

SCRIPT

WOMAN WOKE UP WITH LEFT LIMB
IMPAIRMENT



SCENARIO

#922

NAME

MARY CARTER

SPECIALTY

Neurology

DIFFICULTY LEVEL

INTERMEDIATE

SIMULATION ENVIRONMENT

INTRA HOSPITAL - EMERGENCY ROOM

Scenario

General description of the scenario info. Corresponds to the initial information presented to the trainee when selecting this scenario.

Title

Woman woke up with left limb impairment

Context

Mrs. Carter noticed a motor impairment in her left limbs after waking up this morning. She called for her neighbor's help and he called for an ambulance straight away.

Briefing

72-year-old woman collapsed this morning trying to get up from the bed. She noticed a motor impairment on her left side. Currently is the month of May.

Learning goals

Assess the patient and correctly identify the NIH Stroke Scale (NIHSS) score.

General learning objective

In this scenario, the learner should:

Accurately grade neurological deficits using NIHSS in acute stroke.

Specific learning objectives

Important when questioning the patient:

Ask about main complaints and determine the time onset

Ask about past medical history and regular medication

Fundamental in ABCDE:

Perform vital signs vigilance in acute care

Perform neurological assessments in order to accurately quantify the NIHSS of a stroke patient

Pre-simulation notes

-

Environment

Intra Hospital - Emergency Room

Specialty

Neurology

Difficulty Level

Intermediate

Reviewers

Angels Initiative

Patient characteristics

Characterization of the patient's demographic, habits, behavior and specific status effects.

Avatar



Patient Name

Mary Carter

Age

72 years

Race/Ethnicity

European/Caucasian

Eye color

Brown

Conscious

Yes

Confused

No

Last meal over 2h

Yes

Renal metabolic compensation

Auto

Gender

Female

Main hair color

Light gray

Smoker

No

Sedated

No

Agitated

No

Facial palsy

-100

Patient parameters

These parameter values are used by the simulator to initialize this scenario and correspond to a pre-treatment baseline.

Systolic arterial blood pressure (mmHg)

130

Heart rate (bpm)

100

Respiratory rate (/min)

15

Temperature (°C)

36.7

Diastolic arterial blood pressure (mmHg)

82

O2 saturation (%)

97

Blood glucose (mg/dL)

95

Hemoglobin (g/dL)

14

Urinary output (mL/kg/h)

1

Height (cm)

175

Potassium (mEq/L)

4.1

Weight (kg)

87

BMI

28.4

Sodium (mEq/L)

139

Physical examination

The items below characterize the patient's physical examination and monitoring findings on admission.

Airway

Airway observation

Not a priority

Airway is open, not obstructed, and safe.

Breathing

Chest palpation

Not a priority

Normal: 2L - normal; 2R - normal

Chest percussion

Not a priority

Complete version:
Right: 1R - resonance; 2R - resonance; 3R - resonance; 4R - resonance; 5R - resonance
Left: 1L - resonance; 2L - resonance; 3L - superficial cardiac dullness; 4L - superficial cardiac dullness; 5L - resonance

O2 Sat (%)

1st Priority

97%

Pulmonary auscultation

2nd Priority

Clear to auscultation, with normal breath sounds at all sites.

Respiratory rate (/min)

1st Priority

15 breath/min

Circulation

Blood pressure (mmHg)

1st Priority

130/82 mmHg

Capillary refill time (s)

Not a priority

1 second

Cardiac auscultation

2nd Priority

Regular rate and rhythm, normal S1 and S2 sounds, no murmurs, gallops, or rubs.

Heart rate (bpm)

1st Priority

100 bpm

Pulse palpation

2nd Priority

Central - Amplitude: normal; Arrhythmic;

		Peripheral - Amplitude: normal; Arrhythmic.
Disability		
Blood glucose (mg/dL)	1st Priority	95 mg/dL
Double simultaneous stimulation	1st Priority	Double sensitive stimulation is not performable due to sensory impairment in the left hemibody. Double visual stimulus documents inattention to stimuli from the left visual field.
Extraocular movements	1st Priority	Normal
Face sensitivity	Not a priority	Slight impairment of sensitivity in the left side of the face.
Facial motor assessment	1st Priority	Left central facial palsy.
Finger-nose-finger test	1st Priority	Not able to perform on the left side.
Glasgow Coma Scale	2nd Priority	15 (E-4; V-5; M-6)
Language assessment	1st Priority	Verbal fluency - Normal Verbal comprehension - Normal Naming - Normal
Left ankle strength	1st Priority	Patient demonstrates a significantly decreased strength in the left ankle, being able only to slightly lift the foot. There is a predominant affection of the flexors.
Left hip strength	1st Priority	Patient demonstrates a significantly decreased strength in the left hip, being able only to slightly lift the thigh. There is a predominant affection of the flexors.
Left knee strength	1st Priority	Patient demonstrates a significantly decreased strength in the left knee, being able only to slightly lift the leg. There is a predominant affection of the flexors.
Light touch sensitivity	1st Priority	Impaired light touch perception in the left hemibody.
Mingazzini manoeuvre	1st Priority	Decreased strength in the left limb, being able to only slightly lift.
Pain and temperature	1st Priority	Impaired perception of algic stimuli in

sensitivity		the left hemibody.
Pronator drift	1st Priority	Decreased strength in the left limb, being able to only slightly lift.
Pupil light reflex	2nd Priority	Right eye: 4 mm; Right eye light: 2 mm; Left eye light: 2 mm Left eye: 4 mm; Right eye light: 2 mm; Left eye light: 2 mm
Response to simple verbal commands	1st Priority	Patient is able to comprehend command, by closing and opening the eyes and grip and release the hand.
Right ankle strength	1st Priority	Patient demonstrates normal strength, beating resistance to movement in both dorsiflexion and plantar flexion of the ankle.
Right hip strength	1st Priority	Patient demonstrates normal strength, beating resistance to movement in both extension and flexion of the hip.
Right knee strength	1st Priority	Patient demonstrates normal strength, beating resistance to movement in both extension and flexion of the knee.
Tone	Not a priority	Upper limbs Left side - Spasticity Right side - Normal Lower limbs Left side - Spasticity Right side - Normal
Visual fields	1st Priority	Normal visual field in both eyes.
Exposure		
Abdominal auscultation	Not a priority	Normal bowel sounds without abdominal murmurs.
Abdominal palpation	Not a priority	No rigidity. No pain. No guarding or signs of peritoneal irritation. No masses or palpable organomegalies.
Temperature (°C)	1st Priority	36.7°

Dialogues

This is a complete list of all possible dialogue questions (on the left) and the corresponding responses (on the right).

Greeting and Introduction

01. Could you please tell me your name?

Mary. Mary Carter.

1st Priority

02. Do you know where you are right now?

Yees, I aam at the hospitaal.

1st Priority

History Taking

Chief Complaint

03. How are you feeling?

Noot good... I doon't haave muuch strength on my leeft side.

1st Priority

04. Can you tell me what happened?

I remeember waaking up and suuddenly I felt weeak on my leeft side.

1st Priority

05. Can you tell me your date of birth?

15 of Noveember of 1950. I am 72 yeeears old.

1st Priority

06. Do you know what month it is?

Maay.

1st Priority

History of Present Illness

07. When was the last time you had something to eat?

Yesteeerday, at dinner time.

Not a priority

08. How long has it been since the symptoms started?

I woooke up likee this...

1st Priority

09. Are you feeling any pain?

No, not really.

2nd Priority

10. Can you please repeat:
MAMA, TIP-TOP, FIFTY-FIFTY,
THANKS, HUCKLEBERRY,
BASEBALL PLAYER.

Maama, tip-top, fiifty-fifty, thaaanks,
huuckleberry, baaaseball player.

1st Priority

Past Medical/Surgical History

11. Do you have any health
issues?

I haave high blood pressuure and hiip
arthrosis, which I know oof.

1st Priority

Medications and Allergies

12. Are you currently taking
any medication?

Yees, I taake olmesartan 20 mg. And
someetimes paaracetamol when I have
headaaches.

1st Priority

13. Have you had any side
effects from your medication?

No, I don't think so.

Not a priority

14. Do you have any allergies?

No, nothing.

1st Priority

Social History

15. Can you please tell me
what you usually eat?

I eat more or leess everything, but I am
trying also to avooid fatty foods.

Not a priority

16. How active are you?

I don't noormally do muuch exercise. I try to
do some night waalks around my neighbor
sometimes.

Not a priority

17. How often do you
consume alcohol?

I drink twoo glasses of winee with meeals.

Not a priority

18. Do you smoke?

Noo.

Not a priority

19. Have you gained or lost
weight recently?

Noo.

Not a priority

20. Have you been under any
stress lately?

No, not really.

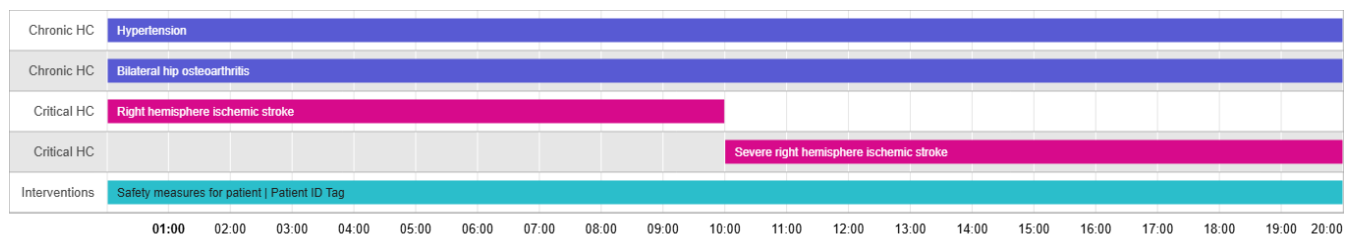
Not a priority

Medical Tests

The items below describe the possible test results in this scenario, including rules that may affect those results.

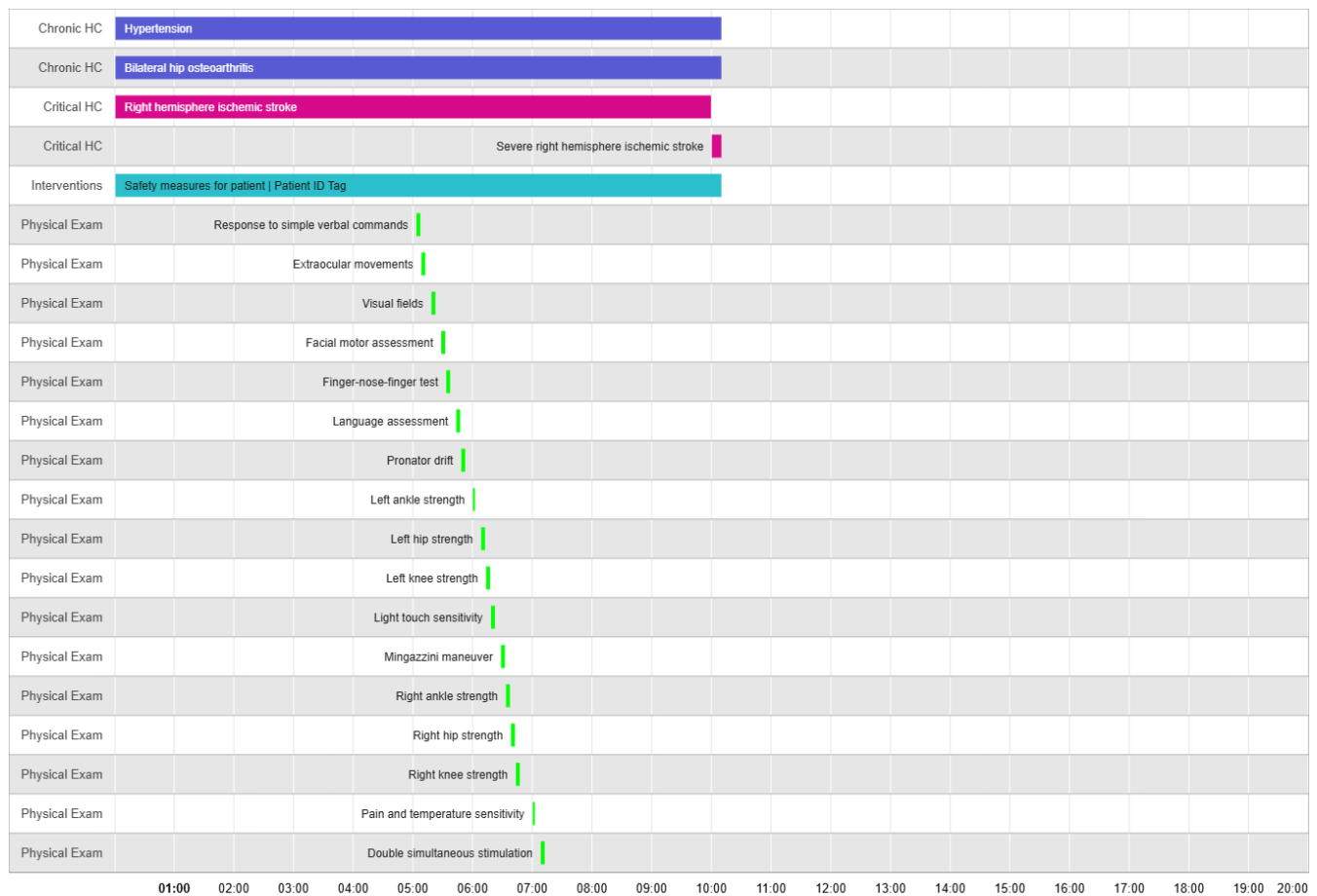
Baseline

This section is automatically generated and predicts scenario behavior assuming no actions by the trainee, which usually represents the worst-case scenario.



Optimal clinical approach

This section previews how the optimal approach resolves the scenario successfully. Comparison with Baseline may be useful to understand the scenario behavior.



Management

The items below represent management actions relevant to solving this clinical scenario. Notes: 1st Priority – Mandatory items required for a successful outcome. 2nd Priority – Optional items considered adequate but not essential. Not a Priority – Unnecessary items that are inadequate or a waste of time.

Question(s) after simulation

Questions presented to the trainee in order to have a more detailed evaluation of the use of the clinical scenario.

Summative Multiple Choice Question:

Question	What is the NIHSS Score?
Correct answer	10
3 Incorrect answer(s)	11
	16
	15

Handoff question

Question presented to the trainee to assess their ability to effectively communicate patient information during a transition of care. This question is optional.

Question	Summarize this Body Interact scenario using a structured handoff pattern.
Review handoff pattern	SBAR (Situation, Background, Assessment, Recommendation): Includes current condition and reason for handoff, relevant history and context, assessment details, and recommended actions. SOAP (Subjective, Objective, Assessment, Plan): Covers

patient-reported symptoms and history, measurable data and findings, clinical impressions and diagnoses, and the treatment plan.

I-PASS (Illness Severity, Patient Summary, Action List, Situation Awareness and Contingency Planning, Synthesis by Receiver): Encompasses illness status, patient background, tasks and actions, potential changes and plans, and confirmation of understanding.

AT-MIST (Age, Time of incident or onset of symptoms, Mechanism of injury/Medical Complaint, Injuries or Inspections head-to-toe, vital Signs, and Treatments): Describes the cause of injury or medical complaint, findings from head-to-toe inspection, vital signs, and treatments provided.

Simulation Ending Messages

Feedback messages shown to the user based on specific successful or unsuccessful approaches, triggered by defined conditional rules.

Title	Type	Message	Conditional
Out of time - NIHSS not done within time	Failure	This is the end of your virtual simulation scenario.	
NIHSS items done	Success	Excellent work! You gathered the full clinical history and ensured comprehensive patient care. This thorough approach guarantees safe and accurate management, allowing you to better meet	

your patient's needs. Keep it
up!

References

1. Lyden P. Using the National Institutes of Health Stroke Scale: A Cautionary Tale. *Stroke*. 2017;48(2):513-519
2. Berge E, Whiteley W, Audebert H, et al. European Stroke Organisation (ESO) guidelines on intravenous thrombolysis for acute ischaemic stroke. *Eur Stroke J*. 2021;6(1):I-LXII.