



**PROPOSED REVIEW OF SIGN GUIDELINE
CONSULTATION FORM**

Title of guideline	SIGN 73: Management of obstructive sleep apnoea/hypopnoea syndrome in adults
Date of publication	June 2003
SIGN scoping search – sources	<p>MeSH headings for the condition specified and any common variations as free text, plus terms for the interventions and care processes discussed in the guideline</p> <p>Sources: Guidelines: NICE; National Library for Health guidelines finder; National Guidelines Clearinghouse; GIN Web site. Technology appraisals: NICE; UK HTA database (Southampton); INAHTA database. Cochrane reviews: Cochrane Library. Other good quality systematic reviews: UK HTA database (Southampton); DARE.</p>
SIGN scoping search - summary	<p>Guidelines – 9 HTAs – 6 Cochrane reviews – 5 Other good quality systematic reviews – 5</p>
Other guidelines/HTAs	<p>Kushida CA, Littner MR, Hirshkowitz M, Morgenthaler TI, Alessi CA, Bailey D, Boehlecke B, Brown TM, Coleman J Jr, Friedman L, Kapen S, Kapur VK, Kramer M, Lee-Chiong T, Owens J, Pancer JP, Swick TJ, Wise MS, American Academy of Sleep Medicine. Practice parameters for the use of continuous and bilevel positive airway pressure devices to treat adult patients with sleep-related breathing disorders. <i>Sleep</i> 2006 Mar 1;29(3):375-80</p> <p>Institute for Clinical Systems Improvement (ICSI). Diagnosis and treatment of obstructive sleep apnea. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2006 Mar.</p> <p>Chesson AL Jr, Berry RB, Pack A. Practice parameters for the use of portable monitoring devices in the investigation of suspected obstructive sleep apnea in adults. <i>Sleep</i> 2003 Nov 1;26(7):907-13.</p> <p>Kushida CA, Morgenthaler TI, Littner MR, Alessi CA, Bailey D, Coleman J Jr, Friedman L, Hirshkowitz M, Kapen S, Kramer M, Lee-Chiong T, Owens J, Pancer JP. Practice parameters for the treatment of snoring and obstructive sleep apnea with oral appliances: an update for 2005. <i>Sleep</i> 2006 Feb 1;29(2):240-3</p> <p>Practice guidelines for the perioperative management of patients with obstructive sleep apnea: a report by the American Society of Anesthesiologists Task Force on Perioperative Management of Patients with Obstructive Sleep Apnea. <i>Anesthesiology</i> 2006 May;104(5):1081-93</p> <p>Atwood CW Jr, McCrory D, Garcia JG, Abman SH, Ahearn GS. Pulmonary artery hypertension and sleep-disordered breathing: ACCP evidence-based clinical practice guidelines. <i>Chest</i> 2004 Jul;126(1 Suppl):72S-77S.</p> <p>Littner MR, Kushida C, Wise M, Davila DG, Morgenthaler T, Lee-Chiong T, Hirshkowitz M, Loubé DL, Bailey D, Berry RB, Kapen S, Kramer M. Practice parameters for clinical use of the multiple sleep latency test and the maintenance of wakefulness test. <i>Sleep</i> 2005 Jan 1;28(1):113-21.</p> <p>American Medical Directors Association (AMDA). Sleep disorders. Columbia (MD): American Medical Directors Association (AMDA); 2006. 38</p> <p>Buscemi N., Vandermeer B., Pandya R., et al. <i>Melatonin for Treatment of Sleep Disorders</i>. Summary, Evidence Report/Technology Assessment: Number 108.</p>

	<p>AHRQ Publication Number 05-E002-1, November 2004. Agency for Healthcare Research and Quality, Rockville, MD.</p> <p>Hailey D, Jacobs P, Mayers I, Mensinkai S. <i>Auto-titrating nasal continuous positive airway pressure systems in the management of obstructive sleep apnea</i>. Ottawa: Canadian Coordinating Office for Health Technology Assessment (CCOHTA), 2003. <i>On the basis of the available literature, APAP shows promise but should be used with caution until further studies establish its effectiveness and cost-effectiveness.</i></p> <p>HAYES, Inc. <i>Pharmacologic treatment of sleep apnea</i>. Lansdale, PA: HAYES, Inc., 2005.</p> <p>ECRI. <i>Mandibular advancement devices for obstructive sleep apnea</i>. Plymouth Meeting, PA: ECRI, 2002:31.</p> <p>Nordic project on sleep apnea - systematic review (project). <i>The Swedish Council on Technology Assessment in Health Care (SBU)</i>. The Swedish Council on Technology Assessment in Health Care (SBU).</p> <p>Hailey D, Tran K, Dales R, Mensinkai S, McGahan L. <i>Sleep laboratory investigations: a review of patient referral guidelines</i>. Ottawa: Canadian Coordinating Office for Health Technology Assessment (CCOHTA), 2005:14.</p> <p>NICE (2005) Radiofrequency ablation of the soft palate for snoring</p>
<p>Main conclusions from new evidence</p>	<ul style="list-style-type: none"> ▪ A Cochrane review found insufficient evidence to recommend the use of drug therapy in the treatment of OSA. Small studies reported positive effects of certain agents on short-term outcome and better matching of drugs to patients according to the dominant mechanism of their OSA may lead to better results. <i>The guideline says that the evidence base to support pharmacological treatment as an effective therapeutic option is small and recommends that pharmacological therapy should not be used as first line therapy for OSAHS (A).</i> ▪ A Cochrane review found CPAP is effective in reducing symptoms of sleepiness and improving quality of life measures in people with moderate and severe obstructive sleep apnoea (OSA). It is more effective than oral appliances (OA) in reducing respiratory disturbances in these people but subjective outcomes are more equivocal. A second Cochrane review concludes that until there is more definitive evidence on the effectiveness of OA in relation to CPAP, with regard to symptoms and long-term complications, it would appear to be appropriate to recommend OA therapy to patients with mild symptomatic OSAH, and those patients who are unwilling or unable to tolerate CPAP therapy. <i>The guideline recommends CPAP as first choice therapy for patients with moderate or severe OSAHS (A) and intra-oral devices as an appropriate therapy for snorers and for patients with mild OSAHS with normal daytime alertness (A) or as an appropriate alternative therapy for patients who are unable to tolerate CPAP (B).</i> ▪ A systematic review concludes that clinical history and physical examination are not reliable for diagnosing OSAHS compared with overnight polysomnography (PSG). <i>The guideline has a good practice point stating that full PSG with EEG-based sleep staging is not necessary to diagnose sleep apnoea in most patients. The guideline recommends limited sleep studies as an adequate first-line method of diagnostic assessment for OSAHS (B).</i> ▪ A systematic review found that compared to standard CPAP, APAP is associated with a reduction in mean pressure. However, APAP and standard CPAP were similar in adherence and their ability to eliminate respiratory events and to improve subjective sleepiness. APAP is more costly than standard CPAP, and should not be considered first-line chronic therapy in all patients with OSA. APAP may be useful in other situations (eg, home titrations, detection of mouth leak) or in certain subgroups of patients with OSA. <i>APAP is not discussed in the guideline.</i> ▪ A systematic review found no evidence that melatonin is effective in

	treating secondary sleep disorders or sleep disorders accompanying sleep restriction, such as jet lag and shiftwork disorder. There was evidence that melatonin is safe with short term use. <i>Melatonin is not discussed in the guideline.</i>
New areas that could be added to the guideline	<ul style="list-style-type: none"> ▪ Use of APAP ▪ Use of melatonin
Summary of the recommendations that could be updated	<ul style="list-style-type: none"> ▪ Recommendations on use of oral appliances.

Please answer the following questions as fully as possible:

Name, designation, organisation:	Other: 5 Academics: 3 Consultant physician: 8 Consultant Neuroanaesthetist: 1
1(a) Is there still a requirement for an evidence-based guideline on this topic?	
<ul style="list-style-type: none"> ▪ Yes = 16 	
1(b) If no, should the guideline be withdrawn?	
2(a) Do you agree with the assessment of the impact of the new evidence and its likely effect on recommendations?	
<ul style="list-style-type: none"> ▪ Yes = 16 ▪ Yes, however, it will be difficult to make very firm recommendations about APAP, as they rest largely on cost-effectiveness. Overall cost effectiveness can be a complex issue and is likely to vary from one centre to another ▪ Probably not a major effect ▪ Agree, role of APAP now merits formal assessment with recommendations as to appropriate integration into diagnostic interventions algorithm. Updated comments on various medications e.g Modafinil, ▪ No = 1 	
2(b) Based on the information given above, and your own clinical judgement, does the guideline require revision in the light of new evidence? <i>Please give details.</i>	
<ul style="list-style-type: none"> ▪ The new areas above should be addressed. Oral appliance application update would be welcomed ▪ Revision would be desirable. Notwithstanding the above caveat regarding recommendations for APAP, it is important that the evidence is presented. On the other hand, the NICE guidelines will soon be published and many have this ▪ Yes, but only to a quite limited extent ▪ No, might be worth a small comment on APAP but I don't think this is a major issue ▪ Yes, huge amount of new evidence published since 2003 ▪ Yes. More RCTs have appeared recently, NICE are about to release a CPAP technology appraisal with economic analysis ▪ I agree that the guideline should be updated to include use of APAP ▪ Recent RCT (Robinson GV et al Eur Respir J 2006;27:1229) showed that CPAP reduced Epworth score even in those with "normal" ESS. Some commissions deny patients access to investigation and treatment unless ESS > 10. in my view it is not appropriate to use the ESS as the sole criterion for referral ▪ Yes, melatonin ▪ No ▪ I think it would be useful to add the 2 new areas, but particularly to update the recommendations on use of oral appliances. ▪ Expanded comments on O.A (especially adjustable) now supported by further trials. <ul style="list-style-type: none"> - Zang, B et al. AJRCCM 2007, Jahl A et al BJD 2005, Lawton HM EJOrthodontics 2005 - Coughlin S et al, EU Heart J 2004 ▪ yes. It would be useful to revise the guideline 	
3 Please list any additions to the remit of the guideline that you think would be beneficial	
<ul style="list-style-type: none"> ▪ There is data about the effect of CPAP on hypertension and diabetic control. These merit review. ▪ - More precise role of OA in snoring and OSA. – Role of APAP – use of CPAP in symptomatic mild OSA – review of OSA as cardiovascular risk factor – role of drugs e.g. modafemil in the treatment of sleepiness (ie. Adjunct to CPAP) ▪ oral appliances, APA vs CPAP, weight loss strategies, Bariatric surgery 	

<ul style="list-style-type: none"> ▪ as above, re-anaesthesia – Practice guidelines from American Society of Anaesthesiologists ▪ Not at the moment. Perhaps needs reviewed in the next few years ▪ Metabolic syndrome/cardiovascular risk/obesity projections ▪ incorporate any additional information on the use of CPAP treatment outlines in the NICE document which is due for publication in the near future 		
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	2
b.	some recommendations will change in the light of the new evidence and selected elements of the guideline should be reviewed	13
c.	the entire guideline should be reviewed	1
d.	the guideline should be withdrawn	

Thank you very much for taking part in this consultation.

Please return to: Safia Qureshi, SIGN Executive, 28 Thistle Street, Edinburgh EH2 1EN, safia.qureshi@nhs.net

Sorry re my late reply as I was on leave when your letter re the proposed review of Sleep apnoea came in. Had a quick look at the the search and concentrated on the anaesthesia part. Practice guidelines ..perioperative management....Amercian Society..Task Anaesthesiology 2006may;104(5):1081-93. No new developements in this review of consensus opinion. Some papers reviewed but all evidence and recommendations already in guideline. Only one to emphasis was co-operation in planning management of the patient by surgeon and anaesthetist. My own search -there is a french review with not so up to date references as Sign 73 and other papers looking at individual anaesthetic specifics which I feel would be too specialty oriented for the guideline. Hope this is of help, Regards,