

Discovering Millions in Missed Opportunities

Predictive modeling can reveal seven- and eight-figure sums that have been lost to underpayments and missed charges.



For nearly two decades hospitals have relied on contract management systems, believing that these systems were accurately flagging payment variances. But as payer contracts have become increasingly complex, many systems have become incapable of accommodating routine updates and retroactive billing, which is resulting in millions of dollars being left behind in underpaid claims.

Predictive analytics, or data mining as it's sometimes referred to, has the potential to uncover millions of lost dollars in the revenue cycle—from business process enhancements to underpaid claims.

Presbyterian Healthcare Services, a system of eight hospitals based in Albuquerque, NM, believed its technology was getting the job done, explains David Hennigan, the system's vice president of revenue cycle. That is, until Presbyterian added data mining technology and uncovered nearly \$32 million in missed charges and underpayments.

Like so many in healthcare, PHS was feeling the financial pressure to tighten its belt. Hennigan says the organization

was interested in automating its credit balance processing and called on Apollo Data Technologies in Chicago, which suggested predictive modeling technology. Hennigan didn't anticipate uncovering any data that showed the system was losing huge sums; rather, Presbyterian was looking to find inefficiencies in the revenue cycle and added technology to help contain costs, generate revenue, and increase staff productivity.

“Many hospitals don't have technology to validate being paid accurately—the vast majority don't—and right now they are losing an unknown amount of money with patient validation due to their contracts' complexities.”

After a brief implementation process, PHS ran a data assessment of payer contracts and analysis of

integrated data sources (categorized patient, financial, and clinical data). Within hours, Presbyterian learned that its contract management system had failed 40% to 50% of the time to identify accounts with underpayment variances and the result was a loss of over \$20 million in revenue over a two-year period.

Hennigan explains that knowing that its contract management system had missed that much sparked interest in adding an additional tool, an underpayment recovery solution that could more effectively identify payment variances and expedite the time-intensive follow-up process—the interpretation and validation stages. Moreover, Presbyterian wanted real-time access to data to identify issues before they affected the bottom line.

“We already had a contract software solution but weren't able to complete what we needed with that tool and it was letting the payer call the shots ... We can't afford to operate that way, but we couldn't hire enough people to deal with all the volume either,” says Hennigan. “We decided to add the Apollo underpayment recovery solution

because it would work with our existing information system.”

Instead of bringing in additional people to analyze all the claims, with the push of a button, the technology was able to cull through years of historical billing and account and clinical data to identify contractual payment anomalies and flag underpaid claims—both high- and low-dollar accounts. What the technology showed was that over an 18-month period, \$32 million was missing due to underpaid claims. To expedite the process and pursue the missing money, Presbyterian used a bulk automated appeal process to ensure its claims were paid based on contract specifications and was able to recover nearly \$25 million of that money.

“Many hospitals don’t have technology to validate being paid accurately—the vast majority don’t—and right now they are losing an unknown amount of money with patient validation due to their contracts’ complexities,” says Jason L. Adams, FACHE, vice president of revenue cycle for MultiCare Health System based in Tacoma, WA. “If an organization doesn’t have the technology to check by exception for underpayments and overpayments, then from a profitability perspective, they’re missing out. But we are also talking about finding clinical variations and documentation and the type of care that’s provided to each patient, which feeds into accurate claims data.”

MultiCare is a not-for-profit, integrated health organization consisting of four hospitals, numerous primary care and urgent care clinics, multi-specialty centers, and hospice and home health services. It began using predictive analytics more than a year ago to find lost revenue in its charge capture process and also found it helped with underpaid claims. “At first I didn’t think we’d find anything in lost revenue due to charge capture. We went live and three months later we had already realized \$1 million in missed charges.”

“We already had a contract software solution but we weren’t able to complete what we needed with that tool and it was letting the payer call the shots ... We can’t afford to operate that way, but we couldn’t hire enough people to deal with all the volume either.”

Adams and his team were able to see which clinicians were missing opportunities to code additional procedures that had been performed. For instance, the system flagged specific diagnoses that usually have lab tests associated with them if the lab test codes were missing. In doing so, the system was able to capture all the charges associated with a diagnosis and then alert clinicians to be aware of their mistakes.

The data also helped spot \$8.5 million in underpayments. “You have continually updated contract terms, so your technology has to progress to keep up,” he adds.

Productivity and contract leverage

Since its system was put into action, Presbyterian has identified nearly \$1 million every month in underpaid claims. In the past, billing staff was able to resolve about 20 claims per day, but with the new technology, that has increase to 40 to 50 claims per day. Moreover, Hennigan says, the data has allowed staff to readily spot and understand the origins of their claims problems, and make improvements.

“We use this data and we meet with the payer and we can correct the problems at the source and eliminate

the problem from happening in the future,” he says. “When it comes to contract interpretation, there needs to be a consensus, and this technology helps achieve it.”

Another benefit enables staff to spot overpayments made by the insurers. This allows Presbyterian to send this money back to the insurer with an explanation and keep its side of the balance sheet accurate.

“Certainly collecting money is a greater priority than returning it, but returning it helps with the bookkeeping,” Hennigan says. “A lot of times the vendors would send the checks back and say we didn’t owe them any money, even with the explanation. The inefficiency in the healthcare system, even when you automate things, is amazing. You still have money being left behind on both sides of the payment transaction.”

Additionally, Hennigan explains, the data has helped Presbyterian negotiate more favorable rates with insurers as well as expedite overall reimbursements. Adams also has found the technology has helped MultiCare with this process.

By using predictive analytic technology, hospitals and health systems can automate the process of sifting through all the historical billing and account and clinical data to identify and flag underpaid claims, detect payment variances, automate batch appeals, and improve administration of contracts.

Although the technology doesn’t come cheap, adding it can yield an immediate return on investment in both dollars and staff productivity, and in the long-term it can improve the administration of payer contracts and lead to more favorable contract terms. Not bad for a technology that takes just a few months, can work with existing technology, and can, within just a few hours, produce the low-hanging fruit hospitals have been missing for years.

—KAREN MINICH-POURSHADI
Reprint HLR0311-6