

## 5.3 Cognition and Vascular Cognitive Impairment

There are many considerations that are crucial to promoting safety and optimizing recovery when working with people who have had a stroke. The TACLS Quick Reference Guides were developed from the TACLS resource and can be used as quick reference to help *support healthcare providers* and informal caregivers who may not typically work with and care for people who have had a stroke.

We recommend reviewing the full **TACLS resource** for more complete information:  
[strokebestpractices.ca/resources/professional-resources/tacsls](https://strokebestpractices.ca/resources/professional-resources/tacsls)

### Quick reference guide highlights

- **Always follow the current care plan for the person that you are working with** to promote safety and independence. Strategies will be individualized based on the person and their needs.
- **Cognition** refers to how we know things and how we think. When people have trouble with cognition, they are said to have **cognitive deficits or impairments**. Impairments can be subtle, difficult to see, or more obvious.
- Cognitive impairment can impact different components of a person's cognition (e.g., attention, orientation, memory, insight, judgement, sequencing, problem solving, and executive functioning).
- **Vascular Cognitive Impairment (VCI)** includes the cognitive and behavioural disorders associated with cerebrovascular disease and risk factors, from mild cognitive deficits to frank dementia.
  - VCI is a syndrome with cognitive impairment affecting at least one cognitive domain (e.g., attention, memory, language, perception or executive functions) and with evidence of clinical stroke or subclinical vascular brain injury.
  - VCI encompasses a large range of cognitive deficits, from relatively mild cognitive impairment of vascular origin to vascular dementia, the most severe form of VCI.
  - VCI also plays an important role in people with Alzheimer's disease pathology who have coexisting vascular lesions.
- **Cognitive impairments** can have a major impact on how well the person functions, and their level of independence and safety.

### Attention: ability to attend and concentrate and focus on a task



#### How you can help

- Reduce distractions (e.g., television, radio, and reduce side conversations).
- Give short and simple step-by-step instructions and ensure the individual understands and completes one step before moving on to the next step.
- Help the person focus on one step at a time by gently bringing their attention back to the task.
- Make eye contact and speak slowly, pausing so the person has more time to think; give time for the person to answer.

## **Orientation: awareness of time, place, and person**



### **How you can help**

- Remind the person of your name and the date by mentioning it when you arrive; put up a calendar to help the person keep track of the day and date by crossing each day off.
- Post personal information (e.g., address, phone numbers) and family pictures on a bulletin or white board where the person can see them easily.
- Keep to a regular schedule of meals and activities to minimize confusion.

## **Memory: Ability to recall and retain experiences and to learn and retain new skills**



### **How you can help**

- Encourage the person to use memory aids (e.g., planner, smartphone, calendar, signs, pictures).
- Use routines and repetition (e.g., store items in the same place and repeat information).
- Provide clear, concise information one step at a time, to help the person focus on the key points.

## **Insight: ability to recognize and understand one's abilities and limitations**



### **How you can help**

- Promote safety through education and modifying the environment (e.g., place mobility aids and assistive devices nearby and remove obstacles that could be tripping hazards).
- Post reminders to use mobility aids and key instructions such as “put on the brakes before getting up from your wheelchair”.
- Provide sufficient supervision and support independence for tasks that can be completed safely.

## **Judgement: ability to make good choices and decisions, understand capabilities and appreciate risk**



### **How you can help**

- Discuss safety concerns with the team; develop strategies to promote independence and safety.
- Set up the environment to promote safety (remove tripping hazards, keep mobility aids within reach, ensure brakes are on mobility devices). Try and make sure the person does not end up in challenging situations where they may be unable to decide what actions are safe.

## **Impulsivity: acting quickly without thinking things through**



### **How you can help**

- Give clear and specific instructions and remind the person to slow down; divide tasks into smaller steps so the person can focus on one part of the task at a time.
- Make the environment as safe as possible.

**Sequencing:** ability to perform steps and actions in the right order including knowing where to begin and how to proceed to complete the task successfully



### How you can help

- Plan the task together and break tasks into small steps, giving clear step-by-step instructions.
- Allow lots of time to practice and remind the person to perform the task the same way each time.

**Problem solving:** being able to recognize a problem and find a reasonable solution



### How you can help

- Work together to identify different ways of solving the problem; talk about ways to approach the problem; break task into small steps and simplify the tasks for the person to succeed.
- Give verbal cues as needed, but also allow the person to find solutions on their own.

**Executive functions:** higher level cognitive skills that work together to help a person get things done. These include planning, organization, processing information, multi-tasking, problem solving, decision making, reasoning, finding your way around and managing emotions and social cognition.



### How you can help

- Consult the occupational therapist for individualized strategies to support the individual. Examples may include: providing instructions one step at a time, using a consistent approach to complete tasks, using lists and planners to support organization, time management and sequencing.

**Note:** This information represents some of the priorities of care related to cognition and VCI; consult the occupational therapist for any questions or concerns regarding a person's cognitive impairments.

### References:

1. Canadian Stroke Best Practice Recommendations: [www.strokebestpractices.ca](http://www.strokebestpractices.ca), **Mood, Cognition and Fatigue**, 6<sup>th</sup> Edition, Section 2
2. Taking Action for Optimal Community and Long-Term Stroke Care (TACLS) – **Cognition**

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