Hitting a Higher Mark

Podcast Transcript

Episode 2: AI vs. Fraud Schemes

Jeff Bernhard:
Hi, I'm Jeff Bernhard, Senior Vice President of Commercial Markets at Highmark. Welcome to Hitting a Higher Mark. In this podcast we explore topics that are transforming how healthcare is delivered and paid for. Today we will specifically be discussing healthcare fraud detection using artificial intelligence. We have two special guests here today with me to expand on this very important healthcare topic. First, we have Kurt Spear who's Vice President of Financial Investigation and Provider Review at Highmark. We also have Musheer Ahmed who is Chief Executive Officer for FraudScope. Welcome, and thank you for joining us. Let's get started on today's topic. Can you tell us a little background about Highmark's partnership with FraudScope?

Kurt Spear:
Sure, absolutely. So we were introduced to Musheer and FraudScope about two years ago through a venture capital group who approached Highmark, asking us to conduct a demo to FraudScope, and provide some thoughts on the AI solution. Within about 12 months, we conducted a demo, we ran a proof of concept and ultimately implemented the software in July of 2019. We continue to work to enhance the functionality and the overall efficacy of the products working directly with Musheer, as we think through new fraud schemes, such as those most recently related to COVID-19.

Jeff Bernhard:
Thanks Kurt. I think most of us have heard of artificial intelligence or AI. Can you talk a little bit about AI as it relates to healthcare?

Musheer Ahmed:
Sure. There are several areas in which AI is making an impact in healthcare. These include diagnosing diseases efficiently, developing new medicine, improving the patient experience, and many others. FraudScope in particular is using AI to identify fraud waste and abuse in healthcare. We noticed a gap in the industry, where the most commonly used techniques were rules-based that only identified known or predicted fraud schemes. New schemes that are constantly emerging all the time were taking longer to be identified by these techniques. That was causing significant losses at health plans. So we developed a sophisticated AI based technology that worked on complex healthcare data to quickly identify new schemes in a proactive manner.

Jeff Bernhard:
What are some of the common types of fraud in the healthcare industry that we can utilize AI to screen for?

Musheer Ahmed:
First of all, let's start off by defining what healthcare fraud is. Any attempt by an individual or an entity to intentionally defraud a health plan to obtain monetary or some unauthorized benefit that they would not have had access to otherwise, is considered to be fraud. Multiple parties can commit fraud, but the largest financial impact is typically caused by providers. I do want to make a note here that most providers tend to be good, but the few that are bad are bleeding the system. Some examples of the most egregious kinds of fraud that can be identified by AI is billing for services never rendered. Scammers use stolen patient information to file medical claims from phantom clinics. That basically function as drop boxes for payments. A fraud ring in Florida charged $42 million last year using this specific scheme. Another egregious example we've seen in the past is intentionally misdiagnosing patients with having cancer, so providers can force them to go through chemotherapy and charge the insurance company for the treatment. Or intentionally misdiagnosing someone as needing a cardiac stent and performing a surgery, knowing very well these patients never needed those treatments in the first place.

Jeff Bernhard:
Wow, that's really fascinating. How does identifying fraud equate to lowering healthcare costs?

Kurt Spear:
So tens of billions of dollars are lost every year to healthcare fraud, waste and abuse in the United States alone. So the issue is significant and drives up costs for all of us. What we've seen to be unique about the AI platform is, it's able to identify potential suspect behavior earlier in the cycle than maybe we would have previously identified. And since being live with FraudScope as our sole AI platform, we've identified about $5 million in suspect behavior that we've been able to stop just over the last 10 months alone.

Jeff Bernhard:
Very interesting. How do the different parts of this partnership work? Such as data and technology sharing, report out process, investigative responsibilities or other aspects?

Kurt Spear:
Sure. So we send all of our paid claims data to FraudScope on a recurring basis. Typically that's every two weeks. And essentially the AI software is able to quickly run through those claims and look for using predictive analytics look for unusual scenarios that maybe some of our rules based platforms would not identify. It's important for us to give that data on a really frequent basis so that again, we can get in front of those fraudulent or waste or abusive type issues quickly as possible.

Jeff Bernhard:
Thanks Kurt. How do AI systems work in tandem with human employees who investigate this problem?

Musheer Ahmed:
Great question. And Kurt kind of alluded to some of these already. So the goal of the AI systems in this specific use case is to help scan a significantly large volume of data, to identify the claims and providers that need to be reviewed and investigated. AI systems in general can analyze more data in a real time

basis and make recommendations much faster than other techniques. FraudScope in particular was designed to provide more accurate results with a much lower false positive rate than other systems. This helps reduce provider abrasion which is always a concern for health plans.

Musheer Ahmed:
In addition to detection capabilities, FraudScope also includes a claims investigation platform that allows users to expedite their investigation process by automating some data analysis tasks around location analysis, relationships, code utilization, Et cetera. However, the platform still requires users to make decisions on which cases to pursue and what is the next appropriate action they would like to take based on the pro health plans policies and general process. Some health plans have techniques to establish provider intent to commit that fraud before prosecuting them, which is something the AI system cannot always do.

Jeff Bernhard:
Thanks Musheer. Kurt, can you please explain to us what Highmark does to explore potential fraud cases?

Kurt Spear:
Sure, absolutely. So we work hand in hand and have really good relationships with federal state and local law enforcement agencies. And we continuously share information back and forth on suspect providers or members or schemes that we see. What the AI platform is allowing us to do is, again detect some of the schemes earlier in the cycle than we would have previously. Fraud detection continues to evolve across the industry from primarily being pattern detection focused, over the years we were relying on tips from individuals in roles based solutions to more AI type software capabilities.

Kurt Spear:
Because again, it allows us to identify these issues sooner. And what it really allows us to do is inject reasoning into the software, where previously we may have needed a large volume of seasoned investigators to go in and look at data and look for unusual patterns. We can now use AI to do that for us and really inject that reasoning into the software and really let my investigators to focus on suspect scenarios, versus going in and trying to identify those scenarios through the system. And allows us to be more sophisticated, just as many of the schemes, over the past I'd say five years, have become much more robust and nationally focused with much more funding behind them.

Kurt Spear:
They're getting more complex and we needed solutions to counter those efforts. So AI is allowing us to leverage software, go through large volumes of claims, identify that suspect data quickly, and then allow our seasoned investigators to really do what they do best.

Jeff Bernhard:
Very interesting. How would you describe the future of the healthcare industry in relation to fraud detection using AI?

Musheer Ahmed:
Yeah. So since we launched our product into the market, we've seen a lot of legacy vendors try to catch up with our AI capabilities, based on the impact we've had in this space. Health plans are also actively looking for solutions that include AI and the industry has to adapt in offering these solutions. A point to note here is that there are numerous AI techniques that could be used, but not all will have the same accuracy and false positive rates, FraudScope's unique and patented AI was developed after academic researchers spent a significant amount of time identifying the techniques that work best, which puts us ahead of others as we continue to invest in our capabilities. We believe we have just scratched the surface here. We are currently working with Highmark to move our fraud detection capabilities prior to paying the claim. And we are launching capabilities to influence outlier providers prior to the claim even being submitted--through education and other means.

Musheer Ahmed:
There are also several opportunities here to bring AI into case workflow management, to help health plans manage numerous cases that may be open at the same time and efficiently bring them to resolution quickly.

Jeff Bernhard:
Thanks for that response Musheer. So where can people go to find out more information about this artificial intelligence program?

Kurt Spear:
So the National Healthcare Antifraud Association is a great resource for all things healthcare fraud. They are really the Mecca for the industry and the experts that reside in this field. The FraudScope website--they also have a number of articles and white papers that are specific to AI and how they're battling various problems across the industry using AI.

Jeff Bernhard:
Thank you both for joining me to discuss fraud detection using artificial intelligence. This topic is critical because AI is an essential tool for reducing hundreds of millions of dollars in fraudulent medical spend each year, which translates to helping maintain lower costs for employers and employees. I'm Jeff Bernhard. And thanks for listening to Hitting a Higher Mark.