

Appendix F

Cost-Benefit Analysis of Drug Abuse Treatment: Declines in Criminal Activity

The consequences of the drug abuse and human immunodeficiency virus epidemics further accentuate the need for policy decisions based on proper scientific assessments. The foundation of sound policy decisions is program evaluation. One of the cornerstones of this type of evaluation is economic assessment.

The most recent analysis that examined economic benefits to society of drug abuse treatment used data from the Treatment Outcome Prospective Study (TOPS) (135,149). This analysis focused only on the economic benefits derived from a decrease in criminal activity during treatment and 1 year after treatment. It compared the average cost of substance abuse treatment in each treatment modality with the savings associated with the observed reduction in predatory illegal acts.

With respect to the social costs of drug-related crime, three cost components were included: costs related to the crime victim (e.g., value of destroyed or stolen property, medical treatment, lost productivity), costs associated with the criminal justice system (police services, adjudication, incarceration), and costs related to crime career productivity, which are basically losses of legitimate productivity for the drug abuser involved in predatory crime (149). Additional cost components included in the analysis were expenditures on illegal drugs, the value of theft, illegal income, and legal earnings. Estimates for these costs were based on self-reported data. Estimates for the victims' costs and costs of the criminal justice system were based on data from the U.S. Department of Justice. Crime career productivity costs were calculated for each drug abuser. This estimate was the difference between the self-reported legitimate income and the expected national average for individuals of the same age and sex. There were two perspectives used in the analysis: the cost to law-abiding citizens, which has as a primary component and is thus influenced by crime-related

costs; and the cost to society, which is dominated by the degree of the abusers' participation in the legitimate economy.

Costs of treatment and benefits derived from treatment were estimated for each treatment modality for a treatment episode of average duration. Benefits derived from treatment were estimated separately for the time while the client was in treatment and 12 months after treatment. Regression analyses were used to calculate the post-treatment benefits. The analyses controlled for sociodemographic factors, previous treatment episodes, pretreatment crime involvement, and the length of time spent in treatment. Regardless of the perspective and modality, with one exception, the benefit-cost ratio was larger than one (149). This finding implies that the benefits from reducing crime that are derived from treatment outweigh the cost of providing treatment. From the perspective of the law-abiding citizen, for each dollar invested in treatment, estimated savings of \$0.30 to \$4.00 (according to the modality) are produced. It should be noted that under the societal perspective, the estimated post-treatment benefits for methadone maintenance clients did not reach statistical significance and were not included in the benefit-to-cost ratio. Thus, the 0.92 benefit-cost ratio includes only benefits derived while the client is in treatment. A possible explanation for this finding is that the societal perspective is influenced by the societal integration and legitimate productivity of the drug abuser, an area in which methadone maintenance had limited success (see ch. 4). On the other hand, the benefit to cost ratio to law-abiding citizens (influenced by crime-related costs) for methadone maintenance clients is 4.04, which reflects the reduced criminal activity observed among methadone maintenance patients. Overall, the authors state that the reduction in crime-related costs "appears to be at least as large as the cost of providing treatment and much of the expenditure is recovered during the time the drug abuser is in treatment."

It should be noted that the analysis did not control for differences among patient subgroups and relied heavily on self-reported data. In addition, the measurement of costs has been estimated on an aggregate level and was criticized as “primitive” (17). It is argued that the overall results should be considered tentative (17). The time frame of the analysis was 1 year. Although the associated benefits can be expected to continue over time for those who

do not engage in drug use, they maybe offset by the costs associated with those who relapse. On the other hand, benefits other than reduction in crime were not factored into the analysis. There are a variety of tangible and intangible potential benefits that can materialize from the reduction of drug use, both to society and the individuals involved, from increased productivity to the prevention of HIV infection.