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Is the drug court model exportable? The cost-effectiveness of a driving-under-the-influence court

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Abstract

We assessed the cost-effectiveness of the Rio Hondo driving-under-the-influence (DUI) court, a therapeutic court intervention in Los Angeles County targeted to repeat DUI offenders. The effectiveness of this court intervention was determined through a randomized controlled field experiment. Although prior research does not identify differences in alcohol-related or criminal behavior between treated and control individuals at follow-up, we found improvements in behavior for all program participants regardless of treatment status. A cost-minimization analysis found that, on average, costs of the DUI court exceeded traditional court expenditures for second-time offenders but produced cost savings for third-time offenders. This suggests that implementing a DUI-specific court intervention for serious DUI recidivists is a worthwhile investment of public resources. The unique legal treatment of DUI offenders in California may hide additional cost savings that could be accrued in other jurisdictions through the adoption of DUI court programs.

Keywords: DUI courts; Driving under the influence; Randomized experiment

1. Introduction

In 2003, alcohol-impaired driving was linked to 40% of all traffic fatalities in the United States, representing 17,013 deaths (National Highway Transportation Safety Authority [NHTSA], 2005). The total estimated economic costs associated with driving under the influence (DUI) were approximately US$114.3 billion in 2000, and 63% of these costs were borne by someone other than the impaired driver (Taylor, Miller, & Cox, 2002). In the 1980s, there were steep declines in alcohol-related traffic fatalities, due in part to increased minimum legal drinking ages and prominent public awareness campaigns (Ross, 1992). Although this downward trend in alcohol-related traffic fatalities continued, the pace of the decline has slowed in recent years. For example, total alcohol-related traffic fatalities increased marginally between 1994 and 2002, from 17,308 to 17,419 deaths (NHTSA, 2003). When adjusted for total vehicle miles traveled (VMT), this represented a 15% reduction—from 0.73 deaths per 100 million miles traveled in 1994 to 0.62 deaths per 100 million miles traveled in 2003. In comparison, deaths per VMT decreased by 55% between 1982 and 1994 (NHTSA, 2003). Recent evidence suggests that the prevalence of drunk driving is now rising after years of steady decline (Quinlan et al., 2005).

In response to the continued problems associated with DUI behavior, a handful of courts throughout the country have developed therapeutic jurisprudence models that couple sanctions against DUI offenders with counseling and treatment. These DUI courts are modeled on drug

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courts, a therapeutic court model popular in criminal justice communities (Finn & Newlyn, 1993). Drug courts recognize that substance abusers are likely to need treatment to recover. Unlike traditional criminal courts, drug courts require more frequent interaction with the judge, who monitors participants' urinalysis results, drug treatment progress, and reports by providers of other services like vocational rehabilitation, mental health, or family counseling. In frequent meetings with drug court participants, judges use their authority to reward progress or punish poor performance using a variety of graduated incentives and sanctions, such as a day in jail for drug use or less frequent reporting for prolonged abstinence (Goldcamp, White, & Robinson, 2001a; Huddleston, Freeman-Wilson, & Boone, 2004). Typically, offenders are motivated to participate in drug courts because they can remain in treatment or community settings and avoid jail or prison sentences if they are compliant with the drug court mandates.

Nonexperimental evaluations of drug courts found that they were successful in reducing criminal recidivism (Goldkamp & Weiland, 1993; Granfield, Eby, & Brewster, 1998; Roberts-Gray, 1994; Sechrest, Shichor, Artist, & Briceno, 1998), increasing retention in treatment programs (Marlowe, DeMatteo, & Festinger, 2003), and lowering costs (Huddleston et al., 2004; Judicial Council of California & The California Department of Alcohol and Drug Programs, 2002; NPC Research Inc. & Administrative Office of the Courts Judicial Council of California, 2002). For example, NPC Research Inc. and Administrative Office of the Courts Judicial Council of California (2002) evaluated the cost-effectiveness of three California drug courts from the perspective of taxpayers (excluding costs to drug abuse offenders) and found that—after an initial period of investment—drug courts became cost-effective due to reduced criminal recidivism. Because the drug court programs evaluated in this study did not include a randomized control trial, the comparison group for assessing cost-effectiveness consisted of individuals who were ineligible or those who declined to participate in the drug court program. Moreover, the evaluation considered only those cases that successfully completed the drug court to be representative of drug court outcomes. This type of "as-treated" analysis tends to exaggerate the likely cost-effectiveness of drug court, because those who successfully complete the program are not representative of those who drop out early. In particular, early dropouts are likely to have more serious drug and criminal behavior problems and are therefore likely to have higher associated costs. Thus, in one of the evaluated courts, costs to taxpayers and the criminal justice system that were avoided amounted to US$1.4 million per 100 participants in the drug court program over a 4-year period. A second study of California drug courts (Judicial Council of California & The California Department of Alcohol and Drug Programs, 2002), which also adopted the questionable as-treated evaluation design, found that drug courts were effective in reducing rates of rearrest, reconviction, and reincarceration and that the total of those costs avoided by a sample of 2,892 drug court participants between January 2000 and September 2001 exceeded US$40 million. As with the NPC study, this evaluation was not based on a randomized control trial.

Despite the promising results from nonexperimental studies, Belenko (2001) pointed out that there are some shortcomings in the literature, including lack of information on length of program duration, few studies with formalized treatment and control groups, and limited information on the types of services provided by drug courts. Experimental and quasi-experimental evaluations that attempted to isolate the effect of drug court treatment programs from other confounding factors found mixed results. Truitt, Rhodes, and Hoffman (2002) used an instrumental variables approach to evaluate the effect of two drug court programs on rates of recidivism for new felonies and found that the programs reduced recidivism by between 30% and 70% over a 2-year period. Similarly, Gottfredson, Kearly, Najaka, and Rocha (2005) and Banks and Gottfredson (2004) evaluated a Baltimore drug court where participants were randomized into treatment and control groups and found that treated individuals were less likely to report crime and substance use and had a longer time to first rearrest than the control group. Other studies found no effect or even a deleterious effect of drug court programs. Deschenes, Turner, and Greenwood's (1995) evaluation of drug court participants in Maricopa County, AZ, for example, found no statistically significant difference in recidivism between treatment and control groups. Meithe, Lu, and Reese (2000) found that drug court participants in Las Vegas had higher rearrest rates as compared with nonparticipants.

Despite the mixed results from experimental evaluations, many members of the criminal justice community view drug courts as a success. For example, Goldkamp, White, and Robinson (2001b) argued that, in time, society may come to view drug courts as "one of the major justice reforms of the last part of the 20th century." Perhaps due to their publicized success, the number of drug courts in the United States has increased dramatically since 1989. According to the National Drug Court Institute, there were 1,183 drug courts in operation in the United States in 2003, which is an increase of more than 1,000 in less than 10 years.

As the drug court movement has grown, courts have adopted the drug court model to other social problems, including domestic violence, crimes committed by the mentally ill, and DUI (Rottman and Casey, 1999). As of December 2003, there were at least 42 stand-alone DUI courts operating under the drug court paradigm (Huddleston et al., 2004). These courts employed a variety of treatment methods designed to rehabilitate offenders. Commonly used treatments include individual, group, and family counseling, Alcoholics Anonymous (AA) meetings, attending DUI victim impact panels, community service, acupuncture, pharmaceutical treatments such as naltrexone (ReVia) and Antabuse, electronic monitoring, court-ordered abstinence