

**Vermont Mental Health Performance Indicator Project**  
Agency of Human Services, Department of Health, Department of Mental Health  
108 Cherry Street, Burlington, Vermont 05401

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

FROM: John Pandiani and Walter Ochs

DATE: January 30, 2009

RE: Involuntary Inpatient Mental Health Services: FY1991–2008

The attached graphs and tables provide an overview of the volume of involuntary inpatient mental health services provided to adults in Vermont during FY1991–2008. These include involuntary non-forensic hospitalization of adults in the Vermont State Hospital (VSH) and in designated Vermont community hospitals (DH). In order to provide a comprehensive overview, three distinct measures of hospitalization are provided: numbers of episodes of care, numbers of patient days, and unduplicated numbers of people served.

This report is based on analysis of two databases: a database of involuntary hospitalizations in designated community hospitals that is maintained by the Vermont Department of Mental Health, and a database of all episodes of care in VSH that is maintained by that institution. The DH analysis includes information on all episodes of involuntary emergency examinations in designated community hospitals, including Fletcher Allen, Central Vermont, Rutland Regional, Windham Center, and the Brattleboro Retreat. For this analysis, an episode of care is defined as 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. Unduplicated counts of people are based on statistical Probabilistic Population Estimation.

As you will see, the overall total number of **episodes** of involuntary care increased during this period from less than 330 in FY1991 and FY1992 to more than 450 in FY2008. The number of episodes of involuntary care at designated hospitals during this period increased from 9 in 1995 to 177 in FY1998 and 309 in FY2006 before decreasing to 262 in FY2008. The number of episodes of involuntary care at the Vermont State Hospital during this period decreased from 329 in FY1991 to 107 in FY2005 before increasing to 194 in FY2008.

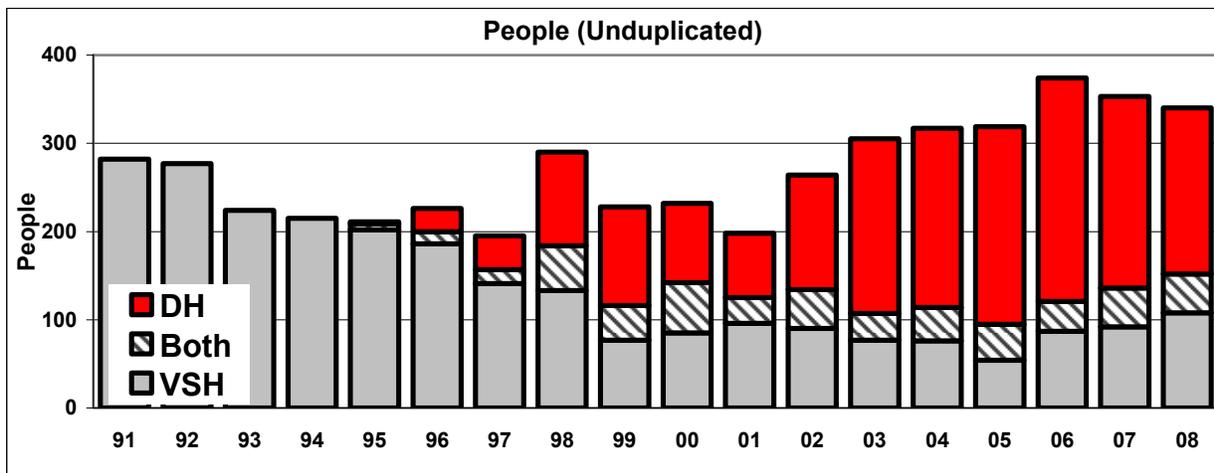
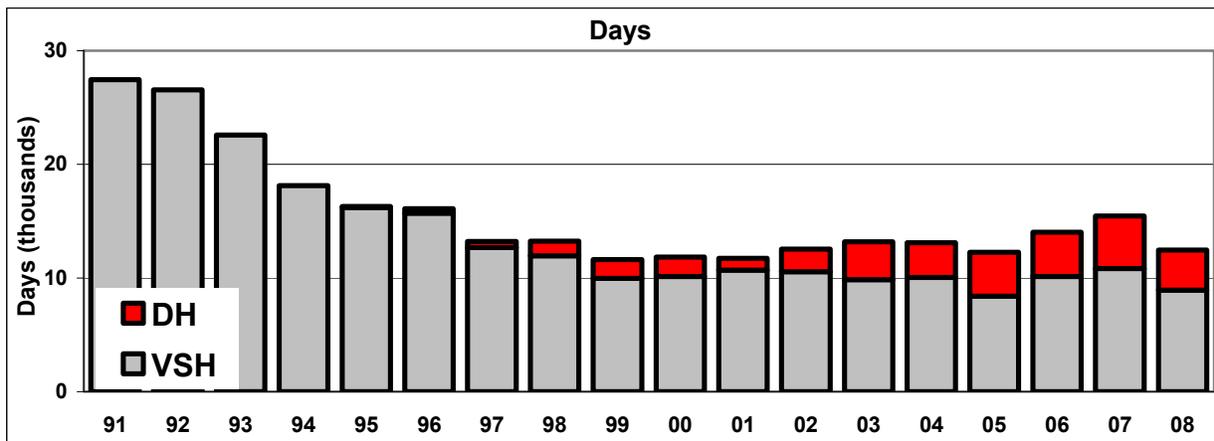
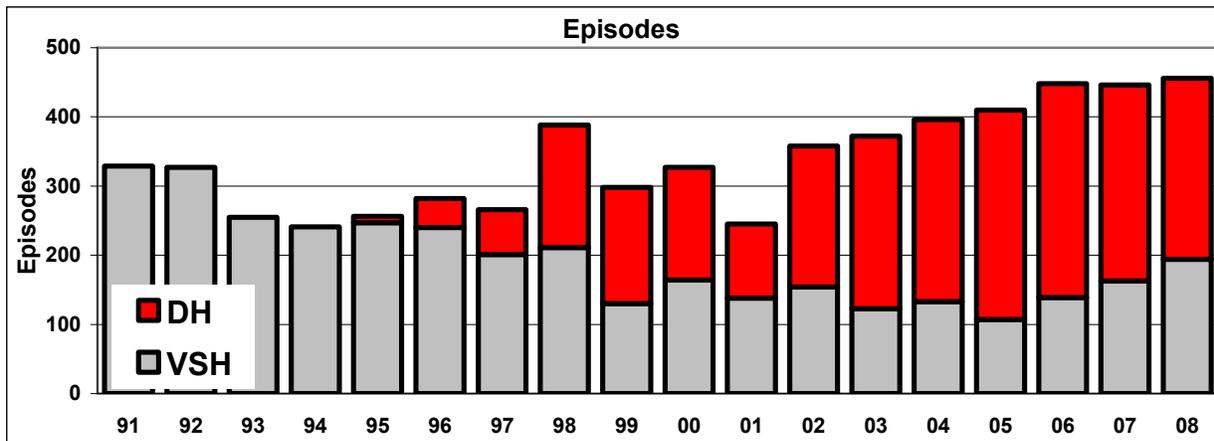
During this same period, total involuntary **patient days** decreased from more than 27,000 days in FY1991 to less than 12,000 in FY1999 through FY2001 before increasing to more than 15,000 in FY2007 and decreasing again to less than 12,500 in FY2008. Again, DH utilization tended to increase while VSH utilization tended to decrease.

Finally, the total **unduplicated number of people** with involuntary inpatient care within a year decreased steadily from more than 280 in FY1991 to less than 200 in FY1997 and then increased steadily from FY2001 through FY2007. More than 300 people received involuntary inpatient care during each year in FY2003 through FY2008. 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 802.863.7249 or [pip@vdh.state.vt.us](mailto:pip@vdh.state.vt.us)

## Number of Involuntary Inpatient Mental Health Services at Designated Community Hospitals and VSH Vermont: FY1991-FY2008



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-FY2008

### Episodes

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08
DH	--	--	--	--	9	42	65	177	168	163	107	204	249	263	303	309	283	262
VSH	329	327	255	241	247	240	201	211	130	164	138	154	123	133	107	139	163	194
<b>Total</b>	329	327	255	241	256	282	266	388	298	327	245	358	372	396	410	448	446	456

### Days

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08
DH	--	--	--	--	81	383	522	1,294	1,633	1,687	1,034	1,985	3,337	3,074	3,865	3,889	4,617	3,530
VSH	27,450	26,568	22,575	18,115	16,209	15,728	12,692	11,960	9,984	10,154	10,700	10,569	9,867	10,045	8,392	10,140	10,836	8,933
<b>Total</b>	27,450	26,568	22,575	18,115	16,290	16,111	13,214	13,254	11,617	11,841	11,734	12,554	13,204	13,119	12,257	14,029	15,453	12,463

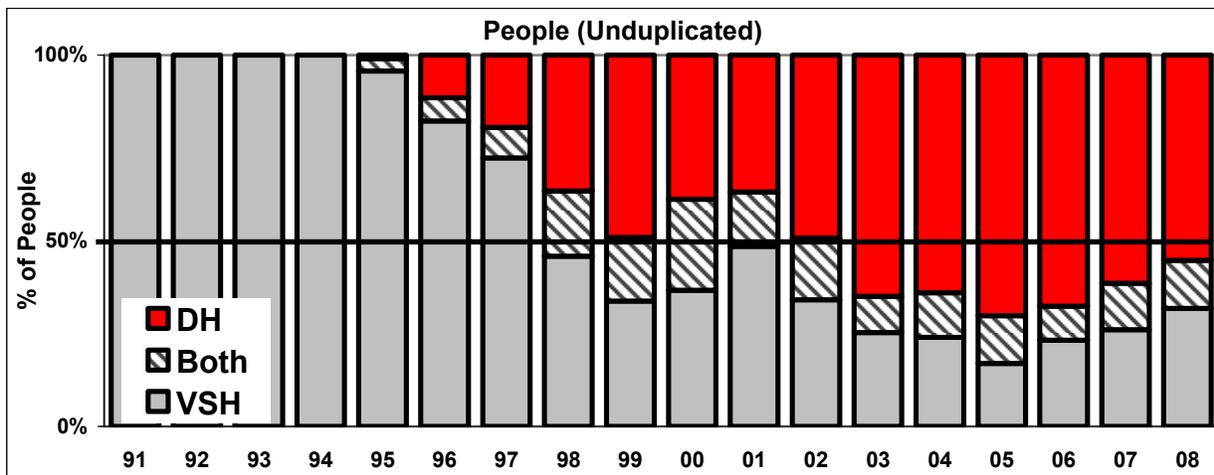
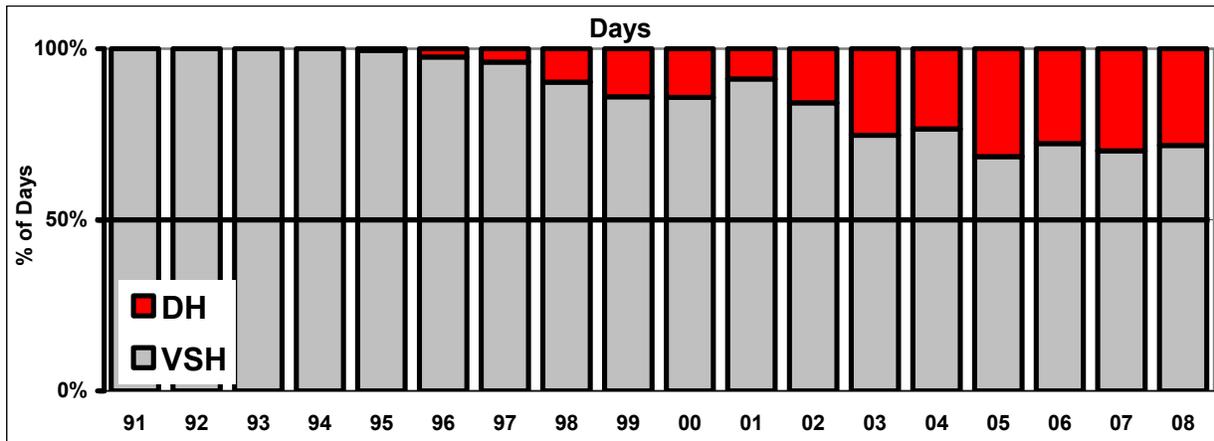
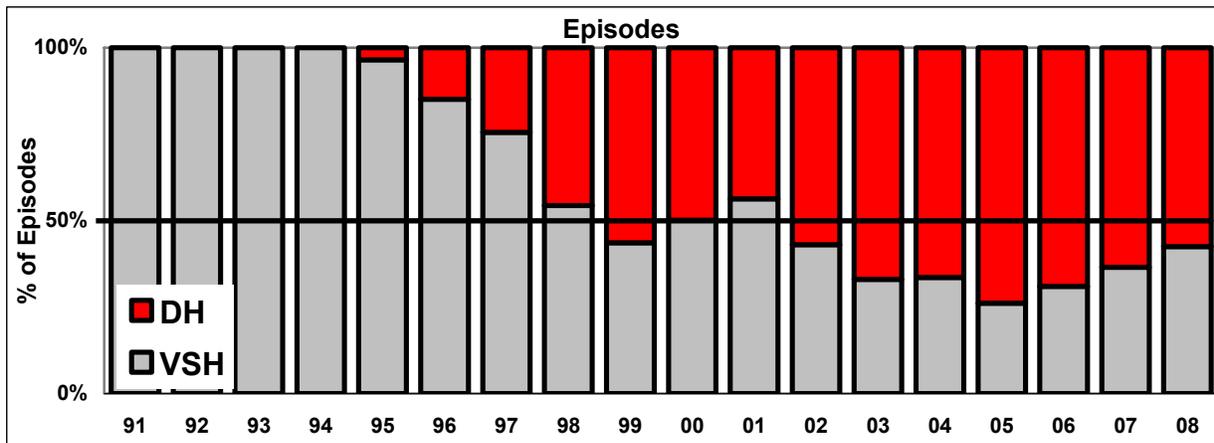
### People (Unduplicated)

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08
DH	--	--	--	--	2	26	38	106	112	90	73	130	198	203	224	253	217	188
Both	--	--	--	--	7	14	16	51	39	57	29	44	30	38	41	34	44	44
VSH	282	277	224	215	202	186	141	133	77	85	96	90	77	76	54	87	92	108
<b>Total</b>	282	277	224	215	211	226	195	290	228	232	198	264	305	317	319	374	353	340

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-FY2008



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-FY2008

### Percent of Episodes

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08
DH	--	--	--	--	4%	15%	24%	46%	56%	50%	44%	57%	67%	66%	74%	69%	63%	57%
VSH	100%	100%	100%	100%	96%	85%	76%	54%	44%	50%	56%	43%	33%	34%	26%	31%	37%	43%
<b>Total #</b>	329	327	255	241	256	282	266	388	298	327	245	358	372	396	410	448	446	456

### Percent of Days

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08
DH	--	--	--	--	0.5%	2%	4%	10%	14%	14%	9%	16%	25%	23%	32%	28%	30%	28%
VSH	100%	100%	100%	100%	99.5%	98%	96%	90%	86%	86%	91%	84%	75%	77%	68%	72%	70%	72%
<b>Total #</b>	27,450	26,568	22,575	18,115	16,290	16,111	13,214	13,254	11,617	11,841	11,734	12,554	13,204	13,119	12,257	14,029	15,453	12,463

### Percent of People (Unduplicated)

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08
DH	--	--	--	--	1%	12%	19%	37%	49%	39%	37%	49%	65%	64%	70%	68%	61%	55%
Both	--	--	--	--	3%	6%	8%	18%	17%	25%	15%	17%	10%	12%	13%	9%	12%	13%
VSH	100%	100%	100%	100%	96%	82%	72%	46%	34%	37%	48%	34%	25%	24%	17%	23%	26%	32%
<b>Total #</b>	282	277	224	215	211	226	195	290	228	232	198	264	305	317	319	374	353	340

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.