

Vermont Mental Health Performance Indicator Project
Agency of Human Services, Department of Health, Division of Mental Health
Weeks Building, 103 South Main Street, Waterbury, VT 05671-1601

MEMORANDUM

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

FROM: John Pandiani and Joan Mongeon

DATE: August 5, 2005

RE: Criminal Justice Involvement and Survey Response

Measures of criminal justice involvement are widely recognized as an important measure of community mental health program performance. Criminal justice involvement is among the measures required by both the CMHS Uniform Reporting System (URS) and the SAMHSA National Outcome Measures (NOMs). At present the mental health field seems to be leaning toward survey based data collection, while the substance abuse field seems to be leaning toward measures based on administrative databases for meeting these reporting requirements.

This week's PIP explores the validity of measures of criminal justice involvement that are based on consumer surveys by comparing the rate at which survey respondents were charged with a crime during the year before the survey to the rate at which survey non-respondents were charged with a crime during the same period. Rates of criminal charging for both groups are based on cross database analysis using Probabilistic Population Estimation (PPE). PPE is a statistical procedure that provides valid and reliable estimates of the number of people shared across data sets. These estimates are based on a comparison of the distribution of dates of birth observed in the data sets to the distribution of dates of birth expected in the general population.

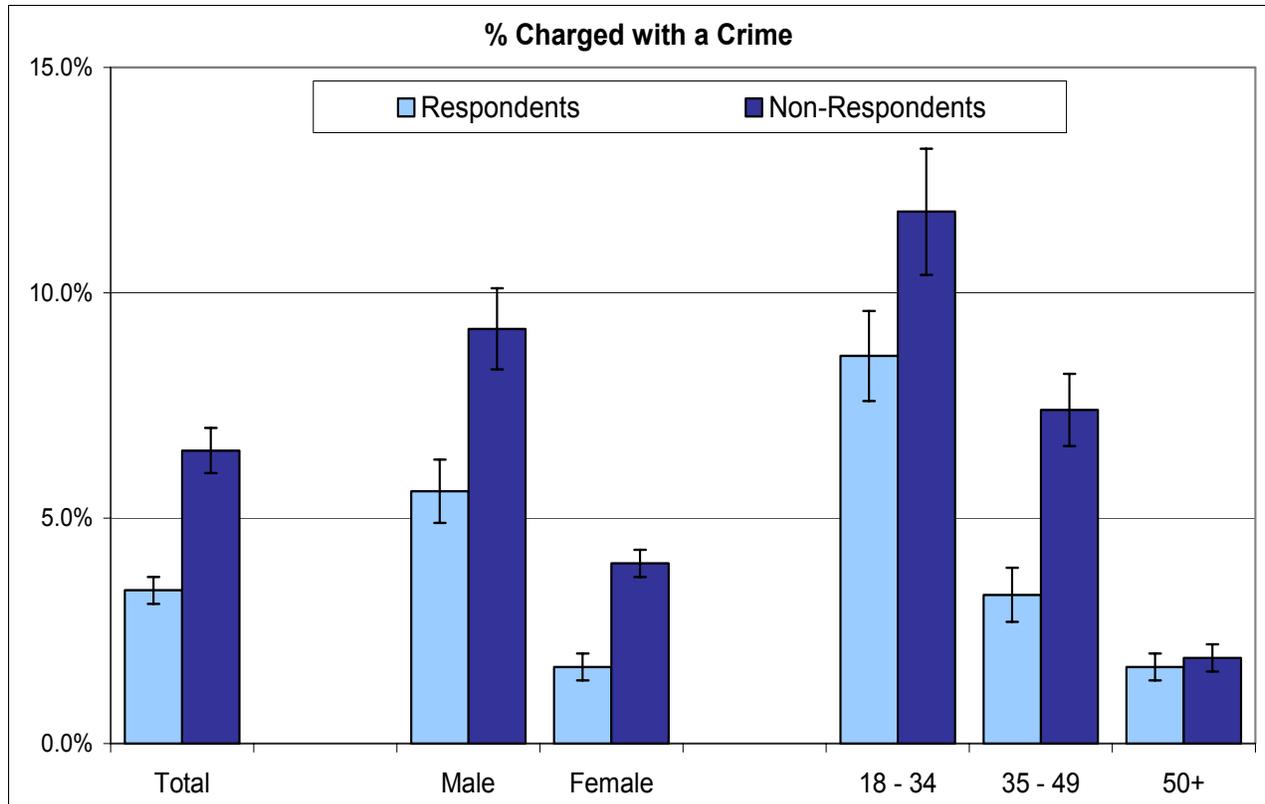
Two data sets were used in this analysis. A data set that includes the date of birth and gender of all individuals charged with a crime (felony or misdemeanor) during the year before the survey was provided by the Vermont Center for Justice Studies. A data set that includes the date of birth and gender of all respondents and all non-respondents to a survey of individuals served by community programs for adults with serious mental illness in Vermont was obtained from the Division of Mental Health client database.

Results indicate that reliance on consumer surveys to measure criminal justice involvement would result in a substantial and significant under-estimation of the true level of criminal justice involvement.

Survey non-respondents, overall, were almost twice as likely as survey respondents to have been charged with a crime (6.5% vs. 3.4%). Female survey non-respondents were more than twice as likely as female survey respondents to have been charged with a crime (4% vs. 1.7%). Male survey non-respondents were more than 50% more likely than male survey respondents to have been charged with a crime (9.2% vs. 5.6%). Non-respondents in the 35-49 age group were more than twice as likely as respondents to have been charged with a crime (7.4% vs. 3.3%), non-respondents in the 35-49 age group were about one-third more likely as respondents to have been charged with a crime (7.4% vs. 3.3%), and there was no difference between non-respondents and respondents in the 50+ age group.

We look forward to your comments, your questions, and your requests for further analyses of these data to pip@vdh.state.vt.us or 802-241-2638.

Criminal Justice Involvement Of Survey Respondents and Non-Respondents Among Adults with Serious Mental Illness



	Respondents			Non-Respondents			Elevated Risk
	Number	Charged	% Charged	Number	Charged	% Charged	
Total	1,223 ± 5	42 ± 4	3.4% ± 0.3%	1,910 ± 7	124 ± 9	6.5% ± 0.5%	1.91 ± 0.15
Male	539 ± 3	30 ± 4	5.6% ± 0.7%	908 ± 5	83 ± 8	9.2% ± 0.9%	1.64 ± 0.16
Female	685 ± 4	12 ± 2	1.7% ± 0.3%	1,002 ± 5	41 ± 3	4.0% ± 0.3%	2.35 ± 0.18
18 - 34	191 ± 2	16 ± 2	8.6% ± 1.0%	464 ± 3	55 ± 7	11.8% ± 1.4%	1.37 ± 0.16
35 - 49	506 ± 3	16 ± 3	3.3% ± 0.6%	756 ± 4	56 ± 6	7.4% ± 0.8%	2.24 ± 0.24
50+	527 ± 3	9 ± 2	1.7% ± 0.3%	690 ± 4	13 ± 2	1.9% ± 0.3%	1.12 ± 0.18

This analysis is based on data provided by the Vermont Center for Justice Studies and data from a Division of Mental Health Client survey database, a survey of individuals served by the community programs for adults with serious mental illness in Vermont.

Probabilistic Population Estimation is a statistical procedure that provides valid and reliable measures of the size and overlap of data sets that do not include unique person identifiers. These estimates are based on a comparison of the distribution of dates of birth in the data sets to the known distribution of dates of birth in the general population. This approach is particularly useful where concerns about the confidentiality of medical records limit the use of personally identifying information. For more detail, see: Banks SM & Pandiani, JA (2001) Probabilistic population estimation of the size and overlap of data sets based on date of birth. *Statistics in Medicine*. 20:1421-1430.