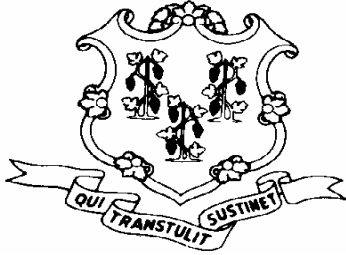


STATE OF CONNECTICUT



**REPORT OF THE COMMITTEE TO EXAMINE  
HOSPITAL INPATIENT BEHAVIORAL HEALTH  
BED CAPACITY FOR CHILDREN**

**For Submission to the Connecticut General Assembly**

**January 2006**

**Cristine A. Vogel, Commissioner**

**Office of Health Care Access**

**Chair of the Committee**



<b>Table of Contents</b>	<b>Page</b>
I. Executive Summary	1
II. Introduction	3
III. Analysis of Statewide and Regional Utilization and Capacity	5
A. Connecticut child population	5
B. Emergency department (ED) care	6
C. Inpatient acute care	8
D. Inpatient bed availability	11
E. Average length of stay	13
F. Discharge from acute care	14
G. Region 5	15
IV. Summary of Findings	17
A. Statewide	17
B. Region 5	17
V. Recommendations	18
A. Region 5	18
B. Statewide	18
APPENDICES	
A. Public Act 05-280	19
B. Membership of the 05-280 Committee	20
C. CT mental health regions	21
D. CT acute care hospital psychiatric units and free-standing psychiatric hospitals in the mental health regions	22

## **I. Executive Summary**

Behavioral health conditions can be devastating for the patient and the family members. The system of care for behavioral health patients in Connecticut seems to be in a gridlock situation. The appropriate state agencies and organizations have been addressing this issue and have created long-term strategies that will improve how care is accessed and to make certain that ample capacity will be available for all those in need. However, currently some patients, especially those less than 18 years of age, wait in emergency departments for days when they need to be admitted to an inpatient unit for their acute care. Unnecessarily long waits occur in the emergency departments since the inpatient acute beds seem to be filled to capacity. However, some of these acute beds would become available for new admissions but the next lower level of care is not available.

The Committee's report examines access to and availability of inpatient acute behavioral health care beds for children and adolescents in the state using multi-sourced data and makes recommendations for Region 5 as charged. The Committee acknowledges that the data may not be ideal and conclusive; however, it presents a framework to assess the issue and offer recommendations. It is important to note that the Committee was well aware that isolating and resolving issues in just one aspect of the delivery of behavioral health care, such as inpatient capacity, is difficult when it is the system as a whole that must be taken into consideration.

According to the *Report of the Governor's Blue Ribbon Commission on Mental Health*, in a given year, only about half of Connecticut's 85,000 children and adolescents who have severe emotional disturbances actually receive publicly or privately funded care. The AcademyHealth reports that geographic location is a more significant explanatory factor for disparity in utilization of, and unmet need for behavioral health services than socio-demographics.

Connecticut's emergency departments play a significant role in providing care for the children and adolescents in need of behavioral health services. Some pediatric patients wait several days in emergency departments while hospital staff try to locate an available inpatient acute care bed. Not all children needing behavioral health services are in need of the acute level of care. The acute level is the highest and must be delivered in a hospital setting. In Connecticut, 4 of the 31 acute care general hospitals provide such services to children (0-12 years of age) and 6 of the 31 hospitals offer services to adolescents (ages 13-18). There are also four free-standing psychiatric hospitals in the state providing services to the adolescent (13-18 years old) and only one of them provides care to children (0-12 years old).

In total, there are 175 acute care beds available for Connecticut's children in need of inpatient behavioral health care services. The distributions of beds by regions are as follows:

<b>Region</b>	<b>Number of Acute Care Beds</b>
Region 1	44
Region 2	49
Region 3	25
Region 4	52
Region 5	5
<b>Statewide</b>	<b>175</b>

Region 5, which is the focus of the Committee's charge, has only 5 beds designated for adolescents (ages 13-18) and no designated beds for children less than 13 years old. Although the pediatric patients have access to six emergency departments, in the event they need to be admitted to an inpatient acute bed, there are only 5 beds available to them all located at Waterbury Hospital. In FY 2004, at least 200 pediatric patients in Region 5 that needed acute inpatient behavioral health care traveled out of the region and even out of the state to access such care; practically every pediatric patient must leave the region to access inpatient care. Therefore, the Committee does recommend increasing the number of beds in Region 5.

The need to determine the appropriate number of inpatient acute care behavioral health bed capacity for the child population is hindered by the fact that patients in the state do not seem to have adequate access to all levels of care. It appears reasonable to conclude that the behavioral health care system is in gridlock and may need, at the minimum, a temporary release of this pressure to relieve the problem of today – children waiting in emergency departments to receive necessary care.

## II. Introduction

Each of the 31 acute care hospitals in Connecticut faces the challenges of pediatric<sup>1</sup> patients presenting at the emergency department with a behavioral health diagnosis and having to wait, sometimes days, for an available “inpatient bed”. Currently, only four of these hospitals have inpatient psychiatric units for children (ages 0-12) and six for adolescents (ages 13 to 18). Although not all hospitals have inpatient behavioral health services for children and adolescents, hospitals attempt to accommodate these pediatric patients either in other units within the hospital or transfer them to other facilities for inpatient care. Acute care hospitals accommodate older adolescents within the adult psychiatric unit depending on their diagnoses. Psychiatric services for children are very specialized and due to staffing and facility requirements, it may not be practical for many institutions to offer these services.

In an attempt to address the situation, the legislature enacted Public Act 05-280, “An Act concerning the expenditures of the Department of Social Services” (see Appendix A). Section 91 of this comprehensive act requires the Commissioner of the Office of Health Care Access to “establish a committee to examine whether licensed hospital psychiatric inpatient bed capacity for children in Connecticut is sufficient and what steps, if any, are necessary to expand such capacity.” The Act states that “the committee shall make specific recommendations concerning the expansion of licensed hospital psychiatric inpatient bed capacity for children in mental health region five.” The composition of the committee was specified to include the Commissioners of Social Services and Children and Families, or their designees; the state Child Advocate, or designee; representatives of private children’s hospitals; and mental health advocacy groups for children (see Appendix B). The mandate requires the Commissioner of the Office of Health Care Access to submit a report on the committee’s findings and recommendations to the General Assembly in January 2006.

Licensed hospital psychiatric inpatient beds are located in acute care hospital psychiatric units, free-standing psychiatric hospitals and Riverview Hospital in Connecticut. Since behavioral health data is currently fragmented and in some instances, not collected, the Committee utilized data from four sources in its discussions; namely the Office of Health Care Access Acute Care Hospital Discharge Database, CHIME, Inc. Emergency Department Data, the Department of Social Services HUSKY A Inpatient Psychiatric Reinsurance Data and surveys administered to some acute care hospitals and to all free-standing psychiatric hospitals. The hospitals were surveyed because the Committee identified additional necessary data that was not available. The Committee set up a subcommittee which developed and administered a questionnaire to the six acute care hospitals in Region 5 and five significant providers of inpatient behavioral health services for children and adolescents. A separate questionnaire was administered to the four free-standing psychiatric hospitals that offer both acute and inpatient psychiatric behavioral health services to children and adolescents.

---

<sup>1</sup> Under 18 years old.

During the four-month timeframe the Committee had to complete this report, it focused on obtaining and analyzing the minimum data necessary to respond to the legislative request. However, the Committee acknowledges that the issue is broader than this report allowed; that is, inpatient care is only one component of a continuum of behavioral health services and changes to only that level of care may not resolve the system issues.

The multi-sourced information referenced above, assisted the Committee in understanding the extent to which children and adolescents accessed acute care inpatient and emergency behavioral health care in the past year. The Committee then examined data that measured the current capacity and geographical location of such services for the acute care hospitals and free-standing psychiatric hospitals. This report presents statewide and mental health regional utilization of emergency departments (EDs), availability and utilization of acute care beds for behavioral health services relative to the pediatric population, lengths of stay, discharge or transfer to lower levels of care, along with a summary of findings and the recommendations.

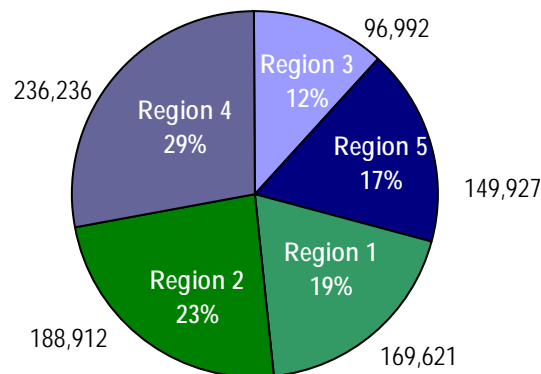
### III. Analysis of Statewide and Regional Utilization and Capacity

The following analysis is a compilation of data from several sources since none of it exists within one state agency or organization. The Committee acknowledges that the data may not be ideal and conclusive; however, it presents a framework to assess the issue and offer recommendations. The following sections will present current utilization of emergency and inpatient acute care, as well as results from the Committee's surveys that will identify the actual number of inpatient beds that are available for pediatric behavioral health patients. Also included are some data regarding the acute care average length of stay and destinations where patients are transferred or discharged to receive the next level of care. The final section of this analysis focuses on results pertaining to mental health Region 5 as required by the legislation.

#### A. Connecticut child population

To estimate the potential number of children and adolescents that may utilize such services, it is important to first identify the target population and its distribution throughout Connecticut. Based on Census 2000, one-quarter (or 841,688) of 3,405,565 Connecticut residents are under age 18. Although this age cohort comprise one-quarter of each of the five mental health regions<sup>2</sup> in the state, the child population is unevenly distributed among the regions; from 96,992 in Region 3 (or 12 % of the total) to 236,236 in Region 4 (or 29 % of the total).

Figure 1: Distribution of CT child population among the five mental health regions



Sources: *CT Department of Mental Health and Addiction Services Regions and Census 2000 CT town populations*

In a given year, only about one-half of 85,000 children and adolescents in Connecticut who have severe emotional disturbances actually receive publicly or privately funded

<sup>2</sup> Connecticut Department of Mental Health and Addiction Services determines mental health regions, see appendices C and D for more information.



care.<sup>3</sup> The AcademyHealth reports that geographic location is a more significant explanatory factor for disparity in utilization of, and unmet need for behavioral health<sup>4</sup> services than socio-demographics.<sup>5</sup> Sufficient availability of beds for all levels of care, also impacts provision of and access to behavioral health services.

## B. Emergency department (ED) care

Emergency Departments (EDs) are a significant point of access for patients in need of inpatient behavioral health services; four of ten pediatric behavioral health inpatient discharges were admitted through an ED<sup>6</sup>. Current utilization of EDs and number of patients treated and admitted to inpatient care provide a “high-level” view of how many children and adolescents are in need of immediate care and their geographical location.

In Fiscal Year (FY)<sup>7</sup> 2004, acute care hospital EDs in Connecticut treated 9,727 patients under age 18 who had a behavioral health diagnosis<sup>8</sup> (see Table 1a). Children (under 13 years of age) comprised one-third of the ED discharges and the remaining were adolescents (between age 13 and 17).

Table 1a: Emergency Department (ED) disposition for pediatric patients with a behavioral health related diagnosis, FY 2004

Regions	ED patients treated		Region distribution		Region's share of total	
	Discharged	Admitted	Discharged	Admitted	Discharged	Admitted
1	873	261	77%	23%	11%	16%
2	1,607	665	71%	29%	20%	40%
3	1,631	151	92%	8%	20%	9%
4	2,438	378	87%	13%	30%	22%
5	1,497	226	87%	13%	19%	13%
<b>Total</b>	<b>8,046</b>	<b>1,681</b>	<b>83%</b>	<b>17%</b>	<b>100%</b>	<b>100%</b>

Sources: CT Office of Health Care Access Acute Care Hospital Discharge Database and Chime, Inc. Emergency Department Data.

The hospitals treated and discharged 83% (or 8,046) of the behavioral health patients from the ED and treated and admitted the remaining 17% (or 1,681). Region 2 has the largest portion of admissions (40% of total) while Region 3 had the lowest portion at 9%. This may relate to the distribution of the population since Region 2 has 23% of the total child population and Region 3 has 12%.

<sup>3</sup> Report of the Governor's Blue Ribbon Commission on Mental Health. Department of Mental Health and Addiction Services, July 2000.

<sup>4</sup> Behavioral health includes mental or nervous conditions and substance abuse conditions (or alcoholism or drug dependence).

<sup>5</sup> Findings brief: Mental Health Care Disparities among Youths Vary by State. AcademyHealth: A National Program Office for Health Care Financing & Organization which is an initiative of The Robert Wood Johnson Foundation. Vol. VII, No 6, 2004.

<sup>6</sup> CT Office of Health Care Access Acute Care Hospital Discharge Database.

<sup>7</sup> Fiscal year is from October 1 of one year through September 30 of the following year.

<sup>8</sup> Behavioral health diagnoses codes used here were ICD-9-CM codes 290 through 319.

Table 1b: Disposition of treated and discharged ED pediatric patients with a behavioral health related diagnosis, FY 2004

Disposition	Discharges			Share of Total		
	Ages 0 - 12	Ages 13 - 17	Ages 0 - 17	Ages 0 - 12	Age 13 - 17	Ages 0 - 17
Home <sup>1</sup>	2,431	4,713	7,144	90%	88%	89%
Transfers to other facilities	274	595	869	10%	11%	11%
-Another acute care hospital	91	184	275	3%	3%	3%
-ICF/SNF	7	23	30	0%	0%	0%
-Another type of institution <sup>2</sup>	175	371	546	6%	7%	7%
-Psychiatric/Rehab unit/hospital	1	17	18	0%	0%	0%
Other <sup>3</sup>	8	25	33	0%	0%	0%
<b>Total</b>	<b>2,713</b>	<b>5,333</b>	<b>8,046</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: *Chime, Inc., Emergency Department Data.*

<sup>1</sup>Four children and four adolescents received additional lower level of care at home.

<sup>2</sup>Type of institution not defined in the National Uniform Billing Committee (NUBC) Manual code list.

<sup>3</sup>Most left against medical advice.

Of those treated and discharged from the ED, 7,144 or 89% went home with only a few requiring lower levels of care at home, 869 or 11% were transferred to another acute care hospital, skilled nursing or intermediate care facilities (ICF/SNF) or to a psychiatric or rehabilitation unit or hospital located in or out-of-state (see Table 1b).

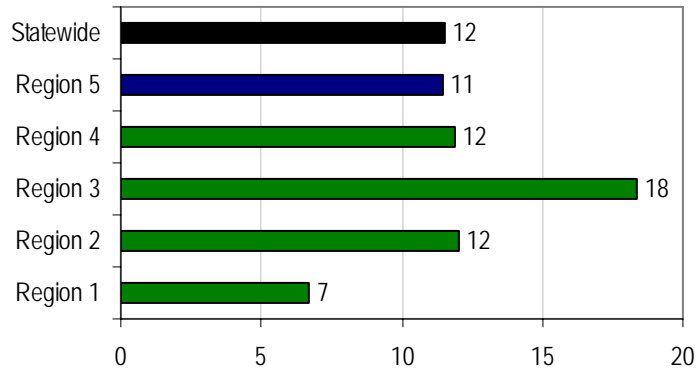
A survey<sup>9</sup> of the hospitals revealed that in FY 2004, hospital EDs evaluated and stabilized about 1,700 pediatric patients (583 children and 1,092 adolescents) requiring additional behavioral health care prior to admission to an inpatient bed. About one-quarter of the patients (132 children and 311 adolescents) waited for over 23 hours before admission. According to Committee members, anecdotally, some pediatric patients wait several days in the ED prior to admission. Long waits in the ED before admission to inpatient acute care occurred in facilities without pediatric behavioral health beds and in those with inpatient behavioral health units that have a high occupancy<sup>10</sup>; albeit, extended waits were twice more likely at facilities without pediatric behavioral health beds. Based on the survey, about 50 patients, one-third of whom were children, left EDs without receiving inpatient care because of extended waits.

Hospitals try to minimize extended waits in the ED for inpatient beds by placing children needing inpatient psychiatric care in general pediatric and adolescent units; and adolescents in adult psychiatric units or medical/surgical units. Hospitals then transfer the remaining patients to other hospitals. From the survey, EDs that treat large volumes of behavioral health patients and hospitals without pediatric psychiatric beds account for most of transfers to other hospitals. About 82 patients (21 children and 61 adolescents) or almost 10% of transfers are referred to out-of-state facilities.

<sup>9</sup> The Office of Health Care Access fielded two surveys for the Committee in October to determine operational acute care pediatric behavioral health beds, ED volumes, transfer patterns and wait times since there was no available data. All six acute care hospitals in Region 5 and five additional significant providers of the services were part of one survey and the four private behavioral health facilities were part of the second survey.

<sup>10</sup> Average number of beds in use on a given day.

Figure 2: ED behavioral health care utilization per 1,000 of under age 18 population



Sources: CT Office of Health Care Access Acute Care Hospital Discharge Database, Chime, Inc Emergency Department Data & Census 2000

A utilization rate assists an analysis by identifying any variation in how a population uses services. For example, Figure 2 demonstrates ED use rates from 7 to 18 per 1,000, with a statewide average of 12 per 1,000. This means that in the child population, 7 out of 1,000 used the ED for behavioral health care in Region 1 compared to 18 out of 1,000 in Region 3.

A region's rate of ED use for pediatric behavioral health care was unrelated to its population size. In particular, Region 3 has the lowest child population but the highest utilization rate<sup>11</sup> of 18 per 1,000, while Region 4 has the highest number of children but has an average use rate of 12 per 1,000 (see Figure 2). Further research would be necessary to understand why such variation exists between the regions.

### C. Inpatient acute care

Acute inpatient behavioral health care for pediatric patients in Connecticut is delivered by the acute care hospitals, the free-standing psychiatric hospitals or Riverview Hospital. The following analysis is inconclusive due to inconsistent data sources; however, in the short time the Committee had to complete the report, enough data were collected to reflect the utilization and capacity of the existing facilities.

Over the last five state fiscal years (SFY)<sup>12</sup>, pediatric inpatient discharges from acute care hospitals with a behavioral health diagnoses<sup>13</sup> increased by almost 15% (or 330) to 2,492 from SFY 2000 in Connecticut<sup>14</sup>. Growth was evenly distributed across the five mental health regions. As many as 44% of the inpatient admissions were through EDs and the

<sup>11</sup> Utilization is based on patient town of origin.

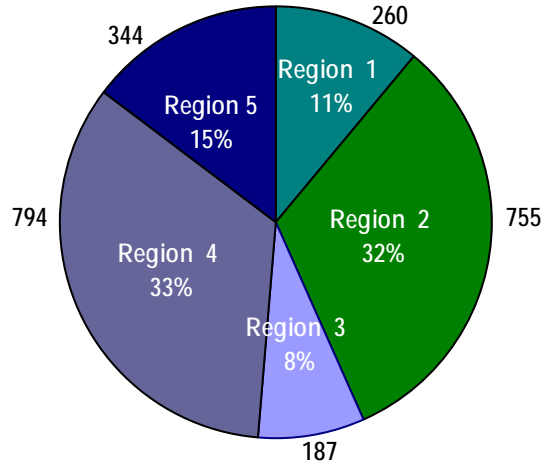
<sup>12</sup> State fiscal year is from July 1 of one year through June 30 of the subsequent year.

<sup>13</sup> Diagnoses Related Group (DRG) codes 424 to 539.

<sup>14</sup> Office of Health Care Access Acute Care Hospital Discharge Database.

remaining 56% were either direct admissions through physician referrals (42%) or transfers from other facilities (14%).

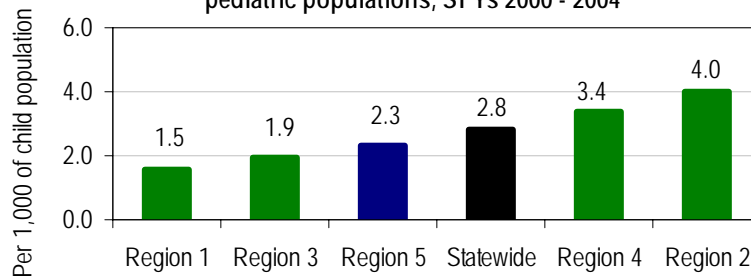
Figure 3: Average annual share and number of pediatric inpatient acute care hospital behavioral health discharges by region, SFYs 2000 - 2004



Source: CT Office of Health Care Access Acute Care Hospital Discharge Database

All regions saw relatively similar increases in inpatient discharges, but there continued to be variations between the volumes originating from regions. In absolute terms, Region 4 pediatric residents accessed inpatient care most frequently, an average of 794 discharges and account for 33% of pediatric behavioral health discharges, in contrast, Region 3 pediatric residents account for the least average discharges of 187 or 8% of the same total (see Figure 3). It is difficult to determine whether this utilization is related to the distribution of child population or availability of beds within a region.

Figure 4: Acute care hospital inpatient pediatric behavioral health care utilization rate per 1,000 of state and region pediatric populations, SFYs 2000 - 2004



Source: CT Office of Health Care Access Acute Care Hospital Discharge Database and Census 2000

Relative to the child population, on average, 2.8 per 1,000 accessed acute care hospital inpatient behavioral health services in the state in the five year period (see Figure 4). Regions 1, 3 and 5 had pediatric inpatient utilization rates below state average of 1.5, 1.9 and 2.3 per 1,000 of their child populations respectively.

Generally, about four of five acute care hospital pediatric inpatients with a behavioral health diagnosis receive care in psychiatric units of acute care hospitals, the rest receive care in other units of the hospitals.<sup>15</sup> Bed availability plays a significant role in utilization of inpatient services. Patients residing in regions with more acute care beds within the region tend to have higher utilization rates.

For example, residents of Regions 2 and 4 have 49 and 52 operational acute care pediatric behavioral health beds in acute care hospitals (see Table 2) and, as expected higher inpatient utilization rates of 4.0 per 1,000 and 3.4 per 1,000 of their child population (Figure 4). These utilization rates do not take into account availability of beds in the four private psychiatric facilities located in Connecticut. Silver Hill and Hall-Brooke hospitals are located in Region 1 and have 30 to 44 beds; Natchaug Hospital and Stonington Institute are located in Region 3 and have 25 beds. The additional beds in those regions help to alleviate demands for acute care hospital inpatient beds. The free-standing psychiatric hospitals reported they discharged 1,319 acute care patients in 2004 and that one-quarter of the discharges were children. However, since they did not provide data by region no conclusive utilization rate can be determined.

Table 2: CT acute care pediatric behavioral health beds, FY 2004

Acute Care Hospitals	# of Operational Beds					
	Age 0 - 12	Age 13 - 17	Swing beds <sup>1</sup>	Age 0 - 17	Location	Region
Hospital of Saint Raphael	10	5	5	20	New Haven	2
Yale New Haven Psychiatric Hospital	15	14	0	29	New Haven	2
St. Francis Medical Center <sup>2</sup>	12	8	0	20	Hartford	4
Hartford/Institute of Living/CT Children's	9	13	0	22	Hartford	4
Manchester Hospital <sup>3</sup>	0	10	0	10	Manchester	4
Waterbury Hospital	0	5	0	5	Waterbury	5
<b>Sub-Total</b>	<b>46</b>	<b>55</b>	<b>5</b>	<b>106</b>		
<b>Psychiatric Hospitals</b>						
<b>Public</b>						
Riverview Children & Youth <sup>4</sup>	-	-	85	85	Middletown	2
<b>Sub-Total</b>	<b>0</b>	<b>0</b>	<b>85</b>	<b>85</b>		
<b>Free-standing</b>						
Hall-Brooke Behavioral Health Services	-	-	20 - 34	20 - 34	Westport	1
Silver Hill Hospital	0	10	0	10	New Canaan	1
Natchaug Hospital	6	12	3	21	Mansfield	3
Stonington Institute	0	4	0	4	N. Stonington	3
<b>Sub-Total</b>	<b>6</b>	<b>26</b>	<b>23 - 37</b>	<b>55 - 69</b>		
<b>Statewide</b>	<b>52</b>	<b>81</b>	<b>113 - 127</b>	<b>246 - 260</b>		

Source: Compiled from hospitals' responses to Office of Health Care Acute Care Inpatient Pediatric Behavioral Services Utilization Survey administered in October 2005.

<sup>1</sup>Hospitals swing beds between the two age groups on as needed basis.

<sup>2</sup>Physical capacity is 23 beds.

<sup>3</sup>Survey was not administered to hospital.

<sup>4</sup>CT Department of Children and Families (DCF) provided the information; the facility has 12 additional sub-acute care beds.

<sup>15</sup> Office of Health Care Access Acute Care Hospital Discharge Database.

Riverview Hospital is a state supported psychiatric hospital for children and adolescents, operated by Department of Children and Families (DCF). Riverview Hospital is located in Region 2 and has 97 beds with a quarter reserved for the court system as forensic beds. Eighty-five of the beds are acute and 12 beds are subacute. In SFY 2004, the facility had 226 admissions, 65% of which came from psychiatric and residential facilities, 25% from the courts and 10 % from individual homes.

**D. Inpatient bed availability**

Connecticut has not adopted a standard methodology to determine the number of beds per population for pediatric behavioral health patients; therefore, the Committee was limited to using number of beds per 10,000 of the child population of each region.

There are 2.1 acute care pediatric behavioral health beds available per 10,000 residents under age 18 in the state but 0.3 per 10,000 for the same age cohort in Region 5 (see Table 3). This analysis demonstrates that Region 5 has substantially lower number of beds available for its child population.

Table 3: Pediatric acute care behavioral health bed availability

Geographical Location	Regions	Acute Care Beds*	Share	Bed per 10,000 of child population
Southwest	1	44	25%	2.6
South Central	2	49	28%	2.6
Eastern	3	25	14%	2.6
North Central	4	52	30%	2.2
<b>Northwest</b>	<b>5</b>	<b>5</b>	<b>3%</b>	<b>0.3</b>
<b>Statewide</b>		<b>175</b>	<b>100%</b>	<b>2.1</b>

Source: Number of beds compiled from acute care and psychiatric hospitals response to Office of Health Care Access surveys administered in October 2005.

\*Includes beds in acute care psychiatric units and free-standing psychiatric hospitals.

Optimal occupancy for acute care pediatric behavioral health beds is approximately 80%. That is, each acute care hospital that has those beds allocates one bed per age group for accommodating unforeseen increases in admissions. It is important to measure occupancy rates of existing beds to determine if there is any capacity available in the system. If the existing beds are continually at capacity, it suggests that additional beds may be necessary.

Table 4: Average rate<sup>1</sup> at which hospitals with acute care pediatric behavioral health beds exceeded optimal occupancy, FY 2004

Acute Care Hospitals	Ages 0 - 12	Ages 13 - 17	Free-standing Hospitals	Ages 0 - 12	Ages 13 - 17
Hartford/IOL/CCMC	2	2	Silver Hill	n/a	3
St. Francis	3	1	Natchaug	1	1
St. Raphael's	4	4	Hall Brooke	3	4
Waterbury	n/a	3	Stonington	n/a	5
Yale-New Haven	5	5			
<b>Average rate<sup>2</sup></b>	<b>4</b>	<b>3</b>		<b>2</b>	<b>3</b>

Source: *Compiled from hospitals' responses to Office of Health Care Acute Care Inpatient Pediatric Behavioral Services Utilization Survey administered in October 2005.*

<sup>1</sup> 5 = Always, 4 = Most times, 3 = Sometimes, 2 = Seldom, 1 = Never.

<sup>2</sup> Sum of rates divided by number of hospitals that responded.

On average, acute care hospitals with pediatric behavioral health care beds reported that they currently operate above optimal capacity “most times” for children and “sometimes” for adolescents (see Table 4). When the hospitals are at capacity or do not offer the services, they transfer patients to other hospitals. The Hartford Hospital/Institute of Living/CT Children’s Medical Center partnership sees a high volume of patients and receives two-thirds of the transfers in the state.

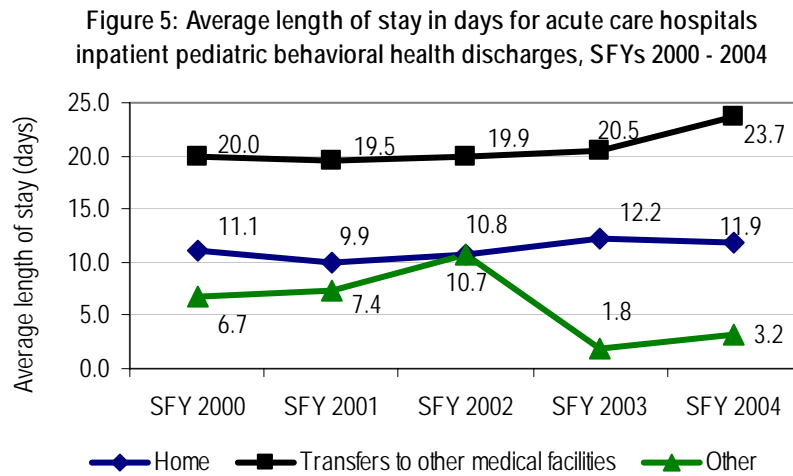
Generally, the free-standing psychiatric facilities serve as referral sites for inpatient acute care. Based on what these facilities reported, on average, their acute care beds for children are “seldom” at capacity while those for adolescents are “sometimes” at capacity during the year; Natchaug Hospital reported that beds are “never” at capacity for both age groups.

Results from both acute care hospitals and the free-standing psychiatric hospitals surveys seem inconsistent with comments shared by Committee members. For example, some institutions reported “seldom” or “never” exceeding optimal occupancy but anecdotally reported long ED waits (up to several days) prior to locating an available acute inpatient bed for discharge or transfer.

### E. Average length of stay

Some Committee members stated that many pediatric behavioral health patients are occupying inpatient acute care beds simply because the next lower level of care is not readily available. The unavailability of next lower level of care beds creates longer lengths of stay than are medically necessary.

In acute care hospitals, over the last five years, the average length of stay<sup>16</sup> for patients discharged to home fluctuated around 11 days. Patients transferred to other facilities for step down level of care, stayed almost twice as long and their average length of stay increased from 20 days to 23.7 days (see Figure 5). Almost 60% of those transfers were Medicaid beneficiaries (76 children and 131 adolescents) and accounted for the long stays. The lowest average length of stay for transfers was for Region 5 at 11.6 days and the highest was for Region 4 at 37.7 days.

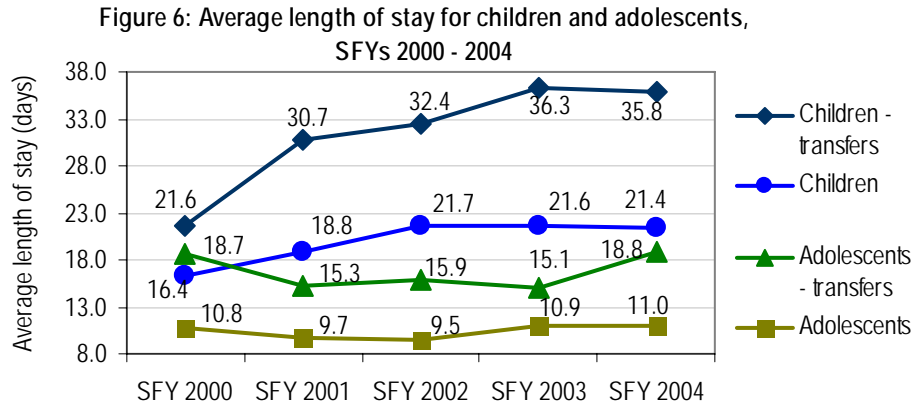


Source: CT Office of Health Care Access Acute Care Hospital Discharge Database

Children with behavioral health diagnosis stayed in acute care hospitals' inpatient units twice as long as adolescents, that is, an average of 20 days compared to 9 days; of this group, children transferred to other facilities for step down care stayed an average of 32 days compared with 16 days for adolescents (see Figure 6).

<sup>16</sup> Average length of stay is total patient days divided by number of patients.





Source: CT Office of Health Care Access Acute Care Hospital Discharge Database

In the survey, the four free-standing psychiatric hospitals reported the average lengths of stay in 2004 were 19.4 and 12.8 days for children and adolescents respectively.

The average length of stay at Riverview Hospital in SFY 2004 was 150 days.

#### F. Discharge from acute care

In the five-year period, from SFY 2000 to 2004, acute care hospitals discharged an average of 83 % or 1,963 inpatient pediatric behavioral health patients to their homes per year. They transferred 17 % or 396 to other facilities such as another acute care hospital, skilled nursing facilities, intermediate care facility or another type of institution<sup>17</sup>. An average of ten discharges either left against medical advice or expired.

The bulk of transfers were to another type of institution and increased from 75% of all transfers (or 296) in SFY 2000 to 83% (or 311) in SFY 2004; meanwhile, in the same period inpatient transfers to other acute care hospitals dropped from 15 % (or 58) to under 10 % (38).

Inpatient psychiatric reinsurance data<sup>18</sup> for SFY 2003 indicate that about one-third of Medicaid pediatric patients awaiting transfer to a lower level of care, occupied approximately 43 beds or spent 15,000 days at acute care psychiatric units and hospitals (including Riverview) during the year; these patients might have been better served at a psychiatric residential treatment facility (PRTF) or community-based alternative.

<sup>17</sup> Another type of institution is not defined in the National Uniform Billing Manual code list.

<sup>18</sup> Reinsurance is a payment program implemented in 1998 for children in inpatient behavioral health care awaiting discharge to behavioral health community services or other placement. Payment schedule for delayed discharges gradually reduces the managed care organization financial risk after the first 15 inpatient days, with the State assuming full risk after the 59<sup>th</sup> inpatient day. CT Behavioral Health Partnership and the development of alternative community-based services should divert psychiatric Emergency Department admissions, hospitalizations and/or reduce the length of hospital stay. Department of Social Services provided the data for SFY 2001 through SFY 2003.

However, reinsurance days have declined from almost 70% of hospital stays to about 47%.

A delay in transferring patients to other facilities for a lower level of care contributes to the gridlock and long waits in the ED before admission for all levels of inpatient behavioral health care when needed. This gridlocked system of care makes it difficult to accurately assess appropriate capacity, since the emergency departments, inpatient acute beds and other levels of care beds are filled at times.

### G. Region 5

Mental Health Region 5 has six acute care hospitals: Charlotte Hungerford, New Milford, Sharon, Danbury, St. Mary's and Waterbury. However, the region has only five beds for adolescent behavioral health patients located in Waterbury Hospital and none at all for children (see Tables 2 & 3). There are no free-standing psychiatric hospitals in Region 5.

Since the majority of patients needing inpatient acute services could not receive them at the hospital where they arrived (assuming they live in Region 5 and went to an ED in Region 5), the Committee surveyed wait times in the Region 5 ED. Interestingly, the self-reported results showed that the larger portion of pediatric patients (under 18 years old) waited and were transferred within 23 hours; and about one-quarter were in the ED greater than 23 hours, almost all were at St. Mary's Hospital. Also, about one-third of those who experienced extended waits were children (0 – 12).

Table 6: Number of pediatric behavioral health patients evaluated in Region 5 emergency departments (EDs) and length of stay in hours prior to inpatient admission, FY 2004

	Age 0 - 12		Age 13 - 17		Age 0 - 17	
	< 23 hours	> 23 hours	< 23 hours	> 23 hours	< 23 hours	> 23 hours
Charlotte Hungerford	56	6	149	32	205	38
Danbury	27	0	122	6	149	6
New Milford	2	0	8	0	10	0
Sharon	0	0	2	0	2	0
St. Mary's	0	56	0	74	0	130
Waterbury <sup>1</sup>	35	4	77	3	112	7
<b>Total</b>	<b>120</b>	<b>66</b>	<b>358</b>	<b>115</b>	<b>478</b>	<b>181</b>

Source: Compiled from hospitals' responses to Office of Health Care Acute Care Inpatient Pediatric Behavioral Services Utilization Survey administered in October 2005.

<sup>1</sup> One adolescent outlier spent 170 hours in ED.

Based on the survey, hospitals in the region admitted 25 children requiring inpatient care to general pediatric or adolescent behavioral health units within the hospital, transferred 30 to other acute care hospitals, six to psychiatric hospitals within the state and 12 patients to out-of-state facilities. In the case of adolescents from the region, the hospitals transferred 70 to a general adolescents unit, 49 to adult psychiatric units, 16 to medical/surgical units, 29 to other acute care hospitals, 125 to psychiatric hospitals, and 34 patients to out-of-state facilities (see Table 7). At least 200 patients in Region 5 that needed acute inpatient care traveled out of the region to access such care.

Table 7: Region 5 acute care hospitals inpatient pediatric behavioral health services discharge transfer patterns, FY 2004

BH Pediatric Beds	Hospital	Ages 0 - 12			Ages 13- 17				
		Another acute care hospital <sup>1</sup>	Psychiatric hospital <sup>1</sup>	Other <sup>2</sup>	Adult psych unit of hospital	Medical/ surgical unit of hospital	Another acute care hospital <sup>1</sup>	Psychiatric hospital <sup>1</sup>	Other <sup>3</sup>
No	Charlotte Hungerford	0	0	0	18	0	12	33	29
No	Danbury <sup>4</sup>	8	12	15	31	0	15	76	6
No	New Milford	2	1	0	0	15	0	10	0
No	Sharon	0	0	0	0	0	0	0	1
No	St. Mary's	0	0	0	0	0	0	0	0
Yes	Waterbury <sup>5</sup>	20	5	9	0	1	2	6	70
<b>Total</b>		<b>30</b>	<b>18</b>	<b>24</b>	<b>49</b>	<b>16</b>	<b>29</b>	<b>125</b>	<b>106</b>

Source: *Compiled from hospitals' responses to Office of Health Care Acute Care Inpatient Pediatric Behavioral Services Utilization Survey administered in October 2005.*

<sup>1</sup> May include out-of-state acute care and psychiatric hospitals.

<sup>2</sup> Danbury transferred 15 patients to its pediatric unit; Waterbury transferred all nine to its adolescent unit.

<sup>3</sup> Charlotte Hungerford transferred 23 patients to partial hospital programs, and the rest to McCall Foundation substance abuse program and outpatient Center for Youth & Family program; Sharon discharged patient to home; Waterbury transferred 70 patients to the hospital's general adolescent unit.

<sup>4</sup> Unable to extract from information system, patients with a secondary behavioral health diagnosis admitted to ICU, telemetry or pediatrics.

<sup>5</sup> Hospital admitted one child to the medical/surgical unit of the hospital.

#### **IV. Summary of Findings**

##### **A. Statewide**

1. The state of Connecticut has 175 operational acute care pediatric behavioral health beds; 106 are located in six of the 31 acute care hospitals; and 69 in the four free-standing psychiatric hospitals.
2. Hospitals operate pediatric behavioral health beds at optimal capacity of at least 80%, acute care hospitals often operate their beds at levels exceeding optimal capacity more often than free-standing psychiatric hospitals in a given year.
3. Approximately 3,800 children and adolescents access inpatient acute behavioral health care in the state in a year; acute care hospitals discharged 2,492 (65%) in SFY 2004; and free-standing hospitals discharged 1,319 (35%) in 2004.
4. About 44% (or 1,700) of these discharges were transfers from acute care hospitals EDs.
5. On average, acute care hospitals with or without pediatric behavioral health beds, transfer at least 1,000 patients under age 18, who have a behavioral health diagnosis to other acute care or free-standing psychiatric hospitals in or out-of-state. Two-thirds of the transfers are adolescents and therefore adolescents are twice as likely as children to be transferred to another acute care or free-standing psychiatric hospital.
6. About 82 patients, almost 10% of ED transfers, were referred to out-of-state facilities.
7. Free-standing psychiatric hospitals are primarily referral sites for inpatient acute care.
8. Transfers to step down level of care after inpatient acute care experience relatively longer stays at acute care hospitals. The delays in transferring and increased demand for inpatient acute care tend to cause a back up in hospital EDs.
9. Fifty (50) patients, one-third of whom were children (0 – 12) left EDs without receiving inpatient care.

##### **B. Region 5**

1. Region 5 has only five adolescent behavioral health beds located in Waterbury Hospital and none at all for children. As a result, the region admits children needing inpatient behavioral health services to general pediatric and adolescent units of the hospital and adolescents to adult psychiatric and medical/surgical units; and the rest to other hospitals in or out-of-state.
2. There are no free-standing psychiatric hospitals located in the region.
3. There are 2.1 acute care pediatric behavioral health beds available per 10,000 residents under age 18 in the state but only 0.3 per 10,000 for the same age cohort in Region 5.

## **V. Recommendations**

These recommendations reflect the opinion of the majority of the Committee. Not all recommendations were supported by all members.

### **A. Region 5**

1. Increase the number of acute care general hospital and/or psychiatric hospital beds and Psychiatric Residential Treatment Facility (PRTF) beds for children and adolescents in Region 5 based on the process outlined in Recommendation #2.
2. The commissioner or designee of the Office of Health Care Access (OHCA) will convene an implementation group including the six general hospitals in Region 5, other behavioral health service providers to Region 5 residents under the age of 18, and representatives of state agencies for input on the appropriate number and location of the beds. Execution of the group's proposal(s) will be subject to Certificate of Need (CON) authorization.

### **B. Statewide**

1. The State should support development of a small number of Emergency Stabilization Beds in areas where OHCA determines emergency departments are consistently overburdened with children and adolescents with behavioral health crises who require overnight stays.
2. DCF and DSS need to evaluate the mechanism for discharging child and adolescent patients who are no longer in need of acute behavioral health care to the appropriate level of care.
3. Implementation of the Connecticut Behavioral Health Partnership (CT BHP) will begin in January 2006 and will have an impact on provision and access to child and adolescent behavioral health care in Connecticut. There is a need to examine the level of impact that the CT BHP has made on acute and subacute care statewide capacity after the first year of operation.

## Appendix A

### Public Act 05-280

#### ***"AN ACT CONCERNING THE EXPENDITURES OF THE DEPARTMENT OF SOCIAL SERVICES"***

Sec. 91. (*Effective from passage*) (a) The Commissioner of the Office of Health Care Access shall establish a committee to examine whether licensed hospital psychiatric inpatient bed capacity for children in this state is sufficient and what steps, if any, are necessary to expand such capacity. The committee shall make specific recommendations concerning the expansion of licensed hospital psychiatric inpatient bed capacity for children in mental health region five, established pursuant to section 17a-478 of the general statutes.

(b) The committee shall consist of the following members:

(1) The Commissioners of Social Services and Children and Families, or the commissioners' designees;

(2) The state Child Advocate, or the Child Advocate's designee; and

(3) Representatives of private children's hospitals and mental health advocacy groups for children.

(c) Not later than January 1, 2006, the Commissioner of the Office of Health Care Access shall submit a report, in accordance with the provisions of section 11-4a of the general statutes, on the committee's findings and recommendations to the General Assembly.

## Appendix B

### Membership of the Committee to Examine Hospital Inpatient Bed Capacity for Children

The membership of the Committee to Examine Hospital Inpatient Bed Capacity for Children included the following persons:

- |    |   |   |
|----|---|---|
| 1  | Cristine A. Vogel, Commissioner & Chair                                     | Office of Health Care Access  |
| 2  | Mark Schaeffer, Ph.D. Director, Medical Policy, Medical Care Administration | Department of Social Services   |
| 3  | Karen Snyder, Chief of Program Operations                                   | Department of Children and Families   |
| 4  | Mickey Kramer, Assoc. Child Advocate  | Office of the Child Advocate  |
| 5  | Lorraine Brodeur, Section Director, Fiscal and Program Policy               | Office of Policy and Management   |
| 6  | Andrea Moran, Director  | Psych Crisis Intervention Services, Lawrence & Memorial Hospital<br>Yale Child Study Center |
| 7  | Joseph Woolsten, M.D., Professor & Chief of Child Psychiatry                |   |
| 8  | Kevin Kinsella, Vice President  | Hartford Hospital   |
| 9  | Leonard Banco, M.D., Vice President, Strategy/Regional Development          | Connecticut Children's Medical Center   |
| 10 | Thomas Czarkosky, Manager, Child & Adolescent Behavioral Health Services    | Waterbury Hospital  |
| 11 | Stephen Fahey, President & CEO<br>Thomas Smith, M.D., Medical Director      | Hall-Brooke Behavioral Health Services, Inc   |
| 12 | Patrick J. Monahan II, Vice President and General Counsel                   | Connecticut Hospital Association  |
| 13 | Judith Meyers, President & CEO  | The Child Health & Development Institute of Connecticut, Inc.                               |
| 14 | Sheila Amdur, Advocate & Public Policy Chair of Connecticut Board           | National Voice on Mental Illness  |
| 15 | Steven Kant, M.D., Medical Director   | Boys & Girls Village, Inc.  |
| 16 | Susan Zimmerman, Advocate   | FAVOR, Inc.   |

#### Staff to the committee

- |   |   |                              |
|---|---|------------------------------|
| 1 | Susan Cole, Director of Certification, Financial Analysis and Forecasting | Office of Health Care Access |
| 2 | Olga Armah, Associate Research Analyst, Research and Evaluation           | Office of Health Care Access |

## Appendix C

### CT Department of Mental Health and Addiction Service Mental Health Regions

Regions	Geographical Area	Towns
Region 1	Southwest	Bridgeport, Darien, Easton, Fairfield, Greenwich, Monroe, New Canaan, Norwalk, Stamford, Stratford, Trumbull, Weston, Westport, Wilton
Region 2	South Central	Ansonia, Bethany, Branford, Chester, Clinton, Cromwell, Deep River, Derby, Durham, East Haddam, East Hampton, East Haven, Essex, Guilford, Haddam, Hamden, Killingworth, Lyme, Madison, Meriden, Middlefield, Middletown, Milford, New Haven, North Branford, North Haven, Old Lyme, Old Saybrook, Orange, Portland, Seymour, Shelton, Wallingford, West Haven, Westbrook, Woodbridge
Region 3	Eastern	Ashford, Bozrah, Brooklyn, Canterbury, Chaplin, Colchester, Columbia, Coventry, East Lyme, Eastford, Franklin, Griswold, Groton, Hampton, Killingly, Lebanon, Ledyard, Lisbon, Mansfield, Montville, New London, North Stonington, Norwich, Plainfield, Pomfret, Preston, Putnam, Salem, Scotland, Sprague, Sterling, Stonington, Thompson, Union, Voluntown, Waterford, Willington, Windham, Woodstock
Region 4	North Central	Andover, Avon, Berlin, Bloomfield, Bolton, Bristol, Burlington, Canton, East Granby, East Hartford, East Windsor, Ellington, Enfield, Farmington, Glastonbury, Granby, Hartford, Hebron, Manchester, Marlborough, New Britain, Newington, Plainville, Plymouth, Rocky Hill, Simsbury, Somers, South Windsor, Southington, Stafford, Suffield, Tolland, Vernon, West Hartford, Wethersfield, Windsor, Windsor Locks
Region 5	Northwest	Barkhamsted, Beacon Falls, Bethel, Bethlehem, Bridgewater, Brookfield, Canaan, Cheshire, Colebrook, Cornwall, Danbury, Goshen, Hartland, Harwinton, Kent, Litchfield, Middlebury, Morris, Naugatuck, New Fairfield, New Hartford, New Milford, Newtown, Norfolk, North Canaan, Oxford, Prospect, Redding, Ridgefield, Roxbury, Salisbury, Sharon, Sherman, Southbury, Thomaston, Torrington, Warren, Washington, Waterbury, Watertown, Winchester, Wolcott, Woodbury



## Appendix D

### CT Acute care hospital psychiatric units and free-standing psychiatric hospitals in the mental health regions

