

**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 Joan Mongeon

DATE: January 6, 2006

RE: Episodes of Hospitalization by Hospital and County of Residence

The geographical distribution of inpatient behavioral health care in Vermont has been a subject of concern since the early days of deinstitutionalization. This week's brief report provides an overview of the geographical distribution of inpatient behavioral health care in Vermont during 2003 by examining the relationship between patients' county of residence and the hospital from which they receive inpatient behavioral health care. This analysis was originally requested by Peter Hofstetter (Northwest Medical Center in St. Albans).

The findings reported here are based on analysis of an integrated database maintained by the Vermont Mental Health Performance Indicator Project that includes basic inpatient utilization data for Vermont adult residents receiving inpatient psychiatric or substance abuse services during 2003 in general hospitals in Vermont, New Hampshire, Massachusetts, and neighboring counties of New York, in the Vermont State Hospital, the Brattleboro Retreat, and in Veterans Administration Hospitals in Vermont and Massachusetts. For more detail, please refer to our report on Inpatient Behavioral Health Care Services Provided to Vermont Residents during 1990 – 2003 (<http://www.healthyvermonters.info/ddmhs/docs/res-eval/inpatient-data-book.html>).

More than 25 hospitals were included in the original report. The analysis reported here, however, focuses on the six hospitals that each accounted for 10% or more of all episodes of inpatient behavioral health care during 2003. These six hospitals accounted for 76% of the total episodes of inpatient behavioral health care provided to Vermont residents and include five Vermont hospitals: Fletcher Allen (20% of all episodes), Rutland Regional (17%), Brattleboro Retreat (15%), Springfield (13%), and Central Vermont (11%) as well as one New Hampshire hospital: Dartmouth Hitchcock (10%). For more detail on "Other Hospitals" please see table 2 on page 5 of this report.

Utilization patterns varied substantially among Vermont counties. Fletcher Allen accounted for more than 60% of Chittenden County hospitalizations for behavioral health care, more than 40% of Franklin Grand-Isle hospitalizations, more than 30% of Addison County hospitalizations, more than 25% of Lamoille County and more than 10% of Essex and Orleans County hospitalizations. Fletcher Allen accounted for less than 10% of episodes of hospitalizations for behavioral health care in each of the remaining 7 regions.

Rutland Regional Medical Center accounted for more than 70% of Rutland County hospitalizations for behavioral health care, and more than 20% of both Addison and Bennington County hospitalizations. Rutland Regional Medical Center accounted for less than 10% of the remaining 10 regions.

Springfield Hospital accounted for almost 50% of Windham County hospitalizations for behavioral health care, more than 20% of Windsor and Bennington County hospitalizations and more than 15% of Essex County hospitalizations, but accounted for less than 10% of the remaining 9 Vermont regions.

The Brattleboro Retreat had much broader utilization. The Retreat accounted for more than 20% of only three counties (Windham, Bennington, and Lamoille) but accounted for at least 10% of hospitalizations from every other region except Orange County (4%).

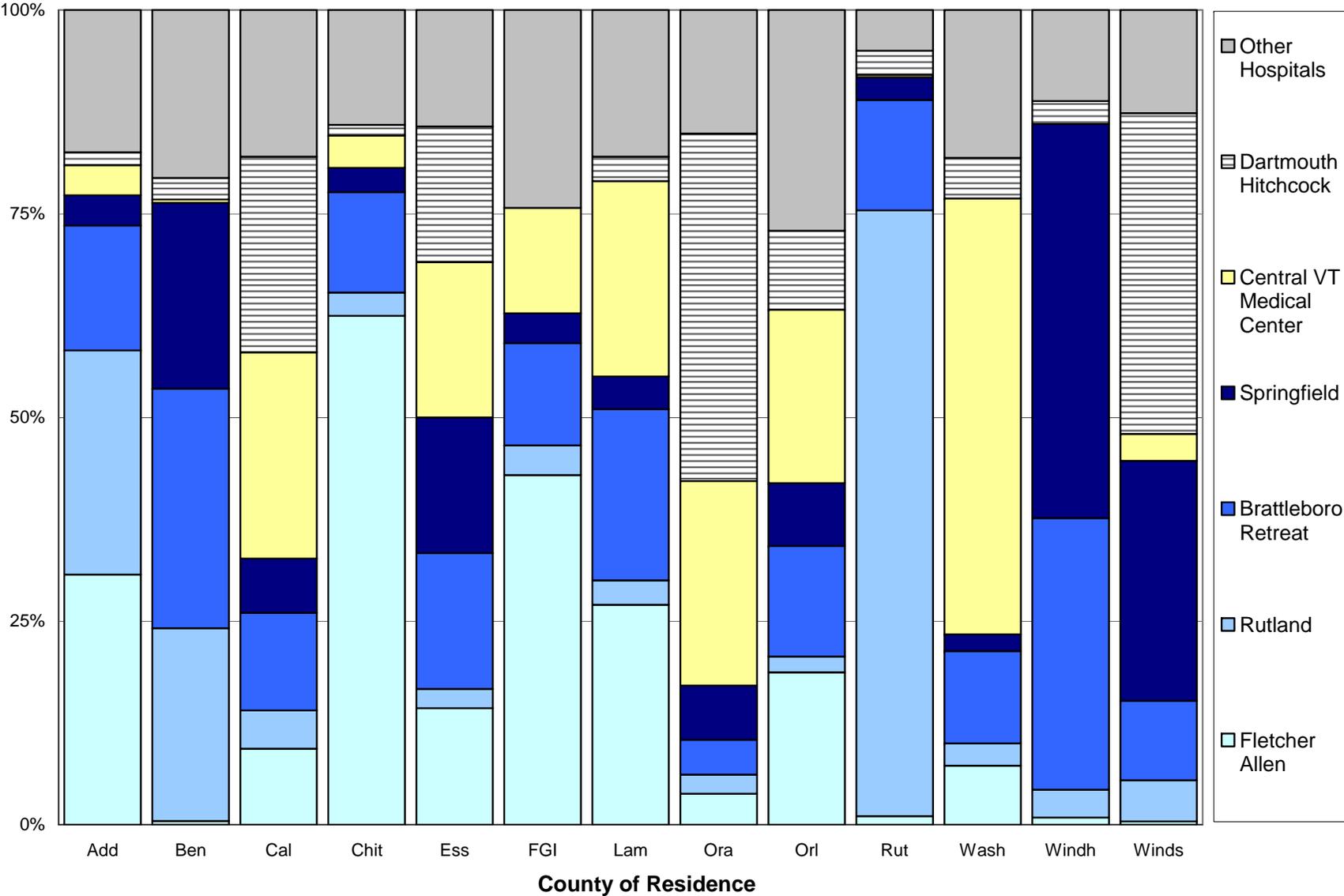
Central Vermont Medical Center accounted for more than 50% of Washington County hospitalizations, more than 20% of Caledonia, Orange, Lamoille and Orleans County hospitalizations, more than 10% of Essex and Franklin Grand Isle County hospitalizations, but accounted for less than 10% of the remaining 6 regions.

The Dartmouth Medical Center in Lebanon, New Hampshire accounted for more than 35% of Orange and Windsor County hospitalizations for behavioral health care, and more than 20% of Caledonia County hospitalizations, and more than 10% of Essex and Orleans County hospitalizations, but accounted for less than 10% of the remaining 8 Vermont regions.

Other hospitals had the greatest impact in Orleans County (27%), Franklin Grand Isle (24%), and Bennington County (21%).

We look forward to questions and suggestions for further analysis regarding the geographical patterns of inpatient behavioral health care services by Vermont residents. As always, you can contact us at [pip@vdh.state.vt.us](mailto:pip@vdh.state.vt.us) or 802.863.7249.

Episodes of Hospitalization for Behavioral Health Care CY2003  
 Adult Vermont Residents by Hospital and County of Residence



**Episodes of Hospitalization for Behavioral Health Care  
Adult Vermont Residents by Hospital and County of Residence: CY2003**

County of Residence	County Episodes by Hospital (%)							Total
	Fletcher Allen	Rutland	Brattleboro Retreat	Springfield	Central VT Medical Ctr.	Dartmouth Hitchcock	Other Hospitals	
Addison	31%	28%	15%	4%	4%	2%	17%	100%
Bennington	0%	24%	29%	23%	0%	3%	21%	100%
Caledonia	9%	5%	12%	7%	25%	24%	18%	100%
Chittenden	62%	3%	12%	3%	4%	1%	14%	100%
Essex	14%	2%	17%	17%	19%	17%	14%	100%
Franklin/Grand Isle	43%	4%	13%	4%	13%	0%	24%	100%
Lamoille	27%	3%	21%	4%	24%	3%	18%	100%
Orange	4%	2%	4%	7%	25%	43%	15%	100%
Orleans	19%	2%	14%	8%	21%	10%	27%	100%
Rutland	1%	74%	14%	3%	0%	3%	5%	100%
Washington	7%	3%	11%	2%	54%	5%	18%	100%
Windham	1%	3%	33%	48%	0%	3%	11%	100%
Windsor	0%	5%	10%	29%	3%	39%	13%	100%
All Counties	20%	17%	15%	13%	11%	10%	14%	100%

Data analysis is based on information derived from the Hospital Discharge Data Set maintained by the Vermont Department of Health and database extracts provided by the Brattleboro Retreat and Vermont State Hospital.

Vermont adults include residents age 18 and older.

**Episodes of Hospitalization for Behavioral Health Care  
Adult Vermont Residents by Hospital and County of Residence: CY2003**

Other Vermont Hospitals	County of Residence, % of County													All Counties
	Add	Ben	Cal	Chit	Ess	FGI	Lam	Ora	Orl	Rut	Wash	Windh	Winds	
Vermont State Hospital	5%	5%	5%	10%	5%	13%	4%	3%	6%	2%	9%	2%	2%	6%
VA - White River Junction	6%	3%	3%	4%		4%	1%	9%	6%	3%	9%	2%	10%	5%
Southwest Vermont		13%										0%		1%
Brattleboro Memorial												5%		1%
North Country					2%				14%					1%
Northeast VT			11%		7%									0%
Northwestern				0%		7%								0%
Copley							13%		1%					0%
Porter	6%													0%
Grace Cottage												2%		0%
Gifford								2%			0%		0%	0%
Mt. Ascutney													1%	0%
<b>Total</b>	<b>17%</b>	<b>21%</b>	<b>18%</b>	<b>14%</b>	<b>14%</b>	<b>24%</b>	<b>18%</b>	<b>15%</b>	<b>27%</b>	<b>5%</b>	<b>18%</b>	<b>11%</b>	<b>13%</b>	<b>14%</b>

Data analysis is based on information derived from the Hospital Discharge Data Set maintained by the Vermont Department of Health and database extracts provided by the Brattleboro Retreat and Vermont State Hospital.

Vermont adults include residents age 18 and older.