



FusionSpeech® powered by SpeechMagic™

Pulling together

Customer story

An ambitious provider of healthcare and two equally ambitious providers of technology get together in Omaha, Nebraska, to solve one of the most pressing issues in healthcare delivery - timely, accurate and reliable documentation. "Our goal at Alegent Health is to be a provider of world-class healthcare", says Joanna Christensen, Operations Director Document Management. Teaming up with Philips and Dolbey, Alegent Health developed and implemented a system-wide speech information management solution that provides documentation for fast, personal treatment of exceptional quality or, simply said, world-class healthcare.

It's time now

Alegent Health staff have the privilege of working for an organization that by 2012 will have invested over \$150 million in innovative medical and information technology. Speech recognition is part of the undertaking. FusionSpeech® powered by SpeechMagic™ is the foundation for converting to text all dictations generated by the more than 1,400 physicians and allied health professionals.

Alegent Health's system of choice features digital dictation, backend and front-end speech recognition.

Front-end is planned for service areas with many standard reports and high volumes as well as individual providers/service areas who specifically request

it. Powered by SpeechMagic™, the dictionaries and conversion factors in FusionSpeech® have done extremely well reports Joanna. "The profiles train quickly and accuracy is high. That's a change from what we've seen historically. Of the engines demonstrated, the Philips engine provided the higher accuracy level for us."

Mission care

Although the implementation is fairly new, 25% of the total 42 million dictation lines are already processed through speech recognition. Alegent Health has seen a return on investment through productivity gains. "We planned on a 9% increase in dictation volume, we've had 17%. Thanks to speech recognition, we're able to meet the need without adding staff," says Joanna. She also noted physicians increased the volume of a History & Physical report (H&P) by 20% over the previous year which she attributes to better documentation.

"Our physicians include more details in their reports to provide even better patient care."

Better patient care seems to truly be the motivation behind the actions taken at Alegent Health.

Joanna notes, "We need to ensure extremely timely, high quality documentation to provide world-class patient care and make the most efficient use of the patient's time in the hospital."



High-tech at Alegent Health: The largest non-profit, faith-based healthcare system in Nebraska and southwestern Iowa will have invested more than \$150 million in state-of-the-art medical technology by 2012.

By popular demand



"We have 6,500 PCs. Physicians are moving around and can take their profiles with them."

Jeffrey Broz,
Operations Director Imaging
Applications

The idea for implementing speech recognition was fueled by physicians. World-class healthcare as well as ever-changing reimbursement guidelines require more comprehensive and detailed reports. In addition, fast turnaround time is required to facilitate treatment timelines, minimize length of stay, and decrease healthcare costs.

Jeffrey Broz, Operations Director Imaging Applications, built on the anticipation of the physicians throughout the implementation so that they were ready to go.

"It's time to rid ourselves of the paper and barcode dependency and integrate speech recognition with the radiology information system."

Learning from the past

Jeff believes an integrated workflow is indispensable. He implemented stand-alone speech recognition in a previous job, describing the experience as "very difficult". Today he prefers a gradual approach to get physicians used to the changes that come along with a paperless workflow – ultimately bringing speech recognition to the front-end. "It's sort of a maturation process, instead of boom - here's your new system and work with it," he says.

Not having to worry about paper documents plus a more highly streamlined workflow has been well received by radiologists. "Today they're champing at the bit to get it everywhere," reports Jeff.



James Burgart, Operations Leader Information Services, has been watching speech recognition for more than 12 years. "Now is the right time. Engines have matured, meaning high speed, efficient translation to text. Along with the computerization we're able to get high accuracy," he says. "From what we've seen in workflow improvement and transcription efficiency, we would highly recommend it - particularly for organizations on the way towards the EHR."

Better information. Better care.

"We believe that the EHR is a factor for patients and referring physicians to choose us because of the completeness of the information. Our own performance and quality targets, and safety goals make it a requirement as well.

Currently, reports from various sources are saved in the EHR as image files. The next step is sophisticated data mining. This will allow us to search documents for a particular diagnosis and procedure and to extract key data fields."

How important is it to speech-enable the EHR?

It is of utmost importance. We have to make the physicians' workflow and their day as efficient as we can. Anything that eliminates clicks and redundant action is positively noticed.

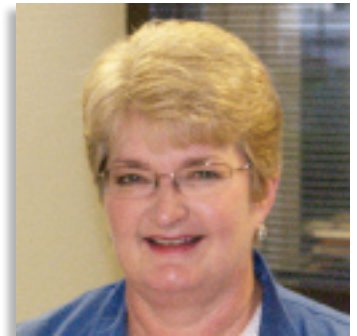
You can always get what you want

“We outlined in our kick-off meeting where we are and where we want to be,” says Jim Burgart, Operations Leader Information Services, stressing the importance of a good relationship with the provider. “Communication, collaboration, turnaround time, project management - all are critical elements.”

“Outline your goals,” recommends Joanna too. “It’s not to eliminate employees; it’s to provide more timely documentation through greater productivity.” Documentation, she says, can be standardized but is still unique to each facility or service line. Every system must be adapted to the environment. One size doesn’t fit all. Neither does the experience from other facilities. “Some say slower transcriptionists have the greatest potential for improved productivity. We found that even the high producing transcriptionists

achieved significant productivity gains. Quality also improved due to the engine acting as the primary transcriptionist – interpreting the same way each time. Also, you have to know your staff; how well can they adapt to change? This can be very specific to a facility or service’s documentation practice pattern. Know your organization,” she concludes.

Dolbey’s FusionSpeech® powered by SpeechMagic™ worked for Alegent Health – given the seamless integration of backend and front-end speech recognition and the support of traditional transcription. “We’re glad we implemented when we did and, when I look at the market now, I think we have the best product,” says Joanna.



“We made our decision two years ago, after having reviewed systems for 12 years. We chose Philips’ SpeechMagic and Dolbey. And it was the right decision.”

Joanna Christensen,
Operations Director Document
Management

The easier the access to the dictation and speech recognition system, the more information is being recorded - which results in more complete, comprehensive and timely reports.

Do physicians actively request speech recognition?

As we recruit new physicians, we’re finding they won’t go to a hospital that doesn’t have it. We have to implement the technology to attract the best talent. They’re trained on state-of-the-art technology and don’t want to settle for anything less in the private practice world. It has become vital for the image of a healthcare institution, the same as the CT or MRI used.

What progress have you made so far?

We’ve seen the turnaround time decrease, transcription become more efficient and physicians provide more details in their reports. When we started, we were looking for partners who were willing to help us become world-class. With Dolbey and Philips we have built a strong team with a common vision and a common goal – world-class healthcare.



Michael Westcott, MD, Chief Medical Information Officer, explains the role of speech technologies for the electronic health record (EHR).



Smooth implementation

Roxanne Dillenburg, Documentation Analyst Information Systems, is the project lead and oversees the implementation of speech recognition at Alegent Health's nine hospitals and more than 40 clinics – spread over a geographic area with a 100 mile radius. She reports the implementation went really well. "We worked with an extremely good team from Dolbey. They were very sensitive to what we needed and how quickly we wanted to move. I think the implementation went very, very, well."

Training has been highly satisfactory. "We completed Dolbey University online. It was a great experience. Dolbey trained us and we trained our staff."

Transcription at Alegent Health has been centralized for 13 years. Of the 95 transcriptionists, 80 work from home. Alegent Health gives priority to data security - everyone working at home is connected

to the central system. "Nothing is stored locally on the PC. It's all on the network," explains Roxanne. Thanks to the network-based architecture of SpeechMagic, home-based transcriptionists benefit from backend speech recognition, too – the same as their colleagues in-house.

"Things are going smoothly. I don't have to do a lot which is a good thing. Joanna sometimes gets a bit impatient because she wants it done yesterday," she tells us, "But even though the implementation took time, it did go quickly. I don't think we could have done it any faster."

She appreciates the service quality as well. "We set up a workflow in the beginning. We had very clear ideas of what we wanted and how the process should work. Dolbey and Philips worked with us and together we made things happen."



Susan Braniff, Documentation Analyst Transcription Operations, says the feedback from her team has been positive, especially from those comfortable with the workflow changes. "Everything takes a while to learn. There are two learning curves to look at - the transcriptionist learning to be an editor and the voice profile that's being trained. These are two truly different mindsets. Transcriptionists are really astonished at how good the conversion is after the profile is trained."



Linda Coppock, Documentation Analyst Special Projects, reports that transcription at Alegent Health is becoming more efficient. They have revised the incentive plan for the transcriptionists to reflect their new role as editors. "For years they've been working with their fingers and now they are looking at it with their eyes. That's transcription the new way - editing rather than transcribing. As transcriptionists get signed on, they like it a lot. And the statistics show their productivity increases," says Linda.