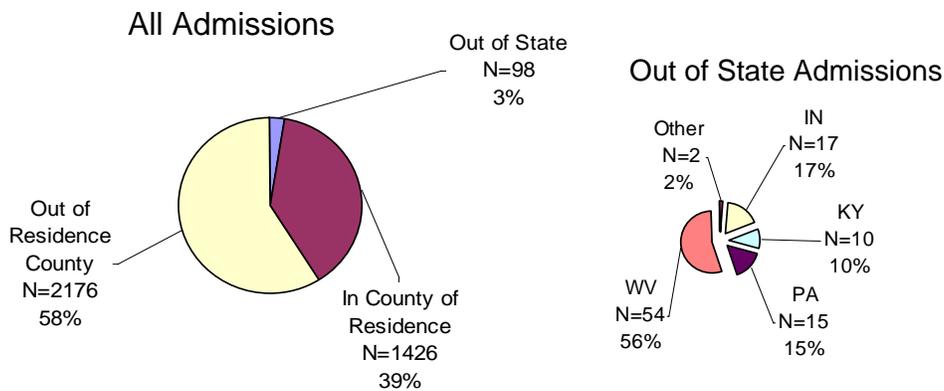


Hospitalization of Children and Adolescents with Medicaid Coverage in SFY 2007

The Medicaid database was queried for children and adolescents under the age of 18 who were admitted and discharged from inpatient hospitalization for a psychiatric condition. The query included all hospitals that billed for an episode of inpatient psychiatric care in SFY 2007. Therefore, the query included hospitals that have not been licensed by ODMH for child and adolescent psychiatric beds.

The query identified a total of 3,700 children and adolescents with an inpatient hospital admission and discharge for a psychiatric condition. Fifty-eight percent (58%) of these admissions occurred at hospitals located outside the patients' county of residence; 39% occurred within the patients' county of residence; and 3% involved inpatient treatment in hospitals located out of state. Over 55% of the admissions to out-of-state hospitals took place in West Virginia. Sixteen out-of-state hospitals billed for inpatient services in SFY 2007.

Figure 1. Distribution of Hospital Admissions by Location



The sample was comprised of 57 hospitals. Of these, 72% (N=41) are located in the state of Ohio. Hospitals in the sample were coded for type of bed licensure, resulting in six categories as follows: 1) adult, adolescent and child beds, 2) adult & adolescent only, 3) child & adolescent only, 4) adults only, 5) no licensed beds, and those located 6) out of state. Average lengths of stay and re-admission rates were calculated for each group. Results of the analysis are found in Table 1.

Table 1. Bed Licensure Status of Hospitals Serving C&A Patients in SFY 2007

Bed Licensure	% of all Patients	Avg. LOS	Re-Admit Rate
Adult, Adolescent & Child	58%	7.6	1.2
Adult & Adolescent	5%	6.1	1.1
Child & Adolescent	19%	11.7*	1.3
Adult	14%	7.7	1.2
No Licensed Beds	1%	5.2	1.0
Out of State	3%	11.5	1.1

*One metropolitan hospital accounts for 62% of the patients in the child & adolescent bed licensure category. When this hospital, which has an average LOS of 15.3 days and re-admission rate of 1.3, is removed from the Child & Adolescent category, the average length of stay for other hospitals in this licensure group is 5.8 days, with a re-admission rate of 1.2.

About 89% of the 3700 hospitalized children and adolescents also received services from a provider affiliated with the public mental health system in SFY 2007. Of the total 3700 admitted for a psychiatric condition, there were 1.22 admissions per patient and 8.36 bed days per patient.

Hospitalization data for the subset of patients (N= 3284) served by a public mental health provider in SFY 2007 were analyzed for differences between lengths of stay and re-admission rates for hospitals located within the patients' board area and out of the board area. Table 2 shows the effect of hospital location in relation to board area on the distribution of patients, average LOS, and re-admission rates. The difference in average LOS between the three groups is statistically significant.

Table 2. Location of Hospital in Relation to Service Board

Hospital Location	% of all Patients	Avg. LOS	Re-Admit Rate
In Board Area	41%	6.4	1.2
Out of Board Area	56%	7.9	1.1
Out of State	3%	12.5	1.1

Hospitalization data for the subset also were analyzed with information about the availability of crisis beds in the patients' board areas. Boards were coded as "Crisis Beds Available" if they indicated the presence of beds at a designated crisis care facility for children and adolescents or a contract for C&A observation beds at a local hospital. In the first analysis, there were 17 boards with crisis beds and 33 boards without. A second analysis was run that added respite beds to the categorization of boards with crisis beds, resulting in 33 boards with crisis beds and 17 boards without. (Sixteen boards have only respite beds and no other type of crisis bed.)

Table 3 shows the relationship between the availability of crisis beds, hospital LOS and re-admission rates for a board area. The results indicate that a lower hospital LOS and a lower re-admission rate associate with the use of respite beds in 16 board areas without any other form of crisis bed. Although the differences are small in the average LOS and re-admission rates associated with the respite bed versus the non-respite bed groupings, a T-test for difference on the

two groups indicates that the smaller re-admission rate of 1.09 in the respite-bed grouping is statistically significant. A major loss of respite bed capacity in community systems may result in an increased number of inpatient bed days and re-admissions.

Table 3. Relationship of Crisis Beds to Average LOS and Re-Admission Rates

Crisis Beds Available	% of all Patients	Avg. LOS	Re-Admit Rate	# of Boards
Capacity Excludes Respite Beds	32%	8.3	1.15	17
Capacity Includes Respite Beds	71%	7.8	1.09	33

Table 4 shows the percentage of child and adolescent consumers hospitalized out of the board/county area in SFY 2007. Some 33 board areas indicate that 100% of hospitalized Medicaid consumers were served outside the board/county area. Between 92% and 97% of C&A consumers in another four board areas were hospitalized out of the service area. In 15 remaining board areas, between 2% and 86% of C&A consumers were hospitalized outside the service area.

Table 4 also shows the percentage of C&A consumers served by the board area who were hospitalized in SFY 2007. Hospitalization rates of C&A Medicaid consumers served in the board's system of care range from 1% to 7%. A slightly lower mean percentage of consumers were hospitalized in the 33 board areas with 100% out-of-county/board placement than were hospitalized in the 17 board areas with out-of-county/board placements in the 2% to 97% range.

Table 4. Percent of Out-of-County/Board Hospitalizations and Percent Hospitalized Medicaid Consumers Served in Local System of Care

Board Area	% of C&A Medicaid Consumers Hospitalized Out of County	% Hospitalized C&A Medicaid Consumers Served in SFY 2007
Allen-Augl-Hard	100%	1%
Ashland	100%	2%
Ashtabula	100%	5%
Athens-Hocking-Vint	100%	3%
Belmont-Harrison-Monr	100%	3%
Brown	100%	6%
Butler	100%	3%
Champaign-Logan	100%	2%
Clark-Grn-Madi	92%	2%
Clermont	100%	7%
Columbiana	100%	6%
Cuyahoga	77%	4%
Defiance-Wms-Hen-Ful	100%	4%

Board Area	% of C&A Medicaid Consumers Hospitalized Out of County	% Hospitalized C&A Medicaid Consumers Served in SFY 2007
Delaware-Morrow	100%	3%
Erie-Ottawa	86%	3%
Fairfield	100%	3%
Franklin	11%	2%
Gallia-Jack-Meigs	100%	2%
Geauga	100%	1%
Hamilton	2%	6%
Hancock	100%	3%
Huron	100%	3%
Jefferson	97%	4%
Lake	25%	5%
Licking-Knox	100%	4%
Lorain	100%	3%
Lucas	3%	1%
Mahoning	60%	7%
Marion-Crawford	100%	1%
Medina	100%	4%
Miami-Drk-Shlb	55%	7%
Montgomery	20%	4%
Muskingum Joint	62%	5%
Portage	100%	2%
Preble	100%	5%
Putnam	100%	4%
Richland	29%	5%
Ross-Pike-Pick-Fay-High	100%	4%
Scioto-Adams-Lawr	100%	3%
Seneca-Sandusky-Wyan	100%	3%
Stark	97%	1%
Summit	23%	1%
Trumbull	28%	7%
Tuscarawas-Carroll	100%	2%
Union	94%	5%
Van Wert-Mercer-Paulding	100%	4%
Warren-Clinton	100%	5%
Washington	100%	1%
Wayne-Holmes	100%	3%
Wood	100%	3%