

KAIZEN RESULTS

Boosting efficiency and busting the backlog:

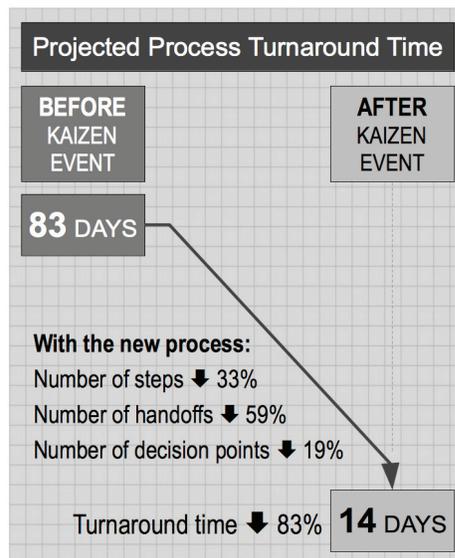
Law enforcement agencies to get faster findings in drug-case investigations

IN BRIEF: At the Ohio State Highway Patrol Crime Lab, staff conduct forensic analyses to identify and determine if submitted evidence contains controlled substances or cannabis. Their work is crucial to the investigation process, and they've always done good work. But now they're achieving additional gains in efficiency thanks to a series of Kaizen-driven improvements.

QUICK RESPONSE: The streamlined approach will reduce processing time by 83% – from an average turnaround time of 83 days to approximately 14 days once the improvements are fully implemented.

NO MORE BACKLOG: The backlog, at 4,069 cases before the team put Kaizen to work, will be eliminated.

SAVINGS: Overtime, which doubled over the past two years, will no longer be necessary – for a savings of \$45,000 per year. Combined with reductions in paper usage and mailing, total annual savings are projected at \$67,300.



DETAILS

When it comes to fighting crime, the Patrol and more than 200 law enforcement agencies count on the “criminalists.” They’re the scientists at the Ohio State Highway Patrol Crime Lab who conduct forensic analyses to identify and determine if submitted evidence contains controlled substances or cannabis. Their findings are relied on in law enforcement investigations.

It’s crucial work that needs to be done quickly and correctly, and the demand for criminalist services keeps growing. The crime lab received 8,383 drug chemistry submissions in 2010, for an average of 23 new cases each calendar day. The volume has increased 22% over the past three years.

Determined to wrestle down a growing backlog while getting ahead of the increasing volume of incoming cases, the criminalists set out to improve their work process. They teamed up with the assistant commander, crime lab director, HR, and others. Team members worked five days straight in August 2011, using the ideas and tools of Kaizen with facilitators from the LeanOhio Office. The group concluded on Friday with a full package of improvement measures – some of them already in motion.

The new and simplified process is designed to handle 2,000 additional submissions each year, for an annual total of 8,400. That’s enough capacity to analyze and report on every incom-

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Team members: Jacqueline Smith, Criminalist; Kara Klontz, Criminalist; Mark Hiatt, Criminalist; Jeff Turnau, Criminalist; Lisa Crow, Criminalist; Lynne Strainic, Criminalist; Theresa Martelli, OSHP Human Resources Department; Heather Sheskey, Criminalist; Dana Warner, BMV; Tammy Qualls, Quality Assurance Administrator; Lt. Todd Lee, Assistant Commander; Brandon Werry, Crime Lab Director; Marlene Brightwell, Intake/Administrative Assistant.

ing submission as the year unfolds, which means that none of these cases will end up in a backlog.

The new process is engineered for efficiency. It involves 33% fewer work steps and 59% fewer handoffs.

Before, storage time caused big slowdowns. Now, the streamlined process can keep all the submissions flowing through to the final reporting step, so storage becomes a thing of the past. And because the improved approach is so much faster, requiring some 7,780 fewer processing hours over the course of a year (given the current volume), staff have the time they need to eliminate the backlog and redirect time to activities that add more value.

This greater process capability is more cost effective, too. The elimination of overtime, combined with reductions in paper usage and mailing, will produce projected annual savings of \$67,300.

Among the big changes that will drive these results is paperless reporting. When fully in place, the drug chemistry section at the Crime Lab will be a largely paper-free operation. Officers in the field will be able to provide case information through an online “pre-log” process, and all agencies will have secure electronic access to lab reports. So when the lab completes a report, it will be immediately available to the submitting agency.

Another major improvement is a new rotation schedule for drug chemistry staff. Specific criminalists will focus on specific cases for a given time period – for example, three people might work exclusively on marijuana cases for several days in a row. This will minimize the transition time between different types of cases while ensuring that staff have immediate access to needed equipment. That means fewer delays and a much smoother work flow.

The team also modified its procedures regarding so-called destroy cases – cases that come in marked “destroy” or have been updated as inactive. Staff will no longer provide a report for each of these, but will simply report out that the evidence will be destroyed. With this one change and the resulting time savings, it’s projected that the backlog will be halved in a month.

Tammy Qualls was one of 13 people who served on the team. A 21-year veteran of the Ohio State Highway Patrol, she com-



ABOVE: By mid-week, the team had used all the available wall space in its meeting room – mostly because the existing process involved so many steps! So they moved into the hallway to map out the streamlined process. The rays from an overhead skylight were fitting – since so many bright ideas led to the newly designed process. Here, two team members are calculating the time savings.

LEFT: In every Kaizen event, team members develop implementation plans that define *who* does *what* and *when*. These plans can address training, communication, technology, backlog reduction, and more.

mented on the Kaizen process during the end-of-week presentation: “We’re at the lab working and working, but we’ve never been able to take a step back, look at our process, and make the process better. But this process allowed us to do that. Stepping back has made all the difference. We’ve had time to think and figure out, *how can we do this?*”

Team member Dana Warner has worked at Public Safety for 33 years. At the Friday presentation, he talked about his involvement in earlier improvement efforts – and described Kaizen as the best of the bunch because management reviews and approves the biggest changes as the week unfolds.

“The great thing about this event and Kaizen is that this is going forward beginning Monday morning,” Warner said. “We have something that will actually work because we can put the changes into process right away.” ●