## A Clarion Call: COVID-19 and the Pediatric Behavioral Health Inpatient Crisis

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The crises occasioned by the coronavirus disease 2019 (COVID-19) pandemic on medical centers have by this point been seemingly exhaustively documented. The ebbs and flows of the virus have caused at various times surging inpatient numbers, equipment shortages, and significant provider attrition, among other challenges. Lost amidst this discourse, however, is another crisis, present before the pandemic, which has now reached a fever pitch for those patients and clinicians caught in its midst: the inpatient pediatric behavioral health crisis.

Although the prevalence of behavioral health conditions in the pediatric population (and the resultant burden upon the healthcare system) increased at alarming rates before the onset of COVID-19, the current circumstances have been described as "a national state of emergency" by the American Academy of Pediatrics. <sup>4,5</sup> This has laid bare a severe lack of pediatric mental health practitioners and the predictable effect upon patients unable to receive the care they require. Even though discourse surrounding this crisis has focused to a large degree upon the lack of outpatient access to mental health resources for these patients, the effects have predictably spread to academic pediatric medical centers.

Although rates of emergency department (ED) visits and inpatient hospitalizations for children with primary behavioral health complaints were on the rise before COVID-19, following the pandemic's onset in March 2020 to October 2020, mental health-related visits to pediatric EDs increased 24% for children ages 5 to 11 and 31% for children ages 12 to 17, compared with 2019 ED numbers. These increased ED volumes have led to record high rates of hospitalization, as well as longer hospitalizations for these patients. At institutions in states with poor pediatric mental health infrastructure, children with psychiatric emergencies may be housed at local hospitals until bed spaces open at an available behavioral health facility, sometimes for up to weeks at a time. To

Given the persistence of COVID and the real possibility that increased rates of pediatric behavioral health inpatient hospitalization will constitute a "new normal" for some time, it is worth-

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while to consider the implications of this trend for various stakeholders involved in the care of these patients and on patients and families themselves.

First, this situation presents a significant challenge for pediatric trainees for whom caring for children with primary behavioral health issues will comprise a higher proportion of their residency experience. Although learning to effectively manage mental health crises and behavioral health pathology is a crucial element in pediatric training, the risk with the current trend is that this will constitute a disproportionate amount of time and clinical experience, potentially detracting from other vital components of pediatrics training (namely, having adequate time to care for and learn from patients with primary medical issues). Besides mere time spent, the recurrent experience of admitting and caring for behavioral health patients, many of whom harbor traumatic histories, without feeling well equipped to offer meaningful interventions, may predispose pediatric residents to burnout and moral distress in such circumstances. 11 These factors may cause students who would otherwise consider pediatrics a potential career avenue to consider alternative specialties or to specifically target institutions with more robust pediatric behavioral health infrastructure that offloads volumes on academic medical centers.

Second, besides its effect on pediatric trainees, persistently high ED and inpatient volumes of children with behavioral health issues will continue to substantially affect the work of pediatric emergency medicine, hospital medicine, and psychiatric providers by increasing risk for practitioner dissatisfaction and burnout. It has been established that pediatric generalists practicing in the outpatient setting who care for pediatric patients with behavioral health issues endure high rates of burnout in the course of such care. 12 Although the effect of caring for this population by pediatric hospitalists has not been studied, given the fact that children with primary behavior health issues are typically admitted to general medicine services when psychiatric services are not available, <sup>13</sup> it is probable that a similar risk exists for pediatric hospitalists. This association between burnout and care for pediatric patients with behavioral health complaints has been established for pediatric emergency medicine practitioners who reported moral distress at feeling ill equipped to care for this patient population even before the onset of COVID-19. 14,15 The situation has only intensified amidst the increased rates of burnout for these practitioners during the pandemic. <sup>16</sup> These deleterious effects are likewise felt by psychiatry practitioners who, although trained in the arena of mental health, are now tasked with seeing unprecedented volumes of pediatric patients in the inpatient setting due to the impact of COVID. 16,17

Third, should this crisis persist, it will impose an increasingly steep financial burden upon pediatric academic health centers that care for these patients. Mental health–related hospitalizations incur high financial cost, with comparatively lower reimbursement rates than medical-related problems in pediatric patients. <sup>13,18</sup> Even though current estimates of the cost to medical centers borne of the COVID-related surge in pediatric

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behavioral health admissions are lacking, this cost was estimated at \$247 billion in 2014. The increase in the rates of these admissions presents important financial questions for many children's hospitals, which already operate at the margins of profit for the medical care that they deliver.

Fourth, and finally, increased rates of admission associated with longer hospital stays will adversely affect patients and families themselves. Although hospitalization is the saftest disposition for pediatric patients experiencing severe mental health issues, these stays (typically on general pediatrics services) ultimately represent a delay in the care they require to ultimately improve. Pediatric hospitalists, residents, and medically trained nurses all desire to provide safe and effective care for these patients; however, ultimately, these practitioners lack the specialized training in behavioral health that these patients require and deserve, both in the setting of acute behavioral health disturbances in the hospital and for their long-term health.

Given the substantial challenges to all of the above stakeholders affected by the behavioral health inpatient crisis, what opportunities for a constructive response might exist? Some promising measures include the implementation of dedicated psychiatric teams in pediatric EDs, which may improve the quality of care for patients and prevent unnecessary admissions<sup>19</sup>; the enhanced use of telepsychiatry to both reduce inpatient hospitalization duration for patients and mitigate the risk of practitioner burnout<sup>20</sup>; and enacting programs for enhanced behavioral health education for pediatric trainees who are underequipped to care well for the increasing numbers of hospitalized children with serious mental illness.<sup>21</sup>

Ultimately, however, these measures represent stopgaps that do not address the core issue of increased rates of pediatric psychopathology with insufficient mental health resources in both the outpatient and dedicated behavioral health inpatient setting to meet this need. If there is any hope in effectively addressing these more deeply entrenched issues, we must be forthright in acknowledging that COVID has not only wrought a state of emergency for children with behavioral health concerns but it also has done the same for those who would seek to care well for them.

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