Document downloaded from http://www.elsevier.es, day 16/10/2018. This copy is for personal use. Any transmission of this document by any media or format is strictly prohibited.

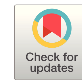
Med Intensiva. 2018;42(4):203-204

medicina intensiva

www.elsevier.es/medintensiva

EDITORIAL

Guidelines of admission, discharge and organization of the pediatric intensive care☆



Criterios de ingreso y alta y organización de los cuidados intensivos pediátricos

J. López-Herce[a,b,c,d,*], A. Carrillo Álvarez[a,b,c,d]

[a] Servicio de Cuidados Intensivos Pediátricos, Hospital General Universitario Gregorio Marañón, Madrid, Spain
[b] Departamento de Pediatría, Facultad de Medicina, Universidad Complutense de Madrid, Madrid, Spain
[c] Instituto de Investigación Sanitaria Gregorio Marañón, Madrid, Spain
[d] Red de Salud Maternoinfantil y del Desarrollo (Red SAMID) RD16/0022/0007, Madrid, Spain

Received 17 December 2017; accepted 25 December 2017

This issue of *Medicina Intensiva* publishes the guidelines referred to admission, discharge and classification in Spanish Pediatric Intensive Care Units (PICUs)—a consensus-based initiative developed by a group of experts of the *Sociedad Española de Cuidados Intensivos Pediátricos*, the *Asociación Española de Pediatría*, and the *Sociedad Española de Medicina Intensiva y Unidades Coronarias*.[1]

Intensive care, and specifically pediatric intensive care, is a medical specialty (referred to Pediatrics) which in contrast to other disciplines does not deal with patients suffering diseases of a given organ or system. Rather, pediatric intensive care affords integral management for children with some medical and/or surgical disorder affecting one or—more frequently—several organs, and which poses a threat to the life of the patient.[2]

The development of medicine allows the treatment of an ever-increasing number of individuals with complex disease processes requiring strict vigilance and continuous management. The treatment of these patients demands a specifically designed unit (the PICU) staffed by medical and nursing professionals with specific training in pediatric intensive care, with a view to guaranteeing adequate treatment 24 h a day, every day of the year.[2,3] The PICU therefore allows the treatment of seriously ill pediatric patients, regardless of whether the underlying disorder is of a medical or surgical nature, and of whether the course of the condition is acute or requires prolonged admission.[4]

The two fundamental criteria for pediatric patient admission to the PICU are the need for close vigilance and/or care, and the existence of a potentially reversible disease process.[1,2] Furthermore, and depending on the circumstances and the hospital, the PICU can also take charge of palliative care and the intermediate care of children that do not require intensive treatment but which do need more care and monitoring than can be afforded in conventional hospital wards.[2]

The PICU must provide support for the rest of the hospital departments and facilitate their activities and progress in a coordinated manner. The supervising health authorities therefore must procure sufficient admission capacity for the unit, with due adaptation of its architectural structure and with sufficient material means and staff to cover its healthcare duties and the activities of the rest of the hospital

DOI of original article: https://doi.org/10.1016/j.medine.2017.10.009

☆ Please cite this article as: López-Herce J, Carrillo Álvarez A. Criterios de ingreso y alta y organización de los cuidados intensivos pediátricos. Med Intensiva. 2018;42:203-204.

* Corresponding author.
E-mail address: pielvi@hotmail.com (J. López-Herce).

2173-5727/© 2018 Elsevier España, S.L.U. and SEMICYUC. All rights reserved.

Document downloaded from http://www.elsevier.es, day 16/10/2018. This copy is for personal use. Any transmission of this document by any media or format is strictly prohibited.

departments---providing integral quality care for the patients and their families.[2,5]

Quality of care in the PICU moreover relies on specific capacitation in pediatric intensive care on the part of the medical and nursing staff, in order to ensure that the therapeutic measures inherent to pediatric patients are adopted, with the incorporation and integration of new technologies.[2,5,6] However, the activity of the PICU cannot be confined to its own physical space but must also comprise support for specialists in other areas, with the performing of specific techniques, sedation, organization and guidance of the in-hospital rapid response system, the transfer of critically ill children, follow-up of patients with special diseases or who are dependent upon complex technological support, palliative care and telemedicine.[1,2,6]

The PICU requires an important number of specially trained healthcare professionals and abundant resources. Since such Units are costly, their size and number should not be incremented indiscriminately.[7] It is therefore necessary to clearly define what type of patients can benefit from admission to the PICU. It is neither possible nor necessary for all Spanish hospitals to have a PICU, provided all children can be guaranteed adequate intensive care when needed.[2,7] The health authorities are therefore responsible for ensuring a sufficient number of PICU beds and for organizing the function of such units in an open and flexible manner, with different levels of complexity, in order to adapt to the real present and future needs of the population. It is essential for each hospital to define the level of care it can offer, in all cases guaranteeing initial stabilization of the seriously ill pediatric patient. Furthermore, the adoption of a specifically pediatric transport system at both Spanish Autonomous Community and national level should constitute a priority concern, since unfortunately no such systems are available in most of the country.[8]

As commented by the authors, these guidelines seek to ''facilitate decision making referred to pediatric patient admission to and discharge from PICUs in Spain, with a view to ensuring that these patients receive the best possible care adjusted to their clinical condition''.[1] These guidelines offer clear criteria for PICU admission and discharge in children with alterations and diseases of each organ system, with multisystem disease processes, or subjected to surgery or invasive procedures.[1] The aim is to optimize PICU use, guarantee adequate care adjusted to patient severity, and ensure the safety of the patients.

The mentioned guidelines are only general recommendations that must be dynamic[1,9] and should be adapted by the professionals to the characteristics of the patient, the capacity of the PICU, and the peculiarities and physical and professional capacities of the rest of the hospital departments.

Classification and assessment (''triage'', as used by the authors) of each patient is essential for deciding whether admission or discharge can be of benefit, conditioned to the monitoring and intensive care needs. Patient benefit should not only be seen in terms of survival but also in terms of quality of life.[1,10] The healthcare professionals of the PICU, together with those of the rest of the departments implicated in the management of the patient, should take part in this process.

Lastly, and as commented by the authors, posterior evaluation based on a multicenter study is required in order to confirm the validity of these criteria.

In conclusion, these guidelines are an important help for professionals in deciding patient admission and discharge in Spanish PICUs, and should serve as a basis for reorganizing pediatric intensive care in this country.

Financial support

RETIC funded by PN I + D + i 2008--2011, ISCIII-*Subdirección General de Evaluación y Fomento de la Investigación* and the European Regional Development Fund (ERDF), Ref. RD16/0022/0007.

Conflicts of interest

The authors declare that they have no conflicts of interest.

References

1. De la Oliva P, Cambra-Lasaosa FJ, Quintana-Díaz M, Rey-Galán C, Sánchez-Díaz JI, Martín Delgado MC, et al. Guías de ingreso, alta y triage para las unidades de cuidados intensivos pediátricos en España. Med Intensiva. 2018;42:235--50.
2. Martinón-Sánchez JM, Trabazo-Rodríguez S, Marques F, Rodríguez-Núñez A. Organización de las unidades de cuidados intensivos pediátricos. In: López-Herce J, Calvo C, Rey C, Rodríguez A, Baltodano A, editors. Manual de cuidados intensivos pediátricos. 4th ed. Madrid: Publimed; 2013. p. 37--40.
3. Marshall JC, Bosco L, Adhikari NK, Connolly B, Diaz JV, Dorman T, et al. What is an intensive care unit? A report of the task force of the World Federation of Societies of Intensive and Critical Care Medicine. J Crit Care. 2017;37:270--6.
4. González-Cortés R, López-Herce-Cid J, García-Figueruelo A, Tesorero-Carcedo G, Botrán-Prieto M, Carrillo-Álvarez A. Prolonged stay in pediatric intensive care units: mortality and healthcare resource consumption. Med Intensiva. 2011;35:417--23.
5. Butler A, Copnell B, Willetts G. Family-centred care in the paediatric intensive care unit: an integrative review of the literature. J Clin Nurs. 2014;23:2086--99.
6. Nguyen YL, Wunsch H, Angus DC. Critical care: the impact of organization and management on outcomes. Curr Opin Crit Care. 2010;16:487--92.
7. Rosenberg DI, Moss MM. Guidelines and levels of care for pediatric intensive care units. Crit Care Med. 2004;32: 2117--27.
8. De la Mata S, Escobar M, Cabrerizo M, Gómez M, González R, López-Herce Cid J, Grupo de estudio del transporte pediátrico. Transporte pediátrico y neonatal en España, Portugal y Latinoamérica. Med Intensiva. 2017;41:143--52.
9. Nates JL, Nunnally M, Kleinpell R, Blosser S, Goldner J, Birriel B, et al. ICU admission, discharge, and triage guidelines: a framework to enhance clinical operations, development of institutional policies, and further research. Crit Care Med. 2016;44:1553--602.
10. Blanch L, Abillama FF, Amin P, Christian M, Joynt GM, Myburgh J, et al. Triage decisions for ICU admission: report from the Task Force of the World Federation of Societies of Intensive and Critical Care Medicine. J Crit Care. 2016;36: 301--5.