

# How Digital Dictation Saves Time Without Compromising Security





**People become healthcare workers to heal patients.**

**That has been the case for hundreds of years. But now that dynamic is changing. Doctors and nurses still heal patients, of course. But attending to patients' needs can no longer be their sole focus.**

**Modern healthcare workers, unfortunately, must attend to administrative tasks. The time they spend on clerical chores now occupies a massive percentage of their time. Doctors, in fact, hold the unhappy distinction of having less time available to spend with patients than physicians in any preceding era, reaching all the way back to Hippocrates. And statistics indicate that the problem is only growing worse.**

There is no single solution for eliminating this problem and restoring the balance of time available for patients to more acceptable levels. But in many different ways, technology offers tools that can streamline administrative chores, making them faster and easier. The administrative chores remain, but the tools of technology can help medical professionals complete them faster, leaving more time for patients.

Modernizing the documentation process is one example. Most clinicians spend many hours every day slogging through the documentation tasks that have become

an integral and inescapable component of modern medicine. But technology provides a tool that can make the documentation process faster and easier: speech-to-text solutions.

This paper discusses how a speech-to-text solution, in partnership with Citrix virtual environments, can save time for clinicians every day — time that can be spent with patients. Also discussed are the benefits that the right speech-to-text solutions can provide to IT professionals in the healthcare industry.





## Business Challenge Summary

A young person fantasizes of one day becoming a doctor. She dreams of healing the sick and saving lives. She spends years in study and accumulates hundreds of thousands of dollars of debt

And then finally the day comes — she achieves her dream. **She is a doctor. And now she spends her days...stuck in an office performing administrative tasks.**

It is likely that many doctors experience “this isn’t what I had in mind” thoughts every day. It is an unfortunate trend, but serving as a doctor is increasingly less about treating patients and more about tending to administrative chores. It is likely that this scenario is not what most clinicians had in mind when choosing medicine as a career.

But that is what every medical professional must endure. In 2016, the *Annals of Internal Medicine* published a study entitled “Allocation of Physician Time in Ambulatory Practice: A Time and Motion Study in 4 Specialties.”

The study found that physicians spend far more time on administrative tasks and paperwork than attending to patients: “...for every hour of direct clinical face time with patients, physicians spent almost 2 hours on EHR [electronic health records] and desk work. In addition, for physicians who completed after-hours diaries, EHR and desk work regularly extended 1 to 2 hours beyond office hours into personal time.”<sup>1</sup>

Physicians are now able to spend only a third of their time interacting with patients. The bulk of their time is consumed with paperwork.

The problem is only accelerating as regulations and compliance requirements become more demanding. In 2005, a similar study was published in the *Annals of Internal Medicine*. This study found that, at that time, paperwork and administrative chores “only” consumed about a third of physicians’ time. In only an 11-year interval between the two studies, time spent on paperwork and administrative chores doubled, and time left for patients was slashed by half.<sup>2</sup>

Perhaps the most important and time-consuming task is the never-ending demand for documentation. Maintaining accurate medical records is an integral component of providing quality medical care. Thorough documentation is also required to receive payment from insurance companies.

In attending to the dreaded documentation, most medical professionals squander lots of time handwriting many of their notes. While handwritten notes are time consuming, they also introduce an element of inaccuracy into the medical documentation process: the infamous “doctor handwriting” is likely to lead to errors when the handwritten notes are translated into permanent records.

Should clinicians then type their notes instead? Typing is also slow and tedious. And while typing is less likely to introduce mistakes into medical records, the clinician must then make decisions about formatting, layout and other related issues — more time consumed.

There is no escaping the fact that **time spent on medical documentation reduces the time available for treating patients.** But though these tasks cannot be avoided, they can be streamlined and made easier.

Technology offers a suite of solutions that accelerates the documentation process to the speed of speech. Clinicians can perform their documentation duties as quickly and easily as they can speak. They can even perform documentation duties while they are attending to patients, eliminating long hours spent in the office slogging through documentation duties after a full day of treating patients.

That suite of solutions is the key, at least in part, to restoring the role of physician to more caregiver, and less office worker.

Citrix Ready has verified a digital dictation solution that addresses the documentation problem in healthcare: Olympus Dictation Management System (ODMS). The Olympus solution fulfills the goals of the Citrix Ready Healthcare Solutions Program:

- **Improve clinician access, workflow and experience** to drive better patient value and patient care.
- **Make IT more agile and flexible** in order to meet and exceed the diverse needs of healthcare constituents and affiliates.
- **Enhance security and compliance**, adhering to all rules and mandates for healthcare information exchange.



<sup>1</sup><http://annals.org/aim/article/2546704/allocation-physician-time-ambulatory-practice-time-motion-study-4-specialties>

<sup>2</sup><http://www.annfam.org/content/3/6/494.abstract>

## Overview of Olympus Speech Documentation Solutions

The Olympus suite of documentation solutions applies the world's most advanced technological capabilities to every aspect of healthcare documentation. Olympus SDS offers the complete portfolio of professional dictation hardware, associated software plus services like System Healthcheck, Test Pilots, etc.

Olympus speech-to-text solutions include classic transcription, automatic voice transcription and advanced voice transcription:

- **Classic:** A typist listens to the recording and manually transcribes it. The author then approves the document.
- **Automatic:** Transcription is done by speech recognition (SR) software. The author trains the SR on spelling of often used words, names etc., in order for the SR to remember

afterwards. The author then approves the document.

- **Advanced:** An administrative assistant uses SR for transcription and in this case he/she is training the user profile of the SR. The author approves the document.

Olympus Speech Documentation Solutions incorporate the software ODMS, which is a modular architecture in their designs, enabling scalability for healthcare organizations of all sizes. And all Olympus solutions offer easy installation and administration.

Many Citrix partner solutions fulfill some of the key objectives of the Citrix Ready Healthcare program. Olympus ODMS fulfills all of the key objectives of the Citrix Ready Healthcare program:

- **Make IT More Agile and Flexible:** Citrix enables the economies of scalability and flexibility. IT administrators can easily add new users and workstations, and perform necessary updates with ease. Olympus digital dictation solutions can be administered on a system-wide scale, eliminating the need to individually manage licensing and installations at each physical workstation. Flexibility is assured since audio files may be stored on the Citrix server level, and not at each client site.
- **Improve Clinician Access, Workflow and Experience:** It is an indisputable truth: speaking is faster than typing. Since documentation happens nearly in real time, digital dictation enables the faster availability of information. Industry experts estimate that digital dictation and speech processing systems can yield time savings of up to 50 percent.





Accuracy is also improved. Clinicians are less likely to forget important information — a frequent byproduct of after-the-fact notetaking — because the digital notes are recorded immediately. Digital dictation supports the mobility that is an integral necessity in modern healthcare environments. Clinicians can plug in the digital dictation device anywhere and not just at certain predesignated workstations.

And the industry-leading, user-friendly, intuitive usability of Olympus solutions contribute to time savings of healthcare IT admin by enabling a faster, smoother workflow.

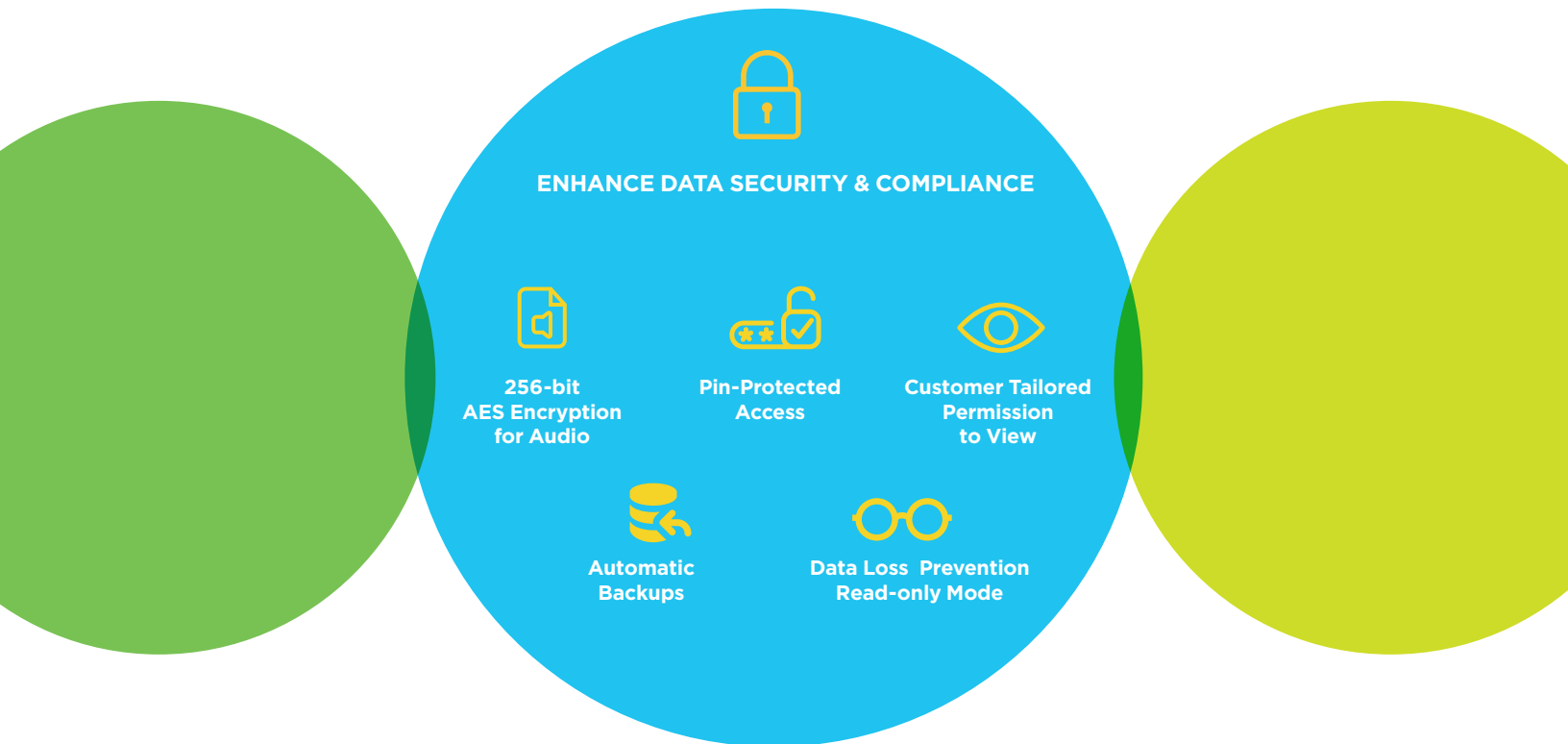
- **Enhance Data Security and Compliance:** Maintaining the integrity of patient data is a growing concern at healthcare organizations worldwide. Electronic health records offer a

wealth of illicit value to cybercriminals, and rank among the forms of data most often targeted by hackers.<sup>3</sup> Olympus Speech Documentation Solutions offer a range of data-protecting features, including:

- 256-bit AES encryption for audio files
- PIN-protected access to mobile voice recorders
- Ability to design workflows such that only designated users are granted permission to view files (based on customer requirements)
- Automatic backups
- Data Loss Prevention (DLP) Mode: the voice recorder can be set to run in read-only mode, preventing the download of confidential data

Olympus Speech Documentation Solutions are designed to interface seamlessly with Citrix programs, leveraging the mobility and flexibility benefits of applications and desktop virtualization solutions offered by XenDesktop and XenApp for healthcare environments. Recordings and transcripts are stored on Citrix virtual machines and are protected in the data center.

For deep integration into any HIS (Hospital Information System), Olympus provides a SDK (Software Development Kit). The SDK is designed to help developers seamlessly integrate Olympus software into third-party software, and includes drivers for virtual environments. Additionally, many leading healthcare software vendors provide Olympus solutions pre-installed with their products.



<sup>3</sup><http://www.healthcareitnews.com/news/healthcare-top-target-cyberattacks-2017-experian-predicts>



Olympus offers several innovative and unique features that aren't available with any competing product. Features unique to Olympus Speech Documentation Solutions include:

- **Reliability:** Olympus solutions are among the most reliable on the market. They do not freeze or malfunction. Robust construction ensures that Olympus hardware products are extremely durable and long-lasting, commonly providing dependable service for many years.
- **Convenience:** Many companies provide software for speech documentation solutions, and many provide hardware. But Olympus provides both. Customers —

particularly large healthcare institutions — appreciate the convenience provided by an end-to-end solution sourced from a single vendor. And concerns about software/hardware mismatches and incompatibilities are eliminated.

- **Customization:** Olympus recognizes that no two customers will have exactly the same needs. No cookie-cutter solution will provide each customer with a full range of benefits expressly tailored to that customer's requirements. For those reasons, Olympus created and maintains a staff of specialists that focus on the specific needs of each customer. This team analyzes each customer's needs and workflows, and customizes solutions that best fulfill those

needs. Long-term support for maintenance and upgrades is also provided.

- **VDI Compatibility:** Olympus solutions are compatible with the Citrix virtual environments deployed by most healthcare organizations.
- **Thin Client Support:** The move toward desktop virtualization and thin client technology is a booming trend in the healthcare industry. Olympus solutions are designed to support thin client technology.



## Olympus Solution Detail

Olympus has been selected to participate in the Citrix Ready Healthcare program because its speech documentation solutions fulfill critical needs for healthcare organizations. Verification by Citrix Ready provides healthcare institutions with assurance that Olympus solutions will integrate seamlessly with the Citrix systems in use in most healthcare environments.

Olympus digital dictation software uses a centrally based management system. This enables software, settings and devices to be configured comprehensively as a group, according to the organization's standards and operating policies. IT administrators are provided with the flexibility to designate assignments for the transcription of recordings. They can define and control what users are able to see and the settings that users are permitted to change. Administrators can lock settings to prevent unintended changes. Administrators also have the ability to customize users' GUIs.

The benefits of Olympus Speech Documentation Solutions are not focused solely on the back end. Olympus solutions are designed to provide a user-friendly interface — as simple as using Microsoft Outlook, with installation as easy as that of a simple analog dictation device. Olympus dictation hardware is also designed to support the core user principles of one-hand operation and intuitive, no-look operation. Users can keep their eyes on their work, and not on the tool.

Hardware and software features that support these user-friendly principles and Olympus' industry-best durability include:

- **High-quality microphone systems:** Low-noise directional microphones are engineered to deliver the highest audio quality for dictation and speech recognition. The wind and pop-noise filter minimizes undesired background noises. The single microphone suspension absorbs most touch noise.
  - **Laser trackball for mouse control:** The laser trackball incorporates a smooth surface, a high-precision laser and large diameter for high precision. It also employs a high-molecular-weight polyethylene film that is extremely durable and can be moved without operational noise.
  - **Programmable buttons support customized workflows:** Microphone buttons can be user-assigned to various functions to suit a particular software application. This tactile control enables one-hand usage by feel — no need to look at the device while using it. The click-lock function allows the user to drag and drop objects or to mark text paragraphs with one hand.
  - **Ergonomic slide switch:** Decades of voice recording support have proven that the slide switch makes recording comfortable and fast. The ergonomic slide switch is an excellent, classic user interface that allows single-handed and blind operation.
  - **Advanced editing options:** Creating texts by merely speaking involves more than just merely recording. The digital speech standard (DSS) allows for quick file editing (insert, overwrite, append, erase/cut) and uses meta information (index, verbal comments, work types, etc.) to facilitate collaboration and automatic processing.
  - **Advanced security features:** Dictations are 256-bit AES encrypted in real time. DS-series recorders can be locked with a 4-digit PIN for each user. If desired, the optional Data Loss Prevention (DLP) mode prevents users from copying files from the computer to the dictation device.
  - **Dictation transfer via LAN, FTP or email:** Every user may define automatic transfer rules and select the preferred method of transfer.
- Olympus Speech Documentation Solutions are entirely compatible with Citrix virtual solutions. Installation on virtual machines is the same as on physical machines; no additional configuration steps are necessary. When using the Olympus Dictation Management System (ODMS) with Citrix, the administrator must simply install the Olympus-supplied virtual driver for Citrix. No additional steps are necessary, and no specific settings are required to enable Citrix compatibility.



## A Proven Partnership that Helps Clinicians Focus on Patients — Not on Administrative Chores

Recent years have seen a time of upheaval and change in the healthcare industry. Costs and regulation have combined to increase the administrative burdens heaped on healthcare professionals. In the midst of these dynamic changes, healthcare practitioners find themselves pressured to serve patients less while focusing more on these “extra” tasks. The demands of keeping pace with documentation have reached all-time highs. Concurrently, time available for focusing on patient care has plummeted to all-time lows.

There is no single, all-encompassing solution to this problem. But technology can help. Olympus Speech Documentation Solutions can substantially streamline the documentation process that usurps so much of clinicians’ time. Olympus solutions simply make the documentation process faster and

easier. Real-time notetaking can reduce or even eliminate hours of office time spent documenting the day’s events. And Olympus solutions integrate seamlessly with the Citrix virtual environments that have become so popular in healthcare organizations.

Olympus continues to build upon a long and rich history as an industry leader. In 1969, Olympus revolutionized medical dictation and transcription with the introduction of the world’s first microcassette recorder, and again in 1997 with its first digital recorder. Every product is designed to advance durability and usability to new levels.<sup>4</sup> WYSIWYG — the long-standing acronym for “What You See Is What You Get” — has for decades implied the ultimate in convenience and usability for visual applications. Olympus has enabled a new meaning for the venerable

acronym: “What You Speak Is What You Get.” It is a simple way of conveying the astounding utility and usability that Olympus offers to medical professionals.

Olympus Speech Documentation Solutions have proven to integrate seamlessly and easily with Citrix environments. The selection of Olympus to the Citrix Ready Healthcare Solutions Program provides healthcare organizations with a proven, reliable solution for streamlining a common chore and easing administrative burdens.

Perhaps most importantly, Olympus Speech Documentation Solutions help to correct a growing and unsustainable imbalance by reducing time spent on administrative tasks, and increasing clinicians’ availability for administering to patients.

For more information about Olympus Speech Documentation Solutions, please visit: <https://www.olympus.co.uk/dictated-documented>

For more information about Citrix application and desktop virtualization, please visit: <https://www.citrix.com/virtualization/>

<sup>4</sup>[https://www.olympus.co.uk/site/en/a/audio\\_systems/professional\\_dictation/professional\\_essentials/innovation\\_with\\_history/index.html](https://www.olympus.co.uk/site/en/a/audio_systems/professional_dictation/professional_essentials/innovation_with_history/index.html)





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## Appendix

Learn more about the Citrix Ready Vertical Solutions Program for Healthcare at: [http://citrixreadyprogram.com/2017/citrix\\_ready\\_vertical\\_solution\\_programs/](http://citrixreadyprogram.com/2017/citrix_ready_vertical_solution_programs/)

To learn more about the Citrix Ready Program partnership with Olympus, please visit: <https://citrixready.citrix.com/olympus-corporation.html>

To learn more about virtualization solutions for healthcare enterprises, contact [Citrix](#) and [Olympus](#).

## Citrix Ready Healthcare Program Overview

The Citrix Ready Healthcare Solutions Program has been launched with the sole objective of building and sharing a library of white papers and case studies that portray the best integrated joint solutions for healthcare. Each of these documents illustrates the teaming of a Citrix partner and Citrix solution in helping healthcare institutions further enhance seamless, instant and secure access to patient information and optimized patient care.

This program will serve to identify and showcase partner technologies such as single sign-on, voice dictation and zero-clients. All spotlighted partner technologies work to seamlessly enhance healthcare solutions that help clinicians become more productive

and provide a better patient experience, without compromising regulatory compliance. All solutions selected to the Citrix Ready Healthcare program support smooth and reliable integration with the latest Citrix XenDesktop and XenApp versions. These solutions address one or more of the below key objectives that have been identified as essential needs for healthcare institutions today:

1. Making IT more agile and flexible
2. Improving clinician access, workflow and experience
3. Enhancing data security and compliance



### About Citrix Ready

Citrix Ready identifies recommended solutions that are trusted to enhance the Citrix Delivery Center infrastructure. All products featured in Citrix Ready have completed verification testing, thereby providing confidence in joint solution compatibility. Leveraging its industry-leading alliances and partner ecosystem, Citrix Ready showcases select trusted solutions designed to meet a variety of business needs. Through the online catalog and Citrix Ready branding program, you can easily find and build a trusted infrastructure. Citrix Ready not only demonstrates current mutual product compatibility, but through continued industry relationships also ensures future interoperability. Learn more at [citrixready.citrix.com](http://citrixready.citrix.com).

### About Olympus SDS

Olympus develops and markets intelligent, complete speech documentation solutions, SDS for short. With more than 45 years' experience, Olympus offers intuitive hardware, workflow-supporting software, and tailored service, for efficient, future-proof Speech-to-Text solutions. The high-tech products for mobile and stationary dictation, as well as for transcription, are the key to professional, secure, and profitable work in all industries. With its comprehensive approach, Olympus is helping to considerably simplify the everyday work routine.

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