South American Publishing

SAP Nursing Depths Series. 2026;5:430
doi: 10.62486/nds2026430

SHORT COMMUNICATION

Critical care nursing for the person at risk of organ failure: a conceptual integration for advanced practice

Cuidados de enfermería en cuidados críticos para la persona con riesgo de falla orgánica: una integración conceptual para la práctica avanzada

Isabel Rabiais[1]
Ricardo Sousa Mestre[1]

[1] Escola Superior de Saúde Atlântica, Lisboa, Portugal.

Submitted: 01-05-2026 | Revised: 20-06-2026 | Accepted: 26-07-2026 | Published: 02-08-2026

Corresponding Author: Isabel Rabiais

ABSTRACT

Introduction: Critical care nursing for people with actual or impending organ failure demands advanced clinical reasoning, continuous surveillance and rapid decision-making. This brief report integrates national and international frameworks that underpin the Portuguese specialist nurse in Medical-Surgical Nursing – Person in Critical Situation. Methods: Narrative, integrative synthesis of key documents (2016–2025): the AACN Synergy Model for Patient Care, Society of Critical Care Medicine guidelines for Family-Centred Care, Meleis' Transitions Theory and the Portuguese specialist competency regulation. We also drew on recent reviews addressing outcomes sensitive to specialised nursing. Results: Convergence emerged across frameworks: (i) alignment between patient characteristics and nurse competencies (synergy) to guide prioritisation; (ii) systematic inclusion of the family in presence, communication, participation and shared decision-making; and (iii) the experience of critical illness as an individual and family transition requiring clinical and relational support. In Portugal, the specialist nurse operates across the emergency department, intensive and intermediate care, rapid response systems, transport and post-acute transitions, preventing, identifying and managing organ dysfunction while safeguarding humanisation and safety. Conclusions: The integrated conceptual base substantiates advanced practice roles for Portuguese specialist nurses in risk detection, organ support and shared decision-making with families. Organisational enablers (clear role differentiation, staffing and protocols) are needed to fully operationalise this model and further quantify nursing-sensitive outcomes.

Keywords: Critical care; Organ failure; Advanced practice nursing; Family-centred care; Transitions theory; Synergy model.

RESUMEN

Introducción: La enfermería en cuidados críticos para personas con falla orgánica real o inminente exige razonamiento clínico avanzado, vigilancia continua y decisiones rápidas. Este informe breve integra marcos nacionales e internacionales que sustentan al enfermero especialista portugués en Enfermería Médico-Quirúrgica – Persona en Situación Crítica. Métodos: Síntesis narrativa e integradora de documentos clave (2016–2025): AACN Synergy Model for Patient Care, directrices de la Society of Critical Care Medicine sobre atención centrada en la familia, Teoría de las Transiciones de Meleis y el reglamento portugués de competencias del especialista. Se incluyeron revisiones recientes sobre resultados sensibles a la enfermería especializada. Resultados: Surgió convergencia entre marcos: (i) alineación entre características del paciente y competencias del enfermero (sinergia) para priorizar; (ii) inclusión sistemática de la familia en presencia, comunicación, participación y decisión compartida; y (iii) vivencia de la enfermedad crítica como transición individual y familiar que requiere apoyo clínico y relacional. En Portugal, el especialista actúa en urgencias, cuidados intensivos e intermedios, equipos de respuesta rápida, transporte y transición posaguda, previniendo, identificando y gestionando la disfunción orgánica con humanización y seguridad. Conclusiones: La base conceptual integrada fundamenta funciones de práctica avanzada del enfermero especialista portugués en detección del riesgo, soporte orgánico y decisión compartida con las familias. Se requieren facilitadores organizativos (diferenciación de roles, dotación y protocolos) para operacionalizar plenamente este modelo y cuantificar mejor los resultados sensibles a la enfermería.

Palabras clave: Cuidados críticos; Falla orgánica; Práctica de enfermería avanzada; Atención centrada en la familia; Teoría de las Transiciones; Modelo de Sinergia.

INTRODUCTION

Critical illness represents one of the most complex and uncertain experiences in health care, characterised by abrupt physiological instability, rapid clinical deterioration and the imminent risk of single or multiple organ failure. Under these circunstances, time-sensitive decisions require permanent clinical surveillance, subtle interpretation of evolving pathophysiological signals and rapid, autonomous decision-making supported by advanced reasoning(1). Technology alone does not ensure safety; the determining factor is the nurse's competence to interpret clinical information, anticipate deterioration and intervene in a timely manner.

Advanced practice nursing in critical care, therefore, exceeds the merely technical manipulation of life-support technologies. It integrates diagnostic reasoning, prioritisation, complexity management, therapeutic plan and relational competencies such as communication, advocacy and family support. Research consistently demonstrates that early recognition of deterioration and advanced nursing surveillance prevent cardiac arrest and avoidable mortality(1-3).

In Portugal, the specialist nurse in Medical-Surgical Nursing – Person in Critical Situation is legally recognised as competent for autonomous intervention in life-threatening physiological instability(4). This recognition acknowledges the specialist as a clinician with capacity for advanced reasoning and independent clinical judgement. However, although the role is legally defined, the conceptual visibility of the practice remains diffuse. Nurses frequently justify their actions through experience and intuition, rather than through conceptual models that articulate why and how advanced clinical reasoning occurs.

To address this gap, this article integrates four conceptual frameworks that, combined, make explicit the theoretical foundation of specialist nursing practice in critical illness: (1) the Synergy Model, which articulates the relationship between patient characteristics and nurse competencies(5); (2) Family-Centred Care guidelines (SCCM), which operationalise communication, participation and shared decision-making in critical illness(1, 5-7); (3) Meleis' Transitions Theory, which frames critical illness as a disruptive transition requiring anticipatory relational support(9); and (4) the Portuguese regulation that formalises autonomous decision-making of the specialist nurse(4). By integrating these frameworks, it becomes possible to demonstrate that advanced critical care nursing is not improvised — it is theory-guided, evidence-supported and legally legitimised.

METHODS

A conceptual narrative synthesis was undertaken to integrate theoretical, regulatory and empirical evidence underpinning advanced nursing practice in critical care. The process followed three sequential stages: identification of sources, selection and eligibility, and analytical integration.

First, a structured search was performed in PubMed, Scopus and CINAHL using the terms advanced practice nursing, critical care, clinical deterioration, family-centred care, transitions theory, and synergy model. The search was limited to documents published between 2016 and 2024 in English, Spanish or Portuguese. Additional sources were identified through manual reference checking (snowballing technique). Inclusion criteria were: (a) theoretical or regulatory documents relevant to advanced practice nursing; (b) guidelines or systematic reviews related to family involvement or surveillance in critical illness; and (c) primary studies evaluating nursing-sensitive outcomes in critical care. Editorials and opinion papers without conceptual consistency were excluded.

Four key reference categories were purposefully selected for conceptual integration: (a) the Synergy Model from the American Association of Critical-Care Nurses (AACN), which specifies patient characteristics and nurse competencies(5); (b) the Family-Centred Care guidelines from the Society of Critical Care Medicine (SCCM), supporting shared decision-making and structured communication(1, 5-6); (c) Meleis' Transitions Theory, which frames critical illness as a destabilising transition requiring relational support(9); and (d) the Portuguese Regulation of Specialist Nurses, which formally recognises autonomous clinical decision-making in physiological instability(4).

Data were extracted and coded deductively according to three analytical dimensions:

1. conceptual alignment with the role of the specialist nurse;
2. clinical and organisational relevance;
3. implications for advanced practice and patient outcomes.

Recent empirical evidence demonstrating the impact of advanced practice nurses on deterioration prevention and mortality reduction (2-3) was incorporated to strengthen the interpretive synthesis.

RESULTS

The conceptual integration revealed that advanced clinical reasoning in critical care nursing is supported by complementary theoretical and regulatory frameworks. The Synergy Model was identified as the central structure through which specialist nurses operationalise autonomous decision-making(1). According to this model, optimal outcomes occur when patient characteristics—such as instability, vulnerability, complexity and resilience—are matched with the nurse's competencies, including clinical evaluation, systems thinking, advocacy and caring practices(5). In critical illness, where physiological instability is sudden and unpredictable, this alignment becomes crucial. The model positions surveillance and anticipatory reasoning as core clinical skills rather than optional or intuitive behaviours. Empirical evidence supports this alignment: continuous monitoring and advanced nursing situational awareness are strongly associated with prevention of in-hospital cardiac arrest and reduced mortality (2,3). Thus, the Synergy Model provides a clinical justification for advanced reasoning based on complexity, rather than a merely procedural response to deterioration.

The findings also revealed that critical illness extends beyond the physiological domain and constitutes a relational and emotional crisis for families. The Society of Critical Care Medicine (SCCM) guidelines formalise relational care into structured components—presence, communication, participation and shared decision-making(1, 5-7). These components allow nurses to integrate families as active partners rather than passive observers. Interventions guided by these principles have demonstrated reductions in anxiety, decisional conflict and post-intensive care psychological distress(6-7). In daily practice, this translates into nurses mediating communication between the clinical team and the family, ensuring comprehension of prognosis and facilitating values-based decisions, particularly when goals of care need to be reframed. In doing so, the nurse assumes the role of care mediator, safeguarding dignity and shared meaning throughout the illness trajectory.

The interpretive synthesis further demonstrated that critical illness constitutes a disruptive life transition, characterised by uncertainty, loss of control and psychological disequilibrium. From the perspective of Meleis' Transitions Theory, such disruptive events require support through information, emotional validation and anticipatory guidance(9). The nurse's role is not restricted to clinical rescue; it includes preparing patients and families for new roles, altered expectations and decision-making in ambiguity. Through this theoretical lens, nursing assumes an active role in facilitating healthy transitions, restoring meaning and supporting adaptation.

Finally, the conceptual integration is strengthened by the Portuguese Regulation of Specialist Nurses, which clearly states that specialist nurses in Medical-Surgical Nursing – Person in Critical Situation are authorised to act autonomously in situations of physiological deterioration and life-threatening instability(4). While clinical intuition and experience may guide urgent care actions, regulation legitimises the nurse as an autonomous professional capable of leading early escalation of care and preventing avoidable organ failure. The regulatory framework thus functions as a structural enabler that aligns legal autonomy with theoretical models and empirical evidence.

Overall, the synthesis shows that the Synergy Model explains how the nurse mobilises clinical reasoning; Family-Centred Care clarifies how relational processes are structured; Transitions Theory justifies why relational and emotional support are essential during critical illness; and Portuguese regulation confirms that the nurse has legal authority to act. Together, these findings reveal that advanced practice nursing in critical care is a theoretically grounded, evidence-based and legally legitimised practice—one that is central to patient safety, prevention of organ failure and improvement of family experience.

DISCUSSION

The integration of theoretical, regulatory and empirical evidence strengthens the conceptual identity of advanced nursing practice in critical care and reinforces the idea that the specialist nurse plays an autonomous, clinically relevant and theoretically grounded role in preventing physiological deterioration. The synthesis of the four frameworks contributes to dismantling a persistent misconception that the work of specialist nurses is an extension of medical practice or that advanced decision-making results merely from accumulated experience. Instead, the findings demonstrate that advanced practice nursing is intentional, structured and conceptually justified.

The Synergy Model provides the epistemic foundation for advanced reasoning in critical care. By requiring the matching of patient characteristics to nurse competencies, it clarifies why specialist nurses must adapt their decision-making to clinical instability and complexity(2). This

model not only legitimises autonomous actions, it articulates how decision-making occurs through continuous assessment, anticipation and prioritisation. This shifts the focus from a task-based practice to a competency-driven practice, where clinical outcomes are sensitive to the quality of nursing judgement rather than the mere execution of interventions. Advanced nursing surveillance has been empirically linked to reduction of preventable deterioration events and lower mortality rates (2,3), reinforcing that these competencies have measurable clinical impact.

While the Synergy Model explains clinical reasoning, the Family-Centred Care guidelines operationalise how specialist nurses interact with families in contexts of uncertainty and life-threatening illness(6-8). The nurse becomes a mediator of meaning: translating technical language, facilitating shared decision-making and managing expectations(1). These practices reduce emotional burden, decisional conflict and post-intensive care psychological sequelae(6-7). Relational work in critical care is not peripheral—it is a fundamental component of patient safety and ethical care. The specialist nurse therefore operates simultaneously in two spheres: clinical complexity and relational complexity.

This relational dimension is amplified when examined through Meleis' Transitions Theory, which recognises that critical illness triggers a disorienting transition marked by uncertainty, vulnerability and psychological disequilibrium(9). The specialist nurse supports this transition by providing anticipatory guidance, validating emotions and helping patients and families construct meaning from sudden changes. Thus, the nurse's role extends beyond stabilising organ dysfunction to stabilising the person and the family system facing existential threat. This theoretical framing elevates relational practice to the level of legitimate expertise rather than a "soft skill".

The role consolidation becomes explicit when the conceptual models intersect with the Portuguese Regulation of Specialist Nurses, which formally recognises the autonomy of the specialist nurse in situations of emergent physiological instability(3, 10-12). This regulatory framework confirms what theory and evidence already support: the specialist nurse is not a passive executor but a clinical leader responsible for early recognition, escalation of care and prevention of organ failure. When theory (Synergy; FCC; Transitions) and legislation (Regulation) converge, they create a powerful disciplinary statement: critical care nursing has autonomy because it has conceptual foundation.

The integration of these frameworks reveals a significant implication for the discipline: advanced critical care nursing is a knowledge-based practice, not a task-based role. The added value of the specialist nurse resides not in performing more interventions, but in thinking differently—mobilising competencies that influence outcomes before physiological deterioration occurs. This conceptual clarity improves professional visibility, strengthens advocacy for advanced nursing roles and provides a path for future research on the measurement of nursing-sensitive outcomes such as avoided complications, reduced decision-making conflict and improved patient/family experience.

CONCLUSIONS

This synthesis demonstrates that advanced nursing practice in critical care is not an extension of routine care but a theoretically grounded, evidence-based and legally legitimised field of professional autonomy. The articulation of the Synergy Model, Family-Centred Care guidelines, Transitions Theory and the Portuguese specialist nurse regulation reveals that specialist nurses act through intentional clinical reasoning, anticipatory decision-making and structured relational support. These frameworks converge to show that specialist nurses prevent deterioration not only by performing interventions, but by thinking critically, interpreting complexity and acting autonomously.

By making the conceptual foundations explicit, this work contributes to the disciplinary visibility of critical care nursing and challenges the persistent misconception that advanced practice emerges solely from experience or intuition. Instead, advanced practice is shown to be a knowledge-based clinical activity that influences patient and family outcomes and improves quality and safety on healthcare. The findings reinforce that specialist nurses act as clinical leaders who integrate patient complexity, relational needs and ethical decision-making when organ failure is imminent.

Further research should focus on measuring nursing-sensitive outcomes associated with autonomous intervention—such as prevented deterioration, reduction of avoidable complications, length of stay, decisional conflict and family experience—to strengthen the evidence base and support policy development. The discipline of nursing benefits when its conceptual contributions become visible: advanced critical care nursing saves lives not only through action, but through knowledge.

REFERENCES

1. Jafari Pour F, Watson R, Jafaripour E, Jafarian R. The roles and responsibilities of advanced practice nurses in intensive care units: a scoping review. Enferm Intensiva (Engl Ed). 2024 Oct-Dec;35(4):e31-e40. doi:10.1016/j.enfie.2024.06.002
2. Zhang RS, Zhang P, Bailey E, Ho A, Rhee A, Xia Y, et al. Comparing outcomes between advanced practice providers and housestaff teams in the cardiac intensive care unit. JACC Adv. 2024;3(11):101312. doi:10.1016/j.jacadv.2024.101312World Health Organization. Critical Care Workforce Policy Brief. Geneva: WHO; 2023.
3. Ordem dos Enfermeiros (Portugal). Regulamento do Enfermeiro Especialista em Enfermagem Médico-Cirúrgica. Lisboa: OE; 2019.
4. Needham DM, Davidson J, Cohen H, Hopkins RO, Weinert C, Wunsch H, et al. Improving long-term outcomes after critical illness. Lancet. 2019;394(10213):1713-1725. doi:10.1016/S0140-6736(19)32682-5
5. Davidson JE, Aslakson RA, Long AC, Puntillo KA, Kross EK, Hart J, et al. Guidelines for family-centred care in the neonatal, paediatric, and adult ICU. Crit Care Med. 2017;45(1):103-128. doi:10.1097/CCM.0000000000002169
6. Latour JM, Coombs M. Family-centred care in the intensive care unit: More than just flexible visiting hours. Intensive Crit Care Nurs. 2019;50:1-2. doi:10.1016/j.iccn.2018.10.002.
7. Duong J, Wang G, Lean G, Slobod D, Goldfarb M. Family-centered interventions and patient outcomes in the adult intensive care unit: A systematic review of randomized controlled trials. J Crit Care. 2024;83:154829. doi:10.1016/j.jcrc.2024.154829Meleis AI. Transitions Theory: Middle Range and Situation Specific Theories in Nursing Research and Practice. New York: Springer Publishing Company; 2010.
8. Yamaguchi Y, et al. Advanced practice nurse competencies to promote quality care in emergency and critical care settings: integrative review. Int J Nurs Pract. 2024;30(2):e13205. doi:10.1111/ijn.13205
9. Bauernfeind L, et al. The impact of advanced practitioners on patients in acute care: a mini-review. Front Emerg Med.2024;ACRM:1399779. doi:10.3389/femer.2024.1399779
10. Notarnicola I, et al. A Systematic Review of Nursing Competencies: Addressing the Challenges of Evolving Healthcare Systems and Demographic Changes. Clin Pract.2025;15(2):56. doi:10.3390/clinpract15020056

FUNDING

The authors did not receive financing for the development of this research.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTIONS

Conceptualization: Isabel Rabiais, Ricardo Sousa Mestre.
Data curation: Isabel Rabiais, Ricardo Sousa Mestre.
Formal analysis: Isabel Rabiais, Ricardo Sousa Mestre.
Research: Isabel Rabiais, Ricardo Sousa Mestre.
Methodology: Isabel Rabiais.
Project management: Isabel Rabiais, Ricardo Sousa Mestre.
Software: Ricardo Sousa Mestre.
Supervision: Ricardo Sousa Mestre.
Validation: Isabel Rabiais
Drafting - original draft: Isabel Rabiais, Ricardo Sousa Mestre.
Writing - proofreading and editing: Isabel Rabiais, Ricardo Sousa Mestre.