Objectives

- Review the impact stroke may have on
  - Behaviour
  - Personality
  - Emotions
  - Cognition

- Discuss strategies that may assist the stroke survivor with these changes to manage daily activities
Stroke Impact on Behaviour

- Behaviour changes depend on
  - Where in the brain the stroke occurred
  - How severe the stroke was
  - When the stroke occurred
  - The patient’s pre-stroke abilities and behaviours
- The loss of brain cells due to a stroke can change how a survivor acts or reacts in some situations
Personality Changes

- Stroke damage can decrease a survivor’s emotional control and change the way a survivor relates to others
  - Behaviours may not match the survivor’s feelings
  - Survivors may lose interest in things they previously enjoyed
  - Survivors may not realize how their behaviour affects others
  - Survivors may experience mood swings
  - Survivors may appear stubborn, demanding or selfish
Emotional Lability

- Emotional lability is a lack of emotional control
  - Responses may seem excessive
  - Emotional responses may not match the emotions the survivor is experiencing
- This can be upsetting for both the survivor and their families
- Ask if the emotion you are observing matches how the person is feeling
- Distraction can work to divert a survivor’s attention to a new activity
Social Isolation

- Many survivors have difficulty adjusting and coping with their self image after a stroke
  - They may have low self esteem
  - They may lose confidence
  - They may feel sad, helpless and out of control of their lives
- This can cause them to stop doing things that were important to them
- Encourage a survivor to return to activities they enjoy
- Encourage participation in self-care to promote independence
Anger

- Often has a root cause
  - Inability to communicate or complete a task they used to do easily can cause frustration
  - Embarrassment after a toileting accident
  - Pain that causes helplessness and frustration
- Try to identify the cause of the anger and work with the survivor to find solutions
- Prevent outbursts through routines, explanations and support during potentially frustrating activities
- During an outburst remove the survivor from the situation or try to redirect their attention
Lethargy

- Survivors, particularly with damage to the right side of the brain, may appear to lack interest in daily or leisure activities
- Learn what interests the survivor and try to find a way they can participate
- Reinforce and support their attempts to participate
- If a survivor is not successful or refuses to participate encourage them to try again later
Social Judgment

- Social judgment is saying and doing the right thing in a given situation
- Personality changes can cause poor social judgment
- Problems with cognition can also contribute to poor social judgment
- Recognize and help the survivor to realize their limits
- Provide feedback to inappropriate behaviours in a straightforward manner and offer alternatives
- Provide positive reinforcement to appropriate behaviours
Behaviours changes can be also be due to
- Cognitive or perceptual problems
- Depression
- Communication challenges
Cognition refers to how we know things and how we think. It involves:

- **Attention** – being able to concentrate for a period of time
- **Orientation** – being aware of person, place and time
- **Memory** – being able to retain and recall information
- **Insight** – knowing and understanding our abilities and limits
- **Judgment** – making good choices or decisions in line with our capabilities
- **Sequencing** – being able to arrange or perform actions in the right order
- **Problem solving** – recognizing a problem and finding a solution
Cognitive problems are invisible barriers but have a major impact on a survivor’s functional level and independence post-stroke.

Because there is no physical impairment we may not see the cognitive problem and over-estimate a survivor’s abilities.

- People may assume a survivor is acting “this way on purpose” rather than an expectation that is too high.
• Attention
  • Reduce distractions
  • Give short and simple instructions
  • Slow down and give the survivor more time to think

• Orientation
  • Post a calendar or use an agenda
  • Use a board to post personal information and family pictures
  • Limit changes to their schedule
• Memory
  • Encourage use of memory aids (journal, agenda)
  • Repeat important information
  • Label drawers and keep things organized
• Insight
  • Keep the environment safe
  • Gently remind the survivor of the stroke and their subsequent limits
  • Provide the necessary amount of supervision
• Judgment
  • Do not place the survivor in challenging situations as they may be unable to decide what action is safe
  • Maximize environmental safety

• Impulsivity
  • Encourage the survivor to slow down
  • Divide tasks into steps
  • Provide clear and specific instructions
• Sequencing
  • Give step-by-step instructions
  • Help the survivor to think through and plan the task
  • Give the survivor the time necessary to complete the task, even if it takes a long time
  • Repeat the task in the same way each time

• Problem-solving
  • Break the tasks into small steps
  • Provide cues
  • Help the survivor identify different ways of solving the problem and how they could approach the solution
Perception

- Perception refers to the way we understand our environment through processing and interpreting information from our senses.
- Stroke can cause perceptual problems including:
  - Time awareness
  - Spatial relation
  - Neglect
  - Apraxia
  - Perseveration
  - Vision problems
• Time awareness
  • Link events together
  • Review the daily schedule
  • Maintain a consistent schedule
  • Use a digital or talking clock

• Spatial relations
  • Keep safety in mind – decrease clutter, use assistive devices or reminders
  • Encourage practice and repetition
• Visual neglect
  • Provide stimulation of the affected side
  • Approach on the unaffected side and move to the affected side
  • Encourage scanning the environment

• Unilateral body neglect
  • Use the affected arm in daily activities as possible
  • Position the affected limb so the survivor can see it
  • Gently rub the affected arm to stimulate awareness
  • Encourage the survivor to position the limb themselves
**Apraxia**
- Use short simple instructions
- Break the task down into small steps
- Encourage repetition and practice of activities
- Provide hand-over-hand guidance if necessary

**Perseveration**
- Plan the task with the survivor and break it down into steps
- If the survivor gets stuck on a step help them move on to the next step
Visual problems

- Encourage scanning
- Place items on the affected side to increase the survivor’s awareness of the visual space
- Encourage the survivor to turn their head toward the affected side
Questions