

Investing in Substance Abuse Treatment: An Essential Strategy for Financially Pressured Times

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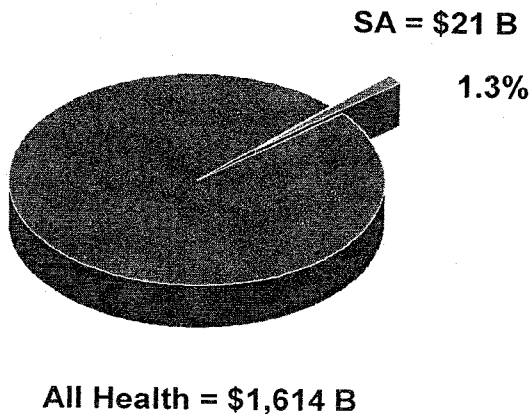
THE PRESENTATION

- I. The Financing of Substance Abuse Treatment is Primarily Public
- II. Social Costs of Substance Use Disorders.
- III. Cost Benefits Analyses of Substance Abuse Treatment
- IV. Some Special Populations

What are we talking about?

- About 22 million Americans age 12 or older or 9 percent of the population are classified as having substance use disorders. (NSDUH, 2007)
- Only a small proportion are treated (about 10% of those who need treatment). (NSDUH, 2007)
- Substance use disorders, if not treated very early, become chronic, relapsing conditions that require continuous monitoring and often multiple treatment episodes.

Substance Abuse Expenditures Are a Tiny Portion of All Health Expenditures, 2003 in Billions (Mark et al, 2003)



Why are we talking about it?

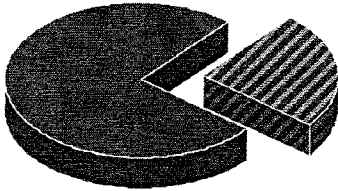
- Failure to provide **effective** substance abuse treatment has serious personal and societal consequences: crime, accidents, disability, death.
- Failure to provide **effective** substance abuse treatment also has significant negative consequences for the public coffer.

Why is this an important issue for legislators?

- Most payment for substance use disorders is made by government, either by public insurance or through states' direct purchase of services.
- About 75% of treatment for substance use disorders is made by public sources (Mark et al., 2005). Over two-thirds of spending is on direct government grants and contracts.
- Only 1.5% of Medicaid expenditures are for treatment of substance use disorders.

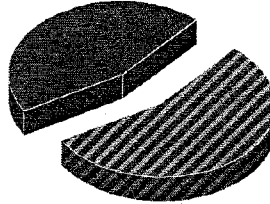
Public Expenditures Are Much Greater for Treatment of Substance Use Disorders Than for Health Care, 2003

**All SA
Public, 77%**



2003, All SA = \$20.7 B
Public = \$16.1 B
Private = \$4.6 B

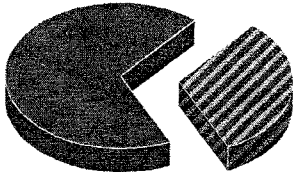
**All Health
Public, 45%**



2003, All Health = \$1,614.2 B
Public = \$721.7 B
Private = \$892.6 B

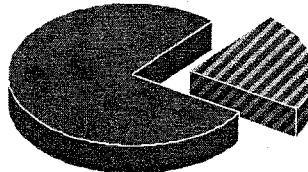
Public Spending is a Greater Share and a Growing Proportion of Expenditures Between 1993 and 2003, in billions

**All SA, 1993:
Public, 68%**



1993, All SA = \$15 B
Public = \$10.3 B
Private = \$4.7 B

**All SA, 2003:
Public, 77%**



2003, All SA = \$20.7 B
Public = \$16.1 B
Private = \$4.6 B

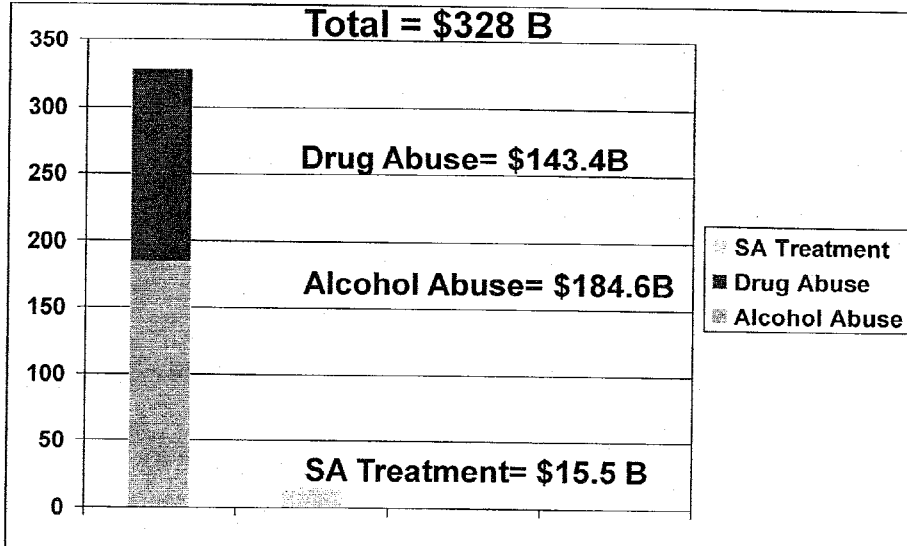
The Treatment System

- There are about 13,000 addiction specialty treatment programs in the US.
- About 80% of them are outpatient, and government funded.
- Of the outpatient programs, 75% see less than 300 admissions per year.
- Two-thirds are private, not for profit programs (D'Aunno, 2004).

Who Are the Patients?

- Patients whose treatment is funded by State substance abuse agencies are also clients of many other State, county, and local agencies.
- One study across three States found that 22% to 75% of persons with co-occurring MH/SA disorders had received some MH/SA services from Medicaid and the State MH and/or SA Agency(ies).

Estimate of National Economic Costs of Substance Abuse (1998) ©Harwood, 2000



Economic costs of substance abuse

Cost of:

- SA Treatment
- Medical Consequences

- Motor Vehicle Accidents
- Fires
- Theft Losses

Lost Earnings:

- Premature Deaths
- SA Related Illness
- Crime/Victims

Cost of:

- Criminal Justice System
- Social Services

COST BENEFIT ANALYSIS

- Compares the economic cost of a program to its economic benefits
- Benefits (avoided criminal justice, medical and, social services utilization) are estimated in \$.
- Result is often expressed as net economic benefits or a cost benefit ratio (CBR): \$1 in SA treatment will produce \$X benefit (or savings)
- May also be call “cost offset”, or “avoided cost”

The Dividends of Treatment: Oregon



Arrests,
Incarcerations
Days of Incarceration

- Outpatient treatment completers were arrested at a rate 45 % lower than the matched group.
- Residential treatment completers were incarcerated at a rate 70% lower than the matched group.
- Outpatient treatment completers had a rate of incarceration days 58% lower than the matched group.

The Dividends of Treatment: Oregon



Use of Food Stamps Open Child Welfare Cases

- Treatment completers had only one-third the use of food stamps that the early leaver comparison group.
- For treatment completers, open child welfare cases decreased by 50%, subsequent to treatment.

The Dividends of Treatment: Oregon



Increase in Medical Costs ER Utilization

- Clients who completed treatment had smaller increases in medical costs.
- Treatment completers also had 53% fewer ER visits.

Group	Pre	Post	Increase
OP- Comp	\$495	\$1114	\$619
OP- Treated	\$480	\$1007	\$527
Res- Comp	\$133	\$489	\$356
Res- Treated	\$213	\$403	\$190
Meth- Comp	\$803	\$4812	\$4009
Meth- Treated	\$1845	\$2194	\$349

The Dividends of Treatment: Oregon



Wage Rate

Number of Weeks Worked

Treatment completers had 65% higher wages than those who were non-completers.

The Dividends of Treatment: Oregon

Economic Results

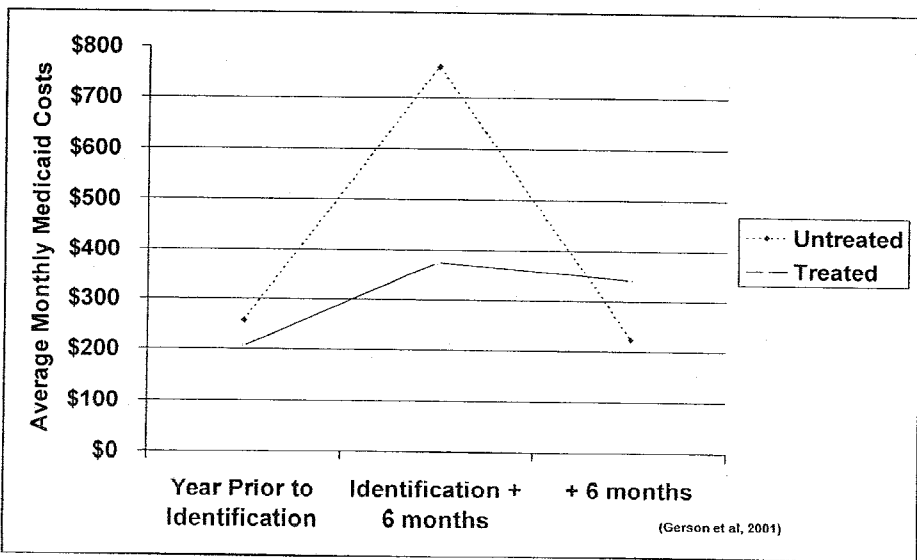
\$ 1 Invested in SA Treatment =

\$5.60 Avoided Costs

The Dividends of Treatment: Other States: California

- In California, criminal activity declined by 66 percent; for every dollar invested in treatment there was a **\$7** return. (Caldwell-Gerstein, 1995)
- Proposition 36 in California diverted 1st non-violent drug offenders to SA treatment vs. prison. Compared to a group of pre Proposition 36 eligible offenders, a net savings of \$1,977 per offender was found, representing a CBR of 2 to 1, or **\$2** saved for every **\$1** invested over a 42 month period. (Urada, Hawken et al, California DADP, 2008)

The Dividends of Treatment: Medicaid in a Ohio County



The Dividends of Treatment: Other Examples

- One Ohio study of the persistent effects of substance abuse treatment found CBR's ranging from **2.8 to 4.1** as long as 30 months after baseline. (Koenig et al, 2005)
- Oklahoma estimated that if 1,666 offenders had served their sentence in prison, they would have spent more than **\$46,646,178** (over 4 years) over and above the cost of drug court. (ODMHSAS, 2004)
- A large study of treatment clients in Chicago found that for every dollar spent, **\$1.49** in benefits accrued. (Salome et al, 2003)

The Dividends of Treatment: Other Examples

- **Drug courts in Kentucky and St. Louis:**
CBR: **2.71 and 2.8.** (Logan et al., 2004)
- In Tennessee, patients who needed but had not received substance abuse treatment, had emergency room use that accounted for **\$777.2 M** in extra hospital charges. (Rickett, 2005; \$ in 2000.)
- **Brief intervention for problem drinkers:**
CBR of **4.3** for medical costs, **39** for social costs.

(Fleming et al., 2002)

The Dividends of Treatment: Prison Treatment

- Voluntary prison treatment programs operated by the Connecticut Department of Corrections.
- Compared 358 inmates who received any treatment (4 different levels) to 473 with SA problem - no treatment.
- One year re-arrest: 33% vs. 46% (but no difference for those who only received one week of drug education).
- CBR range: 1.79-5.74 (Daley et al., 2004)

The Dividends of Treatment: Persons with co-occurring MH/SUD

- Compared clients with co-occurring MI/SUD in a modified therapeutic community program to a treatment as usual group.
- Outcomes measured 12 months post-treatment: self-reported criminal activity, use of treatment/ other health services, employment earnings.
- Net benefits per client = \$85,257 (1994 \$)
- CBR: 5.19 (French, McCollister, Sachs, 2002)

The Dividends of Treatment: Pregnant Women

100 Treated Women

*37% Drug +

*2939 gms

*39 wks

46 Control Women

63% Drug +

2534 gms

34 wks

(Svikis, et al, 1997)

The Dividends of Treatment: Pregnant Women

100 Treated Women

*7 days

*\$14,500

46 Control Women

39 days

\$46,700

The Dividends of Treatment: Pregnant Women

More Benefits from Treating Women

- One study estimated the net benefits (avoided crime costs net of treatment costs) to be \$32,772 for women in residential treatment. (Daley et al., 2000)
- Arkansas pregnant and parenting women who received either standard or specialized residential care yielded CBR of 3.1 and 6.5 respectively. (French, McCollister, Cacciola, et al., (2002)

Summary

- The findings of a variety of studies are consistent in finding that most substance abuse treatment yields a net economic benefit to society. (Belenko, et al, 2005; Harwood, 2002)
- Across many studies a large part of the economic benefit is from reduced crime.
- Improved earnings are also commonly found.
- Many, but not all studies, also document reductions in health care utilization.

Summary

Cost Benefit Ratio's Range from:

\$1:\$1.33 to \$1:\$39 (Belenko, 2005)

NO ONE "TYPICAL" FIGURE

Wide range in part reflective of different patient populations, different treatment modalities, study design, definitions and protocols, and other factors.