



## **Brief Report Series**

# **Information Technology Transfer in Drug Courts: Pilot Test of the eCourt System**

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**Rationale and Objectives.** Efforts to improve drug court research and information technology have been ongoing since the early days of the drug court movement. Promising evaluation results have helped spur the proliferation of drug courts, which now number more than 1,600 nationally. Evaluation reviews, however, have also noted the rudimentary state of most drug courts' information systems, and the inability of many individual courts as well as oversight agencies to monitor and report on performance (Belenko, 2003; GAO, 2002). Despite long-standing calls for improving these systems, the field has struggled to develop and implement information technology (IT) systems that can assist drug court team members in their daily operations while generating the kind of timely and cost-efficient

data needed for research, federal monitoring, and program development.

The e-Court project is intended to address these needs, while also building basic knowledge on technology transfer and the role of technology in advancing program implementation and effectiveness. eCourt is being conducted under CJDATS with supplemental support from the federal Office of Justice Programs (OJP).

*Specific objectives of the eCourt pilot include:*

- Develop and test a management information system (MIS) for monitoring performance at the individual client and program level that can be readily adopted and implemented in drug courts receiving OJP funding.
- Assess the factors involved in drug courts' adoption and use of a web-based MIS with built-in capacities for performance monitoring and data sharing across and within agencies.
- Assess the relative impact of two transfer strategies, a standard training and an enhanced model featuring onsite pre-training, on eCourt adoption and use.
- Explore the impacts of the eCourt MIS on drug court performance in regards to communication and collaboration among drug court team members and proximal client outcomes such as drug test results, drug court retention, and improvements in employment at discharge.

**Development and Design of the e-Court System.** eCourt developers took advantage of an existing system, the Web Infrastructure for Treatment Services (WITS) platform, developed with CSAT support for state drug and alcohol administrative agencies. In addition to the essential cost-savings

from building on an extant system, use of the this platform will make future adoption of eCourt easier in states already employing WITS. New screens and internal databases focusing on court and case management activities, sanctions and incentives, current charges and criminal history data, and discharge and outcome information were added to WITS screens addressing client admission information, assessment results (including standardized measures such as the Addiction Severity Index), treatment and other service participation, and drug testing that were further tailored for eCourt. Drug court team members from different organizations, such as the court, probation/parole, and treatment agencies can log into the system from any location with web access and enter and share data based on client consent protocols that follow federal confidentiality guidelines. Built-in reports allow users to export tables showing progress and status of individual clients, as well as information aggregated across clients on standard drug court performance indicators, such as admission, completion, and rearrest rates, drug test results, treatment participation, and improvement at discharge on measures of employment, education, living in a drug-free household.

**Drug Courts Completing the eCourt Pilot**

**Jackson (Kansas City, MO):** 340 clients, 14.5 years in operation

- 23 eCourt users; enhanced training

**Ramsey (St. Paul, MN):** 50 clients (>100 w/other problem-solving court parts); 5 years

- 7 eCourt users; standard training

**Providence, RI :** 80 clients; 4 years

- 6 eCourt users; enhanced training

**Will (Joliet, IL):** 55 clients; 8 years

- 14 eCourt users; enhanced training

**Shawnee (Topeka, KA):** 40 clients; 6 years

- 2 eCourt users; standard training

**Seminole (Sanford, FL), Anne Arundel (Annapolis, MD), and Prince Georges (Upper Marlboro, MD)** drug courts still in pilot phase

**Pilot Test Procedures.** The drug courts implementing eCourt included a mix of sites that had expressed a preliminary interest in participating in the pilot and others recruited from a national list of OJP-funded courts that were identified to help make the pilot sample representative. In spring 2007, seven drug courts agreed to take part in the study and all were trained between June and August. Additional funding provided by OJP in late 2006 provided an opportunity to explore the impacts of different training strategies. To the extent possible, courts were matched in pairs on the basis of size, history of MIS use, and whether they had contracts with specific providers for treatment, and a site in each pair was randomly assigned to receive standard or enhanced training. All sites received two days of onsite

eCourt training and a pre-training session that focused on how technology fits with court operations. In the standard training sites, the pre-training was done via an off-site interactive Web-based session, while the enhanced sites received an onsite, 1-2 day session that afforded a greater examination of how eCourt could best serve the functional roles and relationships unique to that particular drug court.

Five courts implemented the system immediately after training and completed the six-month pilot phase in early 2008. Of the original group of seven, two small sites chose not to implement the system, in one case because of a sudden loss of funding, and the other due to the drug court coordinator's prolonged sick leave. Three additional courts have implemented the eCourt MIS and remain in the pilot phase. The results in this brief report are drawn primarily from data obtained on the five sites that have completed the pilot. As shown in the table above, these include a small court, three moderately sized courts, and one of the largest and oldest drug courts in the country, Jackson County Drug Court.

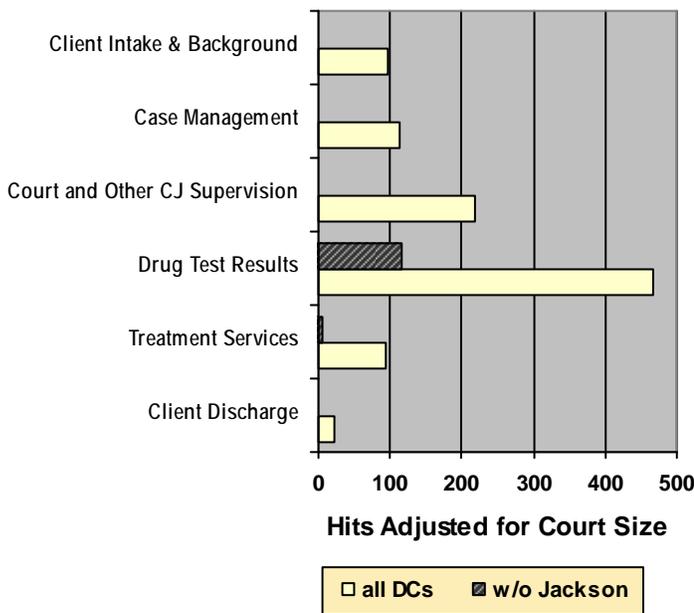
Data collection and analyses so far have been based on two sources. In-person interviews were done at baseline (N=57) and after the 6-month pilot period on the key members of the drug court team; phone interviews were also done at 2 and 4 months after eCourt implementation. Use of eCourt was also

tracked through an internal record of each time a user either accessed (viewed) or modified a screen (entered or changed data). The record allowed us to look at eCourt “hits” over the pilot period for anyone who ever logged onto the system.

**Results: Overall Use of the eCourt System.** Use of the eCourt MIS varied widely by drug court. The Jackson County court used the system at a much higher rate than smaller courts, even adjusting for participant caseload. Jackson totaled 187,222 hits over the six-month pilot, and an average of 67 hits per work day for each Jackson user. At other drug courts, users averaged 8 hits a day, ranging from a high of 18 per day at the Ramsey court (15,447 total) to just 2 hits daily at the Will County court (2,851 total). Further analyses showed that the Jackson numbers were inflated by very heavy use of

the system for recording and reporting drug test results; nonetheless, even with use of the drug test screen subtracted, Jackson had 67,805 hits, or over 50,000 more than the next highest site.

**Use of eCourt Screens**



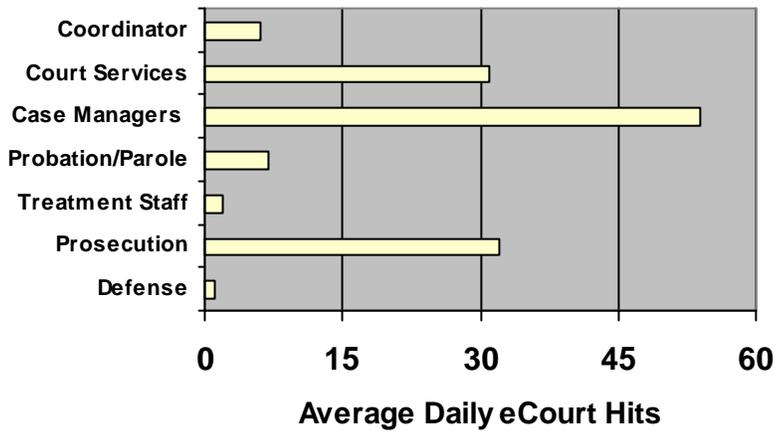
**Use of eCourt Screens.** As shown in this chart, the drug test screen was also fairly heavily used by the other courts taking part in the pilot, with the second most use among the six types of eCourt screens. The most heavily used screens were those involving drug courts’ basic court and case management operations, including screens used to track court appearances, judicial orders, sanctions, and meetings between the participant and the case manager or probation officer. The screens that focused on drug treatment, including attendance in counseling sessions, were rarely used by any site but Jackson. A

similar pattern was evident with the performance reports built into eCourt. Client-level progress reports were used in Jackson and to a lesser extent Ramsey and Providence, but some of the more advanced capabilities of eCourt – interagency sharing of treatment data and performance reporting – were little used by the pilot sites.

Users’ utility ratings of eCourt screens generally echoed their usage patterns, as the screens that were perceived as most useful were those to record drug tests (mean=4.1 of a 1-5 scale, sd=.99) and court and other criminal justice supervision events (mean=3.9, sd=.79). The formal assessment screens that were built into eCourt were used infrequently, as the pilot courts continued to employ their ongoing, established assessment protocols. The overall utility score of the 14 screens rated in the follow-up interviews was favorable, averaging 3.5 of a possible 5 points. Satisfaction with elements of the system was also rated on 5-point scales and probed in open-ended questions. Users most liked the fact that the system “has the information I need” and they also gave high ranks to the performance and progress reports, despite making little use of these reports. Low rankings were given to the “user friendliness” of the eCourt MIS, and there was widespread agreement that the system was too complex, and could be improved by reducing the number of screens and required data entry items on screens, and making navigation easier.

**eCourt Use by Staff Position.** Besides the very heavy use by drug testing staff in Jackson and Ramsey, case managers, prosecutors, and court clerks and assistants had the most hits on the system over the pilot period. Analyses by position again showed very little use by treatment staff, and there

**eCourt Use by Team Member Position**



was surprisingly modest levels of use by the drug court coordinator and other managers – including the judge in each site. While judges generally praised eCourt and gave high ranks to the system and its reporting capabilities, none of the judges in any of the pilot sites ever logged onto the system.

**Factors Affecting eCourt Implementation.** There was no evidence that enhanced training was more effective than standard training in fostering eCourt use. In fact, even the enhanced training appeared insufficient to engage team members in using the interagency

and performance reporting capabilities of eCourt. Communication and collaboration within the team did not increase over the pilot period. The findings did indicate that eCourt use may be related to the size and scale of the drug court, as the two largest sites, Jackson and Ramsey (when this site’s other problem-solving courts are also counted) had the most hits on the system. The pilot underscored how small drug courts operate at the margins, as funding problems and staffing issues led to two of the original pilot sites dropping out prior to eCourt implementation and a third virtually stopping data entry in the last two months of the pilot. Drug court readiness appeared related to adoption and implementation, as Jackson, Ramsey, and the site with the third-most use, Providence, scored highest on all five baseline measures of organizational climate for change (scales on future vision/goals, openness/innovation, taking risks, focus on performance, and staff training & skills). Trainers and site researchers’ observations reinforced this view, as these same sites had prepped all potential users prior to training, and their trainees were more engaged in integrating eCourt into daily business operations.

**Lessons Learned and Future Research.** eCourt findings indicate that training must be of a sufficient duration and quality to integrate innovation into trainees’ needs and interests. Future eCourt research is planned to assess the effects of booster training aimed at showing users the value in data sharing and performance monitoring, and their role in program improvement. We will also be analyzing available pilot site client data to assess eCourt impacts on proximal court outcomes. Results so far suggest that technology innovations should stress simplicity over completeness and complexity, and that high-quality innovations raise expectations and demands among adopters. Requests made by some courts to continue use of eCourt beyond the pilot period suggest that sustaining change requires shared favorable perceptions of utility and satisfaction among all those who are asked to implement the innovation.

**References**

Belenko, S. (2003). The challenges of conducting research in drug treatment court settings. *Substance Use and Misuse*, 37, 1635-1664.

General Accounting Office (GAO). (2002). *Drug Courts: Better DOJ Data Collection and Evaluation Efforts Needed to Measure Impact of Drug Court Programs*. Washington, DC: U.S. GAO.