

## 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 11, 2008

RE: Involuntary Inpatient Mental Health Services: FY1991–2007

The attached graphs and tables provide an overview of the volume of involuntary inpatient mental health services provided to adults in Vermont during 1991–2007. 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.

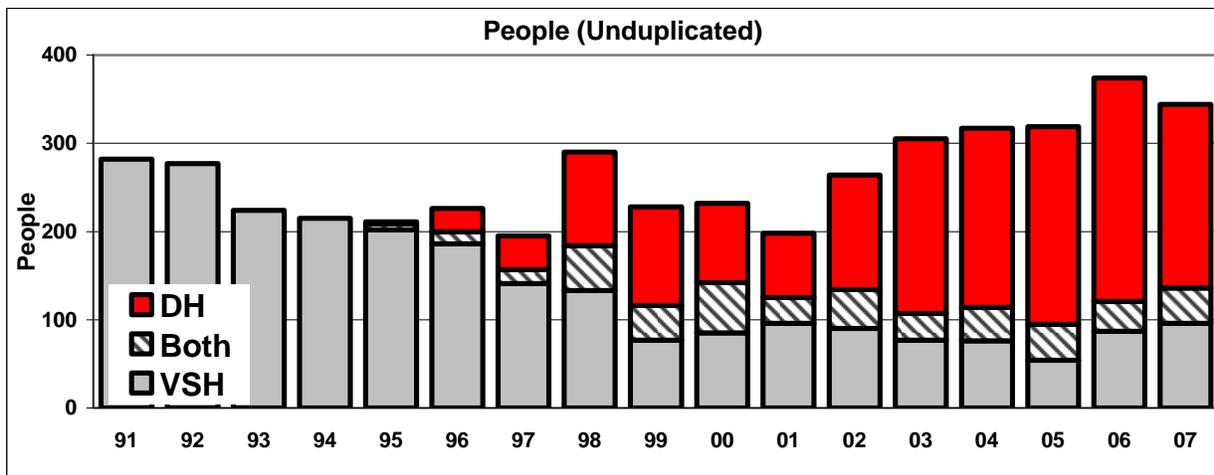
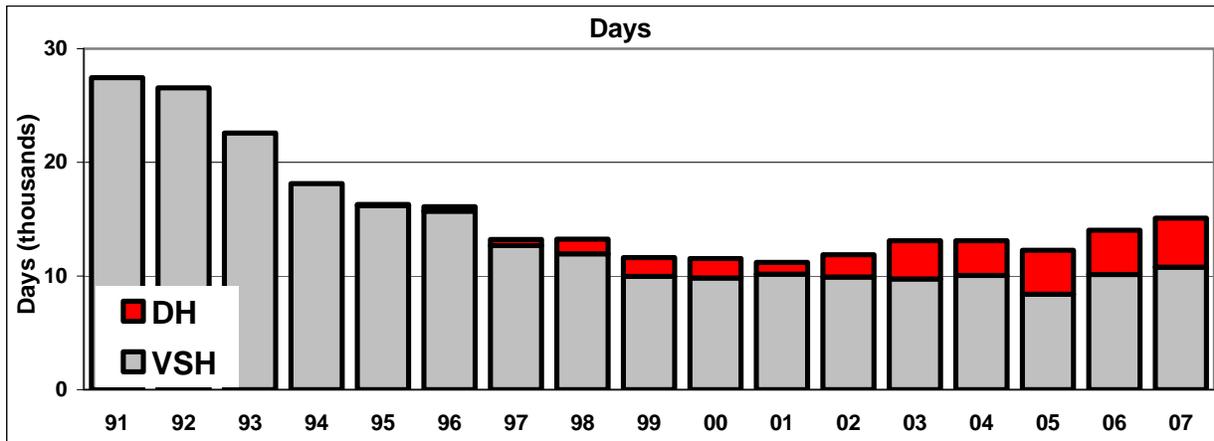
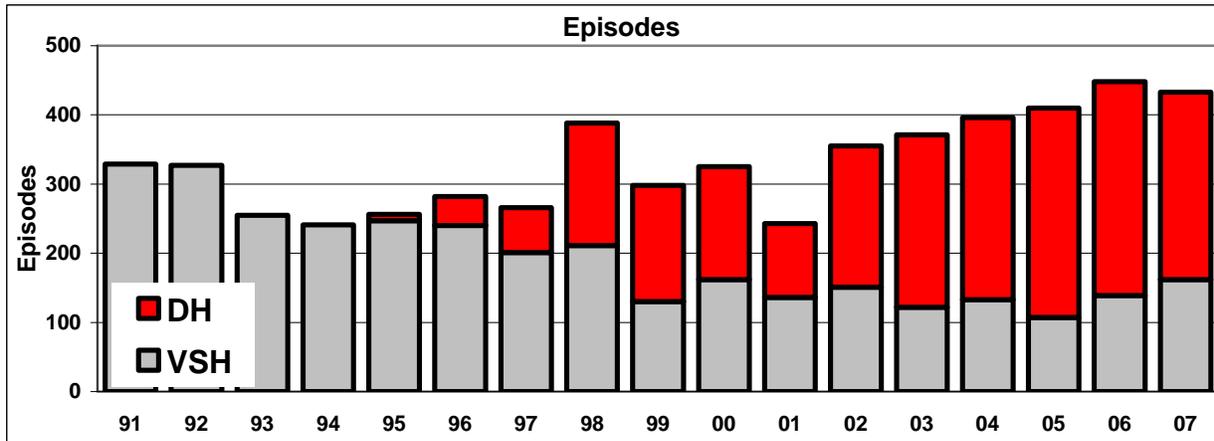
As you will see, the overall total number of episodes of involuntary care increased during this period from less than 330 in 1991 and 1992 to more than 400 in 2005 through 2007. This overall increase in number of episodes of care occurred while the number of VSH episodes was decreasing and the number of DH episodes was increasing.

During this same period, total involuntary patient days decreased from more than 27,000 days in 1991 to 11,209 in 2001 before increasing to over 15,100 in 2007. Again, VSH utilization decreased substantially while DH utilization increased substantially.

Finally, the total unduplicated number of people with involuntary inpatient care decreased steadily from 1991 to 1997 and then increased steadily from 2001 through 2007. This overall pattern was the product of a combination of decreasing numbers of people in VSH and increasing numbers of people with involuntary care in DHs. It is interesting to note that, during 2002 through 2007, between  $\frac{1}{4}$  and  $\frac{1}{2}$  of all involuntary VSH patients were also involuntary patients at a designated community hospital.

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)

# Involuntary Inpatient Mental Health Services at Designated Community Hospitals and VSH Vermont: FY1991-FY2007



This analysis includes adult patients (aged 18 and over) who received involuntary mental health services at VSH (Vermont State Hospital) and designated community hospitals (DH). 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 legal status at admission were not included. The DH analysis is based on adult patients in the involuntary inpatient data set maintained by the Vermont Department of Mental Health.

## Involuntary Inpatient Mental Health Services at Designated Community Hospitals and VSH, Vermont: FY1991-FY2007

### Episodes

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07
DH	--	--	--	--	9	42	65	177	168	163	107	204	249	263	303	309	271
VSH	329	327	255	241	247	240	201	211	130	162	136	151	122	133	107	139	162
<b>Total</b>	329	327	255	241	256	282	266	388	298	325	243	355	371	396	410	448	433

### Days

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07
DH	--	--	--	--	81	383	522	1,294	1,633	1,687	1,037	1,985	3,337	3,074	3,865	3,889	4,317
VSH	27,450	26,568	22,575	18,115	16,209	15,728	12,692	11,960	9,984	9,840	10,172	9,903	9,760	10,045	8,392	10,140	10,792
<b>Total</b>	27,450	26,568	22,575	18,115	16,290	16,111	13,214	13,254	11,617	11,527	11,209	11,888	13,097	13,119	12,257	14,029	15,109

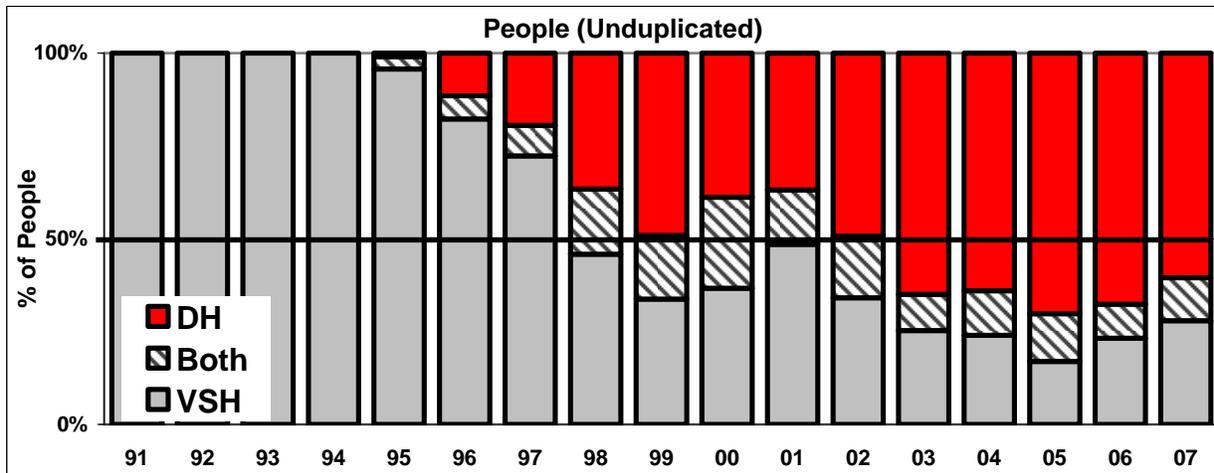
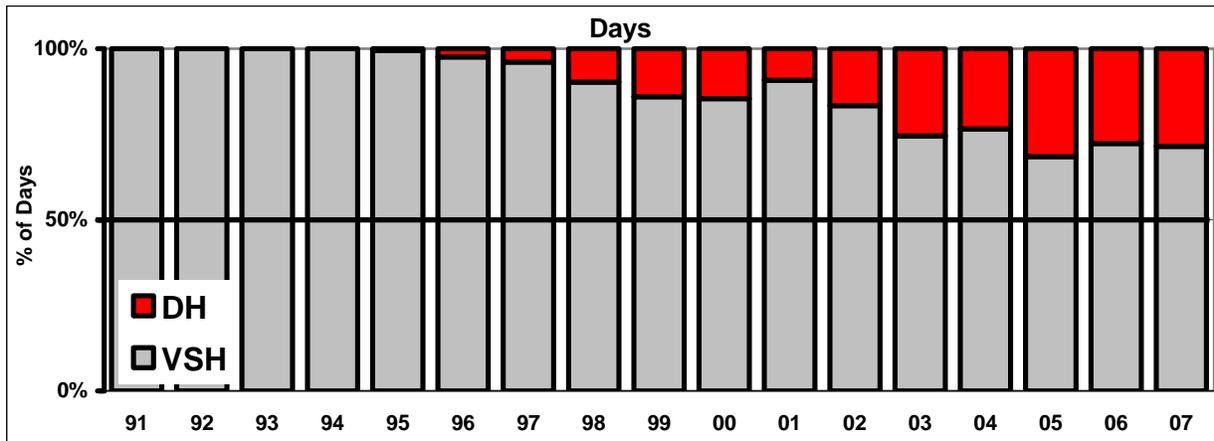
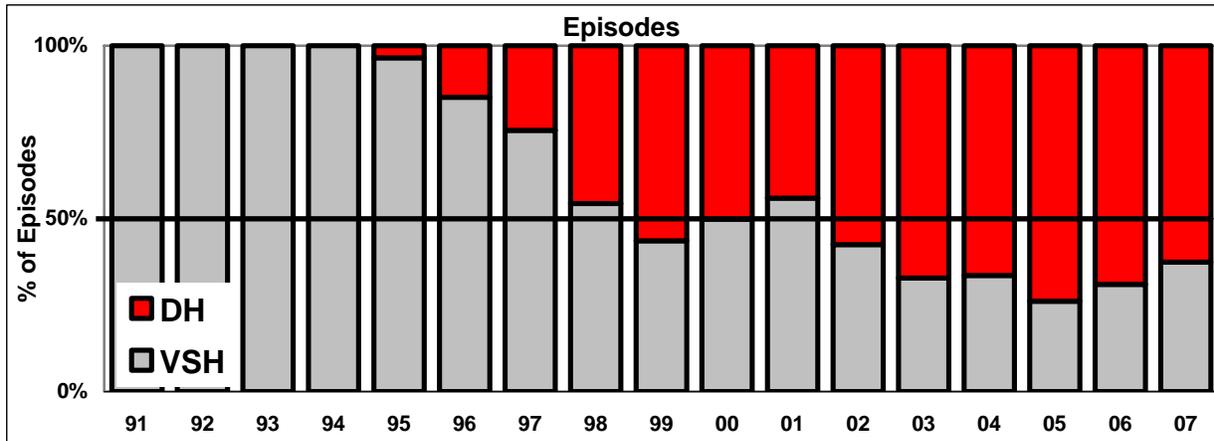
### People (Unduplicated)

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07
DH	--	--	--	--	2	26	38	106	112	90	73	130	198	203	224	253	208
Both	--	--	--	--	7	14	16	51	39	57	29	44	30	38	41	34	40
VSH	282	277	224	215	202	186	141	133	77	85	96	90	77	76	54	87	96
<b>Total</b>	282	277	224	215	211	226	195	290	228	232	198	264	305	317	319	374	344

This analysis includes adult patients (aged 18 and over) who received involuntary mental health services at VSH (Vermont State Hospital) and designated community hospitals (DH). 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. The DH analysis is based on adult patients in the involuntary inpatient data set maintained by the Vermont Department of Mental Health.

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-FY2007



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## Involuntary Inpatient Mental Health Services at Designated Community Hospitals and VSH, Vermont: FY1991-FY2007

### Percent of Episodes

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07
DH	--	--	--	--	4%	15%	24%	46%	56%	50%	44%	57%	67%	66%	74%	69%	63%
VSH	100%	100%	100%	100%	96%	85%	76%	54%	44%	50%	56%	43%	33%	34%	26%	31%	37%
<b>Total #</b>	329	327	255	241	256	282	266	388	298	325	243	355	371	396	410	448	433

### Percent of Days

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07
DH	--	--	--	--	0.5%	2%	4%	10%	14%	15%	9%	17%	25%	23%	32%	28%	29%
VSH	100%	100%	100%	100%	99.5%	98%	96%	90%	86%	85%	91%	83%	75%	77%	68%	72%	71%
<b>Total #</b>	27,450	26,568	22,575	18,115	16,290	16,111	13,214	13,254	11,617	11,527	11,209	11,888	13,097	13,119	12,257	14,029	15,109

### Percent of People (Unduplicated)

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07
DH	--	--	--	--	1%	12%	19%	37%	49%	39%	37%	49%	65%	64%	70%	68%	60%
Both	--	--	--	--	3%	6%	8%	18%	17%	25%	15%	17%	10%	12%	13%	9%	12%
VSH	100%	100%	100%	100%	96%	82%	72%	46%	34%	37%	48%	34%	25%	24%	17%	23%	28%
<b>Total #</b>	282	277	224	215	211	226	195	290	228	232	198	264	305	317	319	374	344

This analysis includes adult patients (aged 18 and over) who received involuntary mental health services at VSH (Vermont State Hospital) and designated community hospitals (DH). 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. The DH analysis is based on adult patients in the involuntary inpatient data set maintained by the Vermont Department of Mental Health.

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