

**N311 Care Plan 2**

Ngoc Trinh

Lakeview College of Nursing

N311: Foundations of Professional Practice

Travis Whisman

Feb 27, 2025

### Demographics

|                                       |                                 |                                  |  |
|---------------------------------------|---------------------------------|----------------------------------|--|
| <b>Date of Admission</b><br>2/15/2025 | <b>Client Initials</b><br>JW    | <b>Age</b><br>82 yrs             | <b>Biological Gender</b><br>Female     |
| <b>Race/Ethnicity</b><br>Caucasian    | <b>Occupation</b><br>Unemployed | <b>Marital Status</b><br>Widowed | <b>Allergies</b><br>No Known Allergies |
| <b>Code Status</b><br>DNR/DNI         | <b>Height</b><br>154.9 cm       | <b>Weight</b><br>45 kg           |  |

### Medical History

**Past Medical History:** Hip Surgery, Total Hip Arthroplasty, Fracture Surgery.

**Past Surgical History:** CKD, COPD, Anemia, Osteoarthritis, Hypothyroidism, Depression.

**Family History:** Renal Failure in her son.

**Social History (tobacco/alcohol/drugs including frequency, quantity, and duration of use):**

The patient states she is smoking half a pack, uses cigarettes, and quit smoking 8 years ago. The patient denied using alcohol and drugs.

**Education:** The patient states she has an Associate degree in Finance.

**Living Situation:** The patient states she lives with a son.

**Assistive devices:** Walker.

### Admission Assessment

**Chief Complaint:** The patient presents with a new onset of left-sided weakness, visual disturbances, unsteady gait, and dysarthria.

**History of Present Illness (HPI) – OLD CARTS:** The 82-year-old Caucasian female presented to the OSF on February 15, 2025, with complaints of new onset of left-sided weakness, visual disturbances, unsteady gait, and dysarthria. The patient states, “It feels like I can not move my left side and have difficulty forming words.” The patient mentions feeling numbness and tingling

in her left side and difficulty speaking, for the past 4 hours, states discomfort in her left leg, and associates the discomfort with “pins and needles.” The patient states that her left arm and leg are weak, and lifting her extremities aggravates the pain. She mentions that laying supine relieved her symptoms for fifteen minutes, but they have not entirely resolved. Therefore, EMS was called immediately for further evaluation, arrived within fifteen minutes, and transferred the patient to the hospital.

### **Primary Diagnosis**

**Primary Diagnosis on Admission:** Stroke

**Secondary Diagnosis (if applicable):** Chronic respiratory failure, Intraparenchymal hematoma of the brain.

### **Pathophysiology**

**Pathophysiology of the Disease, APA format:**

The most common global health threat, Stroke, develops from abrupt interruptions of cerebral blood flow, causing brain injury and neurological function loss (Kim et al., 2021). Doctors classify strokes into two main categories: Blockages in cerebral blood vessels cause ischemic strokes, while hemorrhagic strokes occur from ruptured blood vessels that lead to intracranial bleeding (Capriotti & Frizzell, 2020). The pathophysiological mechanisms of a stroke involve numerous interconnected cellular and systemic processes that result in neuronal damage and the loss of brain function.

Ischemic strokes occur when a thrombus or embolus obstructs cerebral arteries causing immediate cessation of blood flow to brain tissue. Aerobic metabolism is essential for proper neuronal function however ischemic conditions restrict ATP production which results in neuron depolarization calcium influx and excitotoxicity due to excessive glutamate release causing

additional neuronal damage (Capriotti & Frizzell, 2020). The ischemic penumbra develops surrounding the infarcted core as cellular homeostasis starts to break down. According to Kim et al., 2021 neuronal apoptosis and necrosis lead to increased brain injury when timely reperfusion fails to happen.

The rupture of a blood vessel during a hemorrhagic stroke leads to intracerebral or subarachnoid hemorrhage which then results in elevated intracranial pressure (ICP) and reduced cerebral perfusion (Capriotti & Frizzell, 2020). When blood collects it initiates inflammatory responses that produce cytokines and reactive oxygen species (ROS) which then lead to greater neuronal damage. When hemorrhagic strokes occur the blood-brain barrier breaks down allowing harmful substances and immune cells to enter brain tissue that worsens the damage (Capriotti & Frizzell, 2020).

Strokes produce immediate neurological deficits which manifest as one-sided muscle weakness together with facial drooping and speech difficulties (dysarthria), problems with language comprehension or production (aphasia) and vision problems (Kim et al., 2021). An individual's specific symptoms align directly with the specific brain region that has been affected. The right side of the brain when damaged results in left-sided motor deficits (hemiparesis) and spatial neglect whereas left hemispheric strokes typically produce expressive or receptive aphasia (Kim et al., 2021).

To confirm a stroke diagnosis medical professional, conduct clinical evaluations while also performing neuroimaging procedures and laboratory testing. Non-contrast CT scans serve as doctors' preferred technique to distinguish ischemic strokes from hemorrhagic strokes and they use MRI with diffusion-weighted imaging to identify initial signs of ischemic damage (Capriotti & Frizzell, 2020). Through blood tests physicians detect stroke risk factors such as

hypercoagulability dyslipidemia and hyperglycemia which allow them to assess both stroke severity and potential for patient recovery (Capriotti & Frizzell, 2020). Patients achieve better recovery outcomes and reduced brain damage through early detection and intervention.

### Pathophysiology References (2) (APA):

Capriotti, T., & Frizzell, J. P. (2020). *Pathophysiology: Introductory concepts and clinical perspectives* (3rd ed.). F.A. Davis Company.

Kim, J., Fann, D. Y., Seet, R. C., & Jo, D. G. (2021). *Pathophysiology of ischemic stroke and novel therapeutic strategies*. *Frontiers in Aging Neuroscience*, 13, 1-16.

<https://doi.org/10.3389/fnagi.2021.679276>

### Vital Signs, 1 set – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

| Time | Pulse  | B/P         | Resp Rate                  | Temp            | Oxygen      |
|------|--------|-------------|----------------------------|-----------------|-------------|
| 0729 | 75 bpm | 158/63 mmhg | 20 respirations per minute | 96.9 F Temporal | 93 Room Air |

### Pain Assessment, 1 set

| Time | Scale         | Location | Severity | Characteristics | Interventions  |
|------|---------------|----------|----------|-----------------|--|
| 0745 | Numeric Scale | N/A      | 0/10     | N/A             | The patient states she was not in pain; no intervention was needed at this time. |

### Intake and Output

| Intake (in mL) | Output (in mL) |
|----------------|----------------|
|                |                |

|               |                            |
|---------------|----------------------------|
| NS: 240 mL    | <b>Urine voided: 50 mL</b> |
| Total: 240 mL | Total: 50 mL               |

### Nursing Diagnosis

**\*Must be NANDA approved nursing diagnosis\***

| <b>Nursing Diagnosis</b>   | <b>Rationale</b>  | <b>Interventions<br/>(2 per dx)</b>   | <b>Outcome Goal<br/>(1 per dx)</b>   | <b>Evaluation</b>  |
|--|---|---|--|--|
| <ul style="list-style-type: none"> <li>• Include full nursing diagnosis with “related to” and “as evidenced by” components</li> <li>• Listed in order by priority – highest priority to lowest priority pertinent to this client</li> </ul>  | <ul style="list-style-type: none"> <li>• Explain why the nursing diagnosis was chosen</li> </ul>  |   |  | <ul style="list-style-type: none"> <li>• How did the client/family respond to the nurse’s actions?               <ul style="list-style-type: none"> <li>• Client response, status of goals and outcomes, modifications to plan.</li> </ul> </li> </ul> |
| <p><b>1.</b> Impaired Physical Mobility related to neuromuscular impairment and decreased motor function secondary to stroke as evidence by left-sided weakness, and visual disturbances (Phelps, 2023).</p> <ul style="list-style-type: none"> <li>• Impaired Physical Mobility is prioritized first because it directly impacts the</li> </ul> | <p>The nursing diagnosis explains the patient's complaint of left-sided weakness, visual disturbances. The patient also reported symptoms of numbness and tingling.</p> | <p><b>1.</b> Encourage active and passive range-of-motion (ROM) exercises at least twice per shift to maintain joint flexibility, prevent contractures, and improve circulation (Phelps, 2023).</p> <p><b>2.</b> Assist the patient with repositioning every two hours to</p> | <p><b>1.</b> The patient will maintain intact skin integrity by following a proper skincare regimen, repositioning every two hours and keeping skin clean and dry over the next 30 days, as evidenced by the absence of pressure ulcers, redness, or skin breakdown.</p> | <p>The patient responded well to the nurse’s actions, with no incidents of falls. The family appreciated the safety measures. The goal was met, but continued monitoring and reorientation will be maintained.</p>                                     |

|  |  |  |   |   |
|--|--|--|---|---|
| <p>patient's ability to perform ADLs and increases the risk of complications such as pressure ulcers, contractures, and falls, making it an immediate safety concern.</p>  |  | <p>prevent skin breakdown, enhance comfort, and promote circulation in affected extremities (Phelps, 2023).</p>  |   |   |
| <p><b>2.</b> Impaired verbal communication related to prolonged cerebral occlusion affecting speech centers as evidenced by difficulty speaking, difficulty forming words, and inability to express needs effectively (Phelps, 2023).</p> <ul style="list-style-type: none"> <li>Impaired verbal communication is important but is a lower priority because alternative communication methods can be implemented while working on long-term recovery.</li> </ul> | <p>The nursing diagnosis explains that the patient complained of difficult to speak and difficulty forming words, which indicate motor deficits.</p> | <p><b>1.</b> Provide alternative communication methods such as a communication board, pictures, or writing tools to help the patient express needs effectively (Phelps, 2023).</p> <p><b>2.</b> Encourage slow, simple, and one-step commands while maintaining eye contact and allowing extra time for the patient to respond, promoting understanding and reducing frustration (Phelps, 2023).</p> | <p><b>1.</b> The patient will demonstrate improved communication by using simple words, gestures, or a communication board to express basic needs at least three times per shift within one week. Progress will be evaluated daily, with family involvement to reinforce strategies, ensuring measurable improvement in verbal and nonverbal communication.</p> | <p>The patient responded well to communication strategies, using gestures and a communication board more frequently. The family expressed relief and actively participated in reinforcing these methods. The goal was partially met, with improvement in basic communication. The plan will be modified to include speech therapy and continued family education.</p> |

**Other References (APA):**

Phelps, L.L. (2023). *Nursing diagnosis reference manual* (12th ed.). Wolters Kluwer.



