

Multidiscipline Care for a Patient Living with ALS

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ABSTRACT

The case report describes an interprofessional simulation designed for nursing students, focusing on the complex care of a patient with advanced Amyotrophic Lateral Sclerosis (ALS). The primary learning objectives are for students to analyze the interaction of neurological, respiratory, nutritional, and functional challenges in ALS; prioritize nursing interventions based on patient goals and quality of life; synthesize interdisciplinary assessments into a coordinated care plan; evaluate interventions considering patient preferences and clinical evidence; and formulate an interprofessional plan addressing both immediate and future needs. The simulation involves a 61-year-old patient, James Carter, who faces progressive functional, respiratory, nutritional, communication, and psychosocial challenges due to ALS. Learners must collaborate with a respiratory therapist, dietitian, speech-language pathologist, and palliative care specialist to integrate James's goals and preferences into a patient-centered care plan. This case is useful in a curriculum for developing advanced clinical judgment, interprofessional collaboration, and patient advocacy skills, preparing students for practice in complex healthcare environments.

Keywords ALS; interprofessional collaboration; patient-centered care; advanced clinical judgment; communication; nutrition; respiratory therapy; palliative care; neurology; care coordination

CASE OVERVIEW

A detailed interprofessional simulation focusing on the complex care of a patient with advanced Amyotrophic Lateral Sclerosis (ALS). Learners must demonstrate advanced clinical judgment, prioritization, patient advocacy, communication, care coordination, and interprofessional collaboration.

In this simulation, learners engage with a complex case involving James Carter, a 61-year-old patient with advanced ALS. The scenario requires learners to work collaboratively with multiple healthcare professionals to address James's progressive functional, respiratory, nutritional, communication, and psychosocial challenges. This scenario focuses on providing patient-centric care and integrating James's goals and preferences into the care plan, while balancing involvement and the expertise of various health disciplines.

INTENDED LEARNERS

Nursing student

LEARNING OBJECTIVES

1. Analyze the complex interaction between progressive neurological dysfunction, respiratory compromise, dysphagia, malnutrition, communication impairment, and functional decline in a patient with ALS.
2. Prioritize nursing concerns and interventions based on the patient's current condition, risks, goals, and quality-of-life considerations.
3. Synthesize assessment findings and recommendations from multiple healthcare disciplines to develop a coordinated plan of care.
4. Evaluate the appropriateness of proposed interventions based on patient preferences, clinical evidence, safety, and expected outcomes.
5. Analyze how nutritional, respiratory, communication, and functional changes affect the patient's quality of life and caregiver burden.
6. Formulate an interprofessional plan that addresses both immediate clinical needs and anticipated future needs.
7. Evaluate the effectiveness of interprofessional communication and identify gaps requiring further collaboration.

SIMULATED TEAM

#	Character	Role and background
1	Rohan Nair (Respiratory Therapist)	Male, 45 years old, Indian-American
2	Gina DeLuca (Dietitian)	Female, 50 years old, Italian-American
3	Bradley Foster (Speech-Language Pathologist)	Male, 38 years old, Caucasian
4	Hoa Bui (Palliative Care Specialist)	Female, 42 years old, Vietnamese-American

Rohan Nair (Respiratory Therapist)

Demographics. Male, 45 years old, Indian-American

Personality and mood. Detail-oriented, methodical, and empathetic

Identity, purpose and background. Respiratory Therapist

Simulation behaviour. Focus on James's respiratory muscle weakness, ineffective cough, and secretion clearance. Provide insights on noninvasive ventilation options and future respiratory planning.

Respiratory

- Shallow respirations
- Mildly increased work of breathing
- Weak cough
- Difficulty clearing secretions
- Diminished breath sounds at bases
- Coarse breath sounds intermittently
- No acute respiratory distress at rest

- Increasing use of NIV at night

Hello, welcome to our interdisciplinary rounds for Mr. Carter. Let's take a few minutes for introductions. As the respiratory therapist, my role is to ensure that James's respiratory needs are met effectively.

Gina DeLuca (Dietitian)

Demographics. Female, 50 years old, Italian-American

Personality and mood. Compassionate, pragmatic, and supportive

Identity, purpose and background. Dietitian

Simulation behaviour. Address James's dysphagia, decreased oral intake, and weight loss. Discuss the potential for enteral nutrition and quality of life related to eating.

Swallowing/Nutrition

- Difficulty swallowing thin liquids
- Occasional coughing during meals
- Prolonged mealtimes
- Decreased appetite
- Requires assistance with feeding
- Reports fatigue during meals
- Recent 13-lb unintentional weight loss

Hi there, I'm the dietitian here to support James's nutritional needs and discuss our options.

Bradley Foster (Speech-Language Pathologist)

Demographics. Male, 38 years old, Caucasian

Personality and mood. Analytical, patient, and communicative

Identity, purpose and background. Speech-Language Pathologist

Simulation behaviour. Evaluate James's dysarthria and dysphagia. Support his communication needs with the eye-gaze device and explore alternative communication strategies.

Neurological

- Alert and oriented 4
- Significant generalized weakness
- Upper and lower extremity weakness
- Dysarthria
- Cognition intact
- Able to follow commands
- Uses eye-gaze communication device
- Increased fatigue with prolonged communication

Hello, I'm here to help with both James's swallowing and communication challenges.

Hoa Bui (Palliative Care Specialist)

Demographics. Female, 42 years old, Vietnamese-American

Personality and mood. Calm, insightful, and compassionate

Identity, purpose and background. Palliative Care Specialist

Simulation behaviour. Introduce palliative care as an additional layer of support, addressing symptom management, quality of life, and advance care planning.

James reports:

"I'm tired of being dependent on everyone."

He indicates that maintaining communication and spending time with his family are very important to him.

He is concerned about:

- Losing his ability to communicate
- Becoming completely dependent
- Difficulty breathing
- Being a burden to Maria
- What future respiratory support might look like
- Whether he would want invasive mechanical ventilation

Palliative Care Recommendations

- Continue symptom management
- Support communication
- Explore patient values and goals
- Discuss advance care planning
- Provide caregiver support
- Clarify understanding of disease trajectory
- Continue palliative care alongside disease-directed treatment

Important: Palliative care does not automatically mean hospice.

Family / Caregiver Information

Maria Carter -- Wife

Maria is James's primary caregiver.

She is highly involved and knowledgeable about his baseline.

She reports:

"I know him better than anyone. I know what he would want."

She is worried about:

- James's increasing dependence
- His weight loss
- His breathing
- Her ability to continue providing care at home
- Whether he will need a feeding tube
- Whether he will eventually need a ventilator

She becomes emotional when palliative care is mentioned.

She states:

"Why are we talking about palliative care? Are you saying there's nothing else we can do?"

Later she says:

"I don't want him to suffer, but I don't want to give up on him."

Important: Maria is not intentionally obstructive. She is a loving caregiver experiencing anticipatory grief and caregiver burden.

Patient Preferences

James communicates through his eye-gaze device.

When asked what is most important to him, he identifies:

1. Remaining able to communicate
2. Spending time with Maria and his family
3. Maintaining as much independence as possible
4. Avoiding unnecessary suffering
5. Being included in decisions about his care

When asked about future interventions, James indicates that he wants more information before making decisions about:

- Feeding tube placement
- Tracheostomy
- Long-term mechanical ventilation
- Future hospitalization

Do not establish a predetermined answer for these decisions.

The purpose is to have learners recognize the need for informed, patient-centered decision-making.

Advance Care Planning

Current Status

- Full Code
- No documented healthcare power of attorney identified in current chart
- No documented living will available
- Goals-of-care conversation initiated
- Patient currently has decision-making capacity

Nursing Consideration

The learner should recognize that Maria's role as spouse does not replace James's voice while James retains decision-making capacity.

Hi, I'm part of the palliative care team, here to provide additional support for James and his family.

ASSESSMENT ITEMS

Item 1. Why is it important to include palliative care in the management of ALS? (*free text, 3 points*)

Answer and rubric. Palliative care provides additional support for symptom management, improving quality of life, and assists in advance care planning alongside ongoing treatment.

Item 2. The patient is ordered NPO pending a swallow evaluation but requests his scheduled oral medications. What is the nurse's best action? (*multiple choice, 1 point*)

- A. Administer the medications with a small amount of water
- B. Crush the medications and administer them in applesauce
- C. Hold the medications and collaborate with the provider/pharmacist regarding alternative routes

- D. Ask the patient's spouse to administer the medications

Answer and rubric. Hold the medications and collaborate with the provider/pharmacist regarding alternative routes

Item 3. After respiratory interventions, which finding provides the strongest evidence that the patient's ventilatory status is worsening? (*multiple choice, 2 points*)

- A. SpO at 93% on 2L Nasal Cannula
- B. Heart rate of 88 beats/min
- C. Improvement of mental status
- D. PaCO : 68 mmHg

Answer and rubric. PaCO : 68 mmHg

Item 4. What role does the dietitian play in James's care? (*free text, 3 points*)

Answer and rubric. The dietitian assesses nutritional status and provides options for managing dysphagia and weight loss, considering quality of life and patient preferences.

Item 5. Which finding most strongly suggests that the patient's current respiratory problem represents an acute deterioration rather than expected progression of ALS? (*multiple choice, 2 points*)

- A. Progressive muscle weakness over several months
- B. Dependence on assistance for activities of daily living
- C. New right lower-lobe infiltrate
- D. Continued use of an assistive communication device

Answer and rubric. New right lower-lobe infiltrate

DEBRIEFING DIMENSIONS

Clinical Judgment (narrative)	Ability to assess and prioritize patient needs while synthesizing information from multiple disciplines.
Patient Advocacy (narrative)	Effectiveness in advocating for the patient's preferences and autonomy despite communication barriers.
Interprofessional Collaboration (narrative)	Skill in integrating recommendations from various healthcare professionals into a coherent care plan.
Communication Skills (narrative)	Effectiveness in communicating with both the patient and family, ensuring clear and respectful exchanges.
Ethical Considerations (narrative)	Awareness and handling of ethical issues related to patient autonomy and family involvement.

COMPETENCY ALIGNMENT: AACN ESSENTIALS 2021

Progression level. 3 - Ready for Practice

The case requires learners to demonstrate advanced clinical judgment, interprofessional collaboration, and patient

advocacy, which are indicative of readiness for practice.

Domain 1: Knowledge for Nursing Practice

Code	Competency	Rationale
1.1	Integrate knowledge from nursing and other disciplines	The case involves synthesizing assessment findings and recommendations from multiple healthcare disciplines to develop a coordinated plan of care.
1.4	Translate evidence into practice	Learners must evaluate the appropriateness of proposed interventions based on clinical evidence and expected outcomes.

Domain 2: Person-Centered Care

Code	Competency	Rationale
2.1	Provide holistic, individualized care	The case requires prioritizing nursing concerns and interventions based on the patient's condition, risks, goals, and quality-of-life considerations.
2.3	Incorporate patient preferences and values	Learners must advocate for a patient whose communication is impaired while incorporating family perspectives.

Domain 6: Interprofessional Partnerships

Code	Competency	Rationale
6.1	Communicate effectively across professions	The case emphasizes the need for effective interprofessional communication and identifying gaps requiring further collaboration.
6.2	Collaborate in team-based care	Learners must justify the involvement of various healthcare professionals in the patient's care.

Domain 9: Professionalism

Code	Competency	Rationale
9.1	Demonstrate ethical behavior	The case involves handling ethical issues related to patient autonomy and family involvement.

COMPETENCY ALIGNMENT: AACN2026

Progression level. 2 - Advanced Beginner

The case involves complex clinical judgment, interprofessional collaboration, and advanced patient advocacy, which are typically addressed in advanced-level nursing education.

Domain 1: Knowledge for Nursing Practice

Code	Competency	Rationale
1.3	Demonstrate clinical judgment founded on a broad knowledge base.	The simulation requires learners to demonstrate advanced clinical judgment in managing the complex care needs of a patient with ALS.

Domain 2: Person-Centered Care

Code	Competency	Rationale
2.5	Develop a plan of care.	Learners must synthesize assessment findings and recommendations from multiple disciplines to develop a coordinated plan of care.
2.9	Provide care coordination.	The case emphasizes the importance of coordinating care among various healthcare professionals to address the patient's complex needs.

Domain 5: Quality and Safety

Code	Competency	Rationale
5.2	Contribute to a culture of patient safety.	Evaluating the appropriateness of proposed interventions based on patient preferences and clinical evidence is crucial for ensuring patient safety.

Domain 6: Interprofessional Partnerships

Code	Competency	Rationale
6.1	Communicate in a manner that facilitates a partnership approach to quality care delivery.	The case requires effective communication and collaboration with multiple healthcare disciplines to deliver quality care.
6.3	Use knowledge of nursing and other professions to address healthcare needs.	Learners must justify the involvement of various healthcare professionals in the patient's care, demonstrating an understanding of interprofessional roles.

SIMULATION FORMAT

Platform	Figment TeamLab
Format	Four-character interprofessional team simulation
Team size	4 participants
Synthesised voice	alloy
Case first authored	August 2026

The interactive version of this case runs on the Figment TeamLab platform. This article is the archival record of its content at the time of publication.

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