N321 Care Plan

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission	**Client Initials**	**Age**	**Gender**
9/17/13	M.N.C.	75	Male
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
White/Caucasian	Warehouse	Married	NDKA
Code Status	**Height**	**Weight**	
Full Code	165.1cm	83.6 kg	

Medical History (5 Points)

Past Medical History:

Ischemic Stroke, Coronary Artery Disease (CAD), Hypertension (HTN), Myocardial Infraction (MI), Peripheral Vascular Disease (PVD)

Past Surgical History: Coronary Angioplasty w/ Stent Placement

Family History: N/A

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

Reports that he has never smoked. He has never used smokeless tobacco. He reports that he does not currently use alcohol after a past usage of about 1.2 oz per week. He reports that he does not use drugs.

Assistive Devices: Walker

Living Situation: Living at home with wife

Education Level: GED/ Trade School

Admission Assessment

Chief Complaint (2 points): Ischemic Stroke

History of Present Illness – OLD CARTS (10 points):

A 75 y/o male presents to the ED complaining of left-sided weakness. The onset was about an hour before his administration to the ED on 9/16/23. He was watching TV when he felt the change and said that it had only lasted one hour. He knew the S/S of ischemic strokes since he had one before. He appeared in the ED with facial drops, slurred speech, and upper extremity weakness. There were no alleviating or relieving factors, but aggravating factors, such as walking, were a generalized weakness. This was not the first Ischemic attack, and he knew the S/S of what to be attentive to if he possibly had another attack.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Acute Ischemic Attack

Secondary Diagnosis (if applicable): Urinary Tract Infection (UTI)

Pathophysiology of the Disease, APA format (20 points):

An ischemic stroke is described as a sudden neurological outburst caused by inadequate blood vessel perfusion to the brain. Understanding the neurovascular architecture is critical for studying the clinical manifestations of stroke. Two internal carotid arteries anteriorly and two vertebral arteries posteriorly control blood flow to the brain. Ischemic stroke is caused by a lack of blood and oxygen to the brain, whereas hemorrhagic stroke is caused by bleeding or leaky blood vessels. Ischemic occlusions contribute to around 85% of casualties in stroke and generate thrombotic and embolic conditions in the brain. (Chugh, C. 2019, June) If thrombosis ensues, the blood flow is affected by the narrowing of vessels due to atherosclerosis. Plaque buildup will

eventually narrow the vascular chamber and create clots, resulting in a thrombotic stroke. An embolism is caused by reduced blood flow to the brain area in an embolic stroke; the blood supply to the brain decreases, producing acute stress and premature cell death.

Ischemic stroke presents with sudden numbness or weakness of the face, arm, or leg, especially on one side of the body. Sudden confusion, trouble speaking, sudden dizziness, loss of balance or coordination, and shortness of breath (Hui, Patti, Tadi, 2022). Some expected findings that are related to ischemic stroke can include a CT to see if the brain is getting perfused and also to see if the patient has a fracture through an X-ray. Lab tests that are also done include O2 saturation, blood glucose, serum electrolytes/renal test, complete blood count, specific platelet count, prothrombin time/INR, and activated partial thromboplastin time (Patil, Rossi, Jabrah, Doyle, 2022).

The treatment of ischemic stroke is a medicine called alteplase, which is a tissue plasminogen activator. The medication breaks up the blood clots that block blood flow to your brain. Also possibly getting the patient to undergo surgery for a stent/ angioplasty. The patient was specifically taking Plavix, which is a P2Y12 platelet inhibitor/ and platelet aggregation inhibitor. Which helps decrease the prevalence of the vasculature in the patient's body. Clinical results that correlate with the particular client and ischemic patients are the patient's increased BUN and creatine, which indicate renal impairment. Also, the patient's PTT was increased way beyond normal limits. Also, the patient has a past medical history of ischemic stroke, coronary artery disease (CAD), hypertension (HTN), myocardial infarction (MI), and peripheral vascular disease (PVD).

Pathophysiology References (2) (APA):

Chugh, C. (2019, June). Acute ischemic stroke: Management approach. Indian journal of critical care medicine : peer-reviewed, official publication of Indian Society of Critical Care Medicine. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6707502/

Hui, C., Patti, L., & Tadi, P. (2022, Jun 22). Ischemic stroke - statpearls - NCBI bookshelf. https://www.ncbi.nlm.nih.gov/books/NBK499997/

Patil, S., Rossi, R., Jabrah, D., & Doyle, K. (2022, June 24). *Detection, diagnosis and treatment of acute ischemic stroke: Current and future perspectives*. Frontiers in medical technology. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9263220/

Laboratory Data (15 points)

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	4.2-5.8 M/uL	5.11	5.02	
Hgb	12-18 g/dL	12.6	13.0	
Hct	35-45 %	40.0	39.2	
Platelets	140-440 /mm3	334	277	
WBC	4,000-10,500 /mm3	12.70	10.10	Possible infection, inflammatory, or allergic reactions, the patient has a possible UTI
Neutrophils	38-75 %	74.3	75.6	Possible infection by bacteria, viruses, fungi, and parasites indicator for UTI.
Lymphocytes	14-50%	9.6	7.8	
Monocytes	1-13%	10.3	12.6	
Eosinophils	0-6%	4.5	2.9	
Bands	0-2%	N/A	N/A	

Chemistry Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	136-145 mmol/L	136	134	Possible consumption of too much fluid or renal failure since the patient was just on clear fluids.
K+	3.5-5.3 mmol/L	4.1	4.6	
Cl-	8.6-10.2 mmol/L	107	107	
CO2	98-107mmol/L	N/A	N/A	
Glucose	74-109 mg/dL	99	79	
BUN	7-25 mg/ dl	39	25	Kidneys aren't functioning as well, or there is possible dehydration.
Creatinine	0.7-1.3 mg/dL	2.21	1.88	Possible kidney infection or kidney inflammation
Albumin	3.4-5.4 g/dL	3.8	N/A	
Calcium	8.6-10.2 mg/dl	9.1	9.2	
Mag	1.9-2.7 mg/dL	2.3	N/A	
Phosphate	2.8-4.5 mg/dL	N/A	N/A	
Bilirubin	0.3–1.0 mg/dL	0.4	N/A	
Alk Phos	44-107 IU/L	106	N/A	
AST	15-39 U/L	17	N/A	
ALT	7-52 U/L	11	N/A	
Amylase	40-140 U/L	N/A	N/A	
Lipase	0-160 U/L	N/A	N/A	
Lactic Acid	0-2.0 mmol/L	N/A	N/A	

Other Tests Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
INR	0.8-1.1	N/A	N/A	
PT	9.8-12.3	N/A	N/A	
PTT	27-39 seconds	54 sec	N/A	Possible clotting deficiencies or cirrhosis of the liver. The patient had a recent ischemic stroke.
D-Dimer	0-241ng/mL	N/A	N/A	
BNP	<100 pg/ml	N/A	N/A	
HDL	≥59 mg/dL	32	N/A	
LDL	<150 mg/dL	93	N/A	
Cholesterol	<200 mg/dL	145	N/A	
Triglycerides	<150 mg/dL	102	N/A	
Hgb A1c	4-6%	5.2	N/A	
TSH	0.45-5.33 ulU/mL	2.627	N/A	

Urinalysis Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	Clear, Yellow straw	Clear, Yellow straw	N/A	
pH	5.0-8.0	8.0	N/A	
Specific Gravity	1.001-1.035	1.012	N/A	
Glucose	Negative	Negative	N/A	

Protein	Negative	2+	N/A	Possible dehydration or strenuous exercise and the patient was positive for signs of UTI
Ketones	Negative	Negative	N/A	
WBC	0-5.0/ mm3	21-50	N/A	
RBC	Negative	3+	N/A	Possible UTI or cancer. RBC in the blood is a big concern as the kidneys aren't functioning
Leukoesterase	0 - 0.001 Units	N/A	N/A	

Cultures Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	Negative	N/A	N/A	
Blood Culture	Negative	N/A	N/A	
Sputum Culture	Negative	N/A	N/A	
Stool Culture	Negative	N/A	N/A	

Lab Correlations Reference (1) (APA):

Kee, J. L. (2018). *Laboratory and diagnostic tests with nursing implications*. Pearson.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

- CT without contrast
    - No acute intracranial pathology, as the patient had an ischemic attack that could cause decreased perfusion to the brain
- Chest X-Ray

- Slight atelectasis in the left lower lung as volume loss in the left lower lung since 2016, as pt's pulmonary vascularity is within normal

- MRI
  - Study nondiagnostic in nature due to motion

Diagnostic Test Correlation (5 points):

The patient had received both a CT and an MRI to see the brain and how the perfusion was since patient had an ischemic attack. Which caused him to come to the ED slightly confused and weak on the left side. For the X-ray it was to see lung expansion and for Coronary artery disease, to see the structures of organs and see if there is extra fluid and any underlying issues

Diagnostic Test Reference (1) (APA):

Chugh, C. (2019, June). *Acute ischemic stroke: Management approach*. Indian journal of critical care medicine : peer-reviewed, official publication of Indian Society of Critical Care Medicine. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6707502/

Musuka, T. D., Wilton, S. B., Traboulsi, M., & Hill, M. D. (2015, September 8). Diagnosis and management of acute ischemic stroke: Speed is critical. CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4562827/

Current Medications (10 points, 1 point per completed med)
10 <u>different</u> medications must be completed

Home Medications (5 required)

Brand/Generic	Norvasc/ Amlodipine	Clopidogrel/ Plavix	Lisinopril/ Prinivil	Metoprolol tartrate/ Lopressor	Naproxen/ Naprosyn
Dose	2.5 mg	75 mg	10 mg	25 mg	2.5 mg
Frequency	Once daily	Once daily	Once daily	Once daily	BID
Route	PO	PO	PO	PO	PO
Classification	Calcium channel blocker/ Antihypertensive	$P2Y_{12}$ platelet inhibitor/ Platelet aggregation inhibitor	Angiotensin-converting enzyme (ACE) inhibitor/ Antihypertensive	$Beta_1$-adrenergic blocker/ Antihypertensive	NSAID/ Analgesic
Mechanism of Action	Binds to dihydropyridine and nondihydypridine	It binds to adenosine diphosphate receptors on the surface of activated platelets	Reduce blood pressure by inhibiting the conversion of angiotensin 1.	inhibits stimulation of beta1-receptor sites, resulting in decreased cardiac excitability	Blocks cyclooxygenase, the enzyme needed to synthesize prostaglandins.
Reason Client Taking	Control Hypertension	Reduce the rate of CVA and MI with established peripheral arterial disease	To treat hypertension	to manage hypertension	Mild to moderate musculoskeletal
Contraindications (2)	Pts with a history of renal impairment and liver issues	Active pathological bleeding, including intracranial hemorrhage and peptic ucler	Hereditary or idiopathic angioedema or history of angioedema	Cardiogenic shock, heart block greater than first degree, heart rate less than 45 beats/ per minute	Hx of asthma, urticaria, and other allergic-type reactions induced by aspirin
Side Effects/Adverse Reactions (2)	Arrhythmias, chest pain, hypotension, and pancreatitis	Fatal intracranial bleeding, hypotension, severe	CVA, Arrhythmias, hypotension, MI,	CVA, arrhythmias, martial insufficiency, cardiac arrest,	Aseptic meningitis, chills, CVA, heart failure, Papilledema

		hypoglycemia	hepatitis, pancreatitis	heart failure, hepatitis, bronchospasm	, hypoglycemia
Nursing Considerations (2)	Monitors pt with impaired hepatic function closely because it is metabolized with by the liver	Monitor pt for low blood sugar, also instruct pt not to discontinue abruptly	Monitor for angioedema, fluid volume deficit, heart failure, impaired renal function	Monitor for AV block, and poor glucose control with DM, and hyperthyroidism	Monito for thrombotic events, including MI, stroke

Hospital Medications (5 required)

Brand/Generic	Hydralazine/ Apresoline	Labetalol/ Trandate	Aspirin/ Aspro Clear, Disprin	Maxipime /Cefepime hydrochloride	Rivaroxaban/Xarelto
Dose	10 mg	10 mg	81 mg	1 g	2.5 mg
Frequency	PRN 4x max	PRN Max 300 mg until desired effect	Once daily	TID	BID with meals
Route	IV	IV	PO	IV	PO
Classification	Vasodilator/ Antihypertensive	Beta-blocker/ Antihypertensive	Salicylate/ NSAID	Fourth-generation cephalosporin/ Antibiotic	Factor Xa inhibitor/ Anticoagulant
Mechanism of Action	It exerts a direct vasodilating effect on vascular smooth muscle	Selectively block apha$_1$ and beta$_1$ receptors in vascular smooth muscle and beta$_1$ receptors in the heart to reduce blood pressure.	Blocks the activity of cyclooxygenase, the enzyme needed for prostaglandin synthesis	Interferes with bacterial cell wall synthesis by inhibiting the final step in the cross-linking of peptidoglycan strands	Selectively blocks the active site of factor Xa
Reason Client	Manage with	Manage	Mild pain or	To treat mild	Reduce the

Taking	hypertension	hypertension	fever	to moderate UTI	risk of stroke
Contraindications (2)	Coronary artery disease and mitral valvular rheumatic heart disease	Bronchial asthma, cardiogenic shock	Active bleeding or coagulation disorders, breastfeeding, fever, chickenpox	Increase risk of nephrotoxicity and ototoxicity	Active pathological bleeding
Side Effects/Adverse Reactions (2)	Chills, fever, headache, dyspnea, tachycardia, anorexia, lymphadenopathy	Bradycardia, heart block, heart failure, hypotension, ventricular arrhythmias, hepatic necrosis	CNS depression, GI bleeding, hepatoxicity, leukopenia, bronchospasm, angioedema	Coma, encephalopathy, neurotoxicity, hepatic failure, renal failure, neutropenia	Cerebral hemorrhage, subdural hematoma, GI bleeding, excessive bleeding
Nursing Considerations (2)	Monitor ANA titer, CBC, blood pressure and pulse rate	Labetalol masks common signs of shock, Monitor for blood glucose level	Monitor salicylate level for long term therapy	Monitor renal function or history of GI disease, particularly colitis	Monitor for patients with hepatic disease

Medications Reference (1) (APA):

2023 Nurse's Drug Handbook. (2023). . Jones & Bartlett Learning.

Assessment

Physical Exam (18 points) – HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS

GENERAL: **Alertness:** Alert and Friendly	

Orientation: Oriented to person, place, and time **Distress:** No apparent distress **Overall appearance:** Well-groomed and pleasant.	
INTEGUMENTARY: **Skin color:** White, normal for race **Character:** Dry, Intact **Temperature:** Warm **Turgor:** 2+ **Rashes:** None noted **Bruises:** None noted **Wounds:** None noted **Braden Score:** 21 **Drains present: Y☐ N ☒** **Type:**	
HEENT: **Head/Neck:** Head and neck are symmetrical **Ears:** Auricle is pink, moist, and not lesions. **Eyes:** The sclera was white, the cornea was clear, and the conjunctiva was pink, with no discharge noted. EOMs intact **Nose:** Septum is midline with no drainage or bleeding noted **Teeth:** Top and bottom dentures	.
CARDIOVASCULAR: **Heart sounds:** S1 and S2 present with no murmurs, gallops, or rubs **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** 1+ symmetric **Capillary refill:** +1 **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	.
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character** Posterior/anterior bilateral even breathing with no wheezes but diminished lower quardrant	.
GASTROINTESTINAL:	.

Diet at home: General **Current Diet:** General **Height:** 165.1 cm **Weight:** 83.6 kg **Auscultation Bowel sounds:** Present in all four quadrants **Last BM:** 9/18/23 **Palpation: Pain, Mass, etc.:** No pain or mass noted **Inspection:** No lesions or rashes noted **Distention:** No distention noted **Incisions:** No incisions noted **Scars:** No scares noted **Drains:** No drains noted **Wounds:** No wounds noted **Ostomy: Y** ☐ **N** ☒ **Nasogastric: Y** ☐ **N** ☒ **Size:** **Feeding tubes/PEG tube Y** ☐ **N** ☒ **Type:**	
GENITOURINARY: **Color:** Straw, Yellow **Character:** Clear **Quantity of urine:** 300 ml **Pain with urination: Y** ☐ **N** ☒ **Dialysis: Y** ☐ **N** ☒ **Inspection of genitals:** Not performed **Catheter: Y** ☒ **N** ☐ **Type:** Standard **Size:**	
MUSCULOSKELETAL: **Neurovascular status:** No apparent deficits **ROM:** Left-sided weakness **Supportive devices:** Walker **Strength:** Left-sided weakness **ADL Assistance: Y**☐ **N** ☒ **Fall Risk: Y** ☒ **N**☐ **Fall Score:** 72 HIGH **Activity/Mobility Status:** Pt can ambulate with a walker and just requires a gait belt in the hospital. But can have full ROM **Independent (up ad lib)** ☒ **Needs assistance with equipment.** ☐ **Needs support to stand and walk.** ☐	.

NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☐ N ☒ if no -** **Legs ☐ Arms ☒ Both ☐** **Orientation:** Oriented to person, place, and time **Mental Status:** Friendly, agreeable, and alert **Speech:** Good **Sensory:** No obvious deficits **LOC:** Alert	.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** Spending time with wife **Developmental level:** Formal operational stage/No deficits observed **Religion & what it means to pt.:** Not assessed **Personal/Family Data (Think about home environment, family structure, and available family support):** PT is married and currently lives with wife. Two kids have grown up and moved out.	.

Vital Signs, 2 sets (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0800	66	151/76	18	96.6	99
1100	64	156/74	20	98	95

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0800	0/10		Pt denied any pain		

1100	0/10		Pt denied any pain		

IV Assessment (2 Points)

IV Assessment	**Fluid Type/Rate or Saline Lock**
Size of IV: 18 G **Location of IV:** Right AC **Date on IV:** 9/16/23 **Patency of IV:** Patent **Signs of erythema, drainage, etc.:** None noted **IV dressing assessment:** Clean, dry, intact	Saline lock

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
480 mL PO	300 mL urine

Nursing Care

Summary of Care (2 points)

Overview of care: The patient was awake and alert for vitals at 730 and allowed for a full physical assessment. He denied any pain and was able to tolerate his breakfast with two cups

of coffee. He tolerated his medications and was able to go back to a general diet after passing a speech consult. The medical team has been updated and the discharge process has begun.

Procedures/testing done: The testing that was done was a swallow test, as Speech therapy tested variations of foods to look for aspiration and found none

Complaints/Issues: Patient verbalized no complaints

Vital signs (stable/unstable): Vitals were steady throughout the day, with no variations

Tolerating diet, activity, etc.: Pt had a full breakfast and was happy to walk around the unit even after therapy.

Physician notifications: No Notifications

Future plans for the client: Evaluate the patient's response to treatment and possible new medications

Discharge Planning (2 points)

Discharge location: Patient's home

Home health needs (if applicable): The patient needs no possible equipment, such as his walker.

Equipment needs (if applicable): The patient needs no additional equipment

Follow-up plan: Follow up with physician and therapy for generalized left-sided weakness.

Education needs: Education for fall prevention and ischemic attack signs and symptoms.

Nursing Diagnosis (15 points)
Must be NANDA-approved nursing diagnosis and listed in order of priority

Nursing Diagnosis ● Include full nursing diagnosis	**Rationale** ● Explain why the nursing	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation** ● How did the client/family respond to the nurse's

with “related to” and “as evidenced by” components ● Listed in order by priority – highest priority to lowest priority pertinent to this client	diagnosis was chosen			actions? ● Client response, status of goals and outcomes, modifications to plan.
1. Ineffective tissue perfusion related to artery occlusion as evidenced by ischemic stroke	The patient has a history of Ischemic strokes and Peripheral vascular disease	1. Evaluate urine output amount and characteristics. 2. Evaluate BUN and creatine.	**1.** The patient will maintain adequate peripheral perfusion as evidenced by strong pedal pulses, warm skin temperature, and intact skin without edema	The patient is able to ambulate with assistance. The patient's gait has become less impaired and active/ passive ROM has increased
2. Risk for aspiration related to ischemic stroke as evidence by weakness	generalized weakness and confusion upon admittance to the ED.	1. Assessing swallowing ability and risk factors for dysphagia 2. Assess the gag reflex (Swallow studies)	**1.** The patient will be able to tolerate the swallow studies.	The patient is returned to the general diet with not issues of aspiration. The patient not coughing after sipping water or other liquids
3. Risk for injury related to left-side weakness, as evidenced	Patient had a foley as for UTI which increase the score, but also	1. Turn on bed light 2. Orient the patient to the controls	**1.** The patient will remain free of all injuries	The patient did not ambulate without calling for assistance The patient is discharges with 0 falls

by high fall score of 72	weakness for the ischemic stroke	of the call light		

Other References (APA):

Gil Wayne BSN, R. N. (2023, July 30). *Risk for injury & patient safety nursing care plan and management*. Nurseslabs. https://nurseslabs.com/risk-for-injury/#h-goals-and-outcomes

Concept Map (20 Points):

N321 CARE PLAN

Subjective Data

Pt reported having issues speaking, and sudden trouble speaking.
Pt stated that he was dizzy, and loss of balance/ coordination
Pt stated having severe headache with shortness of breath

Nursing Diagnosis/Outcomes

Ineffective tissue perfusion related to artery occlusion as evidenced by ischemic stroke

Risk for aspiration related to ischemic stroke as evidence by weakness

Risk for injury related to left-side weakness, as evidenced by high fall score of 72

Knowledge about the underlying disease and methods to avoid complications related to aspiration or injury due to left sided weakness

Objective Data

Patients gait was weak on the left side
Patients fall score was 72
Patients most recent blood pressure 151/76
Pt's home medications include amlodipine, plavix, prinivil/ lopressor/ naproxen
Pt creatine and BUN increased

Client Information

75 year old caucasian male with history of Ischemic stroke, coronary artery disease, hypertension, myocardial infarction, peripheral vascular disease

Nursing Interventions

Evaluate urine output amount and characteristics.

Evaluate BUN and creatine.

Assessing swallowing ability and risk factors for dysphagia

Assess the gag reflex (Swallow studies)

Turn on bed light

Orient the patient to the controls of the call light

Monitor I/O

Assess ROM