HEDRUG DETERMINATION POLICY

Title: DDP-32 Central Nervous System Stimulant Medications

Effective Date: 11/05/2019

Physicians Health Plan
PHP Insurance Company
PHP Service Company

Important Information - Please Read Before Using This Policy

The following policy applies to health benefit plans administered by PHP and may not be covered by all PHP plans. Please refer to the member's benefit document for specific coverage information. If there is a difference between this general information and the member's benefit document, the member's benefit document will be used to determine coverage. For example, a member's benefit document may contain a specific exclusion related to a topic addressed in a coverage policy.

Benefit determinations for individual requests require consideration of:

1. The terms of the applicable benefit document in effect on the date of service.
2. Any applicable laws and regulations.
3. Any relevant collateral source materials including coverage policies.
4. The specific facts of the particular situation.

Contact PHP Customer Service to discuss plan benefits more specifically.

1.0 Policy:

This policy describes the determination process for coverage of specific drugs.

This policy does not guarantee or approve benefits. Coverage depends on the specific benefit plan. Drug Determination Policies are not recommendations for treatment and should not be used as treatment guidelines.

2.0 Background or Purpose:

Health Plan covers the central nervous system stimulant medications, Provigil (modafinil) and Nuvigil (armodafinal) when criteria are met. These criteria were developed and implemented to ensure appropriate use for the intended diagnoses and mitigation of adverse effects, if possible.

3.0 Clinical Determination Guidelines:
Document the following with chart notes:

A. Obstructive Sleep Apnea (OSA)

1. Diagnosis and severity.

    a. Etiology. Obstructive apneas, hyponeas or respiratory efforts related arousals.

    b. Symptoms: witnessed apnea; snoring; gasping/choking; excessive sleepiness not explained by other factors; non-refreshing sleep; sleep fragmentation/maintenance; insomnia; nocturia; morning headache(s); decreased concentration; memory loss; decreased libido; irritability.

2. Polysomnography (sleep study) confirmation (see appendix II).

    a. In conjunction with appropriate Positive Airway Pressure (PAP) titration.

    b. Apnea Hypopnea Index (AHI) value::

i. At least five per hour in conjunction with symptoms of daytime sleepiness, loud snoring, witnessed apneas or awakening due to gasping/chocking.

ii. At least 15 per hour without symptoms.

3. Other therapies.

a. OSA with allergic rhinitis: nasal steroids.

b. Continuous Positive Airway Pressure (CPAP): maximized; used for greater than four hours per night on more than 70% of the nights (smart chip/download).

c. Failed or significant adverse effects from CPAP (rule out).

i. Equipment and interface: mask fit, humidity, ramp, repair or alternative PAP modality.

ii. Pressure: pressure leaks or inadequate pressure.

4. Dosage regimen.

a. Provigil oral (modafinil): maximum of 200 mg daily.

b. Nuvigil oral (armodafinil): maximum of 150 mg daily.

B. Narcolepsy and Idiopathic Hypersomnia.

1. Narcolepsy type 1 (narcolepsy with cataplexy) (all below):

a. Diagnosis and severity (all below).

i. Presence of excessive daytime sleepiness for more than three months.

ii. Cataplexy: loss of muscle tone in full consciousness triggered by emotions.

iii. Chronic disease requiring life-long treatment.

b. Multiple Sleep Latency Tests (MSLT) confirmation (all below):

i. Sleep latency: less than eight minutes.

ii. Sleep-onset REM periods (SOREMPS): at least two after at least six hours sleep the night before.

2. Narcolepsy type 2.

a. Diagnosis and severity (all below).

i. Presence of excessive daytime sleepiness for more than three months.

ii. Variable clinical course with improvement or even disappearance of the symptoms, the development of cataplexy or a change to idiopathic hypersomnia:

b. Multiple Sleep Latency Tests (MSLT) confirmation (all below):

i. Sleep latency: less than eight minutes.

ii. Sleep-onset REM periods (SOREMPS): at least two after at least six hours sleep the night before.

3. Idiopathic Hypersomnia.

   a. Diagnosis and severity.

      i. Types: prolonged nocturnal sleep (at least ten hours) or without long sleep time.

      ii. Excessive daytime sleepiness, irrepressible need to sleep or daytime lapses into sleep for greater than three months.

      iii. Good quality sleep with few arousals.

   b. Multiple Sleep Latency Tests (MSLT) confirmation:

      i. Sleep latency: less than eight minutes.

      ii. Sleep-onset REM periods (SOREMPS): at least one after at least six hours sleep the night before.

4. Dosage regimen.

   a. Provigil oral (modafinil): maximum of 200 mg daily.

   b. Nuvigil oral (armodafinil): maximum of 150 mg daily.

5. Idiopathic Hypersomnia.
   a. Diagnosis and severity.
      i. Types: prolonged nocturnal sleep (greater than ten hours) or without long sleep time.

      ii. Excessive daytime sleepiness, irrepressible need to sleep or daytime lapses into sleep for more than three months.

      iii. Good quality sleep with few arousals.

      iv. Sleep latency: less than eight minutes
      v. Sleep onset REM periods (SOREMPS): at least one after equal to or greater than six hours sleep the night before.

C. Shift Work Sleep Disorder (SWSD)

1. Diagnosis and severity (both below):

   a. Insomnia during major sleep period and/or excessive sleepiness (including unintentional sleep) during the major wake period.

   b. Sleep disturbances result in clinically significant distress of impairment in social, occupational and/or other waking functions.

2. Frequency of night shifts (usually 11pm to 7am): at least five night shifts per month.

3. Previous therapies:

   a. Non-pharmacologic (one below):

i. Sleep scheduling: **bout one** - priority four hour “anchor” sleep; **bout two** - time which varies around responsibilities; brief naps before shift.

ii. Improving daytime sleep/sleep hygiene: light, temperature and noise adjustments to consolidate daytime sleeping.

b. Pharmacological: short-acting hypnotic agent (zolpidem) and/or melatonin.

4. Dosage regimen.

a. Provigil oral (modafinil): 200mg daily one hour prior to shift.

b. Nuvigil oral (armodafinil): 150mg daily one hour prior to shift.

D. Approval.

1. Initial: six months.

2. Re-approval:

a. Continue to meet criteria for each diagnosis as applicable.

b. Duration: one year.

E. Exclusions: hypersomnia better explained by other factors (see Appendix I).

1. Other sleep disorders: insufficient sleep syndrome, poor sleep hygiene.

2. Other general disorders/conditions: neurological disorder, mental disorder, thyroid disorder, genetic disorder, inflammatory conditions.

3. Substance: sedating medication use or substance use disorder.

4.0 Coding:

None.

5.0 References, Citations & Resources:

1. Narcolepsy: Clinical approach to etiology, diagnosis & treatment. Reviews in Neurological Disease 2011;8 (3-4) ;e97-e106.

2. Optimal treatment of obstructive sleep apnea & excessive sleepiness. Adv. Ther 2009;26(3):295-312.

3. Tolerability & efficacy of armodafinil in naïve patients with excessive sleepiness associated with Obstructive Sleep Apnea, Shift Work Disorder, or Narcolepsy: A 12 month, open-label, flexible-dose study with an extension period. Journ. of Sleep Clin. Sleep. 2010;6(5):450-457.

4. Practice parameters for the clinical evaluation and treatment of circadian rhythm sleep disorders. Sleep 2007:30(11)1445-14595. Circadian rhythm sleep disorders: part I, basic principles.

5. Shift work and jet lag disorders. Sleep 2007:30 (11);1460-14836.

6. Lexicomp Online® , Lexi-Drugs® , Hudson, Ohio: Lexi-Comp, Inc.; Provigil, Nuvigil accessed September 2019.

7. UpToDate [internet] Accessed May 2017. Available from: http://www.uptodate.com/contents/.

   - Sleep-wake disturbances in shift workers.
   - Management of obstructive sleep apnea in adults.
   - Overview of obstructive sleep apnea in adults.

8. Central Disorders of hypersomnolence: Focus on the narcolepsies and idiopathic hypersomnia.

9. Screening for Obstructive Sleep Apnea in Adults: An Evidence Review for the U.S. Preventive Services Task Force [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2017 Jan.

10. Clinical Guidelines for the evaluation, management and long-term care of obstructive sleep apnea in adults.

11. Journal of Clinical Sleep Medicine 2008;5(3):263-276.

12. Medical therapy for obstructive sleep apnea: A review by the medical therapy for obstructive sleep apnea task force of the standard of practice committee of the American Academy of Sleep Medicine. SLEEP 2006;29(8):1036-1044.

13. Narcolepsy and other central hypersomnias. Continuum 2017;23(4):989-1004.

14. Shift work and shift work sleep disorder. CHEST 2017;151(5):1156-1172.

6.0 Appendices:

Appendix I: Differential Diagnosis of Excessive Daytime Sleepiness

Insufficient Sleep	
Sleep deprivation	
Environmental intrusions	
Sleep Disorders	
Obstructive sleep apnea (OSA)	
Central sleep apnea	
Sleep related hypoventilation of hypoxemia	
Central disorders of hypersomnolence:	• Narcolepsy (1 or 2); • Kleine-Levine syndrome; • Idiopathic hypersomnia
Circadian rhythm sleep-wake disorders	• Delayed sleep phase disorder; • Advance sleep phase disorder; • Jet lag, • Shift work
Restless legs syndrome	
Other Neurological Disorders	
Neurodegenerative disease	• Parkinson's disease • Dementia with Lewy bodies • Alzheimer's disease • Multiple system atrophy
Myotonic dystrophy	
Multiple Sclerosis (MS)	
Amyotrophic Lateral Sclerosis	
Structural lesions affecting thalamus, hypothalamus or brainstem	
Traumatic Brain injury	
Encephalitis lethargica	
Cerebral trypanosomiasis	
Medical & Genetic Disorders	
Hypothyroidism	
Obesity	
End-stage renal disease	
Adrenal insufficiency	
Hepatic encephalopathy	
Niemann-Pick Type C	
Prader-Willi syndrome	
Psychiatric Disorders	
Depression	
Anxiety	
Substance Abuse: alcohol, narcotics. Rx opioids. stimulant withdrawal	
Psychogenic sleepiness	
Medications	
Benzodiazepines, non-benzodiazepine sedatives, antipsychotics, opioid analgesics, beta blockers (lipophilic), barbiturates, antihistamines, anticonvulsants, sedative antidepressants, muscle relaxers	

Appendix II: Definitions

Term	Definition
Apnea	Cessation of airflow for at least 10 seconds[8,275]
Hypopnea	Reduction in airflow by at least 30% for at least 10 seconds with decrease in oxygen saturation
Apnea-hypopnea index (AHI)[*]	Number of apnea and hypopnea events per hour of sleep
Obstructive sleep apnea (OSA)	
Mild[8,73]	AHI ≥5 to <15
Moderate[8,73]	AHI ≥15 to <30
Severe[8,73]	AHI ≥30
Obstructive sleep apnea syndrome	AHI ≥5 with evidence of daytime sleepiness[3,8,276]

* The respiratory disturbance index (RDI) is a similar measure to AHI, but it also includes the number of respiratory effort–related arousals per hour of sleep (in addition to apnea and hypopnea events).

Abbreviations: AHI=apnea-hypopnea index; OSA=obstructive sleep apnea; RDI=respiratory disturbance index.

Appendix III: Monitoring & Patient Safety

Drug	Adverse Reactions	Monitoring	REMS
Provigil (modafinil) Nuvigil (armodafinil)	• CNS: anxiety (4-5%), dizziness (5%), headache (17-34%), insomnia (5%), nervousness (1-5%) • Gastrointestinal: dry mouth (4%), nausea (7-11%) • Pregnancy category C	• CNS: monitor for psychiatric symptoms, sleepiness • Cardiovascular (CV): heart rate & blood pressure • Dermatology: monitor for rash • Other: monitor for signs of abuse	Not needed

7.0 Revision History:

Original Effective Date: 07/21/2004

Next Review Date: 11/05/2020

Revision Date	Reason for Revision
8/19	Moved to new format; moved dosing, filled in missing criteria under MSLT, replaced abbreviations, clarified dosing