Editor's Choice Articles for May

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May 2024 and another month of exciting *Pediatric Critical Care Medicine* (*PCCM*) publications. There are three *Editor's Choice* articles with editorials, and each article is accompanied by *PCCM* Connections material. The topics are *clinical decision support* using digital bedside data (1, 2), *trainee education and needs* in spiritual care (3, 4), and *communication with parents* about patient prognosis and the language we use (5, 6). Finally, in addition to the *PCCM* Connections section of the Editor's Choice, I have started a new section called *PCCM* International.

CAN WE HARNESS BEDSIDE DIGITAL DATA TO BETTER PREDICT MINUTE VENTILATION REQUIREMENTS IN CHILDREN?

Pelletier JH, Rakkar J, Au AK, et al: Retrospective Validation of a Computerized Physiologic Equation to Predict Minute Ventilation Needs in Critically Ill Children (1).

My first Editor's Choice article reports the use of a large electronic dataset of acid-base and ventilator parameters in children undergoing neuromuscular blockade during mechanical ventilation to validate a computerized equation to predict minute ventilation requirements. There were over 15,000 arterial blood gases in 484 patients and the investigators found that in silico their equation outperformed clinicians in real time (1). The accompanying editorial provides a helpful discussion about simulation and teaching platforms, and clinical decision support in respiratory care (2).

We then have two parallel developments in the *PCCM* literature that are worth reviewing. You may recall the work of the Second Pediatric Acute Lung Injury Consensus Conference and the renewed emphasis in leveraging clinical informatics and data science for improved care and research in pediatric acute respiratory distress syndrome (7, 8). The other work is from the Pediatric Data Science and Analytics (PEDAL) subgroup of the Pediatric Acute Lung Injury and Sepsis Investigators network (9). The group had a 2020 survey of clinical decision support practices (10) and, in April 2024, a Special Article about development, validation, and implementation of unsupervised machine learning models in pediatric critical care research (11). Do read them all.

IS IT TIME TO "*REDISCOVER A HOLISTIC HEALING EXPERIENCE FOR PATIENTS AND FAMILIES*?"

Stevens PE, Rassbach CE, Qin F, Kuo KW: Spiritual Care in PICUs: A U.S. Survey of 245 Training Fellows, 2020–2021 (3).

My second Editor's Choice article is a report of clinical fellows' responses to a survey about spiritual care in their PICU and/or neonatal intensive care unit practices, 2020 to 2021 (3). The survey response rate was around one-third of 720 training fellows in the United States, which is far below the usual acceptable

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rate of 85%. However, with opinions from a total of 245 fellows, these insights cannot be ignored. For example, many fellows reported that "spiritual care was important for patients and families but (they) rarely incorporated spiritual care into their self-reported clinical practice." This theme is discussed in the accompanying editorial (4), which considers a way forward in curricula, education, and research to "rediscover…. (see above header quote)." Of note, it has been almost 20 years since *PCCM* last published material about history taking and addressing parents' spiritual needs (12, 13), and so this information warrants further review and study.

IN CARE CONFERENCES WITH FAMILIES, DO WE PRESENT CHOICES IN A WAY THAT PREDICTABLY LEADS INDIVIDUALS TO MAKE A CERTAIN CHOICE, I.E. "*NUDGING*?"

Olive AM, Wagner AF, Mulhall DT, et al: Nudging During Pediatric Intensive Care Conferences With Family Members: Retrospective Analysis of Transcripts From a Single Center, 2015–2019 (5).

My third Editor's Choice article is a retrospective study of transcripts from 70 care conferences involving clinicians and families, 2015–2019 (5). The authors examined episodes of decision-making that occurred in 63 transcripts and provide a summary of almost 1,100 instances of nudging. The accompanying editorial comments on the implications of this new research in care conferences, and there is a summary table of strategies to promote "ethically supported shared decision-making" (6).

This area of research is underrepresented in *PCCM*. However, for more reading material, look at my second Editor's Choice this month (3, 4), the systematic review of prognostic and goals-of-care communication in the PICU (14), and the data from the comparative trial of parent Navigator-support during and after PICU admission (15–17).

"*PCCM* CONNECTIONS" FOR READERS

There are two *PCCM* Connections topics this month. The first extends the above discussion about clinical decision support (1, 2). This month there are two articles about an automated, daily calculation of the pediatric Sequential Organ Failure Assessment (pSOFA) score. One article describes the external validation of the automated calculator using a single center 7-year cohort, 2015–2021 (18). The other article describes using this calculator to provide a dynamic prediction of mortality with longitudinal pSOFA scores (19). Please read the accompanying editorial, which is a tour de force with its skillful coverage of severity scoring, prognostic modeling, and biomedical informatics (20).

The second topic for *PCCM* Connections is covered in a *PCCM* Perspective about end-of-life care and the principle of "supported privacy" for families (21). That is, "creating and protecting a private space during end-of-life care in the PICU, while simultaneously sustaining unobtrusive continued presence for practical and emotional support of the family." The summary of recommendations in the authors' table is useful and adds to the discussions found in this month's second and third Editor's Choices (see above).

"*PCCM* INTERNATIONAL" FOR READERS

Our last international focus on sepsis came from Pakistan and was about biomarker-based risk-stratification (22, 23). This month, *PCCM* publishes an article from southwest China describing the epidemiological characteristics, from 12 centers identifying sepsis or septic shock in 3.3% of over 11,000 PICU admissions, 2022–2023 (24). The accompanying editorial covers issues such as diagnosis and treatment protocols (25), which should now be seen in the context of the 2024 international consensus criteria for pediatric sepsis and septic shock (26).

Finally, this month there is another Editorial Notes, Methods, and Statistics article in the series about writing for *PCCM* (27–30). The new addition gives details about the variety of formats for *PCCM*'s Editorials and Commentaries (31). There is also guidance on paragraph-by-paragraph content and structure for new writers.

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