



Nuance Dragon®  
Ambient eXperience™

Redefining the  
21st-century  
healthcare  
provider-patient  
experience

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# Nuance Dragon Ambient eXperience

The current standard for 21st-century healthcare delivery is in flux.

Physicians, administrators, and their organizations face significant challenges that multiply and intensify every year, making it increasingly difficult for providers to deliver the consistently high-quality care for which they strive, and patients deserve. 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.

The Nuance Dragon Ambient eXperience (Nuance DAX™) is a transformative answer to many of healthcare's biggest challenges. With Nuance DAX, providers are embarking on a new strategy for clinical documentation grounded in intuitive technology and operational efficiency—leading 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 providers, patients, and administrators

Improving the quality of patient care is a priority for all healthcare providers. And while methods and resources may vary, the desired outcomes are widely the same: quality care has been broadly defined as effective, timely, equitable, and patient-centered.





Physicians consistently cite documentation as an obstacle to devoting maximum attention to patients and achieving meaningful connections.

In healthcare today, many of the barriers preventing care teams from ensuring the best quality of care have a consistent factor: the burden of clinical documentation. 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 providers—and every stakeholder, from dissatisfied patients to burned-out clinicians to overwhelmed care teams, is affected.

## Sub-optimal patient experience

Physicians consistently list strong patient experience as a top priority. And yet, patients are expressing an increasing lack of engagement. Providers are often rushed during visits as a result of the documentation burden. Physicians documenting in front of patients are distracted by the computer, and patient care time is reduced. This disconnect requires particular attention in the everyday encounter between a physician and patient—as uninterrupted face time with the provider leads to better mutual understanding, stronger relationships, and ultimately more holistic care.

The focus on strengthening the patient experience has become even more critical in recent years as Americans have seen out-of-pocket costs rise from a widespread shift towards high-deductible plans, coupled with growing consumerism in competitive healthcare markets. As patients see more of their own dollars go towards the care they receive, they expect more from providers than basic medical care. They want exceptional experiences in which they feel respected, heard, and supported. This requires that physicians have the time and mental bandwidth to truly connect with their patients.

## Clinician burnout

Clinician burnout is palpable, and a growing concern in the healthcare community as the avalanche of documentation requirements increases. Physicians are frustrated as they can spend two hours on administrative work for every hour of direct patient care,<sup>1</sup> with few options available to increase efficiency without sacrificing the standard of care.

Physicians must choose between documenting during visits, which distracts from care and relationship-building with patients, or adding extra hours to their workdays. The result is what has become popularly known as a “pandemic of physician burnout,” with 51 percent of physicians reporting frequent or constant feelings of burnout.<sup>2</sup>

## Missed reimbursement and financial pressures

Providers have long dealt with narrowing operating margins—a reality that has been exacerbated during the pandemic, given delays in elective procedures and substantial investments in safety infrastructure and materials. Providers have stated in recent years that declining reimbursement rates is a significant challenge to their practices, making high-quality documentation essential to their financial sustainability. Physicians recognize that they are reimbursed for the care they document, not the care they delivered to patients.

And yet, even with the considerable time and effort that providers spend creating documentation, the challenge of incomplete documentation is commonplace. The costs to organizations are enormous. Despite a health system’s resources devoted to monitoring and improving such processes, inefficient or inaccurate documentation can have a consistent and significant impact on cash flow and revenue. Given busy clinic schedules, documentation is often completed after-hours, days later, or the following weekend, forcing physicians to rely on memory or brief notes to complete it.

Inaccurate documentation and billing can lead to non-compliance, audits, and possible malpractice. It can also impact the quality of care delivered: for example, nurses may not be adequately informed about secondary conditions or the severity of illness, preventing them from promptly initiating treatment options.

1 C. Sinsky, L. Colligan, L. Li, M. Prgomet, et al., “Allocation of Physician Time in Ambulatory Practice: A Time and Motion Study in 4 Specialties,” *Annals of Internal Medicine*®, published online December 6, 2016.

2 “WMA Leader Warns of Global Physician Burnout,” *World Medical Association*, October 5, 2018; Medscape Lifestyle Report 2017: Race and Ethnicity, Bias and Burnout.



Healthcare has long sought a documentation solution that is both highly accurate and transformatively time-saving. Nuance DAX meets that need.

## The telehealth imperative

The urgency to address the provider-patient relationship has become more pronounced in the new era of telehealth, which was long considered part of the healthcare delivery model but not widely adopted until recently amid the unprecedented challenges of COVID-19.

In the early days of the pandemic, organizations rapidly reacting to shutdowns sought stopgaps to quickly introduce and expand remote services, despite numerous flaws inherent to these solutions. Amidst the whirlwind shift to virtual care, providers have had to rely on and toggle between multiple, disparate technology platforms, devices, and software, leading to workflow inefficiencies that put additional stress on provider operations and create substantial obstacles to a satisfactory physician and patient experience.

Today, healthcare professionals recognize 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.



Addressing these fundamental, interconnected challenges is paramount to providing high-quality, patient-centered care. Physicians today are looking for more than the status quo; they want intuitive, innovative solutions that redefine the 21st-century healthcare experience.





# 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.

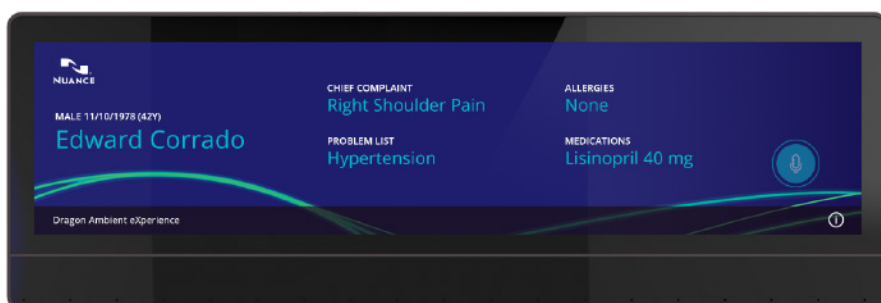


Nuance has innovated a powerful ambient clinical intelligence technology, Nuance DAX, with a simple objective: **Create clinical documentation that writes itself.™** The computer—a ubiquitous middleman in the modern exam—will no longer compete with the patient for the physician’s attention.

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

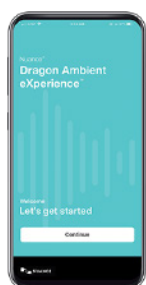
— Chief Medical Information Officer,  
Northeastern U.S.

Nuance DAX transforms the physician-patient experience by enabling the physician to focus completely on the patient. Nuance DAX’s 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  
ambient device

Nuance DAX  
mobile app



Nuance DAX for  
Microsoft Teams



“Our faculty would tell you this has been the best thing that improved quality of life. It brought back the joy of seeing patients again for me.”

— Sports Medicine, Orthopedics, Southeastern U.S.

## 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

Providers 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 providers’ top and bottom lines.

“The physician spent 20 minutes speaking with me. She asked many specific questions that made me feel she was thinking about all possible sources of my health issues. She listened to what I wanted and made decisions based on my wants and needs.”

— From recent survey of patients whose physicians have adopted Nuance DAX

## 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-provider 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.

Telehealth adoption has been rapid among providers, who report 50x to 175x more telehealth visits in 2020 compared to pre-pandemic levels.<sup>3</sup> 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 a clinical intelligence ecosystem for providers offering a variety of sophisticated ambient skills and a skills marketplace, 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—with the transformative power of Nuance DAX.

"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."

— Orthopedic surgeon, Southeastern U.S.

3 Oleg Bestsennyy et al., "Telehealth: A quarter-trillion-dollar post-COVID-19 reality?" *McKinsey*, May 29, 2020, available at <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality>.



# Nuance is uniquely positioned to meet the needs of the market

Backed by Nuance's leadership in healthcare, DAX is poised to become the industry standard for ambient clinical intelligence technology.

A full-service partner trusted by 85 percent of the Fortune 100 across the globe and 90 percent of U.S. hospitals, Nuance is well known for creating intelligent products that better capture information and amplify people's ability to help others. Nuance DAX is a significant advancement in the established line of customer-centric solutions Nuance has brought to market, combining leading domain expertise and partnerships with powerful AI and ambient clinical intelligence.

Nuance brings crucial advantages to succeed in the marketplace ahead of competitors and new entrants. Nuance DAX is a groundbreaking solution for today's healthcare needs and is supported by several critical advantages:



### **10k healthcare organizations worldwide trust Nuance**

Nuance leverages a vast customer base that touches every corner of the healthcare industry. 10,000 healthcare organizations worldwide trust Nuance's AI solutions, with 550,000 clinicians utilizing Nuance's flagship Dragon Medical platform in their offices and exam rooms. Nuance DAX builds on the widespread popularity of the Dragon platform to leverage an enormous built-in network of providers and facilities as they transition to the future of healthcare.



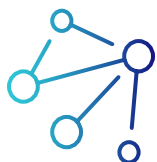
### **Nuance is a leader and pioneer in conversational AI technology**

Nuance is the conversational AI leader who built this industry from scratch—pioneering speech, natural language understanding, and machine learning technology more than 20 years ago. The business sets itself apart through decades of industry-specific expertise and an ability to create technologies that seamlessly integrate into organizations worldwide. Nuance's trusted AI-powered technology draws on advanced research, ambient technologies, and vertically focused development to augment human intelligence at the point of decision-making across customers' daily workflows and interactions.



### **200+ partnerships with healthcare IT leaders and industry players**

Nuance's scale and reach are amplified by decades of experience working side-by-side with leading healthcare IT companies through more than 200 partnerships including the biggest industry players like Cerner, Epic, and MEDITECH, empowering clinicians with fully integrated EHR workflows. The breadth and depth of Nuance's experience in healthcare innovation and its penetration in the marketplace are a significant leg up over the competition to provide the most comprehensive, integrated technologies into clinicians' daily workflows.



### Nuance possesses a reputation as a trusted steward of data

Nuance possesses a reputation as a trusted steward of data. Nuance DAX's artificial intelligence technology continues to enhance documentation quality and accuracy over time by leveraging data to become increasingly smarter and attuned to human behavior's nuances. This extensive record of insights and information is a powerful competitive advantage. Yet, customers know that the massive data streams that inform and optimize Nuance's AI are solely used to make Nuance's intelligent solutions even stronger—never to monetize personal or customer data.



### Nuance makes significant investments in secure data protection

The Nuance DAX data-driven technology is fortified by significant investments in secure data protection and risk minimization. Additionally, Nuance DAX is built on top of Microsoft Azure, a highly secure HITRUST CSF-certified platform, providing assurance to providers and healthcare organizations that their sensitive patient and operational information is secure, yet easy to access.



### Comprehensive suite of specialties supported by Nuance DAX

Nuance DAX supports a comprehensive suite of specialties with clinical notes tailored to each specialty's needs. The product now serves 14 ambulatory specialties, including urgent care and primary care with more specialties being added.

Supported by Nuance's established market position and history of innovation, Nuance DAX stands out by delivering a new healthcare experience that puts the patient-provider relationship first. Nuance DAX is **the superior automated documentation technology:** efficient, comprehensive, accurate—and transformative.



# How Nuance DAX transforms healthcare: Real-world case studies

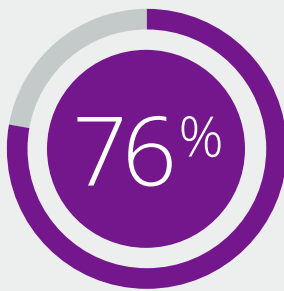
Nuance spoke to physicians across the U.S., serving a diverse set of populations and specialties to understand the impact of Nuance DAX on their patients, practices, and organizations. Physician details are anonymized to ensure their privacy as they focus on serving patients through this challenging period in healthcare.



# Enhanced patient experience



For many physicians, their practices are vital arteries in their communities. Forging a connection with patients and providing the highest-quality care is more than simply a goal—it is a necessity and their ultimate purpose.



Over three-quarters of physicians surveyed across specialties believe Nuance DAX improves the quality of the patient experience

↓ 9  
minutes

For primary care patients, the average wait time was decreased by 9 minutes—cutting the industry average wait time by 50%<sup>4</sup>

<sup>4</sup> Joanne Finnegan, "Report outlines the business perils of long patient wait times," Fierce Healthcare, March 22, 2018, available at <https://www.fiercehealthcare.com/practices/ppatients-switched-doctors-long-wait-times-vitals>.

## Enriched care and capacity to serve more in the community

- Typical patient load:** Approximately 18 patients per day, up to 30 during extended-hours periods

**Priority:** Providing quality care to as many members of the community as possible

**Challenge:** In-room notetaking leaves the physician feeling anxious trying to engage with the patient while absorbing and capturing details, and leaves the patient feeling rushed

USER PROFILE

Primary care physician,  
Pennsylvania

One family care physician in Pennsylvania says a core focus of her work is to support as many members of the community as possible. On an average day, she sees 18 patients; with extended hours, the tally can rise to as high as 30. These patients enter her office from a range of diverse communities and demographics; some pediatric, many in middle-age, others more elderly. Yet she recognizes one critical factor that enables her to serve people of widely divergent backgrounds: building a strong interpersonal connection from the moment the patient enters the room.

Carrying a substantial, fast-paced daily patient load, she has no choice but to conduct documentation in real-time. She finds it extremely stressful to capture in-room notes while simultaneously engaging with patients and absorbing relevant details. Even worse, she worries her patients feel rushed and can sense the distraction of the computer.

Nuance DAX directly addresses her need to provide fulsome experiences to her patients. She notes DAX's ambient documentation facilitates greater patient engagement by allowing her to focus solely on listening to patients' needs and building rapport with them. "Patients find it helpful. Patients do not feel hurried or rushed and are feeling more connected with providers since we brought in DAX."

Critically, she feels that the efficiency Nuance DAX provides will benefit her local community by enabling

her to see more patients during the day. Yet, she is still empowered to complete documentation on time, without adding extra hours to her full workdays, and feels DAX's notes are thorough and delivered promptly. "I know when I go home that my tasks are done," she says. "I finish on time without anxiety to come in early to finish notes."

**Results of patient survey:**  
Conducted at a primary care practice within this health system, showing an overwhelming increase in patient satisfaction after the adoption of Nuance DAX.<sup>5</sup>

97% said their primary care physician spent less time focusing on the computer and was more focused on the patient

90% said their visit felt more like a personable conversation

"Our community needs lots of providers, patients need more appointments; there are new patients that we can't accept because of the lack of providers in the community. DAX will help to open us to more new patients—that is the main goal of having DAX in our practice."

<sup>5</sup> Survey asked patients to compare their experience now, versus appointments conducted prior to their physicians' use of DAX.



## Focusing on the family—inside and outside the exam room

**Typical patient load:** 25-35 patients per day, often older with multiple health issues, such as diabetes, in a small, rural community

**Priority:** Providing a quality care experience where patients feel heard while also thoroughly documenting care

**Challenge:** Taking notes during the patient visit limits the feeling of connectedness between physician and patient; reviewing and revising notes at the end of the day adds more hours to a long day

### USER PROFILE

Podiatrist,  
Wisconsin

A podiatrist who serves a small, rural community in Wisconsin, with an older population that often carries multiple health issues, highly values the concept of family. That extends to the relationships between this physician and his patients: “I keep one of those digital photo frames in my exam room to keep the patients occupied until I get in there, and some patients have basically seen my children grow up. They feel almost connected to my family when we see them out in the community. They frequently tell my kids, ‘I watched you grow up all these years!’”

Live notetaking during visits forces this physician to appear less engaged—his body half-turned toward the computer. Facilitating better engagement with patients is a critical objective for him to ensure his patients are feeling heard—and helping him be a better practitioner of medicine.

With Nuance DAX, he feels empowered to focus on conversation and relationships without the heartburn of worrying critical information is lost in the process. “[In the] past, I had to try to herd patients along,” he notes. “Now, I can try to be social and build relationships. Most important, I really can spend more time focusing on the patient and not the computer. [DAX helps me] complete everything over the course of the visit, rather than trying to finish many notes at the end of the day.”

Most impactful for this podiatrist is the extra moments in the day he gets back by avoiding hours of documentation. He leaves the office satisfied that he has served his patients well—while getting the benefit of more time with his own family. “[The] game-changer is at the end of the day, I’m done with my charts,” he says. “My family sees me a lot more. I have more ‘me’ time. The first day that I started with the trial, it was quarter-to-five, and I went to my staff and said, ‘Do I have any phone calls or messages?’ And they said, ‘No, everything is done.’ I said, ‘Wow, all my charts are done.’ I am going home with that peace of mind knowing all my work is done. I felt I gave great care that day—that is such a mental positive.”

“I think it makes you a better physician, because you really sit and listen to a patient, really take it all in, and they feel, ‘Wow, he is giving me his time.’ I think that is probably a big benefit the patients like too.”

# More sustainable physician experience

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.

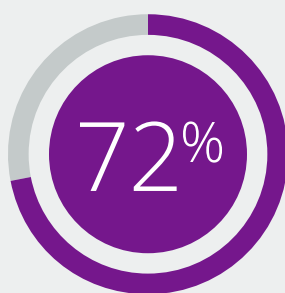


“Just the thought of DAX going away makes me want to quit.”

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

## Nuance DAX’s impact on physicians experiencing feelings of burnout and fatigue.

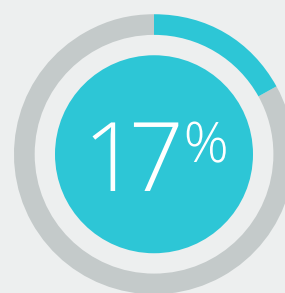
Before DAX



**3 out of 4 physicians  
felt burnout and fatigue**



After DAX



**1 out of 5 physicians  
felt burnout and fatigue**

Results from an academic medical center survey of physicians before and after using DAX.

## Significantly streamlining and simplifying documentation

**Typical patient load:** 50-60 per week, as clinics are fully booked with few no-shows

**Priority:** Providing quality care, which is thoroughly documented

**Challenge:** Dictating after patient visits is time-intensive, and the burden of doing so lengthens the doctor's workday and adds undue stress/anxiety

### USER PROFILE

Urologist,  
Nebraska

A urologist at a large hospital in Nebraska decided to test Nuance DAX after hearing from colleagues in other specialties that DAX liberated them from spending so much time detailing notes. He already sees the same dramatic effect for himself: as much as 25 percent of documentation time, he estimates, is being saved with DAX.

In addition to reducing the time burden, getting documentation right is an important aim for this physician. His standard procedure for notetaking has been to jot down basic information immediately after his visits or at the end of the day, with the hope that leaving little flags will jog his memory the next day to recover important context. He believes "DAX is great because [the context] is generally all included already—I said it out loud to the patient, and I love that it's right there."

A particular feature he appreciates is that notes from DAX are structured into easy-to-follow sections that break out portions of the conversation into relevant categories. That additional context is invaluable to this urologist, who feels renewed confidence in his documentation quality. "It's very simple to use. I would give it 90%-plus of getting the context and information right—there's very minimal editing that has to happen."

85%

of physicians across  
all specialties would  
recommend Nuance  
DAX to a colleague

"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."



## Better patient relationships, better physician well-being

**Typical patient load:** 38-45 patients per day, 40 on average

**Priority:** Providing quality patient care, inclusive of same-day detailed documentation

**Challenge:** Given patients' extensive medical histories—and for many, involvement in legal disputes—documentation must be extraordinarily thorough, amplifying the time spent by physicians

Serving an average of 40 patients a day is a tremendous challenge, particularly in a complex niche like orthopedic spine surgery. For one physician in the Nashville area, the complexity only starts there. Many patients, hailing from multiple states, arrive at his office carrying extensive spinal and surgical histories that need to be recorded. Some have been involved in accidents and are concurrently pursuing legal claims that rely on the physician's records and testimony.

Invariably, the takeaway is consistent: documentation must be extensive, accurate, and fast. "It is very difficult to sit there and handwrite notes and go through charts, and at the same time try to acclimate yourself to the patient," he says. He believes strongly in completing same-day notes to capture all relevant details—often leading to overextended workdays. His partners who attempt to spread out workloads quickly discover their desks piled with stacks of backlogged documentation.

Nuance DAX enables him to provide high-quality care in a complicated field while still saving time to live his life. "Instead of kind of dragging in [to the house] at 7:00 or 7:30 when the kids are about to go to bed, I can go to their baseball games at 5:30 and pick them up, and it saves my wife from having to get someone else to help."

DAX even allows documentation to be a facilitator of more effective patient conversations. The freedom to focus on the patient gives the physician confidence to consistently offer the best solutions. "I developed a better working relationship with my patients, they feel like I'm paying attention to them, and I feel like I'm paying attention to them," he says. "I'm thinking about what my next question is going to be and trying to figure out what is wrong with them, instead of documenting what they are telling me."

### USER PROFILE

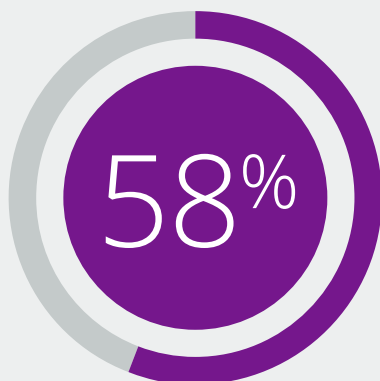
Orthopedic surgeon,  
Tennessee

"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."

# Innovation in quality of documentation



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.



Physicians across specialties who have used Nuance DAX agree that it improves documentation quality

## High-quality, in-room documentation solution enables greater focus on complex care

**Typical patient load:** Variable, though each visit is intensive (40-60 minutes)

**Priority:** Providing intensive, personalized quality care for patients—and thoroughly documenting that care for the practice

**Challenge:** Intensive, personalized care leaves the physician feeling drained; adding time to create detailed accounts following each visit for billing purposes is even more taxing—and can result in light notes that do not adequately reflect the quality of care delivered

### USER PROFILE

Pediatric physiatrist,  
Eastern U.S.

For some patients and their relatives, seeing an attentive, empathetic physician who becomes a partner to the family is essential—especially when the medical conditions are severe. This is the defining objective of practice for a pediatric physiatrist in the Eastern U.S., who co-directs a rehab clinic for children with cerebral palsy. The care this physician provides is intensely personalized for each child, requiring dedicated focus and communication. “When you’re a parent with a sick child, when the physician’s talking to you and looking at the computer more than you, trust is hard to build,” he says.

His work can be tremendously satisfying but emotionally and physically draining. “If you talk for 45-60 minutes, that’s a lot of info to be exchanged,” he notes. Accurately documenting that information for billing is critical to his practice—yet this physiatrist struggles to muster the energy to fulfill the substantial

requirements. “At the end [of a visit], I’ve already worked hard, and I spend 20 minutes on notes—and even then, it’s a shell just to get the billing justified. [Before DAX] I felt like, ‘I’ve done the work already, now I have to go back and figure out how to get paid.’”

Helping to alleviate this documentation burden has a powerful impact on him, given the intensity and complexity of his practice. “I feel the load of what it takes to give to these families, so having the documentation burden lessened was a big help to me,” he says.

He appreciates Nuance DAX’s “tech-savviness” as a path to building something “so good that it is undeniably better” than the norm. The technological advancements DAX has introduced, he believes, will only continue to grow with Nuance’s continued innovation of AI and

natural language processing. And the physician credits DAX as having the potential to provide a sustainable solution to the documentation challenge, allowing him to predict a long future of delivering high-quality care.

“The documentation side contributes to the feeling that we’re all doing the work in the room with patients for free, while everything we do on documentation is just doing the busy work to get paid. If there wasn’t something like DAX, I don’t know if I’d finish my career in clinical medicine.”

## Leveraging cutting-edge innovation to enhance the practice of medicine

- Typical patient load:** 15-17 patients per half-day, including some procedures
- Priority:** Providing quality care, which is thoroughly documented—drawn from full patient background/history
- Challenge:** The physician’s busy schedule meant dictation sometimes took place much later following the visit, as time was available when relevant details might be forgotten

USER PROFILE

Urologist,  
Midwestern U.S.

Working at an academic institution in the heartland of America, one urologist likes to look at his practice from the perspective of how his students, colleagues, and departments can learn and improve. Experiencing technological innovation is a key facet of the educational experience.

Nuance DAX falls right in line. “The vast majority of us [in our department] are very open to technology and trying to advance medicine, and also just kind of make our lives easier too,” he says. While his hope is to teach his residents best practices for documentation, billing, and legal protections, he also wants to introduce innovative solutions—like DAX—to his department to make them more productive and better balance their time. “So, I mean, what DAX is shooting for, it’s an easy no-brainer for us—why wouldn’t we like to pursue it?”

He sees the impact of DAX in his practice. Completing dictation and documentation before going home is a high priority for this physician so he can take advantage of time at home with his wife and three children, and he is happy that DAX “saves quite a bit of time overall.” He also believes the notes are capturing important information that, in the past, may have been lost in the busy rush of traditional clinic sessions. An example of the advantage DAX brings to his documentation is for history of present illness (HPI) data. He notes, “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.”

“I’m always open to new stuff. I’m young, I’m going to be in this a while. I like the advanced technology to make my life easier. Overall, it is a very pleasant experience. It’s a time saver, it’s a burnout saver—it’s a great program.”



# Increased operational efficiency and innovation

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

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

“I’m able to catch every detail in a one-on-one setting with my patients. Before DAX, I did not put the same detail and customization into the documentation due to the time factor. DAX makes it so I’m not doing the work at home.”



6 minutes saved per patient encounter

Physicians across specialties report saving an average of 6 minutes per patient encounter in documentation time using Nuance DAX over previous use of speech capture, scribes, transcription or typing into the EHR.

# Using technology to ramp up patient throughput and improve access to care

**Typical patient load:** Previously 15-17 patients per day, now 20+ with Nuance DAX

**Priority:** Increasing access to critical care for more patients

**Challenge:** Administrative time requirements for physicians takes time away from providing care and causes a tremendous patient backlog

For this cardiologist at a leading academic medical center in the Southeast, the demands of keeping up with administrative requirements while providing patient care created tremendous operational inefficiencies. Despite concerted efforts to keep up during the day, there would consistently be a backlog of patients, causing the facility to reduce timeslots. With Nuance DAX, the practice has seen a dramatic increase in patient throughput, increasing the number of cardiology patients seen per day by 24 percent.

“DAX has made me much more efficient. I went from seeing 15 to 17 patients in a day to consistently seeing over 20 patients. I no longer have a 3-month backup, which is helpful for patients and for me. This is primarily because I am no longer spending time on the documentation. It has shifted the work from documentation to patient care.”

## USER PROFILE

Cardiologist,  
Southeastern U.S.

+24%

Increase in the  
number of patients  
this cardiologist sees  
per day by using  
Nuance DAX

## Flexible and accurate workflows for more engaged and expedited care delivery

**Typical patient load:** 30-35 patients per day, three times per week in clinic

**Priority:** Providing quality care to as many patients as possible

**Challenge:** The sheer volume of patients makes it tough to find time to complete notes as quickly as possible following visits, which can have an impact on care quality as well as the accuracy of billing

Some physicians sense an inevitable relationship between the volume of patients and the quality of documentation. One orthopedic surgeon in the southeastern U.S. sees 30 to 35 patients per day, conducting both elective and inpatient visits, spanning the gamut of age groups from young to mature. While his old dictation service seemed to be adequate, he still struggled to find time to complete notes soon after visits and saw negative impacts on the accuracy of billing and quality of documentation. "It was my only experience, and so I didn't know anything different," he says.

Workflow is different now with Nuance DAX's timely, detailed notes, which require limited editing. He observes that "now that I've switched over [to DAX], I definitely can tell the difference in quality and efficiency of the notes being done."

With more flexible options to complete accurate notes, his appointments are not only more efficient but also more punctual, which shortens patient wait time and can allow for faster processing of pre-authorizations, helping some patients living with intensive, chronic pain get to the operating room quicker. DAX increases the pace of documentation, and patient charts can advance through the insurance approvals process more quickly. Overall, the surgeon feels empowered to facilitate greater engagement with patients during his visits, despite the heavy volume in his schedule. "I definitely can sit and engage with the patient more—and not have to write things down or worry as much," he says.

### USER PROFILE

Orthopedic surgeon,  
Southeastern U.S.

"If I can't sign off on the note until the next day or even the day after that, then it delays getting the pre-authorization. If I have somebody that comes into the clinic that has an infection that I need to take to the operating room that afternoon, it limits the stress of trying to get that documentation into the chart as soon as possible."

## Advanced innovation to improve efficiency in healthcare operations

- Typical patient load:** Approximately 30 patients per clinic day
- Priority:** Providing a focused, attentive, in-room experience for patients
- Challenge:** Prioritizing engagement with patients means holding formal notetaking until after patient encounter/visit—which translates into hours of extra work at the end of the day

USER PROFILE

Plastic surgeon,  
Illinois

For one plastic surgeon, Chief of a Plastic and Reconstructive Division in an academic medical center in Illinois, improving workflows among his teams is an important outcome of healthcare innovation. He describes the progression of documentation since he became a physician, touching on a number of different solutions over the years. He finds a critical conclusion in favor of Nuance DAX: “It has made my clinic more efficient.”

An important factor DAX brings for this physician is that it enables his team members to devote attention to more patients, rather than spending time scribing an exam or transcribing later. “The workflow has become more efficient,” he says, “so that helps with the nurses, with the residents, with the medical students.” He also sees an important advantage in DAX’s consistency and flexibility, providing quality notes whether in the traditional exam room, at an off-site location (with recording via cellphone), or in a virtual visit.

The potential for operational improvement by deploying DAX is meaningful. For example, “My physician assistant can focus on my post-op and return patients,” while the physician can focus on new patients, where “[DAX] is significantly time-saving.” He believes this can facilitate seeing more patients throughout the day, all while reducing the duplication of efforts within teams and limiting everyone’s burden of documentation. For these reasons, this surgeon believes DAX is a critical step in the long evolution of healthcare documentation solutions—advancing towards making the future of medical technology a reality.

“It is potentially going to be a paradigm shift in how we manage the onerous documentation challenge. I think this is the way to go for the future.”



# Time savings lead to increased patient access and additional revenue

## Here are three real examples of individual providers 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.

CARDIOLOGY	PRIMARY CARE	ORTHOPEDICS
<b>17</b> Maximum # of visits per full clinic day w/o DAX	<b>14</b> Maximum # of visits per full clinic day w/o DAX	<b>21</b> Maximum # of visits per full clinic day w/o DAX
<b>21</b> Maximum # of visits per full clinic day w/ DAX	<b>18</b> Maximum # of visits per full clinic day w/ DAX	<b>29</b> Maximum # of visits per full clinic day w/ DAX
<b>4</b> Additional visits seen per day	<b>4</b> Additional visits seen per day	<b>8</b> Additional visits seen per day
<b>24%</b> Increase in daily patient visits	<b>29%</b> Increase in daily patient visits	<b>38%</b> Increase in daily patient visits
<b>\$3,697,916</b> Average annual revenue within specialty <sup>6</sup>	<b>\$2,111,931</b> Average annual revenue within specialty <sup>6</sup>	<b>\$3,286,764</b> Average annual revenue within specialty <sup>6</sup>
<b>40%</b> Visit to revenue ratio <sup>7</sup>	<b>70%</b> Visit to revenue ratio <sup>7</sup>	<b>25%</b> Visit to revenue ratio <sup>7</sup>
<b>\$348,039</b> Additional annual revenue due to DAX	<b>\$422,386</b> Additional annual revenue due to DAX	<b>\$313,025</b> Additional annual revenue due to DAX

<sup>6</sup> Merritt Hawkins 2019 Physician Revenue Survey.

<sup>7</sup> 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.

# 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, coding and billing workflows. Providers 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

“This has changed my life. I was thinking I was going to leave medicine before [DAX] because I spent so much time with charting. This has literally changed my career.”

— Orthopedic surgeon, Southeastern U.S.



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**About Nuance Communications, Inc.**

[Nuance Communications](#) (Nuance) is a technology pioneer with market leadership in conversational AI and ambient intelligence. A full-service partner trusted by 90 percent of U.S. hospitals and 85 percent of the Fortune 100 companies worldwide, Nuance creates intuitive solutions that amplify people's ability to help others.

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