

## Pharmacy Benefit Determination Policy

<b>Policy Subject:</b> Third Generation Anticonvulsants	<b>Dates:</b>
<b>Policy Number:</b> SHS PBD34	<b>Effective Date:</b> August 23, 2012
<b>Category:</b> CNS Drugs	<b>Revision Date:</b> November 5, 2018
<b>Policy Type:</b> <input checked="" type="checkbox"/> Medical <input type="checkbox"/> Pharmacy	<b>Approval Date:</b> December 5, 2018
<b>Department:</b> Pharmacy	<b>Next Review Date:</b> June 2019
<b>Product</b> (check all that apply):	
<input checked="" type="checkbox"/> Group HMO/POS <input checked="" type="checkbox"/> Individual HMO/POS <input checked="" type="checkbox"/> PPO <input checked="" type="checkbox"/> ASO	
<b>Clinical Approval By:</b> <b>Medical Directors</b> PHP: Peter Graham, MD <b>Pharmacy and Therapeutics Committee</b> PHP: Peter Graham, MD;	

### Policy Statement:

Physicians Health Plan, PHP Insurance & Service Company, and Sparrow PHP will cover third generation Anticonvulsants through the Pharmacy Benefit based on approval by the Clinical Pharmacist or Medical Director using the following determination guidelines

### Drugs and Applicable Coding:

**C-Code:** Vimpat - C9254 (1u = 1mg)

### Clinical Determination Guidelines:

Document the following with chart notes

A. Partial Onset Seizures

1. Adjunctive/refractory partial onset seizures (POS):
  - a. Age:
    - Potiga (Ezogabine):  $\geq 18$  years
    - Sabril (vigabatrin):  $\geq 10$  years
    - Gabitril (tiagabine):  $\geq 12$  years .
  - b. Other therapies (both below)
    - Treatment failure or significant adverse effects with  $\geq 2$  formulary anti-epileptic drugs.
    - Concomitant use with other anti-epileptic drug(s)
2. Monotherapy partial-onset seizures (POS)
  - a. Age
    - Vimpat (lacosamide Oral, IV):  $\geq 4$  years
    - Aptiom (eslicarbazepine):  $\geq 18$  years
    - Fycompa (perampanel):  $\geq 12$  years
    - Briviact (brivaracetam Oral, IV):  $\geq 16$  years
  - b. Other therapies: Treatment failure or significant adverse effects with  $\geq 2$  formulary anti-epileptic drugs:

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- B. Primary generalized tonic-clonic seizures
  - 1. Age: Fycompa (perampanel) -  $\geq$  12years
  - 2. Other therapies (both below)
    - a. Treatment failure or significant adverse effects with  $\geq$  2 formulary anti-epileptic drugs.
    - b. Concomitant use with other anti-epileptic drug(s)
- C. Infantile Spasm Monotherapy
  - 1. Age: Sabril (vigabatrin) - 1 month to 2 years
  - 2. Prescriber: Pediatric neurologist
  - 3. Other therapies: Treatment failure or significant Adverse effects with  $\geq$  2 formulary anti-epileptic drugs
  - 4. Potential benefits out-weighs risk of vision loss
- D. Lennox-Gastaut syndrome and Dravet syndrome
  - 1. Age: Epidiolex oral solution (cannabidiol) -  $\geq$  2 years
  - 2. Prescriber: Neurologist
  - 3. Other therapies: Treatment failure or significant Adverse effects with  $\geq$  2 formulary anti-epileptic drugs
- E. Dosage Regimen (Appendix I)
- F. Approval
  - 1. Initial
    - a. All except Sabril: 6 months
    - b. Sabril:
      - Partial onset seizure: 3months
      - Infantile Spasm: 2-4 weeks
  - 2. Re-approval (all): 1 year; reduction of seizure activity

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### Appendix I: Dosing of Anticonvulsants

Drug	Initial	Titration	Target/Max	Adjustment
Vimpat oral, IV lacosamide	Peds: 11- <50Kg: 1mg/Kg 2x/day <u>Adults:</u> 50mg 2x/day	Peds: 1mg/Kg 2x/day <u>Adults:</u> 50mg 2x/day (wkly intervals)	Peds: 2- 6mg/Kg 2x/day <u>Adults:</u> 100-200 mg 2x/day	<ul style="list-style-type: none"> <li>Severe renal impairment (RI) (CrCl <math>\leq</math> 30ml/min): Peds - <math>\downarrow</math> 25% Adult - max 50mg 2x/day</li> <li>Hepatic Impairment (HI): Mild to mod - Peds <math>\downarrow</math> 25%; Adult max 50 mg 2x/day; Severe - Not recommended</li> </ul>
Fycompa perampanel	<ul style="list-style-type: none"> <li>2mg HS</li> <li>Enzyme-inducing AEDs: 4mg</li> </ul>	$\uparrow$ by 2mg/day every wk to 4-8mg	8-12 mg	<ul style="list-style-type: none"> <li><math>\downarrow</math> dose w serious psychiatric or behavioral reactions</li> <li>Severe RI (CrCl <math>\leq</math> 30ml/min): Not recommended</li> <li>HI: Mild-6mg/day; mod-4mg/day</li> </ul>
Potiga ezogabine	<ul style="list-style-type: none"> <li>100mg</li> <li>&gt;65yrs 50mg</li> </ul>	$\uparrow$ $\leq$ 50 mg 3x/dayd, at wkly intervals	1,200mg /day	<ul style="list-style-type: none"> <li>RI: CrCL &lt;50mL or on dialysis: 200mg tid</li> <li>HI: Child-Pugh 7-9 250 3x/day; Child-Pugh &gt;9 200mg 3x/day</li> </ul>
Aptom eslicarbazepine	<ul style="list-style-type: none"> <li>400mg daily</li> </ul>	$\uparrow$ by 400mg wkly to 1,200mg max.	800mg	<ul style="list-style-type: none"> <li>RI: CrCL &lt;50mL: 200mg; <math>\uparrow</math> by 200mg to max 600mg</li> <li>HI: Mild to mod - No adjustment; Severe - Not recommended</li> </ul>
Sabril vigabatrin POS	<ul style="list-style-type: none"> <li><math>\leq</math> 60kg: 250mg</li> <li>&gt;60 Kg: 500mg 2x/day</li> </ul>	$\uparrow$ by 500mg wkly to 1.5gms 2x/day	<ul style="list-style-type: none"> <li><math>\leq</math>60Kg - 2gms/day</li> <li>&gt;60Kg - 3 gms /day</li> </ul>	<ul style="list-style-type: none"> <li>RI: Mild (CrCl: 50-80ml/min) <math>\downarrow</math> dose 25%; Mod (CrCl 30-50ml/min) <math>\downarrow</math> dose 50%; Severe (CrCl 10-30ml/min): <math>\downarrow</math> dose 75%</li> <li>HI: No adjustment</li> </ul>
Sabril vigabatrin Inf. spasms	<ul style="list-style-type: none"> <li>50mg/Kg/day</li> </ul>	$\uparrow$ by 25-50mg/Kg/day every 3-4 days	150mg/Kg/day 12 doses	<ul style="list-style-type: none"> <li>RI: No information</li> <li>HI: No adjustment</li> </ul>
Gabitril tigabine	<ul style="list-style-type: none"> <li>AED: 4mg</li> <li>No AED: <math>\downarrow</math></li> </ul>	$\uparrow$ 4-8mg wkly into 2-4x/day	32-56 mg/day	<ul style="list-style-type: none"> <li>Peds: Max 32mg/day</li> <li>HI: May need to <math>\downarrow</math> dose</li> </ul>
Briviact oral, IV brivaracetam	Peds: 11-50Kg 0.5-1.25mg/kg 2x/day <u>Adult:</u> 50mg 2x/day	None needed	Peds: 2.5mg/Kg 2x/day <u>Adult:</u> 50-100mg 2x/day	<ul style="list-style-type: none"> <li>RI: end stage - not recommended</li> <li>HI: Mild-severe - 50-150mg/day</li> </ul>
Epidiolex oral solution (cannabidiol)	2.5 mg/Kg 2x/day	$\uparrow$ to 5mg/kg 2x/day at 1 wk.	Max: 10mg/Kg 2x/day	<ul style="list-style-type: none"> <li>RI: No adjustment</li> <li>HI: Mod.1.25- 5mg/kg 2x/day</li> </ul>

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### Appendix I: Monitoring & Patient Safety

Drug	Adverse Reactions*	Monitoring	REMS
Vimpat Oral, IV lacosamide	<ul style="list-style-type: none"> <li>CNS: Dizziness (16-53%), fatigue (7-15%), ataxia (4-15%), HA (11-14%)</li> <li>GI: N (7-17%), V (6-16%)</li> <li>MSK: tremor (4-12%)</li> <li>Ophth.: diplopia (6-16%), ↓ vision (2-16%)</li> </ul>	<ul style="list-style-type: none"> <li>CNS: Suicidality</li> <li>CV: ECG w conduction problems, ↑ PR interval (drugs/severe CV dx), Misc: Multi-organ hypersens.: DC</li> </ul>	Med. guide
Fycompa oral perampanel	<ul style="list-style-type: none"> <li>CNS: Dizziness (16-47%), vertigo (3-47%), hostility (12-20%), aggressive BH (2-20%), drowsiness (9-18%), AB gait (4-16%), fatigue (8-15%), HA (13%) Irritability (2-12%), Falling (5-10%)</li> </ul>	<ul style="list-style-type: none"> <li>CNS: Seizure frequency, suicidality ≤ 1 post</li> <li>Misc: Enzyme-inducing AEDs start or DC, weight</li> </ul>	Med. guide
Potiga oral ezogabine	<ul style="list-style-type: none"> <li>CNS: Dizziness (23%), drowsiness (22%), fatigue (15%)</li> </ul>	<ul style="list-style-type: none"> <li>Ophth. Exam: pre &amp; q 6 mons.</li> <li>CNS: Psych/BH rx, seizure frequency,</li> <li>CV: QT interval (risk factors)</li> <li>Labs: electrolytes</li> <li>Urological: Hepatic/renal fx</li> </ul>	Med guide
Aptom oral eslicarbazep- pine	<ul style="list-style-type: none"> <li>CNS: Dizziness (20-28%), drowsiness (16-28%), HA (13-15%)</li> <li>GI: N (10-16%), V (6-10%)</li> <li>Ophth: Diplopia (9-11%)</li> </ul>	<ul style="list-style-type: none"> <li>CNS: Seizure frequency, depression suicidality</li> <li>Labs: LFT, Na, Cl</li> <li>Ophth: Visual changes</li> <li>Hypersensitivity rxns</li> </ul>	Med guide
Sabril oral vigabatrin	<ul style="list-style-type: none"> <li>CNS: somnolence (17-45%), HA (33%), fatigue (23-28%), dizziness (21-24%), irritability (10-23%), sedation (inf. 17-19%), insomnia (10-12%), tremor (14-15%)</li> <li>GI: Vomiting/constipation (14%-20%), diarrhea (10-13%)</li> <li>Ophth.: ↓ vision field (30%), nystagmus (13-15%), blurred vision (11-13%)</li> <li>Misc: Otitis media (inf. 10-44%), fever (29%), infection (7-51%)</li> </ul>	<ul style="list-style-type: none"> <li>CNS: Sedation, Suicidality</li> <li>Lab: Hgb/Hct</li> <li>Ophth: Dilated indirect exam Pre, 4wks during, q 3-6 post</li> <li>Misc: Weight gain/edema</li> </ul>	REMS Purpose: Aware- ness of vision loss
Gabitril oral tiagabine	<ul style="list-style-type: none"> <li>CNS: Dizziness (27-31%), drowsiness (18-21%), nervous (10-14%)</li> <li>GI: Nausea (11%)</li> <li>Infection (19%)</li> <li>MS: Weak (20%), tremor (9-21%)</li> </ul>	<ul style="list-style-type: none"> <li>CNS: Seizure activity</li> <li>Therapeutic Range (tentative): 50-250nmol/L</li> </ul>	Med guide
Briviact oral, IV brivara- cetam	<ul style="list-style-type: none"> <li>CNS: Fatigue, hypersomnia, lethargy or malaise (20-27%); drowsiness/sedation (16-27%), dizziness (12-16%); AB gait, ataxia or vertigo (16%) psyche AB (13%)</li> <li>MSK: Weakness (20-27%)</li> <li>Ophth: Nystagmus (16%)</li> </ul>	<ul style="list-style-type: none"> <li>CNS: depression, suicidality</li> <li>Labs: CBC w diff, liver renal fx</li> </ul>	Med guide
Epidiolex oral solution cannabidiol	<ul style="list-style-type: none"> <li>CNS: Drowsy/lethargy/sedation (&lt;32%)</li> <li>Derm: Skin rash (7-13%)</li> <li>GI: ↓ appetite (16-22%), diarrhea (9-20%)</li> <li>Hem/Onc: Anemia (30%)</li> <li>Hepatic: ↑LFTs</li> <li>Infection: 25-40%</li> </ul>	<ul style="list-style-type: none"> <li>Lab: ALT, AST, bili (pre. &amp; 1,3, 6 mons post)</li> </ul>	None



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### References and Resources:

1. Epilepsia. 2006 Jul;47(7):1094-120.
2. Epilepsia. 2007, 48(7):1308-17
3. Neurology. 2011 May 3;76(18):1555-63.
4. Lexicomp Online®, Lexi-Drugs®, Hudson, Ohio: Lexi-Comp, Inc.; Vimpat, Fycompa, Potiga, Aptiom Sabril, Gavitril, Briviact, Epidiolex accessed November 2018.

### Approved By:

A handwritten signature in black ink, appearing to read "Peter Graham, MD".

12/5/18

Peter Graham, MD – PHP Executive Medical Director

Date

12/5/18

Human Resources - Kurt Batteen

Date