Clinical Policy: Sodium Oxybate (Xyrem) and Calcium, Magnesium, Potassium, and Sodium Oxybate (Xywav)
Reference Number: CP.PMN.42
Effective Date: 05.01.11
Last Review Date: 11.20
Line of Business: Commercial, HIM, Medicaid

See Important Reminder at the end of this policy for important regulatory and legal information.

Description
Sodium oxybate (Xyrem®) and calcium, magnesium, potassium, and sodium oxybate (Xywav™) are central nervous system (CNS) depressants.

FDA Approved Indication(s)
Xyrem and Xywav are indicated for the treatment of patients 7 years of age and older with:
- Cataplexy in narcolepsy
- Excessive daytime sleepiness (EDS) in narcolepsy

Policy/Criteria
Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of health plans affiliated with Centene Corporation® that Xyrem and Xywav are medically necessary when the following criteria are met:

I. Initial Approval Criteria
   A. Narcolepsy with Cataplexy (must meet all):
      1. Prescribed for the treatment of cataplexy in narcolepsy;
      2. Age ≥ 7 years;
      3. Failure of 2 of the following antidepressants, each used for ≥ 1 month, unless member’s age is ≥ 65, all are contraindicated, or clinically significant adverse effects are experienced: venlafaxine, fluoxetine, atomoxetine, clomipramine, or protriptyline;
      4. Dose does not exceed 9 grams (18 mL) per day.
   Approval duration:
   Medicaid/HIM – 12 months
   Commercial – Length of Benefit

   B. Narcolepsy with Excessive Daytime Sleepiness (must meet all):
      1. Diagnosis of narcolepsy with EDS;
      2. Age ≥ 7 years;
      3. Failure of a 1-month trial of one of the following CNS stimulants at up to maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced: amphetamine immediate-release (IR), amphetamine; dextroamphetamine IR, dextroamphetamine, methylphenidate IR, or Metadate® ER;
      *Prior authorization may be required for CNS stimulants
4. If member is \( \geq 17 \) years of age, failure of a 1-month trial of armodafinil or modafinil at up to maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced;
   *Prior authorization may be required for armodafinil and modafinil
5. Dose does not exceed 9 grams (18 mL) per day.

**Approval duration:**
- Medicaid/HIM – 12 months
- Commercial – Length of Benefit

**C. Other diagnoses/indications**
1. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial, HIM.PHAR.21 for health insurance marketplace, and CP.PMN.53 for Medicaid.

**II. Continued Therapy**

A. **All Indications in Section I** (must meet all):
1. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
2. Member is responding positively to therapy as evidenced by, but not limited to, improvement in any of the following parameters: reduction in frequency of cataplexy attacks, reported daytime improvements in wakefulness;
3. If request is for a dose increase, new dose does not exceed 9 grams (18 mL) per day.

**Approval duration:**
- Medicaid/HIM – 12 months
- Commercial – Length of Benefit

B. **Other diagnoses/indications** (must meet 1 or 2):
1. Currently receiving medication via Centene benefit and documentation supports positive response to therapy.

**Approval duration: Duration of request or 12 months (whichever is less); or**
2. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial, HIM.PHAR.21 for health insurance marketplace, and CP.PMN.53 for Medicaid.

**III. Diagnoses/Indications for which coverage is NOT authorized:**
A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off-label use policies – CP.CPA.09 for commercial, HIM.PHAR.21 for health insurance marketplace, and CP.PMN.53 for Medicaid or evidence of coverage documents.

**IV. Appendices/General Information**

*Appendix A: Abbreviation/Acronym Key*
- CNS: central nervous system
- EDS: excessive daytime sleepiness
- FDA: Food and Drug Administration
- IR: immediate-release
Appendix B: Therapeutic Alternatives
This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent for all relevant lines of business and may require prior authorization.

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Dosing Regimen</th>
<th>Dose Limit/Maximum Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cataplexy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venlafaxine (Effexor®)†</td>
<td>75–150 mg PO BID, or 75–150 mg (extended release) PO QAM</td>
<td>375 mg/day* (IR tablets); 225* mg/day (extended release)</td>
</tr>
<tr>
<td>Fluoxetine (Prozac®)†</td>
<td>20 to 80 mg PO QAM</td>
<td>80 mg/day</td>
</tr>
<tr>
<td>Clomipramine (Anafranil®)†</td>
<td>10 to 150 mg PO as a single dose every morning or in divided doses</td>
<td>250 mg/day*</td>
</tr>
<tr>
<td>Protriptyline (Vivactil®)†</td>
<td>5 to 60 mg PO as a single dose every morning or in divided doses</td>
<td>60 mg/day</td>
</tr>
<tr>
<td>atomoxetine (Strattera®)†</td>
<td>40–60 mg PO QD</td>
<td>100 mg/day*</td>
</tr>
</tbody>
</table>

| Excessive daytime sleepiness     |                                                               |                         |
| amphetamine (Evekeo®)            | 5 to 60 mg/day PO in divided doses                            | 60 mg/day               |
| amphetamine/ dextroamphetamine (Adderall®) |                                               |                         |
| dextroamphetamine ER (Dexedrine® Spansule®) |                                               |                         |
| dextroamphetamine IR (Zenzedi®, Procentra®) |                                               |                         |
| methylphenidate (Ritalin® LA or SR, Concerta®, Metadate® CD or ER, Methylin® ER, Daytrana®) | Dosing varies; 10-60 mg PO divided 2 to 3 times daily 30-45 min before meals | 60 mg/day               |
| armodafinil (Nuvigil®)           | 150 mg to 250 mg PO once a day                               | 250 mg/day              |
| modafinil (Provigil®)            | 200 mg PO QD as a single dose in the morning                  | 400 mg/day              |

Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.
*Non-indication specific (maximum dose for the drug)
†Off-label indication
Appendix C: Contraindications/Boxed Warnings

- Contraindication(s):
  - In combination with sedative hypnotics or alcohol
  - Succinic semialdehyde dehydrogenase deficiency
- Boxed warning(s):
  - Central nervous system depression: In clinical trials at recommended doses, obtundation and clinically significant respiratory depression occurred in adult patients treated with Xyrem or Xywav.
  - Abuse and misuse: Xyrem and Xywav are a sodium salt of gamma-hydroxybutyrate (GHB). Abuse or misuse of illicit GHB is associated with CNS adverse reactions, including seizure, respiratory depression, decreased consciousness, coma and death.

V. Dosage and Administration

<table>
<thead>
<tr>
<th>Indication</th>
<th>Dosing Regimen</th>
<th>Maximum Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cataplexy in narcolepsy</td>
<td>Adults: The recommended starting dose is 4.5 grams (g) per night administered orally in two equal, divided doses: 2.25 g at bedtime and 2.25 g taken 2.5 to 4 hours later. Increase the dose by 1.5 g per night at weekly intervals (additional 0.75 g at bedtime and 0.75 g taken 2.5 to 4 hours later) to the effective dose range of 6 g to 9 g per night orally.</td>
<td>9 g/night</td>
</tr>
<tr>
<td>EDS in narcolepsy</td>
<td>Pediatrics: Dosing is weight-based as follows: 20 to &lt; 30 kg: ≤ 1 g at bedtime and ≤ 1 g taken 2.5 to 4 hours later. Increase the dose by 1 g per night at weekly intervals (additional 0.5 g at bedtime and 0.5 g taken 2.5 to 4 hours later) to a maximum dose of 6 g per night orally. 30 to &lt; 45 kg: ≤ 1.5 g at bedtime and ≤ 1.5 g taken 2.5 to 4 hours later. Increase the dose by 1 g per night at weekly intervals (additional 0.5 g at bedtime and 0.5 g taken 2.5 to 4 hours later) to a maximum dose of 7.5 g per night orally. ≥ 45 kg: ≤ 2.25 g at bedtime and ≤ 2.25 g taken 2.5 to 4 hours later. Increase the dose by 1.5 g per night at weekly intervals (additional 0.75 g at bedtime and 0.75 g taken 2.5 to 4 hours later) to a maximum dose of 9 g per night orally.</td>
<td>9 g/night</td>
</tr>
</tbody>
</table>

VI. Product Availability

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xyrem (sodium oxybate)</td>
<td>Oral solution: 0.5 g per mL in 180 mL bottle</td>
</tr>
<tr>
<td>Xyw (calcium, magnesium, potassium, and sodium oxybate)</td>
<td>Oral solution: 0.5 g per mL</td>
</tr>
</tbody>
</table>

VII. References


### Reviews, Revisions, and Approvals

<table>
<thead>
<tr>
<th>Description</th>
<th>Date</th>
<th>P&amp;T Approval Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Converted into new policy template. Removed requirement for proof of diagnosis based on DSM-V criteria and requirement of polysomnogram as this subjective and not within scope of practice for pharmacist to accurate interpret or measure results of sleep study; Removed bullet point #C as this subjective and not within scope of practice for accurate measure or interpretation by pharmacist as reviewer of sleep study results no measure to verify requirements; Created separate bullet point for trial and failure of SSRI or TCA if member intolerant to venlafaxine; Removed concomitant stimulant plus antidepressant therapy as research did not reflect two classes must be used together; Removed use of alcohol because although a safety requirement, no accurate means to measure alcohol use therefore considered subjective; Added that sedative hypnotic use will be reviewed by pharmacy claim history as this is an objective measure; Removed renewal criteria requiring show of improvement of daytime wakefulness and Epworth Sleepiness Scale as this is subjective; Added the following to renewal criteria: Member must be currently on medication AND Dose does not exceed FDA approved limit; Updated background section to include mechanism of action and FDA approved indications. Updated reference to reflect current literature search.</td>
<td>02.16</td>
<td>05.16</td>
</tr>
<tr>
<td>Created separate criteria for diagnosis of narcolepsy with cataplexy and diagnosis of narcolepsy with EDS; Narcolepsy with cataplexy: removed requirements related to trial and failure of stimulants and armodafinil/modafinil for narcolepsy with cataplexy since these</td>
<td>03.17</td>
<td>05.17</td>
</tr>
</tbody>
</table>
agents used to treat excessive sleepiness have little effect on cataplexy per American Academy of Sleep Medicine report; modified criteria to require trial and failure of 2 antidepressants, instead of 1 for cataplexy; Narcolepsy with EDS: modified criteria to require failure of one CNS stimulant indicated for narcolepsy at up to maximally indicated doses instead of failure of 2 stimulants, one from each class (amphetamine and methylphenidate); Converted to new template; Removed requirements related to age restriction and “No concurrent use of sedative hypnotics as evidenced by review of pharmacy claim history” per template update, and since age is not an absolute contraindication per PI and safety concerns are addressed by Xyrem REMS Program; Added “documentation of positive response to therapy” for re-auth; Updated references.

2Q 2018 annual review: no significant changes from previously approved corporate policy; policies combined for commercial, HIM, and Medicaid lines of business; added age requirement as safety and effectiveness in pediatric patients have not been established per PI; Commercial: Cataplexy: added requirement related to trial and failure of antidepressants; EDS: added requirements related to stimulant and armodafinil or modafinil trial; HIM and Medicaid: modified initial approval duration from 3 to 6 months; Medicaid: added quantity limit of 18 mL/day; references reviewed and updated.

Updated policy to reflect new pediatric indication expansion for patients aged 7 years and older for both cataplexy and EDS of narcolepsy; references reviewed and updated.

2Q 2019 annual review: no significant changes; references reviewed and updated.

2Q 2020 annual review: no significant changes; expanded initial approval durations from 6 months to 12 months; added atomoxetine as a potential redirection for narcolepsy with cataplexy; allowed members 65 years old or older to bypass redirections to any TCA throughout the policy; references reviewed and updated.

RT4: added new salt formulation Xywav to policy; updated policy to only require T/F armodafinil/modafinil if member is ≥ 17 years given lack of evidence supporting armodafinil/modafinil use in pediatric populations; references reviewed and updated.

**Important Reminder**
This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical
policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

This clinical policy is the property of the Health Plan. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members and their representatives agree to be bound by such terms and conditions by providing services to members and/or submitting claims for payment for such services.

Note:
For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.