



EDITORIAL

Adapting international pediatric and neonatal cardiopulmonary resuscitation guidelines for use in Spain: an inescapable need

Adaptar a nuestro entorno las recomendaciones internacionales en reanimación cardiopulmonar pediátrica y neonatal: una necesidad ineludible

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The local adaptation of international recommendations is a widely implemented practice in many strategic sectors, such as road safety or civil defense, where international consensus processes define general principles, while their application to regional contexts requires a thorough analysis of local legislation, resources and specific risks.

Medical practice is no exception in this regard, and the recent scientific literature offers multiple examples in which the adaptation of international clinical practice guidelines to national or regional contexts improves their applicability and facilitates their implementation without compromising scientific rigor, especially when there is substantial varia-

tion in resources, health care structures and cultural values between different contexts.

Among clinical practice guidelines, international recommendations for cardiopulmonary resuscitation (CPR) are crucial tools in improving survival in pediatric and neonatal patients. In this particular area, the International Liaison Committee on Resuscitation (ILCOR) recently published its new 2025 recommendations,^{1,2} developed with a methodology based on the formulation of relevant clinical questions, the critical appraisal of the evidence through systematic reviews and the use of structured evidence-grading frameworks.

This approach crystallizes into Consensus on Science with Treatment Recommendations (CoSTR), global reference frameworks whose real-world clinical impact depends on their interpretation and implementation in specific health care systems taking into account organizational factors, the available resources and local characteristics.

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The ILCOR guidelines are not strict rules, but rather consensus- and evidence-based recommendations regarding efficacious practices. In fact, the ILCOR itself explicitly recognizes the limitations of the current evidence on most aspects concerning cardiopulmonary resuscitation, chiefly consisting of observational studies, with broad areas of uncertainty. In addition, cardiac arrest can occur in widely heterogeneous care settings and be attended by individuals with different levels of training ranging from lay rescuers to health professionals specialized in critical care.

Following the publication of the 2025 ILCOR recommendations, several international scientific societies have developed guidelines adapted to their particular geographical scopes, including the Sociedad Española de Neonatología (SENeo, Spanish Society of Neonatology), the European Resuscitation Council (ERC), or the American Heart Association, which have adopted and adjusted practice guidelines based on the available evidence within the organizational and health care frameworks specific to the country or region. Still, these adaptations are still made for entire continents or large geographical areas that comprehend heterogeneous health care systems with substantial variation in terms of resources, health care organization, professional profiles and training models. In consequence, although these regional guidelines are an indispensable step toward the application of the ILCOR consensus recommendations, they cannot specifically address the particularities of each country, which highlights the need to develop adaptations at the national level to translate international evidence to specific and homogeneous health care contexts.

The Spanish health care system has particular characteristics that directly affect the management of pediatric and neonatal cardiac arrest. Among them, we ought to highlight the decentralized organization of health care services, the variation in available resources between autonomous communities, the structure of out-of-hospital emergency care services and the predominant role of public hospital-based care. In addition, the distribution of competencies among pediatricians, neonatologists, emergency care physicians, nursing staff and other health care professionals has a decisive impact on the response to life-threatening emergencies.

In this regard, we feel compelled to acknowledge the effort made by the authors of the two documents published in this issue of *Anales de Pediatría*.

On one hand, the article published by the Spanish Group on Pediatric and Neonatal Cardiopulmonary Resuscitation offers a critical appraisal of the 2025 ILCOR pediatric CPR recommendations and proposes modifications aimed at simplifying the algorithms to facilitate training in CPR and improve its real-world applicability in Spain, a key aspect in the response to pediatric out-of-hospital cardiac arrest, an event that, while infrequent, is associated with very low survival, and therefore poses specific challenges in terms of early recognition, activation of the emergency response system and first responder training.³

On the other, the 2026 Spanish guideline on neonatal stabilization and resuscitation, developed by the Neonatal Resuscitation Group of the SENeo, offers structured recommendations of national scope that integrate international evidence with the organizational factors, resources,

and consensus-based guidelines of the Spanish health care system, which is relevant considering that most neonatal resuscitations take place in the delivery room or in neonatal units with specialized personnel, therefore differing from pediatric or neonatal resuscitation in other hospital settings, where less-trained individuals may be in charge of the initial management, circumstances that fall within the scope of the plan for the prevention and management of pediatric and neonatal in-hospital cardiac arrest.^{4,5}

Both documents reflect that the 2025 ILCOR recommendations constitute an indispensable scientific framework, but that their real-world clinical impact depends on a rigorous local adaptation process, an essential condition to ensure homogeneity, safety and quality in the care of children and newborn infants.

In conclusion, the 2025 ILCOR recommendations constitute a solid and indispensable foundation for pediatric and neonatal life support. However, their real value stems from their potential to be adapted intelligently and pragmatically by each country according to its own health care system. In Spain, this challenge can also be perceived as an opportunity to strengthen the cooperation between professionals, improve training, reduce health care variability, and, ultimately, increase survival and quality of life in children and infants who require advanced life support. Adaptation is not a choice, but a collective responsibility, and these two articles can provide invaluable help in fulfilling it.

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