

How to Build a Pediatric Behavioral Health Crisis Intervention Program



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KEYWORDS

- Pediatric mental health crisis care • Crisis intervention program
- Emergency department diversion • Continuum of care

KEY POINTS

- Pediatric behavioral health crisis intervention programs can divert unnecessary emergency department visits, link youth and families to services, and provide targeted short-term interventions.
- Developing a pediatric crisis intervention program requires a nuanced understanding of the population needs, gaps in current clinical services, and specific state and regional factors.
- Practical decision-making frameworks can help stakeholders synthesize key information, design a crisis intervention program, and implement monitoring, accountability, and quality improvement metrics.

INTRODUCTION

Over the past decade, there has been a sharp rise in pediatric emergency department (ED) visits for behavioral health emergencies. The proportion of pediatric ED visits for a mental health reason approximately doubled from 2011 to 2020, increasing from 7.7% to 13.1% of all visits.¹ This trend was further exacerbated by the COVID-19 pandemic in 2020, prompting leading pediatric medical associations to declare the first-ever national emergency for children's mental health in 2021.²

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Abbreviations	
ED	emergency department
SAMHSA	Substance Abuse and Mental Health Services Administration

While an important resource and safety net for all patients, the environment of the ED is often ill-suited for the unique needs of pediatric patients presenting during a behavioral health emergency. The ED can be busy, loud, and scary for youth, especially those with neurodevelopmental disorders or a history of trauma. This challenging and unfamiliar environment can then exacerbate or precipitate unsafe behaviors, putting patients and staff in harm’s way.^{3–5} Pharmacologic restraint of patients presenting to an ED with a behavioral health crisis occurs in 1.6% to 11.8% of visits and is becoming increasingly more prevalent.⁶ Taken together, this safety net resource may inadvertently traumatize or retraumatize vulnerable youth and discourage future help-seeking behavior for those who need it most.

EDs may also lack the necessary funding and resources to provide high-quality and evidence-based care for those presenting in a mental health crisis. Patients can experience long wait times for a mental health evaluation or not even be seen by a mental health professional at all.⁷ By one estimate, only 20% of pediatric mental health–related ED visits included evaluation by a mental health professional.¹ “Boarding”, defined as waiting for an available inpatient psychiatric bed for longer than 4 hours, is increasingly common for those in the ED.⁸ Approximately one-third of pediatric patients across the United States must board 12 or more hours in the ED before being transferred on to inpatient psychiatry and beginning their treatment.⁹ For those who are discharged, timely outpatient follow-up is vital for reducing the risk of return ED visits.^{10,11} Yet many children, especially those in under-resourced communities, may be discharged with no mental health follow-up.⁷

In response, hospital and community leaders have developed crisis intervention programs at the city, county, and state levels with the shared goal of linking youth in crisis to services that are more timely, efficacious, and equitable while mitigating unnecessary ED visits.¹² These initiatives reflect a broader shift away from ED-centered crisis care toward models that emphasize early identification, rapid intervention, and continuity of care. A range of models have emerged: mobile response and stabilization, school-based programs, behavioral health urgent care clinics, hybrid or telepsychiatry options, and more (Table 1).¹²

With such a heterogeneous assortment of crisis intervention programs across the country, it can be overwhelming for community agencies and hospital systems to think about where to begin and how to design a program from scratch. In this text, we synthesize key considerations for designing a new crisis intervention program and present a practical decision-making framework. Rather than replicating what works well in a different city or state, program designers must take a nuanced approach guided by specific community needs and available resources in coordination with primary stakeholders in their own communities.

CASE VIGNETTE

A 16-year-old female with no prior psychiatric history was sent to the ED from school after disclosing nonsuicidal self-injury and passive suicidal ideation. She had been experiencing several months of worsening depressive symptoms, hopelessness, social isolation, and academic decline. A teacher noticed the patient crying during a passing period and walked the patient to see the school counselor. The school

Table 1
Common pediatric behavioral health crisis intervention programs

Type of Program	Location	Focus of Care	Providers
ED observation and stabilization	In or adjacent to EDs	Acute crisis stabilization for those who present to the ED who do not meet inpatient criteria but are not yet safe to be discharged to home. Treatment and observation is typically 24–48 h.	Psychiatrists, SWs, RNs.
Urgent care and walk-in clinics	Community or hospital	Immediate availability for behavioral health assessment, triage, and referrals.	Therapists, psychiatrists, patient engagement specialists, care coordinators.
School crisis centers	School	Urgent Care (as above) but embedded within or closely collaborating with schools.	Therapists, psychiatrists, patient engagement specialists, care coordinators.
MRSS	Community or hospital	Mobile crisis team can meet individuals in the community or in institutional settings (jails, EDs, schools). MRSS may provide immediate and/or short-term services directly or via referral.	Mental health professional, defined differently in different programs. MRSS may include peers, family support specialists, care coordinators, and psychiatrists.
Crisis lines	Community or hospital-based	24/7, focused on triage and referral; may be linked to urgent care clinic for direct referrals.	Trained crisis workers (may include clinicians with bachelor's to master's degrees).
Crisis stabilization unit	Hospital or community	Less restrictive and shorter-term than an inpatient psychiatric treatment unit; focus on safety, building resilience, family interventions.	Psychiatrists, RNs, therapists, peers.
Paramedic program	Community	Pairing paramedics with behavioral health providers for behavioral health crisis responses.	Paramedics and behavioral health clinicians.

Abbreviations: MRSS, mobile crisis/mobile response and stabilization; RN, registered nurse; SW, social worker.

counselor, with limited available crisis supports, referred the patient to the ED after being unable to complete a safety plan with her.

In the ED, the patient waited several hours to be roomed and evaluated by a mental health professional. She was slow to open up to providers and minimized her

symptoms during the assessment. The mental health care provider was unable to contact anyone at school after the regular hours for collateral or joint treatment planning. Ultimately, the patient was discharged with referrals for outpatient therapy and psychiatry. However, due to the patient's insurance and geographic region, her parents were unable to secure an appointment for several months.

Without structured therapeutic support or medication management, the patient's symptoms continued to escalate. She was re-referred to the ED from school several times over the coming weeks for worsening self-harm behaviors and increasing suicidal ideation. Each visit, the patient did not meet the criteria for inpatient admission. She was discharged with reinforcement of the safety plan and additional referrals to higher levels of care that the family was still unable to access. At her fourth ED presentation in 2 months, the patient was psychiatrically admitted for acute safety and stabilization.

This case illustrates how systemic gaps across multiple points of contact contributed to a predictable escalation in acuity. Limited crisis supports and care coordination from schools, inadequate treatment and linkage to care from the ED, prolonged waitlists for urgent follow-up appointments, and insurance and geographic barriers for this patient perpetuated a cycle of ED utilization and psychiatric decompensation, ultimately resulting in an inpatient admission. We use this example as a starting point to guide designing a crisis intervention model that addresses these structural vulnerabilities and meets the needs of their patients and communities.

KEY FACTORS TO CONSIDER IN BUILDING A PEDIATRIC BEHAVIORAL HEALTH CRISIS INTERVENTION PROGRAM

State and Regional Factors

State and regional factors shape not only what crisis models are feasible, but how they must be implemented. A successful crisis intervention program must align with the geography, climate, transit infrastructure, and population density of the community. For example, Connecticut, a population-dense state, implemented mobile crisis services that can quickly respond in-person to youth mental health crises.¹² In states with a high percentage of rural counties, prolonged mobile response times may negatively impact the efficacy of the intervention. While some rural communities may be best served by virtual crisis support models to mitigate transportation challenges, still others may lack access to reliable high-speed internet.

Program designers must consider mental health laws that vary by state. In some states, youth can consent to mental health care independently, while in others parental consent is required and may complicate timely intervention. Ethical dilemmas are likely to arise if a guardian refuses care or if a youth declines to participate; members of the care team should be familiar with their state laws and school and hospital policies.

Particularly salient in pediatrics is the central role of the school system which can then further support crisis intervention program development. A community with robust funding for school-based programs might consider embedding crisis services within schools. Several states have implemented legislative mandates to guide school mental health services. State-specific boards of education, as well as research and advocacy organizations, often serve as valuable sources for information on relevant policies and priorities. Additionally, the National Center for School Mental Health offers the SHAPE System, a free resource featuring assessment tools, comprehensive resources, and data spanning from the school district to the state level.¹³

Finally, there is wide variability in governmental and administrative structure depending on the specific county or state. Counties with a strong precedent for

top-down coordination and collaboration from the state department of public health may be more suitable for state-wide efforts. Other states may prioritize autonomous county-focused programs tailored to the specific needs of each jurisdiction.

Assessment and Treatment Approach

The design, composition, and goals of the crisis services program should drive the inclusion and exclusion criteria. The care team might consider qualification criteria based on age, primary mental health concern, cognitive level, coexisting medical conditions, symptom severity, and risk. Unfortunately, high acuity patients for whom mental health treatment is most needed, especially those with disruptive or aggressive behaviors, may be “reverse triaged” and excluded from programs.¹⁴ While broad inclusion criteria reach a wider population, the program must ensure it can meet the needs of all participants. For example, a child with aggressive behaviors may not be suitable for an entirely milieu-based program.

Program designers should also decide on the length and nature of the intervention. Current models range from assessment-only programs to short-term treatment (1–2 months) with psychotherapy or medication management.

Programs may be based at differing physical locations. By definition, a mobile crisis team is not confined to one physical location, whereas an urgent care model is typically housed within a standalone clinical space. Still others may be colocated with pediatricians’ offices, schools, or separate but adjacent to EDs. With the increasing prevalence and acceptability of telepsychiatry services, one might also consider remote or hybrid options to best meet patients’ needs.

Hours of operation vary among different crisis services. Certain programs operate 24 hours a day and 7 days a week to meet the unpredictable nature of pediatric mental health crises. However, such a robust program may not be possible to fund or staff in certain parts of the country. Embedded programs must reflect the working hours of the pediatrician’s office or school in which they are colocated. Programs may consider partnering with crisis lines or other local or regional programs to enhance coverage. Some crisis programs may offer walk-in same day services, whereas others may request an appointment.

Successful programs should be able to link youth to existing care systems such as intensive outpatient or partial hospitalization programs. Programs should also be able to refer to inpatient psychiatry units if an imminent risk to self or others is identified, although bed availability varies widely across the country.¹⁵ Processes for timely bidirectional communication with the school that respects hospital and school privacy laws may also need to be established.

Building the Care Team

The goals of the crisis services program guide the composition of the care team, while the composition of the care team drives the available interventions of the program. Crisis programs typically employ multidisciplinary teams that might include psychiatrists, nurse practitioners, social workers, nurses, therapists, primary care physicians, and case managers. A program must weigh the unique skillset of each provider with the needs of the patient population and costs to the program. Awareness of social determinants of mental health will help determine what range of services would be most helpful, such as linking families to food and housing or to a psychiatrist with expertise in medication management. Care teams should strive to build a team that reflects the populations they serve with respect to race, ethnicity, or religion and develop a framework of cultural humility across the organization.

Workforce shortages pose another major challenge. According to the American Academy of Child and Adolescent Psychiatry, 72% of counties in the United States have no child and adolescent psychiatrist, highlighting the need for creative solutions such as collaborative care models, employing advanced practice providers, or using telepsychiatry models.¹⁶ Programs may be unable to fill the roles they need which can limit program effectiveness.

Funding and Insurance

Consideration of funding streams from the early stages maximizes a program's chances at long term success. Program designers may receive funding from public (city, county, state, or federal) or private (hospitals, for profit or nonprofit companies) sources. Diversification with braided or blended funding may help buffer against periods of program vulnerability when grants or donations expire. Some programs, especially those with a physical location or other assets, may have higher start-up costs, while other programs may have a higher monthly operating budget for payroll and supplies.

Programs that are able to bill through insurance have access to a sustainable revenue stream outside of grants and donations, although reimbursement rates frequently do not reflect the level of intervention provided through crisis services.¹⁷ Reliance on insurance can introduce bias and exacerbate equity issues, especially for the uninsured. Continued state and federal advocacy efforts are necessary to ensure adequate reimbursement of behavioral health crisis services.

Measurement and Accountability

Program designers should monitor key program metrics, behavioral health outcome measures, and program fidelity if the program is based on a national model to evaluate the clinical impact, overall performance, and sustainability of the program. For example, programs might monitor time from the initial incoming crisis call to a mobile response provider arriving to the patient, the wait time for a patient on a phone triage line, or time to linking patients with ongoing care. Regular outcome reviews and transparent reporting strengthen program credibility and justify continued funding. Community-based programs should be empowered to collect and share their data with academic centers and vice versa to advance evidence-based crisis service programs that serve community need and contribute to the limited body of knowledge in this topic.

Different stakeholders—patients, families, health care systems, and funders—may emphasize different outcome measures. For instance, a county-level focus might show success in reducing local hospitalizations, while a state-level perspective could reveal that children are simply being transferred to inpatient facilities in neighboring counties. Program designers must remain flexible in their approach with clearly identified balancing measures to ensure designated outcomes are meaningful and comprehensive.

PRACTICAL DECISION-MAKING FRAMEWORK FOR BUILDING A PEDIATRIC BEHAVIORAL HEALTH CRISIS INTERVENTION PROGRAM

A structured approach will help program designers as they undertake this process (Fig. 1). Program designers can begin with a needs assessment of their community: Who and where is the intended target population? What local and regional factors might impact care? Equity considerations should be embedded from the start: language access, insurance status, disability, and others. Next, program designers must tailor the intervention to the community's particular strengths while addressing

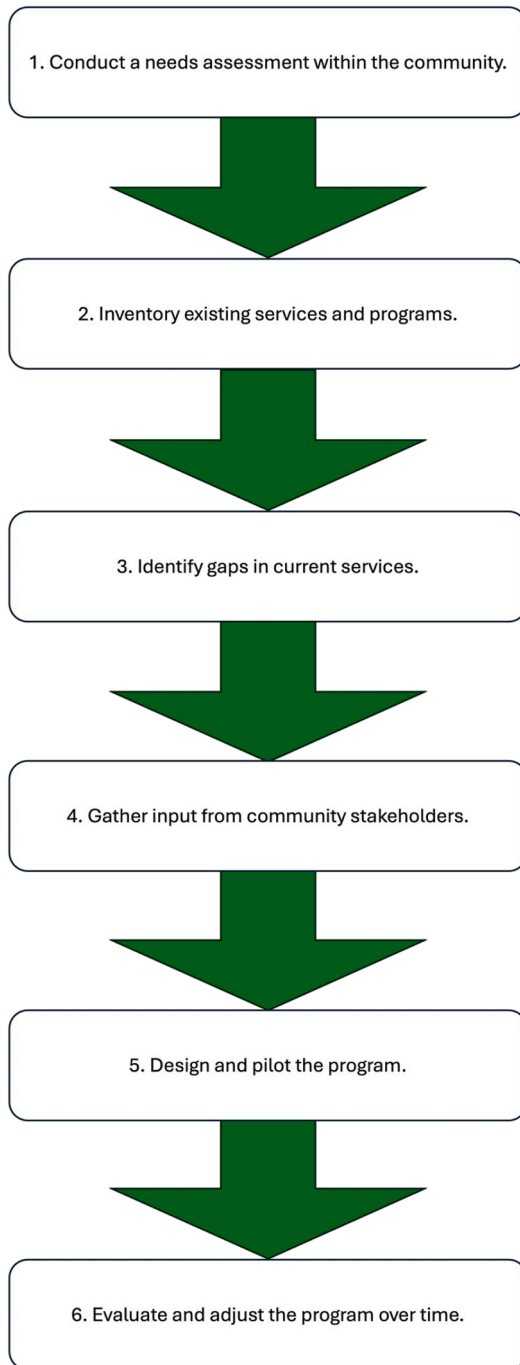


Fig. 1. Practical decision-making framework for building a pediatric behavioral health crisis intervention program.

its specific challenges. For example, a community with high rates of opioid use disorder may prioritize integrating substance-use-disorder treatment into crisis programs.

Program designers should then become familiar with established services in the community to build on and expand the breadth and impact of the new program. Where are the gaps in current service coverage? Are there underserved or marginalized populations, diagnoses or geographic regions that have been excluded or overlooked? Program designers must include input from key stakeholders which can include representatives from schools, law enforcement, hospitals, outpatient providers, and most importantly, patients and families. Program designers can then select a crisis intervention program that incorporates the unique needs of their community rather than simply replicating what has worked in another. Designers might consider combining elements from different models (e.g., urgent care with after-hours crisis hotlines) or a phased approach as the program launches and grows. Finally, programs should prioritize measurement, accountability, and continual improvement with updated iterations of the crisis intervention program as needed over time (Table 2).

Table 2 Key factors to consider in building a pediatric behavioral health crisis intervention program	
Key Considerations	Main Takeaways
State and regional factors	• Programs must be tailored to regional characteristics such as geography, climate, and population density • Effective design uses community strengths and existing resources to address region-specific challenges • Consider that laws and policies regarding consent for mental health treatment vary by state and institution
Assessment and treatment decisions	• Inclusion and exclusion criteria should be established in accordance with program design and capabilities, considering limitations based on factors such as age, primary mental health concern, and coexisting medical conditions. • Program design can vary by intervention type (initial assessment vs short-term treatment), physical location (standalone clinic or meeting the patient where they're at), and delivery of care (in-person, telehealth, or hybrid). • Hours of operation and availability of services depends largely on the ability to partner with existing local programs such as crisis lines and refer to existing care systems (partial hospitalization programs, inpatient psychiatry units).
Building the care team	• Interdisciplinary collaboration is a key component of crisis service programs; composition of the care team should be dictated by the specific needs of the patient population. • Workforce shortages, particularly in child and adolescent psychiatry, may cause limitations for some programs.
Funding and insurance	• Early consideration of funding sources and anticipated costs is integral to program longevity and success. • Reimbursement through insurance companies can serve as a sustainable revenue source, although continued advocacy is needed to ensure adequate reimbursement of crisis intervention services.
Measurement and accountability	• Programs should create and monitor outcome measures to assess the clinical impact of the program, ensuring that these measures are comprehensive and meaningful to various stakeholders involved

SUMMARY

The Substance Abuse and Mental Health Services Administration (SAMHSA) has identified “an urgent need to expand and promote a comprehensive, trauma-informed, customized crisis continuum for youth and families.” As identified by the SAMHSA, individuals in crisis need someone to talk to, someone to respond, and a safe place to be. What this looks like may differ across communities, but effective programs should prioritize a system of care approach that is accessible, culturally competent, developmentally appropriate, equitable, trauma-informed, sustainable, and efficacious.¹⁸

Within the continuum of crisis intervention programs, there is no *best* program. Successful program design necessitates thorough consideration of different models, each with its own intrinsic strengths and challenges. The most effective program for any given community inherently depends on the specific needs and resources of the patients it serves.

As the need for alternative pediatric crisis intervention models grows, it is important for new and existing programs to continue collecting and distributing outcome metrics. Future research should focus on the efficacy of these programs, as well barriers to implementation, to encourage the development of innovative solutions. Tracking and comparing utilization patterns of various crisis care models may also provide important insight into areas of improvement.

CLINICS CARE POINTS

- There is no single *best* pediatric behavioral health crisis intervention program. Programs must be matched to the unique needs, strengths, challenges, policies, and resources of their communities.
- A structured, framework approach can guide program designers interested in building a pediatric behavioral health crisis intervention program from scratch.

DISCLOSURE

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