Emergency Department Use by Connecticut Children and Youth with Behavioral Health Conditions:

Improving Care And Promoting Alternatives

Prepared by the Child Health and Development Institute in collaboration with Beacon Health Options

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Child Health and
Development Institute
of Connecticut, Inc.

beacon
health options

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On behalf of the Child Health and Development Institute, I would like to thank a number of individuals and organizations that made this report possible. We are indebted to the many people who served on the workgroup and the many others who agreed to be interviewed for this project. So many were willing to share their insights about behavioral health service delivery in emergency departments, the strengths and weaknesses of Connecticut's system of services for children and youth with behavioral health conditions, and their ideas for making the system stronger. It is their insights and ideas that form the foundation of this report. Special thanks go to the family members and caregivers for sharing personal, and often painful, stories about their child and family crises, as well as their experiences in emergency departments and the larger system of care.

I would like to acknowledge Dr. Michael Hoge for his superb coordination of the data gathering and report writing process and his expert facilitation of the workgroup meetings. I would also like to thank Dr. Bert Plant and Beacon Health Options for their collaboration in the preparation and co-authorship of this report. In addition, special thanks go to Tim Marshall of the Connecticut Department of Children and Families and Susan Graham, a family champion, for the contributions they made to the information gathering and workgroup process.

The individuals who contributed to this process are listed in the contributors section of this report. We were able to reach consensus on many of the critical issues and recommended solutions for addressing the needs of youth who present to emergency departments for assessment and treatment. That does not mean, however, that each workgroup member explicitly endorsed each of the report's recommendations. Through a process of intensive review and open debate, a set of recommendations emerged, which are included in the report. CHDI accepts responsibility for blending the many insights and ideas into the analysis and recommendations, and for any errors or omissions in the ultimate work product.

CHDI looks forward to the ongoing collaborative work that will be needed to implement these recommendations, as together we seek to improve the health and well-being of Connecticut's children and their families.

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EXECUTIVE SUMMARY

Overview

Connecticut has among the nation's best arrays of services and supports for children and youth with behavioral health needs. It includes a statewide mobile crisis system, care coordination, evidence-based outpatient and intensive in-home services, data collection and quality improvement activities, family advocacy, and many other elements. Yet, despite all that Connecticut has established and achieved to address children's behavioral health over the years, Connecticut has a long history of continually examining new strategies for improving the system, and achieving optimal outcomes for children and families. One area of concern within the state and nationally, is the increase in Emergency Department (ED) use by children and adolescents who have behavioral health conditions, including mental health and substance use problems.

With support from the Children's Fund of Connecticut, the Child Health and Development Institute of Connecticut, Inc. (CHDI) convened a workgroup to examine an apparent increase in emergency department (ED) use by children and adolescents with behavioral health conditions. The focus was on individuals 18 years and younger with mental health and/or substance use diagnoses. This work was conducted in collaboration with Beacon Health Options and in consultation with the Connecticut Department of Children and Families (DCF). Workgroup participants included family members and representatives of multiple state agencies, hospitals, community behavioral health organizations, schools, and the Connecticut Hospital Association. The workgroup met five times between January and July of 2018.

The charge to the workgroup was to: (1) review the literature on national trends in use of ED services by this population; (2) gather and review data on ED use in Connecticut by children and youth with behavioral health conditions; (3) seek input from family members and caregivers, service providers, and representatives of state agencies; (4) identify best practices nationally and in Connecticut relevant to this issue; and (5) propose interventions and financing strategies to promote alternatives to ED use and improve the quality of ED care for this population.

Methods

A review was conducted of the published literature and gray literature, such as federally sponsored reports, to assess national trends and to identify best practices related to ED services and alternatives to ED use. Connecticut Medicaid data on ED use was assembled by Beacon Health Options, the Administrative Services Organization for the Connecticut Behavioral Health Partnership. Additional Connecticut data was provided by hospitals, Mobile Crisis Intervention Services (Mobile Crisis) providers, and members of a task force examining ED use in this state by individuals with autism spectrum disorders, intellectual disabilities, and developmental disabilities. The family perspective was gathered by a family champion who completed semi-structured interviews of six family members or caregivers that had used ED services for their children and youth, and more informal discussions with an additional 20 family members or caregivers. The information described above was summarized, presented to, and discussed by the workgroup as it became available.

DCF involvement includes any youth who is involved with the Department of Children and Families through any of its mandates for any period of time during the reporting year. This includes youth committed to DCF through child welfare or juvenile justice, and those dually committed. It also includes youth for whom the Department has no legal authority, but for whom DCF provides assistance through its Voluntary Services, Family with Service Needs and In-Home Child Welfare programs.

As information was presented and discussed during workgroup meetings, potential recommendations emerged for increasing the use of alternatives to EDs and for improving the quality of ED care for children and youth with behavioral health conditions. Members of the workgroup also suggested recommendations as they shared their own experiences and perspectives on these issues. Potential recommendations were drafted, discussed by the workgroup, and substantially modified and refined during the course of this process. It is important to note that it was not the intention of this workgroup to evaluate or draw conclusions about the ED services of specific hospitals.

Key Findings

The following significant findings formed the foundation for the recommendations contained in this report:

1. There are more than 14,000 behavioral health ED visits each year by children and youth covered by Connecticut Medicaid, which is the population for which data are most readily available.
2. The use of EDs in Connecticut by Medicaid-covered children and youth with behavioral health conditions has increased significantly over the past decade, with the most recent data showing a 20% increase in the number of ED visits from 2014 to 2016. Significant increases in ED visits also have been reported nationally.
3. While Connecticut ED utilization data are not available on privately insured children and youth, their use of EDs nationally has been declining during this same period.
4. Among the Connecticut Medicaid population, those who use ED services for behavioral health reasons are more likely to be older (13–17), male, white, and involved with DCF than those who do not use ED services.
5. The vast majority of Connecticut children and youth covered by Medicaid visited an ED only one or two times during any of the periods that have been studied.
6. In Connecticut, there are very few children and youth covered by Medicaid who are frequent visitors to EDs for behavioral health reasons, and just a handful who are frequent visitors over the course of more than a year. Children and youth with DCF involvement account for a disproportionately large percentage of ED frequent visitors.

7. Among the Connecticut Medicaid population, during the most recent year under study, approximately 1300 episodes of care involved children and youth who were stuck in an ED for more than eight hours after being medically cleared, with more than 9% of these being stuck for more than a week.
8. Those with Autism Spectrum Disorder, Intellectual Disability, or Developmental Disability who are covered by Connecticut Medicaid are disproportionately over-represented among the children and youth who are stuck in EDs. Contributing factors appear to include inadequate expertise within the community-based service system for individuals with these conditions and a lack of expertise in many EDs for addressing the needs of this population.
9. The vast majority of Medicaid-covered children and youth seen in Connecticut's EDs for behavioral health conditions are discharged without being admitted to an inpatient facility. Since relatively few children and youth receive significant treatment interventions in an ED, this raises the possibility that many of these ED visits could have been avoided if existing alternatives to the ED were accessed or if other alternatives were available.
10. Claims data from 2016 suggest that 35% of Medicaid-covered children and youth in Connecticut did not have a follow-up visit in the community within 30 days of being seen in an ED, which raises significant concerns about the connection to community care among those who visit an ED.

11. Services available in Connecticut EDs for children and youth with behavioral health disorders vary widely among hospitals, with some offering no or limited specialized services or staff trained in the treatment of these patients. Few hospitals have specialized services and staff available during most hours of operation.

12. There is wide variation among Connecticut's EDs with respect to practice patterns and outcomes in caring for this population. For example, the rate of inpatient admission among Medicaid-enrolled children and youth with behavioral health conditions seen in an ED ranges from a low of 2.4% to a high of 43.6%.

13. Beacon Health Options generates high quality data regarding ED use among the Medicaid population, and these data are widely available through the Connecticut Behavioral Health Partnership. There appear to be untapped opportunities in Connecticut for ED directors to work with hospital quality and health information managers to develop reliable and valid data about the total population of patients with behavioral health conditions treated in their EDs to guide hospital-based, health care system-based, and statewide quality improvement initiatives related to the delivery of behavioral health services to children and youth.

14. Among the six families and caregivers interviewed as part of this planning process, there tended to be dissatisfaction with their experience in EDs, and, at times even self-reported traumatic experiences in these settings. In Connecticut and nationally, families seek treatment in an ED to obtain safety for the child and family, a thorough assessment, an intervention, helpful guidance, connections to services, compassion, and support. However, they report often encountering in EDs the absence of staff skilled in addressing these needs. The most common experience appears to involve longer than average wait times, environments that heighten rather than calm anxieties, and insufficient communication between ED staff and a child or family's community providers. The most common clinical process appears to be a triage decision. The most common outcome is a discharge home, at times against the desires and fears of the family.

15. Nationally, there is a growing body of knowledge about ED best practices in the care of children and youth with behavioral health conditions. There is a compelling need to strengthen the use of these practices in Connecticut's hospitals, which should include providing quality care to special populations, such as those with Autism Spectrum Disorder, Intellectual Disability, or Developmental Disability. With respect to quality of care, it is important to recognize that EDs throughout the nation and in Connecticut are faced with dramatic increases in utilization, without accompanying increases in resources to address the growing demand.

16. While there is a compelling need to improve the quality of ED care in Connecticut offered to children and youth with behavioral health conditions, virtually every individual involved in or contributing to this workgroup viewed the core problem as a systems issue, not a hospital or ED issue. There was near universal agreement that EDs are, and will always be, suboptimal settings in which to treat children, youth, and families dealing with behavioral health disorders. The widely held view is that action is needed to ensure that existing non-hospital services are fully utilized, and to strengthen the community-based system of care. This will, in turn, ensure that ED services are used much less frequently, stays in EDs are much shorter, diversion and step-down options are more readily available, care provided in EDs is more informed by the family and community provider perspectives, and that peer and family support is more readily available.

17. There is the potential for cost savings if Medicaid-covered ED visits or lengthy stays in EDs by children and youth with behavioral health conditions can be avoided.

Recommendations

Based on the information collected and reviewed, the following recommendations were generated for Connecticut:

1. **Improve diversion and timely discharge from EDs by increasing collaboration and training among Mobile Crisis (formerly known as EMPS) programs, EDs, and the schools.**

   With approval from DCF and in collaboration with the State Department of Education (SDE), the existing Mobile Crisis Performance Improvement Center (PIC) should focus its efforts on increasing collaboration among the Mobile Crisis programs, the EDs, and schools in order to decrease ED admissions, shorten ED lengths of stay, and promote appropriate connections to community care for children and youth who are discharged from an ED.

   The focus of this recommendation is on strengthening ED diversion and utilization of alternatives, with an emphasis on building upon and enhancing existing structures and collaborations. No additional funding is required.

2. **Implement a quality improvement initiative focused on the delivery of behavioral health services within high volume ED settings serving children, youth, and families.**

   It is recommended that the four hospitals in Connecticut that provide the largest volume of behavioral health ED services to children and youth, which are Connecticut Children's Medical Center, the combination of Yale New Haven Hospital and Yale New Haven Children's Hospital, St. Mary's Hospital, and Backus Hospital, collaborate in this initiative to enhance care, with assistance from DCF, the Department of Developmental Services (DDS), SDE, Beacon Health Options, the Connecticut Hospital Association, and national experts.

   The focus of this recommendation is on the quality of ED service. Immediate implementation should be possible with an allocation of $85,000 from the DCF FY19 appropriation to cover the costs of coordinating this initiative, possibly by supporting existing CT-based partners that already provide support to EDs, and/or by hospitals with technical assistance.

3. **Establish a performance improvement initiative under the Behavioral Health Partnership focused on ED services to children and youth with behavioral health conditions.**

   DCF, the Department of Social Services, and the Department of Mental Health and Addiction Services should identity ED services for children and youth with behavioral health conditions as the focus of a formal performance improvement initiative of the Connecticut Behavioral Health Partnership, to be managed by Beacon Health Options as it uses financial incentives to increase the use of alternatives to EDs and improve the quality of ED care.

   The focus of this recommendation is on improvement of the service system. It is an intermediate term strategy that would necessitate an estimated additional $300,000 in DSS state and federal Medicaid funding.

4. **Increase care coordination for children, youth, and families receiving ED services by funding the placement of care coordinators and family support specialists in high volume EDs.**

   A DCF-administered grant program should be created to fund the hiring of additional care coordinators and family support specialists in the four highest volume EDs serving this population, to support short-term care coordination focused on community referral, connection to care, family support, and children and youth stuck in an ED.

   The focus of this recommendation is on ED service quality. It is an intermediate term strategy that would require an estimated $2 million in legislative funding for this grant program.

5. **Provide telepsychiatry case consultation to EDs that lack staff with specialized expertise in serving children, youth, and families.**

   As an implementation strategy, Connecticut should consider integrating this service into the ACCESS Mental Health program that the state currently funds to provide remote consultation on behavioral health conditions in children and youth to pediatricians.

   This recommendation is focused on ED service quality. It is an intermediate term strategy that would require an increase in the DCF budget estimated at $500,000 to expand ACCESS Mental Health.

6. **Initiate a planning process to establish Behavioral Health Assessment Centers in the state.**

   In collaboration with other state agencies, DCF should lead in the development of a plan to create behavioral health assessment centers that will serve as alternatives to EDs, with the capacity to provide urgent evaluation, treatment, and referral in an environment that is conducive to crisis resolution for children and youth with behavioral health conditions. The 2014 Children's Behavioral Health Plan included recommendations to establish these Behavioral Health Assessment Centers, which was then supported in the Governor's Action Plan released soon after. Although the value of such centers was recognized, they ultimately were not funded.

   The focus of this recommendation is on ED diversion and alternatives. This is an intermediate term recommendation that would require new funding. Further planning is required to estimate the amount of funds required.

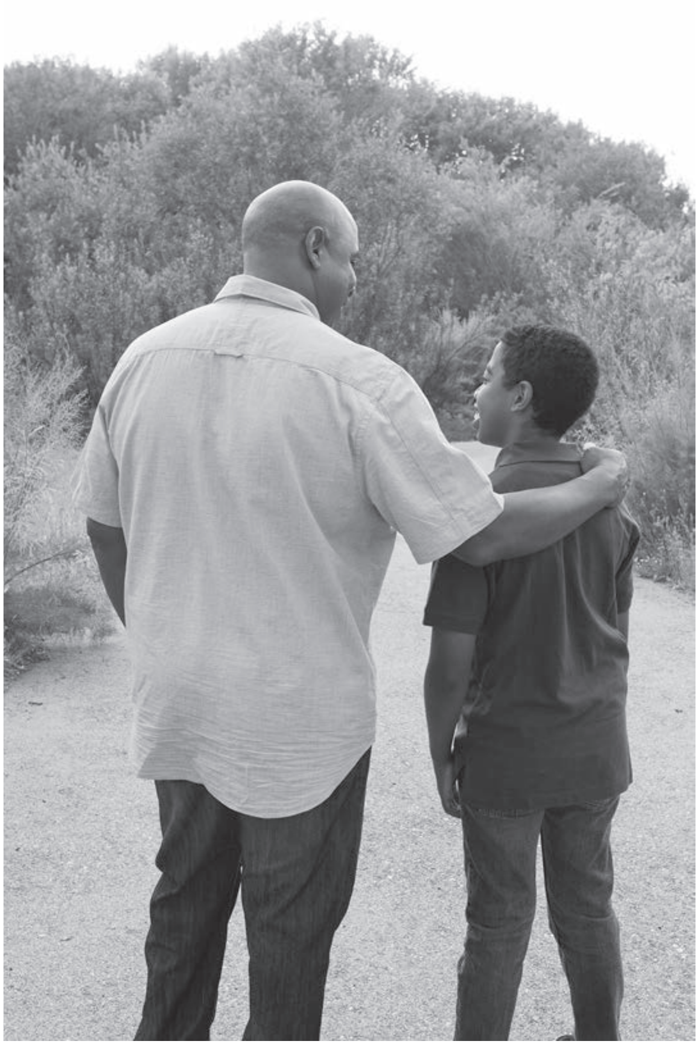
7. **Migrate the functions of the ED workgroup to the Connecticut Behavioral Health Partnership Oversight Council.**

   Within this structure, a formal and ongoing process should be maintained for improving ED services for children and youth with behavioral health conditions, involving a collaboration of state agencies, providers, and family advocates to routinely prioritize interventions, assess progress, and refine strategies as additional information and experience is gained. The Behavioral Health Partnership Oversight Council and its subcommittees already devote attention to this issue. It is proposed that this Council further prioritize the ED issue, and provide oversight of specific actions that are implemented from this report.

   This recommendation focuses on structure and process. Implementation can begin quickly if the Council agrees to assume this role. The level of funding required to support the process of providing effective guidance and oversight of this area would be determined by the Council.

Conclusion

With the release of this report, a practical set of strategies has been identified for strengthening the quality of behavioral health care for children and youth in Connecticut's EDs and, more broadly, strengthening the system of care to reduce the need for children and youth to access ED services. The full report includes a more complete description of the recommendations. Proposed steps for disseminating the report are detailed as well. It is the hope of this workgroup that Connecticut will now take the bold steps necessary to implement these recommendations.



INTRODUCTION

Connecticut has among the nation's best array of services and supports for children and youth with behavioral health needs. It includes a statewide mobile crisis system, care coordination, evidence-based outpatient and intensive in-home services, quality improvement, and family advocacy. Yet, despite all that Connecticut has established to address children's behavioral health over the years, continued efforts to improve the system are needed. One area of concern within the state and nationally is the increase in emergency department (ED) use by children and adolescents who have behavioral health conditions, including mental health and substance use problems. With support from the Children's Fund of Connecticut (CFC), The Child Health and Development Institute of Connecticut (CHDI) convened a workgroup to examine and develop recommendations to address the issue.

The charge to the workgroup was as follows:

1. Review the literature to identity national trends in ED use by children and youth with behavioral health conditions;
2. Gather and review quantitative data from Beacon Health Options and ED providers on ED use in Connecticut;
3. Gather qualitative input about ED use and alternatives by interviewing family members, providers, and state agency representatives;
4. Identify and review existing service models and best practices relevant to this issue, both in Connecticut and nationally; and
5. Propose interventions and associated financing strategies that would promote alternatives to ED use by children and adolescents with behavioral health conditions and improve the quality of care within EDs for this population.

The workgroup included representatives from the Connecticut Department of Children and Families (DCF), Connecticut Department of Social Services (DSS), Beacon Health Options, Connecticut Children's Medical Center (CT Children's), Yale University and Yale New Haven Children's Hospital (YNHCH), UConn Health John Dempsey Hospital, St. Mary's Hospital, community behavioral health organizations and Mobile Crisis providers, school systems, and the Connecticut Hospital Association. A family champion and a family member with lived experience related to children's behavioral health also served on the workgroup, as did a member of the Connecticut legislature and a legislative staff member. CHDI President and CEO, Dr. Jeffrey Vanderploeg, chaired the workgroup, which was staffed by a senior consultant, Dr. Michael Hoge, who is based in the Yale Department of Psychiatry.

The workgroup was convened five times between January and June of 2018. Workgroup members shared their perspectives on ED use by children and youth with behavioral health conditions and received and discussed data and information on related topics, such as: national trends in ED use, Medicaid data on ED use in Connecticut, Mobile Crisis services in Connecticut, and the needs of special populations in Connecticut with respect to ED use.

CHDI and Beacon Health Options partnered on the drafting of this report, in consultation with DCF. Draft recommendations were presented to the workgroup for review and discussion, and significantly revised based on the feedback received. As its last formal act, workgroup members recommended dissemination strategies, which are captured in the final section of this report.

NATIONAL TRENDS IN ED UTILIZATION BY CHILDREN AND YOUTH

Method

To assess national trends in ED utilization by children and youth with behavioral health conditions, a literature search was conducted in www.PubMed.gov with filters set to identify publications in English during the last five years. The search combined terms related to: service setting or type of service (emergency department, emergency services, emergency psychiatric); age (child, children, adolescent, youth); and conditions (mental disorders, mental health, suicide, substance-related disorders, substance abuse, substance use). A total of 531 publications were identified and reviewed. References in these publications were scanned to identify other relevant articles. Members of the workgroup also recommended additional articles and other publications.

The results of the search revealed many recent publications relevant to the workgroup's task, suggesting that there is widespread attention and concern related to ED use by children and youth. Some of the articles reviewed publicly available datasets or qualitative information in order to describe national trends. Others reported data or innovative efforts in a single hospital or system of care, with variable findings influenced by local conditions. Publications differed with respect to the age ranges under study, with most including children and adolescents up to 18 years of age, but some extending their samples to age 21 or 25. Studies also varied with respect to whether they included in their samples individuals seen in an ED who had any mental health or substance use diagnosis, or only individuals with a primary diagnosis of one of these conditions. The search was primarily restricted to publications focused on the United States, but there were a substantial number of Canadian publications of relevance. Several international publications were reviewed as well.

Findings

Use of Outpatient Services

As a context for this review, it is useful to examine overall U.S. trends regarding the mental health care of children and youth. Olfson, Druss, and Marcus (2015) used Medical Expenditure Panel Survey data for persons from 6 to 17 years old and compared the periods of 1996–98 to 2010–12. During this time span, the use of any outpatient mental health service by children and youth rose from 9.2% to 13.3%. Outpatient use by the subgroup of children and youth with severe impairment, as determined by high scores on the Columbia Impairment Scale, saw a much greater increase, from 26.2% to 43.9%. This suggests that strides have been made nationally in ensuring an initial outpatient connection for those with serious illnesses. Across all time periods reviewed, outpatient use was higher among whites than non-whites, and higher among males than females. The use of any psychotropic medication also rose significantly

over this period, increasing from 17.7% to 31.8% among the subgroup of children and youth with more severe mental health impairment.

Use of Inpatient Services

Inpatient use declined significantly in the United States prior to the mid 1990s as payers tightened utilization management criteria and lowered reimbursement rates (Blader, 2011). In the decade from 1996 to 2007, the number of psychiatric inpatient discharges for children rose 82% and total inpatient days rose 136%. During this period, the increase for adolescents was 42% for inpatient discharges and 40% for total inpatient days. Private funding covered a decreasing amount of the inpatient cost (Blader, 2011). A common view in the literature is that overall reduction in inpatient capacity has not been offset by a comparable rise in outpatient capacity, leading to increased use of EDs for care (Dolan & Fein, 2011).

Use of Emergency Departments

There continues to be concern about an increase in ED utilization by children and youth in the United States (Frosch, DosReis, & Maloney, 2011). A study by Pittsenbarger and Mannix (2014) examined the period from 2001 to 2010 and found an increase in the number of psychiatric ED visits for individuals under 18 from 491,000 to 619,000 (26%). The rate of psychiatric ED visits declined over this same period for privately insured individuals (from 4.81 to 3.06 visits per 1000) and increased for the publicly insured (from 8.71 to 12.60 visits per 1000). The publicly insured and uninsured had ED utilization rates four times higher than those who were privately insured. While use did increase, these authors noted that ED visits for psychiatric reasons comprised only 2% of all ED visits for this age group.

Other authors, such as Holder, Rogers, Peterson, and Ochonma (2017), have noted that ED visits for psychiatric reasons may be as high as 5% of all ED visits for children and youth. Data from the National Hospital Ambulatory Medical Care Survey for the period 1997 to 2010 found that 4.3% of all ED visits for 11 to 24 year olds were related to mental health and 2.1% were related to substance use (Fahimi, Aurrecoechea, Herring, & Alter, 2015).

Simon and Schoendorf (2014) reviewed 2001 -2011 data from the National Hospital Ambulatory Medical Care Survey of Emergency Departments. They found that ED visits for psychiatric reasons increased from 4.4% to 7.2% of all ED visits for children and youth. However, these data included youth up to 20 years of age. Older youth appeared to use more ED services than children, which perhaps explains the higher utilization rates in this study.

Increasing ED use by children and youth has been observed in countries with health care systems that differ greatly from those in the United States. Data from a Canadian hospital in Vancouver, collected from 2003 to 2012, revealed that the number of pediatric mental health visits increased by 85.8%, compared with a 27.5% increase in visits for non-mental health reasons (Mapelli, Black, & Doan, 2015). This study also reported some of the clearest data on the decreasing percentage of youth that presented to the ED with high acuity needs, a phenomenon that has been described by numerous experts and observers (Cloutier, Kennedy, Maysenhoelder, Glennie, Cappelli, & Gray, 2010). During the decade under review in the Vancouver study, the percentage of children and youth triaged as "high" acuity decreased from 42.3% to 24.4%, while the proportion triaged as "moderate" acuity increased from 57.7% to 75.4% (Mapelli, et al., 2015).

Who Refers to EDs and Why

Holder, Rogers, Peterson, and Ochonma (2017) examined 5 years of ED data (2010-2014) from a tertiary medical center and found that family members were the primary referral source (49%). Other sources included schools (21%), the primary care provider (PCP; 10%), another medical provider or local mental health center (17%), and a social welfare agency (3%). Primary presenting problems were aggressive behavior (68%), thoughts or actions of self-harm (27%), thought disorder (3%), and medication refills (2%).

In this study, the role of schools in prompting ED visits may have been understated, since schools frequently required parents to obtain an evaluation of their child prior to returning to school, in which case the visit may have been coded as a parent referral. Parents often reported taking their child to the ED because of the difficulty in obtaining a timely evaluation from an outpatient provider. The authors noted, "[S]tudies have demonstrated that the majority of the referrals for pediatric psychiatric care are for non-urgent reasons. Many of the ED visits are the result of events that occur during the day in the life of a youth, including challenges at school, home or the community" (Holder, Rogers, Peterson, & Ochonma, 2017). This fits with the widely reported view in the literature that the volume of ED visits has been rising mainly due to non-urgent issues, and that EDs are now a primary locus for screening of youth in emergency and non-emergency situations (Cloutier et al., 2010).

Grudnikoff, Taneli, and Correll (2015) studied the characteristics and disposition of children and youth referred by schools to a hospital ED in the Queens borough of New York City. They reviewed 551 psychiatric ED visits during a twelve-month period from 2009 to 2010, of which 44.1% were initiated by schools. Of the 200 school referrals, 7.9% were admitted to a psychiatric hospital, 44.4% were given a follow-up appointment at discharge, and 47.7% were given no follow-up appointment. The authors argued that those who did not receive a follow-up appointment were potentially "inappropriate" referrals to the ED by schools. A school nurse, social worker, or other professional evaluated only 18.5% of all individuals being referred by the school to the ED. Children and youth without such an evaluation were nearly twice as likely to be discharged without follow-up, leading to a conclusion that in-school screening could have reduced unnecessary ED evaluations by 52%.

A study by Alavi, Reshetukha, Prost, Antoniak, Patel, & Groll (2017) examined the relationship between bullying and suicidal behavior among children and youth presenting to a Canadian ED. The individuals who acknowledged experiencing cyber bullying were 11.5 times more likely to exhibit suicidal ideation on ED admission than those without this experience.

Studies have demonstrated that the majority of the referrals for pediatric psychiatric care are for non-urgent reasons

Expectations for the ED visit in an Ontario hospital were examined by Cloutier and colleagues (2010). The top five reasons for the ED visit, as reported by caregivers, children, and youth were: suicidal thoughts, depressive or unstable mood, suicide attempt, anxiety, and physical harm to oneself. The level of agreement between the caregiver and the child or youth on the reasons for the visit ranged from 30% to 80%. Ratings by ED clinicians on the "need for action" were much lower than the perceived need for action as rated by children, youth, and their caregivers. The authors suggested that expectations for an ED visit may often go unmet, including a desire for: guidance about what to do or how to cope; a diagnosis; treatment or a connection to treatment; protection and safety; admission to a hospital; and to feel better.

Characteristics of ED Users

Pittsenbarger and Mannix (2014), in their review of national data, reported that 76% of ED psychiatric visits for children and adolescents involved a primary psychiatric ICD-9 diagnosis. The most frequently assigned diagnoses were anxiety states/panic disorder (14%), depression (13%), drug abuse (11%), and conduct disorders (8%). Individuals with a public payer source were more likely to receive a primary psychiatric diagnosis.

In their findings from a tertiary medical center, Holder, Rogers, Peterson, and Ochonma (2017) reported the following diagnoses or categories of diagnoses among youth presenting in the ED: anxiety disorders (28.4%), disorders diagnosed in infancy, childhood, or adolescence (26.5%), mood disorders (18.6%), and substance related disorders (10.1%).

As reported above, the analysis of data from the National Hospital Ambulatory Medical Care Survey for the period 1997 to 2010 found that 4.3% of all ED visits for 11- to 24-year-olds were related to mental health and 2.1% were related to substance use (Fahimi, Aurrecoechea, Herring, & Alter, 2015). It is important to note that just under 21% of the visits with a substance use focus were determined to involve mental health concerns. Among adolescents presenting with a mental health concern, 15% were given a principal diagnosis of a substance use disorder. For substance use ED visits, 48.1% were related to alcohol, 58.8% focused on illicit drugs, and 6.9% centered on both.

4.3% of all ED visits for 11 to 24-year-olds were related to mental health and 2.1% were related to substance use.

Lynch, Bautista, Freer, Kalnych, Cuffe, & Hendry (2016) examined Medicaid data in Florida from 2011 to 2012 and highlighted the prevalence of ADHD as a presenting problem for children and youth. Of the 28,001 behavioral health visits to EDs during the study year, 24% were for ADHD-related evaluation and treatment. While 97% of these children and youth were discharged home from the ED, the authors estimated that a minimum of 30% of the visits were avoidable. Individuals with ADHD who lived in counties with a mental health professional shortage used EDs more frequently, perhaps due to the lack of availability of community mental health resources (Lynch et al., 2016).

In a Canadian study, Gill, Saunders, Gandhi, Gonzalez, Kurydak, Vigod, & Guttman (2017) found that 53.5% of children and youth presenting to an ED for the first time with a mental health condition had not previously received outpatient mental health care. Notably, 43% of children and youth with ED visits for schizophrenia, delusional, and psychotic disorders had no prior mental health treatment. Those without a primary care physician (PCP) had the highest rates of first contact for care in an ED, which the authors argued was related to the major role these providers play in referring and connecting children and youth to community-based care. Other research suggests that even families with a PCP may access ED services prior to contacting their PCP.

Frosch et al. (2011) examined the outpatient mental health connections of youth who had repeat ED visits in an urban general hospital to determine, in part, why youth were seeking care in an ED and to discern if ED visits led to increased outpatient connections. Among this large sample, 65% reported at an initial and subsequent visit that they were connected to an outpatient mental health provider, while 9% had no connection at either visit. From the first to second visit, the percentage of youth with an outpatient mental health connection rose from 71% to 85%. The authors speculated that youth with an outpatient connection and urgent or non-urgent concerns may have sought help in the ED because their outpatient providers directed or referred them there, or the ED was more accessible or

responsive to immediate needs than the outpatient provider. They indicated that more research was needed to explore these hypotheses.

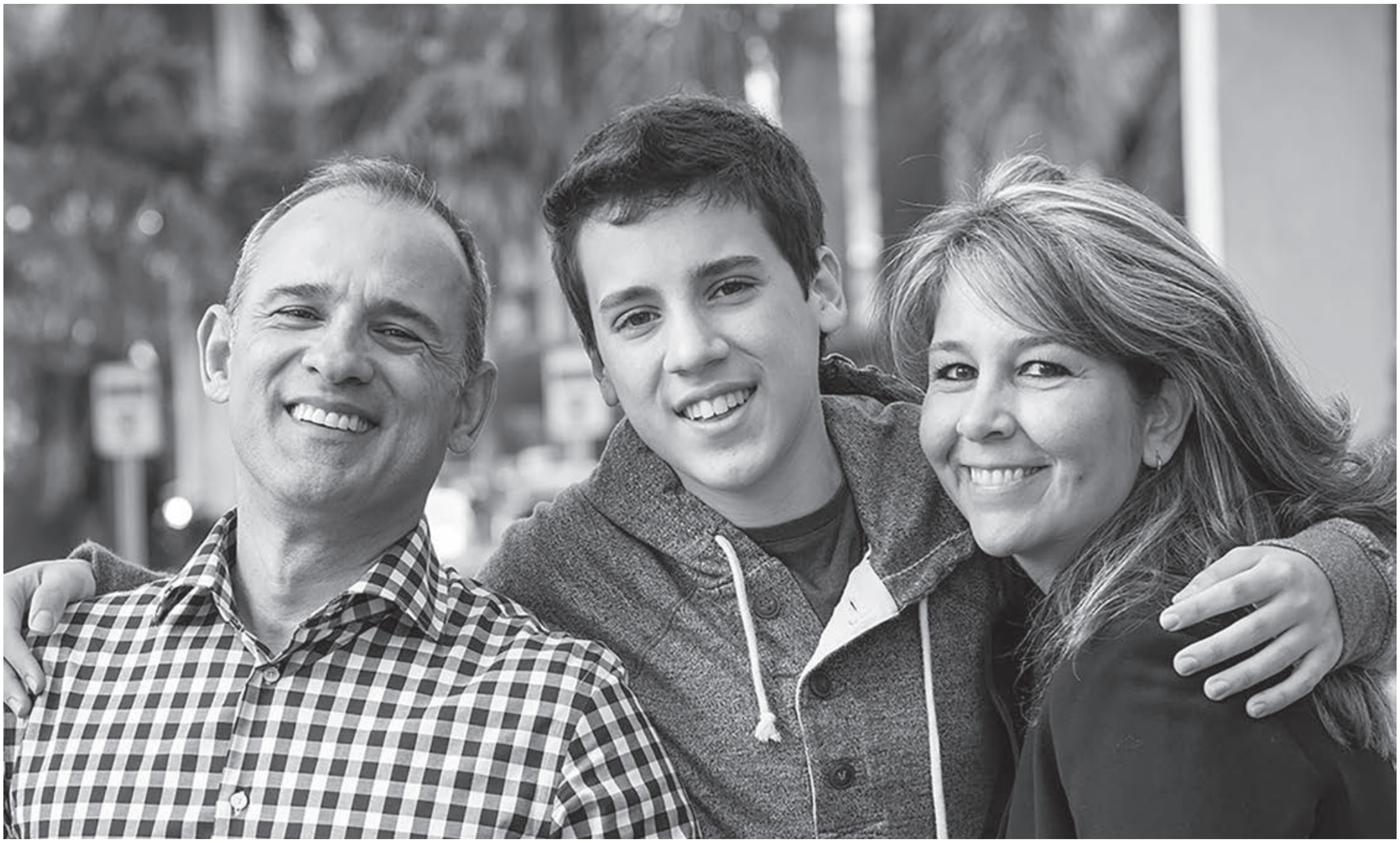
In a systematic review of the literature on repeat ED visits by children and youth, Leon, Cloutier, Polihronis, Zemek, Newton, & Gray (2017) identified three predictors of repeat visits: lower socioeconomic status, child protective services involvement, and previous and current use of mental health care. Currently receiving mental health services significantly predicted how frequent and how recent ED services were used. In the eleven studies the authors reviewed, the level of clinical severity among youth either had no association with repeat visits, or lower severity was positively correlated with repeat visits. The authors cautioned that simply being connected to services does not reflect their appropriateness, quality, or level of family and youth engagement.

Demographics

National Hospital Ambulatory Medical Care Survey (NHAMCS) data collected through 2010 provided detail about the demographics of individuals under 18 years old who use EDs for psychiatric reasons (Pittsenbarger & Mannix, 2014). Of these, 52% were male and 48% were female. An estimated 76% were classified as white, 21% black, 1% Asian, and 2% other. In terms of ethnicity, 15% were Hispanic and 85% were non-Hispanic. With respect to payer, 39% had private insurance, 41% public insurance, and 20% were a combination of self-pay, Workers' Compensation, or uncompensated care.

In a study examining repeat visits to EDs among transition-aged youth throughout California, 41% returned to an ED within a year. Compared to white males, Hispanic and Asian males returned at lower rates. White, African American, Hispanic, and Native American females all returned at higher rates than white males (Aratani & Addy, 2014).

Newton, Ali, Johnson, Haines, Rosychuk, Keaschuk, Jacobs, Cappelli, & Klassen (2010) reported that repeat ED visits by more than 12,000 youth in a Canadian hospital were associated with female gender, older age, receipt of social assistance, and presentations for mood and psychotic disorders.



Timing of Presentation to EDs

Holder, Rogers, Peterson, and Ochonma (2017) found that the majority (57.6%) of ED visits by children and youth occurred after business hours, during which time usual sources of services and supports may be closed. Their study also concluded that ED visits increase during the school year (September through May). They suggest that this may be due to heightened levels of stress related to social interactions, academic pressure, and difficulties meeting parent expectations. They also suggested that it may be due to increased contact with and referral by adults in supervisory roles, such as teachers, coaches, and tutors.

> **The majority (57.6%) of ED visits by children and youth occurred after business hours, during which time usual sources of services and supports may be closed.**

Care Provided to Youth in EDs

Specialized Behavioral Health Services

Given the lack of appropriately trained staff, the underuse of best practices, and the often chaotic nature of these environments, EDs are considered less than optimal settings for children and youth who are not at imminent risk of harm (Frosch et al., 2011). The same lack of qualified staff and specialized services characterizes EDs in other countries, such as France, and has been a major source of concern (Lotte, Askenazy, Babe, & Fernandez, 2017).

In 2006, the American Academy of Pediatrics and the American College of Emergency Physicians issued a position statement titled, Pediatric Mental Health Emergencies in the Emergency Medical Services System, in which these organizations identified the optimal ED services for children and youth in crisis (American Academy of Pediatrics, 2006). Those services included: pediatric-trained mental health consultants; a multidisciplinary team; the use of specialized screening tools; referrals to mental health services; communication with primary care physicians; and sufficient availability of pediatric hospital services. Emergency services are expected to be culturally and developmentally relevant, and appropriate for special populations, including persons with autism spectrum disorders and developmental disabilities, and those exposed to violence, disasters, and mass casualties.

Hamm, Osmond, Curran, Scott, Ali, Hartling, Gokiert, Cappelli, Hnatko, & Newton (2010) conducted a systematic review of interventions used in EDs. They found that the presence of a dedicated team of pediatric mental health professionals in EDs, when compared to usual ED care, was associated with shorter lengths of stay in the ED, reduced hospital admissions from the ED, and a decrease in return visits to the ED. The authors stated that there are no statistics nationally on the number or percentage of EDs with specialized pediatric mental health services. However, they concluded that the majority of EDs in this country do not have child mental health specialists on site.

A hospital in South Carolina increased the number of social workers in its pediatric ED, increased the behavioral health training of the social workers, and tripled the amount of time that a board-certified child and adolescent psychiatrist was available to consult. After these changes were made, the length of stay in the ED decreased from an average of 14.7 to 12.1 hours, a statistically significant difference. The percentage of children and adolescents admitted to an inpatient unit from the ED doubled (from 9% to 18%), while the cost per visit remained unchanged (Holder, Rogers, Peterson, Shoenleben, & Blackhurst, 2017). The authors hypothesized that the savings from reduced lengths of stay may have offset the added cost of increased staffing, and that the increased volume of inpatient admissions may have resulted from better assessments being conducted.

> **The presence of a dedicated team of pediatric mental health professionals in EDs...was associated with shorter lengths of stay...and a decrease in return visits to the ED.**

Numerous authors have suggested that professionals in EDs lack appropriate training to provide quality care to children and youth. Pediatric emergency physicians have acknowledged their lack of training and confidence in assessing and managing behavioral health concerns (Chun, Duffy, & Linakis, 2013). The overall shortage of child and adolescent psychiatrists poses a major obstacle to employing them in hospitals, even among those hospitals that have the funding and the interest to do so. By recent estimates, there are only 8300 child and adolescent psychiatrists in practice, despite the estimated need for 30,000 (Carubia, Becker, & Levine, 2016).

To address the absence of child and adolescent behavioral health specialists in EDs, the Children's Hospital of Colorado used telepsychiatry to link the specialists at its central academic medical center to five pediatric EDs and urgent care centers in the Denver area (Thomas, Novins, Hosokawa, Olson, Hunter, Brent, Frunzi, & Libby, 2018). The goal was to improve care and decrease patient transfers to the main campus. Children and youth who received the telehealth consultations, when compared with those receiving usual care, had ED lengths of stay that were 2.8 hours shorter, patient charges for care that were more than 40% lower, and higher satisfaction with services among ED providers and the patients' caregivers.

Assessment Tools

A systematic review was conducted to determine if there were useful decision-making tools to screen children and adolescents with mental health conditions in EDs (Newton, Soleimani, Kirkland, & Gokiert, 2017). The literature offered what the authors described as modest quality evidence to support the potential use of three tools: the HEADS-ED tool to identify patients in need of hospitalization; the Ask Suicide Screening Questions (ASQ) to assess suicidality; and the DSM-IV 2-Item instrument to screen for alcohol use disorders.

In a study based in England, Diggins, Kelley, Cottrell, House, and Owens (2017) found that youth who presented in an ED with self-harm often harmed themselves again in the future. However, two-thirds of these individuals, on initial presentation to the ED, did not receive a psychosocial assessment, which the authors considered essential to providing quality ED care and arranging aftercare.

In an effort to improve the care of youth in EDs, the Canadian province of Ontario commissioned Jabbour and colleagues (2016) to develop an evidence-based instrument called the Emergency Department Mental Health Clinical Pathway. The purpose of the instrument is to guide risk assessment and disposition planning, and to facilitate transition to follow-up services in the community. At the time of publication, evaluation data on the pathway had not yet been collected.

The information above on specialized services and assessment tools suggests that there is a growing knowledge and evidence base on optimal ED practices. However, actual practices vary among EDs and there are few evaluations of the comparative benefits of the different approaches (Leon et al., 2017).

Extended Lengths of Stay

The length of stay in EDs has been a major quality of care concern in these settings. Based on a review of the literature, Mapelli and colleagues (2015) stated that length of stay for mental health visits in EDs by children and youth in this country are significantly longer than visits for other reasons, and that the rate of extended visits in EDs has been increasing. They concluded that increased lengths of stay are correlated with patient dissatisfaction, leaving the ED without being seen by a physician, and increased costs of patient monitoring by ED medical and security staff.

Case and colleagues (2011) examined 2001–2008 data from the National Hospital Ambulatory Medical Care Survey for individuals 18 years old or younger with a primary mental health diagnosis. They found that youth with a mental health diagnosis were more likely to be hospitalized than all others seen in an ED (16.4% vs. 7.6%) or to be transferred elsewhere (15.7% vs. 1.5%). Their median length of stay was longer (169 vs. 108 minutes) and they were twice as likely to stay in the ED for more than four hours. None of these differences seemed related to characteristics of the evaluation, treatment, or disposition. The hypotheses offered to explain the long lengths of stay included the reduction in pediatric inpatient capacity, a decrease in the number of providers willing to accept private insurance, and greater clinical and social complexity among children and youth, and the mental health treatments they receive (Case, Case, Olfson, Linakis, & Laska, 2011).

Increased length of stay also has been correlated with dual diagnosis. Fahimi et al. (2015) reported that, when compared to ED visits that did not involve behavioral health concerns, average lengths of stay were 88 minutes longer for mental health visits, 71 minutes longer for substance use visits, and 149 minutes longer for visits involving both mental health and substance use.

Special Populations

Experts have raised repeated concerns in the literature regarding quality of ED care for special populations. Psychiatric comorbidity is common, for example, among children with obesity, allergies, and asthma (Dolan & Fein, 2011). An estimated 20 to 40 percent of individuals with intellectual and developmental disabilities have co-occurring psychiatric disorders, which account for approximately half of all hospitalizations among this population (Kalb, Beasley, Klein, Hinton, & Charlot, 2016). As of 2017, there were only nine inpatient psychiatric units in the United States serving youth with developmental disabilities (Kalb, Stuart, Mandell, Olfson, & Vasa, 2017). A recent survey of psychiatrists who were members of the American Academy of Child and Adolescent Psychiatry found that 25% would not accept into their practice a child with a history of crisis. For those that would accept such children, they reported an absence of specialized consultation to aid them in serving youth with Autism Spectrum Disorder and raised concern about the competency of emergency department personnel and first responders to provide developmentally appropriate care to this population (Kalb et al., 2017).

Chun et al. (2013) highlighted the unique challenges and communication barriers in evaluating and treating children with autism and developmental disabilities in ED settings. They emphasized the importance with these populations of turning to parents and other caregivers as sources of information, attempting to convey in advance to these children and youth what will happen in the ED, limiting wait times, minimizing sensory stimuli, and using adjunctive tools for communication.

ED Disposition and Outcomes

If judging the appropriateness of ED use by the percentage of individuals hospitalized from the ED, it is important to keep in mind a 2011 estimate that only about 15% of ED visits for all ages and conditions resulted in an inpatient admission to the hospital in which the ED is located (Weiss, Wier, Stocks, & Blanchard, 2014). In their study of children and youth seen at a tertiary care medical center for behavioral health conditions, Holder, Rogers, Peterson, and Ochonma (2017) reported that dispositions from the ED included hospitalization in a psychiatric facility (21.7%), discharge to a different type of facility (12.8%), discharge home (63.7%), and leaving the ED against medical advice (1.8%).

It is striking how little information is available in the literature about the clinical outcomes of ED use. As described earlier, Frosch et al. (2011) found that repeat users of the ED saw a 14% increase in having an outpatient mental health connection between a first and second ED visit, though the role of the ED in facilitating those connections, if any, was unclear. Patton and Borschmann (2017) argued that there is clear evidence that adolescents who present in EDs with substance use, self-harm, or violence-related injuries have higher mortality rates over the ensuing decade. They noted, however, that follow-up with these adolescents is infrequent and that, even when services are offered, engagement is poor. In their view, this leaves the nation with inadequate information and evidence on the efficacy of ED interventions for children and youth suffering from behavioral health disorders.

Interventions to Address ED Utilization and Improve Care

There has been a range of strategies employed to address ED diversion, quality of care, and connections to continuing care for the treatment of behavioral health disorders. These have included diversion services such as Mobile Crisis, and enhancing ED and patient connections to primary care, community based mental health services, and child protective services. However, there is a perception that these efforts have not resulted in a net decrease in ED utilization (Frosch et al., 2011).

Grover and Lee (2013) described a dedicated pediatric behavioral health unit at the Children's Hospital of Akron (Ohio). They estimated that only 6% of EDs in the nation were equipped to manage child and youth emergencies. Their effort involved assembling a multidisciplinary team of psychiatrists, social workers, nurses, and security personnel, as well as parents who served on an advisory council. There was also a focus on building architecture, refining clinical processes, and quality improvement via a Lean Six Sigma model. After the first year of implementation, average length

of stay in the ED was reduced from 235 to 190 minutes; security hours were reduced from 54 to 17 hours per 100 patients; and the use of physical and chemical restraints was reduced from 1.5 to 0.6 incidents per 100 patients.

> It seems imperative to address the potential role of EDs in behavioral health screening for all children and adolescents.

START programs (Systemic, Therapeutic, Resources, Treatment), which are operated in nine states, provide crisis intervention services to IDD populations. They are designed for intervention at three levels: (1) building capacity of the system to support this population and prevent crises; (2) early detection and intervention to prevent worsening of problems; and (3) stabilization of acute crises. Research has demonstrated the positive impact of START on reducing emergency service use among individuals with intellectual and developmental disabilities (Kalb et al., 2016) (https://www.centerforstartservices.org/about).

Discussion of National Trends

One set of experts has argued that families bringing their children to an ED are following a patient-centered approach that involves seeking immediate care where it is readily available when they feel the need, even if the situation is not an emergency (Frosch et al., 2011). The authors suggest that this differs from the systems-based approach that professionals and policy-makers use to organize a continuum of services and contain costs. This, in turn, differs from the risk assessment and management approach utilized by ED staff. Families who come to the ED seeking a thorough assessment (beyond the issue of risk), an intervention or some form of treatment, and connection to continuing care may receive few of these things, while waiting an extraordinarily long time (Newton, Rathee, Grewal, Dow, & Rosychuk, 2014).

The current challenges in providing ED services to youth must be understood in the context of the larger crisis facing hospital-based emergency care. The Institute of Medicine (2007) has highlighted the challenges for hospitals as they strive to provide trauma and emergency care, offer a safety net for the uninsured, serve as an adjunct to the ambulatory system of care, and grapple with increased patient volume without a comparable increase in revenue or resources.

Lastly, the above analysis focuses on the population referred or seeking help for behavioral health conditions. However, there are high rates of mental health and substance use problems among children and youth seeking help in EDs for non-behavioral health conditions. In summarizing the literature on this issue, Chun et al. (2013) concluded that nearly three quarters of this latter group screen positive for a mental health disorder and nearly a quarter have two mental disorders. They suggest that formal screening would be effective, but that 98% of these disorders go undetected. Despite a myriad of obstacles, it seems imperative to address the potential role of EDs in behavioral health screening for all children and adolescents who are seen in the nation's EDs.

CONNECTICUT FINDINGS FROM MEDICAID ED DATA

The following is a summary of data reported and analyzed by Beacon Health Options (www.beaconhealthoptions.com) in its role as the administrative services organization for the Connecticut Behavioral Health Partnership (CTBHP; www.ctbhp.com). The analyses, conclusions, stated implications, opinions, and ideas expressed are Beacon's and do not represent those of the State of Connecticut, or the State agencies that govern Beacon's contract with the State (the Department of Children and Families [DCF], the Department of Mental Health and Addiction Services [DMHAS], and the Department of Social Services [DSS].

Data Sources and Reporting Periods

Data sources for this report include Medicaid eligibility and claims data (inclusive of medical, behavioral health, and pharmacy claims) furnished by DSS, and data related to DCF status for Medicaid recipients provided by DCF to DSS. Medicaid eligibility typically involves the completion of an application that demonstrates residence in the state, income status, disability status, and other factors used to determine eligibility for several specific types of Medicaid benefits. DCF involvement includes any youth who is involved with the Department of Children and Families through any of its mandates for any period of time during the reporting year. This includes youth committed to DCF through child welfare or juvenile justice, and those dually committed. It also includes youth for whom the Department has no legal authority, but for whom DCF provides assistance through its Voluntary Services, Family with Service Needs and In-Home Child Welfare programs.

Data were also drawn from Beacon's Connect data system used for authorization and care management of behavioral health services. Included are results extracted from reports published on the Beacon Health Options website or presented at the Connecticut Behavioral Health Oversight Council and its various subcommittees, as well as data drawn from Beacon's internal quality management reports and processes. The time periods for the data that underlie the various reports extend over a ten-year period from 2007 through 2017. Perhaps the most important characteristics of the findings reported here is that they are Connecticut-specific and limited to emergency department utilization by Medicaid recipients. Data on ED use for individuals who are uninsured or covered through commercial insurance or other government programs were not available for the workgroup to examine. The Henry J. Kaiser Family Foundation estimated that, in 2016, 40% of Connecticut children and youth (0–18 years old) were covered by Medicaid; 51% were covered by employer-sponsored plans; 6% through non-group insurance policies; with 3% either uninsured or falling in an "other" category (https://www.kff.org/other/state-indicator/children-0-18/ accessed 7/18/18).

Definition of a Behavioral Health ED Visit

For the purposes of this section of the report, the terms children and youth are used interchangeably and refer to any Medicaid member less than 18 years of age.[1] Within certain sections, the volume of all types of Medicaid ED visits for youth is reported to provide context. However, in most cases, the reports are focused on Behavioral Health ED visits where the claim for the visit includes a behavioral health diagnosis that may be the primary diagnosis or that occurs anywhere on the claim (e.g., as a secondary or tertiary diagnosis). Beacon has determined that although this approach may "over count" visits as behavioral health visits, if only claims with a primary behavioral health diagnosis are included, behavioral health ED visits are significantly "under counted."

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[1] Youth under three years of age are typically excluded from behavioral health service reporting because they seldom, if ever, receive behavioral health services.

Findings

This section of the report is organized in sub-sections that summarize the characteristics of youth who utilize the ED with a behavioral health (BH) diagnosis and describe the various challenges or problems that affect the children and families who utilize the EDs and the broader service system. What follow are data on: the characteristics of BH ED utilizers; BH ED volume; BH ED frequent utilizers; BH ED stuck youth; BH ED readmissions; ED connection to care; and admission from the ED to inpatient hospitalization.

Characteristics of Behavioral Health ED Users

The vast majority (96.9%) of the 283,507 total youth eligible for Connecticut Medicaid in 2016 had no BH ED Visits (Beacon Youth Population Profile, 2016). This same pattern has been observed over the last five years and mirrors national data. An analysis of unique visits (as opposed to visitors) indicates that 93% of all youth ED visits are for medical reasons and only 7% had a BH diagnosis associated with the claim. Youth utilize the ED for BH reasons at significantly lower rates than adults. Youth represent 47% of the Medicaid population, but only 26% of all (youth and adult) BH ED utilizers.

Age is a factor in the utilization of the ED by youth for BH reasons. When compared to older children, younger children are higher users of the ED for medical, but not for BH reasons. Youth who use the ED for BH reasons are more likely to be older (adolescent 13–17), male, white, and be involved with DCF.

The table below displays selected demographic and utilization data as a function of the frequency of BH ED visits. In general, as the number of ED visits increases from zero BH ED visits to seven or more in a six-month period, members tend to be older (adolescent 31% vs. 72%), have significantly higher rates of medical comorbidity (6.5% vs. 61.5%), higher average annual Medicaid spending ($2,471 vs. $83,911), and much greater likelihood of experiencing an inpatient psychiatric hospitalization (0% vs. 77%). The relationship between gender and frequency of ED visits is a bit more complex. Up until two or more BH ED visits, there is an increase in the percentage of males compared to baseline as the frequency of visits goes up. However, at higher utilization rates of 2 to16 visits and 7 or more in a 6-month period, the gender distribution returns to the population baseline of 51% male.[2]

Demographics and Utilization Patterns Associated with BH ED Utilization by Youth

ED USE	#	Gender	Age (3-12 13-17)	Medical Comorbidity	Avg. Ann. Spend	BH Inpatient Utilization
Total Medicaid	283,507	51% Male	68% - 3-12	6.5%	$2,979	<1%
No BH ED Visit	274,681	51% Male	69%- 3-12	5.4%	$2,471	0%
1 BH ED Visit	6,083	56% Male	45% - 3-12	38%	$12,043	11%
2 or More BH ED Visits	8,826	56% Male	43%- 3-12	41.6%	$18,777	20.2%
2-6 BH ED Visits	2,595	54% Male	41%- 3-12	48%	$30,446	38.6%
7+ BH ED Visitis	148	51% Male	28%- 3-12	61.5%	$83,911	77%

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[2] Based on the 2016 Beacon Medicaid Population Profile

Behavioral Health ED Volume

The sheer number of youth and families presenting to the ED for behavioral health concerns can overwhelm the ED's ability to effectively serve all patients. All indications are that BH ED volume continues to rise each year, even when accounting for overall increases in Medicaid enrollment, and despite efforts to develop or expand alternatives such as Mobile Crisis, short-term crisis beds, improved access to outpatient care, and other interventions.

The volume of youth BH ED visits increased by 30% between 2011 and 2012. Youth BH ED visits also increased by 20% from 2014 to 2016 (from 12,100 to 14,448 visits). Of all the youth who had a BH ED visit from 2011 to 2012, the majority (64%) had only one ED visit and more than 80% had two or fewer visits. During this period, 115 unique youth had 10 or more ED visits, a decrease from 2014 levels.

In 2016, the rate of unique youth BH ED users per 1000 Medicaid members was 1.32. During the same time period, the rate of visits per 1000 members was 3.76.

Behavioral Health ED Frequent Visitors

ED staff, service providers, Beacon investigators, and other stakeholders have recognized that a small number of ED patients account for a disproportionate number of BH ED visits. Known as BH ED frequent visitors (referred to as "frequent visitors" in this section), Beacon, together with its state agency partners, has conducted several analyses to better understand this vulnerable group.

Youth frequent visitors were initially defined as the top 2% of those who visited the ED with a BH ED claim within a defined time period, which was further operationalized to include youth with four or more BH ED visits in a six-month period. In order to assess the persistence of this pattern of high ED utilization over time, three time periods were examined: a) the six-month index period in which frequent visitors were identified; b) the six-month period immediately preceding the index period; and c) the six-month period immediately following the index period. Episodic frequent visitors are defined as youth who met the frequent visitor criteria during only the index period, and persistent frequent visitors are youth who met the criteria during two or all three of the time periods. The initial analysis conducted in 2014 identified 140 youth who met the criterion as a frequent visitor during the index period. Approximately one-third of youth BH ED frequent visitors did not have any BH ED visits in the six months prior to or following the index time period. Moreover, 20% of youth frequent visitors met the threshold for frequent visits in the prior six months, and 16.4% in the following six months. Notably, there was a small subset of youth (N=6) that were frequent visitors to the ED across all three time periods (see table below).

Number of Youth BH ED Frequent Visitors that Maintained Frequent Visitor Status	Youth BH ED Frequent Visitors	
	#	%
Prior 6-months (January 1–June 30, 2013)	28	20.0%
Index 6-months (July 1–December 31,2013)	140	100.0%
Following 6-months (January1–June 30, 2014)	23	16.4%

Ethnicity and Age of Frequent Visitors

There were no significant differences in terms of the gender, ethnicity, or age of members with only one BH ED visit, moderate BH ED visits, or frequent BH ED visits. There were also no differences on these factors between the episodic and persistent frequent visitor subgroups. Frequent BH ED visitors were slightly more likely to be female and older than the total youth Medicaid population, youth who were users of the behavioral health service system, and youth who had at least one BH ED or inpatient psychiatric visit.

DCF Involvement of Frequent Visitors

Youth members with DCF involvement were defined as youth with any DCF contact during the reporting year, including those who were and were not in the care and custody of the department. These youths accounted for a significantly larger proportion of frequent visits (44%) compared to groups of youth with moderate BH ED visits (31%) or one BH ED visit (18%). Youth members with DCF involvement were statistically similar in the persistent frequent ED visits group (51%) compared to episodic frequent ED visits (41%). Among subgroups of DCF Involvement, the majority of ED visits across utilization subgroups was by those members who were committed to DCF, followed by members who were involved in DCF Voluntary Services. These two groups accounted for a larger proportion of the group of frequent BH ED visitors (29%), compared with moderate BH ED visitors (21%) or those with one BH ED visit (14%). However, DCF Voluntary Services members accounted for a larger proportion of the group of episodic frequent ED visitors (36%) than persistent frequent ED visitors (13%). The relatively higher numbers of DCF-involved youth reflect the vulnerability of this population to more acute and frequent behavioral health emergencies and indicate a potential opportunity for this population to increase utilization of EMPS or community-based supports to circumvent ED visits and enact more effective crisis plans.

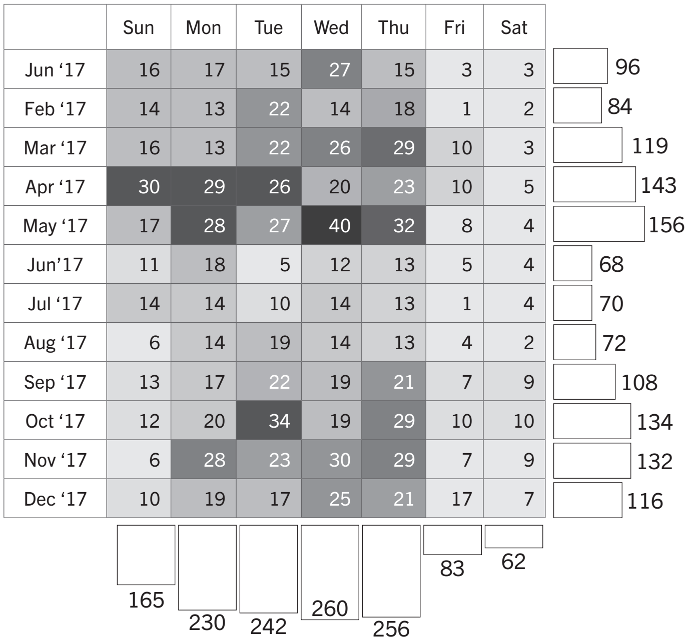
Behavioral Health ED “Stuck” Youth

An important issue associated with ED utilization is that of “stuck” youth, which refers to youth that stay in the ED for extended periods of time (days, weeks, or, in extreme cases, even months) before being discharged to the next level of care. The Connecticut Behavioral Health Partnership defines a “stuck” youth as one with an ED visit and a BH diagnosis who has remained in the ED more than 8 hours following medical clearance. This information is provided on a voluntary basis by each ED as the result of daily phone calls by Beacon to each ED around the state. During calendar year 2017, there were 1,298 episodes of ED care identified as representing a stuck youth.

There was an average of 108 youth per month stuck in an ED during 2017, although as the charts to the right demonstrate, there is significant seasonal variation that mirrors utilization patterns seen for BH ED visits and inpatient psychiatric hospital admissions. As can be seen on page 27, the rate of stuck youth varies considerably by hospital, and tends to follow a bimodal distribution with peaks in the spring (March through May) and fall (September through November). This pattern is believed to reflect stresses associated with school attendance. Very few stuck episodes begin on the weekend; the peak days are Tuesday through Thursday (see the calendar view table on next page).

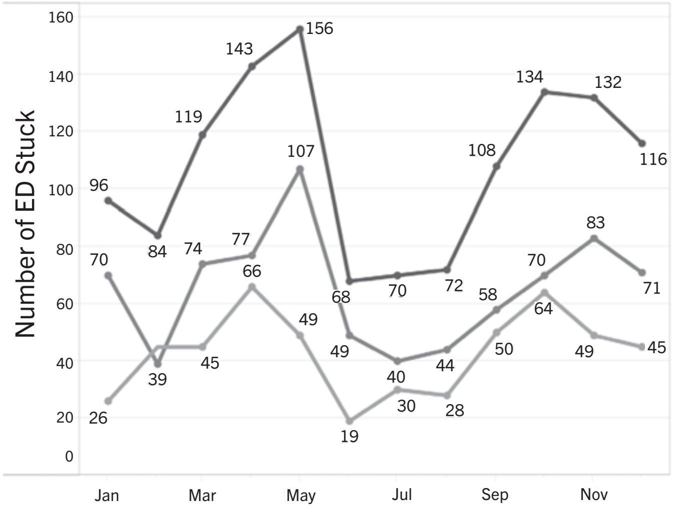
Youth involved with DCF make up a disproportionate number of youth who are stuck in the ED. Of all stuck youth, more than 75% stay between 0 and 3 days, 16% stay between 4 and 6 days, and 9% stay 7 days or longer.

Number of ED Stuck Youth (0-17) by Admit
Not unique members; Excluding CARES; All EDs



	Sun	Mon	Tue	Wed	Thu	Fri	Sat	
Jun ‘17	16	17	15	27	15	3	3	96
Feb ‘17	14	13	22	14	18	1	2	84
Mar ‘17	16	13	22	26	29	10	3	119
Apr ‘17	30	29	26	20	23	10	5	143
May ‘17	17	28	27	40	32	8	4	156
Jun’17	11	18	5	12	13	5	4	68
Jul ‘17	14	14	10	14	13	1	4	70
Aug ‘17	6	14	19	14	13	4	2	72
Sep ‘17	13	17	22	19	21	7	9	108
Oct ‘17	12	20	34	19	29	10	10	134
Nov ‘17	6	28	23	30	29	7	9	132
Dec ‘17	10	19	17	25	21	17	7	116
	165	230	242	260	256	83	62	

ED Stuck Youth (0-17) Counts- All EDs
Not unique members; Excluding CARES
• Total ED Stuck • Recommended IPF • Recommended Other LOC



Of the 1,298 episodes of youth stuck in an ED, 782 (60.2%) were recommended for inpatient hospitalization; however, only 588 (75%) of the youth who were recommended for inpatient actually were admitted to an inpatient unit upon discharge from the ED. It is unclear from the data why the remaining 25% were not admitted to an inpatient unit.

Youth with Autism Spectrum Disorder (ASD), intellectual disabilities (ID), or developmental disabilities (DD) are a small portion of the youth Medicaid population, but are disproportionately over-represented among youth who are stuck in an ED. In calendar year 2016, of the 13,963 unique youth who utilized the ED with a behavioral health diagnosis, 2,775 (20%) had an ASD, ID, or DD diagnosis. Of the 675 unique youth stuck in the ED that year, 197 (29%) had an ASD, ID, or DD diagnosis and 42 (6%) were delayed more than three days with ID, DD, or ASD identified as a barrier to discharge.

Four hospital entities in the state, Connecticut Children's Medical Center (CT Children's; 27%), the combination of Yale New Haven Hospital and Yale New Haven Children's Hospital (16%), William Backus Hospital (8%), and St. Mary's Hospital (8%), account for a large share of youth BH ED visits statewide. Note that ED services provided in New Haven by the Yale New Haven Health System are delivered through two EDs operated separately by the Yale New Haven Children's Hospital (serving birth through age 15) and the Yale New Haven Hospital (serving individuals age 16 and older). Beacon Health Options aggregated data for child and youth ED visits to these two hospitals under the label "Yale New Haven Hospital" in presentations to the workgroup and throughout this report.

CT Children's accounts for a disproportionate share of youth stuck in the ED (62%). Over the last ten years, multiple efforts and external resources have been introduced at CT Children's to address the disproportionate number of ED visits and stuck youth, including, but not limited to, the establishment of the CARES Unit at the Institute of Living, co-location of Mobile Crisis programs in the CT Children's ED; and rounding with CT Behavioral Health Partnership staff. To date, these efforts have not produced the desired results in reducing BH ED volume or rates of youth stuck in the ED. Although the precise reasons for this are unknown, potential contributing factors include staff perspectives on the necessity of inpatient hospitalization, staffing availability, and full consideration of available resources such as Mobile Crisis.

ED Stuck Youth (0-17) Counts by Facility - CY 2017

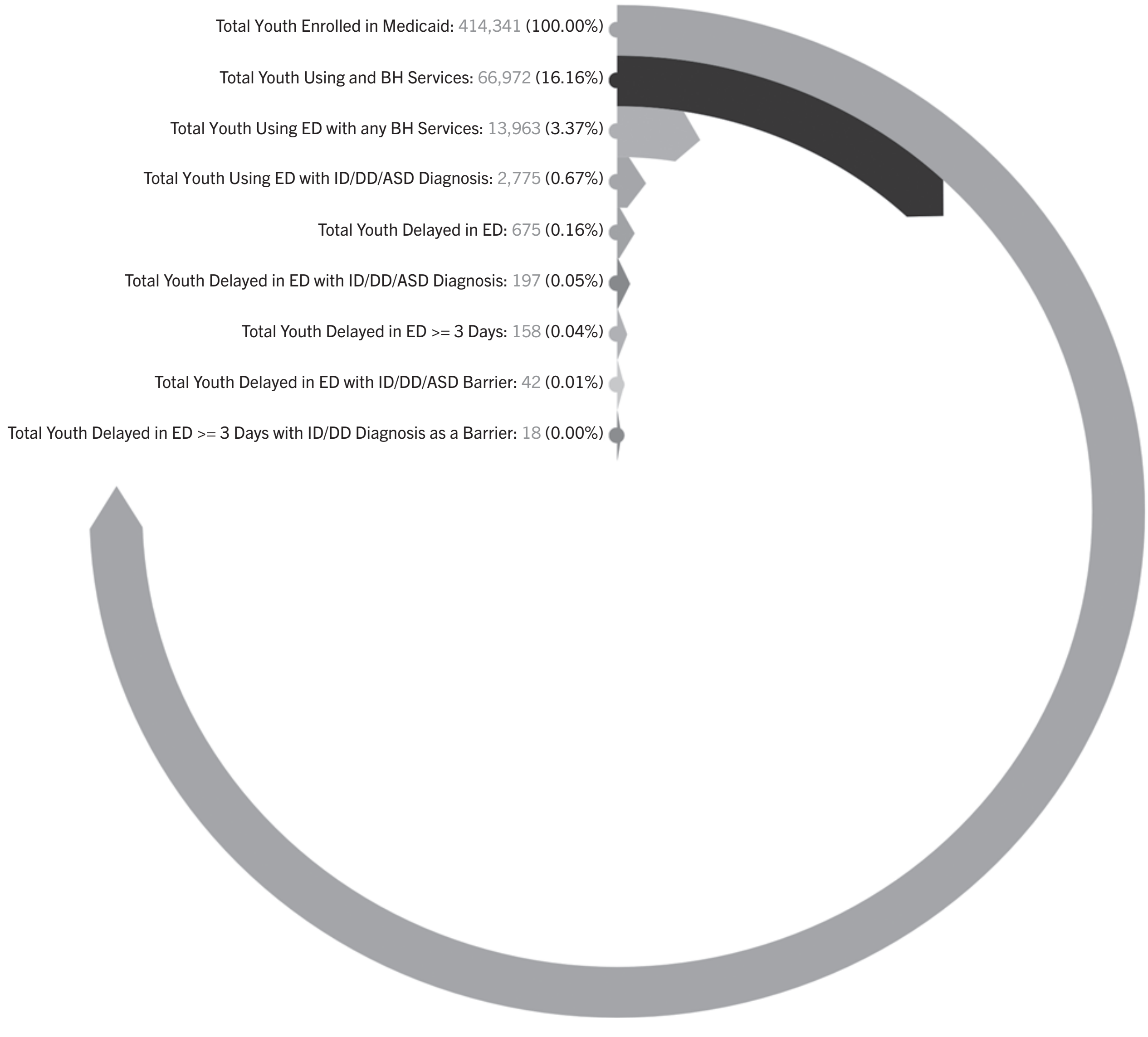
Not unique members; Excluding CARES

ED Facility (group)	Jan ‘17	Feb ‘17	Mar ‘17	Apr ‘17	May ‘17	Jun ‘17	Jul ‘17	Aug ‘17	Sep ‘17	Oct ‘17	Nov ‘17	Dec ‘17	YTD Totals(⋆ = top 3 by ED stuck volume)
Boston Children’s Hospital								1	1				2
Bridgeport Hospital	1		1	3	4	1				1	1	2	14
Bristol Hospital	4	3	1	5	3	2	1	1		2	5	3	30
CCMC ED	47	62	69	96	86	43	56	48	63	80	85	73	808 ⋆
Charlotte Hungerford	6	6		3	3		1	1	1		3	1	25
Danbury Hospital	2	2	1		2				1	2	2	3	15
Day Kimball Hospital	1	1	1	1	1	1	1		2		3	3	15
Greenwich Hospital							1	1			2		4
Hartford Hospital											1		1
Hosp Central CT- New Brit	1	1	1	2	6				2		1	1	15
Johnson Memorial Hospital					1				1				2
Lawrence and Memorial	5		2	1	13	1		2	1	5	3	3	36
Manchester Memorial		1	4	1	1				1		2	3	13
Middlesex Hospital	1	1	3	2	3			1		2	1	1	15
Midstate Hospital	2	1	2		4		1		5	2	1	1	19
Norwalk Hospital	1		1				1	1		1			5
Rockville Hospital					1					1			2
Sharon Hospital	1									1			2
St Francis Hospital			2		1	2							5
St Mary’s Hospital	11	5	12	14	9	3	1	7	12	18	10	12	114 ⋆
St Raphael’s Hospital	1												1
St Vincent’s Hospital	1					1		2				1	5
Stamford Hospital	3		3	3	9	6	2	2	7	8	6	6	55
Stony Brook					1								1
Waterbury Hospital	8	1	11	10	2	3	3	5	10	6	4	2	65 ⋆
William Backus Hospital			2	1	3	3	1						10
Windham Hospital				1			1					1	3
Yale New Haven Hospital			3		3	2			1	5	2		16

Connecticut Medicaid Youth (0-12) that Utilize Behavioral Health Services: Emergency Department

Purpose: The purpose of the following graph is to provide contexr for the ad hoc request on youth with and ID, DD, or ASD diagnosis that utilized the ED for behavioral health concerns. This ad hoc was requested by Bill Halsey of DDS and completed by Chris Bory of Beacon.
Method: Data is pulled from two data sources: Beacon's Population Profile (RPT_CTD613018_2017) and the YTD ED Delayed Report for CY 2016 (RPT_CTBH07093) run on January 9, 2017. Both data sets are for CY 2016. For the ED Delayed, only youth admitted in CY 2016 were included, CARES was excluded.

Total Youth Enrolled in Medicaid: Number of members that were enrolled who were 0-21 years old, excluding all duals & limited benefit groups in CY 2016.
Total Youth Using and BH Services: Number of youth that had utilized any type of behavioral health services in the calander year.
Total Youth Using ED with any BH Services: Number of youth that had utilized greater than 0 count for behavioral health ED visits.
Total Youth Using ED with ID/DD/ASD Diagnosis: Number of youth who had greater than 0 count for behavioral health ED visits and also had an ID, DD, or ASD diagnosis at any point during the year.
Total Youth Delayed in ED: Number of unique youth that were delayed in the D. according to the CY 2016 ED delayed report.
Total Youth Delayed in ED with ID/DD/ASD Diagnosis: Number of unique youth that were delayed in the ED and also had an ID, DD, or ASD diagnosis at any point during the year.
Total Youth Delayed in ED >= 3 Days: Number of unique youth that were delayed in the ED with a length of stay greater than or equal to 3 days.
Total Youth Delayed in ED with ID/DD/ASD Barrier: Number of unique youth that were delayed in the ED and the identified barrier was ID,DD, or ASD related.
Total Youth Delayed in ED >= 3 Days with ID/DD Diagnosis as a Barrier: Number of unique youth that were delayed in the ED with a length of stay greater than or equal to 3 days and the identified barrier was ID, DD, or ASD related.



Behavioral Health ED Readmissions

A portion of youth who have a BH ED visit may return to the ED soon after discharge, indicating that youth and/or family needs have not been met by the visit or by the services utilized after discharge. During 2016, 10.4% of youth with a BH ED visit were readmitted to the ED within 7 days and 25.6% were readmitted within 30 days. There was significant variation in the rates by hospital, with the 7-day readmission rate ranging from 6% to 40% and the 30-day readmission rate ranging from 7.1% to 51% (excluding hospitals with extremely low volume). Readmission rates are generally lower for youth than they are for adults, but there is significant room for improvement at particular hospitals and across the system. The table below displays the readmission rates by hospital for 2016. Rates of ED readmissions have been stable from 2014 to 2016.

Behavioral Health Emergency Department

Medicaid Youth (0-17) Claims-Based Data CY 2016

+ = Providers with the top 5 best rates (for C2C a lower rate is better)

Provider Names	Volume	7-Day Readmit Rate	30-Day Readmit Rate	C2C 7-Day Rate	C2C 30-Day Rate
Statewide	14,488	10.4%	25.6%	49.1%	64.8%
Bridgeport Hospital	520	9.7%	22.3%	+ 62.3%	70.4%
Bristol Hospital	207	10.6%	27.1%	57.9%	+ 73.6%
Connecticut Children's Medical Center	3,962	9.0%	26.0%	43.1%	58.8%
Danbury Hospital	345	11.0%	25.3%	49.6%	67.3%
Day Kimball Hospital	355	11.5%	31.5%	48.7%	67.4%
Greenwich Hospital	71	13.6%	27.3%	27.5%	62.5%
Griffin Hospital	111	9.4%	+ 19.6%	28.8%	43.9%
Hartford Hospital	47	40.0%	51.1%	+ 61.5%	65.4%
Hospital for Special Care	1	+ 0.0%	+ 0.0%	0.0%	0.0%
Johnson Memorial Hospital	71	+ 7.9%	20.6%	30.0%	50.0%
Lawrence and Memorial Hospital	358	11.1%	22.5%	51.0%	70.1%
Middlesex Hospital	332	25.2%	39.6%	+ 64.7%	+ 73.2%
Midstate Medical Center	258	10.2%	24.0%	+ 69.2%	+ 83.3%
Millford Hospital	41	36.6%	36.6%	25.8%	58.1%
New Milford Hospital	75	8.0%	+ 20.0%	44.8%	62.7%
Norwalk Hospital	181	8.8%	20.0%	41.7%	54.6%
Prospect Manchester Hospital	238	12.3%	31.1%	55.2%	70.6%
Prospect Rockville Hospital	50	14.6%	25.0%	44.7%	60.5%
Prospect Waterbury Hospital	393	12.2%	29.3%	58.9%	+ 77.7%
Sharon Hospital	14	+ 7.1%	+ 7.1%	23.1%	61.5%
St Francis Hospital Medical Center	192	11.8%	28.7%	33.6%	54.0%
St Mary's Hospital	1,185	9.0%	23.4%	60.5%	72.6%
St Vincent's Medical Center	374	+ 6.0%	24.0%	+ 64.2%	+ 76.5%
Stamford Hospital	214	+ 7.5%	+ 17.6%	46.7%	60.6%
State of Connecticut - John Dempsey	36	17.7%	32.4%	31.8%	72.7%
The Charlotte Hungerford Hospital	263	13.6%	32.7%	60.9%	71.4%
The Hospital of Central Connecticut	712	12.5%	28.2%	43.4%	59.6%
The William Backus Hospital	1,203	8.9%	21.5%	40.2%	60.1%
Windham Comm Mem Hospital	416	10.3%	25.9%	38.1%	56.0%
Yale New Haven Hospital	2,263	10.1%	24.7%	54.0%	68.6%

Behavioral Health ED Connection to Care

A critical component of ED services is connecting youth and family to care that can meet their needs and help them avoid the need to return to the ED or experience other unwanted outcomes (e.g., suffering, violence, suicide, etc.) Children that do not connect to continuing care in a timely manner are believed to be at risk for clinical deterioration, readmission to the ED, hospitalization, or other negative clinical outcomes.

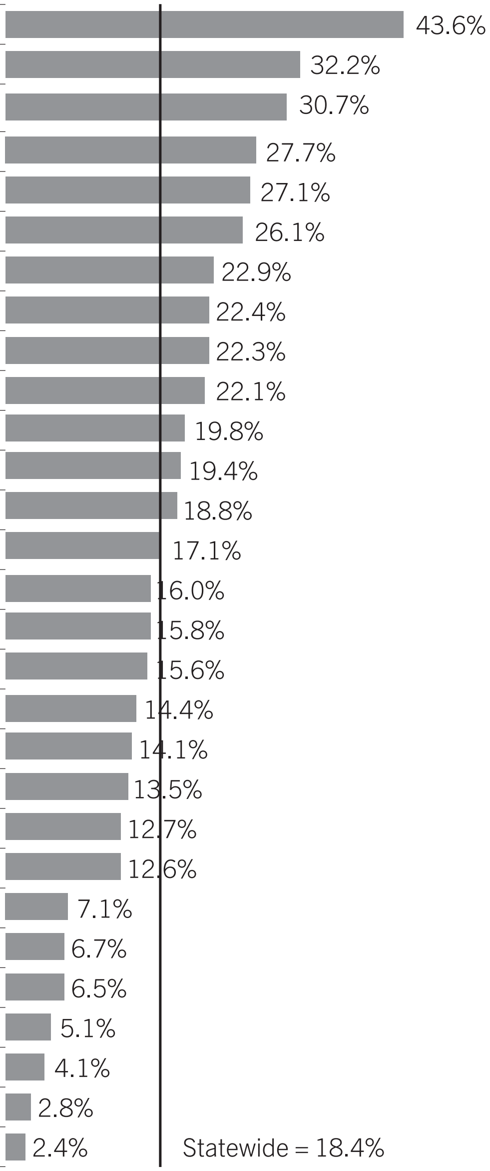
In 2016, slightly less than half (49.1%) of the 14,448 youth BH ED visits that occurred showed evidence in claims of completed community-based follow-up appointments within 7 days of discharge. At 30 days, 64.8% showed evidence of having completed a follow-up appointment in the community. Rates varied significantly across hospitals, with 7-day rates ranging from 25.8% to 69.2% (excluding hospitals with extremely low volume). The 30-day rates ranged from 43.9% to 83.3%. While rates for youth are generally better than rates for adults, the rates for youth leave significant room for improvement. It is important to note that some follow-up appointments may have occurred that could not be captured in the Medicaid claims data; for example, participation in grant funded behavioral health visits that are not on the Medicaid fee for service schedule or behavioral health visits paid for out-of-pocket. The table on page 29 shows Connect to Care and Readmission Rates for the state and for each hospital ED.

Admission to Inpatient Hospitalization from the ED

The vast majority of youth that visit an ED are discharged without the need for a higher level of care, such as inpatient hospitalization. Although inpatient treatment may be the best option for a small number of youth that visit the ED, there are concerns about the unnecessary experience of trauma associated with separation between parents and children, and concerns that overuse of inpatient care as a disposition from the ED can contribute to system problems such as children stuck in the ED, less access to inpatient care for those in acute crisis, and inefficient use of scarce resources. Statewide, ED rates for the percentage of BH ED visits that result in an inpatient admission range from a low of 2.4% to a high of 43.6% (excluding hospitals with extremely low volume). Previous work with several specialty pediatric EDs in New York State suggested that a rate of inpatient admission from the ED of 10% to 15% is attainable with best practices in the ED and access to an adequate system of community-based services and supports. Hospital systems that have their own inpatient hospital resources tend to have higher rates of admission to inpatient from a BH ED visit. The chart below shows 2016 rates by hospital.

Percent of BH ED Visits Resulting in an Inpatient Admission

Value next to the Provider Name is the total count of BH ED visits. Select to highlight graphs to the right.



1	ST VINCENTS MEDICAL CENTER	374	43.6%
2	YALE NEW HAVEN HOSPITAL	2,252	32.2%
3	PROSPECT MANCHESTER HOSPITAL INC	238	30.7%
4	HARTFORD HOSPITAL	47	27.7%
5	STAMFORD HOSPITAL	214	27.1%
6	GRIFFIN HOSPITAL	111	26.1%
7	DAY KIMBALL HOSPITAL	354	22.9%
8	ST FRANCIS HOSPITAL MEDICAL CENTER	192	22.4%
9	NORWALK HOSPITAL	179	22.3%
10	LAWRENCE AND MEMORIAL HOSPITAL	358	22.1%
11	PROSPECT WATERBURY INC	388	19.8%
12	CONNECTICUT CHILDRENS MEDICAL CENT	3,953	19.4%
13	GREENWICH HOSPITAL	69	18.8%
14	STATE OF CONNECTICUT - JD	35	17.1%
15	PROSPECT ROCKVILLE HOSPITAL INC	50	16.0%
16	MIDDLESEX HOSPITAL	330	15.8%
17	BRIDGEPORT HOSPITAL INC	519	15.6%
18	WINDHAM COMM MEM HOSPITAL	416	14.4%
19	JOHNSON MEMORIAL HOSPITAL	71	14.1%
20	DANBURY HOSPITAL	340	13.5%
21	THE CHARLOTTE HUNGERFORD HOSPITAL	260	12.7%
22	BRISTOL HOSPITAL	207	12.6%
23	SHARON HOSPITAL	14	7.1%
24	NEW MILFORD HOSPITAL	75	6.7%
25	THE WILLIAM BACKUS HOSPITAL	1,203	6.5%
26	MIDSTATE MEDICAL CENTER	257	5.1%
27	ST MARY'S HOSPITAL	1,184	4.1%
28	THE HOSPITAL OF CENTRAL CONNECTICUT	712	2.8%
29	MILFORD HOSPITAL INC	41	2.4%

ALTERNATIVES TO ED USE IN CONNECTICUT FOR CHILDREN AND YOUTH

Some children and youth who present to EDs are not experiencing an acute behavioral health crisis and would benefit from accessing a range of outpatient treatment options provided by community mental health centers, schools (e.g., school social worker, school-based health centers), and pediatric primary care physicians, occasionally supported with psychiatric consultation from Connecticut's ACCESS Mental Health program. For youth with more intensive needs, intermediate levels of behavioral health care are available that may also reduce the need for ED utilization, including extended day treatment, intensive outpatient programs, and partial hospitalization programs.

Other youth presenting to the ED are experiencing an acute behavioral health crisis, yet their needs may be better addressed with alternative services located outside of the ED setting, to the extent that those services are available. A report by the Substance Abuse and Mental Health Services Administration (SAMHSA, 2014), titled Crisis Services: Effectiveness, Cost Effectiveness, and Funding Strategies, describes the best practice components of a crisis continuum of care. Multiple crisis-oriented services are included in the recommended continuum, as is a single crisis safety plan for each child or youth that is available to all providers in the continuum. Linkages to care management, care coordination, and crisis peer support are optimally woven throughout the continuum as well. Connecticut's current service array has many, but not all, of the elements described in this report.

One component in the SAMHSA report, crisis hotlines, is well-represented in Connecticut by the state's 2-1-1 system, which also maintains the state's suicide prevention hotline. Children and youth, family members, school personnel, hospital staff, police officers, and other referrers can contact 2-1-1, press 1 for a behavioral health crisis, and press 1 again to speak with a trained intake specialist. During daytime hours, this system seamlessly connects to Mobile Crisis (see previous page). During overnight hours, clinically trained intake specialists cover the phone lines to provide phone-based consultation, crisis de-escalation, and linkage to follow-up services as needed.

A second component of the SAMHSA-recommended, comprehensive crisis continuum of care is a mobile crisis service, represented in Connecticut by the Mobile Crisis Intervention Service (Mobile Crisis), formerly known as Emergency Mobile Psychiatry Services, or EMPS (www.empsct.org). As noted above, Mobile Crisis is primarily accessed through 2-1-1 and referrers include youth, families, schools, ED staff, police officers, and others. DCF contracts with six primary Mobile Crisis providers operating a total of fourteen sites that collectively offer coverage statewide. During mobile hours (6 a.m. to 10 p.m. on weekdays, 1 p.m. to 10 p.m. on weekends and holidays), the 2-1-1 clinician who receives the call collects basic information and then facilitates a warm transfer to the Mobile Crisis provider covering the area in which the child or youth is located. In the majority of cases, the Mobile Crisis clinician provides a mobile, face-to-face response within 45 minutes, offers crisis stabilization services, and is available to offer ongoing care to the youth and family for up to 45 days. Additional episodes of Mobile Crisis services are available as needed. Mobile Crisis offers a critical alternative to the ED, particularly when children are displaying non-emergency needs in home, school, and community locations. A recent study indicates that utilization of Connecticut's Mobile Crisis is associated with 25% reduction in subsequent ED visits among youth (Fendrich, Kurz, Ives, & Becker, 2018). EDs can also contact Mobile Crisis to help shorten ED lengths of stay, facilitate connections to follow-up care, and divert a child from inpatient hospitalization.

Referrals from families, schools, and EDs comprise approximately 90% of all Mobile Crisis referrals statewide. Data show significant increases in the utilization of this service over the last several years, although those increases vary significantly by referrer. From fiscal years 2011 to 2017, family referrals to Mobile Crisis increased from 4,132 to 5,331 (29%). School referrals nearly doubled during that timeframe, from 2,818 to 5,627. However, referrals from hospital EDs increased only 3%, from 1,135 to 1,171.

A third component of the SAMHSA best practice continuum is crisis respite and stabilization, represented in Connecticut by Crisis Stabilization and Short-Term Family Integrated Treatment (S-FIT). The statewide S-FIT program includes approximately 80 beds, available to youth from 12 to 17 years old for up to 15 days. There are a small number of beds designated for use by DCF-involved youth only, whereas the majority are available to youth with or without system involvement. Admissions to S-FIT are made following a Child and Family Team meeting. Beacon Health Options reviews these requests within 2 hours and, if youth are found eligible and a bed is available, transport is arranged to an S-FIT bed within 12 hours of authorization.

> **Mobile Crisis offers a critical alternative to the ED, particularly when children are displaying non-emergency needs in home, school, and community locations. EDs can also contact Mobile Crisis to help shorten ED lengths of stay, facilitate connections to follow-up care, and divert a child from inpatient hospitalization.**

There are, however, elements of the SAMHSA best practice crisis continuum that are not widely available in Connecticut. Peer support services for children, youth, and family are an element of the SAMHSA continuum, but are available in Connecticut on a fairly limited basis and not as part of the Medicaid fee-for-service reimbursement schedule (as it is in some other states). It should be noted that peer support, family engagement, and family advocacy services have been expanded in Connecticut over the last several years through other state funding mechanisms and specific DCF contracts.

For the purposes of this review, it is perhaps most noteworthy that SAMHSA identifies alternative behavioral health assessment centers (BHAC) as a critical component of the continuum. These are described as 23-hour settings in which youth can receive behavioral health assessment, crisis stabilization and short-term observation, access to psychiatric medication management, and linkage to community-based treatment following the BHAC visit. The SAMHSA (2014) report cites research demonstrating reduced rates of inpatient admission when a BHAC is available. These centers are not available in Connecticut, and could address the need for more thorough assessments, interventions, and connections to interventions outside of an ED.

PERSPECTIVES OF CONNECTICUT FAMILIES

Methods

The Family Voice in Connecticut was collected in two ways for this report:

Semi-Structured Family Interviews

Six individuals were selected to participate in semi-structured family interviews. This sample included families from different geographical locations throughout the state (urban and rural) with experiences at large and small hospitals, varied relationships to the child or youth (adoptive or biological parent, step-parent, grandparent), from diverse races and ethnicities (Caucasian, Black, Hispanic); and with state and commercial insurance. A family champion, Susan Graham, conducted individual interviews with each participant via telephone using a semi-structured interview protocol that explored the reasons that families accessed EDs for behavioral health care, their experiences in the EDs, and their recommendations for improving the child, youth, and family experience. Notes from the interviews were analyzed for common themes and summarized.

Informal Family Discussions

Additional information was gathered informally by Ms. Graham from family members and advocates sharing ED experiences at system decision-making tables, family support groups, school meetings, and through natural encounters in the community. These varied experiences with the emergency department to address behavioral health needs were noted, analyzed for common themes, and summarized. An estimated 20 family members were involved in these discussions.

In considering the findings below, note that a modest number of families provided feedback. There was no intention or ability with this sample to draw conclusions about family satisfaction with ED services in specific hospitals.

Findings

Most families accessed ED services for a child exhibiting "out of control behaviors" and/or suicidal ideation. While many of the families had other services in place, the decision to go to an ED was made because of the perceived need for "immediate" intervention. These decisions were most often made jointly with school personnel, law enforcement and, in some cases, Mobile Crisis and other mental health service providers.

The pain, fear, and frustration experienced by families seeking behavioral health services for their children in EDs were palpable in every interview. Some families reported

using the ED even when they were aware of Mobile Crisis, because they found that Mobile Crisis “wasn’t helpful” in the past or they didn’t think it could be helpful with the current situation. This left them feeling that they “have no place else to go and don’t know what else to do.”

Beyond the desire to ensure a child’s safety or to gain access to an inpatient bed, families were using EDs with the hope of obtaining things such as a full assessment, a diagnosis, linkages to other services, and guidance about how to cope.

When asked about their expectations from the ED visit, families said:

> “ I wanted them to give me a solution.”
>
> “EDs are a second set of eyes (on my child) and that’s reassuring to parents.”
>
> “The ED took things off my shoulders for a few hours; once there it was not MY responsibility to keep my child safe, which was a relief.”

Beyond the desire to ensure a child’s safety or to gain access to an inpatient bed, families were using EDs with the hope of obtaining things such as a full assessment, a diagnosis, linkages to other services, and guidance about how to cope.

The length of the ED stays for the children of these families varied from a few hours to multiple days. For youth experiencing longer ED stays, they were most often awaiting inpatient admission at another facility. A short length of stay typically resulted in the child and family being sent home.

The connections to services at discharge varied greatly. Families experienced everything from being told to follow up with the services they already had in place; receiving a referral to a new provider; or no tangible follow-up or direction at all. Receiving a referral did not always result in receiving follow-up care. One family member said, “We were discharged to follow up with a child psychiatrist, and I called and called, but no one was taking new patients or my insurance.”

Taken as a whole, the information gathered from these families suggested that their expectations often were not met and their overall experience while in the ED was negative. The following problems were identified as major contributors to those negative experiences.

1. The ED Environment: Families reported that a lack of privacy contributed to their overall negative experience, often feeling uncomfortable being placed on observation, and assessed and treated in a common hallway due to the lack of a more private room. The hallways were often chaotic and exposed children and youth to the trauma of seeing other patients having medical emergencies and receiving emergency treatment.
2. Lack of Child Psychiatrists: Families highlighted the lack of access to child psychiatrists as contributing to inadequate quality of care. This seemed most common in the smaller and more rural ED settings.
3. Staff Competencies: Families reported that many ED staff had a limited understanding of the assessment and treatment of children, youth, and families experiencing behavioral health crises, or of how to support these individuals when in crisis. The lack of expertise in caring for children and youth with ASD and DD was mentioned numerous times. Families expressed the need for someone in the ED to be available to spend more time with them, value their input, listen to their concerns, answer questions, and have knowledge of available resources.
4. Restricted Family Access to a Child or Youth in an ED: Concerns were expressed about limits placed on a parent or caregiver’s access to children and youth in an ED at this most vulnerable time. ED criteria about who was considered family, and eligible to visit, was one source of this tension.

5. Coordination of Care: Families reported ED staff were frequently unwilling or unable to consult with providers already treating the child or youth, and often did so only when consultation was initiated by the family member. The families felt better supported when this coordination occurred.
6. Dismissing Family Information and Concerns: Some of the families expressed concern that the behaviors exhibited by a child or youth in an ED and observed by ED staff were much different than what the family was experiencing at home. The ability of a child or youth to control his or her behavior while being observed by ED staff, and the tendency of staff to downplay family reports of more serious behaviors, troubled family members.

The findings suggested that families valued flexible behavioral health resources designed to meet their unique needs, and that were not time-limited or "cookie-cutter." They attributed this lack of flexibility as a contributing factor to increased ED utilization. Some families recommended more support from ED staff or peers who could help them identify and access resources and could offer them emotional support. Others recommended improved coordination and collaboration between outpatient providers, EDs, primary care physicians, and schools.

Overall, families wished for a better place than an ED to go to when seriously concerned about their child or youth.

> *"It's hard when you see a kid blowing up a school (referring to school shootings). But, it scares me because I see myself and my child in all those stories."*
>
> *"It shouldn't be the ED meeting my expectations. Rather than waiting for the inevitable to happen, the system should be more proactive."*

An Integrated Narrative of Family Perspectives

To honor the family members who contributed to this review of ED issues by providing their emotion-filled stories, Susan Graham, a family champion, wrote the creative narrative that appears below. It is a composite of the many voices that she heard while gathering information for this report.

“Family Emergency”

I am the parent of a child in the Emergency Room.

My child is struggling.

My family is struggling.

I am struggling.

My child has mental health challenges.

We need help.

We can’t get the help we need

And we don’t know where else to go.

I remember the first time my child was out of control.

I didn’t know what to do.

I didn’t know who to call.

So, we went to the emergency room.

Today is not our FIRST time.

We have been here before.

You see, the things we have tried are no longer working and some are no longer available to us.

I just don’t know what else to do.

I know this may not be the best experience for my child.

Most likely, it will not be the best experience for me, either.

We didn’t get the help we needed the last time we were here.

I don’t think we will get what we need today, either.

I don’t have a choice.

I NEED…

I NEED to know my child is SAFE.

I NEED to know my child will not get hurt or hurt someone else.

We NEED help.

I am so tired and frustrated.

I’m afraid.

I want my child to be well.

So, we’re at the hospital again.

I tried calling Mobile Crisis, but we could not wait 30 minutes, and they suggested we call 911 and get the police.

The police have been to our home and the school so many times they know us by name.

I could fill a binder with the safety plans we have tried.

Our current plan is no longer working, and the school is concerned about safety, so off to the hospital we go.

At the hospital,

We’re waiting in the hallway.

We’ve been here several hours waiting for a room.

It’s horrible.

You see, when no rooms are available, they make us wait in the hall across from the nurse’s station.

There is no privacy in the hall.

I feel like we are on display.

Don’t get me wrong, most of the people are friendly, they smile and say hello when they walk by.

Their smiles don’t matter.

I still feel like they are judging me.

Finally, they have a room for us.

The security guard and the aide come and escort us to the room.

The door makes a loud “click” as it locks behind us and it makes me jump.

Now we are inside.

Now I can relax.

My child is SAFE.

They don't really do anything, but now my child is calm.

There are no signs of the aggression I experienced at home.

Then the social worker comes in and asks a bunch of questions.

"When will we meet with a psychiatrist?" I ask.

She says, "We do not have a child psychiatrist available.

I suggest they call the community psychiatrist that we use.

The social worker responds, "We don't do that."

I call her myself and try to get the emergency room staff to work with our doctors.

This had been helpful in the past, but they don't seem willing to do that today.

At least this social worker is nice and understands my child's special needs.

The last time we were here, the staff had no idea how to interact with my child and I think she made the situation worse.

My child has fallen asleep.

My mind wanders—I start thinking about all the things we've tried.

I wonder if this will ever stop.

Things had been going great for a while when we had in-home services.

The team we had was very helpful.

We made progress and things were going great for several months.

Then,

We learned our clinicians were leaving.

They had gotten better jobs.

Of course, we were disappointed, but it didn't really matter.

Because the service was about to end.

Our 6 months was up.

I began to search for another program.

I found the perfect program.

Then I learned we weren't eligible.

I was told that we didn't have the right insurance.

I did manage to find another program.

It wasn't perfect.

It was several towns away but the best we could get.

We decided to try it.

Soon after, we decided to stop going because the scheduling and transportation became too stressful for my child and our family.

We managed to get in-home services again.

I was so happy and so hopeful.

They sent a different team of clinicians.

Oh my GOSH, let me tell you about "the girls!"

They were lovely young women.

They were kind, caring, and respectful.

They just did NOT have much experience, and very little understanding of the complexity of my child and our family's needs.

This team was not helpful at all.

I hope the ER nurse comes back soon.

I keep wondering what will happen.

Will we be discharged in a few hours with yet ANOTHER safety plan?

I am hoping we can get into an inpatient program.

I understand it is easier to get a bed if you are in the emergency room.

Here she comes with some news.

"Not today," she says, "you don't meet the criteria for inpatient."

We are sent home with a new safety plan and directions to follow up with our clinicians.

So, tomorrow morning, I will begin making phone calls to schedule follow-up appointments.

I will continue searching for programs to help my child.

I hope I find something.

I hope I find something that works.

If not, I know we'll be back to the emergency room.

Maybe next time we'll try a different hospital?

After we get home, I wonder:

> What if it were different?
>
> What if there was a PLACE to go?
>
> What if there was a place designed just for families like mine?
>
> A place that could help us when things get out of control.
>
> A place with trained people who really know how to help kids like mine.

Well, it's nice to dream.

Maybe my dream is too big?

I know change takes time and money.

I understand that a perfect place to go may not be possible right now.

There must be SOMETHING we can do.

What IS possible right now?

What if there was someone to call?

What if there was someone who really understood what it was like?

Maybe a parent, like me, who knows what it was like to struggle and feel hopeless.

What if there was someone like that right at the hospital who could help us when we need it the most?

Better yet…

What if I could connect with someone like that BEFORE we ever had to go to the hospital?

What if that person connected us to resources and walked alongside me on this journey?

What if that person could help me figure out what to do the next time?

Someone who could help me develop a plan and feel confident enough to know what to do.

What if that person connected with our doctors, the school and community and we all worked together on one plan?

I would love to find a person like that.

And if we had to go to the hospital again,

What if the hospital staff knew about our plan and could easily connect with all the members of our team?

There're a few other things I think would be helpful.

Having people at the hospital know how to interact with parents like me and kids like mine.

Having emergency room doctors trained to work with kids.

Having someone right there at the hospital to help parents get connected to resources, something more than a list of numbers to call.

I really hope someone can make some changes right away.

My child needs your help.

My family needs your help.

PERSPECTIVES OF PROVIDERS AND STATE AGENCY REPRESENTATIVES

To supplement the information gathered through literature reviews and the examination of Medicaid data, selected providers and representatives of state agencies were interviewed using a semi-structured interview format. Individuals interviewed were recommended by members of the workgroup and should be considered a small sample of convenience as opposed to a fully representative sample. Highlights of their personal views on ED use among children and youth with behavioral health conditions are outlined below.

Provider Perspectives

Positive about:

- Strong working relationship with the DCF office.
- Mobile Crisis as a resource to divert or step-down children and youth from the ED.
- Mobile Crisis connections with schools.

Concerns about:

- Family exhaustion and the lack of adequate respite services in the state.
- Insufficient number of inpatient beds and access to inpatient care.
- Inadequate space and privacy in EDs for children and youth, plus their comingling with adults.
- Inadequate number of child psychiatrists in EDs and in the community (especially those that will take insurance).
- Younger and younger children presenting with behavioral health problems.
- Unaddressed psychosocial problems and trauma among our children and youth.
- The lack of early intervention in schools before a child is labeled.
- Schools using a low threshold in deciding to send a child to an ED.
- Fixed time limits on intensive in-home services, which prevent meeting the ongoing needs for some families.
- Turnover and inadequate supervision among young, inexperienced staff in in-home programs.
- Families not being contacted by schools in a timely way as they consider referring children to Mobile Crisis or an ED.
- Lack of collaboration and coordination when Mobile Crisis and the ED are not part of the same provider organization.
- The silos of clinical outpatient, care coordination, hospital-based care, and other services, which can impede coordination and continuity of care.

- The lack of a link between EDs and community services. “There isn’t one.”

- The impact of returning all children to the state and to the community (“the right thing to do”), which has raised the community risk profile and strained the availability of community resources.

- Lack of adequate services for children and youth with Autism Spectrum Disorder, Attention Deficit Hyperactivity Disorder, intellectual disabilities, and developmental disabilities.

A Progressive School Perspective

- Among students, the staff have observed increased social and psychological needs, reactivity, the negative impact of social media, and increased self-harm.

- Events such as the Parkland tragedy lead school personnel to worry about what could happen in our Connecticut schools. “We worry about Parkland.”

- Some of our schools are engaging in multiple initiatives to strengthen their capacity to respond to the concerns listed above.

- EDs are viewed as an immediate and appropriate response in true emergencies.

- However, they are not the best resource in most situations, so progressive schools use them infrequently.

- EDs remove a child from a situation, leading to the child calming down and then going home. Progressive schools believe they can often accomplish the same thing (removing from a situation and calming) within the school.

- Progressive schools focus on creating in-school and out-of-school supports, which minimize the need for ED or Mobile Crisis intervention.

A State Department of Education (SDE) Perspective

- Schools rely on EDs.
- But EDs are not the most beneficial place for treatment of mental health issues, since there is no “quick fix” they can offer.

- School personnel (e.g., nurses, social workers, psychologists, administrators) often conduct initial assessments of a child in distress and make decisions about whether to refer to Mobile Crisis or an ED.

- Some schools are becoming more resourceful in addressing behavioral health issues (e.g., use of Mobile Crisis, referrals to counseling, creating behavioral plans), but there are opportunities in Connecticut schools for improvement.

- Some schools place a greater emphasis on liability concerns than others as they make decisions about sending a child to an ED.

- Communication between EDs and schools is minimal because it is restricted by law, unless required releases have been obtained.

- SDE has a strong interest and willingness to collaborate in examining data on the ED issue, learning more about school staff perspectives, educating staff, and engaging in quality improvement regarding school referrals to EDs.

A Connecticut Department of Developmental Services (DSS) Perspective

Concerns about ED services:

- "Diagnostic overshadowing," in which all of a child's problems may be attributed to the developmental disability, and other clinical problems or environmental issues are not adequately considered.
- ED staff viewing a child simply as a "social admission" without clinical needs.
- ED staff lacking adequate knowledge about services for individuals with developmental disabilities, and having unrealistic expectations that DDS will "take individuals out of the ED."
- Concerns about the lack of "alternatives" to ED or hospital care, especially respite care.
- Lack of adequate connections between EDs and community services.
- The need for proactive identification of children and families at risk, combined with early intervention, to avoid ED and hospital use.

> **Using social workers with supervision from an attending child psychiatrist to conduct evaluations, rather than child psychiatrists alone, the Yale New Haven Children's Hospital was able to increase ED staff coverage to nearly 24/7 at an equivalent cost.**

Hospital ED Perspective on Best Practices

Many ED providers have responded previously to concerns about the behavioral health ED volume and/or rates of stuck children and youth by instituting various strategies for addressing these issues. Separate from the provider interviews described above, hospital representatives informed the workgroup about best practices that have been implemented in their EDs.

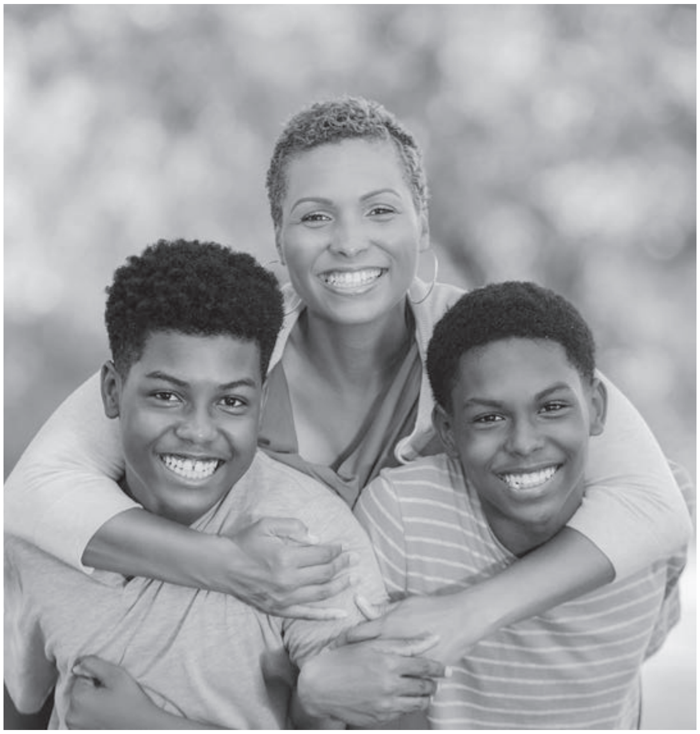
In 2003, Yale New Haven Children's Hospital developed a dedicated psychiatric crisis service to board children and youth with behavioral health conditions on a medical-surgical unit, ending the practice of boarding them in the ED. Gradually, the hospital moved toward eliminating boarding on the medical-surgical unit as well, in favor of strategies that would decrease lengths of stay in the ED and reduce ED overcrowding. Activities included eliminating redundant assessments in the ED, creating new daily data reports to monitor and continually improve throughput and timely disposition, and increasing onsite presence of social workers who were specially trained to complete full mental health assessments. Using social workers with supervision from an attending child psychiatrist to conduct evaluations, rather than child psychiatrists alone, the Yale New Haven Children's Hospital was able to increase ED staff coverage to nearly 24/7 at an equivalent cost. From the quarter ending December 2013 until the quarter ending December 2014, the number of children and youth being boarded on the medical-surgical inpatient unit was reduced from more than 50 per quarter to 0, with a corresponding cost savings of $58,000. The ED reduced lengths of stay for children and youth by more than 60 minutes during a one-year study period, and reported a reduction in the number of inpatient hospitalizations from the ED.

The ED at Connecticut Children's Medical Center (CT Children's), like pediatric EDs across the country, has experienced a significant growth in the number of children and youth presenting with behavioral health problems over the past 5 to 10 years (Rogers, Mulvey, Divietro, & Sturm, 2017). The hospital has attempted to address the needs of these individuals through collaboration and innovation. More than 10 years ago, CT Children's worked with Hartford Healthcare's Institute of Living and its staff of experts to develop the Child and Adolescent Rapid Emergency Stabilization (CARES) unit. The program helped to alleviate ED crowding and demonstrated a cost savings of more than 1 million dollars (Rogers, Griffin, Masso, Stevens, Mangini, & Smith, 2015). Unfortunately, this provided only a temporary reduction in overcrowding. In order to maintain patient and staff safety and improve care, CT Children's invested in the construction of a unique unit within its ED tailored to the needs of these children and youth. This locked, ligature-safe setting provides a more therapeutic environment for children and youth in crisis compared to the general ED environment. Since the majority of patients seen in this ED setting are discharged back to the community, the ED partnered with the Connecticut Children's Center for Care Coordination three years ago to provide a novel community-based care coordination service focused on children seen in the ED for behavioral health problems. This service continues to improve linkages to outpatient services, such as pediatricians, mental health providers, and even schools. A pilot study of this mental health care-focused care coordination service demonstrated its feasibility in the ED, resulting in increased capacity of ED social workers to evaluate and safely discharge patients with mental health issues (Roman, Matthews-Wilson, Dickinson, Chenard, & Rogers, 2018). The service continues to follow a quality improvement process and is currently working to improve patient and family engagement. Further research is required in order to determine whether these strategies have resulted in reductions in ED lengths of stay, better connect to care rates, or reduction in inpatient admissions.

KEY FINDINGS

The following represent some of the significant findings from this review, which form the foundation for the recommendations contained in this report:

1. There are more than 14,000 ED visits each year by children and youth covered by Connecticut Medicaid, which is the population for which data are most readily available.
2. The use of EDs in Connecticut by Medicaid-covered children and youth with behavioral health conditions has increased significantly over the past decade, with the most recent data showing a 20% increase in the number of ED visits from 2014 to 2016. Significant increases in ED visits also have been reported nationally.
3. While Connecticut ED utilization data are not available on privately insured children and youth, their use of EDs nationally has been declining during this same period.
4. Among the Connecticut Medicaid population, those who use ED services for behavioral health reasons are more likely to be older (13 to 17), male, white, and involved with DCF than those who do not use ED services.
5. The majority of Connecticut children and youth covered by Medicaid visited an ED only one or two times during any of the periods that have been studied.
6. In Connecticut, there are very few children and youth covered by Medicaid who are frequent visitors to EDs for behavioral health reasons, and just a handful who are frequent visitors over the course of more than a year. Children and youth with DCF involvement account for a disproportionately large percentage of ED frequent visitors.
7. Among the Connecticut Medicaid population during the most recent year under study, approximately 1300 episodes of care involved children and youth who were stuck in an ED for more than 8 hours after being medically cleared, with more than 9% of these being stuck for more than a week.
8. Those with autism spectrum disorder (ASD), intellectual disability (ID), or developmental disability (DD) who are covered by Connecticut Medicaid are disproportionately over-represented among the children and youth who are stuck in EDs. Contributing factors appear to include inadequate community-based services for individuals with these conditions and a lack of expertise in many EDs for addressing the needs of this population.
9. The majority of Medicaid-covered children and youth seen in Connecticut's EDs for behavioral health conditions are discharged without being admitted to an inpatient facility. Since relatively few children and youth receive significant treatment interventions in an ED, this raises the possibility that many of these ED visits could have been avoided if existing alternatives to the ED were accessed or if other alternatives were available.



10. Claims data from 2016 suggest that 35% of Medicaid-covered children and youth in Connecticut did not have a follow-up up visit in the community within 30 days of being seen in an ED, which raises significant concerns about the connection to community care among those who visit an ED.

11. Services available in Connecticut EDs for children and youth with behavioral health disorders vary widely among hospitals, with some offering no or limited specialized services or staff trained in the treatment of these patients. Few hospitals have specialized services and staff available during most hours of operation.

12. There is wide variation among Connecticut's EDs with respect to practice patterns and outcomes in caring for this population. For example, the rate of inpatient admission among Medicaid-enrolled children and youth with behavioral health conditions seen in an ED ranges from a low of 2.4% to a high of 43.6%.

13. Beacon Health Options generates high quality data regarding ED use among the Medicaid population, and these data are widely available through the Connecticut Behavioral Health Partnership. There appear to be untapped opportunities in Connecticut for ED directors to work with hospital quality and health information managers to develop reliable and valid data about the total population of patients treated in their EDs to guide hospital-based, health care system-based, and statewide quality improvement initiatives related to the delivery of behavioral health services to children and youth.

14. Among the six families and caregivers interviewed as part of this planning process, there tended to be dissatisfaction with their experience in EDs, and, at times, even self-reported traumatic experiences in these settings. In Connecticut and nationally, families seek treatment in an ED to obtain safety for the child and family, a thorough assessment, an intervention, helpful guidance, connections to services, compassion, and support. However, they report often encountering in EDs the absence of staff skilled in caring for children and youth with behavioral health conditions, privacy, thorough assessments, interventions, guidance, connections to services, compassion, and support.

The most common experience appears to involve longer than average wait times, environments that heighten rather than calm anxieties, and insufficient communication between ED staff and a child or family's community providers. The most common clinical process appears to be a triage decision. The most common outcome is a discharge home, at times against the desires and fears of the family.

15. Nationally, there is a growing body of knowledge about ED best practices in the care of children and youth with behavioral health conditions. There is a compelling need to strengthen the use of these practices in Connecticut's hospitals, which should include providing quality care to special populations, such as those with ASD, DD, and ID. With respect to quality of care, it is important to recognize that EDs throughout the nation and in Connecticut are faced with dramatic increases in utilization, without accompanying increases in resources to address the growing demand.

16. While there is a compelling need to improve the quality of ED care in Connecticut offered to children and youth with behavioral health conditions, virtually every individual involved in or contributing to this workgroup viewed the core problem as a systems issue, not a hospital or ED issue. There was near universal agreement that EDs are, and will always be, suboptimal settings in which to treat children, youth, and families dealing with behavioral health disorders. The widely held view is that action is needed to ensure that existing non-hospital services are fully utilized, and to strengthen the community-based system of care. This will, in turn, ensure that ED services are used much less frequently, stays in EDs are much shorter, diversion and step-down options are more readily available, care provided in EDs is more informed by the family and community provider perspectives, and that peer and family support is more readily available.

17. There is the potential for cost savings if Medicaid-covered ED visits or lengthy stays in EDs by children and youth with behavioral health conditions can be avoided.

LIMITATIONS OF THE REPORT

With respect to ED services for children and youth with behavioral health conditions in the state of Connecticut, the findings in this report are limited by the absence of data on the population that is uninsured, commercially insured, or receiving coverage through non-Medicaid governmental programs. The report relies heavily on the substantial data available for Connecticut's children and youth who are covered by Medicaid and whose care is managed by Beacon Health Options. Although the Medicaid population is substantial in Connecticut, and the available data on these youth is robust, there was a recognition among workgroup members that the findings and recommendations of this report would be strengthened if similarly high quality data were available from other payers.

A major limitation of the Medicaid data is that it lacks clear information on the presenting problem for children and youth seen in Connecticut's EDs. The analyses in this report relied heavily on claims data, with behavioral health ED users identified based on having a behavioral health diagnosis on the claim. Although this is the best approach available, it does not adequately capture the primary issue for which an individual seeks services in an ED. Such information would likely be contained in the medical records of the children and youth seen in EDs for behavioral health conditions. However, it does not appear that any organization in the state, including the hospitals, has extracted that information from the records.

A relatively small number of parents and caregivers were interviewed or provided input into this report and their selection was not random. While opinions expressed by parents and caregivers were similar to those found in other states and reported in the published literature, a larger and more representative sample would have been desirable. The summary of parent and caregiver opinions cannot be assumed to apply in similar fashion to every hospital ED in Connecticut.

RECOMMENDATIONS

Based on the information collected and reviewed, the workgroup endorses the following recommendations for Connecticut:

1. Improve diversion and timely discharge from EDs by increasing collaboration and training among Mobile Crisis (EMPS) programs, EDs, and the schools.

Focus:	ED diversion and alternatives
Timeline:	Immediate
Cost:	No additional funding required
Funding Source:	Existing funding for the Mobile Crisis Performance Improvement Center

Many quality improvement initiatives focus on one service provider at a time to address issues that are influenced by multiple parts of the system. With approval from DCF and collaboration with the State Department of Education, the Mobile Crisis Performance Improvement Center (PIC) will focus its efforts on increasing collaboration among the Mobile Crisis programs, the EDs, and the schools in the state in an effort to decrease ED admissions, shorten ED lengths of stay, and promote appropriate connections to community care for children and youth who are discharged from an ED. The State Department of Education (SDE) should contribute leadership and staff support to this initiative as well, including facilitating support and buy-in from local districts, Boards of Education, and relevant education trade associations. The implementation of this recommendation should focus on bringing together community-based teams comprised of Mobile Crisis providers, representatives of high-referring schools and districts, and local EDs. Those teams can then identify measurable goals, identify and address barriers, and collaborate toward reducing referrals of children and youth to EDs when their needs can be safely and effectively addressed outside the ED.

The participating groups and organizations should convene regularly to review data, identify barriers, establish and sign memoranda of understanding, and develop a plan to meet identified performance targets. The goals of the collaboration should include, but not be limited to: 1) providing training to school administrators, teachers, and staff in schools that have high rates of ED referral; 2) increasing Mobile Crisis responses to high-referring schools as an alternative to ED utilization, and; 3) increasing Mobile Crisis responses to local EDs to divert youth from the ED, avoid inpatient hospitalization, and connect children and youth to community-based care. Each collaboration should address the needs of special populations, the needs of families, workforce development of involved staff, and the use of data to manage and evaluate outcomes.

Budget:	There are no added costs for this recommendation as it would rely on existing PIC and SDE staffing to lead implementation.
Actions Needed:	(a) DCF to approve PIC prioritization on this issue. (b) SDE commitment to participate and contribute staff support.

2. Implement a quality improvement initiative focused on the delivery of behavioral health services within high volume ED settings serving children, youth, and families.

Focus: ED service quality

Timeline: Immediate

Cost: $85,000

Funding Source: Recommend that this be drawn from the existing DCF FY19 appropriation

There is an emerging consensus nationwide on best practices in the provision of ED services to children and youth. These include: improving the patient and family experience; creating a trauma-informed environment and culture in the ED; workforce development of staff; standardizing ED processes from intake through discharge; utilizing evidence-based screening and assessment tools; reducing ED lengths of stay and rates of stuck kids; tailoring services to meet the needs of special populations; reducing inpatient hospitalization rates from the ED; improving utilization of Mobile Crisis services; building ED partnerships with community-based services; coordinating care with those partners; improving connection to care; collecting and using data to manage and improve services; and building capacity among patients and families to cope and self-manage.

Within Connecticut, the use of best practices in providing ED services to children and youth with behavioral health conditions varies widely. There is a need and an immediate opportunity to improve services within EDs by implementing quality improvement initiatives on the uptake of known best practices. The recommended focus is on the four hospitals in Connecticut that provide the largest volume of these services to children, youth, and families, which are: Connecticut Children's Medical Center (CT Children's), the combination of Yale New Haven Hospital and Yale New Haven Children's Hospital, St. Mary's Hospital, and Backus Hospital. Together, these hospitals account for 59% of Medicaid-funded ED visits by children and youth and offer geographic diversity. This initiative is envisioned as a collaboration of each hospital with representatives of DCF, DDS, SDE, Beacon Health Options, the Connecticut Hospital Association, and CHDI to identify and address goals related to ED models and quality of care. Providing these hospitals with technical assistance from national experts on best practices would be an element of the intervention, as would the collection and sharing of outcome and quality data among hospitals.

Budget: It is recommended that DCF, DDS, and SDE designate one or more of its staff members to participate in the leadership team of this initiative and that DCF allocate $85,000 from its FY19 budget to support additional staffing and the purchase of technical assistance from national leaders on ED services for children and youth. If new funding is not made available, DCF, DDS, and SDE may consider looking to support existing CT-based partners that already provide support to EDs.

Actions Needed: (a) DCF to approve initiative, contribute leadership and funding.

(b) Agreement from DDS and SDE to designate senior staff to participate.

(c) Agreement from the four hospitals to participate.

3. Establish a Performance Improvement Initiative under the Behavioral Health Partnership focused on ED services to children and youth with behavioral health conditions.

Focus:	Systems improvement
Timeline:	Intermediate
Cost:	$300,000
Funding Source:	DSS state and federal Medicaid funding with existing funding of the Behavioral Health Partnership

Each year, the state agencies involved in the Behavioral Health Partnership, which include DCF, DSS, and DMHAS, identify target goals for formal performance improvement initiatives that are led by Beacon Health Options. Those state agencies should prioritize ED services for children and youth with behavioral health conditions as an upcoming initiative for implementation. The initiative should link multiple parts of the behavioral health service system (e.g., EDs, outpatient providers, Mobile Crisis) and financially incentivize a value-based, performance improvement component that targets selected ED-related goals.

More specifically, the initiative should: identify a minimum of two key priority areas (e.g., connections to care, readmissions, diversions, stuck children); establish system-wide performance goals; develop key metrics specific to the levels of care engaged in the process (e.g., EDs, outpatient clinics, schools); establish a mechanism whereby the providers are incentivized to utilize best practices and attain measurable goals and objectives (e.g., bonus payments, shared savings, bundled payments); measure progress towards achieving the common goal (e.g., reduction in ED utilization, increased connection to care, reduced length of stay in the ED); and measure level of care specific objectives.

This initiative, which could not possibly begin for at least a year, would build on the gains made through the implementation of Recommendations 1 and 2, as outlined above. It would also drive additional change by linking and incentivizing the actions of a greater number of providers.

Budget: Additional expense would be limited to the costs of financial incentives provided through Medicaid. Funds for the performance improvement initiative without the associated financial incentives are contained in the existing Partnership budget. Agreement among the state agencies directing the Behavioral Health Partnership (DSS, DMHAS, and DCF) would be required to reallocate existing Partnership resources to this initiative. There is a potential “opportunity cost” by focusing on this important issue, to the exclusion of other possible priorities.

Actions Needed: (a) DCF, DSS, and DMHAS to approve the initiative.

(b) Agreement from Beacon Health Options to implement the initiative.

4. Increase care coordination for children, youth, and families receiving ED services by funding the placement of care coordinators and family support specialists in high volume EDs.

Focus: ED service quality

Timeline: Intermediate

Cost: $2,000,000 total to cover four hospitals

Funding Source: Legislative funding of a new grant program administered by DCF

There is evidence that care provided to children, youth, and families seen in an ED is often inadequately linked to other services being received or to other services that are needed. The provision of care coordination has been found to improve efficiency of service delivery, improve outcomes, and reduce costs. Beginning in FY20, the Connecticut legislature should fund, through a DCF-administered grant program, the hiring of additional care coordinators and family support specialists in the four highest volume EDs serving this population (CT Children's, Yale New Haven Hospital, St. Mary's, and Backus). The recommended model is one of short-term care coordination focused on referral, connection to care, family support, and a more intensive focus on disposition of children and youth who are stuck in one of these EDs.

As a condition of funding, it should be required that these staff be provided with specialized training and workforce development in: the assessment and treatment of children and youth; mental health and substance use conditions; special populations, including those with ASD, DD, and ID; the network of community-based services and supports; and strategies for meeting the common needs of families seeking services and support in EDs. The hospitals would optimally collaborate in developing standards of care for care coordination in EDs and should be required to collect and report data on the provision of services by these care coordinators and family support specialists.

Budget: It is recommended that DCF work with the hospitals to devise the most appropriate staffing pattern and associated funding level for each hospital. Planning should involve DSS and Beacon Health Options to ensure that this expansion links to the recent DSS funding of increased care coordination for special populations of children and youth seen in EDs. Implementation of this overall recommendation necessitates legislative approval of new funds. Given that EDs operate 24 hours per day, seven days per week, preliminary staffing estimates for this initiative are 4.0 full-time equivalent care coordinators per hospital (approximately $400k) and 2.0 full-time equivalent (approximately $100k) family support specialists per hospital, with an estimated total cost for all four hospitals of $2 million.

Actions Needed: (a) Forward final report to key legislators.

(b) DCF to work with hospitals and legislators to develop budget.

(c) Authorization and appropriation by the legislature in FY20 budget

(d) Approval by the governor.

5. Provide telepsychiatry case consultation to EDs that lack staff with specialized expertise in serving children, youth, and families.

Focus:	ED service quality
Timeline:	Intermediate
Cost:	$500,000
Funding Source:	Legislative increase to the DCF budget to expand ACCESS Mental Health

The shortage in EDs of staff with sufficient behavioral health expertise to effectively evaluate and treat children and youth, or the limited availability of such staff during evenings and weekends, will continue to be an issue in selected hospitals for the foreseeable future. Building on a demonstration in the State of Colorado, the State of Connecticut should utilize telepsychiatry to provide case consultation by behavioral health specialists to these EDs as needed.

As an implementation strategy, Connecticut should consider integrating this service into the ACCESS Mental Health structure that is currently providing consultation to pediatricians. This infrastructure offers options for consultation and assistance from psychiatrists, care coordinators, and family peers, as well as follow up on referrals to ongoing care. The individuals providing this telehealth consultation should be trained and skilled in assessment and treatment of children and youth; needs and approaches to working with special populations, such as children and youth with ASD, DD, and ID; and the provision of family support. With this program expansion, priority should be given to hiring family members with lived experience in the children's behavioral health system for roles that involve care coordination and family support.

Budget: It is recommended that DCF work with DDS, the legislature, the ACCESS Mental Health program management, and current providers of telehealth consultation in the ACCESS Mental Health system to devise an appropriate implementation model and budget for this expansion. The estimated additional funding needed is approximately $500,000. This assumes a $150,000 increase for each of the three ACCESS hubs, plus $50,000 for Beacon Health Options to support the expanded initiative.

Actions Needed: (a) Work group to forward final report to key legislators.

(b) DCF to work with ACCESS Mental Health providers to develop a program model and a budget.

(c) Legislative increase to the DCF FY20 budget to cover this initiative.

(d) Approval by the governor.

6. Initiate a planning process to establish Behavioral Health Assessment Centers in the state.

Focus: ED diversion and alternatives

Timeline: Intermediate

Cost: An estimate is not available at this time

Funding Source: New authorization and appropriation by Connecticut legislature

Children and families with behavioral health needs that visit EDs in Connecticut are often looking for, and too seldom receive, help from specialists trained to meet their needs, a comprehensive assessment, an intervention, guidance on how to manage and cope, compassionate family-centered and resilience/recovery-oriented care, and connections to relevant resources and treatment. They are often subjected to longer than average wait times, physical environments that create anxiety rather than calm, and a lack of privacy.

It is recommended that DCF lead in the development of a plan to create Behavioral Health Assessment Centers, in full collaboration with the Behavioral Health Partnership. This concept was included in the previously released Children's Behavioral Health Plan (2014) and the Governor's Immediate Action Plan to Enhance the Behavioral Health System for Children in Connecticut (2014). The centers should serve as high-quality alternatives to EDs and have the capacity to provide urgent evaluation, as well as treatment and referral, for children, youth, and families in an environment that is conducive to crisis resolution. The planning process should include families, advocates and providers, including hospitals; should involve a review of model programs nationally; and should explore the viability of establishing these centers within existing parts of the system of care, rather than as completely new and separate silos of service. The plan should identify the number, optimal characteristics, and funding requirements of such centers, as well as how the needs of special populations, families, and the workforce in these centers will be addressed. Once the plan is created, DCF, families, and other partners should engage the executive and legislative branches of government to garner support and funding for establishing these centers.

Budget: It is recommended that DCF work with providers and advocates to devise an appropriate implementation model for the assessment center function. Creating a cost estimate for this recommendation is not possible until the recommended model is developed.

Actions Needed: (a) Work group to forward final report to DCF.

(b) DCF, DSS, DDS, and SDE to develop model and proposed budget for assessment enter function.

(c) DCF, providers, and advocates to engage the legislative and executive branches in a discussion of the proposed model and its benefits.

7. Migrate the functions of the ED workgroup to the Connecticut Behavioral Health Partnership Oversight Council.

Focus:	Structure and process
Timeline:	Immediate
Cost:	No additional funding required
Funding Source:	Support within the Connecticut Behavioral Health Partnership Oversight Council budget for implementation and oversight of ED related activities

There have been previous significant efforts to examine and address issues related to the behavioral health service system, including ED utilization by children and youth with behavioral health conditions. This current workgroup is another step in that direction. The State would benefit from maintaining a formal and ongoing process for improving ED services for children and youth with behavioral health conditions. It should continue to bring state agencies, providers, and family advocates together regularly to prioritize interventions, assess progress, and refine strategies as additional information and experience are gained.

To achieve efficiency, it is recommended that the planning and management functions of this current ED workgroup shift to the Connecticut Behavioral Health Partnership Oversight Council. The Behavioral Health Partnership Oversight Council and its subcommittees already devote attention to this issue; however, it is proposed that this Council further elevate and prioritize the ED issue, and provide oversight of specific actions that are implemented from this report. The Council should ensure that there is continued planning, implementation, and monitoring of the recommendations contained in this report. It should also issue a brief report of activities, outcomes, and recommended next steps annually for a period of at least three years.

Budget: There is a need for financial support for the management of ED-related projects initiated or overseen by the Council. The level of funding required will be driven by the implementation strategy devised by the Council to address the recommendations above or other actions that it decides to take related to these services.

Actions Needed: (a) Agreement by members of the Connecticut Behavioral Health Partnership Oversight Council to accept responsibility for oversight and implementation of ED-related recommendations.

(b) Development of an implementation plan by the Council and a funding strategy to support all oversight and implementation activities related to ED services.

NEXT STEPS

With completion of this report, the next steps involve dissemination and then advocacy for adoption of the recommendations. CHDI will use its communications infrastructure to accomplish broad distribution to relevant stakeholders, including legislators and policy makers, state agencies, providers, child and family advocates, and others. Members of the workgroup will be asked to assist in accomplishing broad distribution and educating their constituencies about the report and its recommendations. Specific activities that are proposed to promote adoption and implementation of the recommendations are as follows:

- A two-page Issue Brief will be created for use in discussions with stakeholders about the findings and recommendations.
- In an effort to promote a "bottom up" approach to change, CHDI and workgroup members will educate child and family advocates and advocacy organizations about the findings and recommendations and encourage them to exercise their influence in promoting implementation of the findings by the State of Connecticut. This will include the Children's Behavioral Health Advisory Council, the Consumer and Family Advisory Council to Beacon Health Options, the Alliance for Children's Mental Health, the Connecticut Chapter of the National Alliance on Mental Illness, and family advocacy organizations such as FAVOR, Inc. and African and Caribbean American Parents of Children with Disabilities, Inc..
- The report will be broadly disseminated by CHDI and workgroup members to the Behavioral Health Partnership Oversight Council and managers of ED services, Mobile Crisis programs, and intensive in-home services.
- CHDI will seek approval from the Department of Children and Families (DCF) leadership to initiate Recommendation 1, which involves using the Mobile Crisis Performance Improvement Center to strengthen the working relationship between Mobile Crisis programs, EDs, and schools in responding to children and youth in crisis. CHDI will also seek agreement from the leadership of the State Department of Education (SDE) and local school districts to secure their active participation in the implementation of this recommendation.
- With respect to Recommendation 2, CHDI will seek a meeting with the leadership of DCF and DSS to request the involvement of senior staff from these agencies, plus $85,000 in financial support from DCF's current appropriation, for implementation. This is the proposed quality improvement initiative with the four hospitals that provide the highest volume of ED services to children and youth with behavioral health conditions.
- As an additional step, CHDI will organize a series of meetings with the state agencies that oversee the Behavioral Health Partnership in order to present and discuss Recommendations 3 through 7. Members of the workgroup will be invited to participate in these meetings to help promote support within the agencies for the recommendations.
- Individual members of the workgroup, including representatives of CHDI, will request meetings with legislators, and perhaps legislative candidates, to discuss the report in order to gain support for implementation of its recommendations. One objective in this effort is to have legislators turn Recommendations 3 through 6 into legislative proposals. Meetings with legislators will occur before and after the upcoming elections in order to maximize impact.
- Several members of the workgroup indicated that they will review the recommendations in this report for potential inclusion in their respective agency's or organization's legislative agenda, and will distribute the report to key individuals within these agencies and organizations, and convene meetings as appropriate to discuss the report.

With the release of this report, a practical set of strategies has been identified for strengthening the quality of behavioral health care for children and youth in Connecticut's EDs and, more broadly, strengthening the system of care to reduce the need for children and youth to access ED services. Now the hard work begins of gaining support for implementing these strategies.

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The Child Health and Development Institute of Connecticut, a subsidiary of the Children's Fund of Connecticut, is a not-for-profit organization established to improve the health and well-being of children by advancing system, policy, and practice changes. CHDI helps children reach their full potential by building stronger health, mental health, and early care systems that provide a sturdy foundation so children can thrive.

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