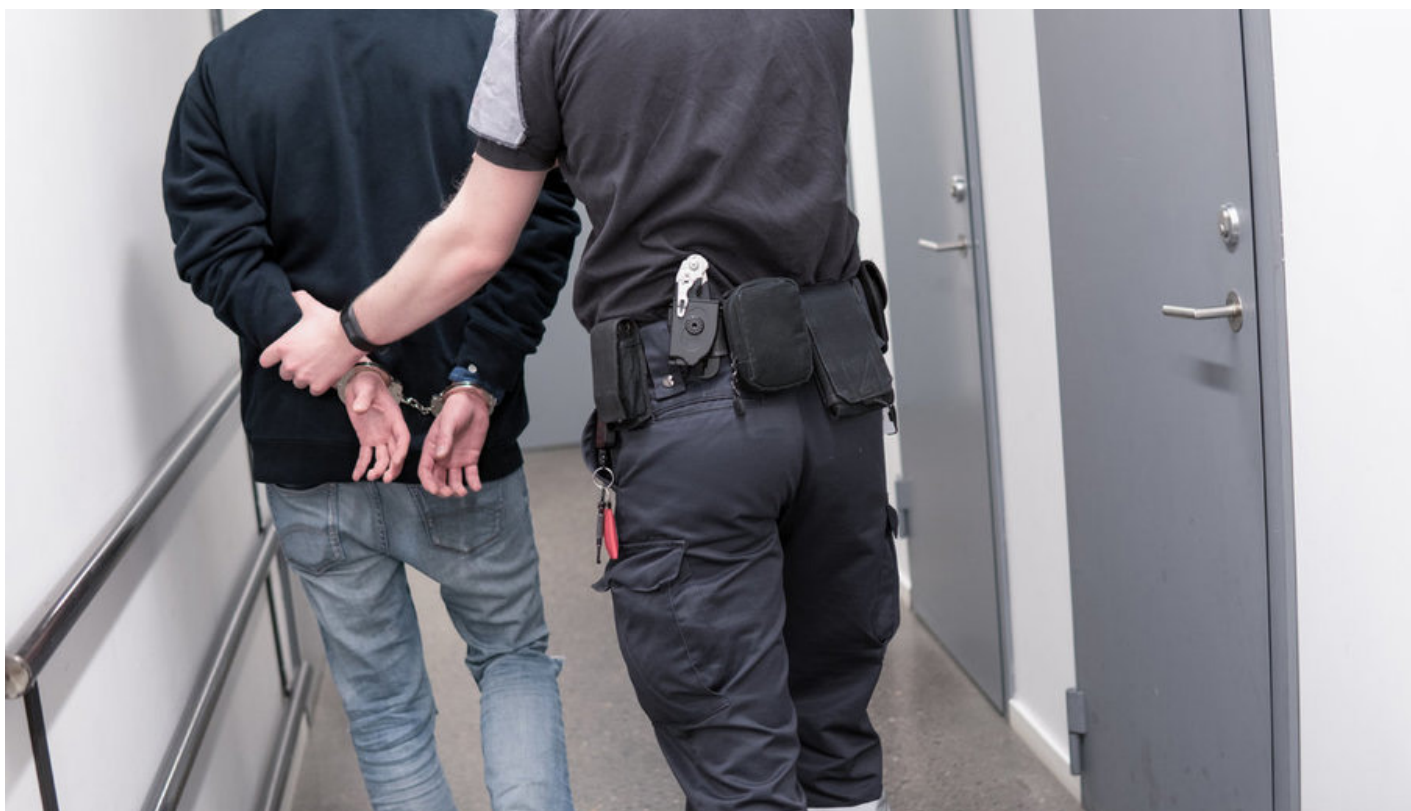# Nexus Software Hopes to Make Parole Decisions Evidence-Based

The new platform hopes to ease the workload for parole officers and inform smarter responses to parolee behavior by automating communications, notifications, data collection and other aspects of the probation process.

BY ANDREW WESTROPE / MARCH 8, 2019

One in 55 American adults — about 4.5 million people — were on probation or parole in 2016, according to a study published last year by Pew Research Center.

The task of monitoring each one's progress and appointments falls to probation and parole officers, and in some jurisdictions, the sheer volume of cases is more than officers are equipped to handle via phone calls and emails.

A new software platform for probation and parole departments, designed with input from justice-system veterans and set to be unveiled at the American Probation and Parole Association conference in Miami, aims to ease this burden by addressing two basic problems for parole officers: a lack of readily available case information, and how best to use that information once they have it. The platform is called Nexus, and it represents a foray into software by SCRAM (Secure Continuous Remote Alcohol Monitoring) Systems, which is best known for making electronic monitoring hardware.

West Huddleston, SCRAM's vice president of business development and a former CEO of the National Association of Drug Court Professionals, told Government Technology that need was the mother of invention for Nexus. He and Dr. Doug Marlowe, a scholar of evidence-based practices in community corrections, have been trying to train criminal-justice professionals in behavioral sciences that lead to better outcomes for parolees. As their trainees struggled with how to encourage certain behaviors in parolees in their respective departments, Huddleston and Marlowe wondered how better data collection and analytics could help.

When they started working with SCRAM on a software solution, they realized one of the first hurdles would be collecting case data in the first place — that parole officers often did not, in fact, have up-to-date information on drug test results, treatment attendance and other obligations of their clients that were being logged by different parties on different systems.

"We assumed that that data was readily available, that we could just attach an analytics software and decision-support engine to it," Huddleston said. "Once we engaged SCRAM Systems to build it, what we discovered was, officers don't have that information, that it is not readily available, that it exists throughout many disparate touchpoints."

With Nexus, they created a software-as-a-service (SaaS) platform for Microsoft Azure that would be accessible via laptop or mobile device to all parties, including officers, treatment providers and the clients themselves, and automate as many communications as possible. Huddleston described it as a customizable add-on to existing case management systems, not a replacement, that keeps parole officers up to speed on each step of their client's progress while offering suggestions about how to respond at each one.

Huddleston listed examples: Nexus recommends to the officer what type of supervision plan is appropriate for a specific client profile; documents what the client is supposed to achieve and when; automates referrals to outside treatment providers so the officer doesn't have to do so by phone or email; provides the treatment provider with a portal to accept that referral and assign the client to appropriate treatment sessions; sends automated mobile reminders to the client 24 hours and two hours in advance of every appointment; gives the treatment provider a portal to report a client's attendance and progress, and sends real-time notifications about it to the officer; notifies the officer whenever something needs attention, such as a client not showing up for treatment; tracks how the officer responds; and so forth.

Marlowe said Nexus improves the wisdom of those responses, such as verbal reprimands, rewards or sanctions.

"(Responses) require probation officers to keep a whole bunch of information in their mind — lots of if/then statements. Is this the person's first infraction, is it their 10th infraction, is this person seriously addicted?" he said. "Our system basically does what computers are good at, which is tabulating hundreds of if/then statements and telling the person what the next consequence or reward should be."

According to Scott Taylor, a retired former director of Multnomah County Department of Community Justice in Oregon, one of Nexus' most important impacts might come from collecting data on what's effective against recidivism. In Multnomah County, he had a dashboard of tools built to track that information, but he said most jurisdictions have neither the time nor the capacity for that.

"When you have 50 or 60 officers, each with 100 cases, it gets really mushy as to what made a difference, and evidence-based practices require us to know that. Part of what this software begins to do is develop the ability to see those analytics as to … what kind of results this treatment provider gets with this kind of person," Taylor said. "That allows you to adjust where you're going to invest, where you're going to help providers or not, and what kind of things you're doing that do or don't make a difference."

Huddleston and Marlowe were unaware of any competitors that did this, although much of what they described was similar to Pokket by Acivilate, another mobile-friendly SaaS aimed at reducing recidivism by tracking a client's progress and putting all concerned parties on the same system.

With Nexus being piloted in El Dorado County, Calif., and Miami County, Ind., Marlowe clarified that the platform does not yet include an artificial intelligence component, nor has it acquired enough data for major analytics at this stage. But that could change with future iterations.

"We're not simply selling a tool to people … this is something that we use to help departments engineer their policies, study and improve their own practices, so that continuous improvement is part of our job," Marlowe said. "At this point it will be scientists like myself, pouring through the data with a pretty good educated guess about what variables to look

at and how to look at them. We're going to be working with jurisdictions."

Another consultant on the project, retired San Diego County Chief Probation Officer Mack Jenkins, sees the platform as a step in the evolving role of probation officers: away from simple compliance and monitoring, toward proactive engagement and behavior modification.

"Our business now is behavior-shaping for a justice-involved individual," he said. "So what we're trying to do is utilize research that's impactful in terms of shaping behavior, and Nexus brings technology to it to facilitate that."

Andrew Westrope Staff Writer

Andrew Westrope is a staff writer for Government Technology. Before that, he was a reporter and editor at community newspapers for seven years. He has a Bachelor's degree in physiology from Michigan State University and lives in Northern California.