



## **Stroke Care for CNAs**

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## Purpose and Objectives

The purpose of this course is to prepare CNAs to care for survivors who have had strokes.

***After successful completion of this course, you will be able to:***

1. Describe the warning signs of stroke
2. Name the different kinds of stroke
3. Identify conditions and habits that may lead to strokes
4. Describe some common losses caused by strokes
5. State the goals for stroke care and rehabilitation
6. Identify ways to create safety for stroke survivors

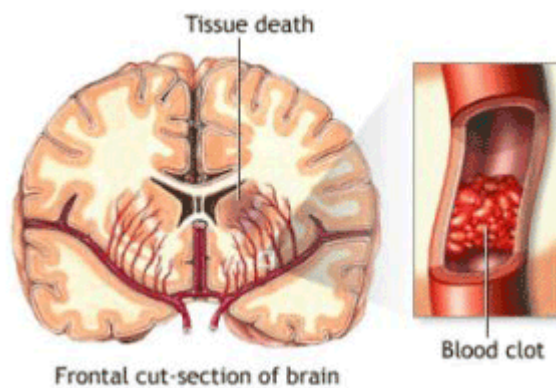
## Introduction

A stroke, sometimes called a brain attack, occurs when a clot blocks the blood supply to the brain or when a blood vessel in the brain bursts (Centers for Disease Control & Prevention [CDC], 2012). Stroke can cause death or significant disability, such as paralysis, speech difficulties, and emotional problems.

In addition to physical and emotional disabilities, stroke can cause financial difficulties for the stroke survivor and family members. The American Stroke Association estimated the direct and indirect cost of stroke care and disability in 2010 was 73.7 billion dollars. It may take weeks to several months to get someone to their best functional level. Even then, they may still need assistance.

Stroke damage can be minimized if survivors get medical care soon after symptoms begin. It is important to recognize the symptoms and initiate stroke therapy as soon as possible.

As a CNA, you are instrumental to empower stroke survivors to be independent and safe in their daily lives, whether you are caring for stroke survivors in hospitals, rehabilitation centers, long-term care facilities or in their homes.



*Image Provided Courtesy of the CDC (2012).*

## Stroke Facts

- Stroke is a leading cause of death in the United States. According to the American Heart Association (2014) strokes have dropped from 3<sup>rd</sup> to the 5<sup>th</sup> leading cause of death in the United States.
- Each year approximately 795,000 people experience a stroke or suffer from a reoccurring stroke. It is estimated that 137,000 people in the United States die from a stroke each year (American Heart Association, 2014). This means that every 40 seconds, someone in the United States has a stroke.
- The lifetime risk for women is higher than men. From the ages of 55 to 75 women have a 1 in 5 chance while men have 1 in 6 chance of having a stroke (Go, et al., 2014).
- The incidence of first-time strokes in African-Americans is two times that of Caucasians. Studies indicate that African-American are at higher risk of acute ischemic stroke (AIS) due to increased prevalence of hypertension, diabetes, obesity and sickle cell anemia.

- The American Heart Association (2014) stated, after the age of 55 each decade of life double the chance of having a stroke while approximately 15,000 people will have their first cerebral infarction before the age of 45.
- Of all the strokes combined, 87% are ischemic and 13% are hemorrhagic strokes. Of hemorrhagic strokes, 10% are an intracerebral hemorrhagic (ICH) strokes and 3% are subarachnoid hemorrhagic (SAH) strokes (Go et al., 2014).

## Warning Signs of Stroke

A stroke is the loss of function due to an interruption in blood flow. When blood flow stops, cells die “time is brain”. Some cells may be saved though if the survivor seeks treatment soon enough. You should suspect your survivor, family member, friend, or stranger is having a stroke if the following sudden symptoms are present:

- Numbness
- Weakness of facial muscles, arms or legs
- Confusion
- Trouble speaking
- Trouble understanding
- Intense painful headache, nausea and vomiting
- Difficulty walking
- Dizziness, loss of balance or coordination
- Trouble seeing in one or both eyes

## Test Your Knowledge

As a CNA you can help reduce the amount of damage a stroke causes by:

- Recognizing the signs of a stroke
- Recommending immediate assessment by a medical professional
- Doing nothing as the signs you see may be caused by something else
- A & B**

Rationale: Stroke damage can be minimized if survivors get medical care soon after symptoms begin. It is important to recognize the symptoms and initiate stroke therapy as soon as possible.

## Types of Stroke:

### Transient Ischemic Attacks (TIAs)

Transient ischemic attack (TIA) is a "warning stroke" or a "mini-stroke" that does not cause any lasting damage. Survivors experiencing TIAs must acknowledge the importance of their diagnosis and know the warning signs of a stroke, as 15% of TIAs lead to AIS within three months and 12% will die within the first year (Easton et al., 2009 & Go et al., 2014). The greatest risk for AIS is within the first week following a TIA (Furie, Kasner, Adams, Albers, Bush, et al., 2011).

Stroke Risk after TIA:

Risk factors that increase the risk of having a AIS after a TIA are: greater than 60 years of age, diabetes mellitus, speech and motor difficulties during the TIA, weakness during the TIA and duration of the TIA lasting longer than 10 minutes (Silver & Silver, 2014).

Recognizing and treating TIA symptoms immediately can reduce the risk of a major stroke. These transient attacks are often temporary, as blood clots can dissolve without treatment and the blood vessel spasm may be short lived.

Many strokes can be prevented by heeding the warning signs of TIAs and treating underlying risk factors (NINDS, 2012a).

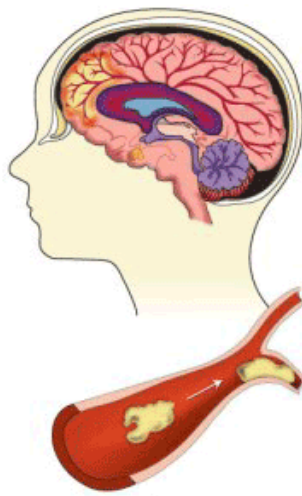
A history of TIAs means greater risk of major strokes in the future. About one-third of those who have a TIA will have an acute stroke sometime in the future (NINDS, 2012a).

## Types of Strokes:

### Ischemic Stroke

An ischemic stroke is the **most common** type of stroke and happens when an artery in the brain is blocked. About 80% of all strokes are ischemic. Most ischemic strokes occur in the elderly.

Symptoms depend on what part of the brain is not supplied with blood. This is an emergency, and rapid treatment is critical. About two third of survivors with ischemic stroke survive without major disability if treated within three hours from the time of the first symptoms.



An **ischemic** stroke occurs when a blood clot blocks blood flow in an artery in the brain.

*Image provided courtesy of the CDC (2012).*

## Types of Stroke:

### Hemorrhagic Stroke

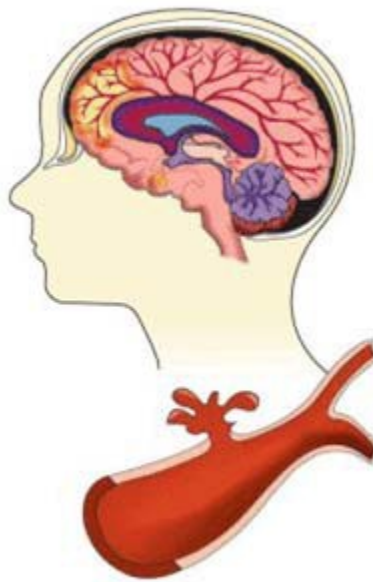
A hemorrhagic (bleeding) stroke occurs when a blood vessel bursts and bleeding puts pressure on the brain and prevents normal brain activity (CDC, 2012a). About 20% of all strokes are hemorrhagic and most hemorrhagic strokes occur in the 35-60 year old age group.

Symptoms depend on what part of the brain is involved. This is an emergency, as immediate treatment is needed to prevent death. About one third of survivors with hemorrhagic stroke survive without major disability.

There are two types of hemorrhagic stroke:

- **Intracerebral hemorrhage:** Is the most common type of hemorrhagic stroke. It occurs when an artery in the brain bursts, flooding the surrounding tissue with blood.
- **Subarachnoid hemorrhage:** Is bleeding in the area between the brain and the thin tissues that cover it.

(CDC, 2012b)



A **hemorrhagic** stroke occurs when a blood vessel bursts in the brain.

*Image provided courtesy of the CDC (2012).*

## Test Your Knowledge:

Which strokes are considered medical emergencies and should be treated immediately?

- A. Transient Ischemic Attacks
- B. Hemorrhagic Stroke
- C. Ischemic Stroke
- D. All but A

Rationale: Transient ischemic attack (TIA) is a "warning stroke" or a "mini-stroke" that does not cause any lasting damage. A hemorrhagic (bleeding) stroke occurs when a blood vessel bursts and bleeding puts pressure on the brain and prevents normal brain activity. An ischemic stroke is the **most common** type of stroke and happens when an artery in the brain is blocked.

## Risk Factors for Stroke

There are many risk factors for stroke; risk factors are divided into two categories:

- A. Non-Modifiable Risk Factors – those factors we have no control over
- B. Modifiable Risk Factors – those factors we have control over

From health screenings to discharge instructions it is imperative for survivors to acknowledge the difference between modifiable and non-modifiable risk factors.

### Non-Modifiable Risk Factors

**Age:** Two-thirds of all strokes occur in survivors greater than 65 years of age

**Sex:** Women have more strokes and die from strokes more often than men

**Race:** The risk for stroke is higher in African Americans

**Heredity:** The risk for stroke is higher if there is a family history of stroke

### Modifiable Risk Factors

**Hypertension:** High blood pressure can greatly increase the risk for stroke. Approximately 77% of survivors experiencing their first stroke had a blood pressure of greater than 140/90. Smoking cigarettes, eating a diet high in salt, and drinking too much alcohol can all raise your blood pressure.

**High blood cholesterol:** Cholesterol builds up fatty deposits (plaque) on blood vessel walls. The deposits can block blood flow to the brain, causing a stroke. Diet, exercise, and family history affect blood cholesterol levels.

**Heart disease:** Common heart disorders can increase the risk for stroke. For example, coronary artery disease (CAD) increases the risk of stroke because plaque blocks the arteries that bring blood to the heart. Other heart conditions, such as heart valve defects, irregular heartbeat (including atrial fibrillation), and enlarged heart chambers, can cause blood clots that may break loose and cause a stroke.

**Diabetes:** Diabetes increases the risk of stroke in all ages. High blood sugar tends to occur with high blood pressure and high cholesterol.

**Overweight and obesity:** Obesity in the abdominal area increases the risk of a stroke.

**Previous stroke or transient ischemic attack (TIA):** Having a previous TIA increases the risk of another stroke occurring in the future.

**Sickle cell disease:** Sickle cell disease increases the risk of stroke in African Americans. A stroke can happen when misshapen blood cells get stuck in a blood vessel and clog blood flow to the brain. (CDC, 2012c)

### **Additional Risk Factors**

Additional risk factors for stroke include:

- **Obstructive sleep apnea**
- **Internal carotid artery blockage**
- **Infection and immune dysfunction**
- **Trauma**
- **Drug abuse and high alcohol consumption**
- **A sedentary lifestyle**

(Go et al., 2014, Lewis et al., 2011 & Roger et al., 2011).

### **Test Your Knowledge:**

All strokes can be prevented by changing your lifestyle.

True

**False**

Rationale: There are many risk factors for stroke; risk factors are divided into two categories:

- A. Non-Modifiable Risk Factors – those factors we have no control over
- B. Modifiable Risk Factors – those factors we have control over

From health screenings to discharge instructions it is imperative for survivors to acknowledge the difference between modifiable and non-modifiable risk factors.



## What Happens After A Stroke?

When a survivor comes into the Emergency Department with stroke symptoms, healthcare providers should work diligently to diagnose the survivor. In addition to the physical exam and lab work, one of the most important tests is a CT scan of the head. A CT scan should be completed within 25 minutes and interpreted within 45 minutes of the survivor's arrival to the Emergency Department to determine if there is a stroke, what type of stroke, and which part of the brain has been affected. (Jauch et al., 2010).

Determining the type of stroke and the part of the brain involved, determines the type of treatment the survivor receives.

Ischemic Strokes (caused by blood clots): are treated using intravenous medications to dissolve the clot. This medication does not specifically target the blood clot in the brain, but works on all blood clots in the body. Therefore, the medical team must be sure that the survivor has not had surgery in the recent past.

Hemorrhagic Strokes (bleeding in the brain): are may be left untreated or may be treated by surgical methods. If intravenous medications were given to dissolve a clot in this type of stroke, more bleeding may occur.

About nine out of ten stroke survivors survive and are discharged. Of those that survive, half eventually return home and a fourth enter a long-term care facility. Most if not all of the stroke survivors will require some type of rehabilitation. This rehabilitation takes place either in a resident facility, on an outpatient basis, or in a home-based program.

## Test Your Knowledge

All types of strokes are treated the same.

True

**False**

Rationale: Determining the type of stroke and the part of the brain involved, determines the type of treatment the survivor receives. Ischemic strokes are treated with an intravenous medication to dissolve clots which if given to a hemorrhagic stroke survivor could make the bleeding worse.

## Types of Disabilities Following a Stroke

The kinds of disabilities following strokes are similar for all age groups, although younger people generally recover more than older survivors.

According to the National Stroke Association, 10% of stroke survivors recover almost completely and 40% experience moderate to severe impairments that require special care (NINDS, 2012c).

Disabilities commonly present after stroke are:

- Total or partial loss of ability to use words or an inability to speak words clearly, even though they know the right words
- Difficulty swallowing
- Cognitive impairment affecting short-term memory, thinking, attention span, judgment and learning

- Spasticity and stiffness, leading to problems with balance and coordination
- Problems with bowel and bladder control.
  - Urinary incontinence is common immediately after stroke but permanent incontinence is uncommon
- Sensory disturbances: This can be unawareness, pain, numbness, or a mix of all three.
- Emotional Changes: May include depression, an inability to acknowledge the physical reality of the effects of stroke, frequent, uncontrollable crying and tiredness.
- Weakness or paralysis of one side of the body. Half of stroke survivors have either one or the other (American Heart Association, 2014).

## Case Study #1

It is a Sunday morning and you are assisting your parents with Sunday dinner when you notice that your mother is leaning against the refrigerator, there seems to be something wrong with the right side of her face and she is drooling. As you assist her to a chair and notice she is dragging her right leg.

Your father asks you what you think is wrong with your mother.

You tell him you think your mother is having a stroke and that you get her to the emergency department to be sure.

Upon arrival to the emergency department your mom is whisked back to a room to begin the assessment; a nurse arrives to ask you about your mother's history. Your father answers that your mother is healthy as a horse and he can't imagine why she would have a stroke. However, you know

- A. Women are more at risk for strokes than men
- B. Your mom is 68 years old, increasing her risk
- C. She is taking blood pressure medication
- D. She is a type II diabetic

Your mom is taken to CT scan which reveals an ischemic stroke. Your dad asks you what that means. You tell him, that a blood clot may be blocking one of the vessels in the brain.

The doctor informs you and your dad that your mom needs to have an intravenous medication to dissolve the blood clot and asks again for confirmation that your mom has not had any recent surgery, trauma, or bleeding.

You confirm that your mom has not and your dad agrees.

Your mom receives the medication, the clot is dissolved, and 4 days later your mom leaves the hospital without any deficits.

You explain to your dad and other family members that your mom did so well because her symptoms were recognized early, she received the appropriate treatment early; both of which attributed to her brain not being damaged.

## Stroke Rehabilitation

Approximately two-thirds of individuals who have a stroke survive and require rehabilitation. Even though rehabilitation does not "cure" stroke or reverse brain damage, rehabilitation can help people achieve the best possible long-term outcome.

Rehabilitation helps stroke survivors re-learn skills that are lost when part of the brain is damaged. Rehabilitation also teaches survivors new ways of performing tasks to overcome any disabilities. Survivors may need to learn how to bathe and dress using only one hand, or how to communicate effectively when their ability to use language has been compromised (NINDS,

2012b).

## **Stroke Rehabilitation Facilities**

Stroke rehabilitation can be started in one facility, continued in another, and completed in yet another facility as indicated by the survivor's condition. These facilities include:

### **Inpatient Units**

Inpatient facilities are either freestanding or part of larger hospital complexes. Survivors stay in the facility and engage in a coordinated, intensive program of rehabilitation.

These programs involve at least three hours of active therapy a day, five or six days a week, for 2-3 weeks. Inpatient facilities offer a comprehensive range of medical services access to the full range of therapists specializing in post-stroke rehabilitation.

### **Outpatient Units**

Outpatient facilities are often part of a larger hospital complex. Survivors typically spend several hours, three days each week, at the facility and return home at night.

Comprehensive Outpatient facilities frequently offer treatment programs as intense as those of inpatient facilities, but they also can offer less demanding regimens, depending on the survivor's physical capacity.

Outpatient facilities offer a comprehensive range of medical services access to the full range of therapists specializing in post-stroke rehabilitation.

### **Skilled Nursing Facilities**

Rehabilitative services available at nursing facilities are more variable than are those at inpatient and outpatient units.

Skilled nursing facilities usually place a greater emphasis on rehabilitation; however, fewer hours of therapy are offered compared to outpatient and inpatient rehabilitation units.

### **Home Based Programs**

Home rehabilitation allows for great flexibility so that survivors can tailor their program of rehabilitation and schedules. These arrangements are often best suited for people who require treatment by only one type of rehabilitation therapist.

Undergoing treatment at home gives people the advantage of practicing skills and developing compensatory strategies in the context of their own living environment.

In the recent stroke rehabilitation trial, intensive balance and strength rehabilitation in the home was equivalent to treadmill training at a rehabilitation facility in improving walking.

## **Stroke Rehabilitation Timeline**

Stroke rehabilitation can start in the acute setting as soon as the survivor is medically stable often within 24 to 48 hours after the stroke and may last a life-time. Initial therapies focus on Speech Language Pathology, Occupational Therapy and Physical Therapy.

- Speech Language Pathologists address swallowing, speech and cognition
- Occupational Therapists target deficits in function regarding activities of daily living, transfers, upper extremity weakness and sensory deficits

- Physical Therapists evaluate and treat deficits in functional mobility, core balance and strength, lower extremity weakness and sensory deficits.
- All three therapies interact as an interdisciplinary team and share information to develop a safe and effective plan of care (NINDS, 2012b).

#### Additional Therapies

- Vocational rehabilitation focuses on finding new ways for stroke survivors to earn an income
- Cognitive behavioral therapy focuses on helping stroke survivors learn new coping skills

## Test Your Knowledge

Stroke rehabilitation starts after the patient is discharged from the hospital.

True

**False**

Rationale: Stroke rehabilitation can start in the acute setting as soon as the survivor is medically stable often within 24 to 48 hours after the stroke and may last a life-time.

## Goals of Rehabilitation

The goal of post stroke rehabilitation is to help a person who has survived a stroke to recover to the highest ability possible. Because stroke survivors often have many rehabilitation needs, recovery is unique for each person. Although a majority of functional abilities may be restored soon after a stroke, recovery is an ongoing process.

Successful rehabilitation depends on:

- Amount of damage to the brain
- Skill of the rehabilitation team
- Cooperation of family and friends
  - Caring family/friends can be one of the most important factors in rehabilitation
- Timing of rehabilitation
  - The earlier it begins the more likely survivors are to regain lost abilities and skills

## Repetitive Practice

Rehabilitation helps stroke survivors relearn skills that are lost when part of the brain is damaged. These include skills such as coordinating leg movements in order to walk, eating, bathing or dressing using only one hand, learning how to communicate, and other skills to compensate for ongoing disabilities. The most important element in any rehabilitation program is carefully directed, well-focused, repetitive practice (NINDS, 2012b).

## Caring for Stroke Survivors

### The Multidisciplinary Team

A multidisciplinary team approach to rehabilitation will ensure coordination of services and a holistic approach. At the core of the multi-disciplinary team is the certified nursing assistant (CNA).

The rehabilitation multidisciplinary team consists of physicians, nurses, certified nurse assistants, survivor care technicians, speech-language pathologists, occupational therapists, and physical therapists, social workers, case managers, and mental health professionals.

This team approach is essential to assist the survivor to re-acquire the ability to carry out the basic activities of daily living; the first stage in a stroke survivor's return to independence.

## The Role of the CNA

The CNA plays an important role in the rehabilitation of the stroke survivor. The CNA has a basic set of skills that are imperative to helping the stroke survivor relearn skills.

These skills are assisting with:

- Bathing and grooming
- Feeding
- Mobility assistance including ambulation, transfers, positioning, range of motion, and positioning precautions
- Notifying professions of any changes in clinical or functional status
- Observing survivor behaviors and reporting observations to the registered nurse
- Socialization activities and reporting the level of survivor participation to the registered nurse

As part of the multi-disciplinary team, the CNA, utilizing a problem solving approach, will be able to deal effectively with the many challenges rehabilitation survivors face and help them overcome these difficulties.

Under the direction of the multi-disciplinary team, the CNA can assist the stroke survivor by encouraging the following:

- Bowel and bladder training: Lack of mobility and/or paralysis can create bowel and bladder problems. Encouraging bladder and bowel training can help ensure that the survivors will regain some self-management of bowel and bladder functions.
- Feeding and Nutrition: Aspiration in survivors with swallowing problems can result in pneumonia and/or dehydration. Encouraging the right texture and consistency can help reduce further disability. Teaching survivors to use adaptive utensils so that they may eat independently.
- Prevention of contractures: Spasticity, paralysis and immobility all contribute to contorted or frozen postures called contractions. Vigilant frequent repositioning and range of motion exercise on survivors will help prevent this complication.
- Prevention of falls: Falls are the number one complication after acute stroke - not only in the acute phase, but throughout the post-stroke life span (Schmid, A, Kapoor, J., Dallas, M., & Bravata, D., 2010).
  - Stroke survivors are at high risk for falls in all post-stroke stages, which has severe consequences, both physically and psychosocially. Individuals with stroke have an increased risk for hip fractures, and balance and gait deficiencies.
- Mobility: Immobility contributes to many additional complications in the stroke survivor including pressure ulcers and venous thromboembolism (blood clots in the legs). Encouraging moving by walking them, getting them into a wheelchair, or helping them to adjust to wearing prosthesis, an artificial limb will help prevent additional complications.
- Communication: Lack of the ability to communicate effectively is understandably one of the most frustrating complications of a stroke. Your ability to be survivor when communicating with these survivors will empower the stroke survivor to learn new communication skills.

- Pain Control: Pain may be a debilitating factor in stroke survivors; decreasing their ability to reach their goals for rehabilitation. Encourage the stroke survivor to communicate the level of pain they are experiencing and to take the pain medications.

As a CNA you can be proactive in assisting stroke survivors to independence by:

- Position the survivor in a way that prevents injury to that part of the body that has no sensation.
- Prevent skin breakdown with frequent turning and skin care
- Place objects in the room so that they can be reached by the survivor
- Feed the survivor by placing the food in the good side of his or her mouth
- Use the communication tool chosen by the speech therapist
- Use equipment that is considered necessary to prevent falls
- Allow extra time for helping survivors to do their own daily hygiene
- Learn how to safely transfer survivors from bed to chair or commode
- Assist or carry out individualized exercise programs provided by the physical therapy team to develop:
  - Coordination
  - Strength
  - Balance
  - Flexibility
- Allow survivors to express frustration while they work toward regaining communication skill and self-sufficiency (Association of Rehabilitation Nurses, 2012).

## Test Your Knowledge

The multidisciplinary team is essential to the recovery of pre-stroke skills and abilities. The CNA plays an important part of this team except:

- A. Administering medications**
- B. Assisting the survivor with activities of daily living
- C. Positioning the survivor to prevent skin breakdown
- D. Positioning objects in the room near the survivor to prevent falls

**Rationale:** As a CNA you can be proactive in assisting stroke survivors to independence by:

- Position the survivor in a way that prevents injury to that part of the body that has no sensation.
- Prevent skin breakdown with frequent turning and skin care
- Place objects in the room so that they can be reached by the survivor
- Feed the survivor by placing the food in the good side of his or her mouth
- Use the communication tool chosen by the speech therapist
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  - Coordination
  - Strength
  - Balance

- Flexibility
- Allow survivors to express frustration while they work toward regaining communication skill and self-sufficiency

This table indicates the activities of daily living that should be evaluated by the multidisciplinary team, included in the rehabilitation plan of care. Many of these activities may be performed by the CNA under the guidance of the multidisciplinary team.

<b>Table of Activities of Daily Living and Instrumental Activities of Daily Living</b>	
<b>Activities of Daily Living</b>	<b>Instrumental Activities of Daily Living</b>
<b>Mobility</b> <ul style="list-style-type: none"> <li>• Bed mobility</li> <li>• Wheelchair mobility</li> <li>• Transfers</li> <li>• Ambulation</li> <li>• Stair climbing</li> </ul>	<b>Home Management</b> <ul style="list-style-type: none"> <li>• Shopping</li> <li>• Meal planning</li> <li>• Meal preparation</li> <li>• Cleaning</li> <li>• Laundry</li> <li>• Child care</li> </ul>
<b>Self-care</b> <ul style="list-style-type: none"> <li>• Dressing</li> <li>• Self-feeding</li> <li>• Toileting</li> <li>• Bathing</li> <li>• Grooming</li> </ul>	<b>Community Living Skills</b> <ul style="list-style-type: none"> <li>• Money/financial management</li> <li>• Use of public transportation</li> <li>• Driving</li> <li>• Shopping</li> <li>• Access to recreational activities</li> </ul>
<b>Communication</b> <ul style="list-style-type: none"> <li>• Writing</li> <li>• Typing/computer use</li> <li>• Telephoning</li> <li>• Using special communication devices</li> </ul>	<b>Health Management</b> <ul style="list-style-type: none"> <li>• Handling medication</li> <li>• Knowing health risks</li> <li>• Making medical appointments</li> </ul>
<b>Environmental Hardware</b> <ul style="list-style-type: none"> <li>• Keys</li> <li>• Faucets</li> <li>• Light switches</li> <li>• Windows/doors</li> </ul>	<b>Safety Management</b> <ul style="list-style-type: none"> <li>• Fire safety awareness</li> <li>• Ability to call 911</li> <li>• Response to smoke detector</li> <li>• Identification of dangerous situations</li> </ul>

Modified from: Pedretti LQ. Occupational Therapy: Practice Skills for Physical Dysfunction. 7th ed. St. Louis: Mosby; 2012.

## Case Study 2: Part 1

Mr. X is a 63 year old male admitted to an acute care rehabilitation facility following an acute stroke.

On admission to the Rehabilitation Unit, his disabilities are:

1. Receptive and expressive dysphasia (inability to understand and to be understood)
2. Right-sided weakness with paralysis in the right upper limb

During rehabilitation Mr. X develops severe spasticity in his right upper arm and when you go to get Mr. X to transfer him back to his room the physical therapist informs you that it is painful and is hindering Mr. X's ability to continue with rehabilitation.

### What are your concerns?

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You are concerned that if the pain in Mr. X's arm is not alleviated, he will not be able to participate in his activities of daily living.

### **What can you do to help alleviate the cause of the pain?**

- You can ensure that Mr. X's right arm is supported during transfers and mobility
- Use of sling
- Support the right arm with pillows to maintain natural alignment
- You can report Mr. X's pain level to the nurse

### **Case Study 2: Part 2**

Mr. X is withdrawn, tearful, and anxious during therapy, and these emotions are limiting his active participation in activities of daily living.

This leads to frustration and distress as he realizes that his communication skills and his ability to function on a daily basis have been limited by the stroke.

The night staff report he was having difficulty sleeping, and day staff have noticed a decline in Mr. X's oral intake.

### **What can you do to help?**

You encourage Mr. X's independence with ADL's by providing adequate time to perform tasks and positive reinforcement and praise for what he is able to achieve.

### **Case Study 2: Part 3**

Mr. X developed nocturnal incontinence when he became depressed. However, the nursing staff found no evidence of a urinary tract infection (UTI) or urinary retention.

In addition, Mr. X was having difficulty using a urinal in bed, due to the pain in his right arm.

### **What can you do to help?**

- You can report Mr. X's pain level to the nurse
- You can assist Mr. X to position the urinal so that it is easier to use while in bed

## **Conclusion**

A multidisciplinary team approach to rehabilitation will ensure coordination of services and a holistic approach. At the core of the multi-disciplinary team is the certified nursing assistant (CNA).

The CNA plays an important role in the rehabilitation of the stroke survivor. The CNA has a basic set of skills that are imperative to helping the stroke survivor relearn skills.

As part of the multi-disciplinary team, the CNA, utilizing a problem solving approach, will be able to deal effectively with the many challenges rehabilitation survivors face and help them overcome these difficulties.

This team approach is essential to assist the survivor to re-acquire the ability to carry out the basic activities of daily living; the first stage in a stroke survivor's return to independence.

By assisting your stroke survivor regain independence, you will play an important part in the



survivor's recovery. This can be a rewarding experience for you, the survivor, and the survivor's family.

## References

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