How Oversight Agencies Are Accelerating, Improving Work with AI

AI is helping to prevent fraud, waste and abuse of funds.

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IT leadership at federal oversight agencies are looking at using artificial intelligence and advanced data analytics to prevent and predictively mitigate fraud, waste and abuse of funds.

AI has a particularly key role in improving oversight analyses and driving efficiency into auditor work, noted Department of Health and Human Services Office of Inspector General CIO Chris Chilbert and U.S. Postal Service OIG CIO Gary Barlet at an industry event Wednesday.
“The first thing that we’re doing is improving our predictive models to identify the riskiest health care providers,” Chilbert said. “There are many, many health care providers, as you might imagine, across Medicare and Medicaid, so we’ve been using predictive analytics for many, many years, and AI is helping improve that. Secondly, it’s improving the efficiency and effectiveness of our auditors and evaluators as they look through mountains of data.”

“Very similar to Chris, we’re using artificial intelligence to help with some of our analytics models that our chief data officer has deployed,” Barlet added. “One of the interesting things that we’re working on right now is using artificial intelligence to help us do some sentiment analysis as we start looking for issues with delivery of mail items, especially high-value items, ... so we’re looking to see if we can detect those types of things that are being broadcast out on social media and get those to the attention of our investigators in a much more rapid fashion.”

In oversight analytics itself, AI can aid personnel in examining larger data sets, as well as creating models more accurately, Chilbert added. The Postal Service sees mass volumes of data, and AI can help investigators review data, surveillance footage and other information in faster, sharper ways, Barlet said.

When thinking about the sheer amount of data the Postal Service generates and connects for audits or other purposes, “human beings can’t possibly keep up with that amount of data and look for all the kinds of connects that might actually exist inside that data,” Barlet said. “The biggest benefit [AI] brings ... is that ability to comb through that kind of data and look for relationships we might never have even thought of.”

The Government Accountability Office is also looking to discover unique oversight insights with AI technologies and algorithms. GAO Chief Data Scientist and Innovation Lab Director Taka Ariga said his lab is developing algorithmic capabilities that can identify trends and behaviors to help GAO auditors improve their work.

“Our goal really is to prototype, problem-centric and sort of really explore a way in which we can answer a question in much greater scale, efficiency and speed,” Ariga said.
As Ariga, Chilbert and Baret continue to drive automation into oversight processes, they highlighted the importance of adjusting and auditing their own algorithms over time to ensure continued improvement.

“We’re taking a very iterative approach to using artificial intelligence, so we’re trying to learn from our experiments in using artificial intelligence to support the mission, and then, based on the results of that, we will adjust and try new things,” Chilbert said.

As a grander goal, Chilbert wants to continue expanding AI capabilities to look at new datasets. While HHS OIG has mostly applied AI toward analyzing Medicare claims data, the larger scope of the organization’s oversight work leaves significant potential for further advanced data analytics and automated tools.

“It’s looking at things like health care treatment patterns and making sure that they make sense, so we’re just going to continue to use [AI] and leverage it to help our workforce be more productive and more effective in the day,” Chilbert said.

AI can also play an added role in forensic data analytics and in analyzing textual data through tools like natural language processing, Ariga said, by identifying specific topics or separate pieces of communication information for auditors.

To enable the expansion of AI tools, Barlet emphasized that Postal Service OIG needs to train its workforce to understand AI-driven models and uses for AI. Chilbert said HHS OIG needs to continue building a cloud infrastructure that will enable him to introduce new tools.

“On the infrastructure side, we have to continue to have a stable cloud-based infrastructure that allows us to bring new tools to the table rapidly, so we want to be able to process new tools and try them out in a relatively rapid pace,” Chilbert explained.

Barlet and Chilbert further highlighted that having data with integrity is critical to improving AI tools, as only quality data will enable quality algorithms.