

Montana Hospital Discharge Data System

Surveillance Report

December 2010



MHDDS Adds Montana State Hospital Adult Mental Health Discharges¹

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The Montana Hospital Discharge Data System (MHDDS) now receives data sets from mental health admissions from the Montana State Hospital (MSH) at Warm Springs for adults age 18 years and older. The MSH is the only public psychiatric hospital for adults in the state. Data from the MSH are available beginning with calendar year 2005. Prior to receiving data from the MSH, surveillance data on mental health care in Montana were limited to admissions to non-psychiatric hospitals participating in the MHDDS. Among those admissions, approximately 3900 per year, or less than 4% of the total, had a primary diagnosis in the Major Diagnostic Category of Mental Diseases and Disorders.

Data from the MSH has added more than 700 mental health admissions per year to the data set. The number of additional mental health admissions contributed by the MSH is relatively small, but the profile of the cases is different from those contributed by non-psychiatric hospitals. Data from the MSH greatly enhance our knowledge of the full scope of mental health hospitalizations in the state (Table 1, pages 2 and 3).

The MSH patient population is 64.2% male, compared to 44.3% male for patients admitted to other hospitals for mental health diagnoses, and MSH patients are substantially older. The MSH patient population is characterized by longer stays, an average of about three months but durations of stay vary substantially, from a few days to more than a year.² Between 2005 and 2008, 63.5% of the admissions to the MSH lasted from 15 days to more than 90 days. In contrast, among patients admitted to other hospitals for mental health diagnoses, 80.7% stayed for a week or less. More patients from the MSH (21.5%) than patients from other hospitals (14.0%) were released to additional care or to another institution. All admissions to the MSH were through physician referral; 72.4% of mental health admissions to other hospitals entered through an Emergency Department.

¹ The Montana Hospital Discharge Data System (MHDDS) receives annual de-identified hospital discharge data sets through Memoranda of Agreement with the Montana Hospital Association and the Montana State Hospital. Most hospitals in Montana participate in voluntary reporting of discharge data from Uniform Billing Forms, version 2004 (UB-04). The MHDDS receives information on more than 90% of the inpatient admissions from non-psychiatric facilities and all admissions from the only public adult psychiatric facility in the state. MHDDS does not receive data on emergency department visits or outpatient procedures at this time. Data sets are currently available for discharge years 2000 through 2008 (2005 through 2008 for Montana State Hospital data).

² Montana State Hospital, Hospital Data Report, Fiscal Year 2008, <http://msh.mt.gov/annualreport2008edited.pdf>

Table 1. Characteristics of Adult Admissions with Primary Diagnostic Codes in the Major Diagnostic Category of Mental Diseases and Disorders by Source of Report, Montana, 2005-2008

Percentage distribution	Non-Psychiatric Hospitals N = 14,168	Montana State Hospital N = 1,195
Male	44.3	64.2
Age group, years		
18-24	15.9	8.0
25-34	20.8	12.8
35-64	51.4	62.6
≥ 65	11.9	16.7
Payer		
Private insurance	33.3	14.2
Medicaid	16.0	2.0
Medicare	26.5	83.8
Other	24.1	~
Source of Admission		
Physician, clinic, or HMO referral	19.8	100.0
Transfer from other health care institution	7.7	~
Emergency Room	72.4	~
Duration of stay		
< 48 hours	30.4	21.7
3-7 days	50.3	9.0
8-14 days	14.8	5.8
15-30 days	4.1	20.9
31-90 days	0.5	28.7
> 90 days (includes not yet discharged at > 90 days)	~	13.9
Discharge status		
Released to home or self-care	82.5	78.2
Released to other care or institution	14.0	21.5
Deceased	0.1	0.2
Other or unknown	3.4	0.1
Primary diagnosis		
Psychosis (ICD-9-CM code 290-299)	80.5	76.8
Dementias (290)	1.5	0.3
Alcohol-induced psychosis (291)	~	0.5
Drug-induced psychosis (292)	~	0.9
Schizophrenia (295)	15.5	46.5
Mood disorders (296)	54.3	16.8
Delusional disorders (297)	0.3	1.0
Pervasive developmental disorders (299)	0.2	1.0
Other (298)	5.1	2.3

continued

Non-psychotic (300-319)	18.9	15.8
Anxiety disorders (300)	4.8	1.1
Personality disorders (301)	0.7	0.3
Alcohol dependence (303)	~	2.0
Drug dependence (304)	~	1.3
Nondependent substance abuse (305)	~	2.5
Other physical syndromes (307)	0.5	0.7
Acute stress (308)	0.4	~
Adjustment reaction (309)	4.8	1.9
Brain damage (310)	0.2	2.4
Depression, NOS (311)	7.0	2.8
Behavioral disorders, NOS (312)	0.3	0.6
Mental retardation (317-319)	0.1	~

The distribution of major mental health diagnoses were similar for the MSH and other hospitals. Overall, 76.8% of MSH admissions and 80.5% of mental health admissions to other hospitals had a primary diagnoses of psychosis, although there was notable variation within this category: 46.5% of admissions to MSH were for schizophrenia, compared to only 15.5% of mental health admissions to other hospitals; only 16.8% of admissions to MSH were for mood disorders, compared to 54.3% of mental health admissions to other hospitals. A small proportion of admissions to both MSH and other hospitals were for non-psychotic diagnoses (15.8% and 18.9%, respectively). The most common non-psychotic diagnoses among patients admitted to MSH were related to drug and alcohol abuse (5.8% in the aggregate), depression (2.8%), and brain damage (2.4%), while the most common non-psychotic primary mental health diagnoses among patients admitted to other hospitals were depression and anxiety (7.0% and 4.8%).

We are pleased with the expansion of the MHDDS to include a more complete coverage of mental health admissions in Montana. We hope these data will be useful to a variety of programs and divisions with DPHHS. Please feel free to contact us with questions and to explore the possibilities of these data.

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Please visit our website at <http://www.dphhs.mt.gov/PHSD/MT-HDDS/MTHDDS-index.shtml>