

## Helping our clients with their working memory

### Working memory

There are several different types of memory and all types can be affected by an acquired brain injury (ABI). However, one of the most commonly affected is the working memory – 70% of people with an ABI have some difficulty with memory and most of these find their working memory is affected.

Working memory is the ability to simultaneously store and manipulate information for a brief period of time, usually under a minute. This is used (for example) when performing a maths problem, using a phone number, or following directions. It enables us to remember what we need to 'focus on' or what we have to do next, such as when following a recipe.

Those with an ABI who have issues with their working memory may experience:

- Trouble remembering what they have just read and keep re-reading the same paragraph over again
- Trouble doing maths in their head, like calculating money that is needed to pay, or what change to expect
- Get easily distracted and losing focus
- Trouble multitasking
- Losing track of the topic in a conversation
- Trouble finishing a task that has been started
- Difficulty planning and organising a big project that has multiple steps

### How we help at Headway Hertfordshire

At Headway Hertfordshire we use the CogMed training programme, as part of our Helping Brain Injury Together (HABIT) programme to help those with an ABI improve their working memory. CogMed is a computer-based programme consisting of training sessions which take approximately 25 minutes each; a full training programme is 40 sessions, done over 8-12 weeks. Ideally, the client completes 3-5 sessions per week and the programme is flexible, meaning that as the trainee improves, the level of difficulty increases. This ensures that the trainee works at their maximum ability level throughout the training. Conversely, if the trainee is having difficulty the computer reduces the difficulty level to allow the client to practice at an easier level.

Each session consists of three exercises (randomly selected from a bank of 12); these change every few days to make the programme more interesting. In addition, the programme creates a graph for each exercise which allows both the patient and their Occupational Therapist to see how they are progressing.

Our specialist Occupational Therapists assess each client to ensure that the programme is suitable for them, as it is not right for all ABI patients, and monitor clients to ensure that they are making progress.

### What Headway Hertfordshire participants think of CogMed

Those at Headway Hertfordshire who have completed the course have reported how much they enjoyed the programme and what a difference it has made to them. Some example quotes are:

*"Before, I was unable to remember my mobile telephone number, but now I have completed the Cogmed training programme, I am able to do so. I would recommend Cogmed, as it has improved my working memory". User, age 50*

*"I really enjoy doing Cogmed, it has helped me to remember longer digits, I am really looking forward to doing Cogmed today. I feel that my memory is better and I am faster thinking." User, age 34*

From a Carer, *"I have seen a real improvement in my son, he has improved immensely and he is a lot faster"*.

One client in particular, Peter, completed the CogMed programme several years ago, completing the initial 40 sessions. He enjoyed the process, feeling that his conversation and discussion skills had improved; he reported being able to now hold ideas in his head, so that more complex discussions were feasible. He also felt that his speed of processing has improved. He has just completed a second training programme and has shown that he has maintained his improvement, getting even better the second time round!

To see Peter explaining CogMed and its benefits, see our video at <https://www.headway-herts.org.uk/how-we-help/cogmed/>