

## **Medicaid Coverage and Mental Health Service Use: Is there a Preventive Effect on Jail Detentions?**

Joseph P. Morrissey<sup>1</sup>, Garry Cuddeback<sup>1</sup>, Henry J. Steadman<sup>2</sup>

January 10, 2004

Report prepared for presentation at Annual Meeting of the American Sociological Association, San Francisco, August 2004

---

<sup>1</sup>Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill

<sup>2</sup>Policy Research Associates, Inc., Delmar, New York

**ACKNOWLEDGEMENTS:** The research upon which this report is based was supported by grant funding from the John D. and Catherine T. MacArthur Foundation's Mental Health Policy Research Network and from the National Institute of Mental Health (MH63883). The data collection and analysis assistance of Kathleen Dalton, Diane Haynes, Paul Stiles, and Tim Boaz at the University of South Florida and to Chunyuan Liu and Ron Armstrong at the University of North Carolina is gratefully acknowledged. For assistance in assembling the administrative data for this study we are indebted to the Pinellas County Data Collaborative; the Pinellas County Mental Health and Substance Abuse Leadership Group; the King County Division of Mental Health, Chemical Abuse and Dependency Services; the King County Department of Adult and Juvenile Detention; the King County Department of Public Health; the Washington State Department of Mental Health; the Divisions of Medical Assistance Administration and Alcohol and Substance Abuse of the Washington State Department of Social and Health Services; and the Washington State Department of Health.

## INTRODUCTION

Research clearly shows that rates of access to health care for Medicaid beneficiaries are comparable to the privately insured population and much greater than access rates for the uninsured (Davis & Schoen, 1978; Marquis and Long, 1996). But much less is known about its effects on access and use of services by persons with a serious and persistent mental illness (SMI), especially for the many thousands each year who are arrested and detained in jails throughout the US (Horgan 1986, Taube et al., 1986; Weinick et al., 1997; Zuvekas, 1999; McAlpine & Mechanic, 2000).

Medicaid is the principal insurance program and payer of mental health services for persons with SMI (Frank, Goldman & Hogan, 2003), now amounting to over half of the public mental health services administered by the states (Smith, 2002; Buck, 2003). In a recent national study of adults, Wells and colleagues (2002) report that the likelihood of using services for alcohol, drug abuse, and mental health care was highest for Medicaid beneficiaries and lowest for the uninsured.

However, other evidence suggests that these advantages may not hold for more vulnerable segments of the Medicaid population. Using data on poor children from 1997, for example, Dubay and Kenny (2001) found that Medicaid coverage was not associated with increased use of mental health services. In another children's study, Feinberg and colleagues (2002) indicate that enrollment in a Medicaid expansion program did not significantly reduce unmet need for mental health services. Glied and colleagues (1998) found similar but somewhat inconsistent effects in a study of homeless individuals; data on a 1985 cohort

showed a positive relationship between Medicaid and mental health service use, but a 1987 cohort did not. More recently, Burt and Sharkey (2002) found that Medicaid coverage was associated with lower access to mental health services in a national cohort of single homeless people.

The issue addressed here is whether Medicaid leads to an advantage in access and receipt of services for another vulnerable group—persons with SMI when released from jail. Jails now process approximately 11.4 million persons each year and best estimates suggest that about 1 million of these persons have SMI (Morrissey et al., 2003). These individuals are among the most vulnerable and needy persons in the public mental health system.

Jails detain many persons who have co-occurring mental illness and substance abuse disorders, often with a history of irregular contacts with community mental health agencies, and revolving-door detentions. Jail stays are typically brief, with most persons released within 48 hours. However, detainees with SMI tend to stay longer than average (Axelson & Whal, 1992). Often, their mental illness is a contributing factor to their offense so that timely access to appropriate mental health services post-release may be crucial if they are to stabilize their psychiatric and functional conditions and avoid future episodes of incarceration.

Does the access and service use advantage enjoyed by the general Medicaid population extend to persons with SMI coming out of jail? Or, as reported for other vulnerable groups such as children and homeless persons, does Medicaid offer them no particular advantage relative to uninsured persons? The Medicaid

advantage presumably accrues from the basic value of any insurance program, i.e., it provides a way to pay for treatment services received. However, although the social safety net for uninsured persons has been eroding in recent years throughout the US, mental health block grant funding from the Federal government through the states to local outpatient providers and the bad debt and charity subsidies for general hospitals are ways uninsured persons can receive mental health care. But there are no published reports in the current literature as to which of these scenarios applies for persons with SMI released from jail.

Here we report findings from a new study that focuses directly on the potential advantages of Medicaid enrollment for persons with SMI released from jail. Three hypotheses are tested:

1. Persons who are SMI and on Medicaid at the time they are released from jail will have a higher probability of receiving community-based mental health services than those not on Medicaid but are SMI.
2. Persons with SMI who leave jail with Medicaid will have shorter lengths of time until first service contact in the community than those not on Medicaid but are SMI.
3. Persons with SMI who are on Medicaid at the time of release from jail will have more service utilization in the 90 days post-release than those persons with SMI not on Medicaid.

## METHODS

We use administrative data and a case-control comparison group design in two large urban counties over a two year period to assess the post-release access and use of community mental health services of SMI persons who are Medicaid enrolled versus those not-enrolled at the time of their release from jail.

### Study Sites

The study was carried out in Pinellas County, Florida and King County, Washington. These two sites were selected because of the availability of administrative data that could be linked on a person-specific basis at each site across multiple agencies (see sample description and measures below).

King County (see Table 1) has about 1.5 times as large a population as Pinellas County and a 43% higher median income. In Pinellas, the population is concentrated in two mid-size cities (St. Petersburg and Clearwater); in King County, the population is concentrated in one principal city (Seattle) but about two thirds of the population is spread across a number of small cities and unincorporated areas. Both counties are largely white; Pinellas has a somewhat larger black population, fewer Asians, and about the same percent Hispanic/Latino population as King County.

According to Bureau of Justice Statistics reports (Beck & Karberg, 2001), the Pinellas County jail ranks 33<sup>rd</sup> and the King County jail 34<sup>th</sup> on the list of largest jail jurisdictions in the US. The average daily jail census is about 18% larger in King County and the total number of jail bookings is about 37% larger than in

Pinellas County. However, although the annual bookings are about 37% greater in King County, the incarceration rate per 100,000 is greater in Pinellas County.

At the time of the study the outpatient mental health portion of Medicaid in King County was carved-out and managed by a private managed care organization under a no-risk administrative services contract with the county. Outpatient providers were reimbursed through case-rate payments for authorized service tiers; community general hospitals were reimbursed for Medicaid services through state per diem rates. The King County public mental health system consists of 4 large community mental health centers, a number of smaller specialty service providers, 1 regional state hospital, and several local general hospitals with psychiatric services.

In Pinellas County, Medicaid coverage during the study interval was provided through a fee-for-service primary care case management program (MediPass) as well as through HMOs. The public mental health system consists of 7 community mental health centers, several other specialty provider agencies, 1 regional state hospital, and 4 local general or specialty hospitals with psychiatric services.

#### Sample Description

For each county, administrative data were used to identify all Medicaid-enrolled persons with SMI who had at least one jail detention within a two-year study interval—July 1998-June 2000 in Pinellas County and January 1997-December 1998 in King County. In Pinellas County, data on jail detentions, Medicaid enrollment, and psychiatric diagnoses were obtained through the Pinellas County Data Collaborative, an interagency data repository managed by

staff at the Louis de la Parte Florida Mental Health Institute, University of South Florida. All data were used pursuant to the process established by an interlocal agreement designed to allow cross system comparisons, while ensuring data security and individual confidentiality. In King County, these same data elements were assembled by the research team as part of an on-going study based at the University of North Carolina at Chapel Hill.

A common logic of sample enumeration was followed at each site, but data sources and linkage varied somewhat. For Pinellas, the sample was limited to Medicaid enrollees participating in the MediPass (primary care case management program) to avoid the problem of missing claims data that has been found for HMOs and other capitated providers (Wooldridge and Hoag, 2001; Merwin et al., 2003). A person-specific data file identifying beneficiaries with SMI (see measures below) and Medicaid enrollment during the study interval was obtained (through the Pinellas Data Collaborative) from the state of Florida's Medicaid claims files and then linked with an incarceration file for jail stays during the study interval obtained from the Pinellas County Criminal Justice Information System.

For King County, Medicaid claims data were not available to the research team so SMI status was determined from county outpatient mental health records. A person-specific SMI file for the study interval was first run against the Medicaid files to identify enrollment status and then secondly with an incarceration file from the King County Jail to identify the final sample of persons with SMI who had jail stays. For both county samples, arrests from the last three

months of the study interval were not included because they could not be followed for a full 90-day period in the community.

A total of 1,210 persons involving 2,878 arrests/detentions were identified in Pinellas County; the corresponding numbers were 2,841 persons and 5,240 arrests/detentions in King County. All analyses presented below are based on the duplicated, total arrest sample. This allows us to determine the impact of Medicaid enrollment on service receipt following each jail release.

Within each cohort, cases are defined as arrests/detentions for persons with SMI who were enrolled in Medicaid on the day they were released from jail; controls are arrests/detentions for persons with SMI who were not enrolled on Medicaid on the day they were released from jail. It is important to note that all of the cases and controls were enrolled in Medicaid at some time during the two-year study interval. Persons in the control group are those who either lost enrollment or had not yet been enrolled on the date of their jail release. The sampling design thereby controls for Medicaid eligibility and assures that the cases and controls within each county are roughly comparable on disability status and financial need.

The study protocol was reviewed for human subject's protection by Institutional Review Boards at Policy Research Associates, Inc., the University of South Florida, and at the School of Medicine, University of North Carolina at Chapel Hill.

Table 2 presents the age, gender, race, and diagnosis profiles of the cases (Medicaid) and controls (Not-Medicaid) at each site. Overall, the Medicaid and

non-Medicaid groups within county are fairly homogeneous on these indices, but there are some between-county sample differences. The King County sample has about 8% more men and 10% more Blacks than the Pinellas sample. The average age is the same across groups and counties.

DSM-IV codes for four primary or secondary diagnoses were used to define SMI: Schizophrenia (295), Affective Disorders (296), Paranoia (297.10), and Unspecified Psychosis (298.9). The first two diagnoses account for at least 85% of the sample in both counties. However, there are some compositional differences between county samples. While the predominant diagnosis for samples in both counties is affective conditions, more individuals in the King County sample had this diagnosis (64% vs. 52%). Schizophrenia diagnoses occurred twice as often in the Pinellas County sample (45%) than in the King County sample (20%). This difference was offset somewhat by the greater frequency of “unspecified psychoses” in the King County sample (15% vs. 3%).

#### Measures of Service Access and Use

In Pinellas County, data on service contacts were available through Medicaid claims as well as through the Florida Department of Children and Families’ Information Data System Data Warehouse (IDSDW). Providers who have contracts with the Department to provide mental health and substance abuse services are required to report service utilization through the IDSDW system. To capture the full range of post-jail service contacts for persons in our sample we accessed data from Medicaid claims and from IDSDW records. In King County, we did not have access to Medicaid claims so service contacts for both Medicaid

and non-Medicaid subjects were identified through the county mental health and statewide substance abuse (TARGET) reporting systems. Contract providers in King County and the state of Washington are required to report service utilization data through these information systems.

We decided to focus our analyses on the first 90-days following jail release. Arguably, it is the first 30-days that are the critical time for persons with SMI to be connected up with community-based services. Unless follow-up services are timely its likely that they would experience further deterioration in their mental health and functional status and at high risk for re-incarceration. However, we wanted to allow for a wider interval to avoid any underestimation of service use following jail release.

Access was measured as any service contact within the 90-day window. A service contact was defined as any recorded event whether for a 15 minute clinic visit or a day-long treatment program. For Pinellas County, the number of services received was created by a count of units of service in Medicaid claims and utilization reports from the IDSDW; for King County, the count was units of service reported in the county mental health and TARGET substance abuse reporting systems. Days to first service was measured as the number of days between date of jail release and date of first service contact. Rate of service was computed by dividing the number of services received by available “exposure” days—90-days minus the number of days each subject was either incarcerated or hospitalized within this period.

### Analyses

A series of regression models were run with the four dependent variables (probability of use, days to first service, number of services used, rate of use) separately for each county with Medicaid/Not-Medicaid as the explanatory variable and seven covariates: age, gender, race, diagnosis, length of incarceration, whether a violent offense, and prior substance abuse treatment. A logistic model was run for services within 90-days (yes/no). For amount of use and rate of use, the total sample was used (including those with no service contact) in a negative binomial model. For time to first service, an ordinary least squares model was used. In each model, standard errors are adjusted for repeated observations at the individual level. Significance tests are based on these regression results. Details on these analyses are available from the first author.

We then calculated adjusted values for the Medicaid and Not-Medicaid groups on each dependent variable. Using the regression weights we then predicted back the dependent variable for each arrest, first treating all observations as if they were Medicaid and then Not-Medicaid. This yields averages for the Medicaid and non-Medicaid groups on each dependent variable that are net the effects of the covariates.

## **RESULTS**

The probabilities of any service use for Medicaid and Not-Medicaid subjects in the 90 days following release are presented in Table 3. These findings are consistent with the first study hypothesis. For each county, those released on

Medicaid have approximately the same average probability (.53 and .60) of accessing services in the 90-days following release, significantly higher than those not on Medicaid ( $p < .001$ ). This means that about half of the jail releases on Medicaid obtained at least one mental health and/or substance abuse service in the 90-days post-release. However, the relative advantage differs markedly between the two counties. For Pinellas, the advantage for the Medicaid group is 5 to 1 ( $p = .53$  vs.  $.09$ ) in comparison to the Not-Medicaid group, whereas for the King County sample it is much lower at 1.25 to 1 ( $p = .60$  to  $.48$ ).

Consistent with the second study hypothesis, the results for days to first service for those who did contact services (Table 3) also favor the Medicaid enrolled ( $p < .001$ ). The average lag time to first service contact for those in Medicaid in Pinellas County is about 3-weeks whereas it over 4-weeks for the Not-Medicaid (8-day advantage). In King, the corresponding figures are approximately 12 and 16 days for a 4-day advantage ( $p < .001$ ). Here again, there is a distinct difference between the two counties. The lag times are much shorter for King County than for Pinellas County—about 9 days shorter for the Medicaid enrolled and 13 days for Not-Medicaid.

Finally, the results for days of service and rate of service (Table 3) are displayed for the total sample (all) and for the subgroup that actually used services (users). When focusing on the total sample (all), the results are consistent with Hypothesis 3--Medicaid individuals in each county receive more days of service than Not-Medicaid (5.8 days vs. 4-days in Pinellas County and 12 days vs. 9-days in King County,  $p < .001$ ) and at a higher rate (.09 vs. .06 in

Pinellas and .17 vs. .13 in King County,  $p < .01$ ). However, when focusing on the subset of users the Medicaid advantage is muted as both groups tend to have similar days and rate of use. Even so, there still is a 2 to 1 difference between counties. SMI individuals released from jail in King County regardless of their Medicaid status received twice as many days of service at a twice faster rate than their counterparts in Pinellas County.

[CONTINUE HERE](#)

## **DISCUSSION**

The findings of this study confirm that persons with SMI on Medicaid access community services more quickly and receive more days of services than those without Medicaid in the 90 days following their release from jail. However, the Medicaid advantage is not uniform across counties. In Pinellas County, the Medicaid enrolled group had a 5:1 advantage over the Not-Medicaid group in the probability of accessing services, whereas it was only 1.25:1 in King County. But when considering the timeliness and amount of services received by Medicaid enrolled persons within 90-days of jail release, those released in King County on average received services quicker and had more service days than their counterparts released from jail in Pinellas County.

Underlying these differentials is the remarkably high rates of service access and use by the Not-Medicaid group in King County. These individuals were five times more likely (.48 vs. .09) to have a service contact in the 90 days following release from jail than their counterparts in Pinellas County. They also received services more quickly and more intensively. These findings strongly suggest that

there was a broader and more encompassing social safety net in King County in the late 1990s than there was in Pinellas County.

An alternative explanation should be acknowledged. The argument that no services were missed for controls in our enumeration is stronger in King County, which may be why controls have higher rates of access and use there as well. The service data for Pinellas County, on the other hand, were based on a merger of Medicaid claims and IDSDW service reports. For cases, service contacts were counted from both data sets, whereas for controls (Not-Medicaid) they were counted only from IDSDW. In a fee-for-service Medicaid environment there is a clear incentive for providers to report all service encounters, whereas this incentive does not exist for IDSDW which is not tied directly to provider reimbursements.

Accordingly, one possible explanation for the low service access rates in the Pinellas County non-Medicaid group is under-reported data. This could be evaluated by matching units of service in both data systems by procedure code and date, but we were unable to do this as the Medicaid claims files we accessed are tied to date of billing, not date of service. However, our review of IDSDW and Medicaid data showed that all major safety net providers of mental health services had substantial volumes of reporting in both the Medicaid and IDSDW datasets. This argues against (but does not completely rule out) an information bias interpretation.

The differential safety net interpretation is supported by our other research focusing on managed mental health care and use of jails by mentally ill persons

in King County (Morrissey et al., 2003; Domino et al., 2003). When King County introduced its Prepaid Health Plan in April 1995 as part of its behavioral health Medicaid carve-out, it established a case-rate payment system that attempted to achieve a seamless service system so that providers would serve Medicaid and non-Medicaid clients alike, i.e., according to their needs without regard to their insurance status or ability to pay. The state Medical Assistance Administration (Medicaid) allowed savings from managed care to be reallocated to serving non-Medicaid, uninsured consumers (Jarvis & Maurer, 2003).

The fee-for-service Medicaid system in Pinellas County did not contain such incentives. So the differences in probability and intensity of service use reported here mirror the differences in Medicaid reimbursement incentives in the two counties.

In the aftermath of 9/11/01 and the declining national economy the fiscal status of state and county governments throughout the US has been threatened and many health and welfare services have been trimmed. In the late 1990s, for example, King County began reducing the proportion of uninsured persons that could be carried by community providers and in 2002 all non-Medicaid enrollments in PHP were closed. It is unclear whether the robustness of the social safety net in King County described here in the late 1990s has survived these reductions. To the extent that these reductions have affected the uninsured more directly than those on Medicaid, then the large advantage for the non-Medicaid group in King County as compared to Pinellas County is likely to have diminished.

The conclusion from the main findings reported here is that there is much greater continuity of care for persons with SMI when they leave jail with Medicaid coverage than without. The policy implications for jail administrators, Medicaid directors, and mental health authorities are also clear—efforts to avoid interruptions in the Medicaid enrollment of persons with SMI will likely produce strong returns in their ability to obtain needed community treatment services. Whether the receipt of community care services actually reduces subsequent incarcerations of persons with SMI will be addressed in our further analyses.

Factors other than Medicaid surely play a role in influencing who seeks and uses mental health care. In the current study, for example, we know that 40-47% of the persons with SMI on Medicaid did not have a service contact in the 90-days following jail release. Some of these individuals may have had private insurance coverage in addition to Medicaid and any use in the private sector would not have been counted by the methods employed in this study. Some may not have had stable living situations or social supports from family or others that help to promote regular healthcare. Future efforts to improve service access for persons with SMI following jail release will have to deal with these non-insurance factors as well.

Our future reports will also explore the extent to which persons with SMI are disenrolled from Medicaid during their jail stays as has been claimed (Brown, 2001; Bazelon Center, 2001). Based on our study findings it would be indeed tragic to find that disenrollment from Medicaid does happen with any regularity,

as it is precisely this resource that helps many people with SMI to obtain needed care in the community.

The Surgeon General's Report on Mental Health (1999) has two highly salient messages for administrators and policymakers in this arena: (1) current treatments work, and (2) needy people should promptly seek professional help. This message is as true for persons with SMI as it is for others. Yet, a variety of policy and procedural barriers arising from Medicaid, criminal justice, and mental health practices appear to disrupt the receipt of timely and appropriate services for some of the most vulnerable people with mental illness. It's clear we still have a ways to go in closing the gap between what we know how to do and what we actually do for the many people with SMI who are caught up in the criminal justice system.

## REFERENCES

Axelson GL, Wahl O (1992) Psychotic versus non-psychotic misdemeanants in a large county jail: An analysis of pretrial treatment by the legal system. *International Journal of Law and Psychiatry* 15:379-386.

Bazelon Center (2001). Finding the Key to Successful Transition from Jail to Community. Washington, D.C.: Judge David L. Bazelon Center for Mental Health Law.

Beck A, Karberg J (2001) Prison and Jail Inmates at Midyear 2000. Washington DC: U.S. Department of Justice, Bureau of Justice Statistics Bulletin.

Brown C. (2001) Jailing the mentally ill. *State Government News*, April.

Buck, J. (2003). Medicaid, health care financing trends, and the future of state-based public mental health services. *Psychiatric Services* 54(7):969-975.

Burt M, Sharkey P (2002) The Role of Medicaid In Improving Access to Care for Homeless Persons. Washington DC: Urban Institute.

Davis K, Schoen C (1978) Health and the War on Poverty. Washington DC: Brookings Institution.

Domino M, Norton E, Morrissey J, Thakur N (2003) Cost shifting to Jails after a change to managed mental health care. Chapel Hill: University of North Carolina.

Dubay L, Kenney G (2001) Health care access and use among low-income children: Who fares best? *Health Affairs* 20(1): 112-121.

Feinberg E. et al. (2002) Family income and the impact of a children's health insurance program on reported need for health services and unmet health need. *Pediatrics* 109 (2): 1-10.

Frank R, Goldman H, Hogan M (2002) Medicaid and mental health: Be careful what you ask for. *Health Affairs* 22(1): 101

Glied S, Hoven C, Moore R, Garrett A (1998) Medicaid and service use among homeless adults. *Inquiry* 35: 380-388.

Horgan, C (1986). The demand for ambulatory mental health services from specialty providers. *Health Services Research* 21(2): 291-319.

Marquis MS, Long SH (1996) Reconsidering the effect of Medicaid on health care service use. *Health Services Research* 30(6):791-808.

McAlpine D, Mechanic D (2000) Utilization of specialty mental health care among persons with severe mental illness: The role of demographics, need, insurance, and risk. *Health Services Research* 35(1), Part II: 277-292.

Merwin E, Rothbard A, Stile P, Slay J, McFarland B, Bothroyd R, Shern D, Murrin M, Leff S, Wieman D, Hoover M, Stroup S, Morrissey J.(2003) Can Medicaid Data Be Used for Monitoring Mental Health Services in an Era of Managed Care?: Challenges and Proposed Solutions. Charlottesville: University of Virginia (Consortium for Evaluation of Managed Mental Health Care).

Morrissey J, Thakur N, Steadman H, Priesser J (2003) The Impact of Managed Care on the Use of Jails, Mental Health Services, and Medicaid: A Population-Based Perspective. Chapel Hill: University of North Carolina.

Smith V (2002). Making Medicaid Better: Options That Would Bring the Program up to Date in Today's Health Care Marketplace and Allow States to Continue to Participate. Report to the National Governors' Association, Health Management Associates, Lansing, MI.

Taube C, Rupp A (1986) The effect of Medicaid on access to ambulatory mental health care for the poor and near-poor under 65. *Medical Care* 24(8): 677-686.

US Surgeon General (1999) Report on Mental Health

Wells K, Sherbourne C, Sturm R, Young A, Burnam A. (2002) Alcohol, drug abuse, and mental health care for uninsured and insured adults. *Health Services Research* 37(4)1055-1066.

Wooldridge J, Hoag S (2001). Challenges to Developing and Using Encounter DATA in Five Medicaid Managed Care Programs, Princeton, N.J., Mathematica Policy Research Inc., April 2001. Report submitted to HCFA, Baltimore MD, Contact # 500 94 0047, Ref # 8240-908.

Zuvekas S (1999) Health insurance, health reform, and outpatient mental health treatment: Who benefits? *Inquiry* 36: 127-146.

Table1. Year 2000 Population, Jail, and Arrest Profiles for Pinellas County, FL and King County, WA

| <b>Indicator</b>               | <b>Pinellas County</b> | <b>King County</b> |
|--------------------------------|------------------------|--------------------|
| Total Population               | 921,482                | 1,737,034          |
| % White                        | 87.3                   | 75.7               |
| % Black                        | 9.1                    | 5.4                |
| % Asian                        | 2.1                    | 10.8               |
| % Hispanic/Latino              | 4.7                    | 5.5                |
| Median Income                  | \$37,111               | \$53,157           |
| Average Daily Jail Census      | 2,504                  | 2,953              |
| Total Jail Bookings            | 44,395                 | 60,992             |
| Incarceration rate per 100,000 | 4,818                  | 3,511              |

Table 2. Sample Demographic and Diagnosis Profiles of Jail Releases with SMI, Pinellas County (1998-2000) and King County (1997-1998)

| Indicator                    | Pinellas County |                |              |                |       |                | King County |             |              |             |       |                |
|------------------------------|-----------------|----------------|--------------|----------------|-------|----------------|-------------|-------------|--------------|-------------|-------|----------------|
|                              | Medicaid        |                | Non-Medicaid |                | Total |                | Medicaid    |             | Non-Medicaid |             | Total |                |
|                              | N               | %              | N            | %              | N     | %              | N           | %           | N            | %           | N     | %              |
| Age                          | 35.6            |                | 35.2         |                |       |                | 35.3        |             | 35.7         |             |       |                |
| Gender                       |                 |                |              |                |       |                |             |             |              |             |       |                |
| Male                         | 1254            | <b>56.6</b>    | 408          | <b>61.5</b>    | 1662  | <b>57.7</b>    | 1,081       | <b>63.7</b> | 860          | <b>69.4</b> | 1,941 | <b>66.1</b>    |
| Female                       | 961             | <b>43.4</b>    | 255          | <b>45.8</b>    | 1216  | <b>42.3</b>    | 615         | <b>36.3</b> | 380          | <b>30.6</b> | 995   | <b>33.9</b>    |
| Race/<br>Ethnicity           |                 |                |              |                |       |                |             |             |              |             |       |                |
| White                        | 1479            | <b>66.8</b>    | 483          | <b>72.9</b>    | 1962  | <b>68.2</b>    | 1,091       | <b>61.4</b> | 836          | <b>63.4</b> | 1,927 | <b>62.2</b>    |
| Black                        | 522             | <b>23.4</b>    | 128          | <b>19.3</b>    | 650   | <b>22.6</b>    | 602         | <b>33.9</b> | 413          | <b>31.3</b> | 1,015 | <b>32.8</b>    |
| Hispanic                     | 9               | <b>&lt;1.0</b> | 14           | <b>1.2</b>     | 24    | <b>&lt;1.0</b> | NA          | <b>--</b>   | NA           | <b>--</b>   | NA    | <b>--</b>      |
| Asian                        | 1               | <b>&lt;1.0</b> | 2            | <b>&lt;1.0</b> | 3     | <b>&lt;1.0</b> | 40          | <b>2.2</b>  | 37           | <b>2.8</b>  | 77    | <b>2.5</b>     |
| Other                        | 202             | <b>9.1</b>     | 36           | <b>5.4</b>     | 238   | <b>8.3</b>     | 45          | <b>2.5</b>  | 33           | <b>2.5</b>  | 78    | <b>2.5</b>     |
| Diagnoses                    |                 |                |              |                |       |                |             |             |              |             |       |                |
| Schizo-<br>phrenia<br>(295)  | 1013            | <b>45.7</b>    | 268          | <b>40.4</b>    | 1281  | <b>44.6</b>    | 700         | <b>21.5</b> | 431          | <b>18.2</b> | 1,131 | <b>20.1</b>    |
| Affective<br>(296)           | 1139            | <b>51.4</b>    | 363          | <b>54.8</b>    | 1502  | <b>52.2</b>    | 2,074       | <b>63.4</b> | 1,516        | <b>63.9</b> | 3,590 | <b>63.7</b>    |
| Para-<br>noia<br>(297)       | 0               | <b>0</b>       | 1            | <b>&lt;1.0</b> | 1     | <b>&lt;1.0</b> | 32          | <b>1.0</b>  | 25           | <b>1.1</b>  | 57    | <b>&lt;1.0</b> |
| Other<br>Psycho-<br>sis(298) | 60              | <b>2.7</b>     | 31           | <b>4.7</b>     | 91    | <b>3.2</b>     | 457         | <b>14.0</b> | 401          | <b>16.9</b> | 858   | <b>15.2</b>    |

Table 3. Average Service Use Indicators for Jail Releases with SMI by Medicaid Status, Pinellas County (1998-2000) and King County (1997-1998)<sup>a/</sup>

| Service use indicators <sup>b/</sup> | Pinellas County |                |            | King County     |                |            |
|--------------------------------------|-----------------|----------------|------------|-----------------|----------------|------------|
|                                      | Medicaid        | Non-Medicaid   | Difference | Medicaid        | Non-Medicaid   | Difference |
| Probability of any service contact   | .53<br>(2215)   | .09<br>(663)   | .44***     | .60<br>(3122)   | .48<br>(2118)  | .12***     |
| Days to first service contact        | 21.6<br>(1315)  | 29.2<br>(234)  | -7.6***    | 12.21<br>(1886) | 16.54<br>(995) | -4.33***   |
| Number of service days:<br>For users | 9.56<br>(1315)  | 10.38<br>(234) | -.82*      | 20.08<br>(1886) | 18.82<br>(995) | 1.26       |
| For all                              | 5.78<br>(2215)  | 3.97<br>(663)  | 1.81***    | 12.09<br>(3122) | 9.30<br>(2118) | 2.79***    |
| Rate of service use:<br>For users    | .15<br>(1315)   | .18<br>(234)   | -.03       | .30<br>(1886)   | .29<br>(995)   | .01        |
| For all                              | .09<br>(2215)   | .06<br>(663)   | .03        | .17<br>(3122)   | .13<br>(2118)  | .04**      |

a/ Based on duplicated sample of jail releases, not distinct persons.

b/ Each average is adjusted for age, gender, race, diagnosis, length of incarceration, whether violent offense, and prior substance abuse treatment. Numbers in parentheses are sample sizes.

\*\*\* p<.001, \*\* p<.01, \*p<.05