Okay, I can't do it any longer. As much as I tried to resist, it is time to write about ambient scribing.

So those who have met me know that I have a strange English-American accent, and I speak in a goblet manner. Yet I'm using the inbuilt voice recognition that Google applies for its poor dictations. I'll write this story now.

Now, it's not politics, but it's going to have a lot of impact. It used to be, and that is a fact of a couple of things. One is the vast improvement in acoustic recording, and the second is the combination of Natural Language Processing and artificial intelligence.

Which brings us to ambient listening to us now. It's very common in all the applications we use in business, like Zoom and others. Of course, we have had something similar in the medical business for many years, particularly in terms of radiology and voice recognition. It has only been in the last few years that the toughest job of all has gotten easier to use, and I'm describing it.

The problem is that doctors and other professionals are forced to write up the notes and history of all that has happened with the patients. Simply, the introduction of electronic medical records made this a major pain point.

Doctors used to take notes mostly in shorthand, leaving the abstraction of these notes for coding and billing purposes to be done by some poor sap in the basement of the hospital.

In the past, doctors used to dictate and then send tapes or files off to parts unknown, but then would have to get those notes back and put them into the record. June 2010, when most American healthcare moved towards electronic records combined, it turned out that most options had to type these. And this was a big problem for many of them.

So, this led to a lot of grumpy doctors not only typing but also having to type up their notes later in the day. And of course, it's a major contributor to burnout and very grumpy doctors.

In large part, the issue of having to type has been mitigated by these scribes, actual human beings wandering around behind doctors pushing a laptop on wheels and typing up everything that was said to them by their patients.

And there have been other experiments. Companies started off using Google Glass, allowing scribes in remote locations like Bangladesh to listen and type directly into the alarm.

But the real breakthrough has been in the last few years. Companies like Suki, a Bridge, and the Light Robin started to promise doctors that they could capture the ambient conversation and turn it into proper SOAP notes.

The biggest splash was made by the biggest dictation company, Nuance, which in the middle of this transformation got bought by one of the tech titans, Microsoft. Five years ago, they had a demonstration showing that ambient scribing technology was viable. I attended it, and I'm pretty sure that it was fake. Five years ago, I also used a butcher's tool to try to capture a conversation I had with my doctor. At that time, they were promising a consumer-facing tool - Dash. And it was pretty helpful.

Fast forward to today, and there are a bunch of companies with what seems to be really very good products. Nuance's Dragon Medical is in relatively wide use, a Bridge has refocused itself on conditions and has excellent reviews, and Nuance has just published a really compelling review from its first big rollout with Kaiser Permanente Oakland California. And others like DeepScribe, Ambient Handy, and even newcomers Innovasa and Sudo seem to be good options.

If you take a look at the results of the study that was done in Northern California using Nuance's tool, you'll see that conditions have adopted that very quickly. I'm very keen on what will happen with the accuracy, enjoy, and the ability to deliver a SOAP note and patient summary very quickly. And have returned a lot of time to the day.

The big gorilla on the EMR side, Epic, has integrated to some extent with Nuance and a Bridge, but many of the other companies are on the way when it's ready, but then so are its other competitors. At the moment, integration religiously means getting the note into the note section of the EMR.

But there is definitely more to come. For many years, NLP companies have been aiming for this note to aid coders in billing, and it's an easy leap to assume that will happen more and more with this ambient scribing. And of course, the same thing is going to be true for classical decision support and pretty soon integration with orders and workflow. In other words, when a doctor says to a patient, "We are going to start you on this new drug," not only will it appear in the SOAP note, but the order will not have to be separated. The description of the lab order will just be magically done.

It is quite reasonable to suppose that we are just paving the cowpath here. Really? Ambient scribing is just making the physician office visit data more accessible. It's not making it go away, which is what we should be trying to do. But I couldn't blame the ambient scribing companies for that. And as I have at length pointed out, we are still stuck in a fee-for-transaction system in which the health services operators in this country make money by doing stuff, writing it up, and charging for it. That is not going away anytime soon.

But given that's where we are, I think we can still see how the ambient scribing battle will play out. Nuance's Dragon Medical has the advantage of a huge client base, but frankly, Nuance has not been an innovative company. One former employee told me that they have never invented anything. And indeed, the Dragon system was the result of purchasing a company called in San Antonio company.

The other issue is the cost of ambient scribing, which in some cases is nearing the cost of a real scribe. Nuance's Dragon Medical, Suki, and even new entries like Sudo seem to be around the four hundred to six hundred dollars a month per physician level. It's actually faster than if you were to use any clinical works. If you were to use Sudo for all of that clients. Add the current pricing amount. The ambient scribing tool would cost as much as the EMR subscription, around six hundred bucks a month.

A Bridge has been quoted at roughly two hundred dollars a month, and Nuance seems to be considering less expensive, around one hundred twenty. But realistically, the whole market will have to compress to about that level because the switching costs are going to be very trivial. Right now, it's almost zero.

Which then leads to some more technical issues as to how good and how quickly these systems become, noting that they are already very good and what will happen to the way they store data. Most of them are currently moving the data back to their cloud. But this may not be acceptable for health systems that like to keep data within their firewalls. For what it's worth, Nuance, being from the EU and very conscious of GDPR, has been pushing this although I'm not sure how much difference that makes.

The other technical issue is the reliance on the large events like OpenAI, Google, etc., compared to companies that are using their own LO.L. Again, this may just remain a technical issue that no one cares much about. On the other hand, accuracy and lack of anonymization will continue to be a big issue if more generic LMS are used and now the fascination with the initial ChatGPT type LMC is wearing off. That's going to be a lot more concern about how AI is using health care as a whole, which will obviously impact

ambient scribing, even if it doesn't impact it as much as things like patient diagnosis or treatment suggestion.

So it's too early to know exactly how this plays out, but it's not much too early. In some ways, it's very refreshing to see the speed at which this new technology is being adopted. The problem that it is fixing for doctors is one that has been around for thousands of years and also one that has been particularly acute for the last twenty years or so. It's almost like we're in a period where the Doctor's going to type up in Epic, which was written up so eloquently. As such, a button by Bob Walker in his book, "The Digital Doctor," is going to be this with a historical artifact. A bit like those who were having to try to get online with dial-up modems.

I'm pretty sure that the winners will be apparent in a couple of years, and that somebody, possibly Microsoft, possibly the investors in big brands like Nuance or a Bridge or Ambient, maybe regretting what happened in a couple of years. Alternatively, one of them may be a monopoly winner that is printing money.

I suspect, though, that ambient scribing will essentially become a close-to-free product for all different types of business. And that clinical care will not be much of an exception. That suggests that a company like Anthropic or OpenAI with close connections to the tech titans, Amazon and Microsoft, will end up becoming more of a feature for the tech giants. And will be delivering that product for free. Into much of clinical care, including ambulance driving.

It's reasonable to expect that all aspects of life, including education, general business, consumer activity, and more, will find note-taking, summaries, and decision support a natural part of the next round of computing.

But to be fair, we are not there yet. My dictation tool took this whole thing while watching a water polo game on Sunday. And I think you'll be modestly amused about how terrible the trend of the original transcript was.

I'm thinking you're putting into TrackGPT to see how it comes up with a battle of Russian.