

# MODEM

modelling outcome and cost impacts  
of interventions for dementia

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## Maintenance Cognitive Stimulation Therapy

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Cognitive skills are the skills the brain uses to think, learn, remember, problem solve and communicate. There are a number of approaches (interventions) to help people with dementia improve their memory and thinking skills and to cope with memory loss, one of these is [Cognitive Stimulation Therapy \(CST\)](#) Maintenance Cognitive Stimulation Therapy (MCST) is a longer course of CST.

Key points:

- CST helps the memory and thinking (cognitive) skills of people with mild to moderate dementia
- people with dementia, who took part in the additional 24 weeks of group therapy, said that there was an improvement in the quality of their daily lives
- people who took part in MCST and take the standard medication for Alzheimer's disease had better results for cognitive skills than those who only took part in MCST and better results than those who took part in CST and were on standard medication

MCST offers value for money (is cost effective).

## What is Maintenance Cognitive Stimulation Therapy (MCST)?

MCST is 24 weekly sessions of Cognitive Stimulation Therapy (CST) (1) in addition to the full [CST course](#). The full CST course is 14 group sessions held twice a week for 7 weeks. (1)

MCST sessions are organised and run in the same way as the original CST course. Each session covers a different topic with a range of

activities. Some activities are repeated at every session such as the group song, refreshments and reminders of date, time and place.

## Why is Maintenance Cognitive Stimulation Therapy (MCST) important for people with dementia?

People living with dementia find it difficult to carry out every day practical activities. It has a big impact on how they feel as an individual and it affects their confidence and self-esteem. Difficulties in speaking and following conversations can result in the person becoming withdrawn and isolated.

People with dementia said that they enjoyed the CST sessions, they helped them to concentrate and they were fun. Their carers said that they were more willing to join in conversations outside of the group and that there was an improvement in their memory (4). Find out more in the [CST summary](#).

## Does Maintenance Cognitive Stimulation Therapy (MCST) work?

The additional 24 week course of MCST helped improve the quality of the lives of people with dementia.

MCST was assessed in a randomised controlled trial (RCT). The 236 people with dementia who took part had previously completed 14 sessions of standard CST. A computer randomly divided people into two groups, 123 attended the additional 24 CST sessions and 113 had their normal care without the additional sessions.

The people with dementia and their carers in both groups were interviewed at 3 and 6 months. They were asked questions to find out if there had been any change in the person with dementia's memory and thinking skills, their quality of life, how they manage to carry out daily activities or changes in behavior.

The standard drug treatment for Alzheimer's disease (usually Donepezil) was being taken by 42 people having MCST and by 34 people in the group being given their normal care.

## Improved Quality of Life

People with dementia said that there was an improvement in the quality of their daily lives when they were interviewed at 6 months and family carers that there was an improvement when they were interviewed at 3 months.

## Cognitive skills

There was no difference in the memory and thinking (cognitive) skills of those who took part in MCST and those who only attended the 7 week CST programme. One reason for this might be that the first CST programme may have already achieved the potential improvements for cognitive skills (2) .

However, people who were on standard medication for Alzheimer's disease and took part in MCST had better results for cognitive skills than those who only took part in MCST and better results than those who took part in CST and were on standard medication.

## Is Maintenance Cognitive Stimulation Therapy (MCST) cost-effective?

MCST offers value for money (is cost-effective) for some of the outcomes particularly those that looked at the quality of life of the person with dementia. The combination of the standard Alzheimer's disease medication (usually Donepezil) (3) and MCST was found to be more cost-effective than medication alone for a number of the outcome measures.

## The cost of MCST for the NHS (at 2016 prices)

In the study, the average total cost for each MCST session was £168.92 in care homes and £170.47 in community centres. The average number of participants per session was 5.

## What people say about MCST

Please take a look at the [Cognitive Stimulation Therapy](#) summary to find out what people living with dementia and their families are saying about CST.

# Further information on Maintenance Cognitive Stimulation Therapy

## England

MCST is available in some areas of England

Contact your Community Mental Health Team, Improving Access to Psychological Therapies (IAPT) clinic or memory clinic to find out if it is available in your area. You can find out where your local IAPT clinic is on the [NHS Choices website](#).

Your local branch of Age UK or Alzheimer's Society might also know about MCST sessions in your area.

Further information on MCST research is available on the University College London (UCL) website

<https://www.ucl.ac.uk/shield/our-projects/mcst>

## Resources

[Cochrane Review: Can cognitive stimulation benefit people with dementia?](#)

## Organisations

Find out more about organisations that have information or offer support to people with dementia and their families - <http://toolkit.modem-dementia.org.uk/further-support-and-information/>.

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## Overall Findings for MCST

Does it work for the person with Dementia?	Does it work for family and carers?	Is it cost-effective?	Strength of evidence	Implemented in the UK?
Quality of Life ✓		Quality of Life ✓		
Cognition =		Cognition =		
Activities of Daily Living =		Cognition (for those taking standard Alzheimer's disease medication) ✓	✓✓✓	✓
Behavioural Difficulties =				

## Findings of individual studies

Study	Does it work for the person with Dementia?	Does it work for family and carers?	Is it cost-effective?	Strength of evidence
<p><b>Orrell et al, 2014</b></p> <p>Randomised Controlled Trial (RCT) 272 participants, UK</p>	<p>Quality of Life ✓</p> <p>Cognition ✓</p> <p>Activities of Daily Living =</p> <p>Behaviour =</p>			<p>✓✓✓</p>
<p><b>D'Amico et al, 2015</b></p> <p>(based on Orrell et al)</p>			<p>Quality of Life ✓</p> <p>Cognition =</p> <p>Cognition (for those taking standard Alzheimer's disease medication) =</p>	<p>✓✓✓</p>

## The Evidence Table Key

### Does it work?

- ✓ Worked well
- ✓= Worked well in some studies and made no difference in others
- ✓=X Mixed results it worked well in some studies, made no difference in others and some found negative impacts
- = Made no difference
- =X Made no difference in some studies and others found negative impacts
- X Negative impact

### Is it cost effective?

- ✓ It was cost effective
- ✓X It was found to be cost effective in some studies and not in others
- X It was not cost effective

### What is the strength of evidence?

This rating will depend on a range of factors such as the type of research for example if it was a Randomised Controlled Trial (RCT) and the number of people who participated in the study.

- ✓✓ High Quality
- ✓✓ Moderate quality
- ✓ Low quality

## References

- [1. Orrell, M.; Aguirre, E.; Spector, A.; Hoare, Z.; Woods, R. T.; Streater, A.; et al. Maintenance cognitive stimulation therapy for dementia: single-blind, multicentre, pragmatic randomised controlled trial](#) *The British Journal of Psychiatry*, Royal College of Psychiatrists; 2014, 454-461
- [2. Aguirre, E.; Hoare, Z.; Streater, A.; Spector, A.; Woods, B.; Hoe, J.; et al. Cognitive stimulation therapy \(CST\) for people with dementia-who benefits most?](#) *Int J Geriatr Psychiatry*, Wiley-Blackwell; 2012, 284-290
- [3. D'amico, Francesco; Rehill, Amritpal; Knapp, Martin; Aguirre, Elisa; Donovan, Helen; Hoare, Zoe; et al. Maintenance Cognitive Stimulation Therapy: An Economic Evaluation Within a Randomized Controlled Trial](#) *Journal of the American Medical Directors Association*, Elsevier BV; 2014, 63-70
- [4. Spector Aimee, Gardner Charlotte, Orrell Martin, The impact of Cognitive Stimulation Therapy groups on people with dementia: Views from participants, their carers and group facilitators](#) *Aging & Mental Health*, Informa UK Limited; 2011, 945-949