

## Vermont Mental Health Performance Indicator Project

Agency of Human Services, Department of Health, Division 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 Barbara Carroll

DATE: January 19, 2007

RE: VSH Discharges Admitted to VSH and Other Psychiatric Inpatient Units

In September of 2006, we distributed a PIP report that provided rates at which Vermont State Hospital (VSH) patients were readmitted to VSH within 30 and 180 days after a VSH discharge.<sup>1</sup> This week's PIP expands the focus of our analysis of readmission rates to include admissions to other psychiatric inpatient services within 30 and 180 days after a VSH discharge. This analysis was originally conducted to meet federal Center for Mental Health Services Uniform Reporting System requirements.

The analysis reported here focuses on anonymous extracts from the VSH database and the Vermont Hospital Discharge database maintained by the Vermont Department of Health.<sup>2</sup> Extracts from the VSH database include all discharges during July 2003 through June 2004 and all admissions during July 2003 through December 2004. Extracts from the Vermont Hospital Discharge database include all psychiatric admissions of Vermont residents to general hospitals in Vermont, New Hampshire, and Massachusetts, the Brattleboro Retreat, and the Veterans' Hospital in White River, Vermont, during July 2003 through December 2004. Rates of readmission to VSH are based on direct linkage of records in the VSH database. Because the VSH and Hospital Discharge data sets do not share unique person identifiers, Probabilistic Population Estimation (PPE) was used to estimate the number of unique individuals shared by the data sets. All PPE estimates are accompanied by 95% confidence intervals in the attached graphs and tables. Because this analysis requires calculation of caseload overlaps for more precise time periods than previous applications, an enhanced set of PPE analytical procedures was used.

As you will see, the addition of admissions to other psychiatric inpatient care after VSH discharge resulted in substantial increases in readmission rates. The overall 30-day readmission rate increased from 10% (readmitted to VSH) to 15% (readmitted to any psychiatric inpatient), and the 180-day readmission rate increased from 20% (readmitted to VSH) to 34% (readmitted to any psychiatric inpatient). The inclusion of other psychiatric inpatient facilities resulted in a greater increase in readmission rates for women than for men, and in the 35 to 49 age group than in other age groups.

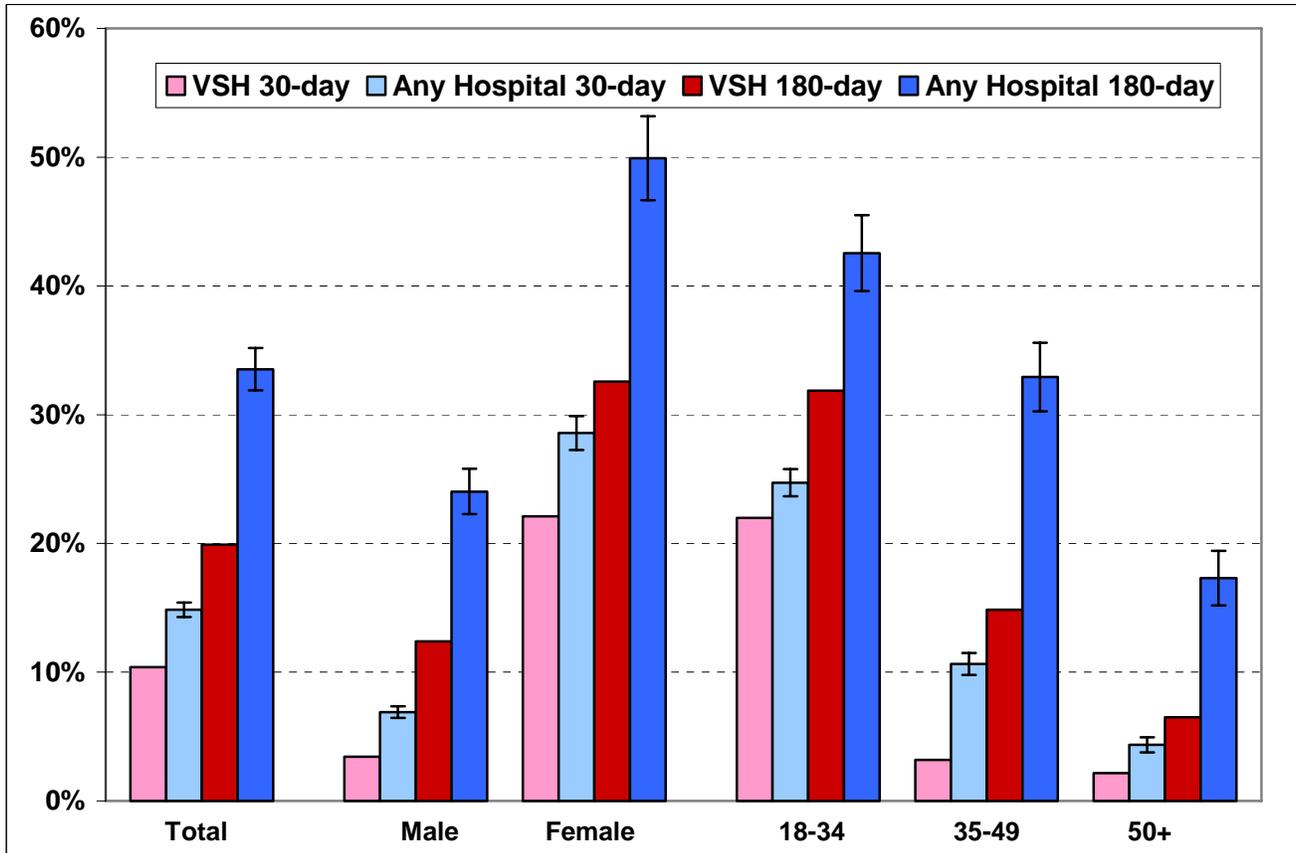
We look forward to your interpretation of these findings and your suggestions for further analysis of this comprehensive data set. Please forward your comments and suggestions to [pip@vdh.state.vt.us](mailto:pip@vdh.state.vt.us) or 802.863.7249.

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<sup>1</sup> [VSH Readmission Rates CY1982 - 2005](#) (09/01/06)

<sup>2</sup> <http://healthvermont.gov/mh/docs/res-eval/documents/2004inpatientdata.pdf>

## FY2004 Vermont State Hospital Discharges Admitted to VSH and Other Psychiatric Inpatient Units Within 30 and 180 Days After Discharge



	FY04 VSH Discharges	Readmitted Within 30 Days		Readmitted Within 180 Days	
		VSH	Any Hospital	VSH	Any Hospital
<b>Total</b>	231	10%	15% ± 0.6%	20%	34% ± 1.6%
<b>Men</b>	145	3%	7% ± 0.4%	12%	24% ± 1.8%
<b>Women</b>	84	22%	29% ± 1.3%	33%	50% ± 3.3%
<b>18 - 34</b>	91	22%	25% ± 1.1%	32%	43% ± 2.9%
<b>35 - 49</b>	94	3%	11% ± 0.8%	15%	33% ± 2.7%
<b>50+</b>	46	2%	4% ± 0.6%	7%	17% ± 2.1%

Analysis is based on anonymous extracts from the Vermont State Hospital (VSH) database and the Vermont Hospital Discharge database maintained by the Vermont Department of Health. Extracts from the VSH database include all discharges during July 2003 through June 2004 and all admissions during July 2003 through December 2004. Extracts from the Vermont Hospital Discharge database include all psychiatric admissions of Vermont residents to general hospitals in Vermont, New Hampshire, and Massachusetts, the Brattleboro Retreat, and the Veterans' Hospital in White River, Vermont, during July 2003 through December 2004. Because these data sets do not share unique person identifiers, Probabilistic Population Estimation (PPE) was used to estimate the number of unique individuals represented in each data set and the number of unique individuals shared by the data sets. Because this analysis requires calculation of caseload overlaps for more precise time periods than previous applications, an enhanced set of PPE analytical procedures was used.