# The State of Emergency Child and Adolescent Psychiatry: Raising the Bar

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**KEYWORDS**

- Emergency child and adolescent psychiatry • Systems of care
- Pediatric emergency departments • Telepsychiatry programs
- Child psychiatric evaluation and treatment planning

**KEY POINTS**

- There are several innovative systems of care in place to care for children and adolescents in psychiatric crisis.
- This article outlines innovations in the pediatric emergency department, specialized child and adolescent psychiatry emergency programs, telepsychiatry programs, and community-based mobile crisis programs.
- These models may serve as inspiration and blueprints for systems-based improvements in child and adolescent psychiatric emergency care throughout North America.

## INTRODUCTION

Emergency departments (EDs) struggle with growing numbers of young people presenting in psychiatric crisis that continue to climb, with striking increases in children of younger and younger ages.[1] More specifically, from 2006 to 2011, although all-cause hospitalizations did not increase for children ages 10 to 14, ED visits for mental health conditions increased by 21% and hospitalizations for mental health conditions increased by approximately 50%.[1] Suicide is now the second leading cause of death in adolescents[2] and suicidal ideation and behavior have significantly increased in children and early adolescents presenting to EDs.[1] Coupled with the shrinking capacity for inpatient psychiatric hospitalization, EDs are challenged to safely and effectively manage children in psychiatric crisis, and boarding in EDs and on pediatrics units is

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a common occurrence and represents a tremendous burden for children, families, and health care providers.[3–7] Myriad problems underlie the current state of affairs, including reimbursement, work force and parity enforcement limitations, widespread tolerance of substandard care for this population, and the lack of best practices and guidelines.

Historically, the usual model of ED care for young people was evaluation and disposition from a medical emergency room or psychiatric emergency programs serving primarily adults. Although the latter represents a significant advance in adult psychiatric care driven by high volumes of behavioral health patients clogging adult medical EDs, these programs fail to meet the needs of young patients because psychiatric and nursing staff commonly lack child and adolescent expertise and these programs also expose young people to frightening and unsafe environments. Pediatric EDs provide a more child-friendly environment but they lack safe facilities for the management of psychiatric patients, and the medical and nursing staff generally lack sufficient competencies in behavioral health. The challenges of serving young patients in psychiatric crisis in these settings has been well documented.[3,4,6,8] A study in California reports that more than 50% of young people presenting to EDs for self-injurious behavior left without a mental health evaluation.[9]

Fortunately, child and adolescent psychiatrists, health care systems, and state and local governments across North America have begun to mobilize to address the lack of capacity for high-quality psychiatric emergency care for children and adolescents. In 2016, an emergency psychiatry committee was established at the American Academy of Child and Adolescent Psychiatry, which links and supports ED providers across the United States and Canada as they work to improve services in their communities. This is an important development because shared expertise and advocacy are important in moving health care systems to invest resources to develop appropriate services for youth in psychiatric crisis. The delivery of mental health services is associated with low rates of reimbursement relative to medical and surgical services, which presents a barrier to enhancement and expansion in health care systems increasingly motivated by the bottom line. In addition, ED services are generally associated with low collection rates and are justified by the need to fill hospital beds. In an era when contraction or elimination of child psychiatry beds in general hospital settings is the norm, there is little motivation other than quality concerns to invest in these services. Behavioral health disorders, however, are the major morbidity and mortality in an otherwise generally healthy population, children and adolescents. The public health crisis of youth suicidal and self-injurious behavior necessitates pushing health care systems beyond financial calculations and holding them to quality and safety standards that are so central to their mission.[10]

Over the past 5 years, service developments improving the quality of child psychiatric emergency care have been implemented in a variety of arenas, providing a strong framework for dissemination to additional sites. These include adaptations and enhancements to psychiatric emergency care delivered in pediatric EDs, with the development of dedicated space and behavioral health staff as well as the implementation of clinical pathways standardizing assessment, intervention and disposition. This is a basic and first step, acknowledging that the management of behavioral health disorders is part of the central role of pediatric EDs. As volumes and acuity increase, relying on the historically inadequate systems of care must become an aberration rather than the norm. Considerable effort must be made to demand and develop structural reimbursement systems that adequately support emergency psychiatry care in EDs.

In addition, sites with high volumes of ED psychiatric visits (more than 2000 per year) have begun to implement specialized and dedicated programs for the care of youth in psychiatric crisis. These programs require considerable institutional commitment, because they utilize valuable space and require significant financial investment both for buildout and for ongoing operations. Generally, they have required local governmental support and/or philanthropic support for start-up as well as for operations, speaking to the failure of appropriate insurance supports for these crucial services. These programs model the adaptions made to adult psychiatric emergency care, with dedicated and safe spaces and appropriately trained physician, nursing, and social work staff for evaluation, management, and disposition. Extended observation beds, with active treatment, are an important element of these programs, allowing young people who can be stabilized in 3 days to 5 days to avoid longer inpatient admissions. This is critical for children and adolescents, who commonly have their first presentation for behavioral health disorders in EDs.

Third, telepsychiatry is beginning to make important contributions to ED psychiatric care. Given the tremendous shortage of child and adolescent psychiatrists, telepsychiatry presents an opportunity to serve multiple EDs from a centralized site. Large health systems serving multiple hospitals have implemented hub-and-spoke telepsychiatry programs, increasing access to child psychiatric evaluation across care systems, allowing youth to receive appropriate evaluation and disposition planning in EDs without child psychiatry staffing. Compared with treatment as usual, there is evidence from Children's Hospital Colorado that telepsychiatry leads to shorter lengths of stay in EDs (5.5 hours vs 8.3 hours), lower total patient charges ($3493 and $8611), and high patient satisfaction and acceptability.[11] Additionally, a large review demonstrated that telepsychiatry is feasible to implement and that both psychotherapy and psychopharmacology services provided via this modality are possible in the ED setting.[12] Although logistic and reimbursement challenges exist within this model, it is an excellent model for addressing the work force shortage issues.

Finally, mobile programs that provide evaluation and facilitated and effective triage of youth in psychiatric crisis in the community have considerable promise to reduce ED visits. For these programs to be effective, they must have an immediate response capability as well as effective and rapid mental health care in the community.[13] These programs are generally funded by local government investment and provide a viable alternative to EDs for youth at lower levels of acuity and for those families facing challenges in accessing the routine mental health system for their children.

What follows includes examples of these 4 types of program development from across the United States and Canada. Together these programs provide a framework for the development of psychiatric emergency care systems that can be adapted to the needs of specific communities and health care systems. Their implementation represents considerable progress in raising the bar on the standards of care for youth and families in psychiatric crisis.

## INNOVATIONS WITHIN PEDIATRIC EMERGENCY DEPARTMENTS: PSYCHIATRIC SERVICES WITHIN PEDIATRIC EMERGENCY DEPARTMENTS, CODE GOLD, FLEXIBLE SPACE IN THE EMERGENCY DEPARTMENT, AND CLINICAL PATHWAYS

### *Psychiatric Services Within Pediatric Emergency Departments (Nationwide Children's Hospital, Columbus, Ohio)*

In response to a sharp increase in behavioral health patient visits to the ED at Nationwide Children's Hospital, the hospital created a new model of care

using licensed master's-level behavioral health therapists to complete primary assessments of patients that were then reviewed by phone by a child psychiatry attending physician. Additionally, an ED behavioral health suite was built with 5 safe examination rooms and 1 safe restroom along with a workstation for behavioral health staff. The advantages of this system included providing a safer, quieter place to assess behavioral health patients and dedicated behavioral health staffing.

Nationwide Children's Hospital is also planning on opening the Nationwide Children's Hospital Big Lots Behavioral Health Pavilion in 2020. Although still in the design phase, there are plans for a psychiatric crisis center staffed by an ED physician, psychiatrist, psychiatric and ED nurses, behavioral health clinicians and technicians, and administrative staff. The physical plant blueprints include a medical suite, psychiatric assessment rooms, seclusion room, comfort room, extended observation unit, and crisis phone line.

### *Code Gold and Flexible Emergency Department Space (Los Angeles County–University of Southern California)*

Los Angeles County–University of Southern California (LAC-USC) Hospital has integrated 2 innovative approaches to addressing agitation and lack of space in pediatric EDs. Using the Joint Commission model of codes, LAC-USC uses Code Gold for behavioral health emergencies with a focus on clinical, not security, intervention. When a Code Gold is activated, trained behavioral health nurses and technicians respond en masse to the patient and work to verbally de-escalate the situation. The goal is to address the underlying cause of the agitation and minimize the use of restraints or medications.

Additionally, given the wide fluctuations in volume in pediatric EDs, LAC-USC uses a flexible physical plant model. When the number of behavioral health patients exceeds the safe allotment for a pediatric ED, a portion of the waiting room is temporarily repurposed with stretchers and staffing to support additional patients with behavioral health chief complaints. This model is often used for patients who have been assessed and require inpatient admission and are awaiting an open inpatient bed.

### *Clinical Pathways for Patients with Autism Spectrum Disorder (Children's Hospital of Philadelphia)*

Patients with autism spectrum disorder (ASD) can present to a pediatric ED in a setting of agitation or aggression at home. First and foremost, a medical etiology for this agitation should be considered and ruled out. Common causes for agitation or aggression in adolescents with ASD include constipation, seizures, ear infections, dental infections, pain, sleep problems, undetected injuries, sleep apnea, and urinary tract infections.[14]

At the Children's Hospital of Philadelphia (CHOP), pediatrics created a clinical pathway to optimize the care for patients with ASD who present to the ED with agitation or aggression, many of whom require medical work-up or admission. This clinical pathway is in the public domain, located on the CHOP Web site.[15] Goals of this clinical pathway include facilitating patient compliance and comfort, minimizing patient and staff safety and concerns, and defining a series of practical strategies and methods to organize and structure a patient encounter. The clinical pathway also provides an in-depth description of patients with ASD, including possible clinical features of repetitive behaviors and comorbid conditions.

*Communication strategies*

- Parents as partners (planning for difficult tasks when parents are present, discussing plan of care in advance of implementing, and frequent 2-way communication with parent and designated staff member)
- Kids care model adaptations (knocking and waiting before entering, allowing for child to become accustomed, introducing self, identifying all at bedside, discussing plan of care, checking name bands, returning in timely manner, and so forth)
- Get low, go slow (getting down to child's level, explaining everything in simple language, breaking down instructions, and positive reinforcement)
- CHOP autism flash cards to help identify people, medical supplies, and procedures using pictures

*Environmental modifications*

- Sensory sensitivities (tags on clothing, lights, too many people, loud noises, food textures, and too many instructions)

*Pain assessment*

- Asking patient or parent; often cannot use tools with rating scale or facial expression
- Simplistic language, terms familiar to patient, and minimizing time to focus on pain work best[16]

Given patients with ASD often require a longer ED course to stabilize or may require medical admission and procedures, CHOP has pioneered a new 12-bed medical behavioral unit, co-led by the departments of pediatrics and psychiatry.[17]

***Clinical pathways with public health standards of care (Canadian national health care system)***

To address increased emergency behavioral health visits and lack of standardized mental health screening tools and pediatric expertise, the Canadian national health care system created an evidenced-based Emergency Department Mental Health Clinical Pathway (EDMHCP) with 2 main goals:

1. Guide risk assessment and decisions on appropriate disposition for children and adolescents who present to an the ED with a behavioral health chief complaint
2. Provide streamlined referral process for follow-up mental health services within community organizations[18,19]

The EDMHCP algorithm begins at triage. Resuscitative/emergent medical care is the initial priority and, once a patient is medically cleared, a mental health screening battery is administered as part of the routine clinical pathway. The patient is subsequently evaluated by a child/youth mental health clinician and ED physician, and the HEADS-ED (Home, Education, Activities and peers, Drugs and alcohol, Suicidality, Emotions and behaviours, and Discharge resources) clinician screening tool is administered. Based on these assessments, the disposition recommendation is determined as in-patient admission, community mental health services, or follow-up with primary care. Community mental health services was further classified as 24-hour rapid response or 7-day response.[18]

Further details of this pathway and its implementation are discussed in Mona Jabbour and colleagues' article, "An Emergency Department (ED) Clinical Pathway for Children and Youth with Mental Health Conditions," in this issue. Both service and process outcomes of EDMHCP are currently being studied with the goals of determining whether or

not it improved health care utilization, medical management of behavioral health chief complaints, and coordination of care with outside mental health treatment clinics.[18]

## SPECIALIZED CRISIS CENTERS (HOSPITAL BASED): BELLEVUE HOSPITAL CENTER AND UNIVERSITY OF CALIFORNIA, LOS ANGELES

### *Bellevue Children's Comprehensive Psychiatric Emergency Program*

Bellevue Hospital Center in New York has created a system of comprehensive evaluation and management of pediatric psychiatric emergencies, the Children's Comprehensive Psychiatric Emergency Program (CCPEP). After patients are triaged in the pediatric ED, they are transferred to the CCPEP, which includes a 6-bed (4 bedrooms: 2 single rooms and 2 double rooms) extended observation unit providing active treatment, with a nursing station, medical examination room, charting room, waiting room, and 3 offices for evaluation and disposition of patients not meeting criteria for extended observation (danger to self or others or illness impairing safety in the community). This model of care, supported by the New York State Office of Mental Health, allows patients to have a legal status for observation, under Mental Hygiene Law 9.40. This legal status allows child psychiatrists 72 hours in which to evaluate, observe, and re-evaluate patients with the goal of optimal dispositional outcomes.

The CCPEP comprises comprehensive mental health staffing, including child and adolescent psychiatrists, child psychiatry fellows, psychologists, social workers, psychiatry technicians, and psychiatric nurses. The Bellevue CCPEP evaluates more than 2000 patients per year, with 40% meeting criteria for extended evaluation and 60% requiring comprehensive psychiatric and psychosocial evaluation and treatment planning. Dispositional options include discharge home from extended observation with outpatient follow-up (50% of extended observation patients), admission to the Bellevue inpatient child or adolescent psychiatry unit, follow-up in the interim crisis clinic (housed in the CCPEP, allows for close follow-up for patients who do not require admission but would benefit from immediate treatment with facilitated referral to longer-term treatment), and discharge home with referrals to the outpatient clinics (community or hospital based).

### *Child and Adolescent Psychiatric Emergency Department (University of California, Los Angeles)*

In response to 2 sentinel events, Los Angeles County partnered with the City of Los Angeles to create a specialized child and adolescent psychiatric ED. Modeled after the Bellevue CCPEP, Harbor-UCLA is building the first child and adolescent psychiatric ED on the West Coast, scheduled to open in 2018.

This model of care will include dedicated and specialized environment and a firm patient cap after which overflow will go to a pediatric ED. Goals of this new space are to centralize child and adolescent psychiatric emergency care in Los Angeles in 1 location and provide the highest level of patient care with staffing by child and adolescent psychiatrists.

## TELEPSYCHIATRY (ZUCKER SCHOOL OF MEDICINE AT HOFSTRA/NORTHWELL HEALTH/LONG ISLAND JEWISH MEDICAL CENTER)

Cohen Children's Medical Center of Northwell Health has a pediatric emergency psychiatry service, which includes a telepsychiatry component. After a 30% increase in ED behavioral health volume from 2011 to 2013, staffing changes were implemented to meet the needs of this vulnerable patient population. Concurrent to the development of an emergency psychiatry service, the Northwell Health system also expanded

and included many regional hospitals with varying psychiatric coverage (general psychiatrist, psychiatric nurse practitioner, and no coverage) in the EDs. Telepsychiatry was implemented to provide services to children presenting to other health system hospitals as an alternative to transferring them via emergency medical services or, in some locations, as an alternative to being evaluated by a general psychiatry nurse practitioner/physician provider. As the program expanded to more health system hospitals (they currently there are 14 spoke EDs), the volume of patients requiring telepsychiatric evaluation reached a critical volume and the health system created an independent behavioral telehealth center. The centralized behavioral telehealth center provides comprehensive evaluation and dispositional support with a team of adult and child and adolescent psychiatrists, social workers, case managers, and clerical support associates working together in covering multiple EDs. This telepsychiatry system economizes the highest trained professionals (adult and child and adolescent psychiatrist) in a centralized location, expanding their reach to on-site staff and providing psychiatric care where none is available, allowing for fewer unnecessary transfers and decreased lengths of stay in the EDs.

## COMMUNITY MOBILE CRISIS PROGRAMS: EMERGENCY MOBILE PSYCHIATRIC SERVICES (CONNECTICUT CHILDREN'S MEDICAL CENTER)

There are many methods of managing crises within the community, such as triage phone lines, mobile community crisis teams, and local/embedded psychiatric triage teams, all of which are highlighted by Kristina Sowar and colleagues' article, "Psychiatric Community Crisis Services for Youth," in this issue. This article highlights 1 state-wide mobile crisis program from Connecticut. Based on national best practices, this community-based provider network created new goals, clinical benchmarks, and targets for accountability. The goal of the emergency mobile psychiatric services (EMPS) was to respond to psychiatric crises in the community, connect patients to care, and avoid unnecessary ED visits.[13]

The program is funded by Connecticut state grants with third-party reimbursement from Medicaid and commercial insurers.

Any child 18 years of age or younger (19 years of age or younger, if in high school) can access these services. Anyone can call to make a referral to EMPS, by definition the crisis is defined by caller. The only exclusion criteria for EMPS services are for youth currently in psychiatric residential treatment centers, subacute units, or inpatient hospitals.

EMPS undergoes ongoing performance improvement; there are provider performance benchmarks that include high volume, being mobile, and responding within 45 minutes or less. The EMPS team responses to homes, schools, EDs, and communities, and clinical assessment is completed using standardized instruments and follow-up services are put into place within 45 hours. The team has access to psychiatric evaluation and medication management, if needed.

There are more than 16,000 calls annually to the call center, 75% of which are referred on to EMPS. As part of ongoing quality-improvement measures, the EMPS team has calculated that the cost per episode of care is more than $10,000 on the inpatient unit and $842 using EMPS services. EDs can also refer to EMPS, diverting patients from inpatient psychiatric units, and these referrals have saved more than $2 million.[13,20]

## SUMMARY

Children and adolescents in crisis or with psychiatric emergencies are growing in number and acuity. This article highlights service developments improving the quality of child psychiatric emergency care that have been implemented in a variety of arenas.

First, innovations within pediatric EDs are described, including clinical pathways for patients with ASD, using Joint Commission Code Gold to optimize clinical staff to de-escalate agitated patients, and clinical pathways with public health standards of care pioneered in Canada. Second, specialized and dedicated units for the evaluation and treatment of children and adolescents in psychiatric crisis at both Bellevue Hospital Center and LAC-USC are outlined. Third, using the Northwell Health/Long Island Jewish Medical Center telepsychiatry program as a model, how telepsychiatry can increase access to child psychiatrists is described. Last, the statewide EMPS in Connecticut is highlighted, a cost-effective and successful means of triaging and treating children and adolescents in crisis in the community, thereby reducing ED visits and inpatient psychiatric hospitalizations.

Together, these 4 areas of care demonstrate myriad innovative and creative means to best care for patients and may be useful to guide system-based improvements for the care of pediatric patients in crisis throughout North America.

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