A Real World Case Study

'Taming a tidal wave of data'

Mary Kay Delgiacco is no stranger to data – she knows where to find it; how to analyze it; and who can use it to make the best possible decisions for optimal performance. But to do her job she needs the right tools. That's where Salient comes in. Thanks to Salient, she can now also identify new behavior patterns in a fraction of the time it once took.

As Manager of Information Technology Services in the Division of Technology and Business Automation at NY State's OMIG, Mary Kay supervises a group of analysts—or "data miners," as she calls them—whose first function is to support OMIG's investigators and auditors in their quest to help ensure Medicaid compliance among the program's providers and recipients. "To do this we must provide timely and accurate data to anybody who has an idea" for recovering inappropriate payments, Mary Kay explains.

Separately, her Claims Analysis Unit has set a \$20 million recovery goal for 2011 to come exclusively through "system matches,"—also known as "desk audits"—which are cut-and-dried cases where providers are being paid with Medicaid funds for procedures or services that are clearly not covered under the program. For instance, a nursing home cannot bill Medicaid for patient supplies that are already included in the cost of the stay. Dental costs, in most cases, are also covered by the nursing home and therefore are not eligible for additional Medicaid payments.

Mary Kay and her team call the system matches "slam dunks" because they are spelled out and are irrefutable once they go through a thorough 12-step process to account for any exceptions.



Salient's Susan Lepler (left) and OMIG's Mary Kay Delgiacco review some of the data for "slam dunks."

Telling if a target is worthy

"We develop system matches by pulling and analyzing data, and that's the first place we see the enormous benefit of Salient," says Mary Kay. "It would take so much longer if we had to use the data straight from our data warehouse. By pulling it through Salient though, it is ridiculously fast to get answers to the complex questions. Before we even create and confirm a system match, we use Salient to see if it's a significant enough issue to pursue."

In one instance, Mary Kay's Claims Analysis Unit worked with the NY State OMIG's subject matter expert on dentistry—a licensed dental hygienist – who suggested they take a look at providers who were charging Medicaid for "consultation" fees of \$87 versus \$29 for a regular office visit. While the referral fees require a referring provider on record, as well as a written report, "We found, through Salient, that there are an enormous amount of referral fees without referrers, and we found out who was billing the highest percentage of the enhanced office visits," says Mary Kay. The total recovery

for this specific system match is estimated between \$6 to \$7 million, which goes directly to the team's 2011 recovery goal of \$20 million. In fact, she estimates that they could recover more than half their total goal in dental probes alone.

'Shiver-less' solution

"We can look at the data in a lot of different ways to find the [anomalies]," Mary Kay continues. "And we just keep asking questions. 'What's the total billing for a category of service in 2009 versus 2010?' Before Salient, that would have been a question you would shiver about because it would take so long to answer, maybe half a day, even though it sounds so simple to the requester. 'How much was paid for a particular prescription drug in 2010 – by region, by provider, by recipient, by anyway you want to look at it?' That would take a very long time in the warehouse. But with Salient, it literally takes 10 seconds to go through a huge number of claims.

I can have the answer to any question in seconds. And once I get that answer, I can ask another question and get another answer, and I keep asking questions until I get to the root cause. Salient tames a tidal wave of data and makes it manageable and easy to illustrate so that someone else or another department can take the necessary action steps. We are seeing more opportunities for [financial] recovery because we can open more cases and projects with Salient. We are giving the auditors and investigators much more complete information to act on."

'Amazing analyses'

Another one of Mary Kay's current projects is a joint effort between OMIG's Division of Medicaid Investigation (DMI) and a federal law enforcement agency. At their request she used Salient to create a "collection" of counties that were showing an inordinate amount of prescriptions for Level 2 and 4 drugs. From there she looked at the highest prescribers of the medications as well as the most frequented pharmacies and the most frequent recipients.

"I have been able to do some amazing analyses with this collection of counties, and that would have been really difficult without Salient," Mary Kay points out. "All the summaries for the Level 2 and 4 drugs are done quickly." One of the findings was that about 1,900 recipients out of a total of 460,000 in the "collection" of counties each filled their prescriptions at seven different pharmacies, which could suggest abuse or potential abuse. "Just having that initial collection was great, and it would have taken so much longer to get that far without Salient," she says. "We gave the list of the 1,900 to the DMI and the agency and I'm sure they are calling on some providers and recipients."

Outstanding team work

From the OMIG perspective, this particular project is a great example of a subject matter expert working with a Data Analyst to probe an opportunity using the power of Salient. The result was affirmation that OMIG should absolutely act on this campaign.

Salient's speed and visual data mining capabilities enable OMIG users to work faster, ask the next question, and follow their train of thought, and at the same time lets them be more efficient and creative in the data analysis process. They can sort through and slice and dice large stores of data in seconds, look at data in new ways, ask any question, get an answer in three seconds or less, and continue to pursue or change direction based on results. Salient is the best weapon in OMIG's war on Medicaid waste, fraud and abuse.