

Substance Abuse and Mental Health Services Administration Center for Substance Abuse Treatment www.samhsa.gov

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# Cost Offset of Treatment Services

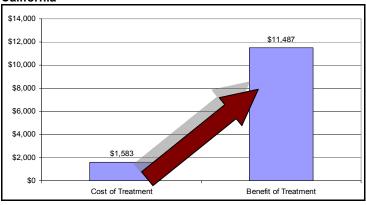
There is a great paucity on nationwide data related to the cost benefit of substance use treatment. However, the limited research in some States suggests that there is a major benefit to substance use treatment. According to recent estimates<sup>1</sup>, the total financial cost of drug use disorders to the United States is estimated to be \$180 billion annually. The economic costs of alcohol abuse were 184.6 billion in 1998<sup>2</sup>. Accessible and effective community-based alcohol and drug treatment is imperative to reduce society's financial burden from problems associated with drug use. As the U.S. economy faces unsustainable escalations in health care costs, we need to ensure needed substance use disorder treatment and recovery programs help reduce health and societal costs.

The benefits of treatment far outweigh the costs. Even beyond the enormous physical and psychological costs, treatment can save money by diminishing the huge financial consequences imposed on employers and taxpayers.

### Cost Savings of Treatment: California, New York, and Washington

Treatment has been shown to have a benefit-cost ratio of  $7:1^3$ . The largest savings were due to reduced cost of crime and increased employer earnings (see Figure 1).

Figure 1. Cost Offset of Substance Abuse Treatment in California



For every **\$100,000 spent on treatment**,



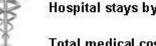
\$487,000 of health care costs<sup>4</sup> and \$700,000 of crime costs were shown to be avoided<sup>5</sup>.

### Public Assistance in Washington

A comparison of medical expenses of Medicaid clients<sup>6</sup> who received treatment noted these savings:

Modality	Savings per Medicaid member per month
Inpatient	\$170
Outpatient	\$215
Methadone	\$230

Spending money on treatment has led to important health and public safety cost reductions in Washington<sup>7</sup>: Likelihood of being arrested Medical costs State hospital expenses Likelihood of felony convictions 34% \$311/month \$48/month 16% Health Care Utilization Savings: California **Employers** Treated patients have been shown to **reduce**<sup>8</sup>: Employees treated for substance use<sup>9</sup> have: reduced absenteeism, ER visits by reduced tardiness.



Total medical costs by **76** 

when compared to a control group.

- lowered on-the-job injuries,
  fewer mistakes, and

## **Benefit-Cost Comparisons**

- A study<sup>10</sup> comparing the direct cost of treatment to monetary benefits to society determined that on average, costs were \$1,583 compared to a benefit of \$11,487 (a benefit-cost ratio of 7:1).
- In an analysis<sup>11</sup> of methadone detoxification patients (n=102), authors observed that for every dollar spent on treatment, \$4.87 of health care costs were offset.
- In comparing cost offsets in Washington State of people in treatment to non-treated, authors noted:<sup>12</sup> lower medical costs (\$311/month); lower state hospital expenses (\$48/month); lower community psychiatric hospital costs (\$16/month); reduced likelihood of arrest by 16%; and reduced likelihood of felony convictions by 34%.

#### **Health Care Utilization**

- In a study<sup>13</sup> examining nearly 150,000 Medicaid claims for beneficiaries in six states, authors determined that people with substance abuse disorders had significantly higher expenditures for health problems compared to others.
- In comparison of medical expenses for welfare clients in Washington State<sup>14</sup> (n=3,235 treatment group and n=4,863 control) it was determined that substance abuse treatment was associated with a reduction in expenses of \$2,500 per year.
- In reviewing selected beneficiaries in Oregon's Medicaid program,<sup>15</sup> researchers concluded that eliminating the substance abuse benefit led to increased medical expenditures.
- A review<sup>16</sup> of over 1,000 patients in a Sacramento chemical dependency program noted a substantial decline in hospital (35%), emergency room (39%), and total medical costs (26%) when compared to a control group.
- A recent article<sup>17</sup> on medical costs concluded that health care costs are higher for families with a person who has a dependency problem than for other similar families.

# **Employer Savings**

An intake-to-follow-up assessment<sup>18</sup> study of nearly 500 people treated at Kaiser Permanente's Addiction Medicine program demonstrated significant reduction in missed work, conflict with coworkers, and tardiness. It also noted that employers break even on investing in chemical dependency treatment.

Every \$1 spent on addiction treatment saves \$7 in crime and criminal justice costs. When researchers added savings related to health care, the savings-tocost ratio was 12:1.<sup>19</sup>

Office of National Drug Control Policy (2004). "The economic costs of drug abuse in the United States, 1992-2002." Washington, DC: Executive Office of the President (Publication No. 207303).

<sup>2</sup> Harwood, Henrick. (2000). "Updating estimates of the economic costs of alcohol abuse in the United States." Report prepared by the Lewin Group for the National Institute on Alcohol Abuse and Alcoholism.

<sup>3</sup> Ettner, S.L., D. Huang, et al. (2006). "Benefit-cost in the California treatment outcome project: does substance abuse treatment 'pay for itself'?" Health Services Research, 41(1): 192-213.

<sup>4</sup> Hartz, D.T., P. Meel, et al. (1999). "A cost-effectiveness and cost-benefit analysis of contingency contracting-enhanced methadone detoxification." American Journal of Drug and Alcohol Abuse, 25(2):207-18.

<sup>5</sup> NIDA, Principles of Addiction Treatment, 1999.

<sup>6</sup> Wickizer, T.M., A. Krupski, et al. (2006). "The effect of substance abuse treatment on Medicaid expenditures among GA clients in WA State." Milbank Quarterly, 84(3): 555-76.

Estee, S. and D. Norlund (2003). Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project: 2002 Progress Report. R.a.D.A. Division and W.S.Do.S.a.H., Services, Washington State.

<sup>8</sup> Parthasarathy, S., C. Weisner, et al. (2001). "Association of outpatient alcohol and drug treatment utilization and cost: revisiting the offset hypothesis." Journal of Studies on Alcohol and Drugs, 62(1): 89-97.

CATOR Connection, Comprehensive Assessment and Treatment Outcome Research, St. Paul, MN, 1990.

<sup>10</sup> Ettner, op cit.

<sup>11</sup> Hartz, D.T., P. Meek, et al. (1999). "A cost-effectiveness and cost-benefit analysis of contingency contracting-enhanced methadone detoxification." American Journal of Drug and Alcohol *Abuse*, 25(2):207-18. <sup>12</sup> Estee and Norlund, op cit.

<sup>13</sup> Clark, R. E., M. Samnaliev, et al. (2009). "Impact of substance abuse disorders on Medicaid beneficiaries with behavioral health disorders." Psychiatric Services, 60(1): 35-42.

<sup>14</sup> Wickizer and Krupski, op cit.

<sup>15</sup> McConnell, K.J., N.T. Wallace, et al. (2008). "Effect of eliminating behavioral health benefits for selected Medicaid enrollees." Health Services Research, 43(4): 1348-65.16

<sup>16</sup> Parthasarathy and Weisner, op cit.

<sup>17</sup> Ray, G.T., J.R. Mertens, et al. (2007). "The excess medical cost and health problems of family members of persons diagnosed with alcohol or drug problems." Med Care, 45(2): 116-

Jordan, N., G. Grissom, et al. (2008). "Economic benefit of chemical dependency treatment to employers." Journal of Substance Abuse Treatment, 34(30): 311-19.

<sup>19</sup> NIDA, Principles of Addiction Treatment, 1999.