Thermo Scientific TruNarc enables faster case adjudication and improves efficiency of prosecution

Background

In 2011, the Alabama Department of Forensic Sciences centralized and reduced the number of forensics laboratories by 30% from nine to six. As a result of this reduction, the drug case backlog exploded by 240% from 11,455 in August 2011 to more than 28,000 cases in March 2013—the vast majority more than 90 days old. At that time, it averaged 18 months to receive a drug report from the state lab, a requirement in Alabama for proceeding to grand jury. This backlog—and resulting trial delays—has been identified as an inhibitor to a safe and fair criminal judicial system and a contributor to unnecessary confinement in the State of Alabama.

The Problem

- Drug case backlog of more than **28,000** cases with an average **18 month turnaround**
- Alleged drug offenders held unnecessarily pending laboratory results
- Cases dismissed due to lack of lab report; potential offenders released
- Accused perpetrators rarely plead out due to likelihood of case being delayed or dismissed

Trial Objectives

To address the backlog and improve the prosecution process, a collaborative effort was initiated between the Jacksonville State University Center for Applied Forensics (JSU CFAF), the Calhoun-Cleburne Drug and Violent Crime Task Force and the District Attorney for Calhoun and Cleburne Counties.

The Center for Applied Forensics conducted a three-month evaluation of the Thermo Scientific™ TruNarc™ analyzer for identification of suspected controlled substances which addressed the following key objectives:

1. Help relieve state lab backlog
2. Increase speed, efficiency and effectiveness of prosecution
3. Implement a cost effective solution ("pay for itself")

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Technology Evaluation

After considering several technologies, the JSU Center for Applied Forensics chose the Thermo Scientific™ TruNarc™ analyzer for a more extensive evaluation. According to Mark Hopwood, coordinator of the Center for Applied Forensics, "The TruNarc analyzer was selected based on the size and simplicity of operation, security of the library and the fact that exposure to samples was minimal. The other Raman unit that was demonstrated was the size of a suitcase, similar to a bench top instrument, and allowed the operator to add or delete standards in the library." The ability to alter the library would be problematic for prosecution, raising significant questions about the source of the data. A closed loop system, such as the TruNarc analyzer, ensures data integrity and provides traceable standards whose source can be verified.

"The TruNarc is truly 'Fit for Purpose' as a tool for the rapid identification of controlled substances in the field."

Mark Hopwood, Coordinator
JSU Center for Applied Forensics

The TruNarc Solution

In a trial from October to December 2012, the TruNarc analyzer was used by the JSU Center for Applied Forensics in conjunction with colorimetric tests to develop preliminary drug examination reports. These reports were provided to the Assistant District Attorney prior to grand jury, and defendants were typically offered a plea agreement based on the report.

"It's not often that promises are made and every single one of them is met. TruNarc did just that."

District Attorney Brian McVeigh

If the case went to trial, the drug evidence was submitted to the Alabama Department of Forensic Sciences for processing at one of the central labs. If the defendant pled guilty, the drug evidence wasn't sent to the lab, reducing any additional lab burden.

TruNarc Impact

Through use of the TruNarc analyzer and preliminary drug examination reports, Calhoun County, Alabama has seen a marked improvement in court efficiency and plea bargain rates, and is able to better serve their community:

1. Help relieve state lab backlog. *Goal Met*

- Backlog Management

When a defendant pleas out, that drug evidence is not sent to the state lab, reducing the number of samples submitted. While this doesn't have a short term impact on reducing backlog, it ensures that fewer simple possession cases are added to the backlog.

"With TruNarc, we can eliminate the 'no brainer' samples—often simple possession cases. This allows lab resources to focus on distribution, trafficking and other tougher cases."

Mark Hopwood
Coordinator, JSU Center for Applied Forensics

2. Increase speed, efficiency and effectiveness of prosecution. *Goal Met*

- Increased Plea Rate

According to Shane Golden, forensic scientist and assistant coordinator at the JSU Center for Applied Forensics, **55 percent** of items from January 2013 examined using TruNarc had been adjudicated as of May 2013. By using the preliminary drug examination reports, consisting of TruNarc analysis and colorimetric test, the cases were resolved in a matter of months rather than staying in the system pending lab results for 18 months before moving forward to grand jury.

"We've seen our Pleas before Indictment (PBIs) go from one or two to 30, 50, 100—and more than 150 before the most recent grand jury. The only thing that changed during this time was TruNarc."

District Attorney Brian McVeigh

According to District Attorney Brian McVeigh, **"That's 55 percent disposal on cases that no longer have to wait for lab reports. The defendants can get into drug court or rehab, and begin repaying their debt."**

- Address Repeat Offenders

Due to the backlog, many offenders are released only to offend again. According to Commander Rob Savage of the Etowah County Drug Enforcement Unit, "Some individuals have as many as three actions pending before their first case goes to Grand Jury. They make bond and are back on the streets." Etowah County began using TruNarc in June 2013 and are particularly focused on identification of synthetic cannabinoids such as Spice and K2.

- Fast Exoneration of the Innocent

In two cases during the trial period, it was found that the seized material was not a controlled substance. Under existing protocol, it would have taken the typical 18 months for return of lab results, during which time the accused were facing possible criminal charges. Using the TruNarc protocol, the suspects were exonerated within a day and did not face drug charges.

3. Implement a cost effective solution ("pay for itself") *Goal Met*

- Court Fees and Fines

Once a defendant accepts a plea agreement, the process of fees and fine collection can begin. Since initiating the trial in October 2012, Calhoun and Cleburne Counties collected more than **$75,000** in court costs and fines—an **average of $2,000 per case**—more than paying for the cost of several instruments.

Conclusion

In response to the growing backlog and its potential impact on prosecution, the JSU Center for Applied Forensics (JSU CFAF), the Calhoun-Cleburne Drug and Violent Crime Task Force and the District Attorney for Calhoun and Cleburne Counties implemented a trial solution incorporating the TruNarc technology and preliminary drug examination reports.

Through this trial and subsequent efforts, they were able to have a significant, measurable impact on the court system in Calhoun County, Alabama, meeting their initial objectives:

1. **Help relieve state lab backlog**
   While the implementation of TruNarc did not immediately reduce the existing backlog, fewer samples were submitted for processing, allowing the State labs to focus on high priority samples and begin addressing older cases.
2. **Increase speed, efficiency and effectiveness of prosecution**
   The dramatic increase in plea agreements before indictment (PBIs) has been attributed to use of TruNarc results and preliminary drug examination reports prior to grand jury. The increase in pleas helps further streamline prosecution by ensuring that offenders receive treatment and/or rehabilitation needed, or can begin repaying their debt to the State more quickly.
3. **Implement a cost effective solution ("pay for itself")**
   By getting cases through the system more quickly, court fees and fines can be collected, covering the TruNarc implementation and providing funds to support further prosecution.

Following positive initial trial results, a TruNarc analyzer was immediately purchased by the Oxford, Alabama Police Department for use by the Calhoun-Cleburne Drug and Violent Crime Task Force. Further, the State of Alabama Office of Prosecution Services and JSU Center for Applied Forensics obtained a grant from the Alabama Department of Economic and Community Affairs (ADECA) to fund the purchase of four (4) additional TruNarc units, which have now been deployed in neighboring counties in Alabama.

About Thermo Scientific TruNarc

The Thermo Scientific TruNarc analyzer is a handheld Raman system for rapid identification of suspected narcotics. A single test for multiple controlled substances provides law enforcement with clear, definitive results for presumptive identification. The TruNarc instrument easily identifies narcotics, stimulants, depressants, hallucinogens and analgesics using lab-proven Raman spectroscopy, analyzing key drugs of abuse as well as common cutting agents, precursors and emerging threats such as cathinones (bath salts) and synthetic cannabinoids.

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