



**PROPOSED REVIEW OF SIGN GUIDELINE
CONSULTATION FORM**

Title of guideline	SIGN 86: Management of patients with dementia
Date of publication	Feb 2006
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 – 13 HTAs – 11 Cochrane reviews – 34 Other good quality systematic reviews – 64</p>
Other guidelines/HTAs	<p>National Institute for Health and Clinical Excellence (NICE). Dementia: Supporting people with dementia and their carers in health and social care. Nov 2006</p> <p>Alzheimer's Association. Dementia care practice recommendations for assisted living residences and nursing homes. 2006</p> <p>American College of Physicians/American Academy of Family Physicians Panel on Dementia. Current pharmacologic treatment of dementia: a clinical practice guideline from the American College of Physicians and the American Academy of Family Physicians. Ann Intern Med 2008;148(5):370-8. http://www.annals.org/cgi/reprint/148/5/370.pdf</p> <p>Royal College of Psychiatrists. Forgetful but not forgotten: assessment and aspects of treatment of people with dementia by a specialist old age psychiatry service. 2005 http://www.rcpsych.ac.uk/files/pdfversion/cr119.pdf</p> <p>Singapore Ministry of Health. Dementia. Singapore: Singapore Ministry of Health. 2007</p> <p>Waldemar G, Dubois B, Emre M, Georges J, McKeith IG, Rossor M, Scheltens P, Tariska P, Winblad B, EFNS. Recommendations for the diagnosis and management of Alzheimer's disease and other disorders associated with dementia: EFNS guideline. Eur J Neurol 2007 Jan;14(1):e1-26.</p> <p>Canadian Coordinating Office for Health Technology Assessment Cholinesterase inhibitors for Alzheimer's disease: a systematic review of randomized controlled trials. Ottawa: Canadian Coordinating Office for Health Technology Assessment/Office Canadien de Coordination de l'Evaluation des Technologies de la Sante (CCOHTA) 2005: 118</p> <p>NICE. Donepezil, galantamine, rivastigmine (review) and memantine for the treatment of Alzheimer's disease. Technology Appraisal 111, Sep 2007</p>

	<p>Swedish Council on Technology Assessment in Health Care. Dementia - diagnostic and therapeutic interventions (Vol 2). Stockholm: Swedish Council on Technology Assessment in Health Care (SBU). Yellow Report No.172E/2. 2008</p> <p>Loveman E, Green C, Kirby J, Takeda A, Picot J, Payne E, Clegg A. The clinical and cost-effectiveness of donepezil, rivastigmine, galantamine and memantine for Alzheimer's disease. <i>Health Technology Assessment</i> 2006; 10(1): 1-176</p> <p>Robinson L, Hutchings D, Corner L, Beyer F, Dickinson H, Vanoli A, Finch T, Hughes J, Ballard C, May C, Bond J. A systematic literature review of the effectiveness of non-pharmacological interventions to prevent wandering in dementia and evaluation of the ethical implications and acceptability of their use. <i>Health Technology Assessment</i> 2006; 10(26): 1-124</p> <p>Smith S C, Lamping D L, Banerjee S, Harwood R, Foley B, Smith P, et al. Measurement of health-related quality of life for people with dementia: development of a new instrument (DEMQOL) and an evaluation of current methodology. <i>Health Technology Assessment</i> 2005; 9(10): 1-108</p>
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Main conclusions from new evidence	<ul style="list-style-type: none"> ▪ A meta-analysis of studies using MMSE concluded that it offers modest accuracy with best value for ruling-out a diagnosis of dementia in community and primary care. For all other used it should be combined with or replaced by other methods. A systematic review reported that there are many brief cognitive screening instruments for the diagnosis of dementia in primary care instruments and that no single instrument is ideal for all settings. Limitations in the literature search and failure to consider study quality in the synthesis mean that these findings should be interpreted with caution. <i>The guideline recommends the use of the MMSE in the diagnosis of dementia in patients with suspected cognitive impairment (B)</i> <p>There is a large evidence base of Cochrane and other systematic reviews for treatment of dementia with different classes of drugs, notably Cholinesterase Inhibitors (CI) and Antipsychotics (AP). There is also a body of evidence for other non-class effect drugs.</p> <ul style="list-style-type: none"> ▪ Several systematic reviews indicate that the three cholinesterase inhibitors (donepezil, galantamine and rivastigmine) and NMDA receptor blocker memantine can result in statistically significant but clinically marginal improvement in measures of cognition and global assessment in patients with dementia. Despite slight variations in the mode of action of the three drugs there is no evidence of any differences between them with respect to efficacy. The evidence from one large trial shows fewer adverse events associated with donepezil compared with rivastigmine. <i>The guideline presents separate and detailed recommendations for the use of donepezil, galantamine and rivastigmine in the management of cognitive decline and associated symptoms (B). The guideline reports insufficient evidence to make a recommendation on memantine.</i> ▪ Several systematic reviews conclude that atypical antipsychotics (risperidone and olanzapine) may be useful in reducing aggression and risperidone reduces psychosis, but both are associated with serious adverse cerebrovascular events and extrapyramidal symptoms. <i>The guideline notes that MHRA recommends against their use and presents a GPP that careful evaluation of adverse effects must be made before using APs.</i> ▪ A Cochrane review reports that although safe, the evidence that Ginkgo biloba has predictable and clinically significant benefit for people with dementia or cognitive impairment is inconsistent and unreliable. <i>The guideline notes the conflicting evidence on Ginkgo and safety concerns when used in combination with warfarin or aspirin.</i> ▪ A systematic review concluded that cerebrolysin could significantly improve global clinical impression scores in patients with mild to
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moderate Alzheimer's disease. Despite limitations in the review, the author's conclusions are probably appropriate. *The guideline states there is a lack of evidence of effectiveness for the use of cerebrolysin.*

- A Cochrane review reports no evidence of efficacy of Vitamin E in the prevention or treatment of people with AD. *Not included in the guideline.*
- A Cochrane review reports that studies on use of folic acid, with or without vitamin B12, provides no evidence for a beneficial effect on cognitive function of unselected healthy or cognitively impaired older people. *The guideline reports that reversible causes of dementia (eg vitamin B12 deficiency) are very rare (< 1%) and there is no evidence that screening for this improves the accuracy of clinical diagnosis.*
- A systematic review concludes that there is insufficient evidence to support the effectiveness of melatonin in managing the cognitive and non-cognitive sequelae of dementia. *The guideline comments only on the use of melatonin for sleep disturbance but does not recommend it.*
- Huperzine A is a naturally occurring compound with CI properties sold as a dietary supplement for memory support. A Cochrane review showed some beneficial effects on improvement of general cognitive function, global clinical status, behavioral disturbance and functional performance, with no obvious serious adverse events for patients with dementia. However, only one study was of adequate quality and size. There is therefore inadequate evidence to make any recommendation about its use. *Not included in the guideline.*
- A Cochrane review concludes that valproate preparations are ineffective in treating agitation among demented patients, and that valproate therapy is associated with an unacceptable rate of adverse effects. *The guideline recommends against the use of valproate (A).*
- A systematic review concludes that current evidence does not show any beneficial preventive effects of statins on dementia. The findings were limited by poor methodology and reporting in the review. *Not included in the guideline.*

There is a large evidence base of systematic reviews on non-pharmacological interventions for people with dementia. The reviews measure many different outcomes using a wide range of therapeutic approaches. Most report a lack of evidence on which to base recommendations.

- A systematic review assessed the effects of non-pharmacological interventions on neuropsychiatric symptoms in patients with dementia. It concluded that unmet needs and behavioural interventions that include caregivers or bright light therapy may be efficacious, but more high-quality research is needed. *The guideline specifies in a good practice point that bright light therapy is not recommended for the treatment of cognitive impairment, sleep disturbance or agitation in people with dementia.*
- A systematic review of combined therapies aimed at elderly people living at home with dementia and their caregivers reported improvements in some aspects of functioning. The studies in the review suffered from methodological weaknesses. *The guideline does not make a recommendation on combined therapies.*
- A systematic review assessed the efficacy of motor intervention for primary or secondary dementia. The authors concluded that motor intervention minimises the physical and mental decline inherent in dementia. *The guideline does not address this specifically but notes that structured exercise may help to maintain mobility.*
- A systematic review of simulated presence therapy for challenging behaviours in people with dementia provides limited support for the use of the intervention with this population and stresses the importance of assessing participants' suitability for such an approach and monitoring their responses closely. The evidence base is small and of questionable quality. *The guideline states that simulated presence therapy is not effective for reduction in agitation in nursing home residents with severe dementia.*
- A Cochrane review of massage and touch for management of several

	<p>outcomes in people with dementia did not find sufficient evidence to make any recommendation for their use. <i>The guideline does not include massage.</i></p> <ul style="list-style-type: none"> ▪ A Cochrane review of acupuncture for vascular dementia reported that the effectiveness of this intervention was uncertain. High quality studies are lacking. <i>The guideline does not include acupuncture.</i> ▪ A Cochrane review of reminiscence therapy for dementia was unable to draw conclusions due to the low quality of studies, small sample sizes and variations in results. <i>The guideline states there is a lack of evidence for reminiscence therapy</i> ▪ A systematic review of Montessori based interventions in people with dementia concluded that such interventions may be beneficial, but further evidence is required to determine their efficacy. <i>The guideline does not include Montessori based interventions.</i> ▪ A systematic review evaluated the effects of planned physical activity programmes on mood, sleep and functional ability in people with dementia. The authors concluded that sustained walking may benefit mood and physical activity appears to benefit sleep quality and functional ability in care-home residents. The conclusions overlook conflicting evidence, while methodological weaknesses make it unclear whether the findings can be relied upon. <i>The guideline notes that the impact of physical activities on the core or associated symptoms of dementia is minimal.</i> ▪ A systematic review concludes that there is limited evidence for the effectiveness of some psychosocial methods in reducing depressed, aggressive or apathetic behaviours in people with dementia. <i>The guideline recommends behavioural management to reduce depression in people with dementia (B).</i> ▪ A systematic review concludes that preferred music had positive effects on decreasing agitated behaviours in older adults with dementia but the evidence presented was insufficient to provide robust recommendations. <i>The guideline notes a lack of evidence of effectiveness for music therapy.</i> ▪ A meta-analysis of non-pharmacological support programs for people with dementia showed that such programs decrease the odds of institutionalization and significantly increase the time to institutionalization. <i>The guideline states that comprehensive caregiver support is associated with reduction in institutionalization and recommends caregiver training (B).</i> ▪ A systematic review of aromatherapy in people with dementia reports a lack of robust evidence to form a recommendation. <i>The guideline notes a lack of evidence for the efficacy of aromatherapy.</i> ▪ A systematic review notes that cognitive training may improve some cognitive and function measures in patients with dementia but poor methodological quality of the review makes firm conclusions difficult. <i>The guideline recommends that cognitive stimulation should be offered to people with dementia (B).</i>
New areas that could be added to the guideline	<ul style="list-style-type: none"> ▪
Summary of the recommendations that could be updated	<ul style="list-style-type: none"> ▪

This report has been reviewed by SIGN Senior Management who do not consider that the new evidence provides justification for updating of the guideline at this stage, and the guideline remains current. This report will be updated and reconsidered in 2011.