DSHS | About the Thurston/Mason ICM Pilot Participants

REPORT 4.62

Baseline demographics, health conditions, criminal involvement, and use of alcohol/drug treatment



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N 2005, the Washington State Legislature passed Senate Bill 5763, a wide-ranging piece of legislation designed to change several aspects of publicly funded substance abuse and mental health treatment in Washington State.

One provision in that legislation created pilot programs to provide intensive case management (ICM) for a target population of persons with histories of high utilization of crisis services coupled with a primary chemical dependency diagnosis or dual primary chemical dependency and mental health diagnosis. The DSHS Division of Alcohol and Substance Abuse (DASA) is responsible for implementing the pilots.

This report provides a preliminary examination of the pilot in Thurston and Mason counties, which has been in operation since November 2005. For illustrative purposes, ICM participants are compared with DASA patients who were not participating in ICM but were admitted to alcohol/drug treatment in 2006.

Mental illness diagnosis in year prior to entry? Schizophrenia or Mania/Bipolar

FEE-FOR-SERVICE (FFS) patients only



This report focuses on two issues:

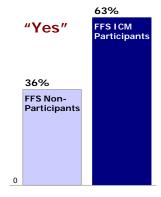
- Whether the target population is being served, and
- Whether contracted providers are meeting service expectations.

Received DSHS Mental Health Division services in year prior to entry?

Any MHD service

0 Participants

FEE-FOR-SERVICE (FFS) patients only



Key Findings

The ICM pilot in Thurston/Mason is effectively targeting patients for whom this pilot was designed.

In addition to their chemical dependency, ICM participants are:

- More likely than non-participants to have a diagnosis of schizophrenia or mania/bipolar disorders (27 percent versus 9 percent among patients with DSHS medical coverage).
- More likely than non-participants to have recently received services from the Mental Health Division (63 percent versus 36 percent among patients with DSHS medical coverage).
- More likely than non-participants to have been admitted for alcohol or drug detoxification services (22 percent versus 10 percent).

The ICM pilot in Thurston/Mason is meeting its service expectations:

- Since January 2006 at least 30 patients have been served per month.
- A high of 60 patients was served in August 2006.

A Context for Intensive Care Management

The Legislation

The goal of SB 5763 was to more fully integrate treatment for mental health and chemical dependency disorders and in the process improve treatment for patients with co-occurring conditions. The ICM pilots play an important role in this integration by: 1) targeting those with co-occurring conditions, 2) using screening and assessment instruments specifically designed for the co-occurring population, and 3) employing case managers who have familiarity with the target population. Features of the pilots include:

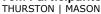
- Two DASA-selected sites, one in Thurston/Mason and one in King County.
- Specific requirements for chemical dependency case managers, including training in and use of appropriate screening and assessment tools. In addition, case managers must assist patients as they seek access to other programs and services (e.g., medical coverage or economic assistance programs) and work with the providers of other services to insure that patient needs are being met.
- A two-year pilot period. Funds for these programs became effective in July 2005, though the first patients were not served until November of that year. Funding runs through June 2008. Analyses presented here will focus on ICM participants receiving services from startup through December 2006, and comparison patients receiving treatment in 2006.

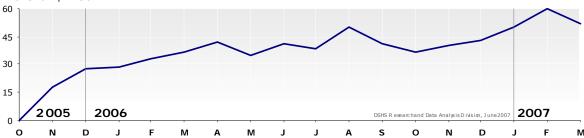


The Thurston/Mason Pilot

Providers in Thurston/Mason are contracted to provide ICM services for 80 people per year with two full-time case managers. Since January 2006, contractors have consistently served over 30 patients per month, and reached a high of 60 served in February 2007.

ICM Participants Served per Month





TIMEFRAMES

ICM PARTICIPANTS VERSUS NON-PARTICIPANTS

Throughout this report, ICM participants are compared to non-participants, defined as those adults who did not receive ICM services but were admitted to substance abuse treatment in Thurston/Mason counties in 2006.

DEFINING TREATMENT ENTRY

Comparisons of the status and service utilization were done by examining data in the year prior to each patient's **program entry date**.

- For ICM participants, the program entry date is the date in 2006 when they began receiving ICM services. This date is gathered from the TARGET database.
- For non-participants, the program entry date was defined as the date of their first admission to substance abuse treatment in 2006.

For patients in both groups, the **year prior to program entry** is defined as the 12 months prior to the program entry date.

Past Year Measures | All Patients

Arrest(s) in year prior to entry?

"Yes" 34% NonParticipants 19% ICM Participants

Medical coverage in year prior to entry?

DSHS fee-for-service medical



Past Year Differences Between ICM Participants and Non-Participants

Looking at data covering the year prior to entry documents how ICM participants differed from non-participants in the key areas of criminal justice involvement, DSHS medical coverage, and DSHS service utilization.

Three key findings emerge from that data:

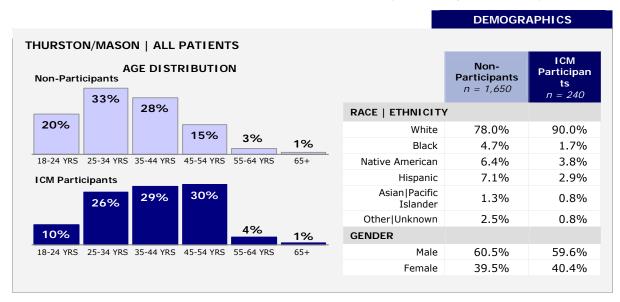
- ICM participants were less likely to have an arrest for a felony or gross misdemeanor, 19 percent versus 34 percent for nonparticipants.
- A higher percentage of ICM participants received fee-for-service medical coverage in the prior year, 56 percent versus 30 percent. This indicates that ICM participants were more likely to receive medical coverage under the Medicaid Disabled, GA-U or ADATSA programs.
- ICM participants were more likely to have received treatment for alcohol or drug dependence (33 percent versus 26 percent) and more likely to have received detoxification services (18 percent versus 5 percent).

Demographic data show that ICM participants are somewhat older than non-participants: 35 percent of ICM participants were 45 years of age or older compared to 19 percent of non-participants. Fully 90 percent were white, compared to 78 percent for non-participants.

All Patients | Received Alcohol or Substance Abuse Services in Year Prior to Entry

Services administered by DSHS Division of Alcohol and Substance Abuse	Non-Participants n = 1,650	ICM Participants n = 240
Any DASA Service*	41.9%	46.7%
Any Alcohol or Drug Treatment*	25.7%	32.5%
Outpatient Treatment	13.6%	22.5%
Residential Treatment	13.6%	15.4%
Opiate Substitution Treatment	2.4%	3.3%
Detoxification	4.7%	17.9%
Assessment	34.7%	27.9%

*Patients may receive more than one type of service; thus, subcategories will not sum to the overall percentages shown for "Any Alcohol or Drug Treatment" or "Any DASA Service."



Past Year Measures | Fee-for-Service (FFS) Medical Patients

Arrest(s) in year prior to entry?



Received detoxification in year prior to entry?



Past Year Differences Between FFS ICM Participants and Non-Participants

Fee-for-Service (FFS) Medical patients are an important subgroup in this study because of the availability of additional medical data. In this subgroup, ICM participants were different from non-participants in several respects. They were:

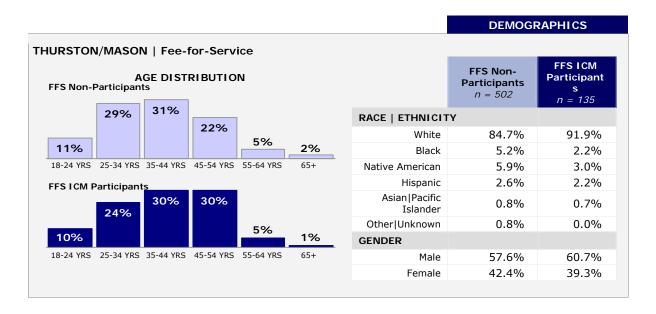
- Less likely to have a previous arrest, 18 percent versus 35 percent.
- More than twice as likely to have received detoxification services (22 percent versus 10 percent).
- Less likely to have received substance abuse treatment in a residential setting (24 percent versus 37 percent).
- Less likely to have a complete assessment of their need for chemical dependency treatment (39 percent versus 57 percent).
 Assessments are a valuable tool identifying need for treatment, as well as needs in other domains such as medical, psychological, legal, and social.

Demographically, FFS ICM participants were somewhat older and more likely to be White than the counterparts. Gender distributions for the two groups are nearly identical.

Fee-for-Service | Received DASA Services in Year Prior to Entry

Services administered by DSHS Division of Alcohol and Substance Abuse	FFS Non-Participants n = 502	FFS ICM Participants n = 135
Any DASA Service*	67.5%	60.7%
Any Alcohol or Drug Treatment*	50.0%	45.9%
Outpatient Treatment	18.9%	29.6%
Residential Treatment	36.5%	23.7%
Opiate Substitution Treatment	4.2%	4.4%
Detoxification	9.8%	22.2%
Assessment	57.4%	38.5%

*Fee-for-service patients may receive more than one type of service; thus, subcategories will not sum to the overall percentages shown for "Any Alcohol or Drug Treatment" or "Any DASA Service."



Medical Eligibility in Year Prior to Entry

The table below compares the average number of months of medical eligibility and examines the program under which patients received coverage. FFS ICM participants had 8.8 months of eligibility, compared with about 7.5 months for FFS non-participants. In addition, FFS ICM participants were more likely to get medical coverage through the Medicaid Disabled medical program.

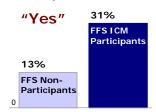
Average months of medical eligibility	FFS Non-Participants $n = 502$	FFS ICM Participants n = 135
Any Type Medical	7.50	8.80
Medicaid Disabled	4.26	6.35
ADATSA	1.47	0.84
GA-U	0.80	1.07
Medicaid Aged	0.16	0.01
Other Medicaid	0.59	0.36
Other	0.22	0.17

Medicaid-paid Prescription Medications in Year Prior to Entry

Received prescription medication for depression/anxiety?



Received prescription medication for psychotic illness bipolar disorder?



Prescription medications provide an important indicator of the overall health of patients as well as their particular medical needs. Fee-for-service medical records provide detailed data on all claims for medications. Specific drugs have been grouped based on the conditions they are designed for. Findings below show that FFS ICM participants were more likely to receive medications for several conditions:

- FFS ICM participants were more likely than FFS nonparticipants to have received prescription medications for depression/anxiety (48 percent versus 34 percent).
- FFS ICM participants were more than twice as likely as FFS non-participants to receive prescription medications for psychotic or bipolar conditions (31 percent versus 13 percent).
- FFS ICM participants were more likely to receive prescription medications for seizure disorders (14 percent versus 8 percent).

Major conditions	FFS Non-Participants $n = 502$	FFS ICM Participants $n = 135$
Depression Anxiety	33.5%	48.1%
Pain	36.7%	38.5%
Psychotic Illness Bipolar	12.9%	31.1%
Cardiac	20.5%	23.0%
Seizure Disorders	8.2%	14.1%

Medicaid Management Information System (MMIS) Claims: Mental Illness Diagnoses in Year Prior to Entry

Mental illness diagnosis in year prior to entry? Schizophrenia or Mania/Bipolar

27% "Yes" FFS ICM



Fifty-nine percent of FFS ICM participants had a mental illness diagnosis in their Medicaid claims records compared to about 31 percent for FFS non-participants.

More specifically, FFS ICM participants were more likely to have a diagnosis of schizophrenia or mania/bipolar disorder than FFS nonparticipants (27 percent versus 9 percent).

A diagnosis of mental illness appeared on a medical claim received by DSHS	FFS Non-Participants n = 502	FFS ICM participants n = 135	
Any Mental Illness	30.9%	59.3%	
Schizophrenia	4.8%	19.3%	
Mania/Bipolar	4.2% 9.0%	8.1%	
Depression/Personality	21.9%	31.9%	

Received DSHS Mental Health Division Services in Year Prior to Entry

Received DSHS Mental Health Division services in year prior to entry?

Any service



Sixty-three percent of FFS ICM participants received some publicly funded mental health service in the year prior to entry compared to 36 percent of FFS non-participants.

Over 18 percent of FFS ICM participants received services in a community inpatient setting compared with about 4 percent of FFS non-participants. Community inpatient hospitals provide care for those with acute psychiatric needs.

Services administered by DSHS Mental Health Division	FFS Non-Participants $n = 502$	FFS ICM participants n = 135
Any MHD Service*	35.9%	63.0%
Community Services	35.3%	61.5%
Community Inpatient	3.8%	18.5%
State Hospital	1.2%	0.7%

^{*}Patients may receive more than one type of service; thus, subcategories will not sum to the overall percentages for "Any MHD Service."

Medical Assistance Costs in Year Prior to Entry

Overall medical costs for both FFS ICM participants and FFS nonparticipants were similar at about \$480 per month. Inpatient costs for FFS ICM participants cost on average \$102 per month in the year prior to entry, which was less than FFS non-participants whose costs averaged \$223 per month.

Per member per month expenditures	FFS Non-Participants $n = 502$	FFS ICM participants $n = 135$
Overall HRSA-MA Expenditures	\$485	\$475
Inpatient	\$223	\$102
Outpatient ER	\$42	\$73

Summary Remarks

The Intensive Case Management services initiated with the passage of Senate Bill 5763 were designed for persons with histories of high utilization of crisis services and a primary diagnosis of chemical dependency or a dual diagnosis of chemical dependency and mental illness.

The descriptive analyses presented in this report show that the Thurston/Mason pilot is serving the expected target population. Analyses of the fee-for-service subpopulation of patients show that baseline use of detoxification and community psychiatric hospital services is higher for ICM participants than among non-participants, while the diagnosis information shows higher rates of mental illness, particularly schizophrenia and bipolar disorder in the ICM group. The data also show that the number of ICM participants served is consistent with expectations.

This report was designed with the limited goal of examining how ICM participants differ from non-participants to assess whether the pilot project is reaching its target population. A future report will examine outcomes associated with the receipt of ICM services, including medical and mental health service utilization and criminal justice involvement in the year following program entry.

TECHNICAL NOTES

This report examines the characteristics of patients who received DASA-funded Intensive Case Management services. The analyses presented in this report used data from the following sources:

- The Research and Data Analysis Division Client Services Database provided patient demographics and a common identifier for linking patient information from multiple data sources. Mental Health Division service data were also obtained through the Client Services Database.
- DASA's TARGET data system provided information on ICM, alcohol/drug treatment, detoxification, and assessment services.
- Medical claims from the Medicaid Management Information System provided: diagnoses of chronic physical conditions and mental illness; information from pharmacy claims; and medical service cost and utilization data. Claims-based reimbursement amounts for acute medical inpatient admissions at hospitals participating in the Certified Public Expenditure (CPE) program were adjusted to reflect the full cost of the inpatient stay.
- OFM Eligibility data provided information on patients' medical coverage.
- Arrest data from the Washington State Patrol (WSP) identified patients who had been arrested. Local law enforcement agencies are generally required to report only felony and gross misdemeanor offenses into the WSP arrest database. This report somewhat understates the full volume of arrest events in the population because our data exclude arrests for an unknown number of misdemeanor offenses that are not required to be reported into this database.

Mental illnesses were identified using the psychiatric diagnosis categories from the Chronic Illness and Disability Payment System (CDPS). Pharmacy claims were classified using the drug classes from the Medicaid-Rx pharmacy-based risk adjustment tool.

APPENDIXA Diagnoses of Thurston/Mason ICM Participants Compared to Non-Participants

	SAMPLE DIAGNOSES	FFS ICM	FFS Non-ICM
			n=502
BY CDPS DISEASE GROUP			
Cancer, high	Lung cancer, ovarian cancer, secondary malignant neoplasms	0.7%	0.2%
Cancer, medium	Mouth, breast or brain cancer, malignant melanoma	0.7%	0.6%
Cancer, low	Colon, cervical, or prostate cancer, carcinomas in situ	0.0%	0.2%
Cardiovascular, very high	Heart transplant status/complications	0.0%	0.0%
Cardiovascular, medium	Congestive heart failure, cardiomyopathy	3.7%	2.4%
Cardiovascular, low	Endocardial disease, myocardial infarction, angina	5.9%	5.6%
Cardiovascular, extra low	Hypertension	11.1%	7.8%
Cerebrovascular, low	Intracerebral hemorrhage, precerebral occlusion	1.5%	0.8%
CNS, high	Quadriplegia, amyotrophic lateral sclerosis	0.0%	0.2%
CNS, medium	Paraplegia, muscular dystrophy, multiple sclerosis	0.0%	1.0%
CNS, low	Epilepsy, Parkinson's disease, cerebral palsy, migrane	12.6%	13.3%
DD, medium	Severe or profound mental retardation	0.0%	0.0%
DD, low	Mild or moderate mental retardation, Down's syndrome	0.0%	0.4%
Diabetes, type 1 high	Type 1 diabetes with renal manifestations/coma	0.0%	0.2%
Diabetes, type 1 medium	Type 1 diabetes without complications	1.5%	1.2%
Diabetes, type 2 medium	Type 2 or unspecified diabetes with complications	0.0%	0.4%
Diabetes, type 2 low	Type 2 or unspecified diabetes w/out complications	7.4%	3.0%
Eye, low	Retinal detachment, choroidal disorders	0.0%	0.0%
Eye, very low	Cataract, glaucoma, congenital eye anomaly	1.5%	0.6%
Genital, extra low	Uterine and pelvic inflammatory disease, endometriosis	0.7%	2.6%
Gastro, high	Peritonitis, hepatic coma, liver transplant	0.7%	0.4%
Gastro, medium	Regional enteritis and ulcerative colitis, enterostomy	6.7%	5.2%
Gastro, low	Ulcer, hernia, GI hemorrhage, intestinal infectious disease	8.9%	9.8%
Hematological, extra high	Hemophilia	0.0%	0.0%
Hematological, very high	Hemoglobin-S sickle-cell disease	0.0%	0.0%
Hematological, medium	Other hereditary hemolytic anemias, aplastic anemia	3.7%	1.0%
Hematological, low	Other white blood cell disorders, other coagulation defects	1.5%	2.0%
AIDS, high	AIDS, pneumocystis pneumonia, cryptococcosis	1.5%	1.6%
HIV, medium	Asymptomatic HIV infection	0.0%	0.0%
Infectious, high	Staphylococcal or pseudomonas septicemia	0.7%	0.0%
Infectious, medium	Other septicemia, pulmonary or disseminated candida	1.5%	1.0%
Infectious, low	Poliomyelitis, oral candida, herpes zoster	1.5%	3.2%
Metabolic, high	Panhypopituitarism, pituitary dwarfism	2.2%	1.2%
Metabolic, medium	Kwashiorkor, merasmus, and other malnutrition, parathyroid	1.5%	0.2%
Metabolic, very low	Other pituitary disorders, gout	4.4%	3.0%
Psychiatric, high	Schizophrenia	19.3%	4.8%
Psychiatric, medium	Bipolar affective disorder	8.1%	4.2%
Psychiatric, low	Other depression, panic disorder, phobic disorder	31.9%	21.9%
Pulmonary, very high	Cystic fibrosis, lung transplant, tracheostomy status	0.0%	0.2%
Pulmonary, high	Respiratory arrest or failure, primary pulmonary hypertension	4.4%	1.8%
Pulmonary, medium	Other bacterial pneumonias, chronic obstructive asthma	3.7%	1.2%
Pulmonary, low	Viral pneumonias, chronic bronchitis, asthma, COPD	15.6%	15.9%
Renal, very high	Chronic renal failure, kidney transplant status/complications	0.0%	0.0%
Renal, medium	Acute renal failure, chronic nephritis, urinary incontinence	2.2%	3.0%
Renal, low	Kidney infection, kidney stones, hematuria, urethral stricture	0.7%	1.4%
Skeletal, medium	Chronic osteomyelitis, aseptic necrosis of bone	0.0%	0.6%
Skeletal, low	Rheumatoid arthritis, osteomyelitis, systemic lupus	0.7%	3.0%
Skeletal, very low	Osteoporosis, musculoskeletal anomalies	5.9%	6.4%
Skeletal, extra low	Osteoarthrosis, skull fractures, other disc disorders	13.3%	9.4%
Skin, high	Decubitus ulcer	0.0%	0.2%
Skin, low	Other chronic ulcer of skin	0.7%	1.0%
Skin, very low	Cellulitis, burn, lupus erythematosus	14.1%	13.7%
Substance abuse, low	Drug abuse, dependence, or psychosis	34.1%	23.3%
Substance abuse, very low	Alcohol abuse, dependence, or psychosis	26.7%	11.2%

HOW TO INTERPRET THIS TABLE: Chronic disease conditions were identified by applying the Chronic Illness and Disability Payments System (CDPS) to clients' fee-for-service medical claims in FY 2005. Counts are hierarchically unduplicated within the disease group. For example, a client with diagnoses of schizophrenia and depression will be counted only once in the "Psychiatric, high" category. Thus, percentages can be added within a disease category (e.g., Psychiatric) to produce the unduplicated percentage of clients in that disease category. Clients with diagnoses in multiple categories (e.g., Cardiovascular and Psychiatric) will be counted once in each broad category represented in their medical claims diagnoses. For more information about the CDPS, see Kronick R, Gilmer T, Dreyfus T, et al. "Improving health-based payment for Medicaid beneficiaries: CDPS," Health Care Fin Rev. 2000; 21:29-64.

APPENDIX B

Drugs Prescribed to Thurston/Mason ICM Participants Compared to Non-Participants

		FFSICM	FFS Non-ICM
	SUMMARY DRUG DESCRIPTIONS	n=135	n=502
BY MEDICAID-Rs PHARMACY G	ROUP		
Alcoholism	Disulfiram	3.7%	1.0%
Alzheimers	Tacrine	0.0%	0.2%
Anti-coagulants	Heparins	0.0%	1.8%
Asthma/COPD	Inhaled glucocorticoids, bronchodilators	23.0%	15.7%
Attention Deficit	Methylphenidate, CNS stimulants	0.0%	0.4%
Burns	Silver Sulfadiazine	0.0%	0.6%
Cardiac	Ace inhibitors, beta blockers, nitrates, digitalis, vasodilators	23.0%	20.5%
Cystic Fibrosis	Pancrelipase	0.0%	0.2%
Depression / Anxiety	Antidepressants, antianxiety	48.1%	33.5%
Diabetes	Insulin, sulfonylureas	1.5%	2.6%
EENT	Anti-infectives for EENT related conditions	8.1%	9.6%
ESRD / Renal	Erythropoietin, Calcitriol	0.0%	0.2%
Folate Deficiency	Folic acid	4.4%	0.4%
Gallstones	Ursodiol	0.0%	0.0%
Gastric Acid Disorder	Cimetidine	7.4%	11.2%
Glaucoma	Carbonic anhydrase inhibitors	0.0%	0.6%
Gout	Colchicine, Allopurinol	0.7%	0.6%
Growth Hormone	Growth hormones	0.0%	0.0%
Hemophilia/von Willebrands	Factor IX concentrates	0.0%	0.0%
Hepatitis	Interferon beta	0.0%	0.0%
Herpes	Acyclovir	1.5%	1.6%
HIV	Antiretrovirals	0.0%	0.4%
Hyperlipidemia	Antihyperlipidemics	7.4%	5.0%
Infections, high	Aminogycosides	0.0%	0.2%
Infections, medium	Vancomycin, Fluoroquinolones	10.4%	7.0%
Infections, low	Cephalosporins, Erythromycins	39.3%	30.1%
Inflammatory /Autoimmune	Glucocorticosteroids	5.9%	6.0%
Insomnia	Sedatives, Hypnotics	1.5%	2.4%
Iron Deficiency	Iron	1.5%	2.0%
Irrigating solution	Sodium chloride	0.0%	0.0%
Liver Disease	Lactulose	0.7%	0.4%
Malignancies	Antinoeplastics	0.7%	1.0%
Multiple Sclerosis / Paralysis	Baclofen	0.7%	1.8%
Nausea	Antiemetics	3.7%	9.2%
Neurogenic bladder	Oxybutin	0.0%	0.8%
Osteoperosis / Pagets	Etidronate/calcium regulators	0.7%	0.4%
Pain	Narcotics	38.5%	36.7%
Parkinsons / Tremor	Benztropine, Trihexyphenidyl	6.7%	1.6%
PCP Pneumonia	Pentamidine, Atovaquone	0.0%	0.0%
Psychotic Illness / Bipolar	Antipsychotics, lithium	31.1%	12.9%
Replacement solution	Potassium chloride	3.7%	3.8%
Seizure disorders	Anticonvulsants	14.1%	8.2%
Thyroid Disorder	Thyroid hormones	0.0%	0.8%
Transplant	Immunosuppressive agents	0.0%	0.0%
Tuberculosis	Rifampin	0.0%	0.2%

HOW TO INTERPRET THIS TABLE: Pharmacy groups were identified by applying the Medicaid-Rx system to clients' fee-for-service medical claims in FY 2005. Clients with prescriptions in multiple categories (e.g., Pain and Depression/Anxiety) will be counted in both categories. For more information about the Medicaid-Rx system, see Gilmer T, Kronick R, Fishman P, et al. "The Medicaid Rx Model: Pharmacy-based risk adjustment for public programs," Ned Care 2001; 39:1188-1202.

Additional copies of this paper may be obtained from: http://www1.dshs.wa.gov/RDA/ or http://www1.dshs.wa.gov/dasa/ or through the Washington State Alcohol Drug Clearinghouse by calling 1-800-662-9111 or 206-725-9696 (within Seattle or outside Washington State), by e-mailing clearinghouse@adhl.org, or by writing to 6535 Fifth Place South, Seattle, Washington 98108-0243.

