Pediatric Emergency Medicine Curricula for Emergency Medicine Residents

To the Editor:

We have reviewed "Defining a Focused Pediatric Emergency Medicine Curriculum for Emergency Medicine Residents: A Case Study at Michigan Medicine" by Ponce and Wolff published in AEM Education and Learning online on April 16, 2020. We congratulate the authors on this important contribution to resident education.

We recognize that it is crucial for optimal health outcomes that emergency medicine (EM) residents be thoroughly trained to care for pediatric patients, because over 85% of the 36 million children accessing emergency care in the United States each year do so in general emergency departments (EDs).¹ However, there is variability in exposure to pediatric emergencies during residency, and opportunities to manage critically ill children are even more limited.^{2,3}

Optimal pediatric training for EM residents requires prioritization of crucial content. Mitzman et al.⁴ established a comprehensive list of pediatric EM (PEM) topics as a consensus core curriculum. Ponce and Wolff reported an individual program analysis identifying 68 PEM topics requiring a specific curriculum within their residency program. Crucially, they identified 20 topics not covered within the Model of Clinical Practice of Emergency Medicine (EM Model), five of which have high risk of morbidity. We strongly support the authors' suggestion that these 20 topics in general, and the five high-risk topics in particular, are considered for inclusion in the next iteration of the EM Model. We commend the authors for sharing the process with which they assessed their curriculum and challenge all EM residency programs to perform such an analysis themselves.

To address PEM gaps in EM training, simulation has been identified as an educational best practice. Simulation allows for a standardized experience for trainees to evaluate and manage rare but high-risk disease processes. Using a modified Delphi method, we identified 56 PEM topics and procedures that should be taught in all EM residency programs using simulation.⁵ All items and 19 of 26 procedures have been mapped to 16 simulation cases, created by authors across the country, tested with EM residents, and iteratively peer edited. The resultant Emergency Medicine Resident Simulation Curriculum for Pediatrics (EM ReSCu Peds) will be available soon as an open-access, free eBook. Of note, these cases address 24 of the items identified by Ponce et al., including four of the high-risk topics missed in the EM Model.

A standardized national simulation curriculum will provide EM residents with PEM-specific content critical for their education. This educational strategy will allow for hands-on skill practice and engagement in critical thinking and diagnostic reasoning without having to rely on the infrequent and uneven distribution of critically ill pediatric patients. We look forward to sharing the EM ReSCu Peds soon and working with educators across the county to further evaluate and refine the content. It is exciting to see more educators performing targeted needs assessments to engage in curricular development targeting PEM content for the EM physician, as our colleagues from Michigan have demonstrated so nicely in this article.

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