The proposal to add parenteral phenobarbital to the Model List is well-prepared and thoroughly done. The prevalence of the disease and evidence for efficacy for this established treatment is presented. While a benzodiazepine such as diazepam or lorazepam given parenterally is the first choice therapy at this time, parenteral pentobarbital or phenobarbital remains the standard follow up drug when a benzodiazepine is inadequate to control the seizures. Pharmacologically, phenobarbital appears to have more antiseizure activity at equi-sedating doses than other barbiturates(1). For this reason, it is the appropriate barbiturate to include in the Model List for this purpose.

I recommend adding 200mg/ml ampules of phenobarbital sodium to the Model List.

I recommend several changes to the proposed text for the Model Formulary. Since this drug is being added for status epilepticus, “sedation” should be deleted from the “therapeutic action” section. “Presentation…” should delete reference to 100 mg ampules. In addition, I question if “drowsiness” is a relevant adverse effect for a patient with status and suggest it be deleted. I also do not consider respiratory depression a contraindication for treating status epilepsy if ventilatory assistance is available. Hypotension is also a potential adverse effect following IV administration and this should be added to the list with circulatory support being made available if needed. Furthermore, the risk of increased sedation when combined with other CNS drugs is irrelevant for patients with status. The relevant risk is for respiratory depression or hypotension.

Reference

1. Mc Namara JO. Drugs effective in the therapy of the epilepsies in Hardman JC, Limbird LE, Gilman AG. The Pharmacologic Basis of Therapeutics, Mc Graw Hill, N.Y., 2001, p. 531