

Innovations in Pediatric Emergency Nursing: Validated Clinical Scoring Systems in Advanced Nursing Directives

Abstract

Integrating validated clinical scoring systems into nursing care in the pediatric emergency department (PED) is crucial for improving patient outcomes and promoting standardized care delivery. These scoring systems provide objective tools that allow healthcare professionals, particularly nurses, to assess and monitor patients systematically. By assigning numerical scores to various clinical parameters, nurses can prioritize care, recognize deterioration, and initiate appropriate interventions promptly. This abstract explores the significance of integrating validated clinical scoring systems into nursing practice within the PED, highlighting the benefits of triage accuracy, monitoring effectiveness, care standardization, enhanced communication, and opportunities for education and research. By incorporating advanced nursing directives that utilize these scoring systems, nurses can optimize patient outcomes, improve resource utilization, and contribute to the overall quality of care in the pediatric emergency department.

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Introduction

In the fast-paced environment of the pediatric emergency department (PED), healthcare providers must make critical decisions swiftly and accurately. The incorporation of validated clinical scoring systems into nursing care has emerged as a powerful tool to enhance patient outcomes, improve resource utilization, and promote standardized care delivery [1]. Advanced nursing directives that integrate these scoring systems provide valuable guidance to nurses, enabling them to prioritize care, recognize deterioration, and initiate appropriate interventions promptly. This article explores the significance of integrating validated clinical scoring systems into nursing practice within the pediatric emergency department.

Internationally, much attention has been focused on long wait times in emergency departments and the inaccessibility of acute inpatient hospital beds. Inpatient overcapacity and the overutilization of emergency facilities as primary care centers are thought by some to be a driving force behind ED overcrowding [2]. As a result, health care practitioners are working to improve patient care by adopting progressive strategies such as nurse-initiated protocols and Advanced Nursing Directives. Like many other health care centres, the Pediatric Emergency Department at the Alberta Children's Hospital has seen significant growth in patient visits along with the corresponding increase in ED length of stay. Focusing on departmental flow, the development and implementation of Advanced Nursing Directives and their corresponding patient care maps have been successful in our PED. Intentionally targeting 3 of the most common presentations to the PED, we developed processes in which children meeting unit-based nursing protocol criteria receive evidence-based, timely care from nursing staff prior to being assessed by an emergency physician. Extensive academic collaboration reviewing the existing clinical scoring systems and current research pertaining to these common pediatric medical complaints were referenced to construct hospital based care maps. The purpose of this paper is to review the theoretical constructs behind nurse-driven protocols [3], the evidence supporting clinical scoring systems, and how the integration of the two form Advanced Nursing Directives (ANDs), which have the potential to significantly improve patient care outcomes, administrative metrics, and overall patient and

caregiver satisfaction for children presenting to the ED.

The need for validated clinical scoring systems

Validated clinical scoring systems serve as objective tools that enable healthcare professionals, including nurses, to assess and monitor patients systematically. These systems are developed based on robust research and statistical analysis, utilizing variables such as vital signs, physical examination findings, and laboratory results [4]. By assigning numerical scores to various parameters, these systems allow for the quantification of a patient's illness severity, risk stratification, and response to treatment.

Health-care-based clinical pathways, or care maps, are one method of practice standardization that has been shown to improve patient care outcomes. Pathways are evidence-based, structured algorithms that visually direct patient care provided by a team of health care professionals. As many pathways are developed by multidisciplinary practitioners involved in direct patient care, these guidelines can act as patient-focused and site-specific tools. Several care maps outline multispecialty, best-practice guidelines for a patient's overall experience, relying on the collaboration of current research in specific care areas to create an effective overall pathway for patient care [5]. These guidelines standardize care for a patient from their admission to the hospital through to their discharge home, reducing practitioner care variability, improving inter- and intra-department communication, and ideally fostering high-quality patient outcomes. There are, of course, certain factors that may prevent a health care provider from following a clinical guideline. For example, children who are immune compromised may not present with the anticipated features of appendicitis. Reasons for exclusion should be documented on the clinical pathway to alert staff and should be a part of pathway development and staff education sessions prior to its implementation. Once a health care professional determines that a patient meets the specific criteria to follow a clinical pathway, the care document should guide care and offer possible variations as a result of patient response to treatment [6]. For example, if a nurse determines that a patient meets the criteria for a nurse-initiated protocol or Advanced Nursing Directive at the beginning of a clinical pathway and

administers the suggested medications, the nurse should have the ability to assess that patient's response and offer appropriate care.

Integration into nursing care

Triage: The initial triage process in the PED involves rapid assessment to determine the urgency of care required. Validated clinical scoring systems, such as the Pediatric Early Warning Score (PEWS) or the Modified Early Warning Score (MEWS), provide nurses with a structured approach to identify patients at higher risk for deterioration. By assessing vital signs, behavior, and other clinical parameters, nurses can assign appropriate triage categories and allocate resources efficiently [7].

Monitoring: Continuous monitoring of patients in the PED is crucial to detect early signs of deterioration. Clinical scoring systems like the Pediatric Risk of Admission (PRISA) score or the Clinical Dehydration Scale (CDS) aid nurses in objectively assessing patients' severity of illness and monitoring their response to interventions. These tools enable nurses to identify subtle changes in clinical status and intervene promptly to prevent deterioration.

Standardization: Integrating validated clinical scoring systems promotes standardized care delivery. By following evidence-based guidelines and protocols derived from these systems, nurses can ensure consistency in care across different healthcare providers [8]. This consistency reduces variability and minimizes the likelihood of errors, leading to improved patient outcomes.

Communication: Validated clinical scoring systems facilitate effective communication among healthcare providers. By using standardized scoring systems, nurses can succinctly convey patients' clinical status, allowing for better interprofessional collaboration and seamless transitions of care. This streamlined communication enhances patient safety and reduces the risk of misinterpretation or oversight.

Nurses and other members of the health care team should, of course, feel empowered to use critical thinking skills and to act as patient advocates if they feel the care their patient is receiving is ineffective. If expected outcomes of patient care are not reached while a patient is following a clinical pathway, the team should feel comfortable entertaining other intervention strategies. When a clinical pathway is followed, team-based collaboration and effective communication

remain important factors in patient care. One glaring critique of the use of patient care maps suggests that these guidelines can lead to cookbook medicine [9]. Here, the importance of using performance feedback loops, both in terms of patient outcomes and impact on/perception of health care providers, should be emphasized. Clinical pathways should be updated to reflect practice outcomes. Documentation of patient response to care is one important method of feedback to assist with future improvements to clinical pathways.

Education and research: The integration of validated clinical scoring systems into nursing practice offers opportunities for education and research. By incorporating these systems into nursing curricula and training programs, future nurses can acquire the necessary skills to assess, document, and interpret patient data accurately. Additionally, research efforts can utilize these scoring systems to evaluate the effectiveness of interventions, identify areas for improvement, and develop evidence-based practices [10].

Conclusion

Integrating validated clinical scoring systems into nursing care within the pediatric emergency department has numerous benefits. These systems enhance the accuracy and efficiency of triage, facilitate monitoring and early recognition of deterioration, standardize care delivery, improve communication, and provide opportunities for education and research. By incorporating advanced nursing directives that utilize these scoring systems, nurses can optimize patient outcomes, promote interprofessional collaboration, and contribute to the overall quality of care in the pediatric emergency department.

References

1. Furman CD, Rayner AV, Tobin EP. Pneumonia in older residents of long-term care facilities. *American Family Physician*. 70, 1495–1500(2004).
2. El-Solh AA, Niederman MS, Drinka P. Nursing home acquired pneumonia: a review of risk factors and therapeutic approaches. *Current Medical Research and Opinion*. 26, 2707–2714(2010).
3. Mills K, Nelson AC, Winslow BT et al. Treatment of nursing home-acquired pneumonia. *American Family Physician*. 79, 976–982(2009).
4. Sarin J, Balasubramaniam R, Corcoran AM et al. Reducing the risk of aspiration pneumonia among elderly patients in long-term care facilities through oral health interventions. *Journal of the American Medical Directors Association. Current Medical Research and Opinion*. 9, 128–135(2008).
5. Marik PE, Kaplan D. Aspiration pneumonia and dysphagia in the elderly. 124, 328–336(2003).
6. Zimm S, Wampler GL, Stablein D et al. Intracerebral metastases in solid-tumor patients: natural history and results of treatment. *Cancer*. 48, 384–394(1981).
7. Grunfeld E, Coyle D, Whelan T et al. Family caregiver burden: results of a longitudinal study breast cancer patients and their principal caregivers. *CMAJ*. 170, 1795–1801(2004).
8. Brouwers MC, Chambers A, Perry J et al. Neuro-oncology Disease Site Group. Can surveying practitioners about their practices help identify priority clinical practice guideline topics? *BMC Health Serv Res*. 3, 23-25(2003).
9. Lee ST, Lui TN, Chang CN et al. Prophylactic anticonvulsants for prevention of immediate and early postcraniotomy seizures. *Surg Neurol*. 3, 361–364(1989).
10. Mintz AH, Kestle J, Rathbone MP et al. A randomized trial assess the efficacy of surgery to radiotherapy in patients with a single brain metastasis. *Cancer*. 78, 1470–1476(1996).