

# Developing Pediatric Patient Safety Research Priorities

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Pediatric patient safety and a focused, relevant research agenda are top priorities for both advancing the health of children and guiding health care providers and systems on impactful changes in which to invest. In 1999, the Institute of Medicine launched a national conversation on patient safety with the *To Err Is Human*<sup>1</sup> report. From this seminal point, the research agenda on patient safety has proliferated, producing evidence-based advances to address key patient safety risks, such as central-line bloodstream infections. Health care providers and systems now routinely focus on mitigating patient safety risks with these efforts, garnering attention at the bedside and up to board rooms. Despite the acceleration in activity over the past 20 years, our efforts for children have lacked a unified direction and need a meaningful and inclusive pediatric patient safety research agenda.

In their article entitled “Priorities for Pediatric Patient Safety Research,” Hoffman et al<sup>2</sup> reinvigorate this discussion and provide a foundational starting point for this national journey toward the north star of meaningfully improving pediatric safety and child health more broadly. No child should be harmed while trying to stay well, heal, or manage their chronic conditions via interactions with health care providers and systems. The adage that “children are not little adults” is indispensable in its truth because it speaks to the unique risks and issues that need to be addressed for ensuring safe health care for children, including dependence on families and caretakers.

Research agendas are strengthened by broad input, but researchers must also strive to balance both the existing evidence base and feasibility to realize the broader goal of meaningful data-driven research. The work by Hoffman et al<sup>2</sup> is an important first step in this quest. However, there are several points that may warrant further consideration as we outline next steps. First, just as family and caretaker perspectives serve as vital inputs for this agenda, further broadening of stakeholders is needed. This includes a greater diversity of patients, providers, delivery systems, regulators, and insurers (public and private) but also requires more fully capturing pediatric-relevant settings of care beyond primarily hospital-based foci. A significant focus on ambulatory care, private practice, school-based clinics, and community emergency departments can help buffer potential biases and also better ensure the usability and feasibility of the agenda.

Second, with the goal of setting a meaningful research agenda, it is important to recognize the role of distinct data sources in informing development. Given the design of the survey reported on by Hoffman et al,<sup>2</sup> the priorities are based on responses to a question framed around “urgent learning opportunities,” thereby potentially defining priorities as those in need of urgent attention rather than priorities that are important but may deserve time to address. This approach differs from other approaches, such as the evidence-based review, “Making Health Care Safer II: An Updated

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Critical Analysis of the Evidence for Patient Safety Practices,”<sup>3</sup> commissioned by the Agency for Healthcare Research and Quality and the related publication entitled “The Top Patient Safety Strategies That Can Be Encouraged for Adoption Now.”<sup>4</sup> Use of evidence in prioritization can be useful because it helps to evaluate potential impact and overall value of addressing specific topics. In research agenda development, such quantitative inputs should be maximized as well as qualitative approaches, as used in this study. Additionally, through error reporting, patient safety organizations, and collections of root cause analyses and other data, we have the opportunity to bolster and further elucidate key pediatric patient safety research issues.

Third, the issue of understanding real-world barriers to uptake of evidence-based strategies and feasibility is also key to inform research agendas with the goal of ultimately showing meaningful impact. To this end, as noted by the authors, a research agenda must include balanced priorities that are focused both on generating new

knowledge and on priorities grounded in implementation science that can be used to address contextual factors and in policy levers that can affect adoption and spread.

Lastly, pediatric health care and child health inextricably begin with maternal health. A comprehensive approach to a national pediatric patient safety research agenda should include a focus on maternal risks and issues that children face from the fetal to perinatal periods. Maternal health factors to incorporate include such issues as maternal medications and substance use, pregnancy detection and risk algorithms, maternal complications, intimate partner violence, and postpartum depression and such realities as the obesity epidemic and resultant impacts on complications in pregnancy.

This key foundational work by Hoffman et al<sup>2</sup> reveals the need for a national pediatric patient safety research agenda as an essential goal for our nation to improve child health. This work can serve as a launching point for a larger, nationally-convened work group of broad stakeholders in

children’s health. The importance of building on the work started here by Hoffman et al<sup>2</sup> is paramount given the increasingly complex nature of health care, our health care systems, and the overall health care industry. There is much at stake; thus, our pediatric patient safety research agenda must be clearly defined and then executed.

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