

Creation of a Pediatric Hospital Medicine Subspecialty in Spain

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Pediatric hospital medicine (PHM) has emerged as a subspecialty in response to the challenges of pediatric care in recent decades. The risk of fragmentation of patient care and knowledge, the exponential increase in medical complexity and chronic diseases, and the need for efficient management of resources have facilitated the emergence of integrative professional models, such as hospital medicine in adults.

PHM was recognized as a pediatric subspecialty by the Spanish Association of Pediatrics (Asociación Española de Pediatría [AEP]) in 2011 as a specialty responsible for the global care of hospitalized children. Since then, PHM has been included in the White Paper Catalogue of Pediatric Specialties of the AEP.¹ In the same year, the Spanish Society of Pediatric Hospital Medicine (SEPIH) was founded (www.sepih.es)²⁻⁴ and it has experienced an exponential growth in members (approximately 260) at more than 60 Spanish hospitals. This trajectory allowed SEPIH to join the AEP board of directors as 1 of the specialties with the largest number of members among all subspecialties. To our knowledge, SEPIH is currently the only pediatric society in Europe specifically dedicated to PHM.

Despite this, we face some of the same challenges that have confronted other subspecialties in Spain: official recognition from a legal point of view by the political authorities responsible for health planning in our country. The Spanish Ministry of Health has recently published a royal decree law that would allow the legal recognition of pediatric subspecialties. The lack of a European Society of PHM hinders the recognition process because of an absence of a European syllabus that allows governmental approval of this specialty. In recent years, thanks to the commitment of professionals and scientific societies, important steps have been taken toward PHM's official recognition.¹⁻⁴

In the new edition of 2022 White Paper Catalogue of AEP Pediatric Specialties,¹ we adapted the appellation of PHM for better identification and more clear designation of our subspecialty. The official recognition of pediatric subspecialties, including PHM, is currently at a crossroads. Currently, we await formal recognition by the Spanish Ministry of Health, in a collaborative process coordinated by the AEP and the rest of pediatric subspecialty societies. The request for recognition specifically includes a proposed training program in PHM, with a detailed list of centers and professionals for its development.

This training program was developed by a team specifically created in SEPIH with experts from different Spanish hospitals. It is based on a competence map model, which consists of a structured plan of knowledge, skills, and attitudes necessary to adequately perform in this subspecialty. Currently, the training program in Spain to specialize in general pediatrics lasts 4 years. The last year is usually focused on a specific subspecialty. We proposed a specific training program (Fig 1) in PHM that is composed of a first phase of

www.hospitalpediatrics.org

DOI:<https://doi.org/10.1542/hpeds.2022-006867>

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HOSPITAL PEDIATRICS (ISSN Numbers: Print, 2154-1663; Online, 2154-1671).

FUNDING: No external funding.

CONFLICT OF INTEREST DISCLOSURES: The authors have indicated they have no potential conflicts of interest to disclose.

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3 years of common pediatric core training and 2 years of specific training in PHM. The content of this proposed program was developed according to recommendations of scientific societies such as the Academic Pediatric Association, the Society of Hospital Medicine, the Global Pediatric Education Consortium, and the curricular framework for PHM fellowships proposed in the United States.^{5–13}

PHM-specific clinical competencies and other universal competencies must be acquired during the additional 24 months of training. Other clinical competences are new and specific to this subspecialty (highlighted in Table 1). Universal competences should include skills in quality of care and safety as well as others such as effective communication skills.

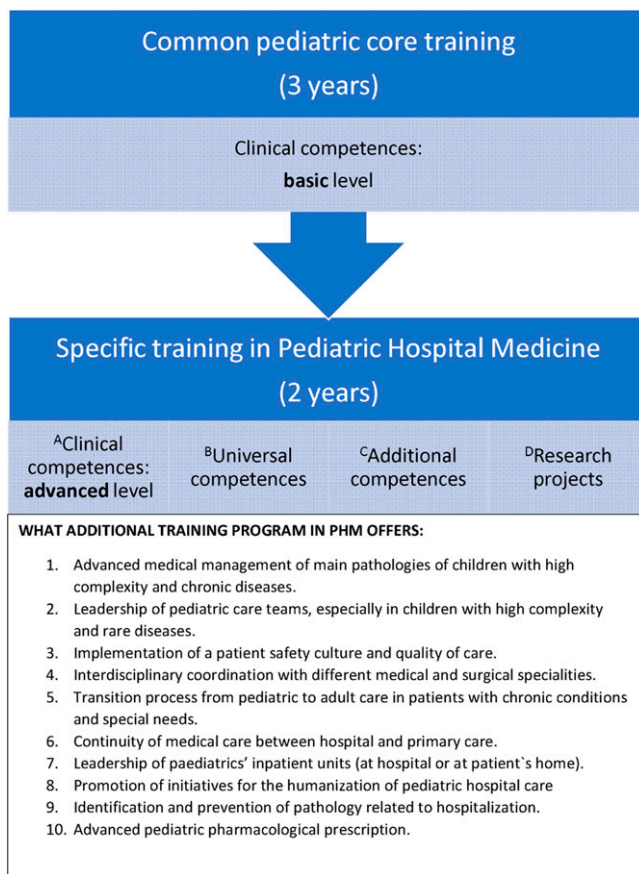
The overall resident evaluation objectives include that the pediatric resident achieves learning objectives and competencies, but it must also include that learning is continuous and motivational. Residents must learn other skills including resilience, flexibility in acquiring new knowledge and skills, and a commitment to continuous improvement. Evaluations could include periodic structured discussions with residents to improve self-assessment and periodic reports from the resident advisor. Possible methods to be used for this evaluation include analysis of individual curricular areas, annual reports from the attending advisor, presentation of research projects, and structured clinical evaluation on skills related to contents of the training program in PHM. During the COVID-19 pandemic, pediatric hospitalists played a key role in the care of affected

patients, a continuation of other essential pediatric care, and leading the adaptation of hospitals and systems through this health crisis. New training programs for future hospitalists should incorporate the important lessons learned during the COVID-19 pandemic to effectively respond during future new crises.

In addition to the specific PHM training content, our proposed program incorporates training elements of other SEPIH teamwork and sections relevant to PHM: quality of care and patient safety, pediatric home care, medical complexity, and chronic diseases and coordination between systems of care (primary care, interhospital collaboration, transitions to adult units). In this sense, 1 of the primary roles of the pediatric hospitalist is to lead interprofessional teams. To advance this goal, we are moving toward comanagement of postsurgical patients and initiatives that improve patient care and resident training. Also, pediatric hospitalists participate in research and promote multicenter studies to improve patient and family-centered care. Likewise, safety is one of the main goals of PHM, so residents are trained in aspects such as medication errors as well as misidentification of patients, falls, and failures in communication, especially during handoffs, with the goal of knowledge and compliance with international safety goals according to Joint Commission standards.¹⁴

Ongoing collaborations with the Spanish Society of Hospital Pharmacy and the Spanish Society for Healthcare Quality also provide the opportunity to create training alliances for future residents in essential aspects of our specialty.

A pressing challenge is the absence of a European Society for PHM, and therefore an official European syllabus in PHM. This situation may be addressed in the coming years with the supervisory work of international organizations such as the European Academy of Pediatrics, which is the pediatric section of the European Union of Medical Specialists. We believe that the development of a training program focused on the health of hospitalized children should be in accordance with leading societies such as



(A, B, C and D superscript are explained at Table 1)

FIGURE 1 Competence map model of the training program in pediatric hospital medicine made by SEPIH. Superscripted letters correlate to sections A, B, C, D in Table 1.

TABLE 1 Competences From the Specific Training in Pediatric Hospital Medicine

A. Clinical competences: (advanced level)	<ul style="list-style-type: none"> ● Skills in clinical documentation ● Attention model focused on hospitalized children and his family ● Advanced life support ● Monitoring and early warning scores in pediatrics* ● Intrahospital and interhospital transport* ● Safety in transfer of intrahospital patients* ● Respiratory support and non-invasive mechanical ventilation ● Invasive diagnostic techniques ● Peripheral and central vascular access ● Nutritional support ● Analgesia and sedation ● Fluid therapy ● Transfusion, thrombosis prevention ● Antimicrobial stewardship ● Drug prescription in children ● Care of surgical patient* ● Children with special needs* ● Social risk and child abuse ● Attention to the immigrant or refugee patient ● Palliative care* ● Care to children with complexity and chronic condition* ● Adolescent care ● Home care units*
B. Universal competences	<ul style="list-style-type: none"> ● Quality of care and safety* ● Effective communication skills* ● Patient and family centered care* ● Team leadership and coordination* ● Teaching capacity* ● Evidence-based medicine ● Research ● Health resource management and bioethics
C. Additional competences	<ul style="list-style-type: none"> ● Courses, congresses, conferences, or workshops related to PHM areas* (e.g., bedside ultrasound, investigation methodology)
D. Research projects	<ul style="list-style-type: none"> ● Participation on a Pediatric Research Network ● Participation on Pediatric Research Projects on clinical and universal competences of the specific training in PHM.*

Competences with an asterisk highlight what additional training program in PHM offers that are different from common pediatric core training.

the American Academy of Pediatrics, the Academic Pediatric Association, and the Society of Hospital Medicine.

Our society has established collaborative contacts with other countries in the Americas (Argentina and Chile), with participation in conferences and training workshops. In 2021, a first official contact was established between the representatives of the subspecialty from the United States and Spain, which opened the door to the possibility of consolidating training and research collaboration strategies. The interaction between different national societies can generate an exponential development of PHM in many countries. All these efforts have a common goal: the best integral and integrative care of hospitalized children and their families.

Acknowledgments

We thank Dr Quiñonez for assistance in reviewing and editing of the paper. We also thank editor Dr Patrick Brady for the interest and comments given to improve the understanding of this paper.

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