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Suffolk County Drug Court Evaluation

Introduction and Summary

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Court Enhancement
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Advisory Board
Suffolk County Drug Court
Programs

Delivered to:
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1.0 Introduction and Summary

This report documents an evaluation of four adult treatment drug court programs located in Suffolk County, Massachusetts. The evaluation incorporates both process and impact analyses conducted by Abt Associates Inc. The process evaluation examines program caseflow and participant characteristics to describe program intake, retention, and graduation. Using a comparison group of matched probationers who did not enter drug court, the impact analysis studies the receipt of alcohol and other drug treatment services following entry into drug court; and it studies probation revocations, criminal recidivism (new arrests and new convictions), and incarceration (Houses of Correction or jails) during a follow-up period beginning one year after the probationer entered drug court.

1.1 Process Analysis: A Summary

By policy, the four drug courts admit offenders with serious and chronic addiction histories and substantial criminal records. (See section 3.0.) To demonstrate the application of that policy, we assembled and integrated data from diverse sources, and we used those data to compare the prior histories of drug court participants and other drug-involved probationers. (See section 2.0.) By integrating drug court records with probation assessment records for drug-involved probationers, we established that drug court participants tend to have worse probation risk scores than do other drug-involved probationers (consistent with the eligibility policy of the four drug courts) based on:

- Prior criminal records and correctional histories
- Unstable residences and employment records

By integrating drug court records with state criminal history records, we established that drug court participants tend to have more extensive criminal histories based on:

- Previous arraignments
- Previous convictions

After integrating drug court records with House of Corrections Records, we found that drug court participants were more frequently incarcerated and spent more time incarcerated prior to their participation in drug court than did other drug-involved probationers. By integrating drug court records with substance abuse treatment records, we found that drug court participants had more frequently been in treatment, presumably reflecting more entrenched substance abuse problems, than was true of other drug-involved probationers.

We examined drug court program records for 833 probationers. Records showed the program status for 794 participants. Of the 794, about 13 percent were active in drug court at the time the records were assembled. Of the other 690 participants, about 42 percent were graduates, and the rest had unfavorable outcomes: 11 percent had outstanding warrants and the court committed or otherwise ended the participation of the other 47 percent.

1.2 Impact Analysis: A Summary

Program evaluators often use random assignment to assure that individuals who receive a treatment (here, participation in drug court) are no different from individuals who do not receive the treatment (here, non-drug court probationers) except that the former are “treated” while the latter are not. By establishing

pretreatment equivalence between the treated and untreated groups, random assignment assures that any observed post-treatment difference in outcomes can be attributed to the treatment itself. However, random assignment was impossible for this evaluation, which relied on archival data.

It would have been misleading to compare outcomes for drug court participants and other drug-involved probationers because the process analysis showed that program eligibility requirements caused drug court participants to differ from other drug-involved probationers in ways that are likely to affect outcomes. When faced with this type of problem, evaluators often use statistical procedures to “control” for pretreatment differences. We used a procedure called “matching based on propensity scores.” For every drug court participant who met criteria described later (about 300 drug court participants), we identified up to three probationers who were *observational equivalent*¹ to the drug court participant on characteristics such as criminal record and other factors. We then computed the differences between the outcomes for each of 300 drug court participants and their matched probation counterparts, and we averaged over those 300 differences to estimate an overall average treatment effect. Thus, comparisons made for purposes of the process analysis and for the impact analysis used different data sets, commensurate with the different purposes of the process and impact analyses.

For the impact analysis, the principal comparison is between probationers who **entered** drug court and their matched probation counterparts. Specifically, it is not a comparison of drug court completers and drug court dropouts; nor is it a comparison of drug court completers and matched probation counterparts. Comparing the outcomes for those who entered treatment with the outcomes for those who did not enter treatment is the standard way that program evaluators test for treatment effects (Bloom, 2005) and it is the principal way that other evaluators have studied drug court programs (GAO, 2005). Nevertheless, the Advisory Board requested that we also compare the outcomes for 158 drug court **graduates** with their matched probation counterparts, and this report also summarizes results from that comparison.

Using standard statistical analysis to examine outcomes, we found:

- Compared with non-drug court matched probationers, drug court **participants** (graduates and non-graduates):
 - Are 13 percent less likely to be arrested (0.46 arrest probability for drug court participants and 0.52 arrest probability for matched probationers);
 - Have 34 percent fewer convictions on average (1.45 convictions for drug court participants and 2.20 convictions for matched probationers);
 - Remain arrest-free for 15 percent longer on average (410 days for drug court participants and 356 days for matched probationers);
 - Are 24 percent less likely to be incarcerated (the probability of incarceration is 0.16 for drug court participants and 0.21 for matched probationers);
 - Have 35 percent fewer incidents of incarceration (an average of 0.20 events per drug court participant and 0.31 events for matched probationers); and
 - Have 36 percent fewer suspensions and revocations (an average of 0.25 for drug court participants and 0.39 for matched probationers).

¹ The meaning of observationally equivalent is explained later in this report. A non-drug court probationer is observationally equivalent to a drug court participant if he or she is like the drug court participant with respect to all observed variables that would affect outcomes: criminal record, history of substance abuse, and so on.

- Compared with non-drug court matched probationers, drug court **graduates**:
 - Are 33 percent less likely to be arrested (0.34 arrest probability for graduates and 0.51 arrest probability for matched probationers);
 - Have 47 percent fewer convictions (1.10 convictions for graduates and 2.09 convictions for matched probationers);
 - Remain arrest-free for 25 percent longer on average (480 days for graduates and 383 days for matched probationers);
 - Are 70 percent less likely to be incarcerated (the probability of incarceration is 0.06 for graduates and 0.20 for matched probationers);
 - Have 66 percent fewer incidents of incarceration (an average of 0.10 events per graduate and 0.29 events for matched probationers); and
 - Have 54 percent fewer suspensions and revocations (an average of 0.17 for graduates and 0.37 for matched probationers).
- Compared with their non-drug court matched probationers, drug court **participants** had a 35 percent higher probability of receiving substance abuse treatment (0.65 for drug court participants and 0.48 for matched probationers). Nevertheless, non-drug court probationers frequently received substance abuse treatment, so if substance abuse treatment were the principal ingredient of drug court success, we would only expect a modest incremental improvement from drug court participation. Of course, the provision of treatment is not the only or necessarily the most important element of a drug court program. Compared with non-drug court matched probationers, drug court **graduates** are neither more nor less likely to enter treatment. The apparent explanation is that drug court is successful at reducing relapse to substance abuse, and hence reduces the need for future treatment (beyond the treatment that was delivered as part of the drug court program).

Drug court programs are selective. In the absence of random assignment, therefore, an evaluation based on propensity score case matching (or any other quasi-experimental procedure) may not control for all elements of selection bias. Nevertheless, the best evidence at our disposal indicates that the four drug courts in Suffolk County have increased the receipt of substance abuse treatment and reduced criminal recidivism for a population of otherwise recalcitrant, drug-involved offenders. This evidence is consistent with reports from the Federal Government Accounting Office, which assessed the effectiveness of drug courts over 27 programs for which researchers had reported rigorous evaluations.