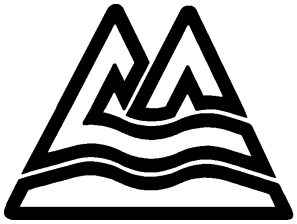
Profile of 1995 Psychiatric Alerts

Reducing Crime Benchmark Analysis
Multnomah County, Oregon



Deparment of Community and Family Services
Department of Support Services
Health Department

1996

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Executive Summary
Profile of 1995 Psychiatric Alerts

1) There were 1554 inmates booked in the Justice Center in 1995 with psychiatric alerts. This was 7% of total bookings for all inmates. During 1995, almost half of the bookings were released within the first week, meaning that provision of psychiatric care for much of this population will inevitably be community based, rather than provided by Corrections Health staff based in the jails.

2) Over the 10 year period 1986 to 1995 these 1554 inmates averaged 9 bookings each, with a total of 18 charges—including 2 violent crimes against persons. Inmates averaged 24 days in jail per booking.

3) These inmates can be described by 5 diagnostic groupings:

	Jail Beds Occupied on an Average Day	Average Jail Days /Booking
Major Mental Illness*	**83**	**25**
Personality Disorders*	**18**	**32**
Substance Abuse	**68**	**23**
Miscellaneous Diagnoses	**4**	**21**
Diagnosis "unknown", "pending", or "other"	**17**	**17**
TOTAL	**190**	**24**

*****with or without co-existing substance abuse

3) Although these inmates present a substantial psychiatric workload, there is no evidence that they all require a hospital level of care. Thus the assertion that the Multnomah County corrections system is operating a 190 bed psychiatric hospital is probably not accurate. However, it may be serving as an emergency psychiatric triage center for some portion of the group.

4) Treatment approaches are commonly agreed upon for Major Mental Illness and Substance Abuse. Whether or not to provide treatment services to Personality Disorders is a difficult public policy question as there is no clear agreement on the best approach to treatment; response to treatment can be slow; and personality disorders are often disruptive to treatment programs. This is also the diagnostic group most likely to engage in repeated criminal behavior.

5) A large percentage of inmates with major mental illness do not appear to be well served by the State's adult mental health system. When service does occur it tends to be for brief periods. However, enrollment in community mental health programs is still correlated with about a 12% reduction in jail use, even though 41% of CMHP enrollments only last one day. Whether or not it would be cost effective to offer expanded CMHP services to reduce jail use would require a more thorough cost-benefit analysis.

6) There is no evidence that the downsizing of state hospital psychiatric beds affected mental health services provided to these inmates for more than a 1-2 year period in 1993 and 1994; by 1995 State provided mental health services levels to these inmates had returned to levels they were in 1990 to 1991. Note: This report only evaluated the impact of state hospital downsizing on 1995 psychiatric alert inmates; it did not assess what other impacts state hospital downsizing may have had on other Multnomah County populations.

7) Approximately 72% of psychiatric alert inmates have been diagnosed with alcohol and drug dependence problems, and for 555 (36%), it was the primary diagnosis. Twenty-nine percent were enrolled in publicly funded alcohol and drug treatment programs during the most recent two fiscal years.

8) Psychiatric alert inmates with substance abuse problems have similar rates of access to alcohol and drug treatment when compared to all other corrections inmates; however, their retention is lower.

9) There is a significant inverse relationship between the number of violent felonies with which an individual has been charged and the number of days spent in community-based publicly funded alcohol and drug treatment. This likely reflects that those with more serious charges are not provided access to community-based treatment.

Profile of Psychiatric Alert Inmates Booked in Multnomah County Justice Center During 1995

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Introduction

During 1995, 1554 inmates with psychiatric alerts (unduplicated count) were booked at the Multnomah County Justice Center. Over the year these individuals each averaged 2.1 bookings which resulted in new charges. (Re-bookings on old charges, or bookings which ended in charges being dismissed were excluded from this study). The psychiatric alert bookings accounted for 7% of the 42,288 total bookings of all inmates during 1995. On the average day in 1995, 190 jail beds were occupied by psychiatric alert inmates; this was 13% of the total of 1461 available jail beds in Multnomah County's system.

The large number of jail beds occupied with inmates who have been given a "psychiatric alert" has given rise to the assertion that the Multnomah County jail system is the one of the largest psychiatric hospitals in the State—second only to Oregon State Hospital which as of September 1996 averaged 690 patients. This report examines that assertion by dividing the 1554 psychiatric alert inmates into different diagnostic groups; the "Major Mental Illness group" – the group most comparable to state hospital patients – accounts for 83 of the 190 jail beds occupied by psychiatric alert inmates on a typical day. Even when this smaller number of 83 beds is considered, it is clear that the Multnomah County jail system has a substantial psychiatric workload, although this doesn't imply that a hospital level of care is currently needed by all these individuals.

How do Inmates Get a Psychiatric Alert?

There are two basic ways an inmate can get a psychiatric alert:

1) a verified psychiatric history and diagnosis;
2) assessment by Corrections Health staff.

Assessment of an inmate's psychiatric status by Corrections Health staff is initiated any number of ways including: self referral by inmates; behavioral observations by other corrections staff; calls from community treatment providers, family members, or other law enforcement officials; requests by the court or probation or parole officers.

What Types of Diagnoses Do Psychiatric Alert Inmates Have?

The data base used by the Multnomah County Sheriff's Office (Corrections Population Management System—CPMS) permits up to three diagnoses to be entered per inmate. The computer accepts only 24 different diagnoses, including "pending" when diagnosis is in progress but not complete at the time of release, and "other" which is used when none of the other 22 are appropriate.

Table 1
Number of Psychiatric Diagnoses
of Inmates on Psychiatric Alert
in Multnomah County Jail--1995

Number of Diagnoses	Number of Inmates	Percent of Inmates
One diagnosis	219	14%
Two diagnoses	542	35%
Three diagnoses	675	43%
Unknown*	118	8%
Total	1554	100%

*Note: Diagnoses of "other" and "pending" are included under the one, two or three diagnosis categories. Unknown means all three fields are blank.

The presence of multiple diagnoses for most inmates shows this is a complex population. Creating a different subgroup of patients for all possible combinations of 24 different diagnoses would result in too many groups to be useful for program planning. Therefore, inmates were sorted into one of 5 diagnostic groups.

Table 2 summarizes these five diagnostic groups and shows the presence of other psychiatric diagnoses within each group (comorbidity). Following is an

example of how to read Table 2. There are 159 schizophrenics in the Major Mental Illness group. Of these 159: 11% have an alcohol abuse or dependence diagnosis; 37% have a drug abuse or dependence diagnosis; 6% have both an alcohol and drug abuse or dependence diagnosis. Forty-four percent of the 159 schizophrenics have an additional psychiatric diagnosis other than schizophrenia or substance abuse (for example, "post traumatic stress disorder or "other.")

Table 2: Diagnostic Groups of Inmates on Psychiatric Alert in Multnomah County Jail--1995

			% of Category with Co-existing Substance Abuse			% with Other Diagnoses
Diagnostic Group	NUMBER		Alcohol	Drug	Both	
Major Mental Illness		**643**				
Schizophrenia	159		11%	37%	6%	44%
Affective Disorder	492		18%	48%	14%	46%
Personality Disorder		**99**	**10%**	**65%**	**13%**	**62%**
Substance Abuse		**555**	**16%**	**61%**	**23%**	**89%**
Alcohol only	91		100%			88%
Drug only	339			100%		92%
Both	125				100%	85%
Miscellaneous Diagnoses		**59**				**42%**
Mild Retardation	19		No substance abuse			53%
Adjustment Disorder	25		by definition; all			36%
Post Traumatic Stress	17		substance abusers included in above			53%
Unknown, Pending, or "Other"		**198**	categories			**100%** **(by definition)**
TOTAL		**1554**	**13%**	**45%**	**14%**	**70%**

Note: Groups have priority from top to bottom. For example, a schizophrenic may also have post-traumatic stress disorder and alcohol abuse, however, being schizophrenic, they would fall in Group 1 and not be counted again in Groups 2 or 3. Being in a group lower on the chart means you do not have any of the diagnoses of groups further up the chart.

Group 1: Major Mental Illness

This group includes 159 inmates with schizophrenia and 492 with affective disorders. (Eight inmates have both conditions.) Presence of either of these diagnoses places an inmate in this group, whether or not other diagnoses from Groups 2-5 are present.

The "Major Mental Illness" group most closely approximates those patients who are in state hospitals, although it is unclear what percentage of this group would meet current hospitalization criteria. Patients are usually hospitalized in the state hospital system if they are an immediate danger to themselves or others due to a psychiatric condition and cannot be successfully treated on an outpatient basis. Not all psychiatric alert patients in the Multnomah County jail system meet this level of need. This does not mean that these inmates do not need psychiatric treatment; it does mean that this treatment may not need to be provided in a psychiatric hospital. Assuming that each psychiatric alert patient in jail ought to be in a psychiatric hospital goes counter to what most psychiatric professionals would consider current standards of treatment.

The prognosis for affective disorders is favorable. Schizophrenia is a chronic progressive and incurable disease with a less favorable prognosis for functional improvement.

Group 2: Personality Disorders

Ninety-nine inmates with personality disorders have been placed in Group 2. (An additional 37 personality disorders were placed in Group 1 because they also have a major mental illness.) Despite this being a small group, it is important as further analysis shows that personality disorders are the most prone of all the diagnostic groups to engage in repeated criminal behavior.

Personality disorders are also one of the more difficult groups in terms of public policy. There has been an ongoing policy debate as to whether personality disorders, in the absence of a major mental illness, should be a focus of publicly funded mental health treatment. There is no clear agreement on the best approach to treatment; response to treatment can be slow. Personality disorders are often manipulative and disruptive to treatment programs. Given this level of disagreement, formulating an adequate public response in terms of policy and program will be difficult.

Group 3: Substance Abuse

Any inmates with schizophrenia, affective disorder, or personality disorder were placed in Groups 1 and 2, regardless of whether or not they had associated substance abuse problems. (See Table 2 for the percent of Group 1 and 2 inmates who also have substance abuse problems.) Group 3 includes the 555 remaining psychiatric alert inmates with substance abuse problems. It is important to note that relatively few of the inmates who are booked each year with substance abuse problems receive a psychiatric alert: only those whose behavior warrants further psychiatric analysis receive psychiatric alert status. For example, in 1995 65% of inmates tested positive for drugs at the time of booking (DUF—Drug Use Forecasting data) vs. the 7% of bookings which received a psychiatric alert.

Group 3, therefore, is not just substance abusers but is a complex diagnostic group. Besides a substance abuse diagnosis, 89% of the 555 have some other psychiatric diagnosis: adjustment disorders—12%; post traumatic stress disorder—35%; mental retardation—5%; "other" or "pending"—49%.

State hospitals stopped admitting patients for only alcohol/drug abuse or dependence in the 1970's. The presence of psychiatric disorders in addition to alcohol/drug diagnoses in 90% of this group may lead to psychiatric hospitalization. But exclusion of inmates with schizophrenia, affective disorders, or personality disorders by definition tends to reduce Group 3's hospitalization risk. In fact, during 1995 only 4% of this group was hospitalized, the lowest of any of the 5 diagnostic groups. (For detail on mental health treatment history by diagnostic group see Tables 15 & 16). Overall, it is not accurate to conclude that most Group 3 patients require psychiatric hospitalization.

It is accurate to conclude that these inmates need treatment for alcohol and drug problems, and that for some this may require an inpatient setting. This report did not assess what percentage of these inmates need inpatient treatment, nor did it assess what percentage of these inmates would accept alcohol or drug treatment if it were offered to them. Treatment records from the State Office of Alcohol and Drug Abuse Programs show that 35% of this subgroup was enrolled in State alcohol and drug programs during fiscal years 1993-4 and/or 1994-5 (see Table 17).

Group 4: Miscellaneous Diagnoses

The preceding three diagnostic groups account for most of the inmate population--(excepting the large group of diagnosis "other," "pending," or "unknown" which are found in Group 5). A few miscellaneous diagnostic groupings, none of which has been a focus of publicly funded mental health treatment in Oregon, are combined into Group 4.

These include:

Mild or borderline mental retardation—19 inmates;
Adjustment disorder—25 inmates;
Post traumatic stress disorder—17 inmates.

A total of 59 inmates were placed in this group, while the number of inmates who have the above three conditions sums to 61. This means that only two of the 59 inmates simultaneously has more than one of the above three conditions (although Table 2 shows that 42% also have a diagnosis of "other" or "pending"). As Group 4 is relatively small—it occupies only 4 jail beds on the average day—it is of little program significance and not analyzed further in this report.

Group 5: Diagnosis of "Other," "Unknown," or "Pending"

One hundred ninety-eight inmates (13% of psychiatric alerts) only had diagnoses of "other" or "pending" or all three diagnosis fields were blank. There's not much that can be said about these inmates from a diagnostic standpoint, given the lack of data. As this is a relatively large group, it is included in subsequent analysis to see if it is the same or different from diagnostic groups 1-3. The analysis shows that there are at least some members of this group who have significant mental health needs, so the group should not be ignored for the purposes of program planning. It would require a detailed chart review of a sample of these inmates to better determine the nature of their program needs.

Profile of Diagnostic Groups

Statistical analysis shows that neither age nor racial background is related to diagnostic group. However, gender does show a statistically significant relationship, with the percent of females highest in the alcohol and drug category (43%), and lowest in the personality disorders (16%). This is shown in Table 3.

Table 3
Gender, Age, and Race of Diagnostic Groups of Inmates on Psychiatric Alert in Multnomah County Jail--1995

DIAGNOSTIC GROUP	% Male	Avg. Age	% African American	% European American	% Hispanic American	% Other Ethnic Back-ground
Major Mental Illness	72%	35	22%	73%	3%	2%
Personality Disorder	84%	33	17%	79%	2%	2%
Substance Abuse	57%	35	19%	75%	4%	2%
Unknown, Pending, or "Other"	77%	35	19%	78%	2%	1%
All Groups Combined	68%	35	20%	75%	3%	2%

Booking History

All 1554 inmates booked in 1995 with a psychiatric alert were included in this study. All bookings of these inmates (which resulted in new charges which were not dismissed) were then studied for the ten year period 1986 through 1995. This analysis shows that 22% of the 1995 psychiatric alert patients have been active in Multnomah County's jail system for at least 10 years; 33% have been active for the last 7 years. The behavior of these 1554 individuals has been relatively consistent over this 10 year period. Those inmates who are active during a given year average about 2 bookings and spend about 50 days during the year in jail. This information is displayed in Table 4.

Table 4
Ten Year Booked and Charged History for all
1554 Psychiatric Alert Inmates Booked in 1995
Multnomah County Jail

Calendar Year	# of the 1554 inmates who were booked and charged	% of the 1554 inmates who were booked with new charges*	Average Bookings per year per inmate	Average jail days per year per inmate
1986	348	22%	1.8	53
1987	417	27%	2.1	52
1988	454	29%	2.1	55
1989	516	33%	2.0	52
1990	518	33%	2.0	47
1991	569	34%	1.9	50
1992	623	40%	1.9	47
1993	738	47%	2.0	52
1994	948	61%	2.1	46
1995	1435*	92%*	2.1	48

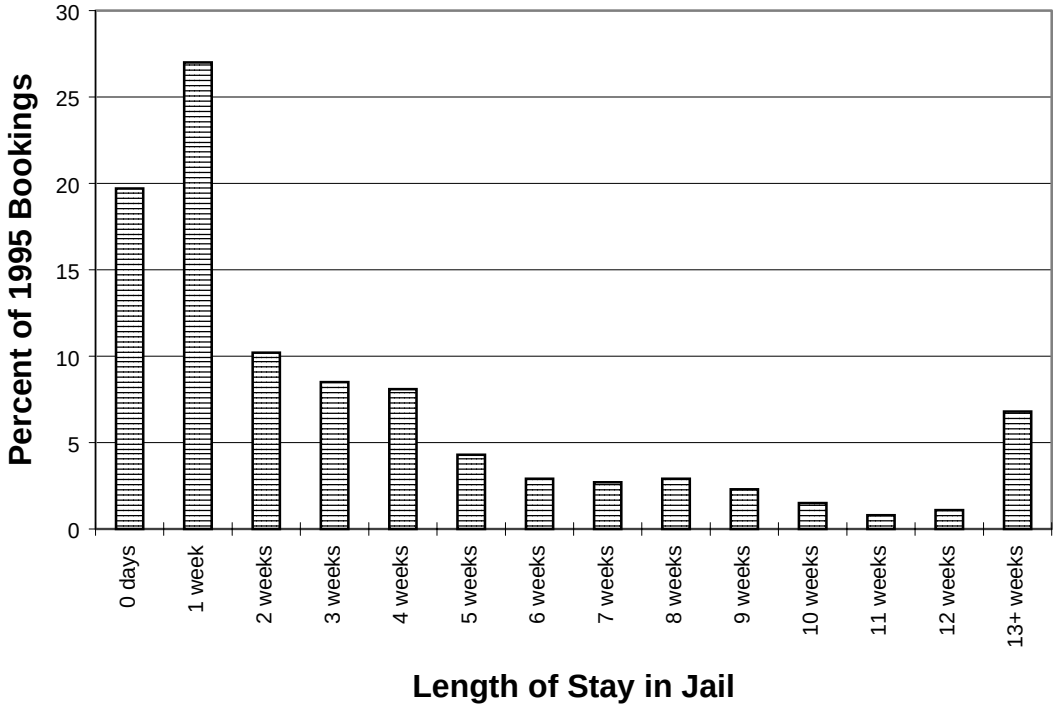
*****Note: 119 of the 1554 psychiatric alert inmates (8%) were booked in 1995 but charges were either dismissed due to lack of a complainant, lack of evidence, etc. If the inmate was picked up on a charge which was previously filed (e.g., had released on their own recognizance and then failed to appear at court and was re-arrested) these bookings were also not included if additional charges were not filed.

It is important to note that Table 4 does not show <u>all</u> psychiatric inmates booked each year. For example, in 1986 there were many more psychiatric alert inmates booked than the 348 shown in Table 4. Table 4 only shows how many of the 1554 psychiatric alert inmates booked in 1995 were also booked in previous years. Thus, Table 4 should not be interpreted to show that there is an increasing number of psychiatric alert inmates in the Multnomah County jail system. It only shows that for the 1554 psychiatric alert inmates who were booked in 1995, that substantial percentages <u>of these same 1554 inmates</u> were also booked in previous years.

The average for all 1554 inmates over the 10 year period is: 9 bookings which resulted in 18 charges (multiple charges—law violations—can be filed at each booking), including 2 violent crimes against persons. Total jail days averaged 218 over the ten years. Average time in the community between bookings averaged 219 days.

The above averages obscure important differences. One of them is how long many of these inmates actually spent in jail in 1995. This is shown in Graph 1.

Graph 1: 1995 Jail Length of Stay for Psychiatric Alerts



Graph 1 shows that in 1995 almost 20% of inmates were released the same day they were booked. Almost half were released by the end of the first week. This means that psychiatric service provision for at least half of bookings will inevitably be community based.

Inmates who repeatedly return to jail are a major concern of the criminal justice system. Table 5 shows the total number of bookings the 1554 psychiatric alert inmates have accumulated during the 10 year study period. It is clear that there is a percentage of these inmates who have accumulated a large number of bookings; half have accumulated 7 or more bookings.

Table 5
Total Number of Bookings Over 10-Year Period
by Inmates on Psychiatric Alert
Multnomah County Jail--1995

Number of Bookings	Number of Inmates	Percent of Inmates	Cumulative Percent
1	105	6.8	6.8
2	124	8.0	14.7
3	117	7.5	22.3
4	130	8.4	30.6
5	103	6.6	37.3
6	105	6.8	44.0
7	95	6.1	50.1
8	95	6.1	56.2
9	84	5.4	61.6
10	69	4.4	66.1
11	84	5.4	71.5
12	54	3.5	75.0
13	57	3.7	78.6
14	42	2.7	81.3
15	35	2.3	83.6
16	41	2.6	86.2
17	40	2.6	88.8
18	24	1.5	90.3
19	19	1.2	91.6
20	25	1.6	93.2
21	15	1.0	94.1
22	18	1.2	95.3
23	16	1.0	96.3
24	13	.8	97.2
25-39	44	2.8	100.0
TOTAL	1554	100.0	

Table 6 shows that diagnostic category is unrelated to the rate at which inmates cycle in and out of the jail system. (Note: Rate is the total number of bookings accumulated divided by the number of years since the first booking. Later in this analysis it is shown that personality disorders accumulate a greater total number of bookings; Table 6 shows that they don't accumulate these at a faster rate than other diagnostic categories.)

Table 6

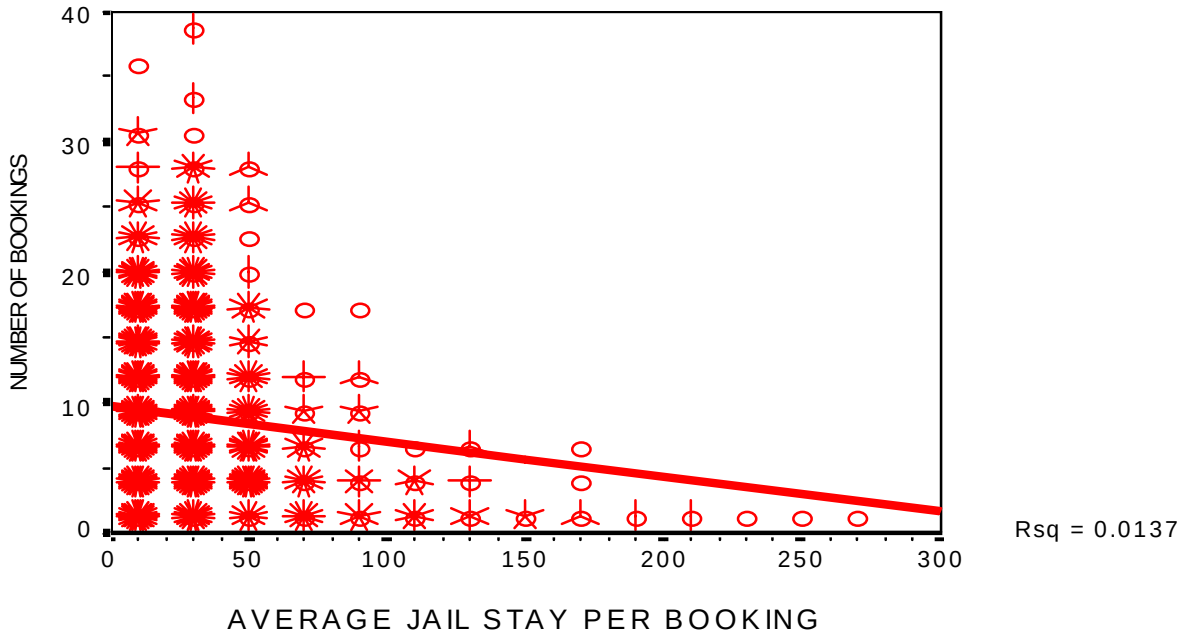
Bookings Per Year by Diagnostic Category
by Inmates on Psychiatric Alert
in Multnomah County Jail--1995

	Bookings Per Year				
DIAGNOSTIC GROUP	Up to 1 per year	Up to 2 per year	Up to 3 per year	Up to 4 per year	More than 4 per year
Major Mental Illness	25%	37%	20%	9%	9%
Personality Disorder	23%	40%	26%	7%	3%
Substance Abuse	20%	44%	19%	7%	10%
Unknown, Pending, or "Other"	29%	37%	15%	9%	11%
All Groups Combined	23%	40%	20%	8%	10%

Differences are not statistically significant; chi-square, .115 level.

If diagnostic group does not show a strong correlation to the rate at which inmates re-enter jail, what does? It is a reasonable hypothesis that the rapid release of many inmates leads to a quicker rate of re-offense, and therefore to a greater number of bookings. Graph 2 examines this hypothesis.

Graph 2: Relation of Average Jail Stay Per Inmate
To Total Bookings Per Inmate



Graph 2 can be a bit difficult to interpret, but it tells an important story. First, the star-like clusters represent the number of inmates. For example, at the bottom right hand corner of the chart is are three small circles (without lines extending from them) at the points where the number of bookings is 1 and the average length of stay for all bookings is 230, 250, 270 days respectively. These circles each represent one inmate who meets these characteristics. Immediately to the left is a circle with two lines extending from it. Each line represents one inmate; thus the circle plus the two lines represents three inmates who have one booking each and an average length of stay for all bookings of about 210 days. The circles with the largest number of lines extending from them show the highest concentrations of inmates. Thus, most inmates have 20 or fewer bookings and average less than 50 days in jail per booking. The average inmate has 9 bookings and averages 24 days per booking.

The question is: If inmates are held for longer periods of time, do they tend to have less bookings? The line through the graph shows that in general this is true. It is called a "least squares line." It shows that as one moves to the right on the graph (the average jail stay becomes longer), that the total number of bookings per inmate decreases; thus, the line slopes down to the right. This shows that it is true that longer lengths of jail stay tend to correlate with a lesser number of bookings. However, there is a wide variation of inmates above and below the line. For instance, with inmates whose length of stay is 50 days or less, the number of bookings ranges from 1 to 39, with most inmates having from 1 to 20 bookings. Thus, the length of jail stay is not a very good predictor of how many bookings an inmate has accumulated.

These findings can be expressed statistically. The following statements can be made:

1) There <u>is</u> a statistically significant relationship between the average length of jail stay and the total number of bookings (.000 level). This means that it is virtually certain that the observed relationship is not due to chance ;

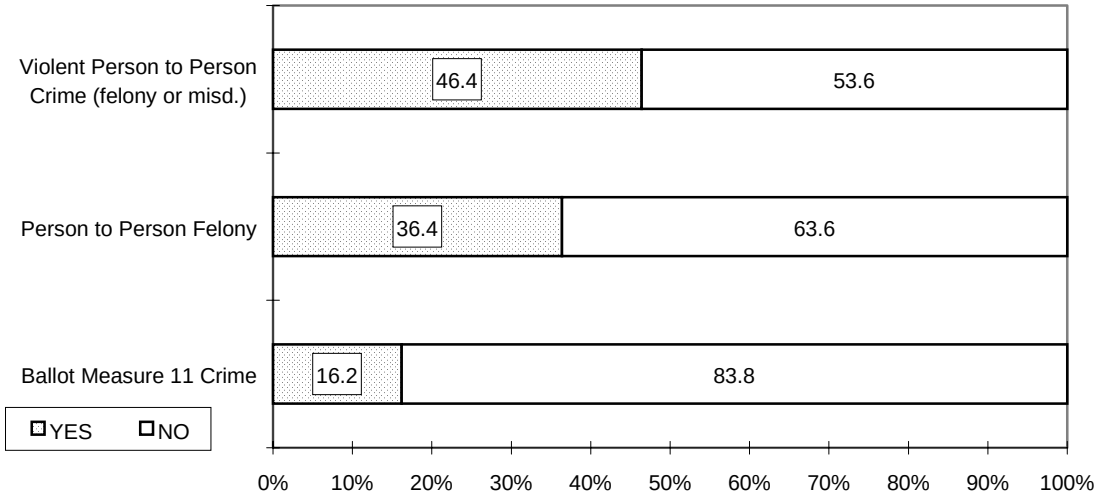
2) The relationship is very weak as the average length of jail stay accounts for only about 1.37% of the variation in number of bookings. The remaining 98.63% of the variation is accounted for by other factors.

What this means is that increasing the length of the average jail sentence would have some effect on the total number of bookings, but the effect would be very small; other factors control most of the variation in the number of bookings

Types of Charges

There is a wide variety between these inmates in regard to the types of crimes they have been charged with committing. For example, sixteen percent have never been charged with a felony. Graph 3 shows there is also wide variation in charges for person to person crimes.

Graph 3: Ten Year History of Charges for Person to Person Crimes



Percent of 1995 Psychiatric Alert Inmates

*Note: Graph 3 shows charges not convictions. Charges may have been dismissed, a person may have been found not guilty, or been convicted of a lessor crime.

Total charges accumulated by the 1554 inmates during the 10 year study period are shown in Table 7.

Table 7
Types of Charges Accumulated Between 1986 and 1995
by Inmates on Psychiatric Alert
in Multnomah County Jail--1995

CHARGE CATEGORY	Number of Charges	Percent of Charges	% felony charges
Property crimes	7411	27.0%	34%
Drug charges	3913	14.2%	95%
Holds	3355	12.2%	NA
Traffic charges	2779	10.1%	22%
Parole violations	1905	6.9%	95%
Violent misdemeanors	1635	6.0%	0%
Crimes against the justice system	1580	5.8%	26%
Crimes involving fraud	967	3.5%	82%
Person to person Class A felonies	860	3.1%	100%
Crimes against public order	720	2.6%	0.4%
Person to person Class C felonies	626	2.3%	100%
Ordinance violations	572	2.1%	0%
Person to person Class B felonies	355	1.3%	100%
Other crimes against persons	222	0.8%	26%
Weapons charges	219	0.8%	6%
Escape	197	0.7%	88%
All other	12	0.6%	67%
TOTAL	27463	100%	45%

These differences are important because they have program implications. Inmates with a more serious or violent criminal history require high levels of security while receiving psychiatric treatment. Individuals who commit offenses of lesser danger to the community may be more appropriate for outpatient treatment.

Criminal History by Diagnostic Group

The four major diagnostic groups used in this study showed important relationships to criminal history. This is demonstrated in Table 8.

Table 8
Distribution of 1986 to 1995 Felony Charges
by Psychiatric Category
Inmates on Psychiatric Alert
Multnomah County Jail

Number of Felony Charges	None	1-5	6-10	11-14	16+
Major Mental Illness	19%	35%	19%	13%	14%
Personality Disorder	0%	23%	23%	19%	34%
Substance Abuse	11%	33%	24%	15%	17%
Diagnosis "Unknown", "Pending", or "Other"	29%	40%	13%	10%	8%
All Groups Combined	**16%**	**35%**	**20%**	**14%**	**15%**

Statistically significant at .000 level; Chi-square.

Inmates with personality disorders are the most likely to engage in a high number of felonies. Inmates with a diagnosis of "unknown," "pending," or "other" are the least likely to commit multiple felonies. Table 8 also shows that there is wide variation within each diagnostic group. For example, there are individuals with major mental illness who have been charged with no felonies while others have been charged with 16 or more.

This pattern carries over when only person to person felonies are considered, as shown in Table 9.

Table 9
Distribution of Person to Person Felony Charges
by Psychiatric Category
Inmates on Psychiatric Alert
Multnomah County Jail--1995

Number of Person to Person Felony Charges	None	One	Two or More
Major Mental Illness	65%	11%	24%
Personality Disorder	36%	14%	50%
Alcohol and/or Drug	65%	13%	21%
Diagnosis "Unknown", "Pending", or "Other"	70%	12%	18%
All Groups Combined	**64%**	**12%**	**24%**

Statistically significant at .000 level; Chi-square.

Again, personality disorders are the diagnostic group most likely to be charged with repeated person to person felonies. Similar tables were constructed which

showed the relationship of diagnostic group to how many of each of the following types of crimes had been committed: Ballot Measure 11 crimes; property felonies; drug felonies; all other felonies; and misdemeanors. For each of these 5 additional tables (not shown here to save space) the results were similar—personality disorders have been charged with more crimes than any other diagnostic group. The exceptions to this pattern were relatively minor. The exceptions to the pattern were:

1) For drug felonies, the alcohol and drug diagnostic group exceeded even the personality disorders in terms of repeated charges.

2) Individuals with major mental illness and personality disorders each had about 16% of the group committing 3 or more violent misdemeanors.

Finally, Table 10 shows the relation of total jail days accrued by the 1554 inmates during the 10 year study period and their diagnostic group.

Table 10
Distribution of 1986-1995 Jail days Accrued
by Diagnostic Group
Inmates on Psychiatric Alert
Multnomah County Jail--1995

Total Jail Days	0-50	51-100	101-200	201+
Group 1: Major Mental Illness	23%	14%	25%	38%
Group 2: Personality Disorders	2%	5%	18%	75%
Group 3: Substance Abuse	19%	13%	23%	45%
Group 4: Diagnosis "Unknown", "Pending", or "Other"	48%	17%	15%	21%
All Groups Combined	**24%**	**13%**	**22%**	**41%**

Statistically significant at .000 level; Chi-square.

Table 10 shows that personality disorders are much more likely to spend more time in jail while those with diagnoses of "unknown," "pending," or "other" spend less. This may account for the relatively larger percentage of "unknown" diagnoses in Group 4—there is no time to diagnose many of them before release.

History of Treatment in the State's Mental Health System

One commonly advanced thesis is that if inmates could get adequate psychiatric treatment they would not be as involved in the criminal justice system. This report cannot directly answer this question. But it was possible to describe whether or not inmates with psychiatric alerts had been enrolled in Oregon's publicly funded mental health system and to determine whether or not that service was associated with reduced jail use. Using data supplied by the Mental Health and Developmental Disability Services Division, Office of Mental Health Programs, it was possible to analyze all contacts of these 1554 inmates with the State mental health system between 1989 and 1995—a 7 year history.

This analysis showed that 771 of these inmates (49.6%) had a history of enrollment in State mental health programs for an average of 6 times each; 303 (19.5%) had been hospitalized an average of 2.6 times each; 727 (46.8%) had community mental health program enrollments an average of 5.3 times each.

The simple fact of whether or not a person had been hospitalized had no apparent effect on the number of times they had been booked or on the number of days they spent in jail. This is shown in Table 11.

Table 11
Effect of Psychiatric Hospitalization on Jail History

Hospitalized in State System?	Average Number of Bookings	Average Days in Jail
Never	9.2	218
Yes	8.2	222

Differences are not statistically significant: Independent samples test for differences between means

The simple fact of whether or not an inmate was enrolled in a community mental health program (CMHP) did have a statistically significant effect on total days in jail but not on number of bookings.

Table 12
Effect of Community Mental Health Program Enrollment on Jail History

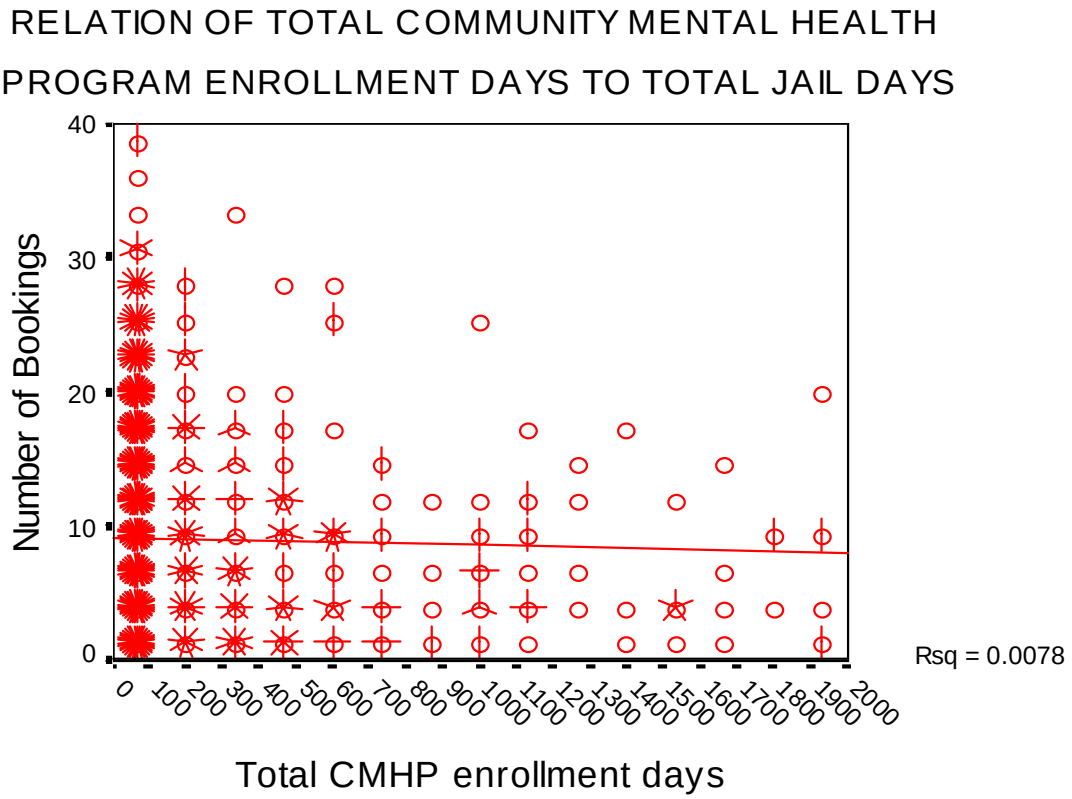
	Average Number of	Average Days

Enrolled in a CMHP?	Bookings	in Jail
Never	9.2	232
Yes	8.7	203

Difference in average days in jail is statistically significant at .008: Independent samples test for differences between means

Although the difference in average days in jail is only 29 days (a 12% reduction), the difference is statistically significant. Furthermore, 41% of CMHP enrollments lasted only 1 day; the median CMHP enrollment (point at which 50% of enrollments are above or below) was 3 days; 75% of CMHP enrollments were 28 days or less. The fact that so many enrollments lasted such a short period and were still associated with an overall reduction of 12% in jail days, shows the potential importance of CMHP treatment in successfully managing this population. It is tempting to say that more prolonged CMHP enrollment could result in fewer bookings. Graph 4 examines this hypothesis. To make the graph scale easier to read, 58 inmates with CMHP enrollments exceeding 2,000 days are not shown on the graph but are included in the statistical analysis.

Graph 4



Graph 4 shows that when the total days of CMHP enrollment (as opposed to Table 12's analysis of the simple fact of CMHP enrollment—yes or no) is correlated with the number of bookings (there is a statistically significant

relationship at the .000 level). As would be expected, the regression line slopes down to the right. That is, as inmates accumulate more days of enrollment in a CMHP, there tends to be a reduction in the number of bookings. However, the line does not slope very much. This shows there is not a very large decrease in the number of bookings as the length of CMHP enrollment increases (even though the relationship is statistically significant.) However, the fact that the overwhelming number of inmates receive such short enrollments (50% of inmates have accumulated 71 days or less) still leaves the question unanswered: "If more inmates received a CMHP enrollment adequate to meet their needs, would statistical analysis show a stronger reduction in jail bookings?"

A final question is whether it would even be cost effective to try to reduce jail use by expanding CMHP enrollment. The only data this study can contribute is that the median total days of CMHP enrollment (over the 7 year period for which records are available) was 71 days which produced an average benefit of 29 less jail days. Jail costs for 1995 were $86.97 a day, so 29 less days of jail has a value of about $2,522; this figure does not include additional savings which could result from reduced court costs and reduced probation costs. The daily cost of the CMHP enrollment which produced this benefit was not available, so it is impossible to determine if this was a cost effective investment.

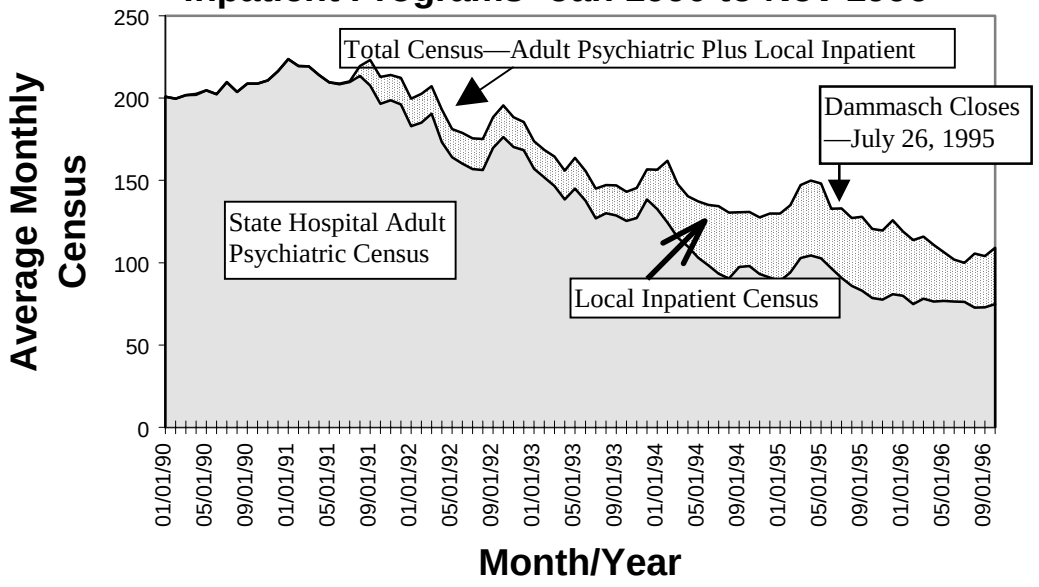
It is important to remember that each inmate spends on the average about 50 days in jail per year. At 1995 rates, this costs about $4,350 per year. Even if all jail days in a year could be eliminated by CMHP enrollment, the cost of CMHP care could not substantially exceed $4350 per year if it were a cost effective investment.

Effect of Closure of Dammasch Hospital

It is commonly believed that closure of Dammasch State Hospital has resulted in decreased access to mental health services, and that this has led to increased use of the jail by the mentally ill. This section begins what should be a more thorough data based examination of that belief. The downsizing and closure of Dammasch State Hospital should be examined in relation to the total number of hospital beds available to Multnomah County in the state adult psychiatric system. Focusing on the number of beds available at Dammasch itself misses that substantial numbers of Multnomah County patients have also been treated at Oregon State Hospital, Eastern Oregon Psychiatric Center, as well as state funded local inpatient treatment programs located at private hospitals

throughout the state. (Patients in the Forensic Psychiatric Unit, Geropsychiatric Unit, and Child and Adolescent Unit at Oregon State Program are excluded from the following analysis because these three specialized programs have not been affected by downsizing.) What is most critical, is not which hospital has the adult psychiatric beds, but how many total beds are available to Multnomah County patients. Graph 5 shows the decline in adult psychiatric beds available to Multnomah County since January of 1990.

Graph 5: Multnomah County Average Census in State Hospital Adult Psychiatric and Local Inpatient Programs--Jan 1990 to Nov 1996



Multnomah County's hospitalized population has dropped from about 200 during the typical day in 1990 and 1991 to about 100 by 1996. The full impact of this decline in state funded adult psychiatric beds is not examined in this report. However, the impact on the 1554 psychiatric alert inmates who were booked in 1995 was examined. First, re-examine Table 4—Ten Year Booked and Charged History for Psychiatric Alert Inmates Booked in 1995. This table shows a remarkable 10-year stability in criminal behavior for these 1554 inmates. Throughout this time span, these inmates have been booked about twice a year and have spent about 50 days in jail per year. There is no upswing in these two indicators during the downsizing of state hospital adult psychiatric beds.

That the downsizing of state hospital beds has had little observable effect to date on the behavior of these 1554 inmates is confirmed by Table 13.

Table 13
Seven Year State Hospitalization History
for 1554 Psychiatric Alert Inmates
Multnomah County Jail 1995

Calendar Year	% of the 1554 inmates who were booked (from Table 4)	% of the 1554 inmates who were hospitalized	Average hospital-izations per year	Average length of stay for hospitalizations beginning during the year*
1989	33%	3%	1.3	81
1990	33%	4%	1.5	53
1991	34%	4%	1.4	46
1992	40%	4%	1.4	65
1993	47%	4%	1.1	40
1994	61%	5%	1.6	37
1995	92%	7%	1.5	47

*Note: Excludes hospitalizations of 14 inmates with lengths of stay greater than 2 years; these 14 outliers distorted the average length of the remaining 784 hospitalizations.

Table 13 shows that only a small percentage of the 1554 inmates has ever been hospitalized in a State psychiatric hospital. It also shows that the average number of hospitalizations per year for these inmates dropped only in 1993. There was also a drop in the length of an average hospitalization during 1993 and 1994. However, during 1995, the average hospitalizations per year and the length of an average hospitalization returned to levels similar to those in 1990-91. It is important to note that Table 13 does not answer the question of whether or not a greater percentage of inmates should have been hospitalized and whether or not this could have reduced involvement in the criminal justice system.

The long term trend in community mental health programs in which these inmates have enrolled is shown in Table 14.

Table 14
Seven Year State Community Mental Health Program (CMHP) History
for 1554 Psychiatric Alert Inmates
Multnomah County Jail--1995

	% of the 1554 inmates who were booked	% of the 1554 inmates who were newly	Average number of new	Average duration of enrollments

Calendar Year	and charged (from Table 4)	enrolled in a CMHP	enrollments per year	beginning during the year*
1989	33%	7%	1.8	72
1990	33%	10%	2.4	50
1991	34%	11%	2.6	40
1992	40%	12%	2.3	36
1993	47%	14%	2.4	28
1994	61%	20%	2.5	36
1995	92%	23%	2.1	51

*Note: Excludes 140 enrollments with duration greater than 2 years; these 140 outliers distorted the average length of the remaining 3740 enrollments.

Table 14 shows no drop off in the number of new CMHP enrollments occurred during state hospital downsizing. As with hospitalization history, the year 1993 does show a low point in terms of duration of new CMHP enrollments. However, by 1995 the average duration of new CMHP enrollments had returned to 51 days, well within 1990-91 levels.

Several conclusions can be drawn from Tables 13 and 14:

1) Only 7% of the 1554 psychiatric alert inmates were hospitalized in a State psychiatric hospital during 1995; only 23% were newly enrolled in community mental health programs.

2) The number of hospitalizations declined only slightly in 1993 but the number of new CMHP enrollments per year did not decline. Both the average length of stay of hospitalizations and the duration of CMHP enrollments did decline in 1993; this may indicate stress on the system during the downsizing of Dammasch in particular and the state's adult psychiatric hospital beds in general.

3) By 1995 both hospital length of stay and duration of CMHP enrollment had returned to levels which characterized the early 1990's.

1995 Level of Mental Health Services by Diagnostic Group

A more pertinent question than whether Dammasch's closure is the reason we have mentally ill in the jails, is "Are the mentally ill in jails getting an appropriate level of mental health treatment now?" A preliminary answer to this question is found in Tables 15 and 16. Table 15 shows how many of the 1554 inmates entered into a new hospitalization in 1995. (It does not count

hospitalizations which may have started in 1994 or before and extended into 1995).

Table 15
1995 Psychiatric Hospitalizations of 1554 Psychiatric Alert Inmates

DIAGNOSTIC GROUP	# of Inmates in Group	# Newly Hospital-ized in 1995	% of Group Newly Hospital-ized in 1995	Average Days Hospitalized in 1995
Major Mental Illness	643	69	11%	92
Personality Disorders	99	7	7%	17
Substance Abuse	555	20	4%	37
Diagnosis "unknown" or "pending"	198	17	9%	57
ALL GROUPS COMBINED	1554*	113	7%	47

*Note: Totals include 59 patients in miscellaneous diagnosis group who are not shown in the above table.

Table 15 shows that, as might be expected, that the Major Mental Illness group is hospitalized at a greater rate and for longer than other diagnostic groups. The relatively high hospitalization rate and days of hospitalization for the "Diagnosis unknown or pending" suggests that this is a group which needs further investigation.

Table 16 is somewhat different since it counts all of the 1554 inmates who were active in a CMHP during 1995, regardless of whether or not their enrollment began before 1995. This is necessary because many CMHP enrollments can extend for a long time; counting only enrollments which were new in 1995 could ignore inmates carried over in active CMHP status from earlier years. (Comparing Table 14 to Table 16 shows that counting all current enrollments versus new enrollments only increases 1995 total enrollment of all inmates from 23% to 26%).

Table 16
Number of 1554 Psychiatric Alert Inmates
Active in 1995 in a Community Mental Health Program (CMHP)

DIAGNOSTIC GROUP	# of Inmates in Group	# Active in CMHP in 1995	% of Group Active in 1995	Median Days Active Since Date of Enrollment
Major Mental Illness	643	220	34%	123
Personality Disorders	99	24	24%	6.5
Substance Abuse	555	106	19%	27.5
Diagnosis "other", "unknown" or "pending"	198	36	18%	72.5
All Groups Combined	1554	398	26%	69.5

*Note: Totals include 59 patients in miscellaneous diagnosis group who are not shown in the above table.

Table 16 shows that 34% of psychiatric alert patients with a Major Mental Illness were actively enrolled in a CMHP sometime during 1995. This means that 66% of the Major Mental Illness group were not enrolled—thus their mental health needs would probably have to be met entirely by Corrections Health staff or a special effort would be needed to enroll them in a CMHP upon release from the jail. Table 16 also confirms that inmates with a diagnosis of "other", "unknown" or "pending" cannot be ignored as 18% of them have a diagnosis which results in a relatively long CMHP enrollment.

In sum, a large percentage of the Major Mental Illness group and other diagnostic groups do not appear to be served by the State's adult mental health system. When service does occur it tends to be for brief periods. However, even brief enrollments in community mental health programs are correlated with reduced use of the jail. Whether or not it would be cost effective to offer expanded CMHP service would require a more thorough cost-benefit analysis.

History of Services from the County Alcohol and Drug Treatment System

It has been shown that 72% of psychiatric alert inmates suffer from substance dependence problems. Most treatment professionals would probably agree that treatment for the dependence must precede or at least coincide with treatment for the mental health problem in order for the individual to reach stability.

Using data supplied by the Oregon State Office of Alcohol and Drug Abuse Programs, it was possible to describe the services received by the 1554 inmates from the County A&D treatment system over the last two fiscal years—1994-95 and 1995-96. The characteristics of those inmates who received A&D treatment are also described.

Of the inmates placed on psychiatric alert, Table 17 shows that 458 (29%) were enrolled in the publicly funded alcohol and drug treatment system over this two year period: 325 in FY 1994-95 and 328 in FY 1995-96, with 195 clients served both years. This is far short of the 72% of the group who were diagnosed with an alcohol or drug dependence problem. Nevertheless, this is actually somewhat higher than estimates that the treatment system serves only about 20% to 25% of all inmates who are booked into the corrections system and who have an alcohol or drug abuse or dependence problem.

Table 17
Alcohol and Drug Treatment Enrollment by Mental Illness Diagnostic Group

Diagnostic Group	# of Inmates	**A&D Dependent:** N	% of Diag. group	**Enrolled in A&D Treatment** N	% of Diag. Group	% of Dependent
Major Mental Illness	644	481	75%	190	**30%**	40%
Personality Disorder	99	87	88%	21	**21%**	24%
Substance Abuse	555	555	100%	195	**35%**	35%
"Unknown", "Other" or "Pending"	198	un-known	---	45	**23%**	----
TOTAL	1554*	**>1,123**	>72%	458	**29%**	~38%

*Note: Totals include 59 patients in miscellaneous diagnosis group who are not shown in the above table.

Compared with the general population of Multnomah County who uses publicly funded alcohol and drug treatment (excluding those who enroll due to driving under the influence of intoxicants--DUII) the psychiatric alert patients who were served by A&D programs were more likely to be female, more likely to be of African-American heritage (primarily at the expense of other minority groups), and more likely to be a resident of Multnomah County. Nevertheless, they are still predominantly male (55%), and white (71%). They were less likely to have ever married, and more likely to have been either homeless or a resident of an institution prior to entering treatment. They were more likely to

describe themselves as “unable to work”, more likely to have reported earning less than $800 per month, more likely to have reported obtaining their income from public sources, and more likely to have reported themselves as eligible for Medicaid. They were more likely to be covered by Medicaid/the Oregon Health Plan and these sources were in fact more likely to have been billed for the client’s treatment. If the inmate seeking A&D treatment was female, they were slightly less likely to be pregnant at the time of admission compared with the Multnomah County general population who accessed non-DUII publicly funded alcohol and drug treatment during the last two fiscal years. However, based on their own reports, those placed on a psychiatric alert were nearly twice as likely to have reported being arrested at least once and more than twice as likely to have reported being arrested two or more times.

Of the major diagnostic groupings, those in Diagnostic Group 3 (primary diagnosis of substance abuse) were most likely to be enrolled in treatment (see Table 15). Slightly less than a third of those in Diagnostic Group 1 (Major Mental Illness) were enrolled although that group represented approximately 40% of the diagnosed dependence cases. The somewhat lower rate among those with a Personality Disorder is likely a reflection of their more serious criminal charges and longer stays in custody. Indeed, apart from those for whom the A&D dependence is the primary diagnosis, those with a personality disorder are most likely to also have a problem with alcohol and/or particularly drugs (see Table 3).

Table 18 shows that overall, the 458 psychiatric alert inmates who did receive treatment averaged 2.5 treatment episodes for an average total of 200 days, or about 6.5 months over the two year period. Both of these mean values are significantly higher than those for the general population served in the County’s publicly funded alcohol and drug treatment system--1.8 episodes for a total of 163 average days. (Note: The comparison group is comprised of all adults--age 18 or over—served by an alcohol or drug treatment provider located in Multnomah County, apart from those cited and referred under the laws prohibiting Driving Under the Influence of Intoxicants—DUII).

Table 18
A&D Treatment Episodes and Length of Stay
by Mental Illness Diagnostic Group

Diagnostic Group	Average # of Treatment Episodes	Average Length of Stay in Treatment (days)
Major Mental Illness	2.4	205
Personality Disorder	1.9	144
Substance Abuse	2.7	194
"Other", "Unknown"	2.6	241

While there is some variation among the major diagnostic groups, all averaged at least two treatment episodes over the two year period for a total of at least 144 days, or nearly five months. Those with a primary diagnosis of alcohol or drug dependence registered the largest average number of episodes (2.7), but show a slightly smaller number of days (194). Those diagnosed with a personality disorder had the lowest number of episodes and lowest average time in treatment. Nevertheless, the group averaged nearly five months total enrollment in some form of alcohol and drug treatment. The diagnostic group of "other", "unknown", or "pending" stands out with the highest number of treatment episodes and longest length of stay in treatment, again underscoring that this group needs further investigation to determine its treatment needs.

Table 19 shows that compared with all adults who sought publicly funded alcohol and drug treatment in Multnomah County during this period, the 1554 inmates were significantly less likely to complete all the provider requirements for treatment (17% versus 25%). Completion rates also differed significantly among the major mental health diagnostic groups. Those with a primary diagnosis of alcohol or drug dependence were most likely to complete both their first and last episodes in fiscal year 1994-95. However, the rates were comparable for those with a primary diagnosis of major mental illness, and indeed higher in fiscal year 1995-96. It is important to remember that both these groups comprise variations on the them of "dual diagnosis"—mental illness combined with substance abuse. The Major Mental Illness group has a primary psychiatric diagnosis but most also have secondary substance abuse problems. The Substance Abuse group has a primary substance abuse diagnosis but 89% have some other co-existing psychiatric diagnosis (see Table 2).

Table 19

A&D Treatment Completion by Mental Illness Diagnostic Group

Diagnostic Group	FY 1994-95 1st Episode	FY 1994-95 Last Episode	FY 1995-96 1st Episode	FY 1995-96 Last Episode
Major Mental Illness	15%	25%	18%	26%
Personality Disorder	6%	6%	0%	14%
A&D Dependence	21%	28%	14%	19%
"Other", "Unknown"	9%	6%	9%	12%
TOTAL	17%	23%	15%	21%
General Trt. Population	**25%**	**29%**	**24%**	**28%**

Based on the above analysis it is reasonable to conclude that individuals in the Major Mental Illness and Substance Abuse groups had about the same access to treatment. Those with a diagnosis of a major mental illness were also as likely to complete treatment as those with a primary diagnosis of substance abuse. Both groups engaged in more treatment episodes and spent more time in treatment, compared with the rest of the population engaged in publicly funded, non-DUII A&D treatment. However, members of both groups were less likely to complete their treatment, compared with the entire population participating in publicly funded treatment.

A partial explanation for the low rate of treatment completion may be the high rates at which members of these groups reported using opiates and cocaine and the high rates of administration by injection. Methadone providers have by far the lowest rates of treatment completion and those participating in methadone treatment have by far the longest stays in treatment. Clearly, the A&D treatment providers must be trained to work with the members of the psychiatric alert population, and improved training may help to improve the rate at which treatment is completed. Any effort to improve treatment completion rates and reduce treatment length of stay would benefit from a more in-depth study of the members of this population. For example, this study has not been able to account for the interaction between efforts to address the inmates' A&D issues and efforts to address their mental health needs.

Summary of Program Implications

The above analysis of criminal history, and State funded mental health and alcohol and drug treatment, leads to some important implications for program design for the psychiatric alert population.

1) All psychiatric alert inmates are not alike. Successful program design must focus on unique program needs of at least three diagnostic groups:
   Major Mental Illness
   Personality Disorders
   Alcohol and/or Drug dependent

   A fourth group of diagnosis "unknown", "other", or "pending", has been shown to have significant treatment needs. A detailed chart review is probably the most practical method of better understanding the needs of this group.

2) Treatment methodologies are fairly well established for the major mental illness group and for the alcohol and/or drug dependent group. Treatment approaches for personality disorders are less well defined; public policy is not as clear as to what types of services should be offered to this group.

3) Half of 1995 psychiatric alert bookings were released within one week. This means that the locus of treatment for most of these inmates will not be in the jail system. The role of Corrections Health staff, adult mental health staff, and alcohol and drug treatment staff will be to successfully link these inmates to community providers upon their release.

4) Community treatment services have been used by some inmates. About half have had past contact with the adult mental health system over the past 7 years; about 3 out of every 10 inmates were enrolled in community alcohol and drug treatment during the most recent two fiscal years. The average community mental health program enrollment of these inmates averages only 21 days and only 26% of inmates were actively enrolled in 1995. However, even with these limited service levels, CMHP enrollment is associated with about 12% fewer jail days. Whether or not it would be cost effective to expand CMHP services rather than repeatedly jail these inmates would require a more sophisticated analysis.