

## IMPROVING OUTCOMES THROUGH BETTER DATA TRACKING: THE USE OF TECHNOLOGY IN PROBLEM-SOLVING COURTS AND BEYOND

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*With the 20th anniversary of the nation's first problem-solving court upon us, it may be time to consider how the problem-solving approach can benefit all courts. This article discusses how technology is used in a variety of problem-solving functions in New York, and how the courts are looking at ways to apply these innovations statewide.*

Problem-solving courts are moving out of the experimental phase, with many court systems now contemplating how to apply the problem-solving approach in conventional court settings. In fact, a BJA-funded survey of trial court judges nationwide found that 75 percent approved of using problem-solving techniques in their current assignment, with most indicating that they already use one or more specific problem-solving practices (Farole et al., 2008). With overcrowded jails and prisons, budget constraints, and public outcry for improvements to the justice system, it is understandable that court managers are looking at how the benefits of problem-solving justice, which have been documented by research, can be applied on a larger scale. Technology is an important tool that can support the integration of the principles of problem-solving justice: enhanced information, community engagement, collaboration, individualized justice, improved accountability, and an emphasis on measuring outcomes.

### Problem-Solving Courts and Technology: An Overview

The U.S. currently has more than 2,000 drug courts, 200 mental health courts, 250 domestic violence courts, 30 community courts, and 500 other models (e.g., homelessness, truancy, teen, and sex offense courts), with dramatic growth expected in the years ahead (see Karafin, 2008; Huddleston et al., 2008). In New York State alone, there are nearly 300 problem-solving courts operating—at least one in each of the state's 62 counties—with 49 more courts in planning for 2009, covering all case types and serving a majority of the state's population.

These courts recognize that high-quality information, gathered with the assistance of technology and shared in accordance with confidentiality laws, can help practitioners make more nuanced decisions about both treatment needs and the risks individual defendants pose to public safety, ensuring offenders receive an appropriate level of supervision and services. The additional data required to screen, monitor, and evaluate these cases has necessitated expansion of existing technology, as well as the development of new applications.

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In New York, dedicated problem-solving technology applications developed by the Unified Court System and its research and development arm, the Center for Court Innovation, have been created to support the work of the problem-solving courts, and there are plans to incorporate these components into the main case-management system used in criminal and family courts statewide. With these enhancements, judges and courtrooms across the state will benefit from gains in information technology first forged in the state's problem-solving courtrooms. In the New York applications, there are five key data-tracking elements that span all problem-solving case types, which can also be useful in courts of general jurisdiction:

1. A **screening-and-assessment tool**, consisting of numerous question-and-answer sets, to determine litigants' problems and needs effectively;
2. A **program rolodex**, listing local social-service providers and other partner agencies, to assist the court with placing litigants in needed services;
3. **Detailed court appearance and sentencing options**, with all possible problem-solving mandates (including treatment, social services, batterers programs, mental health services, and job-training programs), providing judges, court managers, and partners with a complete picture of each case;

4. A **flexible compliance-tracking module** to track litigants' attendance and compliance within court-ordered programs, as well as completion status; and
5. Secure **access to the information for community social-service providers**, expanding the applications' user base outside of the court system, which allows providers to see case information and immediately provides the courts with program-status updates. Additionally, New York has developed secure data exchanges between state, local, and private agencies utilizing the NIEM and JIEM models. All agencies benefit by using nationally supported methodology, which allows faster data definition and integration.

### Benefits of Problem-Solving Data Tracking for all Courts

Judges in conventional courts who use data-tracking technology will enjoy many of the same benefits as judges in problem-solving courts. Whether in or out of specialized problem-solving settings, judges who require defendants to participate in substance abuse or mental health treatment, GED classes, employment services, or other programs need the capacity to track this information. Expanded data collection provides some key advantages.

**Interview - Windows Internet Explorer**

**Client Info** You are working with: **SANCHEZ, A** InterviewID: 95079 **Print**

**Alcohol and Other Drug Use**

Have you ever used alcohol?	<b>No</b>
Have you ever used drugs?	<b>Yes</b>
Do you think you need substance abuse treatment?	<b>Yes</b>
Have you ever completed detox?	<b>Do not know</b>
Do you think that you have a problem with drugs or alcohol?	<b>Yes</b>
Have you ever entered treatment for substance abuse?	<b>Yes</b>
If yes, how many times have you entered treatment for drugs?	<b>1</b>
If yes, how many times have you entered treatment for alcohol?	<b>0</b>
If yes, are you currently in a treatment program?	<b>No</b>
If no, what was the most recent program you attended?	<b>SOUTH BROOKLYN</b>
If no, when did you attend this program?	<b>DK 3RD AVE</b>
If no, what kind of program was it?	<b>outpatient</b>

Sample Screen Shot: Drug Compliance System—Assessment questions about drug use history.

1. **Informed Decision Making: Screening and Assessment**  
The more a judge knows about a litigant's history and issues—not just his or her criminal-justice history, but also substance abuse, joblessness, mental illness, education, etc.—the easier it is to make the best possible decisions about bail, sentencing, or placement in services.
2. **Stakeholder Collaboration: Third-Party Access and Data Exchanges**  
When criminal-justice and community-based partners are included in information sharing with the court, this improved coordination can result in more efficient and effective monitoring of offenders, better case outcomes, faster linking of victims to necessary services, and immediate notification of violations of court orders.

**New Compliance for SANCHEZ, A**

**CANCEL**

\* Date recorded: 11/07/2008

\* In compliance:  Yes  No  N/A

Note (optional): Ct is not in compliance. Ct did not show up for her intake at TPE on 11/4/08. Clinic will be submitting a recommendation form to Alternative Sanctions regarding Ct's non-compliance.

Private clinic note (optional): Tested positive for heroin, cocaine

Recorded by: Modified by:

**Submit** **Submit and Add More** Was drug test required?  Yes  No

Add another compliance record for same client/program.

Sample Screen Shot: Community Justice Center Application Out-of-Compliance Alert

### 3. Improved Case Outcomes: Detailed Mandate and Compliance Tracking

To change the behavior of offenders, judges must provide careful oversight of problem-solving mandates. To ensure that a court order to attend and complete drug treatment has been accomplished, for example, it is necessary for a judge to see regular status reports and drug-test results and to require the defendant to return to court frequently.

The screenshot shows a software interface for a Drug Compliance System. At the top, there are tabs for Compliance, Drug Tests, Court Dates, Court Ordered Programs, IDV, and Event/Response. The 'Drug Tests' tab is active. On the left, there is a form for entering test details: Test Date (04/16/09), Not Collect (checkbox), and a list of substances with radio buttons for 'Pos', 'Neg', or 'N/A'. The substances listed are THC, Heroin, Cocaine, Benzodiazepine, PCP, Amphetamine, Alcohol, Methadone, Barbiturates, and Prescription Meds. Below this are fields for Onsite (Yes/No), Apparatus (Machine), and a Comment field. On the right, there is a 'Drug Test History' table with columns for Test Date, Not Collected, and various drug abbreviations (TH, He, Co, Be, Am, PC, Al, Me, Ba, PM, Excused). The table shows two entries: one for 04/02/09 and another for 03/05/09. At the bottom right, there is a 'Key' section defining the abbreviations used in the table.

Test Date	Not Collected	TH	He	Co	Be	Am	PC	Al	Me	Ba	PM	Excused
Thu 04/02/09												<input type="checkbox"/>
Thu 03/05/09												<input type="checkbox"/>

Sample Screen Shot: Drug Compliance System—Drug-test results entered by a treatment provider directly into the court case management system.

### 4. Tracking Results Through Active Research

With more data comes the ability to analyze, study, and report the effectiveness of new approaches. Research can help document improved court outcomes and cost savings and help further improve upon existing practices.

#### Drug Cases and Technology

Drug-treatment courts currently work with only a small fraction of defendants who can potentially benefit from their combination of treatment and strict judicial compliance monitoring, strategies that have been shown to reduce recidivism among drug-addicted offenders (see Rempel et al., 2003). The research supporting the efficacy of drug courts helped contribute to the passage in April 2009 of a

major reform of New York’s Rockefeller drug-sentencing laws that is expected to send more defendants into treatment. Currently, New York’s drug courts admit only 2,600 new felony offenders each year, which, Chief Judge Jonathan Lippman points out, is only “a small fraction of the 43,000 new felony drug arrests that come through the system.” Nationally, only 55,000 defendants were active in drug courts in 2005, compared with 1.5 million who were potentially eligible, according to a study by the Urban Institute (see Bhati et al., 2008). These numbers are staggering. While the movement to promote the use of treatment as an alternative to incarceration seems to be gathering political momentum, there are some very real operational challenges that must be confronted if it is to be successful. Namely, how would all of these additional cases be identified, monitored, and tracked? It simply cannot be done without state-of-the-art technology. Any effort to use technology to expand the courts’ capacity to link defendants to drug treatment must have the following components:

#### 1. Automated Eligibility Screening

In New York, discussions are under way to build an automated-screening component into the statewide criminal and family case-management system, allowing individual jurisdictions to set the system to search for cases that meet their local eligibility rules—such as particular charges, prior felony history, and the jurisdiction of the arrest. Any new arrests would be auto-screened, and those meeting the criteria would be presented to the court in a daily report for further review. This same automated-screening component could also be used to help quickly identify cases potentially eligible for a number of problem-solving case types: community courts (by charge and jurisdiction of arrest), sex offense courts (by charge), and domestic violence courts (by case type and relationship of the parties).

#### 2. Monitoring and Tracking

New York’s Universal Treatment Application, which has been used to track drug court cases statewide since 1995 and was the first specialized problem-solving technology application developed in the state, includes the five key data-tracking elements of assessment and screening instruments, program rolodex, provider-agency access, compliance tracking, and detailed mandate recording. Court administrators recognize that adding this established functionality to the statewide criminal and family case-management system will allow judges who

divert cases to treatment to track and monitor all drug offenders effectively, regardless of whether they are participating in a specialized drug court.

### **Beyond Case Management: Other Problem-Solving Approaches Using Technology**

Applying a problem-solving approach in the justice system goes beyond the use of case-management systems. Following are a few examples of recent innovations in New York using technology to enhance decision making, hold offenders accountable, and improve outcomes for litigants, victims, and communities.

#### **Operation Spotlight**

Operation Spotlight is a New York City-wide project started in 2002 targeting persistent misdemeanants who commit repeated quality-of-life crimes. Before this initiative, studies indicated that 28 percent of all non-felony crime in New York City was committed by only 6 percent of the defendants, leading Mayor Michael Bloomberg to seek to enhance prosecution of these “frequent fliers.”

Specific eligibility criteria must be met for a defendant to be flagged as a “Spotlight” recidivist, including three or more arrests in the past 12 months, two of which must be a non-felony. Automated scanning of all statewide arrest data was developed by the Division of Criminal Justice Services to identify Spotlight offenders, and when identified, the first page of the rap sheet is automatically flagged with the warning “Alert: Persistent Misdemeanant.” The project goal is to improve the prosecution’s and court’s response to these offenders and to recognize patterns as they emerge. A specialized court hears the Spotlight cases, expediting narcotics laboratory reports, increasing trial capacity, and directly connecting offenders who are drug addicted or mentally ill to necessary services. According to studies conducted over the seven-year project, Operation Spotlight has led to an increase in the percentage of eligible defendants detained on bail and receiving jail sentences.

#### **“Fuzzy” Database Searching**

Several new initiatives in New York are built around identifying a common person across multiple databases, or even within the same database, to locate cases for domestic-violence-related and custody-related filings quickly. To accomplish this, the Unified Court System has obtained “fuzzy search” database software, which returns a list of results based on likely significance even when search words and

spellings may not exactly match. Results are “scored” based on the likelihood of a match, so that exact and highly relevant matches receive the highest scores. An example of where a fuzzy search would identify a match is two dockets where the litigant’s first name is entered as Robert on one and Bob on another, but all other relevant search items match. Two high-profile statewide projects currently use this fuzzy-search tool, both of which will be incorporated in the statewide criminal and family case-management system:

#### ***Statewide Registry Check***

Based upon recent legislation, family and supreme courts in New York are now required to perform multiple record checks in all custody/visitation matters before issuing a temporary or final order. These checks provide the court with background information on individuals seeking custody or visitation to help ensure the safety and well-being of the children who may be in their care. The checks include orders of protection history, open family-court warrants, and history of prior child-abuse-and-neglect cases statewide. Searches are based on the individual’s name, gender, and date of birth.

#### ***Integrated Case Identification in Domestic Violence Court***

A new “one-family, one-judge” initiative in New York allows a single judge to hear multiple cases involving the same family where the underlying issue is domestic violence. Eligible cases include existing criminal, family, and matrimonial matters where there are common parties in each. Before the use of fuzzy searching across the statewide databases that contain the eligible cases, court staff had to search through each case-management system manually. The courts now receive a daily report of potentially eligible cases, saving them considerable time and allowing them to focus on the cases that meet their criteria.

By adding a few additional components to existing technology systems and applying the many lessons learned from problem-solving courts, all courts can greatly improve their response to crime, to their communities, and to the litigants who come through their doors.

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