



**PROPOSED REVIEW OF SIGN GUIDELINE  
CONSULTATION SUMMARY**

Title of guideline	SIGN 81: Diagnosis and management of epilepsies in children and young people
Date of publication	November 2005
SIGN summary of the scoping search	<p><b>Guidelines</b>  <b>Sowerby Centre for Health Informatics at Newcastle.</b> Epilepsy (PRODIGY Guidance). February 2006</p> <p><b>American College of Radiology Expert Panel on Pediatric Imaging.</b> Seizures - child. 2006</p> <p><b>American Academy of Neurology Subcommittee, Practice Committee of the Child Neurology Society.</b> Practice parameter: diagnostic assessment of the child with status epilepticus (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology and the Practice Committee of the Child Neurology Society. <i>Neurology</i> 2006 Nov 14;67(9):1542-50</p> <p><b>University of Warwick, Joint Royal Colleges Ambulance Liaison Committee.</b> Convulsions in Children. May 2007</p> <p><b>Cincinnati Children's Hospital Medical Center.</b> Best evidence statement (BEST) inpatient support groups for families of children with intractable epilepsy. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2009  <a href="http://guidelines.gov/content.aspx?id=14797">http://guidelines.gov/content.aspx?id=14797</a></p> <p><b>HTAs and Systematic Reviews</b>  Appleton R, Macleod S, Martland T. Drug management for acute tonic-clonic convulsions including convulsive status epilepticus in children. <i>Cochrane Database of Systematic Reviews</i> 2008, Issue 3. Art. No.: CD001905.</p> <p>Beavis J, Kerr M, Marson AG. Non-pharmacological interventions for epilepsy in people with intellectual disabilities. 2007</p> <p>Beavis J, Kerr M, Marson AG. Pharmacological interventions for epilepsy in people with intellectual disabilities. 2007</p> <p>Chadwick DW, Marson AG. Zonisamide add-on for drug-resistant partial epilepsy. 2005</p> <p>Cheuk DKL, Wong V. Acupuncture for epilepsy. 2006</p> <p>Connock M, Frew E, Evans B-W, Bryan S, Cummins C, Fry-Smith A, Li Wan Po A, Sandercock J. The clinical effectiveness and cost-effectiveness of newer drugs for children with epilepsy: a systematic review. <i>Health Technology Assessment</i> 2006;10(7)</p> <p>Gamble CL, Williamson PR, Marson AG. Lamotrigine versus carbamazepine monotherapy for epilepsy. 2006</p> <p>Gayatri NA, Ferrie CD, Cross H. Corticosteroids including ACTH for childhood epilepsy other than epileptic spasms. 2007</p> <p>Hancock EC, Cross HHJ. Treatment of Lennox-Gastaut syndrome. <i>Cochrane Database of Systematic Reviews</i> 2009, Issue 3. Art. No.: CD003277.</p> <p>Hancock EC, Osborne JP, Edwards SW. Treatment of infantile spasms. <i>Cochrane Database of Systematic Reviews</i> 2008, Issue 4. Art. No.:</p>

	<p>CD001770. DOI: 10.1002/14651858.CD001770.pub2.</p> <p>Koch MW, Polman SKL. Oxcarbazepine versus carbamazepine monotherapy for partial onset seizures. <i>Cochrane Database of Systematic Reviews</i> 2009, Issue 4.</p> <p>Li Q, Chen X, He L, Zhou D. Traditional Chinese medicine for epilepsy. <i>Cochrane Database of Systematic Reviews</i> 2009, Issue 3. <a href="http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD006454/frame.html">http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD006454/frame.html</a></p> <p>Lozsadi D, Hemming K, Marson AG. Pregabalin add-on for drug-resistant partial epilepsy. 2008</p> <p>Muller M, Marson AG, Williamson PR. Oxcarbazepine versus phenytoin monotherapy for epilepsy. 2006</p> <p>Posner EB, Mohamed K, Marson AG. Ethosuximide, sodium valproate or lamotrigine for absence seizures in children and adolescents. 2005</p> <p>Powell G, Saunders M, Marson AG. Immediate-release versus controlled-release carbamazepine in the treatment of epilepsy. <i>Cochrane Database of Systematic Reviews</i> 2010, Issue 1.</p> <p>Prasad K, Al-Roomi K, Krishnan PR, Sequeira R. Anticonvulsant therapy for status epilepticus. 2005</p> <p>Ramaratnam S, Baker GA, Goldstein LH. Psychological treatments for epilepsy. 2005</p> <p>Ranganathan LN, Ramaratnam S. Rapid versus slow withdrawal of antiepileptic drugs. 2006</p> <p>Ranganathan LN, Ramaratnam S. Vitamins for epilepsy. 2005</p> <p>Stokes T, Shaw EJ, Camosso-Stefinovic J, Baker R, Baker GA, Jacoby A. Self-management education for children with epilepsy. 2007</p> <p>Tomson T, Dahl ML, Kimland E. Therapeutic monitoring of antiepileptic drugs for epilepsy. 2007</p> <p>Whiting P, Gupta R, Burch J, Murjica Mota RE, Wright K, Marson A, Weishmann U, Haycox A, Kleijnen J, Forbes C. A systematic view of the effectiveness and cost-effectiveness of neuroimaging assessments used to visualise the seizure focus in people with refractive epilepsy being considered for surgery. <i>Health Technology Assessment</i>. 2006; 10 (4).</p> <p>Tan G, Thornby J, Hammond DC, Strehl U, Canady B, Arnemann K, Kaiser DA. Meta-analysis of EEG biofeedback in treating epilepsy. <i>Clinical EEG and Neuroscience</i>. 2009;40(3):173-179. <a href="http://www.ncbi.nlm.nih.gov/pubmed/19715180">http://www.ncbi.nlm.nih.gov/pubmed/19715180</a></p>
<p>Main conclusions from new evidence</p>	<ul style="list-style-type: none"> <li>▪ Time to treatment withdrawal was significantly improved with lamotrigine compared to carbamazepine, while time to first seizure and seizure freedom at six months favoured carbamazepine although the results were not statistically significant.</li> <li>▪ Oxcarbazepine is less likely to fail than phenytoin when used as monotherapy for partial onset seizures.</li> <li>▪ Zonisamide in combination with another antiepileptic drug can reduce seizures, but with some adverse effects.</li> <li>▪ Intravenous lorazepam is at least as effective as intravenous diazepam and associated with fewer adverse events in the treatment of acute tonic-clonic seizures. Where intravenous access is unavailable, buccal midazolam is the treatment of choice.</li> <li>▪ Lorazepam is better than diazepam or phenytoin for immediate control of status epilepticus. In the treatment of serially occurring seizures, diazepam gel administered rectally is effective in controlling seizures.</li> <li>▪ Hormonal treatment resolves spasms in more infants than vigabatrin but this may not translate into a better long-term outcome.</li> <li>▪ There is no evidence to support routine therapeutic monitoring of</li> </ul>

	<p>antiepileptic drugs in the treatment of epilepsy.</p> <ul style="list-style-type: none"> <li>▪ A review of various self management practices concluded that self-management education may reduce the number of seizures, and improve quality of life.</li> <li>▪ Two reviews addressing interventions for people with intellectual disabilities broadly supported the use of antiepileptic drugs to reduce seizure frequency, but reported a lack of studies on non-pharmacological interventions.</li> <li>▪ There is no reliable evidence to support psychological treatments for people with epilepsy.</li> </ul>
New areas that could be added to the guideline	<p>Use of Pregabalin Treatment of Lennox Gastaut syndrome</p>
Summary of the recommendations that could be updated	

Please answer the following questions as fully as possible:

Specialties:	Nursing (1), Paediatric Neurology (3), Clinical Neurophysiology (1)
1(a) Is there still a requirement for an evidence-based guideline on this topic?	<p>Yes</p> <p>The guideline has been very useful particularly in setting up the Managed Knowledge Network for paediatric epilepsy. Much of the quality framework is based around the SIGN 81 guideline. It is also useful in the running of the paediatric epilepsy training courses run by the BPNA.</p>
1(b) If no, should the guideline be withdrawn?	
2(a) Based on the information given above, and your own clinical judgement, does the guideline require revision in the light of new evidence? Please give details.	<p>Section 4: The information checklists were arrived at by consensus and should be re-evaluated.</p> <p>Section 4.2.2: The section on SUDEP should be revisited.</p> <p>Section 5: Should be updated to include new drugs.</p> <p>Section 6.3: Update to include lorazepam study</p> <p>Section 10: Revise the section on implementation and audit.</p>
2(b) If no, is there a need to scope for new evidence on a yearly basis?	<p>Yes</p>
2(c) Do you agree with the assessment of the impact of the new evidence and its likely effect on recommendations?	<p>Yes</p>
2(d) If yes, please suggest clinical questions that could be addressed in the revision?	
3(a) Please list any additions to the remit of the guideline that you think would be beneficial	<p>Include the topic of deaths in epilepsy as this has caused some considerable difficulties in Fatal Accident Enquiries particularly with regards to the use of Epilepsy Alarm. There have been some review papers and trials regarding these. Epilepsy Alarms used to be provided by a charity and they have now asked the Scottish Government to take over the funding of these. Include in the management section 4.</p> <p>There is evidence that enough children aren't being referred for epilepsy surgery and there are papers from America on the epidemiology of this. I think it would be good to have some robust evidence in the guideline.</p>

3(b) Please list any sections of the guideline that are no longer required	
4 Please tick your preferred option for reviewing this guideline	
a. there is no new evidence that will affect existing recommendations and the guideline should not be reviewed at this time	✓
b. some recommendations will change in the light of the new evidence and elements of the guideline should be reviewed	✓

5 SIGN COUNCIL			Date: 11/11/2011
<b>Revalidate</b>	<b>Refresh</b>	<b>Revise</b>	<b>Remove</b>
		✓	