Pharmacy Benefit Determination Policy

Policy Subject: CNS Stimulant Medications	**Dates:**
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Category: CNS Drugs	**Revision Date** May 10, 2017
Policy Type: ☐ **Medical** ☒ **Pharmacy**	**Approval Date:** June 27, 2018
Department: Pharmacy	**Next Review Date:** June 2019
Product (check all that apply):	**Clinical Approval By:**
☒ Group HMO/POS	**Medical Directors**
☒ ASO	PHP: Peter Graham, MD
☒ PPO	**Pharmacy and Therapeutics Committee**
☒ Individual HMO/POS	PHP: Peter Graham, MD

Policy Statement:

Physicians Health Plan, PHP Insurance & Service Company, and Sparrow PHP will cover Provigil (modafinil) and Nuvigil (armodafinal) through the Pharmacy Benefit based on approval by the Clinical Pharmacist or Medical Director using the following determination guidelines.

Drugs and Applicable Coding:

NA

Clinical Determination Guidelines:

Document the following with chart notes

A. Obstructive Sleep Apnea (OSA)
   1. Diagnosis & 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 HAs; ↓concentration, memory loss; ↓libido, irritability
   2. Polysomnography (sleep study) confirmation (See appendix II)
      a. In conjunction with appropriate PAP titration
      b. Apnea/Hypopnea Index value
         - ≥5/hour in conjunction w symptoms of daytime sleepiness, loud snoring, witnessed apneas or awakening due to gasping/choking
         - ≥15/hour without symptoms
   3. Other therapies
      a. OSA w allergic rhinitis: Nasal steroids
      b. CPAP: maximized; used > 4 hours/night on >70% of the nights (smart chip/download).
      c. Failed or significant adverse effects from CPAP (rule out)
         - Equipment/Interface: Mask fit, humidity, ramp, repair or alternative PAP modality
         - Pressure: Pressure leaks or inadequate pressure

B. Narcolepsy & Idiopathic Hypersomnia
1. Narcolepsy type 1 (Narcolepsy w catoplexy): All below
   a. Diagnosis & severity (all below)
      - Presence of excessive daytime sleepiness for > 3 months.
      - Cataplexy: Loss of muscle tone in full consciousness triggered by emotions
      - Chronic disease requiring life-long treatment
   b. Multiple Sleep Latency Tests (MSLT) confirmation: (all below)
      - Sleep Latency: < 8 minutes (found in ≤30% of the normal population)
      - Sleep-onset REM periods (SOREMPS): ≥2 after ≥ 6 hrs. sleep the night before
2. Narcolepsy type 2
   a. Disease & severity (all below)
      - Presence of excessive daytime sleepiness for > 3 months
      - 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)
      - Sleep Latency: < 8 minutes (found in ≤30% of the normal population)
      - Sleep-onset REM periods (SOREMPS): ≥2 after ≥ 6 hrs. sleep the night before
3. Idiopathic Hypersomnia
   a. Diagnosis & severity
      - Types: Prolonged nocturnal sleep (> 10hrs) or without long sleep time
      - Excessive daytime sleepiness, irrepressible need to sleep or daytime lapses into sleep for > 3 months
      - Good quality sleep w few arousals
   b. Multiple Sleep Latency Tests (MSLT) confirmation:
      - Sleep Latency: < 8 minutes (found in ≤30% of the normal population)
      - Sleep-onset REM periods (SOREMPS): ≤1 after ≥ 6 hrs. sleep the night before

C. Shift Work Sleep Disorder (SWSD)
1. Diagnosis & severity
   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-7am): ≥ 5 night-shifts/mon.
3. Previous therapies:
   a. Non-Pharmacologic (1 below)
      - Sleep scheduling: Bout 1 - Priority 4 hr “anchor” sleep; Bout 2 - time which varies around responsibilities; brief naps before shift
      - Improving daytime sleep/sleep hygiene: Light, temperature & noise adjustments to consolidate day time sleeping
   b. Pharmacological: Short acting hypnotic agent (zolpidem) and/or melatonin

D. Other
1. Approval
   a. Initial: 6 mons.
   b. Re-approval:
      - Continue to meet criteria for each diagnosis as applicable
      - Duration: 1 yr.
2. Dosage regimen
   a. Provigil (modafinil)
      - Narcolepsy/hypersomnia/OSA: 200mg PO 1x/day in am (doses >200 - <400mg tolerated but no evidence it adds benefit)
      - SWSD: 200mg po.1hr prior to start of shift
   b. Nuvigil (armodafinal)
      - Narcolepsy/hypersomnia: 150mg-250mg po. 1x/day in am
      - OSA: 150-250 mg po. 1x/day in am. (>150mg have not been shown to ↑ benefit)
      - SWSD: 150mg po. 1hr prior to start of shift
3. Exclusions: Hypersomnia not better explained by other factors (See Appendix I)
   a. Other sleep disorders: Insufficient sleep syndrome, poor sleep hygiene
   b. Other general disorders/conditions: Neurological disorder, mental disorder, thyroid disorder, genetic disorder, Inflammatory conditions
   c. Substance: Sedating medication use or substance use disorder

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 disease • Dementia with Lewy bodies • Alzheimes disease • Multiple system atrophy
Myotonic dystrophy	
Multiple Sclerosis (MS)	
Amytrophic 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 opiods. 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[9]

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%) • GI: Dry mouth (4%), nausea (7-11%) • Pregnancy category C	• CNS: Monitor for psychiatric symptoms, sleepiness • CV: Heart rate & blood pressure • Derm: Monitor for Rash • Other: Monitor for signs of abuse	Not needed

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Approved By:

7/6/17

Peter Graham, MD – PHP Executive Medical Director — Date

7/6/17

Human Resources (Kurt Batteen) — Date