Qlarant

Data Science & Technology Reports:
The Opioid Crisis

In a War Where Evidence is Ammunition the Smoking Gun Can Be Buried in Data.

How specialized data analysis helps law enforcement locate buried targets and speed convictions.

ON THE FRONT
OF A C

Among the many stakeholders fighting the American opioid crisis, the United States Attorney's Office is using every available tool in their arsenal to combat the epidemic and stem the tide of devastation. In addition to assigning special coordinators and full-time opioid abuse unit prosecutors, U.S. Attorneys are working closely with federal, state, and local law enforcement partners; various State Attorneys' Offices; the Drug Enforcement Administration's Tactical Diversion Squads and Diversion Groups; and various task forces.

One of the most successful initiatives pursued by the USAO is also the one with significant additional potential: The application of data and data analysis for identifying trends and targets, and for solidifying case evidence for more convictions.

The U.S. Department of Health and Human Services focuses on this opportunity exclusively in its September 2018 Report, *Data Sources and Data-Linking Strategies to Support Research to Address the Opioid Crisis*. Calling for both "better data" and "better research" to improve "the current state of evidence" in the war on opioids, HHS expresses support for a wide array of data categories,

"Law enforcement must recognize the importance of reliable and comprehensive data in understanding the extent of the problem and developing an effective response."

Notes from the Field: Opioid Crisis
Lessons Learned From the Front Lines of the Opioid Epidemic
U.S. Department of Justice, Office of Justice Programs,
National Institute of Justice
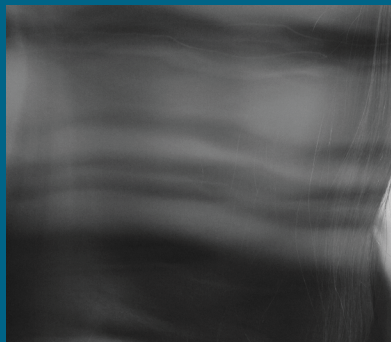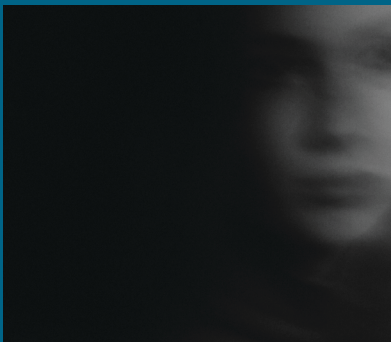
LINES
RISIS

highlighting that:

"Prescription drug monitoring programs (PDMPs) are increasingly used to identify opioid analgesic prescribing trends and apply risk indicators for inappropriate prescriber behavior. Other large databases, such as all-payers claims databases, are also valuable resources for understanding the crisis, particularly if they are able to accurately link individuals over time and/or link to other relevant data sources."

The kind of analysis that reveals such links and insights is precisely the work performed by the data teams increasingly engaged by law enforcement for their unique expertise in healthcare fraud and abuse. What's more, the data sources employed not only extend well beyond the core recommendations of the DOJ and HHS, but can also include singular local, regional, or state archives and databases.

"Solving the opioid epidemic is well beyond the scope of what law enforcement can do alone," wrote Chief Richard Biehl of the Dayton, Ohio Police Department in his April 2018 *Notes from the Field* report on the opioid epidemic for the U.S. Department of Justice. "Partnerships are key, both to effectively respond to the crisis and to conduct research."

Data for
Insight & Evidence

Mining for Trends & Targets

First on the list of challenges and opportunities involved in combating the opioid epidemic on the data front is identifying aberrant prescribing or dispensing behavior, as it allows law enforcement to more effectively leverage their resources to address the worst offenders.

The types of analytics and data needed may vary depending on the objectives and requirements of individual states and jurisdictions, but some of the most common analytics for identifying opioid abuse include patients prescribed:

- Over 90 morphine mg equivalents per day
- From multiple prescribers during a given period
- Disproportionate use of opioids with high street market value, e.g. methadone, OxyContin® et al.
- Both benzodiazepines and opioids concurrently
- Narcotics requiring long-distance travel to obtain
- Concurrent use of opioids and opioid potentiators

Data analysis can also be used to identify entities that are non-compliant with reporting regulations through reconciliation with other available data sources. Results may reveal anomalies that don't match other findings. Educating the community-at-large about this capability may further deter aberrant behavior simply by ensuring greater compliance.

Coordinating for Conviction

Then comes the challenge of developing the case itself, which includes organizing and preparing data to support search warrants, arrests, and convictions. This challenge is especially relevant in the selection of data team partners for law enforcement. Although qualified resources in data analysis and predictive analytics are plentiful, that number diminishes precipitously when category requirements – medical and healthcare data sets in general, as well as fraud and abuse analysis in particular – are added into the mix.

An effective and efficient data partner for law enforcement is a multi-disciplinary team armed

For the Strength of
Your Convictions

If data are the building blocks of evidence, then your resources for data acquisition and analysis are likely to play a decisive role in your success at trial. When it's time to select a data team partner, it's time to talk to Qlarant.

PROPERTY RECORDS

HOSPITAL DATA

FINANCIAL FILINGS

DRUG MONITORING DATA

D.E.A. RECORDS

INSURANCE CLAIMS

COURT RECORDS

STATE MANAGED CARE DATA

with specialized algorithms to analyze large-scale prescription drug data sets. Ideally, the data resource team consists of former members of agencies such as the Office of Inspector General (HHS-OIG) and Drug Enforcement Administration (DEA); subject matter experts who are physicians and clinical pharmacists; as well data analysts who can tailor algorithms which are sophisticated in their application, yet easy-to-use and comprehensible for law enforcement. Through these types of analyses, specialized data teams partnering with law enforcement have investigated thousands of providers for their over-prescribing of opioids, and have both referred investigations to law enforcement and aided criminal prosecution teams through conviction. Such teams have testified in trials across the country, at both the state and federal level.

Data Team Best Practices

Develop data team algorithms in collaboration with law enforcement to benefit from their experience.

Supervisory review of analysis and modeling to ensure only statistically significant outcomes are pursued.

Combine client data sources with third-party data sources to ensure a complete data inventory.

Ensure the data team consists of individuals with a proven track record of supporting cases through conviction.

A Qlarant
Case Study

Following is a generic composite of actual cases, which serves as a representative example of how specialized data solutions can yield significant real-world results.

Dr. John Doe was identified in a proactive data model for excessive distribution of opioids. Prescribing data and medical claims were used to identify Doe as a "pill mill" doctor – those who prescribe opioids and other controlled substances to patients lacking in medical necessity. The flagging of Dr. Doe included a high incidence of patients traveling excessive distances to see him, as well as a high percentage of patient overdoses.

The investigation opened by law enforcement included detailed clinical analysis performed by the Qlarant clinicians, which established that Dr. Doe represented an existential threat to the health and safety of his patients: He routinely provided morphine equivalents dosages of over 1,000 mg per day; he failed to comply with dosing standards, increasing the risk of overdose; he used opioids restricted to cancer patients for patients who did not have cancer.

The data team also provided evidence that Dr. Doe was in fact the highest prescriber in his state of an opioid restricted for use in cancer patients, and that he had been paid by the drug's manufacturer. Dr. Doe then opened his own pharmacy, which almost exclusively dispensed the drug, Subsys®, and which received significant rebates from the drug manufacturer.

Following his arrest, Doe decided to go to trial rather than accept a plea deal. There were multiple pre-trial meetings with the data team to assist with the multiple and complex issues of healthcare fraud and diversion. Analysts and clinicians from the data team testified in the trial, which lead to a conviction on all counts. Dr. Doe was sentenced to over 20 years on violations of the Controlled Substance Act, the Anti-Kickback Statute, and Healthcare Fraud.

1

TECHNICAL CAPABILITY
Locate an integrated team of qualified data scientists, statisticians, engineers, and software designers.
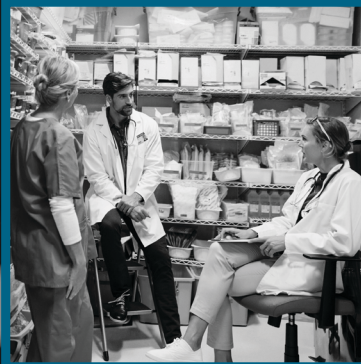
3

DEEP EXPERIENCE
Seek a legacy of medical data projects and predictive analytic tools to aid specifically in the detection of misuse.

2

CATEGORY KNOWLEDGE
Engage those with special expertise in the scope and complexity of medical waste, fraud and abuse.

Highest & Best Use of Attorney Time
Attorneys are no strangers to the value of information. But attorney value is in using the implications and conclusions of data to successfully prosecute a case – not spend countless hours organizing and analyzing.

Choosing
A Data Team Partner

A USAO data partner should be able to analyze large-scale prescription drug data sets to identify and prioritize prescribers, dispensers, and manufacturers who represent a threat to the health and safety to the population. Ideally, the data resource team consists of former members of agencies such as the Office of Inspector General (HHS-OIG) and Drug Enforcement Administration (DEA); subject matter experts who are physicians and clinical pharmacists; as well data analysts who can tailor algorithms that are sophisticated in their application, but provide easy-to-use and comprehensible results for law enforcement.

Meet Your
Data Division

Qlarant

Consulting and tools to assist law enforcement in analyzing and utilizing data findings for more successful prosecutions.

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We get legal, we get medical. You get results.

Qlarant is a 503(c) company with over 500 specialists focusing on data analytics, risk scoring and fraud, and waste and abuse detection and pursuit. Solutions are provided by a multidisciplinary team of auditors, compliance experts, former law enforcement and State Medicaid officials, physicians, policy experts, and senior nurses, as well as investigators, pharmacists, epidemiologists, and data scientists.

Ready expertise in opioid fraud & abuse.

Our extensive government work includes partnerships with federal and state enforcement entities such as Health and Human Services Office of Inspector General (HHS/OIG), the Federal Bureau of Investigation (FBI) and the Drug Enforcement Administration (DEA). Our expertise in conducting investigations and supporting testimony before the courts is well regarded, as is our ongoing work with these law enforcement entities.

Qlarant is the only contractor having provided surveillance and detection of prescription drug abuse to the Centers for Medicare & Medicaid Services (CMS) nationally since 2009, and has developed key risk indicators and algorithms to identify questionable behavior patterns and interactions for controlled substances, and for opioids in particular.

Motion to expedite.

Find out just how quickly and completely we can get up-to-speed on your particular needs and objectives. Call or write Sandy Love, President of Integrity Solutions, at loves@qlarant.com | 1-800-999-3362

To download a PDF file of this report, and for more information including video programming, visit

qlarant.com/opioidcrisis