Speaker 1:

Welcome to The Vurge podcast, where we bring together groundbreakers and industry disruptors from various corners of the virtual world to ponder the future of technology innovation.

Steve Weichhand:

I'm your host Steve Weichhand with Divurgent, and today I'm with Nate Pluke, founder and head of products at Switch RCM, a healthcare revenue cycle management company focused on using artificial intelligence to improve outcomes. Nate started off his career at Epic, where he spent an impressive seven years on the claims team, long enough to earn himself the elusive six months sabbatical. After leaving Epic, Nate has been successful in his career working with healthcare provider and technology companies, again with a focus on the revenue cycle. Nate, welcome to the show.

Nate Pluke:

Thank you for having me. I appreciate it.

Steve Weichhand:

All right. Well, today we're going to talk about how organizations are using AI to identify and correct issues with claims. So Nate, to begin with, would you start by talking a bit about the problems that you and your team at Switch RCM are working to solve?

Nate Pluke:

Yeah, absolutely. Before I dive into that, I will say, I think that study was right on, I think five years maybe aggressive in the healthcare space but we're trying to help provide our organizations really accelerate that process. What we are doing is we are focusing on some very specific problems, one of them is underpayments. Underpayments are something that happen on a daily basis throughout all of the healthcare payments cycle, both physician billing and hospital billing. Switch RCM focuses specifically on physician billing and solving those problems and we also tackle other things like denial reduction and other items where healthcare provider organizations are spending an incredible amount of time, resources in order to work denials. The underpayments area and the denials area, those are two things where there is great opportunity for automation to resolve things that humans don't need to touch while getting things that people do need to review in front of the right people at the right time.

Steve Weichhand:

Great. For those of us less familiar with these deeper rev cycle functions, can you at a high level talk through that professional billing claim submission process, just so we can have a better understanding of how it works and where those problems or opportunities might be.

Nate Pluke:

Yeah, absolutely. Think about it this way, you go into the physician's office, you see your doctor, at some point after you've seen your doctor a charge is created in some way, shape or form. Sometimes it's something that is manually entered in a back office, but more commonly now with a proliferation of EHR systems, those charges are triggered from the EHR system. From there, I call it the charge running the gauntlet. There are many steps and I was counting them out in preparation for this conversation, just counting out the number of places. I counted on average there are three places before a claim ever

leaves a provider system where a charge could be stopped for someone to touch. You want to talk about administrative costs there, it's adding up.

Nate Pluke:

After the claim leaves, typically after a charge becomes a claim and the claim leaves the provider's organization, typically that claim will go to a claims clearing house where they apply their own edits. And that gives one more opportunity for a claim to be rejected. If it passes that, then it goes into the provider system and the providers actually have a two step system for... I'm sorry, the payers actually have a two step system that gives opportunity for a claim to be not paid in one way or another.

Nate Pluke:

The first is, something could be rejected at the front door, and that could be because a subscriber ID was entered incorrectly in the registration system. Then there's the other part where the claim actually enters into the payer's adjudication system and ends up being denied for some reason or another. The reason why I tell the story of the gauntlet as a setup for talking about underpayments is because there is so much opportunity for a charge or a claim to fail along the standard revenue cycle process that oftentimes providers are just happy to get the claim paid the first time.

Nate Pluke:

That leads to a problem that I call the silent underpayment, which is, in the case of most underpayments, what we see is that the claim is paid and then the standard... The standard in healthcare payments is typically a provider will bill more than what they will actually be paid or allowed by the payer. Payer makes a payment and then there is what's called a contractual adjustment applied, and that zeros out the balance. From the provider side, that's the best possible flow. You get paid, the rest of the balance is contractual lies, you never have to look at it again. But if you haven't been paid right, that can be tough to see because now in your system the balance is zero. So, it seems great because you've got a payment, but if the payment's not right, you've just lost money.

Steve Weichhand:

Well, that description that you just gave there really helps explain why when I go see the doctor it's weeks or months later that oftentimes I get the bill in the mail, but there's just so many touch points there and so many opportunities for mistakes to be made or claims to be rejected, thanks for providing a detail. Focusing in on that underpayment issue specifically, what is the traditional approach for preventing that from occurring, or is there a traditional approach from preventing underpinnings from occurring?

Nate Pluke:

On the hospital billing side, there has been a traditional approach which is to engage firms that are sometimes called a zero balance firms or underpayment solutions where there is a lot of manual review of accounts. That is not a practical approach for physician billing because physician billing is, the dollars may be lower per service but there are many more services that are taking place. So, the volume is just too high to have manual review of payment accuracy. I can't say that there's been one traditional approach from the physician billing side, but what I can say is they basically fall into three buckets.

Nate Pluke:

First is that they use a contract management vendor to manage underpayments, and that involves extracts from the billing system as well as manual build-out of contract terms within the vendor system. All of that lives outside of the billing system itself. The second approach which is increasingly common is, the practice management systems like Epic are putting development resources into putting those features into the actual billing application itself, is that we're seeing more healthcare providers trying to build out their contract terms in the physician billing system and trying to create an underpayment management workflow in the billing system itself which is good to move it upstream but can be difficult since many of the practice management systems, their exception workflows are really focused on a single occurrence of an exception.

Nate Pluke:

So, if you have systemic or endemic underpayments happening, those are not things that you want to work on a one by one basis. Then the third thing is do nothing. A surprising amount of organizations do nothing, they take what they've been paid and they take it at face value. Those are the three main approaches and all of them are expensive and they're expensive for their own reasons.

Steve Weichhand:

All right, thanks for that. You alluded to some of this already, but on the physician billing side of things, can you give us an idea of what scale these claim underpayments occur?

Nate Pluke:

I wish I could give you a number. I will say it really varies from payer to payer and provider to provider and provider to payer. So many of these issues are caused by human error on the payer side or the provider side. One day you can have all of your payments from your top commercial payer being paid correctly, and the next day because someone updated the payer system and missed hitting some button or making some association with the system, the next day half of your payments for the same payer and the same providers could be paid at the wrong rate. That is actually based on a true story which I'm happy to talk about.

Nate Pluke:

The other thing I'd I'd put in there is, this is an area that a lot of organizations are interested in and healthcare providers very much they don't want to dive into anything unless there's a good ROI. What I would say to providers out there listening to this is, be wary of anyone who says they can tell you what you're being paid with any degree of certainty from high level metrics. It is just so specific that it is really hard to say, "Yeah, 3% underpayments are what you see." We might be able to generalize some, but the amounts recovered can vary from one and a half percent to 7% all depending on the specific situations.

Steve Weichhand:

Well, it sounds like while it's tough to quantify with any level of precision, there does seem like there's a great opportunity here. And just given the nature of it with the volume of transactions that would need to be reviewed, it's tough to do manually like you said. Can you explain a bit about how artificial intelligence could be used to help solve these problems?

Nate Pluke:

Yeah, absolutely. I will try and not get too detailed. The good thing for you is that I'm our company's data scientist. So, I could even get too detailed if I wanted to. But the big thing is that we've built a system that can very quickly transform X12 transactions. Those are your electronic claims and your electronic remittance transactions. Those are the keys to being able to analyze payments for correct amounts. Where the AI piece comes into it is that we are able to look at a wide variety of information, two to three years worth of data for all of a provider's claims in relatively short order.

Nate Pluke:

The big thing that it does is, I call it a consultant in a box. One of the ways to find underpayments is to go through and do analysis and run reports and do an Excel, but we've built a system that can go through and identify payment patterns and to very accurately predict what the contract rate in effect is. And from there, we applied business logic to make sure we don't get false positives for standard industry reductions or payer specific reductions and then we identify the outliers. So, if there are secondary patterns that emerge or specific instances of cases where the payment for a given profile, provider profile, payer profile, if it falls outside of that, that then is flagged by our system as a potential underpayment, and that happens very quickly. So, I think that's the biggest thing is, AI gives us the ability to get to results quicker.

Steve Weichhand:

Sounds like you're supercharging organizations ability to identify the issues. Once you have identified the underpayment issues that may have occurred, how then could the technology be used to correct them?

Nate Pluke:

Yes, that's a good question. Since resolving the underpayment means actually getting the payer to take back their incorrect payment and reissue a payment. The way that the technology helps with that process is, since we have the 837 business claims and remittance data, since we have all of that within our system, for those things that we've identified is, through under payments. We compile that information into a report format that contains the key data elements that we've found by reviewing the payers individual underpayment appeal forms. Basically we say, here is a spreadsheet and this contains the services that were underpaid and every bit of information we would expect for your payer to ask you for in order to reprocess those claims.

Nate Pluke:

That's configurable, but we've had very good luck with that to the point where, just to give you an example of that, we've produced spreadsheets that have 9,000 unique services on them, spanning a year of time where the provider was able to just email their payer rep and say, these were underpaid, these were underpaid at this rate. The system has told us this, and it's right. Here's the list that we need you to reprocess and repay. And it was done within three weeks on the payer side. Which from a payer side turn around for that type of thing is very good, and from the provider side, they didn't have to fill out a single appeal and they didn't have to resubmit a single claim.

Steve Weichhand:

That's powerful. You were talking about the amount of manual work effort that goes in. If you can not only identify the issues but have them solved and in a short timeframe with minimal effort, that sounds

unique. Are there other unique aspects of the way that you at Switch are solving this underpayment problem that you could expand on?

Nate Pluke:

Yeah, for sure. I would say, for us the biggest thing is with the convergence of the AI technology, the use of standard transactions in our business. Our process allows for an analysis first model where we can complete the analysis on potential underpayments without obligating the perspective provider partner to anything financially. I think that's a big thing. We are willing to show the value of our product before we ask a provider to commit to anything, because in the end, having worked in the provider side of healthcare directly and having tried to manage technology vendors and that sort of thing, I can say it's very refreshing to see a model where I don't have to commit financially to something until I know that , one, it works the way that it's been told to me, and two, that I'm going to get real value out of it.

Nate Pluke:

The other big thing is we've tried to create something that really makes for a lighter lift for provider organizations. A lot of vendors, and this is not specific to underpayment vendors, but a lot of revenue cycle vendors who are trying to add value for these provider organizations require a lot of data and a lot of times that's extensive extracts out of a data warehouse or out of the EMR, EHR billing systems. That can be a heavy request for IT. Ask any IT department and they will tell you that they are already 20% over capacity. So, we try and make it very light by using industry standard transactions that everybody has instead of basing it on extracts.

Steve Weichhand:

Well, that's helpful. Just having been in the industry for years, the budget cycles, the ability for these healthcare provider organizations to come up with the money to pay for a new vendor or a new service, that process can take some time. I think contributes greatly to how in some ways the industry has been slow to adopt new technologies and improve performance using tools like what we're talking about today. I certainly recognize what you're saying about the bandwidth of IT departments use to take on net new projects like this. It seems like you have a great approach for working around those two challenges, proving your value and reducing the lift needed to figure out what the value is. Thanks for expanding on that.

Nate Pluke:

Sure thing.

Steve Weichhand:

All right. In terms of results, I already asked a question around what outcomes organizations could theoretically expect. You mentioned that it's tough to predict and to be wary of organizations that give you hard numbers up front, but in terms of your past experience and working with organizations on solving this problem, do you have any generic type examples that you could share on how an organization partnered with you and what the value was that they were able to achieve?

Nate Pluke:

Absolutely. I'll start with one quick example. It's actually the one that I mentioned earlier where the client was able to recover 9,000 services without having to submit a claim or an appeal, that was the

case. Again, payer error, completely innocent, something changed in their system and somehow certain physical locations for the provider were no longer attached to their contract. We caught that, we quantified that, we submitted that to the payer and in that case those 9,000 services ended up being a repayment of $1.8 million or a little more than $1.8 million just in terms of the patient specific revenue. The other thing with under payments and late payments is that usually within a payer provider contract there's some language about interest. In that case, the provider was also able to see an additional $225,000 in interest payments for the lateness on those underpaid services that we helped them recapture.

Nate Pluke:

Then another one right now that's still in process is probably heading one thing we didn't talk about is, a lot of times the payments are reissued but in some times when an issue is at a very large scale and a long period of time, sometimes a settlement agreement will be reached and we can help with those things. We have another one that's pending right now that's probably going to end up in a settlement because when we ran the AI process on it, the last time we ran the AI process on it, it was over $3.2 million and it was over $35,000 individual services.

Nate Pluke:

That's also a good example of why manual process is not something feasible on the physician billing side, because on the hospital side you could recover 90,000, $100,000 on a single account that's been underpaid, but in this case, we're talking about relatively small average under payments stretch across 35,000 services. Those are two big real examples. The reason why I say it's hard to estimate what the total recovery is, in the case of the one that's going to be more than 3.2 million, that represents over 7% of the payments over a two year period of time for that provider. Whereas the 1.86 one accounted for less than 3%,

Steve Weichhand:

That's impressive. In an industry that relies on thin margins, comparatively to other industries, that can make a big difference. So, thank you for helping identify and solve those issues. While I have you here, I'd be remiss if I didn't ask you, just generally given your background and your position in the industry, if there's any other trends or technologies that you're seeing out there transforming healthcare specific to the rev cycle I'd say, that we and our listeners should be on the lookout for,

Nate Pluke:

Yeah, for sure. If there's going to be one big thing in the next five years, I will say it's going to be a move away from fee for service models, fee for service payment models. We've already started to see that with the formations of ACO and the proliferation of some value based payment models and other hybrid models of payments. It's good for the industry. I think we all can admit that the fee per service payment model is a bad model for... It's just a bad model especially for patients. So, this is good for the industry, it's good for the patients, it's good for the providers and it's good for the payers.

Nate Pluke:

But what I will say is it will make tracking things like underpayments and payment to contract term more difficult because the payment structures are going to change. There will be multiple payment structure put in place, some of them experimental, some will take hold, but these will look different than the fee for service models. So, while there will be changes within provider billing systems that in order to meet

some of these value based contracts, it's still going to be important to make sure that even in a value-based contract you're being paid correctly. I would say that as the industry moves away from fee for service, it's important to have a vendor partner that can quickly adapt to the new payment technologies that are going to be coming out pretty fast and furious in the next few years.

Steve Weichhand:

Well, that's been a change. t's been a long time coming, it's been talked about for some time, but I think you're right. I think there's momentum now, I think technology can enable organizations to make that pivot, and just given everything happening in the world, it makes a lot of sense. Thanks for sharing that perspective.

Nate Pluke:

Absolutely.

Steve Weichhand:

Well Nate, really just to close out, I know that I and our listeners really do appreciate you sharing your time with us today. So, I just want to thank you for being with us.

Nate Pluke:

Steve, thank you. It was a pleasure. It was a great conversation.

Steve Weichhand:

All right. Take care.