Washington State Institute for Public Policy

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April 2009

THE COSTS AND FREQUENCY OF MENTAL HEALTH-RELATED HOSPITALIZATIONS IN WASHINGTON STATE ARE INCREASING

In Washington State, one out of five (22 percent) adult hospital stays involved a mental health or substance abuse (MHSA) diagnosis in 2007. State spending on the public community mental health system (outpatient treatment and crisis services) combined with state psychiatric hospital operations totaled $675 million in fiscal year 2007. This amount represents only a portion of the costs associated with mental health-related treatment. For example, about a third of the $1.4 billion hospital charges for adults paid for by Medicaid in 2007 were MHSA-related.

This report outlines the impact of mental health disorders on the state's community hospitals. We focus on both the state's *public mental health clients* (receiving services through the state's Regional Support Networks) and *public-pay clients* (Medicaid clients with hospital encounters). The following questions are addressed:

- How do hospital stays related to a mental health diagnosis differ from other inpatient hospital stays?
- What is the trend in emergency department visits among Medicaid clients?
- How many public mental health clients have prior visits to the emergency department?

Mental health and substance abuse disorders result in a significant cost to our state's health care system. This report outlines what available data indicate about mental health-related hospitalizations and emergency department visits in Washington State.

Summary

The 2001 Washington State Legislature directed the Washington State Institute for Public Policy to analyze the outcomes of public mental health consumers. This report examines mental health-related hospitalizations and emergency department visits in Washington State. Among adults aged 18 and over:

- 22 percent of hospital stays involved a mental health or substance abuse (MHSA) diagnosis in 2007.
- 4.6 percent of hospital admissions had a primary MHSA diagnosis. In these cases, a mental health condition was the primary reason for the hospital stay.
- While all hospital stays have increased at the rate of population growth, MHSA-related hospitalizations have increased faster.
- 62 percent of patients with a MHSA diagnosis are admitted through the emergency department (compared with 41 percent of other patients).
- Mental health-related Medicaid emergency department claims were 20 percent more costly than those that were not mental-health related ($343 versus $287 per case).

This report also examines trends for individuals who were served by an emergency department and received treatment from the public mental health system.

Suggested citation: Mason Burley (2009). *The costs and frequency of mental health-related hospitalizations in Washington state are increasing.* Olympia: Washington State Institute for Public Policy, Document No. 09-04-3401.

A Significant Number of Hospital Stays Include Mental Health Issues

The Washington State Department of Health (DOH) maintains records on admissions to community hospitals[1] using the Comprehensive Hospital Abstract Reporting System (CHARS). According to DOH, there were over 500,000 adult hospital admissions in 2007. These records include both a primary and secondary diagnosis for the patient. Although a definitive mental health diagnosis cannot always be reached prior to hospital discharge, this diagnosis gives an indication of the number of people presenting with mental health or substance abuse issues.

Hospital diagnoses are recorded based on the International Statistical Classification of Diseases, commonly known as ICD codes. In order to summarize the incidence of mental health-related hospitalizations, we utilized ICD groupings developed by the Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project (HCUP).[2] HCUP is a partnership between federal, state, and industry representatives designed to assemble multi-state data systems and issue statistical reports informative to policymakers and researchers. The Appendix details the HCUP classification method for grouping mental health and substance abuse diagnoses.

Depression and Substance Abuse Are Most Common Diagnoses for Mental Health-Related Hospitalizations

Exhibit 1 shows the number of hospital stays for Washington State adults by diagnosis category. In 2007, nearly one in ten hospital stays included a mood disorder (depression/bipolar) as a primary or secondary diagnosis. Alcohol-related disorders made up 4.5 percent of adult hospital stays, while substance abuse issues were seen in 4.4 percent of adult cases. Cognitive disorders (such as delirium and dementia) were also present in 4.4 percent of all adult hospitalizations.

Exhibit 1
Mental Health/Substance Abuse Disorders, Adult Hospital Stays, Washington State Community Hospitals, 2007

Diagnosis	MHSA-Related Hospital Stays	Percentage of All Hospital Stays
Mood Disorders (including bipolar and depression)	50,723	9.7%
Alcohol-related disorders	23,602	4.5%
Delirium, dementia, and other cognitive disorders	23,070	4.4%
Substance-related disorders	22,865	4.4%
Anxiety disorders	16,961	3.2%
Schizophrenia and other psychotic disorders	9,013	1.7%
Miscellaneous mental disorders	6,216	1.2%
Personality disorders	2,975	0.6%
Disruptive behavior disorders	1,668	0.3%
Adjustment and impulse control disorders	821	0.2%
Disorders usually diagnosed in childhood	296	0.1%
Total Adult Hospital Stays	**522,752**	

Source: Washington State Department of Health Comprehensive Hospital Abstract Reporting System (CHARS)

[1] The American Hospital Association defines community hospitals as: "All nonfederal, short-term general, and special hospitals whose facilities and services are available to the public. (Specialty hospitals include obstetrics and gynecology; eye, ear, nose, and throat; rehabilitation; orthopedic; and other individually described specialty services.) Short-term general and special children's hospitals are also considered to be community hospitals."

[2] P. Owens, M. Myers, A. Elixhauser, & C. Branch. *Care of adults with mental health and substance abuse disorders in U.S. community hospitals, 2004*. Agency for Healthcare Research and Quality, 2007. HCUP Fact Book No. 10. AHRQ Publication No. 07-0008. ISBN 1-58763-229-2.

Of course, patients may have multiple diagnoses for each hospital stay. For the purpose of this analysis, we analyzed stays with at least one MHSA diagnosis and classified the stays according to:

1) **Primary MHSA Only:** A mental health/ substance abuse-related diagnosis was listed as the primary diagnosis and no other MHSA diagnoses were included by discharge.
2) **Primary and Secondary MHSA:** The primary diagnosis was MHSA-related and at least one additional diagnosis on the discharge record was MHSA-related.
3) **Secondary MHSA Only:** The primary reason for the hospital stay was not MHSA-related, but a secondary or complicating condition included a mental health or substance abuse disorder.

In 2007, 22 percent of Washington adult hospital stays involved a mental health or substance abuse-related diagnosis. As Exhibit 2 indicates, the majority of these stays (17.5 percent) included mental health issues as a secondary diagnosis. Over 18,000 admissions (3.5 percent) included both a primary and secondary mental health diagnosis. An additional 5,860 cases listed a primary MHSA diagnosis only.

Exhibit 2
Adult Mental Health/Substance Abuse Disorder, Hospital Stays: Washington State Community Hospitals, 2007

Diagnosis Category	Admissions	Percentage
No MHSA Diagnosis	**407,388**	**77.9%**
Any MHSA Diagnosis	**115,364**	**22.1%**
Primary MHSA Only	5,860	1.1%
Primary and Secondary MHSA	18,200	3.5%
Secondary MHSA Only	91,304	17.5%
Total	**522,752**	**100.0%**

Source: CHARS

Mental Health-Related Hospitalizations Are Growing at a Faster Rate Than Overall Hospitalizations

Between 2002 and 2007, total adult community hospital stays increased from 472,417 to 522,752, a 9 percent increase (Exhibit 3).[3] The rate of mental health/substance abuse stays, however, has grown about 18 percent, from 97,410 in 2002 to 115,364 in 2007.

Exhibit 3
Adult Hospital Stays in Washington State by Mental Health/Substance Abuse Diagnosis, 2002–2007

Year	No MHSA Diagnosis	Primary or Secondary MHSA Diagnosis	Total Adult Hospital Stays
2002	375,007	97,410	472,417
2003	376,982	100,315	477,297
2004	379,614	104,343	483,957
2005	392,699	108,392	501,091
2006	400,727	113,754	514,481
2007	407,388	115,364	522,752

Source: CHARS

Emergency Departments Are the Primary Referral Source for Mental Health-Related Hospital Stays

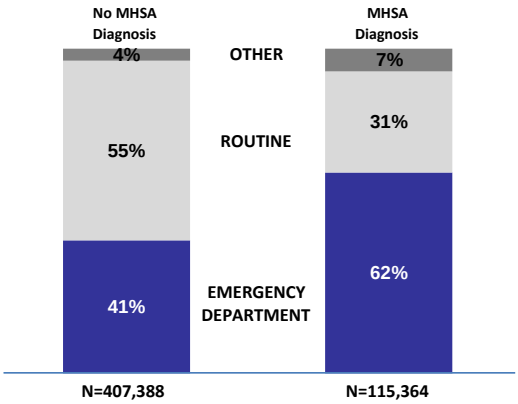
Nationwide, only 12.8 percent of emergency department visits resulted in admission to the hospital.[4] Among hospitalized patients, however, those with a MHSA diagnosis are more frequently admitted through the emergency department than other patients. These patients may either have more acute needs or be less likely to see a physician on a regular basis.

Exhibit 4 shows that 62 percent of adult hospital stays involving an MHSA diagnosis were referred

[3] The adult population in the state grew 8 percent between 2002 and 2007 (from 4.5 to 4.9 million).
[4] S. Pitts, R. Niska, J. Xu, C. Burt (2008, August 6). *National Hospital Ambulatory Medical Care Survey: 2006 emergency department summary*. National Health Statistics Reports, No. 7. Hyattsville, MD: National Center for Health Statistics.

from the emergency department. Among non-MHSA-related hospital stays, 41 percent were admitted through the emergency department.

Exhibit 4
Referral Source for Adult Hospital Stays in Washington State Community Hospitals, 2007



WSIPP, 2009
Source: CHARS

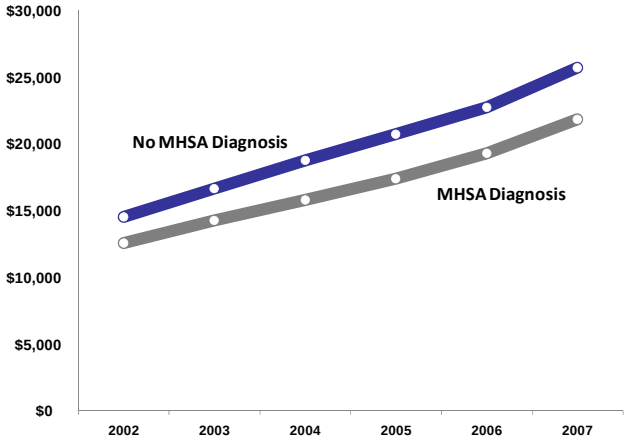
Mental Health-Related Cases Stay in the Hospital Longer and Cost Slightly Less

Once admitted, adult patients with a mental health or substance abuse diagnosis had a longer length of stay, on average, compared with other patients. Length of stay averaged:

- ***3.9 days*** for patients with *no mental health/substance abuse diagnoses.*
- ***5.1 days*** for patients with *any* MHSA diagnosis.
- ***7.8 days*** for patients with a *primary MHSA diagnosis.*

While patients with mental health-related conditions had longer hospitalizations, the average cost per case has been slightly lower than cases without a mental health diagnosis. Exhibit 5 displays the average charge per stay for adult clients from 2002 to 2007. In 2002, the average charge per adult hospital stay was $14,521 for non-MHSA-related cases and $12,585 for cases with a MHSA diagnosis. By 2007, that figure had almost doubled to $25,728 for non-MHSA cases and $21,825 for MHSA cases.

Exhibit 5
Average Charge per Adult Hospital Stay by Mental Health Diagnosis, 2002–2007



WSIPP, 2009
Source: CHARS

Medicare or Medicaid Pays for a Large Percentage of MHSA-Related Hospitalizations

As Exhibit 6 shows, 41 percent of patient stays with a MHSA diagnosis were covered by Medicare, and 19 percent of these stays were paid by Medicaid. A Medicaid-paid hospital stay cost more on average for patients with a MHSA-related diagnosis ($22,767) than for those with no MHSA diagnosis ($20,277).

While Medicare costs are covered by the federal government, Washington State assumes roughly 50 percent of the overall cost for insuring Medicaid clients. As Exhibit 6 indicates, Medicaid charges for MHSA-diagnosed hospital stays totaled $498 million in 2007. Total charges for non-MHSA Medicaid cases were $1.17 billion. Charges for MHSA cases, therefore, represented 30 percent of all Medicaid inpatient community hospital charges in 2007 ($498 million/$1.67 billion). In comparison, only 15 percent of inpatient hospital charges paid for by commercial insurance were MHSA-related ($294 million/$1.94 billion).

Exhibit 6
Adult Hospital Stays by Diagnosis and Primary Payer, 2007

Primary Payer	No MHSA Diagnosis			MHSA Diagnosis			Overall Charges
	Adult Stays	Average Charge per Stay	Total Charges	Adult Stays	Average Charge per Stay	Total Charges	
Medicare	153,617 (38%)	$31,459	$4,832,667,360	47,548 (41%)	$23,377	$1,111,523,454	$5,944,190,814
Medicaid	57,842 (14%)	$20,277	$1,172,868,553	21,879 (19%)	$22,767	$498,126,762	$1,670,995,315
Health Maintenance Organization	35,442 (9%)	$24,279	$860,510,637	8,771 (8%)	$20,663	$181,232,985	$1,041,743,622
Commercial Insurance	70,028 (17%)	$23,460	$1,642,886,059	13,511 (12%)	$21,783	$294,314,294	$1,937,200,353
Health Care Service Contractor	65,622 (16%)	$26,982	$1,770,580,228	12,657 (11%)	$24,453	$309,501,849	$2,080,082,077
Other	24,837 (6%)	$27,025	$671,227,835	10,998 (10%)	$21,830	$240,083,922	$911,311,757

Source: CHARS

The next section examines trends in hospitalizations and emergency department admissions for adults covered by Medicaid. Finally, we analyze the overlap between adults receiving public medical assistance (Medicaid) and public mental health treatment.

Medicaid-Paid Emergency Department Visits Are Increasing

The statewide hospital data available from the Department of Health do not include information on outpatient emergency department visits. Medicaid claims data, however, provide additional detail about inpatient claims (resulting in a hospital stay) and outpatient visits (such as emergency department visits).

Individuals eligible for Medicaid Medical Assistance can receive services through the Healthy Options managed care program or on a fee-for-service (FFS) basis. About half of the adults on Medical Assistance are FFS clients.[5] Since service encounter information is recorded for FFS claims, we can track data on hospitalizations and emergency department utilization for this population.

Among adult Medicaid FFS clients, emergency department visits increased 23 percent between 2002 and 2007 (from 191,810 to 235,253).[6]

As shown in Exhibit 7, 18 percent of all Medicaid FFS adults that visited the emergency department in 2007 had a mental health or substance abuse-related diagnosis, compared with 12 percent in 2002. This trend may be the result of both an increasing prevalence of MHSA disorders among the Medicaid population and improved diagnosis and detection of mental health issues in the emergency department.

Exhibit 7
Adult Medicaid FFS Emergency Department Visits by Diagnosis, 2002–2007

Year	Emergency Department Visits	No MHSA Diagnosis	MHSA Diagnosis
2002	191,810	168,054 (88%)	23,756 (12%)
2003	197,249	172,505 (87%)	24,744 (13%)
2004	194,722	164,326 (84%)	30,396 (16%)
2005	213,160	176,177 (83%)	36,983 (17%)
2006	227,654	187,012 (82%)	40,642 (18%)
2007	235,253	192,645 (82%)	42,608 (18%)

Source: WSIPP analysis of Medicaid FFS data.

[5] http://fortress.wa.gov/dshs/maa/news/Fact/FS008007 Medicalassistanceataglance.pdf

[6] On a per capita basis, emergency department visits increased from 42.5 visits per 1,000 adults in 2002 to 47.8 visits per 1,000 adults in 2007 (a 13 percent increase).

Mental Health-Related Emergency Department Stay Costs Are 20 Percent Higher

Medicaid FFS cases with a primary or secondary mental health diagnosis had emergency department claims that were 20 percent higher than for those without. In 2007, the average MHSA-related emergency department claim was $343 (compared with $287 for emergency department visits without a MHSA diagnosis).

Exhibit 8
Adult Medicaid FFS Emergency Department Average Claim by Diagnosis, 2002–2007

Year	No MHSA Diagnosis	MHSA Diagnosis	All Emergency Department Visits
2002	$254	$281	$257
2003	$258	$296	$262
2004	$260	$306	$267
2005	$271	$298	$275
2006	$273	$301	$277
2007	$287	$343	$297

Source: WSIPP analysis of Medicaid FFS data.
Note: Claims include outpatient emergency department visits that did not result in an inpatient hospital admission.

Public-Pay Emergency Department Patients With Frequent Visits Are More Likely to Have Mental Health Issues

While there are noticeable differences in average claim levels based on a MHSA diagnosis, these averages do not reveal all of the detail about high-cost Medicaid clients.

In 2007, nearly 90,000 Medicaid-eligible adults visited an emergency department. Over half of these individuals (46,099) had just one emergency room visit during the year, as shown in Exhibit 9. Among those with one visit, 12 percent of adults had a mental health or substance abuse-related diagnosis. For those with multiple visits, however, the proportion of MHSA-related cases increased along with the number of repeat visits.

For Medicaid FFS clients with two emergency room visits in 2007, 21 percent had a MHSA diagnosis. If we look at adults with four or five emergency department visits over the year, two out of five (40 percent) listed a MHSA diagnosis. While only a small number of Medicaid-eligible individuals had 12 or more emergency department admissions in 2007, 76 percent of these were MHSA-related.

Exhibit 9
Multiple Emergency Department Visits for Medicaid FFS Adults by Diagnosis, 2007

Emergency Department Visits During Year	No MHSA Diagnosis	MHSA Diagnosis	Total
1	40,672 (88%)	5,427 (12%)	46,099
2	13,941 (79%)	3,738 (21%)	17,679
3	5,906 (70%)	2,582 (30%)	8,488
4 or 5	4,437 (60%)	2,972 (40%)	7,409
6 to 11	2,555 (45%)	3,084 (55%)	5,639
12 or More	533 (24%)	1,665 (76%)	2,198
Total	**68,044**	**19,468**	**87,512**

Source: WSIPP analysis of Medicaid FFS data
Note: Claims include outpatient emergency department visits that did not result in an inpatient hospital admission.

Medicaid FFS clients with a mental health diagnosis also made up a disproportionate share of high-cost emergency department clients. Medicaid claims data do not separate the claims for an emergency department stay from a subsequent inpatient hospitalization. So, we analyzed FFS claims for all outpatient emergency department visits for adults on Medicaid in 2007.

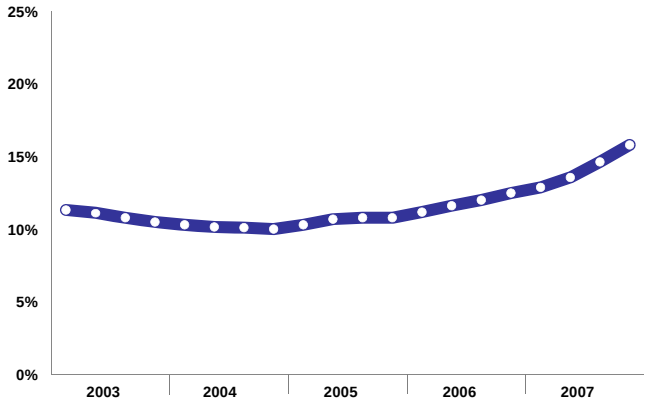
Among the highest 10 percent of all claims (most expensive), 56 percent were MHSA-related. For the low cost (bottom 10 percent) emergency department claims, only 9 percent of visits included a mental health or substance abuse diagnosis (Exhibit 10).

Exhibit 10
High-Cost Emergency Department Clients, 2007 Medicaid FFS Claims by Diagnosis

Claim Rank	No MHSA Diagnosis	MHSA Diagnosis	Average Claim
0% to 10% (Top 10% of Claims)	3,875 (44%)	4,876 (56%)	$3,457
10% to 20%	5,595 (64%)	3,156 (36%)	$1,305
20% to 30%	6,301 (72%)	2,450 (28%)	$854
30% to 40%	6,712 (77%)	2,040 (23%)	$614
40% to 50%	7,079 (81%)	1,672 (19%)	$458
50% to 60%	7,210 (82%)	1,541 (18%)	$351
60% to 70%	7,608 (87%)	1,144 (13%)	$261
70% to 80%	7,820 (89%)	930 (11%)	$186
80% to 90%	7,894 (90%)	858 (10%)	$129
90% to 100% (Bottom 10% of Claims)	7,950 (91%)	801 (9%)	$72

Source: WSIPP analysis of Medicaid FFS data
Note: Claims include outpatient emergency department visits that did not result in an inpatient hospital admission.

Exhibit 11
Percentage of Adult Public Mental Health Consumers With Prior Emergency Department Visit, 2002–2007



WSIPP, 2009
Source: WSIPP analysis of Medicaid FFS data and DSHS Mental Health Division Service Utilization data

The Percentage of Public Mental Health Consumers With a Recent Emergency Department Visit Is Growing

Medicaid FFS clients with frequent or high-cost emergency department visits are far more likely to have mental health or substance abuse disorders, and this likelihood increases as utilization goes up. In many cases, public mental health care is available for these individuals and should help reduce the frequency and expense of emergent care.

Currently, about 15 percent of persons who receive care from the public mental health system have a history of prior emergency department visits. In the past two years, the percentage of public mental health clients with a recent emergency department visit has increased slightly.[7] Exhibit 11 displays the percentage of public mental health clients with an emergency department visit in the 12 months prior to receiving inpatient or outpatient mental health treatment.

Each calendar quarter, roughly 50,000 adults receive either outpatient treatment or inpatient care through the state's public mental health system. In 2004, 10 percent of these individuals had a Medicaid-paid emergency department visit in the past year. By the end of 2007, over 8,000 adults (16 percent) on the public mental health caseload had a visit to the emergency department within the past year.

The Connection Between Hospitalizations and Public Mental Health Services Is Also Changing

Every year, thousands of low-income persons with mental health or substance abuse disorders seek emergent care from community hospitals in Washington State. Available data do not indicate the extent to which these individuals may require extended treatment. As shown previously, individuals with mental health difficulties are more likely to have more frequent and expensive emergency department visits. The next section examines the number of individuals seeking publicly funded mental health outpatient care after an emergency department visit.

[7] The cause of this increase is uncertain. Public mental health caseloads remained relatively flat during this period. Eligibility/access standards did change, however, which may explain the slight influx of more clients with recent emergency department visits.

After a Mental Health-Related Emergency Department Visit, One in Five Patients Receive Public Mental Health Outpatient Services

Approximately one in five Medicaid adults with a mental health-related emergency department visit received publicly funded outpatient services in the year following discharge. Most of these individuals, however, only had one outpatient contact with the public mental health system, as shown in Exhibit 12.

Exhibit 12
Follow-Up Outpatient Care for Mental Health-Related Emergency Department Visits, 2006

Total Adult Medicaid Emergency Department Visits, 2006: 40,988			
Number of Outpatient Mental Health Treatment Visits in Year After Discharge	1	5,228	13%
	2 to 10	549	1%
	11 or More	1,240	3%
	Total Follow-Up	**7,017**	**17%**

Source: WSIPP analysis of Medicaid FFS and DSHS Mental Health Division Service Utilization data

Of the 7,017 emergency department visits followed by publicly funded outpatient care, about one-third (35 percent) received services within 30 days of leaving an emergency department. An additional third of these visits resulted in outpatient services within six months (Exhibit 13).

Exhibit 13
Time to Outpatient Services for Mental Health-Related Emergency Department Visits, 2006

First Outpatient Contact After Emergency Department Discharge	Number	Percentage
Within 30 days	2,430	35%
31 to 180 days	2,490	35%
6 to 12 months	2,097	30%
Total	7,017	100%

Source: WSIPP analysis of Medicaid FFS and DSHS Mental Health Division Service Utilization data

While nearly 20 percent of mental health-related emergency department visits were followed up by publicly funded outpatient care, there may be additional service treatment options appropriate for individuals leaving emergent care. The next section discusses emergency department visits that lead to inpatient treatment and details the overall trends in inpatient psychiatric care in the public mental health system.

Inpatient Psychiatric Follow-Up Care—Changes in Capacity and Service Delivery

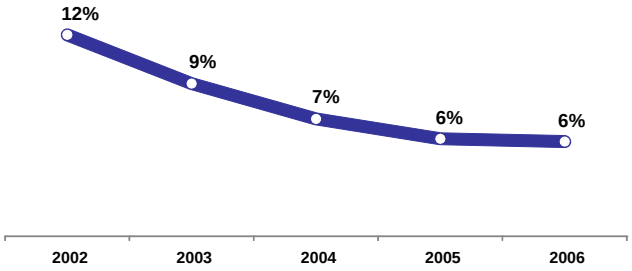
According to the Washington State Hospital Association, there were 637 inpatient psychiatric beds available in Washington State community hospitals at the end of 2008. This represents a 20 percent reduction from the 799 inpatient beds available in community hospitals in 2000.[8]

In the Last Five Years, a Smaller Percentage of Emergency Department Patients With a Mental Health Diagnosis Are Receiving Follow-Up Inpatient Care

Inpatient transfers from a hospital emergency department to inpatient psychiatric care may be affected by the decrease in available beds. In 2002, 12 percent of Medicaid FFS adults with a mental health-related diagnosis transferred to inpatient psychiatric care within one year after an emergency department discharge. By 2006, only 6 percent of emergency department discharges resulted in a publicly funded inpatient psychiatric stay (Exhibit 14).

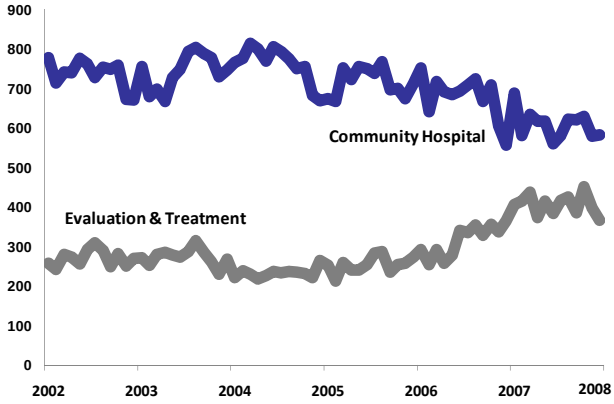
[8] "Improving Washington's Mental Health System," 2008 Mental Health Workgroup (convened by the Washington State Hospital Association), October 2008, p. 9. These inpatient bed counts do not include the two psychiatric hospitals operated by the state of Washington.

Exhibit 14
Publicly Funded Follow-Up Inpatient Psychiatric Care for Mental Health-Related Emergency Department Visits, 2002–2006



WSIPP, 2009
Source: WSIPP analysis of Medicaid FFS and DSHS Mental Health Division Service Utilization data

Exhibit 15
Monthly Adult Inpatient Mental Health Count, 2002–2008



WSIPP, 2009
Source: WSIPP analysis of DSHS Mental Health Division Service Utilization data

Exhibit 15 shows the monthly adult inpatient counts for psychiatric admissions at community hospitals and freestanding evaluation and treatment (E&T) residential facilities. The monthly population for psychiatric stays at community hospitals declined between 2004 and 2007, and stayed relatively unchanged thereafter.

One factor leading to a reduction in the use of inpatient psychiatric beds may be the growing number of inpatient E&T facilities in the state. In the last three years, more E&T centers have opened and the number of stays at these facilities is increasing.

The monthly counts in Exhibit 15 include both voluntary and involuntary inpatient admissions. A recent report by a statewide mental health workgroup[9] concluded that "since 2006, largely because of the increase in [provider reimbursement] rates, there has not been a significant decrease in inpatient capacity. The problems of overcrowding for involuntary beds, however, remain at all levels of the system."[10]

Under Washington's Involuntary Treatment Act (71.05 RCW), a designated mental health professional can petition the court to involuntarily detain individuals who are gravely disabled or pose a significant danger to him/herself or others. Three options are available when an individual is detained under the Involuntary Treatment Act:

1) **Inpatient Psychiatric Beds in Community Hospitals:** According to the Washington State Hospital Association, 11 community hospitals were certified to accept involuntary treatment admissions at the end of 2008. These hospitals had 361 beds available in 2008. This represents a 27 percent reduction from the 498 involuntary treatment-certified beds that were available in 2006.
2) **Evaluation and Treatment Facilities:** E&T centers are freestanding residential facilities certified by DSHS to provide mental health services and help stabilize and return individuals to a community setting.

[9] This workgroup includes representatives from the Regional Support Networks, Washington Community Mental Health Association, Washington State Hospital Association, and National Alliance on Mental Illness.

[10] "Improving Washington's Mental Health System," 2008 Mental Health Workgroup (convened by the Washington State Hospital Association), October 2008.

3) **Single Bed Certification:** When certified beds are not available at licensed facilities, hospitals may request a *single bed certification* to hold involuntary treatment clients. This certification is on a case-by-case basis and usually occurs in emergency rooms, which may not have the staffing or structure to house involuntarily admitted patients.

Reliable data are not yet available on a statewide basis to measure trends in involuntary treatment admissions. Future reports will analyze the impact of involuntary treatment admissions on inpatient capacity and the extent to which individuals may be placed in alternative settings under an involuntary treatment detention.

Conclusion

Previous reports in this research series have focused on the outcomes and characteristics of individuals served by the public mental health system. As this report indicates, however, mental health issues significantly impact hospitals and emergency departments in Washington State. And, whether from improved diagnoses or increased prevalence, mental health-related hospital encounters are growing.

Medicaid clients, in particular, show a higher incidence of mental health issues as emergency department usage increases. Fewer patients with a mental health diagnosis are transferring from the emergency department to inpatient psychiatric care. And, more adults receiving public outpatient mental health treatment have a recent emergency department visit. As these trends indicate, there is an important connection between public mental health services and mental health-related incidents in the state hospitals and emergency departments. The significance of this connection should be considered as new policies concerning mental health are proposed and implemented.

Appendix: Mapping ICD-9-CM Codes to Mental Health and Substance Abuse Clinical Classifications

Adjustment disorders	3090 3091 30922 30923 30924 30928 30929 3093 3094 30982 30983 30989 3099
Anxiety disorders	29384 30000 30001 30002 30009 30010 30020 30021 30022 30023 30029 3003 3005 30089 3009 3080 3081 3082 3083 3084 3089 30981 3130 3131 31321 31322 3133 31382 31383
Disruptive behavior disorders	**Attention-deficit disorder and Attention-deficit/hyperactivity disorder** (31400 31401 3141 3142 3148 3149) **Conduct disorder** (31200 31201 31202 31203 31210 31211 31212 31213 31220 31221 31222 31223 3124 3128 31281 31282 31289 3129) **Oppositional defiant disorder** (31381)
Delirium, dementia, and amnesic and other cognitive disorders	2900 29010 29011 29012 29013 29020 29021 2903 29040 29041 29042 29043 2908 2909 2930 2931 2940 2941 29410 29411 2948 2949 3100 3102 3108 3109 3310 3311 33111 33119 3312 33182 797
Disorders usually diagnosed in infancy, childhood, or adolescence	**Elimination disorders** (3076 3077) **Other disorders usually diagnosed in infancy, childhood or adolescence** (3073 30921 31323 31389 3139) **Pervasive developmental disorders** (29900 29901 29910 29911 29980 29981 29990 29991) **Tic disorders** (30720 30721 30722 30723)
Impulse control disorders	31230 31231 31232 31233 31234 31235 31239
Miscellaneous mental disorders	**Dissociative disorders** (30012 30013 30014 30015 3006) **Eating disorders** (3071 30750 30751 30752 30753 30754 30759) **Factitious disorders** (30016 30019) **Mental disorders due to general medical condition not elsewhere classified** (29389 2939 3101) **Other miscellaneous mental conditions** (316 64840 64841 64842 64843 64844 V402 V403 V409 V673) **Psychogenic disorders** (3060 3061 3062 3063 3064 30650 30652 30653 30659 3066 3067 3068 3069) **Sexual and gender identity disorders** (3021 3022 3023 3024 30250 30251 30252 30253 3026 30270 30271 30272 30273 30274 30275 30276 30279 30281 30282 30283 30284 30285 30289 3029 30651) **Sleep disorders** (30740 30741 30742 30743 30744 30745 30746 30747 30748 30749) **Somatoform disorders** (30011 3007 30081 30082 30780 30781 30789)
Mood disorders	**Bipolar disorders** (29600 29601 29602 29603 29604 29605 29606 29610 29611 29612 29613 29614 29615 29616 29640 29641 29642 29643 29644 29645 29646 29650 29651 29652 29653 29654 29655 29656 29660 29661 29662 29663 29664 29665 29666 2967 29680 29681 29682 29689 29690 29699) **Depressive disorders** (29383 29620 29621 29622 29623 29624 29625 29626 29630 29631 29632 29633 29634 29635 29636 3004 311)
Personality disorders	3010 30110 30111 30112 30113 30120 30121 30122 3013 3014 30150 30151 30159 3016 3017 30181 30182 30183 30184 30189 3019
Schizophrenia and other psychotic disorders	29381 29382 29500 29501 29502 29503 29504 29505 29510 29511 29512 29513 29514 29515 29520 29521 29522 29523 29524 29525 29530 29531 29532 29533 29534 29535 29540 29541 29542 29543 29544 29545 29550 29551 29552 29553 29554 29555 29560 29561 29562 29563 29564 29565 29570 29571 29572 29573 29574 29575 29580 29581 29582 29583 29584 29585 29590 29591 29592 29593 29594 29595 2970 2971 2972 2973 2978 2979 2980 2981 2982 2983 2984 2988 2989
Substance-related disorders	**Alcohol-related disorders** (2910 2911 2912 2913 2914 2915 2918 29181 29189 2919 30300 30301 30302 30303 30390 30391 30392 30393 30500 30501 30502 30503) **Drug related disorders** (2920 29211 29212 2922 29281 29282 29283 29284 29289 2929 30400 30401 30402 30403 30410 30411 30412 30413 30420 30421 30422 30423 30430 30431 30432 30433 30440 30441 30442 30443 30450 30451 30452 30453 30460 30461 30462 30463 30470 30471 30472 30473 30480 30481 30482 30483 30490 30491 30492 30493 30510 30511 30512 30513 30520 30521 30522 30523 30530 30531 30532 30533 30540 30541 30542 30543 30550 30551 30552 30553 30560 30561 30562 30563 30570 30571 30572 30573 30580 30581 30582 30583 30590 30591 30592 30593 64830 64831 64832 64833 64834 65550 65551 65553 76072 76073 76075 7795 96500 96501 96502 96509 V6542)

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Document No. 09-04-3401