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## ABSTRACT

This report discusses the preliminary results of a study that investigated arrest rates for adolescents who received community mental health services under Medicaid managed care programs in Hillsborough, Florida, and four surrounding counties. Results indicate many young recipients of mental health services were arrested in Hillsborough and nearby counties during 1995-1998. Almost one-third of all 14-16 year-old boys, and almost one-fifth of all 17-19 year-old boys in Hillsborough County were arrested each year, on average. In surrounding counties, the arrest rates varied from more than one-fifth for 14-16 year-old boys to more than one-fourth for 17-19 year-old boys. Arrest rates for girls were lower, but still quite high. In Hillsborough County, 19% of 14-16 year-old girls and 11% of 17-19 year-old girls were arrested each year on average. In the surrounding counties, almost one in ten girls in both age groups were arrested each year on average. When arrest rates for the year before treatment were compared to arrest rates for the year after treatment for boys, the results were not encouraging. For both groups in both regions, arrest rates during the year after treatment were significantly higher than arrest rates prior to treatment. (Contains 14 references.) (CR)

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## ***Mental Health and Criminal Justice Caseload Overlap in Five Counties***

**Steven M. Banks  
John A. Pandiani**

### ***Introduction***

This paper reports on the preliminary results of a replication/extension of research previously conducted in Vermont (see Pandiani, Banks, Schacht, & Bagdon, 2000; Pandiani, Banks, & Geertsen, 2001; Banks, Pandiani, & Bramley, 2001; Pandiani, Schacht, & Banks, 2001). This earlier research examined treatment outcomes for young people who had received services from community mental health and other child serving agencies. The treatment outcomes that were examined included incarceration (for boys), maternity (for girls), and hospitalization for behavioral health care (for both boys and girls).

The current research focuses on arrest rates for young people who received community mental health services under Medicaid managed care programs in Hillsborough County, Florida, and four surrounding counties in Florida. We examined levels of criminal justice involvement both before and after receipt of children's services. The Florida research is part of a larger evaluation of the managed care program in terms of criminal justice involvement for both children and adults in this region.

The results of this research will provide a valuable complement to the ongoing examination of managed behavioral health care in this region that focuses on service delivery patterns and consumer evaluation of services. In combination with similar research being conducted in Vermont (Pandiani, Banks, & Schacht, 1998a; Banks, Pandiani, & Schacht, in press; Banks, Stone, Pandiani, Cox, & Morchauser, 2000; Pandiani, Banks, Bagdon, & Schacht, 2000; Pandiani, Banks, & Bramley, 2001; Pandiani, Banks, Clements, & Schacht, 2000; Rosenheck, Banks, Pandiani, & Hoff, 2000) and other states, findings will add to our understanding of criminal justice outcomes for recipients of community mental health services. Increasing concern among the general public and public policy makers about juvenile crime and violence make this a very important area of inquiry.

### ***Method***

The findings reported here are based entirely on the analysis of data from existing administrative databases using the method of Probabilistic Population Estimation (Banks & Pandiani, 2001; The Bristol Observatory, 2001).

Probabilistic Population Estimation is a statistical method for determining the number of people represented in a data set that does not include a unique person identifier. The estimate is based on a comparison of information on the distribution of dates of birth in the general population with the distribution of dates of birth observed in data sets. In order to probabilistically determine the number of people shared across data sets that do not include a common person identifier, the sizes of three populations are determined from two original data sets, and the results are compared. The number of people in each of the original data sets are the first two populations. The number of people in the data set that is formed by combining the two original data sets becomes the third data set. The number of people who are shared by the two data sets is the difference between the sum of the numbers of people represented in the two original data sets and the number of people represented in the combined data set. This occurs because the sum of the number of people represented in the two original data sets includes a double count of every person who is represented in both data sets. The number of people represented in the combined data set does not include this duplication. The difference between these two numbers is the size of the duplication between the two original data sets, the size of the caseload overlap. Because this measure relies on information in existing data bases, it does not require the commitment of substantial amounts of staff time, and it is possible to evaluate changes in systems of care that have occurred in the past.

Two data sets were used in this analysis: 1) anonymous data sets obtained from the Florida Mental Health Institute in Tampa, Florida, provided basic demographic information on all children and adolescents served during 1995 through 1998, and 2) anonymous data sets obtained from the Florida Department of Law Enforcement provided similar demographic information on all people who were arrested in the five counties under examination during the study period.

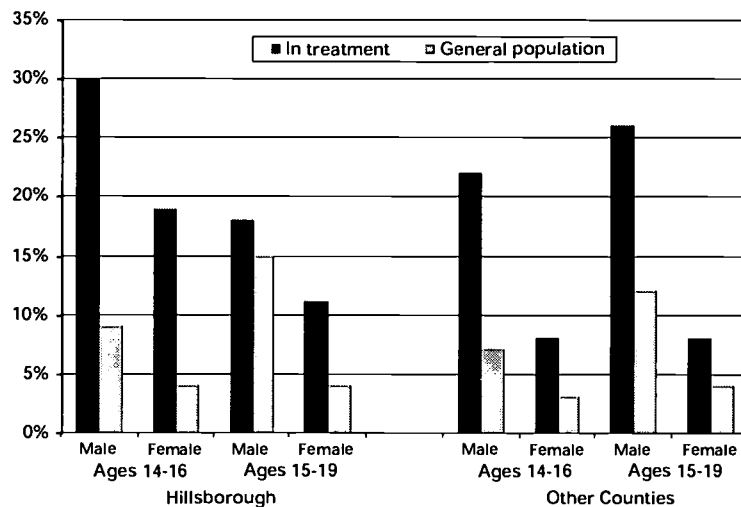
Using this approach, the proportion of young people receiving mental health services during 1995 through 1998 who were also arrested during each year was determined. These annual rates were averaged to provide an overview of rates of criminal justice involvement by mental health service recipients during the period.

In order to provide a measure that focuses explicitly on treatment outcomes, the number of young people who had been arrested during the year before the treatment year was compared to the proportion of young people who were arrested during the year after the treatment year. For this analysis, the number of young people who appear in both the 1996 mental health data set and the 1997 criminal justice data set, for instance, was determined. This is the number of mental health service recipients who were arrested during the year after they were in treatment. Dividing this number by the total number of mental health service recipients provides the arrest rate after treatment. Similar calculations using the 1995 criminal justice data set provide the arrest rate for the year prior to the treatment year.

### Results

The results of this analysis indicate that many young recipients of mental health services were arrested in Hillsborough and nearby counties during 1995 through 1998. As shown in Figure 1, almost one-third (30%) of all 14 to 16 year old boys, and almost one-fifth (18%) of all 17 to 19 year old boys in Hillsborough County were arrested each year, on average. In surrounding counties, the arrest rates varied from more than one-fifth (22%) for 14 to 16 year old boys to more than one-fourth (26%) for 17 to 19 year old boys. Arrest rates for girls were lower, but still quite high. In

Figure 1  
Arrest Rates (4-year Average)



Hillsborough county, 19% of 14 to 16 year old girls and 11% of 17-19 year old girls were arrested each year on average. In the surrounding counties, almost one in ten (8%) of girls in both age groups were arrested each year on average.

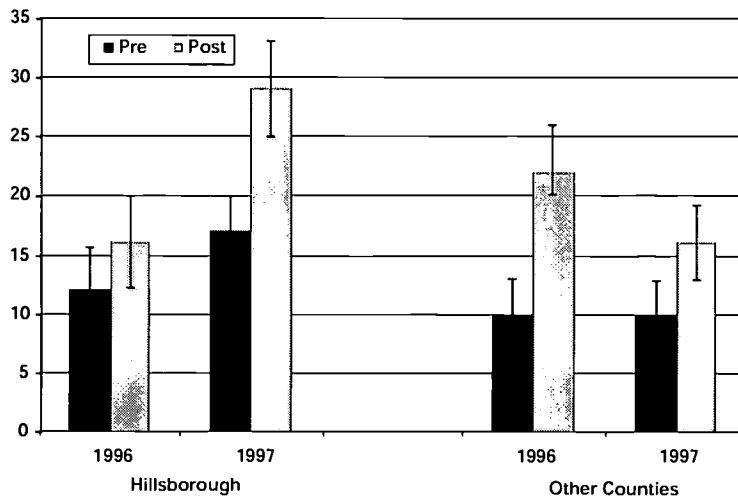
When arrest rates for the year before treatment were compared to arrest rates for the year after treatment for boys, the results were not encouraging. For both groups in both regions, arrest rates during the year after treatment were significantly higher than arrest rates prior to treatment. (See Figure 2, which plots arrests with 95% confidence intervals.)

### Discussion

These results provide a preliminary overview of criminal justice involvement by youthful recipients of mental health services in Hillsborough and surrounding counties during 1995 through 1998. A number of questions, however, remain to be answered. First, and perhaps foremost, is the question of longer term treatment outcomes. How do these arrest rates of service recipients compare to arrest rates for other young people who live in the same regions as they enter adulthood? In Vermont, youthful recipients of mental health services were found to have a much greater likelihood of getting into trouble with the law than other residents, but that the degree of elevated risk decreased as these young people grew older. This was interpreted by program administrators as evidence that the mental health programs were reaching the young people who were most in need of treatment, and that the programs were having a favorable impact on levels of criminal justice involvement.

Levels of criminal justice involvement prior to treatment provide a powerful measure of access to care for one of the groups of people who are most in need of services. From this perspective, programs that are serving more young people with a history of criminal justice involvement may be seen as doing a better job than programs that are not serving these high risk young people. Further research in this area should also investigate the impact of race and ethnicity on access to mental health services and levels of criminal justice involvement for youthful recipients of mental health services.

Figure 2  
Arrest Rates for Boys 14-16  
Pre & Post Service



Levels and types of criminal justice involvement should also be investigated to determine: 1) whether youthful mental health service recipients are arrested for more serious or less serious offences than other young people, 2) if they are more or less likely than other offenders to be convicted and incarcerated after arrest, 3) whether the criminal justice system diverts health service recipients to other more appropriate treatment options, or 4) whether the data support the criminalization hypothesis (which holds that people with mental and emotional disorders are more likely to be engulfed by the criminal justice process).

Finally, there are important advantages to Probabilistic Population Estimation when compared with more traditional methodologies that rely on special purpose data collection. Because this method relies on existing data sources, it avoids the expense of original data collection and supports large scale and long term research designs. Also, Probabilistic Population Estimation can reliably measure outcome variables after young people leave treatment and before they enter treatment. Because the analysis uses only anonymous data sets, the privacy of individuals and the confidentiality of medical records is protected (Pandiani, Banks, & Schacht, 1998b). In addition to criminal justice involvement, this approach is ideally suited to measuring a wide range of treatment outcomes for which comprehensive data sets exist.

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