomized controlled study with a clear design for testing a pre-specified hypothesis is needed. Given these limitations, the benefit of NightWare in individuals with nightmare disorder and post-traumatic stress disorder-associated nightmares is uncertain. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

## **Policy History**

Date	Action
9/2024	Annual policy review. References updated. Policy statements unchanged.
9/2023	New medical policy describing investigational indications. Effective 9/1/2023.

## Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information: <u>Medical Policy Terms of Use</u> Managed Care Guidelines Indemnity/PPO Guidelines Clinical Exception Process Medical Technology Assessment Guidelines

#### References

- 1. International Medical Device Regulators Forum. Software as a Medical Device (SaMD): Key Definitions. 2013. http://www.imdrf.org/docs/imdrf/final/technical/imdrf-tech-131209-samd-key-definitions-140901.pdf. Accessed March 10, 2024.
- 2. National Institute for Health and Care Excellence (NICE). Evidence standards framework for digital health technologies. 2021. nice.org.uk/corporate/ecd7/chapter/section-a-evidence-for-effectiveness-standards. Accessed March 10, 2024.
- 3. Deacon B, Lickel J, Abramowitz JS. Medical utilization across the anxiety disorders. J Anxiety Disord. 2008; 22(2): 344-50. PMID 17420113
- 4. Meuret AE, Wilhelm FH, Ritz T, et al. Feedback of end-tidal pCO2 as a therapeutic approach for panic disorder. J Psychiatr Res. Jun 2008; 42(7): 560-8. PMID 17681544
- 5. American Psychiatric Association. (2013). Trauma- and stressor related disorders. In Diagnostic and statistical manual of psychiatric disorders (5th edn)
- Muhtz C, Yassouridis A, Daneshi J, et al. Acute panicogenic, anxiogenic and dissociative effects of carbon dioxide inhalation in patients with post-traumatic stress disorder (PTSD). J Psychiatr Res. Jul 2011; 45(7): 989-93. PMID 21324483
- Kellner M, Muhtz C, Nowack S, et al. Effects of 35% carbon dioxide (CO 2) inhalation in patients with post-traumatic stress disorder (PTSD): A double-blind, randomized, placebo-controlled, cross-over trial. J Psychiatr Res. Jan 2018; 96: 260-264. PMID 29128558
- Tolin DF, McGrath PB, Hale LR, et al. A Multisite Benchmarking Trial of Capnometry Guided Respiratory Intervention for Panic Disorder in Naturalistic Treatment Settings. Appl Psychophysiol Biofeedback. Mar 2017; 42(1): 51-58. PMID 28194546
- Ostacher MJ, Fischer E, Bowen ER, et al. Investigation of a Capnometry Guided Respiratory Intervention in the Treatment of Posttraumatic Stress Disorder. Appl Psychophysiol Biofeedback. Dec 2021; 46(4): 367-376. PMID 34468913
- Kaplan A, Mannarino AP, Nickell PV. Evaluating the Impact of Freespira on Panic Disorder Patients' Health Outcomes and Healthcare Costs within the Allegheny Health Network. Appl Psychophysiol Biofeedback. Sep 2020; 45(3): 175-181. PMID 32342249
- Morgenthaler TI, Auerbach S, Casey KR, et al. Position Paper for the Treatment of Nightmare Disorder in Adults: An American Academy of Sleep Medicine Position Paper. J Clin Sleep Med. Jun 15 2018; 14(6): 1041-1055. PMID 29852917
- 12. De novo classification request for Nightware kit (Apple iphone, Apple watch, Apple iphone charging cable, Apple watch charging cable). Available at
- https://www.accessdata.fda.gov/cdrh\_docs/reviews/DEN200033.pdf. Accessed on March 10, 2024. 13. Davenport ND, Werner JK. A randomized sham-controlled clinical trial of a novel wearable
- intervention for trauma-related nightmares in military veterans. J Clin Sleep Med. Feb 01 2023; 19(2): 361-369. PMID 36305584