# **Best Evidence Summaries of Topics in Mental Healthcare**

# **BEST** in MH clinical question-answering service

## Question

How effective is the MMSE, compared to any other diagnostic tool, in managing memory in adults with cognitive impairment being treated with Cholinesterase Inhibitors?

### Clarification of question using PICO structure (PICTRO for diagnostic questions)

Patients: Adults with cognitive impairment being treated with Cholinesterase Inhibitors.
Index test: Mini-Mental State Examination (MMSE).
Comparator tests: Any other diagnostic tool.
Target condition: Cognitive impairment.
Reference standard: Unknown.
Outcome: Sensitivity, Specificity.

#### **Clinical and research implications**

No relevant evidence was identified.

#### What does the evidence say?

Number of included studies/reviews (number of participants)

No relevant evidence was identified.

Main Findings N/A

Authors Conclusions N/A

Reliability of conclusions/Strength of evidence N/A

### What do guidelines say?

No guidelines were found that directly consider the use of MMSE alongside Cholinesterase Inhibitors.

Date question received: 26/02/13 Date searches conducted: 28/02/13 Date answer completed: 04/03/13

#### Search Details

Source	Search Strategy	Number of hits	Relevant evidence
			identified
Guidelines			
NICE	MMSE	65	0
	Mini Mental State Examination		
	Cholinesterase Inhibitors		
SRs and Pri	mary studies		
CENTRAL			
PsycINFO	1. PsycINFO; MMSE.ti,ab; 3599 results.	8	
- /	2. PsycINFO; "mini mental state examination".ti,ab; 5055 results.		
	3. PsycINFO; MINI MENTAL STATE EXAMINATION/; 510		
	results.		
	4. PsycINFO; 1 OR 2 OR 3; 6280 results.		
	5. PsycINFO; (sensitivity OR specificity).ti,ab; 71980 results.		
	6. PsycINFO; (pretest ADJ probability).ti,ab; 24 results.		
	7. PsycINFO; (pre-test ADJ probability).ti,ab; 14 results.		
	8. PsycINFO; (post-test ADJ probability).ti,ab; 16 results.		
	<ol><li>PsycINFO; "predictive value*".ti,ab; 5099 results.</li></ol>		
	10. PsycINFO; "likelihood ratio*".ti,ab; 1163 results.		
	11. PsycINFO; TEST VALIDITY/; 48133 results.		
	12. PsycINFO; 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11; 120833		
	results.		
	13. PsycINFO; 4 AND 12; 974 results.		
	14. PsycINFO; dementia.ti,ab; 38655 results.		
	15. PsycINFO; exp DEMENTIA/; 47041 results.		
	16. PsycINFO; alzheimer*.ti,ab; 35248 results.		
	17. PsycINFO; ALZHEIMER'S DISEASE/; 28329 results.		
	18. PsycINFO; COGNITIVE IMPAIRMENT/; 18936 results.		
	19. PsycINFO; "cognitive* impair*".ti,ab; 18836 results.		
	20. PsycINFO; "memory clinic".ti,ab; 513 results.		
	21. PsycINFO; "memory service".ti,ab; 7 results.		

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	22. PsycINFO; (memory adj2 assess*).ti,ab; 2600 results.		
	23. PsycINFO; 14 OR 15 OR 16 OR 17 OR 18 OR 19 OR 20 OR		
	21 OR 22; 80780 results.		
	24. PsycINFO; 13 AND 23; 812 results.		
	25. PsycINFO; CHOLINESTERASE INHIBITORS/; 1390 results.		
	26. PsycINFO; donepezil.ti,ab; 1052 results.		
	27. PsycINFO; rivastigmine.ti,ab; 484 results.		
	28. PsycINFO; galantamine.ti,ab; 443 results.		
	29. PsycINFO; (Acetylcholinesterase AND inhibit*).ti,ab; 1059		
	results.		
	30. PsycINFO; (cholinesterase AND inhibit*).ti,ab; 1500		
	results.		
	31. PsycINFO; (AChE OR AChEI).ti,ab; 915 results.		
	32. PsycINFO; 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31;		
	3903 results.		
	33. PsycINFO; 24 AND 32; 8 results.		
EMBASE	34. EMBASE; MMSE.ti,ab; 9839 results.	126	
	35. EMBASE; "mini mental state examination".ti,ab; 8958		
	results.		
	36. EMBASE; MINI MENTAL STATE EXAMINATION/; 13449		
	results.		
	37. EMBASE; 34 OR 35 OR 36; 19007 results.		
	38. EMBASE; (sensitivity OR specificity).ti,ab; 762103 results.		
	39. EMBASE; (pretest ADJ probability).ti,ab; 1046 results.		
	40. EMBASE; (pre-test ADJ probability).ti,ab; 591 results.		
	41. EMBASE; (post-test ADJ probability).ti,ab; 402 results.		
	42. EMBASE; "predictive value*".ti,ab; 80216 results.		
	43. EMBASE; "likelihood ratio*".ti,ab; 9500 results.		
	44. EMBASE; SENSITIVITY AND SPECIFICITY/; 184511 results.		
	45. EMBASE; DIAGNOSTIC ACCURACY/; 168053 results.		
	46. EMBASE; 38 OR 39 OR 40 OR 41 OR 42 OR 43 OR 44 OR		
	45; 998377 results.		
	47. EMBASE; 37 AND 46; 2096 results.		
	48. EMBASE; dementia.ti,ab; 79426 results.		
	49. EMBASE; exp DEMENTIA/; 204396 results.		
	50. EMBASE; alzheimer*.ti,ab; 105250 results.		

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	51. EMBASE; ALZHEIMER'S DISEASE/; 112076 results.		
	52. EMBASE; COGNITIVE IMPAIRMENT/; 84503 results.		
	53. EMBASE; "cognitive* impair*".ti,ab; 38779 results.		
	54. EMBASE; "memory clinic".ti,ab; 976 results.		
	55. EMBASE; "memory service".ti,ab; 9 results.		
	56. EMBASE; (memory adj2 assess*).ti,ab; 2960 results.		
	57. EMBASE; 48 OR 49 OR 50 OR 51 OR 52 OR 53 OR 54 OR 55		
	OR 56; 295447 results.		
	58. EMBASE; 47 AND 57; 1819 results.		
	59. EMBASE; donepezil.ti,ab; 2908 results.		
	60. EMBASE; rivastigmine.ti,ab; 1543 results.		
	61. EMBASE; galantamine.ti,ab; 1329 results.		
	62. EMBASE; (Acetylcholinesterase AND inhibit*).ti,ab; 10340 results.		
	63. EMBASE; (cholinesterase AND inhibit*).ti,ab; 8062 results.		
	64. EMBASE; (AChE OR AChEI).ti,ab; 11954 results.		
	65. EMBASE; CHOLINESTERASE INHIBITOR/; 16487 results.		
	66. EMBASE; DONEPEZIL/; 7867 results.		
	67. EMBASE; RIVASTIGMINE/; 4779 results.		
	68. EMBASE; GALANTAMINE/; 4911 results.		
	69. EMBASE; 59 OR 60 OR 61 OR 62 OR 63 OR 64 OR 65 OR 66		
	OR 67 OR 68; 38963 results.		
	70. EMBASE; 58 AND 69; 126 results.		
MEDLINE	71. MEDLINE; MMSE.ti,ab; 5551 results.	22	
	72. MEDLINE; "mini mental state examination".ti,ab;		
	6646 results.		
	73. MEDLINE; MINI MENTAL STATE EXAMINATION/; 0		
	results.		
	74. MEDLINE; 71 OR 72 OR 73; 8724 results.		
	75. MEDLINE; (sensitivity OR specificity).ti,ab; 657299		
	results.		
	76. MEDLINE; (pretest ADJ probability).ti,ab; 784		
	results.		
	77. MEDLINE; (pre-test ADJ probability).ti,ab; 349		

 results.	
78. MEDLINE; (post-test ADJ probability).ti,ab; 310	
results.	
79. MEDLINE; "predictive value*".ti,ab; 61059 results.	
80. MEDLINE; "likelihood ratio*".ti,ab; 7691 results.	
81. MEDLINE; SENSITIVITY AND SPECIFICITY/; 257105	
results.	
82. MEDLINE; 75 OR 76 OR 77 OR 78 OR 79 OR 80 OR	
81; 844325 results.	
83. MEDLINE; 74 AND 82; 1151 results.	
84. MEDLINE; dementia.ti,ab; 58929 results.	
85. MEDLINE; exp DEMENTIA/; 108763 results.	
86. MEDLINE; alzheimer*.ti,ab; 80433 results.	
87. MEDLINE; "cognitive* impair*".ti,ab; 27405 results.	
88. MEDLINE; "memory clinic".ti,ab; 622 results.	
89. MEDLINE; "memory service".ti,ab; 6 results.	
90. MEDLINE; (memory adj2 assess*).ti,ab; 2277 results.	
91. MEDLINE; ALZHEIMER DISEASE/; 60754 results.	
92. MEDLINE; MILD COGNITIVE IMPAIRMENT/; 849	
results.	
93. MEDLINE; 84 OR 85 OR 86 OR 87 OR 88 OR 89 OR 90	
OR 91 OR 92; 164792 results.	
94. MEDLINE; 83 AND 93; 953 results.	
95. MEDLINE; donepezil.ti,ab; 1972 results.	
96. MEDLINE; rivastigmine.ti,ab; 1006 results.	
97. MEDLINE; galantamine.ti,ab; 888 results.	
98. MEDLINE; (Acetylcholinesterase AND inhibit*).ti,ab;	
8959 results.	
99. MEDLINE; (cholinesterase AND inhibit*).ti,ab; 6716	
results.	

Summary	NA	NA	
	103. MEDLINE; 94 AND 102; 22 results.		
	101; 28839 results.		
	102. MEDLINE; 95 OR 96 OR 97 OR 98 OR 99 OR 100 OR		
	results.		
	101. MEDLINE; CHOLINESTERASE INHIBITORS/; 15772		
	100. MEDLINE; (AChE OR AChEI).ti,ab; 10232 results.		

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