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Cognitive Transitions in Care

The Importance of Working Memory Exercise Prescription

When healthcare practitioners use BCAT® Test System results to identify candidates for cognitive interventions and they prescribe working memory exercises (WME) as part of the discharge plan of care, their clients achieve both *immediate and long term, sustainable improvements* in key skills such as attention, memory and executive function.

Active participation in evidenced-based cognitive exercises post discharge from therapy is essential to sustain the cognitive gains and to mitigate against further decline.

Healthcare professionals should do the following:

Step 1: Administer the BCAT®.

- Utilize the BCAT® Test Scores to determine the most appropriate individualized cognitive exercise program for patients/clients to use post discharge from services. See **Crosswalk** on **page 2** and the **Additional Information** on **page 5** of this packet to provide specific prescriptive recommendations based on A Longitudinal Analysis of BCAT® Working Memory Exercises for Community Patients. This compelling information supports why healthcare professionals should prescribe Working Memory Exercises.

Step 2: Prescribe a home exercise program based on BCAT® Scores:

- For patients/clients that score **25-50 on the BCAT®**, provide them, family members and/or caregivers with **page 3** and **page 4**. Provide education on the importance of completing working memory exercises.
- For patients/clients that score **less than 25 on the BCAT®**, provide clients, family members and/or caregivers with **page 4.** Provide education on the importance of cognitive stimulation and meaningful engagement.

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Crosswalk for Healthcare Professionals:

Use the table below to prescribe a cognitive home program for your clients/patients. Items in ***bold*** have the ***most research*** surrounding the benefits of targeting working memory. Provide your client with the recommended resources based on the cognitive stage.

Cognitive Stage	BCAT® Test Scores	BCAT® Resources
For clients/patients that score in the blue range, provide them with pages 3-4 of this packet.		
· Normal aging · Mild Cognitive Impairment (MCI) · Mild impairment	**BCAT® Total Score of 25-50**	· **The BCAT® Working Memory Exercise Book - Home Edition** · **Digital Working Memory Exercises** · The BrainSharp™ Exercise Book · The BCAT® Brain Fitness Book – Volume 1 · ENRICH® Brain Health Program – Brain Exercise of the Week · Family Matters · 15 For Me®
For clients/patients that score in the red range, provide them with page 4 of this packet.		
· Moderate impairment · Severe impairment	**BCAT® Total Score of 0-24**	· MemPics® Book Series *(13 different topics are available)* · The Dementia Journey: A Navigation Manual for Family Members · Family Matters · 15 For Me®

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The Benefits of a Prescribed Brain Health Program: Maintaining Your Independence

For older adults, cognition should be considered a "**vital sign**." Vital signs are measurements of the body's basic functions and are vital for healthy functioning. Cognition is at the center of everything we do and is essential for us to successfully perform everyday tasks. It consists of multiple domains, including *attention*, *memory* (e.g., remembering to take medications, remembering a doctor's appointment), and *executive functions* (e.g., judgment, problem-solving, reasoning).

Healthcare practitioners often prescribe cognitive exercises to allow you to improve and maintain these skills for both the short and long term.

How do Cognitive Exercises Work?

- Improve "working memory" or the ability to hold and use information which can result in improved memory.
- Strengthen the brain's defenses and buffer against decline.
- Promote the ability to live independently for as long as possible.

What Are People Saying About Participating in Cognitive Exercises?

- 85% of participants credit the cognitive exercises for improving their cognition.
- 92% of participants reported overall satisfaction with cognitive exercises.

Get Started Today!

The BCAT® Research Center offers two different resources to complete scientifically validated working memory exercises. You can complete workbook activities or use an online platform to maintain your cognition now and in the future.

Complete exercises 5x/week for 15 min a day for best results using the resource(s) selected below.

BCAT® Working Memory Exercise Book – Home Edition – basic and more advanced cognitive exercises that can be completed as part of a home program. Hours of paper/pencil activities that promote neural plasticity and cognitive reserve are included. https://enrichvisits.com/shop/exercisebook-homeedition

Digital Working Memory Exercise Platform – online interactive cognitive exercises that target memory, attention, and organization skills. These exercises offer different levels of difficulty, with something for everyone.

https://www.thebcat.com/BCAT-license-pricing#bcat-digital-working-excercise-platform

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Additional Cognitive Exercises to Improve Your Brain Health

Book / Program Description
The BrainSharp™ Exercise Book Adults use this book as part of a cognitive "workout routine" to improve cognitive performance and everyday functioning. This book contains three specific exercise types: mazes, word scrambles, and word searches. https://enrichvisits.com/shop/the-brainsharp-exercise-book
The BCAT® Brain Fitness Book Basic and complex online cognitive exercises are used to promote positive cognitive functioning and buffer against decline. These interactive digital exercises target the thinking skills needed to maintain independence. https://enrichvisits.com/shop/bcat-brain-fitness-book-volume-1
15 For Me® Engaging in positive lifestyle choices is essential to healthy aging and maintaining overall independence. Completing memory exercises, physical activities, and centered breathing/meditation offers a comprehensive and proactive approach to maintaining overall brain health. https://enrichvisits.com/shop/https/enrichvisitscom/individuals-family-members-bookstore/15-for-me-for-individuals
MemPics® Book Series These books activate memories through pictures and conversations about familiar people, places, objects, and events. MemPics® books provide a variety of cognitively enhancing activities for meaningful engagement with family members and/or caregivers. There are 13 different topics available. https://enrichvisits.com/individuals-family-members-bookstore
The Dementia Journey: A Navigation Manual for Family Members Written by two dementia experts, this book is your guide to help family members and loved ones through the dementia journey. https://enrichvisits.com/shop/the-dementia-journey-a-navigation-manual-for-family-members-1
Free Resources
ENRICH® Brain Health Program Free, scientifically validated set of tools that supports the identification of mood and/or cognitive changes, provides brain health education, and offers a variety of tools to support the sustainability of cognitive functioning for persons across the cognitive continuum. www.enrichvisits.com
Family Matters Interview Series Designed to inform and support family members with loved ones who have cognitive impairment and/or dementia. These free monthly programs are approx. 30 minutes in length and include an expert from the BCAT® Research Center, or other expert healthcare professional, being interviewed about specific topics via a virtual format. https://www.youtube.com/playlist?list=PLl5n0y3KJhMbqJmamejEhbpa0rVqp61al

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A Longitudinal Analysis of BCAT® Working Memory Exercises for Community Patients: Preliminary Outcomes and Recommendations for Sustaining Cognitive Health

Background: Brain health is a multibillion-dollar industry. Despite often extravagant claims for the efficacy of cognitive exercises, there is a paucity of evidence that cognitive exercises sustain or improve cognitive functioning over time. Because cognitive functioning in general, and working memory in particular, are highly correlated with abilities to successfully perform complex activities of daily living, exercises that improve cognition would be at a high premium. There is ample evidence demonstrating that BCAT® working memory exercises improve cognition and IADL performance for people with mild cognitive impairment and mild stage dementia. However, most of these studies have focused on short-term efficacy. To address longer time horizons, the current study investigated cognitive functioning at 6-month and 12-month intervals after initial evaluation.

Purpose: Determine if prescribed working memory exercises (WME) sustain or improve cognitive functioning in patients with MCI and mild stage dementia over time. In this 4X4 design, two groups with a diagnosis of MCI and two groups with a diagnosis of mild stage dementia were compared at 6-month and 12-month intervals. The "treatment" groups used BCAT® working memory exercises, either with a brain health coach or independently, while the "control" group did not participate in a cognitive exercise program.

Participants: Community-dwelling older adults (N = 60, mean age=80) with MCI or mild stage dementia seen in the National Brain Health Center (Columbia, Maryland, USA). All participants were administered the BCAT® foundational test at three times: initial, at 6 months, and at 12 months). The treatment group participants were prescribed working memory exercises by a brain health coach. The control group participants did not participate in working memory exercises.

WME interventions: *Digital Working Memory Exercises* and the *Working Memory Exercise Book* are well-researched evidence-based programs. They target attention and working memory through a range of computerized and hard copy workbook tasks, respectively.

Key findings: Means, SD, t-tests, ANOVA

- For the MCI WME group, cognitive health improved over the 12-month period.
- For the MCI no-WME group, cognitive health decreased over the 12-month period.
- For the dementia WME group, small gains in cognitive health were achieved.
- For the dementia no-WME group, cognitive health significantly deteriorated.
- **MCI and mild stage dementia participants who engaged in WME at least three times per week demonstrated meaningfully higher BCAT® scores at 6-months and 12-months**.

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Table 1 & Figure 1: MCI Group Comparisons

MCI Group	Initial BCAT® Test Score	BCAT® Test Score: 6-month	BCAT® Test Score: 12-month
Participated in WME exercises	39	41	**41**
No cognitive exercises	39	36	**35**

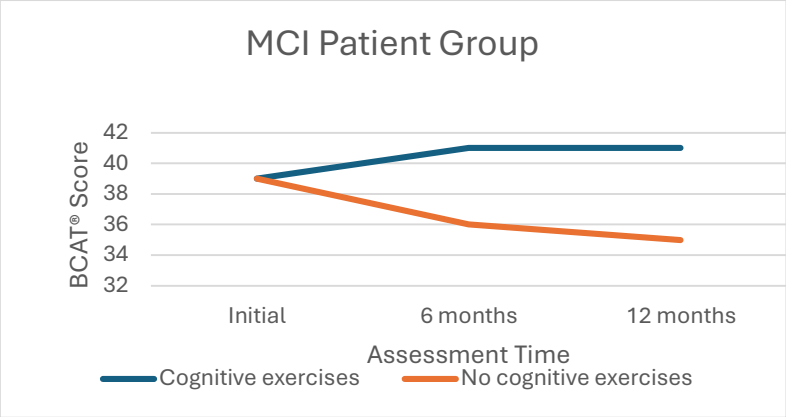
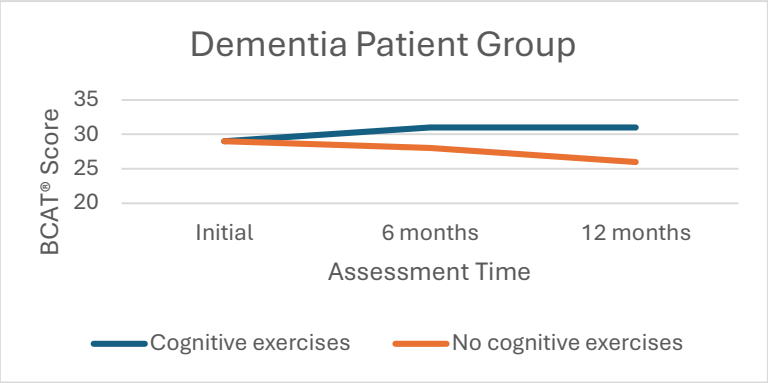


Table 2 & Figure 1: Mild Stage Dementia Group Comparisons

Dementia Group	Initial BCAT® Test Score	BCAT® Test Score: 6-months	BCAT® Test Score: 12-months
Participated in WME Exercises	29	31	**31**
No WME Exercises	29	28	**26**



Impact: This study demonstrates that clinicians should routinely prescribe working memory exercises for patients with MCI and mild stage dementia after active treatment. The study underscores the importance of a cognitive home exercise program that has empirical evidence for its efficacy. In the study, participants who participated in these exercises scored 5-6 points higher in their BCAT® test scores after one year.

For more information on the BCAT® Approach, please contact: **info@thebcat.com**

Longitudinal Analysis for BCAT® WME 2025