



Washington State
Department of Social
& Health Services

Research & Data Analysis
Division

DSHS Research and Data Analysis Division, 4.49fs

Methadone Treatment For Opiate Addiction Lowers Health Care Costs And Reduces Arrests And Convictions

WASHINGTON STATE SUPPLEMENTAL SECURITY INCOME RECIPIENTS

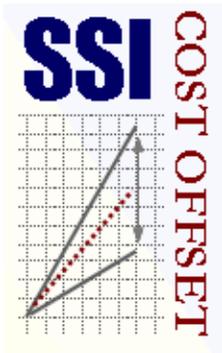
Methadone Treatment Results In Lower Health Care Costs

Medicaid-paid medical, mental health, and long-term care costs are significantly lower for persons addicted to opiates who participate in methadone treatment, compared to opiate addicts who remain untreated.¹

These cost offsets can be interpreted as **costs avoided** for clients already receiving treatment, and as **potential savings** that might be realized by treating the untreated.

- The **average net cost offset is \$765** per person per month for methadone treatment for opiate addiction.
- The average methadone **treatment cost is \$219** per person per month.²
- **Reduced medical costs account for 80 percent** of the offset.³

The chart below compares the monthly Medicaid costs for opiate addicts who do not enter treatment with costs for opiate addicts who participate in methadone treatment.

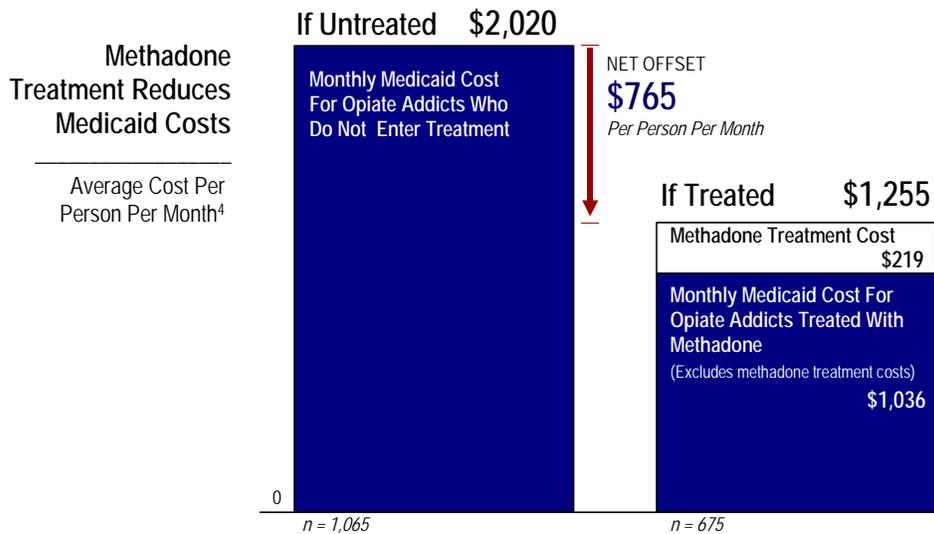


Daniel J. Nordlund, Ph.D.
Sharon Estee, Ph.D.
David Mancuso, Ph.D.
Barbara Felver, MES, MPA

In conjunction with
Division of Alcohol &
Substance Abuse

Kenneth D. Stark, Director
Antoinette Krupski, Ph.D.

UPDATED JUNE 2004



¹ Mental health costs include state psychiatric hospital, community psychiatric hospital, and outpatient mental health expenditures. Long-term care expenditures include nursing home costs. Costs reported are generally Medicaid-paid claims receiving 50/50 state/federal match. Mental health costs include some "state-only" dollars.

² The standard rate for methadone treatment is about \$10 per day; however, the average cost presented here includes those who were not in treatment for the entire follow-up period, bringing down the overall average cost per month to \$219.

³ Non-medical cost offsets include reductions in mental health (state psychiatric, community psychiatric, outpatient mental health), and nursing home costs.

⁴ Cost offsets were estimated using regression models in which the effects of covariates (age, gender, race/ethnicity, baseline medical expenditures, dual eligible status) were controlled.

Longer Stays In Methadone Treatment Result In The Greatest Cost Offset

Cost offsets were examined for different lengths of time spent in treatment. It was found that longer stays in methadone treatment result in the greatest reductions.

- For treatment stays up to 90 days, the **average monthly offset is \$725** for persons treated with methadone.
- For methadone treatment stays over 365 days, the Medicaid **cost offset averages \$899** per person per month.



ABOUT METHADONE TREATMENT

Methadone Treatment – or “opiate substitution” treatment – is an outpatient service for individuals addicted to heroin or other opiates. Under this approach, state-funded and accredited opiate substitution treatment agencies provide counseling and daily or near-daily administration of methadone or other approved substitute drugs. Patients also receive education, random urine drug screening to monitor drug use, and are subject to stringent rules regarding compliance. Methadone treatment is distinct from “drug free” treatment for opiate addiction. “Drug free” programs do not dispense methadone or other approved substitute drugs to persons addicted to opiates. A “drug free” treatment program may occur in a residential or outpatient setting. Residential modalities are generally highly structured and include intensive inpatient and long-term residential treatment. Intensive inpatient treatment typically lasts 21 to 28 days while long-term residential treatment lasts 90 days or longer.

Compared to clients receiving “drug free” treatment for opiate addiction, clients in methadone treatment tend to have more years of regular heroin use prior to treatment, more intense use of heroin in the 30 days prior to treatment, and greater dependence on income acquired through illegal activity.⁶

⁵ Cost offsets were estimated using regression models in which the effects of covariates (age, gender, race/ethnicity, baseline medical expenditures, dual eligible status) were controlled. Cost offsets are measured relative to untreated clients.

⁶ Carney, M., Elworth, J., Calsyn, D., Kivlahan, D., Peavy, M., Floyd, A., and Donovan, D., 2003. *Washington State Outcomes Project: Opiate Study Sample (Final Report)*. University of Washington Alcohol and Drug Abuse Institute, University of Washington Department of Psychiatry, and VA Puget Sound Health Care System, Seattle Division, October 2003.

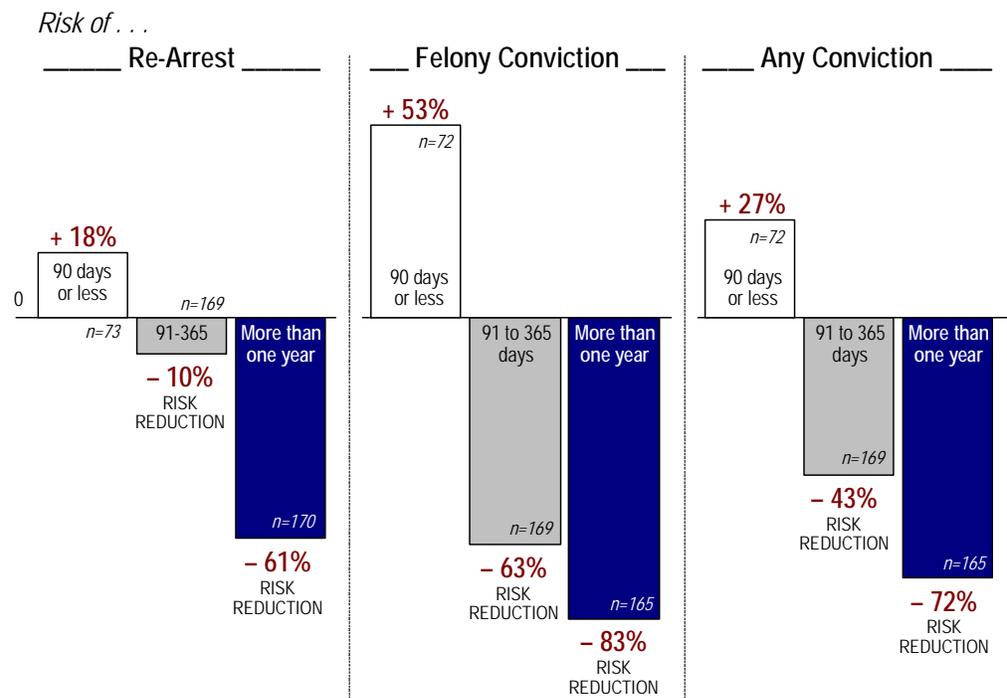
Longer Stays In Methadone Treatment Reduce The Risk Of Criminal Re-Arrest And Conviction

Stays in methadone treatment of more than 90 days are associated with a reduced risk of re-arrest or conviction. Methadone treatment stays over one year are associated with particularly dramatic reductions. Staying in methadone treatment 90 days or less is associated with an increased risk of re-arrest or conviction, which may reflect the effect of arrests or convictions in terminating treatment, or increased criminal activity that may follow relapse in use and premature exit from treatment.

- Compared to untreated opiate addicts, the risk of re-arrest is 18 percent higher for persons who stay in methadone treatment for 90 days or less, but is **10 percent lower** for those in treatment 91 to 365 days and **61 percent lower** for those who stay more than one year.⁷
- Compared to untreated opiate addicts, the risk of a felony conviction is 53 percent higher for persons in methadone treatment for 90 days or less, **63 percent lower** for opiate addicts in methadone treatment 91 to 365 days, and **83 percent lower** for those in methadone treatment for more than one year.
- Similarly, the risk of any conviction is 27 percent higher for persons who stay in methadone treatment for 90 days or less, **43 percent lower** for opiate addicts in methadone treatment 91 to 365 days, and **72 percent lower** for those who stay in methadone treatment for more than one year.

Criminal Justice Outcomes Improve With Longer Stays In Methadone Treatment

Risk relative to untreated clients with opiate addiction



⁷ Percentages reflect the change in the hazard of re-arrest or conviction, relative to untreated clients. Estimates are from proportional hazards models that control for age, gender, and race/ethnicity. The zero axis represents the baseline risk for the untreated.

TECHNICAL NOTES

This paper examines “cost offsets” – costs avoided for clients already receiving treatment or potential savings that might be realized by treating the untreated – of Medicaid medical, mental health, and long-term care costs among opiate addicts who were treated with methadone. The paper also examines criminal arrest and conviction outcomes among persons addicted to opiates who enter methadone treatment. The criminal justice analyses are restricted to clients with prior criminal histories.

The study population included clients who received Supplemental Security Income (SSI) benefits at some time between July 1997 and December 2001 and who were identified as having a substance abuse problem based on administrative records. The SSI program provides cash and medical assistance to persons with little or no income who are unable to work due primarily to disability. Results of the original study⁸ and comparisons for stimulant drug abusers⁹ and those with opiate addictions who participated in drug free chemical dependency treatment¹⁰ are also available from the authors.

The need for treatment for these clients was identified through events recorded in administrative data. Information used to identify a need for treatment included medical diagnoses or procedures; detoxification, assessment, or alcohol or drug (AOD) treatment encounters; and arrests for drug or alcohol-related offenses. Clients were included in the analysis only if they had at least one month of medical assistance eligibility both before and after the “index event” indicating a need for AOD treatment.

For this report, a subset of 3,354 persons was identified as opiate-dependent by the presence of:

- Heroin, non-prescription methadone, prescribed opiate substitutes, or other opiates and synthetics as primary, secondary, or tertiary drug of abuse in TARGET records.¹¹
- Diagnosis of opiate abuse or dependence in Medicaid claims data.

Medicaid costs of opiate-addicted clients receiving methadone treatment were compared with costs of opiate-addicted clients who remained untreated. Offsets were estimated using regression models to control for the effects of covariates such as age, gender, race/ethnicity, and baseline medical expenditures.

⁸ Estee, S. and Nordlund, D., 2003. *Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project: 2002 Progress Report*. Washington State Department of Social and Health Services, Research and Data Analysis Division, February.

⁹ Nordlund, D., Estee, S. and Yamashiro, G., 2003. *Treatment of Stimulant Addiction Including Addiction to Methamphetamine Results in Lower Health Care Costs and Reduced Arrests and Convictions: Washington State Supplemental Security Income Recipients*. Washington State Department of Social and Health Services, Research and Data Analysis Division, December.

¹⁰ Nordlund, D., Estee, S., Mancuso, D. and Felver, B., 2004. *Non-Methadone Chemical Dependency Treatment for Opiate Addiction Reduces Health Care Costs, Arrests and Convictions: Washington State Supplemental Security Income Recipients*. Washington State Department of Social and Health Services, Research and Data Analysis Division, March.

¹¹ TARGET is the database maintained by the Division of Alcohol and Substance Abuse that contains a record of all publicly funded chemical dependency treatment in Washington State.

Additional copies of this fact sheet may be obtained from the following websites:

<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.



Washington State
Department of Social
& Health Services
Research and Data Analysis Division
Report Number 4.49fs