

Vermont Mental Health Performance Indicator Project

Agency of Human Services, Department of Mental Health
103 South Main Street, Waterbury, Vermont 05671

TO: Vermont Mental Health Performance Indicator Project
Advisory Group and Interested Parties

FROM: John Pandiani and Walter Ochs

DATE: May 6, 2011

RE: Involuntary Inpatient Mental Health Services: FY1991–2010

This week's brief report provides an overview of involuntary inpatient mental health services provided to adults in Vermont during FY1991–2010. These include involuntary non-forensic hospitalization of adults in the Vermont State Hospital (VSH) and in designated Vermont community hospitals (DH). Three measures of hospitalization are provided: numbers of episodes of care, numbers of patient days, and unduplicated numbers of people served. This report adds two years to the report for that was distributed on January 30, 2009.

This report is based on analysis of two databases: a database of involuntary DH hospitalizations maintained by the Department of Mental Health, and the VSH database. The DH analysis includes all involuntary emergency examinations in Fletcher Allen, Central Vermont, Rutland Regional, Windham Center, and the Brattleboro Retreat. For this analysis, an episode of care is a hospital stay that includes at least one day in the specified year. Patient days include the day of admission but not the day of discharge. Unduplicated counts of people are based on Probabilistic Population Estimation.

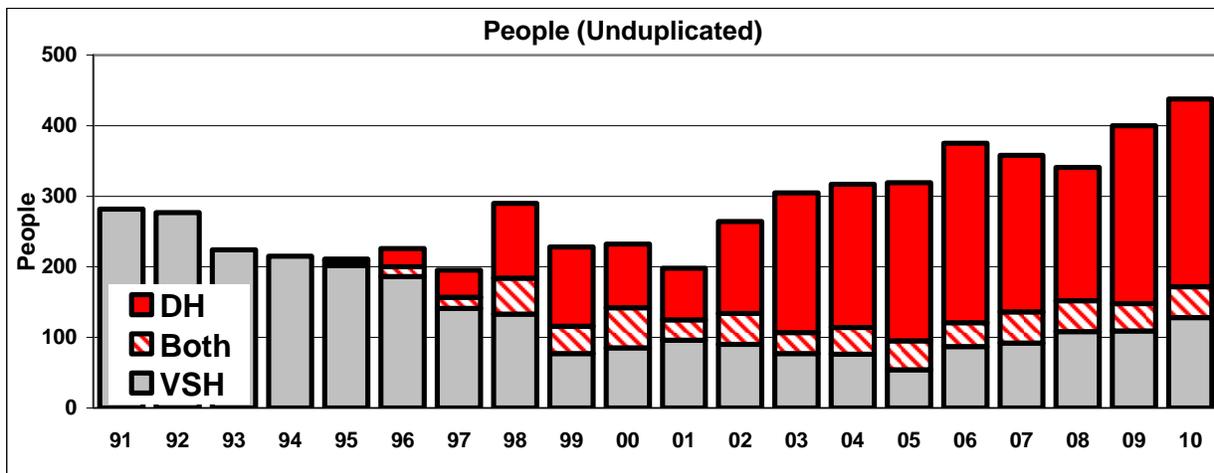
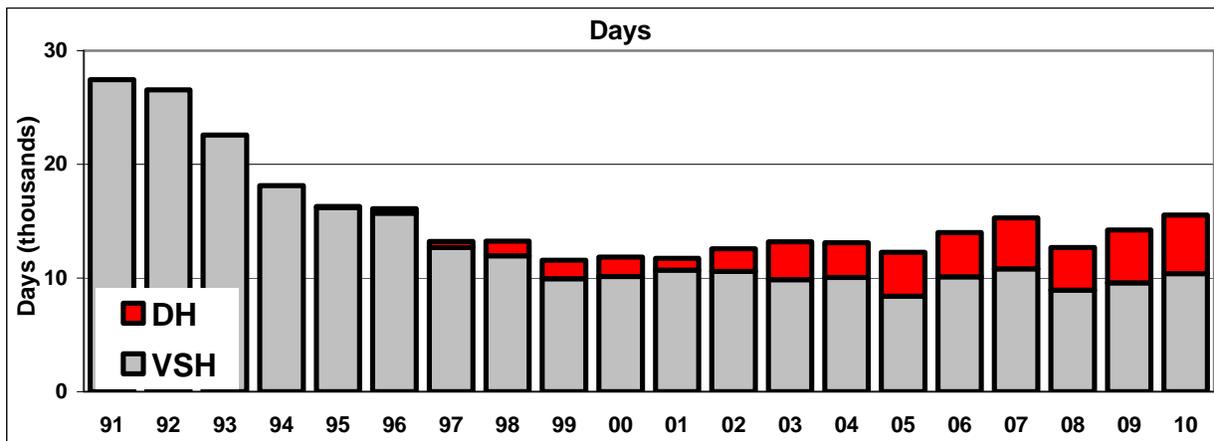
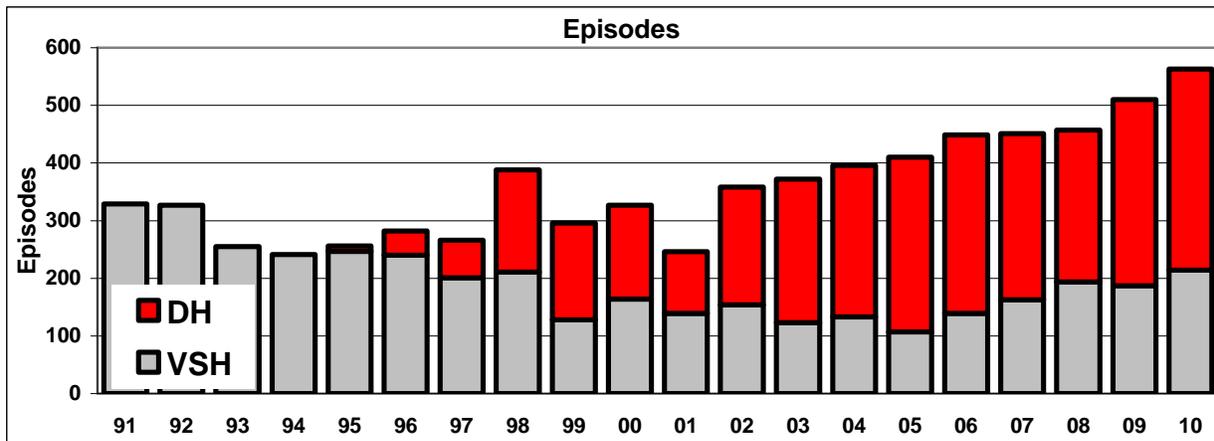
As you will see, the total number of **episodes** of involuntary care increased from less than 330 in FY1991 and 1992 to more than 500 in FY2009 and 2010. The number of episodes of involuntary care at designated hospitals increased from 9 in FY1995 to 349 in FY2010. The number of episodes of involuntary care at VSH decreased from 329 in FY1991 to 107 in FY2005 before increasing to 214 in FY2010.

During this same period, total involuntary **patient days** decreased from over 27,000 days in FY1991 to less than 12,000 in FY1999 through FY2001 before increasing to more than 15,000 in FY2007 and FY2010. As was the case with episodes, DH involuntary patient days tended to increase while VSH involuntary patient days tended to decrease during the study period.

Finally, the annual **unduplicated number of people** with involuntary inpatient care increased from less than 300 per year during FY1991 through FY2002, to more than 300 per year during FY2003-2008, and to more than 400 per year during FY2009 and FY2010. This overall pattern was the product of a combination of increasing numbers of people with involuntary care in DHs and decreasing numbers of people in VSH. It is interesting to note that a substantial number of individuals received involuntary inpatient care in both the Vermont State Hospital and in a designated hospital during the same year for much of the period under examination.

We look forward to your questions and comments about these findings, and your suggestions for further analyses of data regarding involuntary inpatient treatment in Vermont. As always, we can be reached at pip@ahs.state.vt.us or 802-241-4049.

Number of Involuntary Inpatient Mental Health Services at Designated Community Hospitals and VSH Vermont: FY1991-FY2010



This analysis includes adult patients (aged 18 and over) who received involuntary mental health services at designated community hospitals (DH) and Vermont State Hospital (VSH). The DH analysis is based on adult patients in the involuntary inpatient data set maintained by the Vermont Department of Mental Health. The VSH analysis is based on extracts from the Vermont State Hospital Treatment Episode database. This analysis includes VSH patients with a legal status at admission of emergency, revocation of conditional release, revocation of orders of non-hospitalization or involuntary court commitment for 90 days. VSH patients with a legal status at admission of voluntary, forensic or transfers under interstate compact were not included.

Number of Involuntary Inpatient Mental Health Services at Designated Community Hospitals and VSH, Vermont: FY1991-FY2010

Episodes

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
DH	--	--	--	--	9	42	65	177	168	163	107	204	249	263	303	310	288	263	323	349
VSH	329	327	255	241	247	240	201	211	128	164	139	154	123	133	107	139	163	194	187	214
Total	329	327	255	241	256	282	266	388	296	327	246	358	372	396	410	449	451	457	510	563

Days

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
DH	--	--	--	--	81	383	522	1,294	1,633	1,687	1,034	1,985	3,337	3,074	3,865	3,894	4,478	3,746	4,660	5,145
VSH	27,450	26,568	22,575	18,115	16,209	15,728	12,692	11,960	9,944	10,154	10,703	10,598	9,867	10,045	8,392	10,106	10,810	8,932	9,566	10,398
Total	27,450	26,568	22,575	18,115	16,290	16,111	13,214	13,254	11,577	11,841	11,737	12,583	13,204	13,119	12,257	14,000	15,288	12,678	14,226	15,543

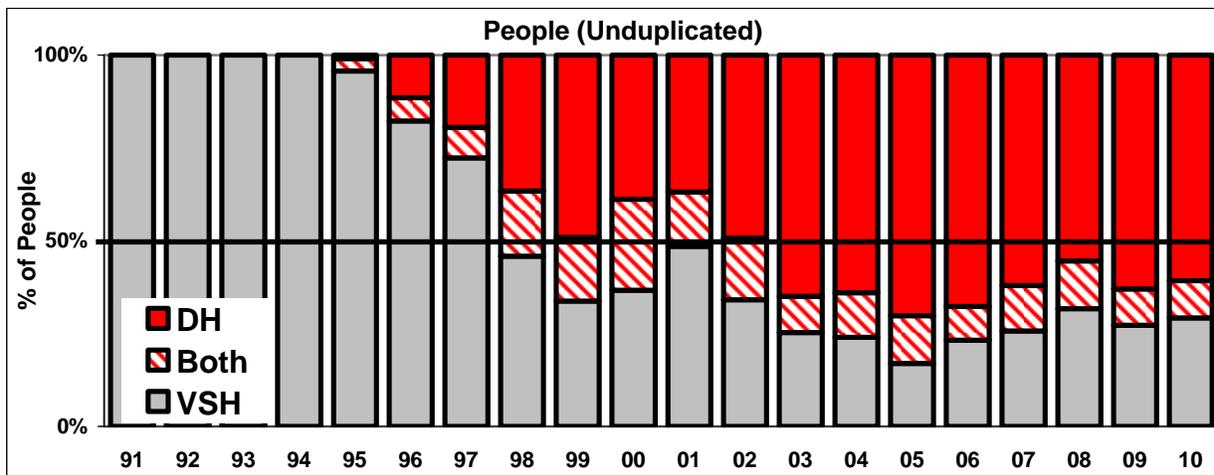
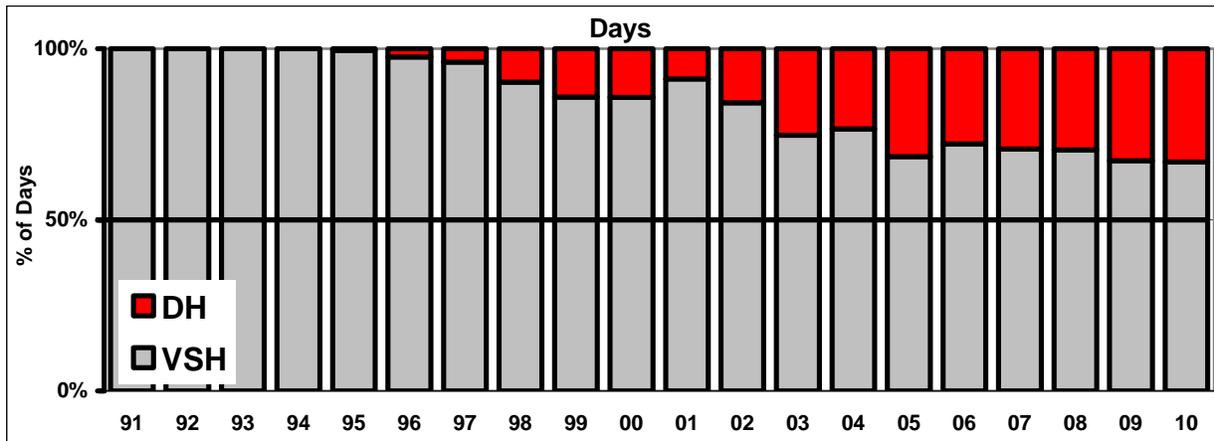
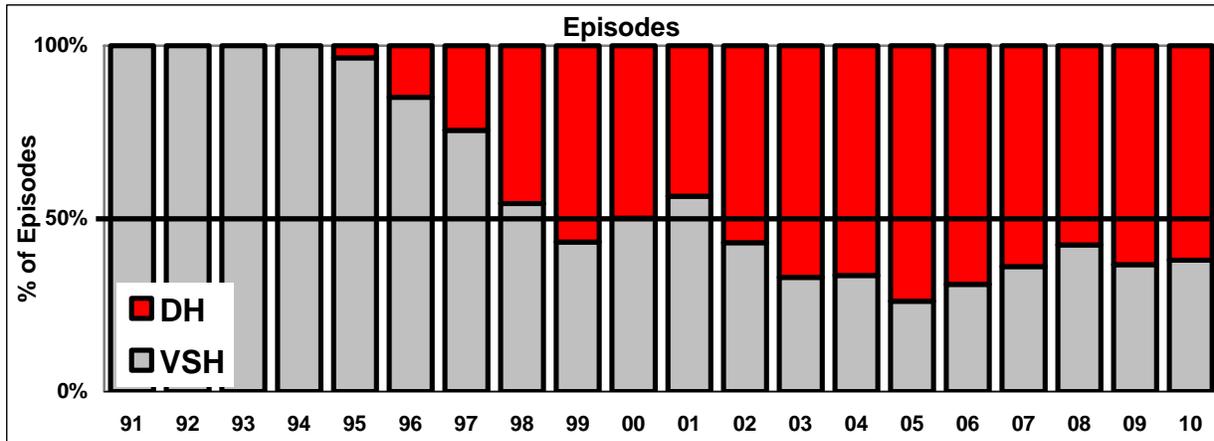
People (Unduplicated)

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
DH	--	--	--	--	2	26	38	106	112	90	73	130	198	203	224	254	222	189	252	266
Both	--	--	--	--	7	14	16	51	39	57	29	44	30	38	41	34	44	44	39	44
VSH	282	277	224	215	202	186	141	133	77	85	96	90	77	76	54	87	92	108	109	128
Total	282	277	224	215	211	226	195	290	228	232	198	264	305	317	319	375	358	341	400	438

This analysis includes adult patients (aged 18 and over) who received involuntary mental health services at designated community hospitals (DH) and Vermont State Hospital (VSH) . The DH analysis is based on adult patients in the involuntary inpatient data set maintained by the Vermont Department of Mental Health. The VSH analysis is based on extracts from the Vermont State Hospital Treatment Episode database. This analysis includes VSH patients with a legal status at admission of emergency, revocation of conditional release, revocation of orders of non-hospitalization or involuntary court commitment for 90 days. VSH patients with a legal status at admission of voluntary, forensic or transfers under interstate compact were not included.

An episode of care is defined by a hospital stay that includes at least one day in the specified fiscal year. Patient days include the day of admission but do not include the day of discharge. Because these data sets do not share unique person identifiers, Probabilistic Population Estimation (PPE) was used to determine number of unduplicated people served by VSH, designated community agencies and both.

Involuntary Inpatient Mental Health Services at Designated Community Hospitals and VSH Vermont: FY1991-FY2010



This analysis includes adult patients (aged 18 and over) who received involuntary mental health services at designated community hospitals (DH) and Vermont State Hospital (VSH). The DH analysis is based on adult patients in the involuntary inpatient data set maintained by the Vermont Department of Mental Health. The VSH analysis is based on extracts from the Vermont State Hospital Treatment Episode database. This analysis includes VSH patients with a legal status at admission of emergency, revocation of conditional release, revocation of orders of non-hospitalization or involuntary court commitment for 90 days. VSH patients with a legal status at admission of voluntary, forensic or transfers under interstate compact were not included.

Involuntary Inpatient Mental Health Services at Designated Community Hospitals and VSH, Vermont: FY1991-FY2010

Percent of Episodes

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
DH	--	--	--	--	4%	15%	24%	46%	57%	50%	43%	57%	67%	66%	74%	69%	64%	58%	63%	62%
VSH	100%	100%	100%	100%	96%	85%	76%	54%	43%	50%	57%	43%	33%	34%	26%	31%	36%	42%	37%	38%
Total #	329	327	255	241	256	282	266	388	296	327	246	358	372	396	410	449	451	457	510	563

Percent of Days

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
DH	--	--	--	--	0.5%	2%	4%	10%	14%	14%	9%	16%	25%	23%	32%	28%	29%	30%	33%	33%
VSH	100%	100%	100%	100%	99.5%	98%	96%	90%	86%	86%	91%	84%	75%	77%	68%	72%	71%	70%	67%	67%
Total #	27,450	26,568	22,575	18,115	16,290	16,111	13,214	13,254	11,577	11,841	11,737	12,583	13,204	13,119	12,257	14,000	15,288	12,678	14,226	15,543

Percent of People (Unduplicated)

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
DH	--	--	--	--	1%	12%	19%	37%	49%	39%	37%	49%	65%	64%	70%	68%	62%	55%	63%	61%
Both	--	--	--	--	3%	6%	8%	18%	17%	25%	15%	17%	10%	12%	13%	9%	12%	13%	10%	10%
VSH	100%	100%	100%	100%	96%	82%	72%	46%	34%	37%	48%	34%	25%	24%	17%	23%	26%	32%	27%	29%
Total #	282	277	224	215	211	226	195	290	228	232	198	264	305	317	319	375	358	341	400	438

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