

# Cognitive and Perceptual Impacts of Stroke

## Less Visible Impacts of Stroke



**Cognition** How we think and understand.

**Perception** Understanding our environment through our five senses.

**Stroke can impact cognition and perception. Understanding the following challenges will help you to help the stroke survivor.**

Cognitive Challenges	Perceptual Challenges
<ul style="list-style-type: none"> <li>→ Unable to concentrate or focus attention</li> <li>→ Disoriented to person, place and/or time</li> <li>→ Decreased memory</li> <li>→ Decreased insight into abilities and limitations</li> <li>→ Acting quickly without thinking (i.e. impulsive)</li> <li>→ Difficulty using good judgement to make decisions</li> <li>→ Unable to do tasks in the correct order</li> <li>→ Difficulty problem-solving</li> <li>→ Thinking slowly</li> </ul>	<ul style="list-style-type: none"> <li>→ Less awareness of the body and environment on the affected side of the body (i.e. neglect)</li> <li>→ Difficulty interpreting what is seen and how objects are spatially related (e.g., not recognizing how far it is from the spoon to the bowl)</li> <li>→ Misjudging where objects are (e.g., missing the chair when sitting down)</li> <li>→ Difficulty initiating and making purposeful movements (e.g. trouble starting to walk) (i.e. apraxia)</li> <li>→ Difficulty using common objects (e.g. combing hair with a toothbrush) (i.e. apraxia)</li> <li>→ Unaware of time passing</li> <li>→ Repeating a word, phrase or action and not being able to stop (i.e. perseveration)</li> </ul>

## Mary is a Stroke Survivor



Mary had a right-sided stroke. Her left arm and leg are weak. She has the following cognitive and perceptual challenges.

By understanding these challenges you can plan care to meet Mary's needs.

### Attention & Memory

Mary has difficulty paying attention and remembering what to do. She needs time to think things through.



Decrease distractions (e.g., turn off TV and radio), provide reminders and give Mary the time she needs.

### Body Neglect

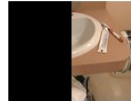
Mary is not aware of her left side



Position Mary's affected arm so she can see it. Encourage Mary to use her arm as much as she can. Use cues to draw attention to her arm.

### Visual Loss

Mary can't see things on her left side. This problem worsens Mary's neglect.



Encourage Mary to look to her affected side. Approach Mary from the midline or unaffected side. Arrange items so she can see them.

### Apraxia

Mary has difficulty starting and performing everyday tasks such as brushing her teeth.



Use consistent, simple verbal and physical cues. Break tasks into smaller steps. Use repetition and provide hand-over-hand guidance.

### Perseveration

Mary sometimes keeps repeating tasks or words.



Give simple step-by-step instructions. Help to stop and restart Mary's tasks or words if she gets stuck in repetition. Provide hand-over-hand guidance and cueing.

### Impulsivity

Mary acts quickly without thinking (e.g., she tries to get out of the wheelchair without the help she needs).



Encourage Mary to slow down. Use clear instructions and divide tasks into small steps. Provide a safe environment and ensure walking aids and assistive devices are easily accessible.

## Setting the Stage to Assist Stroke Survivors

Stroke Survivors have cognitive and perceptual challenges. The following seven strategies can help you meet those challenges with daily activities.



**1. Prepare** Mary by letting her know what you would like to do. **Limit distractions** and give her the time she needs.



**2. Place objects** within reach, arrange them in the order they will be needed and draw her attention to them.



**3. Safely position** Mary to support her independence and increase her awareness of her affected arm.



**4. Encourage her use of the affected limb** and assist her as necessary.

**5. Cue and guide**, break tasks into small steps, demonstrate, be consistent and use "hand-over-hand" guidance.

**6. Use assistive devices** such as glasses, hearing aids and specially prescribed equipment.

**7. Encourage** Mary's participation and **recognize** her successes.

**For More Information Go To:** Heart & Stroke Foundation of Canada (2015) Taking Action for Optimal Community and Long Term Stroke Care (TACLS) [Link](#)

**STROKE NETWORK**  
of Southeastern Ontario