Study offers new details on pediatric mental health boarding
25 September 2020

A Dartmouth-led study, published in the journal Pediatrics, offers new details about pediatric mental health boarding in emergency departments across the country, a problem that has steadily increased in the last 10 years and been made worse by a shortage of psychiatric resources.

Boarding refers to the practice of admitting children and adolescents—who are in need of inpatient mental health treatment—to emergency departments or inpatient medical units while they wait for a psychiatric bed to become available in the hospital.

Behavioral and mental health disorders are the most common and costly chronic diseases that affect children and adolescents. Approximately one in six U.S. youths has a behavioral or mental health condition, and treatment costs for these disorders are estimated to exceed $13 billion annually. Yet, 50 to 70 percent of children who have treatable behavioral and mental health conditions don't receive care from behavioral and mental health professionals.

"Although mental health boarding is widely recognized as a major health system challenge, its processes, outcomes, and risk factors had not previously been systematically reviewed," explains co-author Fiona McEnany, MPH '19, a Ph.D. student at Dartmouth's Guarini School of Graduate and Advanced Studies who contributed to the research project as part of her Master of Public Health program study at The Dartmouth Institute for Health Policy and Clinical Practice. "Our goal was to characterize the prevalence of pediatric mental health boarding and to identify factors among patients and hospitals that increase the likelihood of this care process."

To this end, the research team conducted a comprehensive review of 222 studies to describe frequencies, durations, processes, outcomes, and/or risk factors associated with youth mental health boarding in the U.S. Of the 11 studies that met their criteria for inclusion, the majority were retrospective analyses conducted at individual hospitals. Of these single-center studies, all were performed at children's hospitals or pediatric emergency departments in urban or suburban areas—with study sample sizes ranging from 27 to 44,328 patient participants.

The investigators found that among young patients needing inpatient psychiatric care, 23 to 58 percent were boarded in hospital emergency departments while 26 to 49 percent were boarded on inpatient medical units. Boarding durations ranged on average from five to 41 hours in emergency departments and two to three days in inpatient units. Key risk factors for children included being younger in age, having suicidal or homicidal thoughts, and seeking care at hospitals during non-summer months.

In sum, the research team found that pediatric mental health boarding is prevalent and understudied. "It's a vital issue in youth mental healthcare today, experienced by at least 40,000 to
66,000 youth admitted to hospitals each year," says The Dartmouth Institute's JoAnna Leyenaar, MD, Ph.D., MPH, an associate professor of pediatrics and of health policy and clinical practice at Dartmouth's Geisel School of Medicine, and a co-author on the study. "More research that represents a diversity of hospital types and geographical regions is needed, so that we can inform clinical interventions and healthcare policies to better support youth who board each day at hospitals across the country."


Provided by The Geisel School of Medicine at Dartmouth