

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, Walter Ochs, and Katie Jones

DATE: April 8, 2011

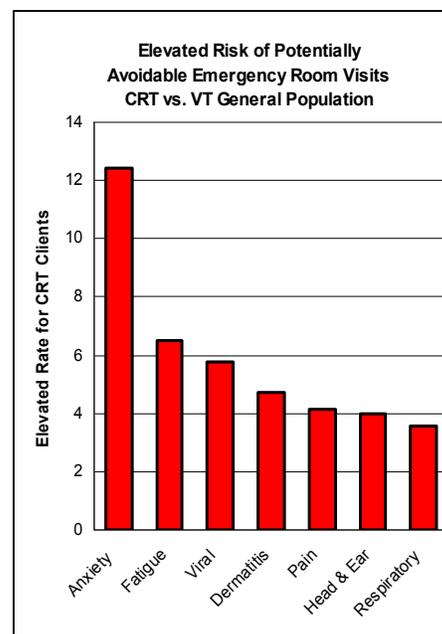
RE: Potentially Avoidable ER Visits by Diagnosis Group for CRT

This week's report is the 4th in a series¹ that provides information regarding potentially avoidable hospital emergency room (ER) visits by Vermont mental health service recipients. This report provides more detailed information about the ER diagnostic categories and numbers of individuals served by Vermont Community Rehabilitation and Treatment (CRT) programs for adults with serious mental illness during CY2008, who had potentially avoidable ER visits to hospitals in Vermont and New Hampshire during the same year. This report also compares CRT clients with potentially avoidable hospital ER utilization rates with the same rates for members of Vermont's adult population. As in previous reports, our potentially Avoidable ER visits are based on criteria provided by Onpoint Health Data². This analysis was conducted in response to questions raised at a meeting with senior clinical and management staff following publication of earlier reports on potentially avoidable emergency room visits.

This analysis used anonymous extracts from two data sets. Vermont's Uniform Hospital Discharge Data Set provided basic demographic and clinical information for all of Vermont residents with emergency visits to general hospitals in Vermont and New Hampshire during CY2008. The DMH Monthly Service Report database provided demographic and clinical information for all CRT clients served during the same period. Because these data sets do not share unique person identifiers, Probabilistic Population Estimation (PPE) was used to determine the unduplicated number of people shared by the two data sets. "Potentially avoidable emergency department visits" include visits with primary diagnostic categories for conditions that are non-urgent or treatable in primary care settings. A complete list of these diagnoses is attached.

As you will see, CRT clients were more than three times as likely as members of the general population to have potentially avoidable ER visits in each of the seven ER diagnostic categories under examination. Anxiety disorders had the greatest elevated risk (12 times the general population rate), followed by Fatigue and Viral disorders (6 times), Dermatitis (5 times), Head/Ear and Pain Disorders (4 times) and respiratory disorders (3.6 times).

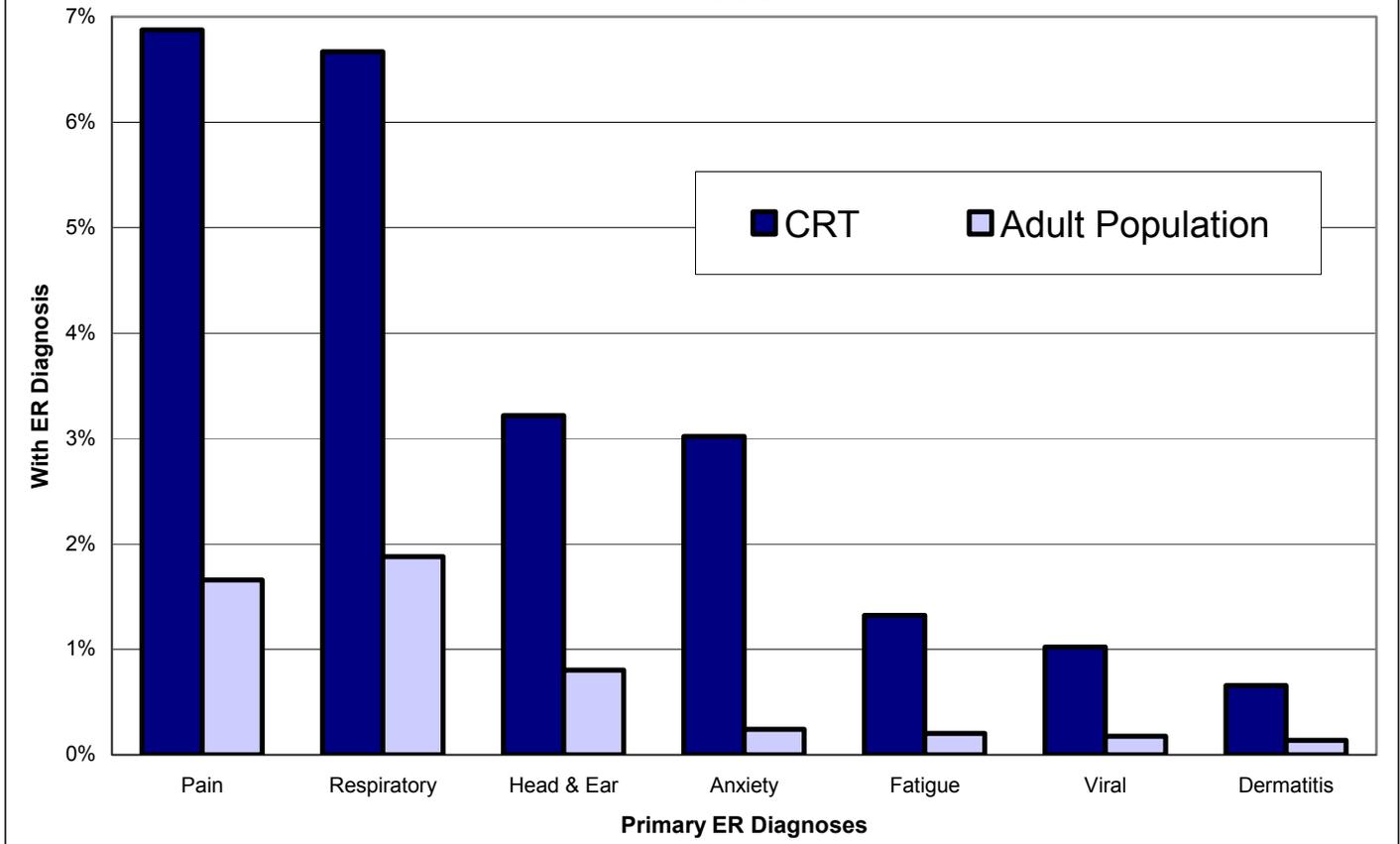
We look forward to your questions, comments, interpretation of these findings, and requests for further analyses. As always, we can be reached at pip@ahs.state.vt.us or 802-241-4049.



¹ previous reports in this series are available at:
http://mentalhealth.vermont.gov/sites/dmh/files/pip/DMH-PIP_Oct_8_2010.pdf
http://mentalhealth.vermont.gov/sites/dmh/files/pip/DMH-PIP_Sept_24_2010.pdf
http://mentalhealth.vermont.gov/sites/dmh/files/pip/DMH-PIP_Sept_3_2010.pdf

² Vermont Emergency Department Visit Study DRAFT Proposal. Analysis of Commercially Insured Population Under Age 65 Claims and Vermont Hospital Data. Prepared by Onpoint Health Data, June 2010.

Potentially Avoidable Emergency Room Utilization CRT Clients and Vermont Total Adult Population CY2008



Diagnostic Group	CRT Clients (n = 3,014)				Adult General Population (n = 492,340)				Relative Risk
	Number with Avoidable ER		Percent with Avoidable ER		Number with Avoidable ER		Percent with Avoidable ER		
Joint, Back, Limb Pain	207	± 10	6.9%	± 0.3%	8,167	± 19	1.7%	± 0.004%	4.1
Respiratory	201	± 10	6.7%	± 0.3%	9,215	± 25	1.9%	± 0.005%	3.6
Head & Ear	97	± 5	3.2%	± 0.2%	3,959	± 12	0.8%	± 0.002%	4.0
Anxiety	91	± 3	3.0%	± 0.1%	1,198	± 5	0.2%	± 0.001%	12.4
Fatigue	40	± 2	1.3%	± 0.1%	1,001	± 4	0.2%	± 0.001%	6.5
Unspecified Viral	31	± 2	1.0%	± 0.1%	868	± 4	0.2%	± 0.001%	5.8
Dermatitis	20	± 2	0.7%	± 0.0%	684	± 3	0.1%	± 0.001%	4.7

Based on analysis of the Uniform Hospital Discharge Dataset maintained by the VT Department of Health and Monthly Service Report data maintained by the VT Department of Mental Health. Includes adult (age 18 and over) Vermont residents served by emergency rooms, for diagnoses identified as non-urgent and/or treatable, in Vermont and in New Hampshire and Community Rehabilitation and Treatment (CRT) program clients served during CY2008. Adult general population rates based on 2008 Vermont Department of Health estimates. Because data sets used in this analysis do not share unique person identifiers, Probabilistic Population Estimation was used to measure caseload size and overlap (with 95% confidence intervals).

Potentially Avoidable Emergency Room Diagnostic Groups

Joint, Back and Limb Pain

719.40, 719.41, 719.42, 719.43, 719.45, 719.46, 719.47, 719.48, 719.49, 724.2, 724.5, 729.1, and 729.5

Upper Respiratory Infections, Bronchitis, Asthma and Sore Throat

034.0, 461.9, 462, 465.9, 466.0, 473.9, 490, 493.00, 493.01, 493.02, 493.10, 493.11, 493.12, 493.20, 493.21, 493.22, 493.81, 493.82, 493.90, 493.91 and 493.92

Unspecified Headache, Conjunctivitis and Ear Infection

784.0, 382.9, 380.10, 372.00, 382.00, 381.01, 381.4, 372.03 and 381.00

Anxiety

300.00 and 300.02

Fatigue

780.79

Unspecified Viral Infection

079.99

Dermatitis

691.0, 691.8, 692.6, 692.9 and 782.1

Potentially Avoidable Hospital Emergency Room Visits, as recommended by Onpoint Health Data in its June 2010 report: *Vermont Emergency Department Visit Study DRAFT Proposal. Analysis of Commercially Insured Population Under Age 65 Claims and Vermont Hospital Data.*

Includes non-admitted patients with primary emergency room diagnoses identified as non-urgent and/or treatable in primary care settings. These diagnoses include: headache; sore throat (strep); external and middle ear infections (acute or unspecified); upper respiratory infections (acute or unspecified); viral infection, unspecified; joint pain; muscle and soft tissue limb pain; lower and unspecified back pain; asthma, bronchitis (acute or unspecified), and cough; fatigue; conjunctivitis (acute or unspecified); dermatitis and rash; and anxiety (unspecified or generalized).