Washington State
Institute for
Public Policy

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OUTCOMES FOR ADULT PUBLIC MENTAL HEALTH CLIENTS IN WASHINGTON STATE: A FIVE-YEAR LONGITUDINAL ANALYSIS

INTRODUCTION

The 2001 Washington State Legislature directed the Washington State Institute for Public Policy (Institute) to conduct an ongoing study on outcomes of public mental health consumers in Washington State. Specifically, this study was meant to…

> *…assess any changes in client outcomes at two, five, and ten years. The measures tracked shall include client change as a result of services, employment and/or education, housing stability, criminal justice involvement, and level of services needed.*[1]

A report with two-year outcomes of public mental health consumers was completed in March 2007. This report focuses on five-year outcomes for adults who received public mental health services in 2004.

A recent report in this study series highlighted the characteristics and service utilization of continuous, regular, and intermittent consumers of public mental health services.[2] This report will further examine the relationship between these service utilization patterns and outcomes that can be tracked using statewide administrative data systems. These outcomes include:

- Employment stability and wage progression
- Self-reported housing status
- Criminal convictions
- Inpatient hospitalizations and emergency department visits

Summary

The Washington State Institute for Public Policy was directed by the 2001 Washington State Legislature to "conduct a longitudinal study of long-term [mental health] client outcomes to assess any changes in client status at two, five, and ten years."

This report analyzes five-year outcomes for 38,668 adults receiving public mental health services in January 2004. After five years, we found that:

- 6 percent received services continually (every month)
- 15 percent regularly utilized mental health services (every quarter)
- 11 percent had intermittent use of mental health services
- 69 percent were classified as "leaving" clients who discontinued service use

Over the five-year study period, we also found that:

- 32 percent were employed for any period of time
- 13 percent had one or more episodes of reported homelessness
- 15 percent were convicted of a misdemeanor or felony
- 33 percent had a Medicaid-paid hospital admission
- 38 percent visited the emergency department

For each of these measures, consumers with intermittent, or irregular, use of mental health services had poorer outcomes compared with other consumers. Future reports will investigate cost-effective programs and strategies to increase retention and improve outcomes.

[1] ESSB 5583, Chapter 334, Laws of 2001.
[2] While the legislative direction for this study specifies that outcome reports should be completed at two, five, and ten years, the Institute has released a number of reports related to this research effort (listed on page 12).

STUDY COHORT

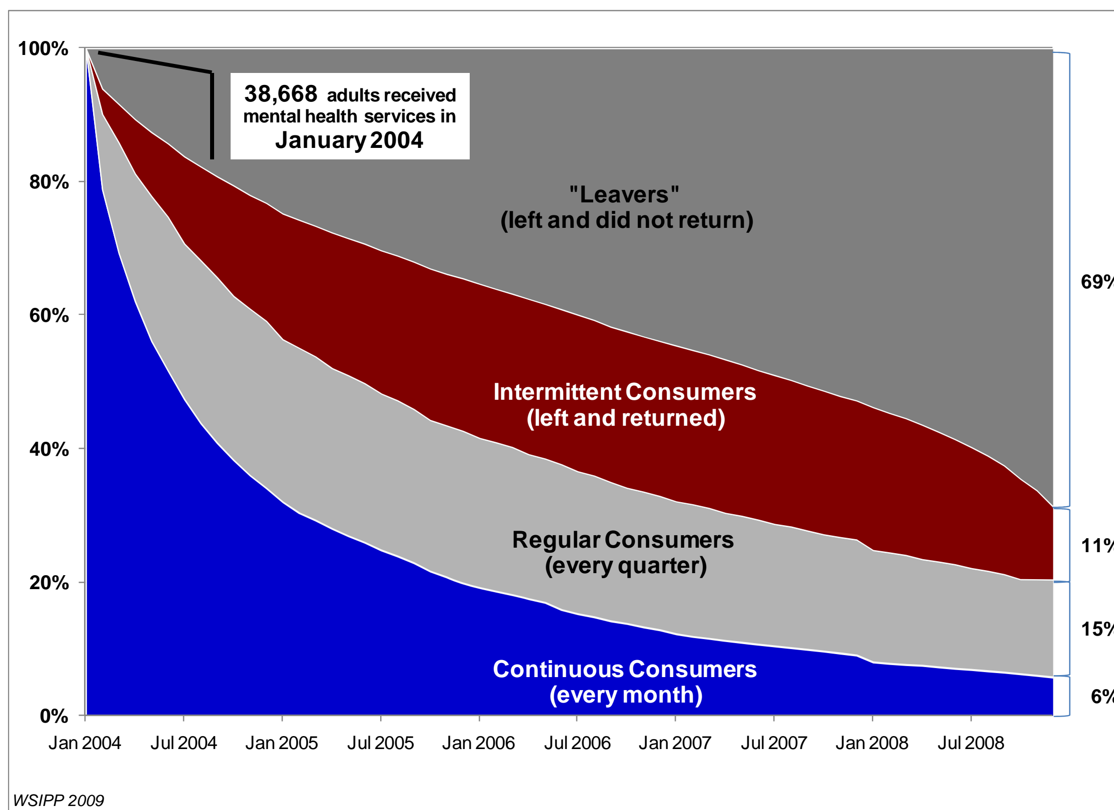
In 2008, over 118,000 individuals (86,000 adults) received services or treatment from Washington State's public mental health system. The majority of these individuals received outpatient treatment from community mental health providers. About 7,800 persons (6,923 adults) had an inpatient psychiatric admission to a community hospital or evaluation and treatment facility in 2008. And, approximately 2,200 persons (2,100 adults) were in residence at one of the state's psychiatric hospitals in 2008.

At any point in time, of course, individuals might be receiving mental health services as a new consumer or concluding treatment after an extended period of service. To follow outcomes over time, we selected a cohort, or "snapshot," of adults receiving public mental health services in January 2004. In January 2004, ***38,668 adults*** received public mental health services in Washington State.

For this analysis, we follow services and events for this cohort of consumers from January 2004 through December 2008. Over the course of five years, ongoing usage of public mental health services was categorized based on:

- Those who ***receive services continually*** (month after month). Six percent (2,233) of this cohort were *continuous consumers*.
- Those with ***regular utilization*** of mental health services (every calendar quarter). Fifteen percent (5,639) of adults with services in January 2004 were *regular consumers* after five years.
- Those with ***intermittent use*** of mental health services (gaps in service lasting more than three months). Eleven percent (4,235) of consumers could be classified as *intermittent consumers*.
- ***"Leaving consumers"*** who received mental health services for a period of time and then left the public mental health caseload. Nearly 70 percent (26,561) of adults stopped receiving services at some point during the five-year study.

Exhibit 1
Adults Receiving Public Mental Health Services in January 2004



CONSUMER PROFILES

Before examining outcomes for this January 2004 cohort, this section describes the profiles of the four groups of mental health consumers described above. In a previous analysis,[3] we found several factors that predicted regular utilization of public mental health services. For the 2004 study cohort, diagnoses of schizophrenia or bipolar, as well as more limited functioning, were related to the likelihood of continued services. Mid-aged adults (age 46 to 60) also had an increased likelihood of ongoing mental health treatment.

Exhibit 2 displays characteristics of the 38,668 adults receiving public mental health services in January 2004, according to their five-year utilization patterns. As shown on the previous chart (Exhibit 1), 6 percent of the January 2004 cohort were considered continuous consumers and 15 percent regular mental health consumers after five years. Several subgroups of this population had even higher rates of ongoing or regular mental health use. Fourteen percent of individuals with schizophrenia had continuous use of mental health services and 24 percent had regular utilization over five years. Adults with more limited functioning (as measured by the Global Assessment of Functioning—GAF) also had more continuous use of public mental health services.

Regular and consistent use of mental health services may be necessary for consumers with persistent illnesses. The goal of these services, however, is to support recovery by helping consumers gain independence and stability. The next sections explore five-year outcomes for adults receiving public mental health treatment and services.

Exhibit 2

Adults Receiving Public Mental Health Services in January 2004: Characteristics by Utilization Level

	Continuous (received services monthly)	**Regular Utilization** (every quarter)	**Intermittent Breaks** (more than three months between service)	**Leavers** (received services and did not return)	**Total**
Sex					
Male	7.2%	15.0%	11.0%	67.3%	**16,609**
Female	4.8%	14.3%	10.9%	70.0%	**22,059**
Age					
18-30	3.0%	9.7%	12.8%	74.5%	**7,746**
31-45	6.6%	15.1%	12.3%	66.0%	**14,482**
46-60	7.9%	18.1%	10.5%	63.5%	**11,401**
61-74	4.4%	16.4%	7.4%	71.8%	**3,029**
75 and older	0.9%	6.8%	2.0%	90.3%	**2,010**
Primary Diagnosis					
Schizophrenia	14.0%	23.8%	13.4%	48.8%	**10,506**
Bipolar	4.5%	15.5%	13.4%	66.7%	**6,528**
Depression/Anxiety	2.5%	11.6%	9.8%	76.1%	**15,660**
Other	1.6%	7.1%	5.9%	85.3%	**2,673**
Missing	1.0%	3.8%	7.5%	87.7%	**3,301**
Global Assessment of Functioning (GAF)					
1-40 Severe	9.0%	17.0%	12.2%	61.7%	**10,603**
41-50 Serious	6.1%	16.8%	11.7%	65.4%	**13,385**
51-60 Moderate	3.9%	13.3%	9.4%	73.4%	**7,129**
GT 60 Mild	2.3%	10.5%	9.6%	77.6%	**2,120**
Not Assessed	2.5%	7.6%	9.2%	80.7%	**5,431**
Total	**5.8%**	**14.6%**	**11.0%**	**68.7%**	**38,668**

[3] M. Burley (2008). *Who stays and who leaves? A profile of adult public mental health consumers.* Olympia: Washington State Institute for Public Policy, Document No. 08-05-3401.

EMPLOYMENT

Records from the January 2004 cohort of adult mental health consumers were merged with information on quarterly earnings from the Washington State Employment Security Department (ESD). To assess wage changes over time, we received employment data for the two years prior to January 2004 and the five years following.

At the time of observation (January 2004), seven of ten members of the study cohort had not worked at any time during the previous two years. As Exhibit 3 demonstrates, employment history varies according to previous involvement with the public mental health system. Of the study cohort, 5,023 adults could be considered new consumers (with one month or less of previous service). Among these new consumers, 57 percent had no employment in the previous two years. In contrast, 9,933 consumers had received mental health services on an ongoing basis over the previous two years. These ongoing consumers had an unemployment rate of 83 percent.

Among those consumers with any record of employment in the two years prior to 2004, average total wages were $7,900. Average earnings also varied according to the level of previous mental health services. New consumers had average previous earnings of $11,182 while ongoing consumers earned $5,471, on average, in the years prior to the study period.

Exhibit 3
Adults Receiving Public Mental Health Services in January 2004:
Prior Employment and Earnings

Employment Level in Previous Two Years	Previous Months of Mental Health Service (in last two years)				Total
	New Mental Health Consumers (0 to 1 months)	Short-Term Mental Health Consumers (2 to 12 months)	Long-Term Mental Health Consumers (13 to 22 months)	Ongoing Mental Health Consumers (23 to 24 months)	
Unemployed	2,886 (57%)	7,705 (62%)	8,436 (75%)	8,238 (83%)	**27,265 (71%)**
1 to 4 Quarters	1,124 (22%)	3,109 (25%)	1,890 (17%)	1,026 (10%)	**7,149 (18%)**
5 to 8 Quarters	1,013 (20%)	1,710 (14%)	862 (8%)	669 (7%)	**4,254 (11%)**
Total	**5,023**	**12,524**	**11,188**	**9,933**	**38,668**
Average Total Earnings (Two Years)	**$11,182**	**$8,049**	**$6,586**	**$5,471**	**$7,900**

Given the high relative unemployment and low earnings of all mental health consumers in the years prior to 2004, how did employment prospects change over the study follow-up period? Exhibit 4 shows that during the five-year follow-up (2004 to 2008), 68 percent of the study cohort was unemployed (with no quarters worked). Only 5 percent of the original study group worked for more than 16 quarters (four to five years).

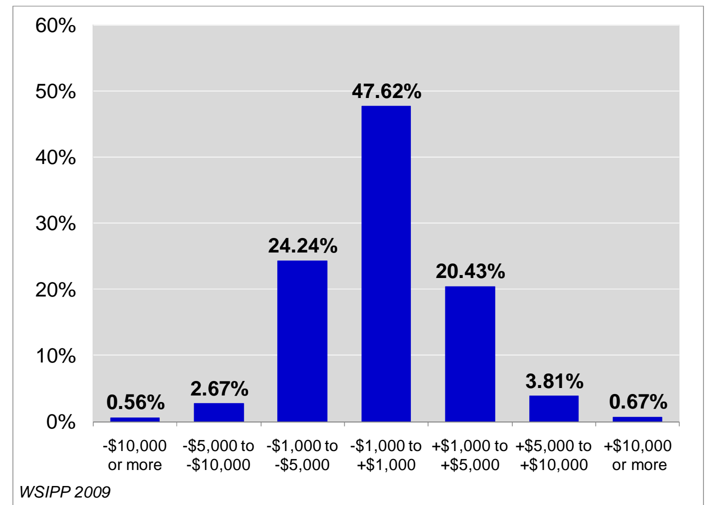
Exhibit 4
Adults Receiving Mental Health Services in January 2004: Number of Quarters Employed Over Five Years

Total Employment	Persons (Percentage)
Unemployed	26,211 (68%)
1 to 4 Quarters	5,096 (13%)
5 to 8 Quarters	2,416 (6%)
9 to 12 Quarters	1,620 (4%)
13 to 16 Quarters	1,325 (3%)
17 to 20 Quarters	2,000 (5%)
Total	**38,668**

For those consumers with employment activity, we examined changes in earnings between the period prior to the study (2002 to 2003) and the end of the outcome period (2007 to 2008). For the entire cohort of 38,668 adults, 27 percent (14,372) had employment in either time period (or both). Exhibit 5 shows changes in earnings between both periods for these individuals.

About half of all employed consumers had little change (less than $1,000) in overall earnings at the end of the follow-up period. As Exhibit 5 indicates, the number of persons with wage gains of more than $1,000 was offset by persons who saw decreased wages when observed after five years.

Exhibit 5
Adults Receiving Mental Health Services in January 2004: Changes in Earnings After Five Years



This analysis shows persistently low employment rates for adult consumers of public mental health services. Continuous and regular consumers of public mental health services also had employment rates much lower than those who left services and did not return. Exhibit 6 displays five-year employment outcomes for those groups of consumers described previously (page 2).

Exhibit 6
Adults Receiving Mental Health Services in January 2004: Employment by Utilization Level

Utilization Level	Total	Employed in 2008	Mean Earnings
Continuous (received services monthly)	2,233	233 (10.4%)	$5,050
Regular (every quarter)	5,639	654 (11.6%)	$5,817
Intermittent (service breaks of three months between service)	4,235	620 (14.6%)	$5,221
Leavers (received services and did not return)	26,561	5,044 (19.0%)	$12,326
Total	**38,668**	**6,551 (17.0%)**	**$10,745**

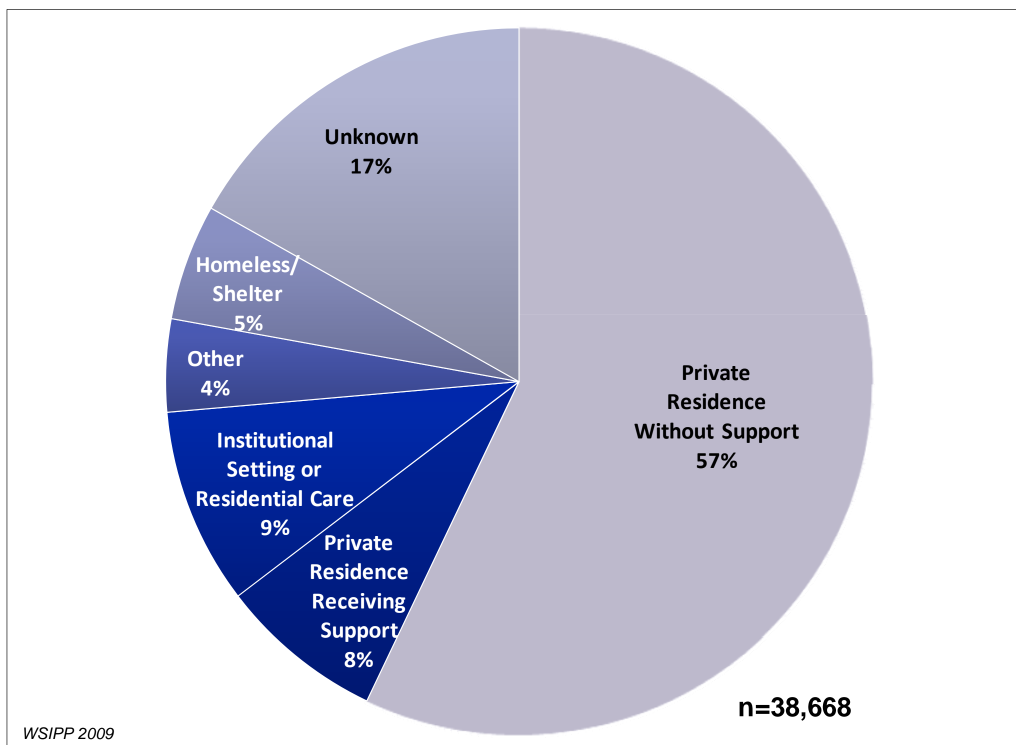
Lower overall employment for continuous or regular mental health consumers should not necessarily be interpreted to mean that services are not effective. As shown in previous reports, these regular consumers have more serious diagnoses and lower functioning scores. Since a suitable comparison group is not available for this longitudinal study, we cannot measure how treatments or services received contributed to these outcomes. The goal of this research, therefore, is to provide a benchmark for various outcomes of public mental health consumers and examine how different subgroups of consumers fare over time. The next section looks at another important outcome—housing stability.

HOUSING AND LIVING SITUATION

Washington does not have information systems that track individual housing situations. Therefore, once a consumer discontinues mental health services, we cannot track changes in living situations. While individuals are receiving services, however, consumers periodically report where they have been living for the last 30 days. Exhibit 7 shows the most recent living situations for all adults receiving public mental health services in 2004.

Nearly 60 percent of the study cohort lived in a private residence and did not report receiving any support. Nine percent of the cohort lived in a setting with 24-hour residential care (i.e. group home or treatment facility) or an institutional setting (skilled nursing, inpatient care, or state hospital).

Exhibit 7
Adults Receiving Mental Health Services in January 2004: Self-Reported Living Situation



At the time the study cohort was selected, 2,051 individuals (5 percent) reported being homeless. However, over the course of the five-year follow-up period, 4,782 individuals (13 percent) had at least one reported episode of homelessness while receiving mental health services. For this population, we investigated how this homeless episode ended. While receiving public mental health services, 52 percent (2,481 persons) found housing after a period of homelessness. Unfortunately, we can only observe residential changes while receiving public mental health care—we do not know the living situation of individuals after they leave the public mental health system.

Exhibit 8 shows another potential housing outcome for consumers in the study cohort—consistent residential placement. These individuals reported living in a private residence, residential care, or institutional setting for the entire time they received public mental health care. That is, they did not have any episodes of homelessness or an unknown housing status.

Exhibit 8
Adults Receiving Mental Health Services in January 2004: Consistent Residential Living Situation by Service Utilization Level

Utilization Level	Total	Private Residence or Institutional Care
Continuous (received services monthly)	2,233	1,158 (52%)
Regular (every quarter)	5,639	2,570 (46%)
Intermittent (service breaks of three months between service)	4,235	900 (21%)
Leavers (received services and did not return)	26,561	11,337 (43%)
Total	**38,668**	**15,965 (41%)**

As Exhibit 8 shows, about half of all continuing and regular consumers lived solely in residential settings during the study period. Only one in five intermittent clients, however, reported this level of housing stability. Again, we do not know the housing status of intermittent or leaving mental health consumers after they discontinue services, but, consumers who left mental health care and returned had far greater housing instability compared with others in the study cohort. Based on employment levels and reported housing stability, individuals with long gaps in mental health services may be at higher risk of poor outcomes. The next section further examines this relationship by following criminal justice outcomes for the study cohort.

Criminal Justice

A recent report on community re-entry for incarcerated mentally-ill offenders notes that "Washington State is not alone in its struggle to manage and serve justice-involved persons with mental illness, as all states are being challenged by the large and increasing numbers of persons with mental illness…who come into contact with the criminal justice system."[4] In the study cohort examined here, the level of criminal involvement was also significant. Among the 38,668 adult consumers receiving services in January 2004, 36 percent (14,016) had at least one criminal conviction prior to the study period.

In this section, we examine criminal convictions for public mental health clients. Conviction-level data provide the most consistent and accurate indication of criminal activity. Exhibit 9 displays the lifetime conviction rates and number of convictions in the two years prior to January 2004.

Exhibit 9
Adults Receiving Mental Health Services in January 2004: Criminal Conviction Rate

Crime Category	Lifetime Convictions (Percentage)	Convictions in Previous Two Years (Percentage)
Total Felony	6,527 (16.9%)	1,800 (4.7%)
Felony Violent	2,666 (6.9%)	611 (1.6%)
Felony Drug	2,436 (6.3%)	584 (1.5%)
Felony Other	3,679 (9.5%)	749 (1.9%)
Total Misdemeanor	9,735 (25.2%)	3,792 (9.8%)
Total Convictions	**14,016 (36.2%)**	**5,478 (14.2%)**

Source: WSIPP CJS database.
Note: Individuals may appear in more than one category.

[4] J. Morrissey & G. Cuddeback (2008). *Using DSHS's integrated database to examine criminal justice - mental health issues.* Chapel Hill: Cecil G. Sheps Center for Health Services Research, p. 1.

In the two years before the study period, about 14 percent of the cohort had a prior criminal conviction in Washington State. One in ten public mental health consumers had a misdemeanor conviction in the previous two years. Most often, previous crimes included convictions for theft, assault, or driving while intoxicated, as shown in Exhibit 10.

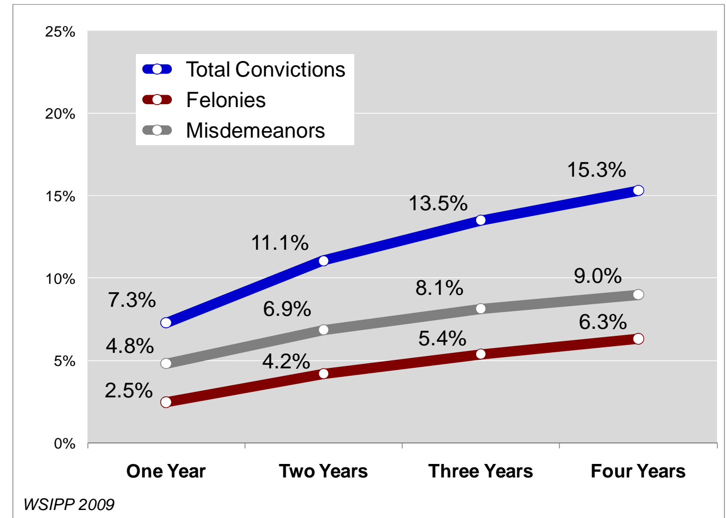
Exhibit 10
Adults Receiving Mental Health Services in January 2004: Most Serious Crimes

Most Serious Conviction in Previous Two Years	Total (Percentage)	Cumulative Percentage
Theft/Fraud/Larceny (M)	688 (13%)	12.8%
Assault (M)	602 (11%)	24.1%
Driving While Intoxicated (M)	495 (9%)	33.3%
Assault/DV Related (M)	424 (8%)	41.2%
Theft/Fraud/Larceny (F)	385 (7%)	48.4%
Assault (F)	334 (6%)	54.7%
Possession (F)	296 (6%)	60.2%
Harassment/DV Petition (M)	294 (5%)	65.7%
Criminal Conduct (M)	228 (4%)	69.9%
Drug Delivery (F)	178 (3%)	73.3%
Trespass (M)	162 (3%)	76.3%
Drug Possession (M)	154 (3%)	79.1%
Domestic Violence (F)	146 (3%)	81.9%
Burglary (F)	110 (2%)	83.9%
Destruction of Property (M)	102 (2%)	85.8%
Alcohol (M)	74 (1%)	87.2%
Destruction of Property (F)	68 (1%)	88.5%
Prostitution (M)	54 (1%)	89.5%
Auto Theft (F)	45 (1%)	90.3%
Other (F)	244 (5%)	94.9%
Other (M)	274 (5%)	100%

Note: M = misdemeanor; F = felony

Over the course of the five-year follow-up, criminal convictions remained at similar levels. About 7 percent of the cohort (2,816) had a criminal conviction within one year. Five-year outcomes were not possible to track, since one year must be added to the follow-up for cases to be adjudicated. However, after four years, the total criminal conviction rate for the cohort had risen to 15 percent (Exhibit 11).

Exhibit 11
Adults Receiving Mental Health Services in January 2004: Most Serious Crimes

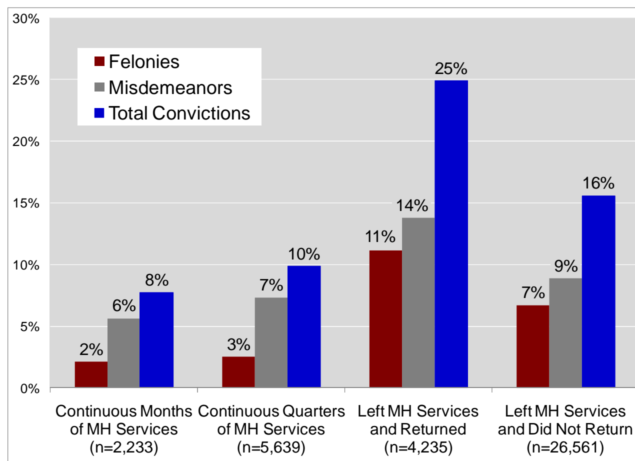


Source: WSIPP CJS database

Conviction rates vary for consumers with different levels of mental health service utilization. Consumers who received public mental health services on a continual basis (every month or every quarter) had fewer criminal convictions than those who left services or left and returned. Exhibit 12 illustrates this difference. After four years, between 8 and 10 percent of continuous public mental health consumers had a criminal conviction.

Adult mental health consumers who used services intermittently also had much poorer outcomes when compared with other consumers. Twenty-five percent of those with long service breaks (left and returned to treatment) had at least one criminal conviction after four years. Eleven percent of these consumers had a felony conviction, nearly twice the rate of other adults in the cohort.

Exhibit 12
Adults Receiving Mental Health Services in January 2004: Four-Year Conviction Rates by Mental Health Service Utilization Level



WSIPP 2009

As shown previously (Exhibit 9), 5,478 members of the study cohort had a criminal conviction in the two years prior to January 2004. Over the next four years, we found that 51 percent of these individuals (2,794) had a repeat criminal conviction. Again, intermittent consumers had a higher recidivism rate than other cohort members. Exhibit 13 displays recidivism rates for consumers with a previous criminal offense.

Exhibit 13
Adults Receiving Mental Health Services in January 2004: Recidivism Rate by Service Utilization

Utilization Level	Total	Previous Conviction	Re-convicted After January 2004
Continuous (received services monthly)	2,233	150	67 (45%)
Regular (every quarter)	5,639	510	201 (39%)
Intermittent (service breaks of three months between service)	4,235	808	500 (62%)
Leavers (received services and did not return)	26,561	4,010	2,026 (51%)
Total	**38,668**	**5,478**	**2,794 (51%)**

It would be premature to claim that the lower conviction rate and reduced recidivism of continuous public mental health consumers are a direct result of services. Consumers who are more likely by nature to engage in mental health treatment may be less likely to engage in criminal behavior. Without a suitable comparison group, assertions of the effectiveness of services cannot be made reliably.

The relationship between service utilization and the outcomes explored here does, however, provide an indication of which consumers may be at higher risk of experiencing adverse outcomes. Many of these outcomes place a significant strain on public resources. To the extent that high-risk individuals can be identified and cost-effective services and treatments can be targeted to these individuals, many of these poor outcomes can be improved. The next section looks at the final outcome analyzed for this cohort—hospitalizations and emergency department visits.

Hospitalizations/Emergency Department

A recent report completed by the Institute showed that individuals who frequently visited emergency departments were more likely to be patients with a mental health or substance abuse (MHSA)-related diagnosis. In addition, the most expensive Medicaid claims at emergency departments disproportionately involved cases with an MHSA disorder.[5]

For our 2004 cohort of public mental health consumers, we can examine Medicaid fee-for-service (FFS) claims for inpatient hospital admissions and emergency department visits. Most (over 80 percent) of the public mental health caseload qualifies for Medicaid services, so these claims are a useful indicator of hospital activity for the study cohort.

[5] M. Burley (2009). The costs and frequency of mental health-related hospitalizations in Washington State are increasing. Olympia: Washington State Institute for Public Policy, Document No. 09-04-3401.

In the two years prior to the observation period (2002 to 2003), 24 percent of the adults in the study cohort had an inpatient admission to a hospital in Washington State. Even more adults (34 percent) had visited an emergency department in the two years prior to 2004 (see Exhibit 14).

Exhibit 14
Adults Receiving Mental Health Services in January 2004: Prior Medicaid-Paid Emergency Department Visits

Emergency Department Visits in Two Years Prior to 2004	Persons	Percentage
0	25,416	66%
1 or more	13,215	34%
1 or 2	6,873	18%
3 to 5	3,260	8%
6 or more	3,082	8%
Total	**38,631**	

Note: Medicaid records could not be matched to 37 individuals.

While previous hospitalizations and emergency department visits show a high level of hospital activity, the more relevant question involves how these visits correspond to the utilization of public mental health services. To answer this question, we looked at hospital admissions and emergency department visits for consumers based on utilization patterns over five years. Exhibit 15 includes the groups discussed previously: continuous, regular, intermittent, and leaving mental health consumers. Between 2004 and 2008, 33 percent of study the cohort had an inpatient hospital admission and 38 percent had one or more visits to the emergency department.

Over the five-year study period, adult mental health consumers who received continuous (monthly) services had the lowest rate of emergency department visits (33 percent). Consumers who left and received services for a shorter period of time had the lowest hospitalization rate (30 percent).

Exhibit 15
Adults Receiving Mental Health Services in January 2004: Subsequent Hospital and Emergency Department Visits

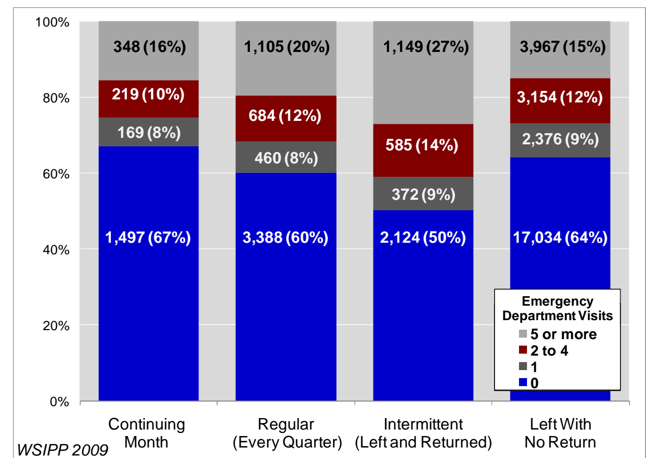
Utilization Level	Hospital Admissions	Emergency Dept. Visits	Total Persons
Continuous (received services monthly)	793 (36%)	736 (33%)	**2,233**
Regular (every quarter)	2,273 (40%)	2,249 (40%)	**5,637**
Intermittent (service breaks of three months between service)	1,884 (45%)	2,106 (50%)	**4,230**
Leavers (received services and did not return)	7,902 (30%)	9,497 (36%)	**26,531**
Total	12,852 (33%)	14,588 (38%)	**38,631**

Note: Medicaid records could not be matched to 37 individuals.

Again, consumers receiving mental health services on an intermittent, or infrequent basis, had poorer health-related outcomes than other adults in the study cohort. Forty-five percent (1,884) of intermittent consumers had a hospitalization during the five-year follow-up period and half (2,106) visited the emergency department during this time.

In addition to having the highest emergency department utilization rates, intermittent consumers were also more likely to have multiple visits to the emergency department. As Exhibit 16 shows, 27 percent of intermittent mental health consumers had five or more emergency department visits between 2004 and 2008.

Exhibit 16
Adults Receiving Mental Health Services in January 2004: Frequency of Subsequent Emergency Department Visits



Note: Medicaid records could not be matched to 37 individuals

TRACKING OUTCOMES

Following a legislative audit of the state's mental health system,[6] the 2001 Washington State Legislature clarified that community mental health programs should provide for…

> *…accountability of efficient and effective services through state of the art outcome and performance measures and statewide standards for monitoring client and system outcomes, performance, and reporting of client and system outcome information.*[7]

Since this time, the Department of Social and Health Services Mental Health Division has implemented annual performance indicator reports,[8] developed an online performance reporting system,[9] and started the statewide implementation of evidence-based programs.[10]

Additional steps are needed, however, to develop informative and reliable measures of consumer outcomes. Existing performance monitoring reports focus on access, utilization, and self-reported outcomes while consumers are still engaged in services. This study includes new analyses with details on five-year employment, criminal justice, and hospitalization outcomes.

This research effort has also tracked outcomes for mental health consumers who utilize services regularly, as well as those who discontinue treatment or use services on an infrequent basis. In examining long-term outcomes in employment, housing, criminal convictions, hospitalizations, and emergency department visits, we found differences among these groups. Public mental health consumers who use services intermittently do not fare as well as those who either successfully leave services or stay engaged over time.

The findings presented here are not meant to establish the effectiveness of mental health services. Since this analysis does not include adults with similar characteristics who received no public mental health services, we cannot compare outcomes relative to untreated individuals.

This analysis does indicate that long-term engagement and retention of public mental health consumers may be an important measure for differentiating outcomes. In addition, these results show a significant level of criminal convictions and subsequent hospitalizations for the study cohort. The public costs of serving individuals in these settings should be considered when monitoring and tracking outcomes for public mental health consumers.

The 2009 Washington State Legislature directed the Institute to continue ongoing work analyzing…

> *…return on investment to taxpayers from evidence-based prevention and intervention programs and policies that influence crime, K-12 education outcomes, child maltreatment, substance abuse, mental health, public health, public assistance, employment, and housing…and result in more cost-efficient use of public resources.*[11]

Future reports in this series will concentrate on programs and policies that help improve outcomes for public mental health consumers and on potential strategies most cost-effective for Washington State.

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[6] R. Perry, L. Brubaker, & V. Whitener (2000). *Mental health system performance audit.* Olympia: Joint Legislative Audit and Review Committee, Document No. 00-8.
[7] RCW 71.24.015(3)
[8] <http://www.dshs.wa.gov/Mentalhealth/mhpireports.shtml>
[9] <http://www.mhd-pi.com>
[10] R. Bjorklund, M. DeVita, D. Reed, A. Toulon, & G. Morse (2009). State mental health policy: Washington state's initiative to disseminate and implement high-fidelity ACT teams. *Psychiatric Services, 60*(1): 24-27. <http://www.psychservices.psychiatryonline.org/cgi/content/abstract/60/1/24>.

[11] ESHB 1244 Sec. 610(4), Chapter 564, Laws of 2009

Previous Reports in the Longitudinal Mental Health Series

Mason Burley (2009). *The costs and frequency of mental health-related hospitalizations in Washington state are increasing*, Document No. 09-04-3401.

Mason Burley (2008). *Washington's public mental health system: Regional needs and approaches*, Document No. 08-10-3401.

Mason Burley (2008). *Who stays and who leaves? A profile of adult public mental health consumers*, Document No. 08-05-3401.

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