Indian Health Service
IHS National Pharmacy and Therapeutics Committee
Extended Release Lithium and Valproic Acid
January 2012

Background:
At the January 2012 meeting, the NPTC reviewed the treatment of bipolar disorder. Lithium and divalproex are considered standard of care agents used in the management of bipolar disorder. These agents are included on the National Core Formulary.[1] Based upon the presentation and discussion at the January 2012 meeting, the NPTC recommended the development and dissemination of a formulary brief discussing the use of extended release formulations of lithium and divalproex.

Discussion:
Both lithium and divalproex are first line agents in the treatment of bipolar disorder.[2,3] Both agents are recommended for acute manic episodes and for maintenance therapy. These products can be used as monotherapy or as an adjunct when monotherapy with another agent is not working. These agents are available as extended release tablets. Lithium is typically dosed as follows: IR 300 to 600mg tid to qid and ER formulation as 900 to 1800mg/day in 2 to 3 divided doses. Divalproex delayed release (DR) is typically started at 750mg/day in 2 to 3 divided doses. Extended release (ER) divalproex may be given once daily.

There is little difference in price for each of these products. Lithium 150mg capsules are approximately $0.05/capsule, 300mg $0.02/capsule and 600mg $0.20/capsule. The extended release formulation comes in two strengths, 300mg at $0.10/tablet and 450mg for $0.13/tablet. The divalproex 250mg DR tablet is $0.15/tablet while the ER is $0.16/tablet. The divalproex 500mg DR tablet is $0.10/tablet and the ER formulation $0.15/tablet.

Although there are no studies stating that extended release formulations are better for treating bipolar disorder, compliance is often improved with fewer daily doses. Extended release formulations also tend to have fewer side effects associated with them.

Findings:
Because the cost of immediate release lithium and delayed release divalproex are comparable with the costs of extended release formulations of both agents, the NPTC felt it was important to ensure sites are aware of this and encourage the use of the extended release formulations. This will hopefully encourage better compliance, relieve pill burden, and decrease adverse events with medications for patients with bipolar disorder.

If you have any questions regarding this document, please contact the NPTC at nptc1@ihs.gov.

References:

1. Indian Health Service National Core Formulary. http://www.ihs.gov/nptc/index.cfm?module=dsp_npt_formulary; accessed March 10, 2012.
2. American Psychiatric Association: Practice guideline for the treatment of patients with bipolar disorder (revision). Am J Psychiatry 2002; 159:1–50.
3. National Institute for Health and Clinical Excellence. Bipolar Disorder: The management of bipolar disorder in adults, children, and adolescents in primary and secondary care. *NICE*; London. 2006.