



Nuance Dragon®  
Ambient eXperience™

Revolutionizing the  
patient-physician  
healthcare experience

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# The Nuance Dragon Ambient eXperience

The current standard for 21st-century healthcare delivery is in flux, with unique challenges preventing care teams from ensuring high-quality, patient-centered care. Many of the challenges are fundamental, interconnected, and share a consistent factor: the burden of clinical documentation.

Physicians today are looking for more than the status quo—they want intuitive, innovative solutions that redefine the healthcare experience for patients, physicians, and administrators alike.

The Nuance Dragon Ambient eXperience (Nuance DAX™) is a transformative answer to many of healthcare's biggest challenges. With Nuance DAX, physicians are embarking on a new strategy for clinical documentation grounded in intuitive technology and operational efficiency. This leads to time savings that facilitate greater patient access and additional revenue. Nuance DAX is primed to lead healthcare's return to the ideal model of the physician-patient relationship, practicing medicine the way it used to be, with human conversation once again at its core.

Healthcare innovation in the 21st century takes a quantum leap with Nuance DAX.



# The intersection of challenges confronting physicians, clinicians, patients, and administrators

Clinician burnout, hindered care team communication, declining patient satisfaction, increased financial pressures, growing administrative demands, and obstacles to effective care delivery—each of these challenges has profound repercussions and requires advanced leadership, solutions, and innovative foresight to address.



Physicians, administrators, and their organizations face significant challenges that multiply and intensify every year.

Time-consuming documentation requirements, central to our healthcare system's operations and the reimbursements physicians and health systems receive, have become a thorn in the side of many physicians—making it increasingly difficult to deliver the consistently high-quality care for which they strive and patients deserve.

## Sub-optimal patient experience

Patients are increasingly seeing reduced engagement with physicians that are often rushed or distracted during visits as a result of the documentation burden. The overall patient experience suffers, as a lack of uninterrupted face time between patient and physician inhibits the ability to build understanding and connection and the delivery of more holistic care.

This has become even more critical as Americans have seen out-of-pocket costs rise, and healthcare markets are increasingly competitive. As patients see more of their own dollars go towards the care they receive, they are seeking exceptional experiences in which they feel respected, heard, and supported.

Dynata conducted a survey of more than 1,000 U.S. consumers, 61 percent said they would visit their healthcare physician more often if the communication experience felt more personalized and 71% said they are 'frustrated' with their healthcare experience.

## Physician shortage

Health and Human Services predict there will be a nationwide shortage of nearly 90,000 physicians by 2025. Burnout, COVID-19, retirement and limits on medical school and residency programs are the main reasons for the shortage.

Compounding the problem is an aging population. The number of people aged 65 and older is projected to reach 83.7 million by 2050.



The dramatic expansion of virtual medicine is here to stay, putting additional stress on healthcare operations.

## Clinician burnout

The “pandemic of physician burnout” is a significant threat to the sustainability of America’s healthcare system, particularly as the avalanche of documentation requirements increases.

Physicians have few options to increase efficiency without sacrificing the standard of care, often choosing between documenting during visits, which distracts from care and relationship-building with patients, or adding extra hours to their workdays.

Clinician burnout has increased due to COVID-19 with 64% of U.S. physicians stating that the pandemic intensified their sense of burnout

Burnout has become a \$4.6 billion dollar a year problem, resulting in patient and physician churn with many leaving the profession, spurring a hiring competition for physicians.

## Missed reimbursement and financial pressures

Physicians recognize that they are reimbursed for the care they document, not the care they deliver to patients.

And yet, even with the considerable effort and resources devoted to conducting and improving documentation, the challenge of inaccurate, late, or insufficient documentation is commonplace. This can have a consistent and significant impact on cash flow and revenue, compliance, and even the quality of care delivered.

## The telehealth imperative

Amidst the whirlwind shift to virtual care, physicians have had to rely on and toggle between multiple, disparate technology platforms, devices, and software, leading to workflow inefficiencies that put additional stress on operations and create substantial obstacles to a satisfactory physician and patient experience.

Today, healthcare professionals understand that the dramatic expansion of virtual medicine is here to stay—and that advanced, integrated solutions are needed to take advantage of this new paradigm.



# The solution: Shaping the future of healthcare with Nuance DAX

Introducing the most advanced ambient clinical intelligence technology to the physical and virtual exam room. Healthcare has long sought a documentation solution that is both highly accurate and transformatively time-saving—Nuance DAX meets that need.

Nuance has innovated a powerful ambient clinical intelligence technology, Nuance DAX, with a simple objective: **Create clinical documentation that writes itself.™** The computer—a ubiquitous middleman in the modern exam—will no longer compete with the patient for the physician’s attention.

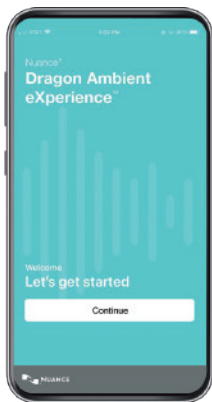
Nuance DAX transforms the physician-patient experience by enabling the physician to focus completely on the patient. Its sophisticated conversational AI and ambient technology captures and contextualizes the patient encounter, which is then available in the EHR for the physician’s review and signature. Nuance DAX supports a comprehensive suite of specialties, including urgent care and primary care, with clinical notes tailored to each specialty’s needs.

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“Our patients see us being progressive. They know we are looking to adapt with the times and I think that says a lot of about a healthcare physician that we are investing in our future and where things are going.”

— Kristy Gleaton,  
Director of Operations,  
Thomas Eye Group

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Nuance DAX mobile app



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Nuance DAX for Microsoft Teams





## Positive impact on the delivery of care

This technology will lead to positive impacts on the delivery of care that will revolutionize the healthcare experience across medical specialties, amplifying healthcare professionals' ability to help others by:

- **Rehumanizing the patient experience**

Nothing means more to the patient than knowing her physician is listening to her story and focusing on top-quality treatment. High-quality engagement facilitates higher patient satisfaction and, ultimately, patient retention. Nuance DAX ensures that the relationship between the patient and physician, and not the copious notetaking, is the primary focus of the visit.

- **Relieving physicians to focus on their patients and themselves**

After using Nuance DAX, physicians are thrilled by the extent to which it reduces the time spent on documentation. Physicians overwhelmingly feel satisfied and recharged that patient care has returned to the focus of how they spend most of their time.

- **Reimagining how organizations operate to improve the balance sheet**

Physicians are seeing dramatic improvements in operational efficiency. Complete, precise documentation, paired with efficient service, is reducing waiting room backlogs and time between encounters, enabling more patients to be added to their schedules. With increased patient throughput and retention and more accurate reimbursement, Nuance DAX positively impacts physicians' top and bottom lines.

“DAX is a true differentiator and one that we are certain will draw top talent to our organization.”

— Dr. Snehal Gandhi,  
CMIO, Cooper University  
Healthcare

“The biggest burden is that cognitive burden of getting data into the system, and with DAX that is essentially eliminated. I tell people it's the greatest thing now that I can just sit back relax and have a meaningful conversation with my patient regarding what's going on and not have to worry about inputting the data.”

— Dr. Lance Owens, CMIO, Family Medicine, University of Michigan Health-West

## Nuance DAX for Microsoft® Teams

Nuance's latest innovation for telehealth, the first of many, builds on the power of the solution to serve patients in remote environments with Nuance DAX for Microsoft Teams. This integration, along with Nuance and Microsoft's strategic partnership, has sparked the creation of a cutting-edge telehealth solution that broadly scales virtual consults to increase physician wellness and provide better patient outcomes.

The technology seamlessly fulfills an array of responsibilities from real-time automated documentation to scheduling coordination to patient-physician communication—all within one simple platform. Nuance and Microsoft address what the market needs as it enters a more permanent "second phase" of telehealth—delivering enterprise-wide digital technologies as the foundation for the virtual environment for years to come.

Before the pandemic, telehealth comprised less than 1 percent of outpatient visits. But, during the early stages of the pandemic, this rose to 13 percent, followed by a drop to 8 percent in 2021.<sup>1</sup> Despite the drop, telehealth is here to stay and Nuance DAX for Microsoft Teams is an essential tenet of the transition to virtual care in healthcare's future.

## Leveraging innovation to advance care

This is just the beginning of the benefits that the Nuance DAX solution will bring. In the long term, it will grow into an interconnected AI clinical ecosystem offering a variety of sophisticated ambient skills and proactive intelligence making it the ideal solution for physicians that want to leverage innovation to advance the level of care they provide. These capabilities, fueled by artificial intelligence algorithms and a sophisticated set of technologies, can be seamlessly deployed to clinical teams to address healthcare's primary operational and clinical challenges.

Ambient clinical intelligence is launching healthcare into a more sustainable future, returning the patient-physician relationship to the forefront of the care delivery experience. Nuance DAX is the superior automated documentation technology: efficient, comprehensive, accurate—and transformative.

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90%

Join 90 percent of U.S. hospitals and 85 percent of the Fortune 100 across the globe that trust Nuance's intelligent solutions.

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A group of healthcare professionals in white coats, with a woman in the foreground smiling. The image is overlaid with a blue-to-purple gradient.

# How Nuance DAX transforms healthcare

For many physicians, their practices are vital arteries in their communities. Nuance DAX is transformational in the way physicians can focus more on an enhanced patient experience, providing the highest level of care possible.

## Enhanced patient experience



From 20 minutes to 4 minutes—reduction in family medicine patient wait times (The University of Michigan Health-West)

Forging a connection with patients and providing the highest-quality care is more than simply a goal of physicians—it is a necessity and their ultimate purpose.

With the right technologies, physicians can deliver high-quality healthcare experiences, and patients can get the healthcare experience they need and deserve.

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“I have noticed a huge improvement both in the quality of my life and in the patient’s experience. I no longer must bring a computer into the room with me, and I am no longer scrambling to get out of the room to start frantically typing to document the note. I believe I am more effectively meeting the patient’s expectations regarding their overall experience and satisfaction levels.”

— Dr. Jesse Affonso, Cape Cod Orthopedics

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That's what Dr. Jesse Affonso at Cape Cod Orthopedics did when he started using the Nuance Dragon Ambient eXperience (DAX) over a year ago. He doesn't even bring a computer to the exam room. He brings up the DAX mobile app on his cell phone, taps the record button, and automatically captures the conversation.

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"The art of medicine is such a vital part of medicine. The science is the clerical part. I think this technology really allows you to focus more on the art of medicine. And the art of medicine is to develop strong patient relationships and to tease out challenging or difficult issues. DAX has eliminated the clerical burden that had been competing with my time with the patient and allowed me to be present and engaged during the visit."

— Dr. Jesse Affonso, Cape Cod Orthopedics

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85%

say their physician is more personable and conversational<sup>2</sup>

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82%

say their physician is more focused<sup>3</sup>

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82%

say their physician spends less time on their computer<sup>4</sup>

Improved  
physician  
satisfaction



70%

reduction in feelings of  
burnout and fatigue<sup>5</sup>

The advanced technology Nuance DAX introduces to the exam directly correlates with less time spent completing charts and billing—whether during the patient visit or at the end of the workday. By giving physicians back time in their days, Nuance DAX frees them to have valuable personal time and enjoy the practice of medicine without the constant weight of documentation requirements.

We have heard from countless physicians about the time savings they're realizing with DAX and how that's impacting their lives for the better.

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"The extra time particularly at the end of a really hard clinic day—your mind is zapped. To be able to just put everything down and say, 'Okay, I'm done,' leave and go home, is probably the best benefit."

— Dr. John KleKamp, Orthopedics, Bone and Joint Institute of Tennessee

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On average, DAX saves 7 minutes per encounter, reducing documentation time by 50%. Some are realizing even more time savings. Dr. Christopher Deibert, a urologist at Nebraska Medicine states that DAX has decreased his daily documentation time by 75%. And Dr. Scott Vincent, an orthopedic surgeon also at Nebraska Medicine states that, “before DAX, in a typical week, he would approximately spend six to eight hours documenting, dictating, and signing notes. My time has been cut in half, if not one-third.”

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“The reduction of physician burnout and the reduction of physician burnout has been a tremendous benefit to us all.”

— Dr. Robert McDermott, Allergy and Immunology, Allergy, Asthma and Immunology of the Rockies

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The time savings of DAX frees physicians from the administrative burden of documenting care. And with that time savings they are experiencing better work life balance.

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“I know when I go home that my tasks are done. I can spend time with my family and not have the anxiety to come in early the next day to finish notes.”

— Dr. Makarroma Sharmin, Family Medicine, WellSpan Health

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What’s more, it’s helping to keep physicians from retiring early and quitting. We’ve heard this sentiment from many who chose not to be identified.

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“Just the thought of DAX going away makes me want to quit.”

— Ear, Nose and Throat Specialist, Western U.S.

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79%

better work life balance<sup>6</sup>

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86%

would recommend DAX<sup>7</sup>

## Innovation in quality of documentation



3 out of 4

physicians state  
DAX improves  
documentation  
quality<sup>8</sup>

The speed, time, and accuracy of documentation all have ramifications for physicians' practices. Understanding the nuances of innovating documentation practices with the technology of ambient clinical intelligence is key to recognizing the unique power of Nuance DAX.

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"Now I know I can leave and [the information] is there—I really don't have to worry that the specific plan or action that I may forget, frankly, the next day is lost in my mind. It is not: it's spoken, it's captured, and it's going to be in the note when I next look."

— Dr. Christopher Deibert, Urologist Nebraska Medicine

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“The quality is better when it is being recorded in real time than me going back hours later or, especially, if I’m doing it the next day.”

— Dr. Andrew Christensen, Urologist, Nebraska Medicine

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The accuracy of documentation is positively impacting healthcare organizations in unexpected ways.

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“I am impressed by the accuracy of the clinical note. It really codifies and cements what the patient is being seen for in a way that I couldn’t do myself with recall.”

— Dr. William Silver, Medical Director, Orthopedics, Emerge Ortho

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During a pilot test of the technology with 15 primary care physicians at the University of Michigan Health-West, the health system’s auditors found that DAX directly led to a 40% increase in first-time approval of prior authorizations “because the documentation is so good,” says Dr. Lance Owens, CMIO, Family Medicine.

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“It’s a life preserver for healthcare.”

— Dr. Lance Owens, CMIO, Family Medicine

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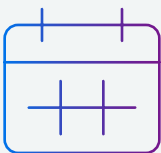
40%

increase in first-time approval of prior authorization<sup>9</sup>

## Increased operational efficiency and innovation



7 minutes saved per encounter on average, reducing documentation time by 50%<sup>10</sup>



On average, physicians are adding 5 appointments per clinic day<sup>11</sup>

Great healthcare physicians are always looking for ways to improve how they operate in ways that benefit patients, employees, and balance sheets alike.

“We replaced our previous documentation methods with DAX for a number of reasons. Previously we were using virtual scribes as well as dictation methods, in addition to typing. We tried to use scribes in the past, they were on a virtual session with the patient encounter which was somewhat cumbersome. Their documentation was not as accurate as DAX. The AI technology of DAX has been superior. Additionally, we had issues if there was a scribe out of the organization often and there was not enough backup to provide our services to get notes back in a timely manner. Finally, the cost, the most important reason the cost of scribes became too high and it became cost prohibitive.”

— Dr. Robert McDermott, Allergy and Immunology, Allergy, Asthma and Immunology of the Rockies

The time-savings realized from DAX can be utilized in several different ways. The time can be given back to physicians, it can be used to see additional patients or some of both.

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“DAX has saved us an enormous amount of time. It’s a huge satisfier for our physicians, and we get paid faster because all the coding and documentation are done faster.”

— Dr. Monte Hunter, Orthopedics, Augusta University Healthcare

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Increasing patient throughput is just one of many ways that DAX is improving efficiencies. The accuracy of the documentation is enabling more accurate billing, faster prior authorization approval as well as providing efficiencies above and beyond scribes.

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“Life changing service, allows for optimal balance of work and personal life. Helps with insurance prior authorization approval in a more timely and efficient manner.”

— Andrew P. Kapsalis, DPM, AACFAS | American Health Network, Part of Optum

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“The scribe role had the highest turnover rate in our organization, upwards of 30% - 40%. DAX has been a very valuable investment for Thomas Eye Group. I don’t think I could ever go back.”

— Kristy Gleaton, Director of Operations, Thomas Eye Group

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“I have already added 5 patients a day and plan to add 5 more a day next month.”

— Dr. Teresa Joy,  
Family Medicine,  
WellSpan Health

## Time savings lead to increased patient access and additional revenue

Here are three real examples of individual physicians from our survey who decided to use the majority of time savings provided by Nuance DAX to see more patients each day. The increased patient throughput not only increased access to care within the community but also generated additional revenue.



## Nuance DAX is a 21st-century solution for today's greatest healthcare challenges

Nuance DAX seeks to improve the patient and physician experience alike, by reestablishing an exam paradigm (whether live or virtual) founded upon the trusted relationship between physician and patient—without a computer in between. Physicians find they are empowered to focus primarily on practicing medicine, without constant fear of inaccurate or inefficient documentation—or the many hours of time they previously spent at night or the next day to clear their desks.

The benefits are impactful and wide-ranging. Patients and physicians are more satisfied with their exam room experiences. Organizations are capitalizing on faster, more precise documentation and the resulting positive financial outcomes. Physicians in academic environments are leveraging cutting-edge technology to address big-picture challenges and introducing advanced AI-based technology to the next generation of medical leaders. And communities are benefiting, as greater operational efficiency and less clinician burnout means physicians can have longer careers and have time to see more patients within each day, increasing access to high-quality care within our communities.

Tackling the leading obstacles in care delivery, Nuance DAX is leaving a lasting impression on our healthcare system: improving the overall quality of care on multiple levels. Nuance DAX is a solution that truly meets the moment in 21st-century healthcare—driving a new model of quality for the decades to come.



More than 3 out of 4 physicians across specialties who have adopted Nuance DAX would be disappointed if they no longer had access to DAX.

“I think this will be a game changer in many ways. Really restoring the joy of medicine back to physicians and then restoring that intimacy of the encounter for the patient.”

— Dr. Peter Hahn, President and CEO, University of Michigan Health-West

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## Endnotes

- 1 <https://mhealthintelligence.com/news/telehealth-use-dropped-to-8-in-2021#:~:text=Before%20the%20pandemic%2C%20telehealth%20comprised,visits%20between%202019%20and%202021>
- 2 Over 600 patient survey responses (2/2023)
- 3 Over 600 patient survey responses (2/2023)
- 4 Over 600 patient survey responses (2/2023)
- 5 Over 1,000 clinician survey responses (2/2023)
- 6 Over 1,000 clinician survey responses (2/2023)
- 7 Over 1,000 clinician survey responses (2/2023)
- 8 Over 1,000 clinician survey responses (2/2023)
- 9 Independent study conducted by healthcare organization
- 10 Over 1,000 clinician survey responses (2/2023)
- 11 Over 1,000 clinician survey responses (2/2023)
- 12 Merritt Hawkins 2019 Physician Revenue Survey
- 13 Visit to revenue efficiency ratio varies by specialty and many operational factors. Primary care ranges from 70%–95% as annual revenue is closely tied to the number of clinic encounters; however, our estimate does not assume the ability to fill 100% of the new appointment slots created from DAX time savings. The ratio is lower for surgical specialties such as cardiology, between 40%–70%, and orthopedics, between 25%–65%, because their annual revenue is also dependent on procedures and operations, and the ratio will vary depending on their schedules and access to operating room facilities.
- 14 Merritt Hawkins 2019 Physician Revenue Survey.
- 15 Visit to revenue efficiency ratio varies by specialty and many operational factors. Primary care ranges from 70%–95% as annual revenue is closely tied to the number of clinic encounters; however, our estimate does not assume the ability to fill 100% of the new appointment slots created from DAX time savings. The ratio is lower for surgical specialties such as cardiology, between 40%–70%, and orthopedics, between 25%–65%, because their annual revenue is also dependent on procedures and operations, and the ratio will vary depending on their schedules and access to operating room facilities.
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## About Nuance Communications, Inc.

[Nuance Communications](#) is a technology pioneer with market leadership in conversational AI and ambient intelligence. A full-service partner trusted by 77 percent of U.S. hospitals and more than 75 percent of the Fortune 100 companies worldwide, Nuance creates intuitive solutions that amplify people's ability to help others. Nuance is a Microsoft company.