

UHS drives quality through cloud speech and CDI workflow.

Intuitive cloud-based speech and CDI workflow engages physicians in quality improvement.

Challenge

- Engage independent physicians in documentation improvement efforts
- Reduce transcription costs
- Increase documentation timeliness
- Capture more accurate and detailed patient conditions to improve quality measures and reimbursement

Solution

- Dragon® Medical One
- Cerner Document Quality Review (DQR) with embedded Nuance® Computer-Assisted Physician Documentation™ (CAPD)

Results

- 69% reduction in transcription costs, netting \$3 million in savings year-over-year
- 12% increase in case mix index (CMI)
- Improved documentation of patients with extreme severity of illness by 36%
- Improved details on the patients with highest risk of mortality by 24%

Universal Health Services, Inc. (UHS), located in King of Prussia, PA, is an integrated delivery network with 26 acute care hospitals in the U.S. and over 200 behavioral health facilities in the U.S. and England. The organization has over 70,000 employees, and combined annual revenue of \$10 billion. There are 6,000 credentialed medical staff members in the U.S., with just 350 physicians being employees of the UHS system. The remaining are independent physicians who share patients with competitors, making physician engagement a challenging, and essential, part of capturing complete and accurate patient stories.



“The workflow is right for our physicians. Everything they need is in one place and it produces better outcomes.”

Mike Nelson
Chief Information Officer
Universal Health Services

The journey from speech to advanced CDI

Quality-based payment methodologies had moved clinical documentation improvement (CDI) to the forefront in UHS' business priorities. Administrators knew that better documentation specificity was likely to improve quality metrics and financial integrity. They also understood that getting physicians to adopt documentation best practices is one of the greatest challenges for today's healthcare organizations. For UHS, the challenge was even greater, given that most of its physicians are independent practitioners.

According to Mike Nelson, UHS' Chief Information Officer, administrators decided the best path toward CDI success would be giving physicians an easy-to-use solution that would make voluntary adoption attractive. “Our philosophy was we need to make technology easy for physicians, or they can take their business down the street,” he explained.

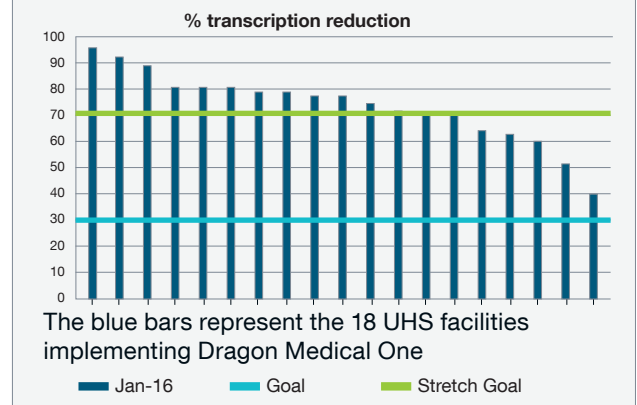
UHS sought an advanced documentation capture tool that would accomplish a three-prong goal: 1) create tight integration with the electronic health record (EHR), 2) bring real-time intelligence to physicians without disrupting their workflow and c) enable quick and efficient documentation of the patient story at the point of care.

UHS decided to adopt Nuance's Dragon Medical One to take advantage of its 100% secure cloud-based architecture, technical superiority, ease of maintenance, and unparalleled capabilities for physician productivity in the EHR and beyond.

The technology promised to break down barriers and provide a transparent speech recognition experience for clinicians—enabling them to dictate progress notes, history of present illness, and assessment and plan directly into their EHR from virtually anywhere. It also offered real-time intelligence, delivered at the point of care while the physician is documenting. All of those features offered more impact on patient care decisions than did retrospective queries.

Implementation Results

Excellent transcription reduction by facility

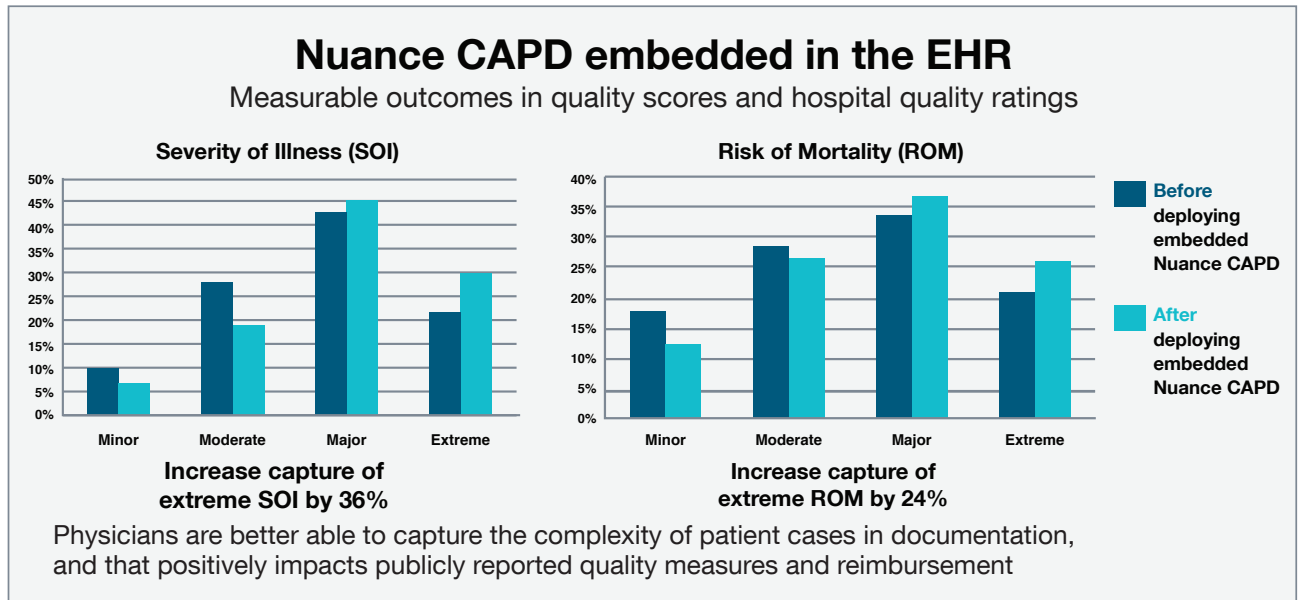


UHS went live with Dragon Medical One in just one facility, but deployed microphones in others. The documentation capture tool built a strong foundation of real-time speech and mobile solutions that seamlessly integrated into physician workflow—not only improving the quality of clinical documentation, but also optimizing the EHR and promoting its adoption.

According to Nelson, it didn't take long before the “wow factor” and word of mouth spread rapidly among system physicians, and adoption took off. “The system was virtually flawless and physicians were working collaboratively in the EHR to see and share patient care updates—they were engaged,” he said.

Results post system-wide rollout of Dragon Medical One

Building on that success, UHS rolled out Dragon Medical One to other facilities. With thousands of users now engaged, the health system set a 30% reduction goal for voluntary transcription within 90 days of go live.



All facilities exceeded that target goal. In addition, the majority of facilities exceeded stretch goals related to transcription expense reduction. Overall, UHS achieved a 69% reduction in transcription costs year-over-year, resulting in \$3 million in actual savings.

Quality scores, ratings, and measurable outcomes

More efficient capture of complete documentation also presents a vested interest for physicians who are now being publicly measured on quality scores reported to the government. These scores will be published for anyone to see starting in 2018, with the intent that patients and their families will use the ratings to make care decisions. Physician quality scores and hospital quality ratings are based on accurate documentation of patient conditions and the care provided to treat them. Physicians, however, don't always give themselves credit for the real medical complexity of the patient because of the extra time it takes to fully document it.

With this dilemma in mind, a natural next step for the UHS quality improvement initiative was implementing Cerner DQR with Nuance Computer-Assisted Physician Documentation (CAPD) embedded in the EHR. Nuance CAPD amplifies human intelligence by automatically prompting the physician concurrent to caregiving only if there's a different diagnosis or a different piece of medical information that he or she should consider. With this truly integrated solution, UHS' patient encounters became analyzed in real time using natural language understanding.

According to Dr. Ehab Hanna, Chief Medical Information Officer, UHS, "as a physician, I think the real value of the solution is that it's not disruptive. If you are going to ask a question to clarify something, ask me when I'm in the note, not an hour or a day later. If I've moved on, the question is an interruption in my day."

By adopting an unobtrusive solution, UHS realized a 12% increase in case mix index (CMI) across the cases where physicians agreed with the CAPD clarifications, and updated their patient's documentation accordingly. A corresponding increase in appropriate reimbursement was realized at two facilities in just nine weeks alone. The health system also improved capture of details to support better quality outcomes. As seen in the graph, a notable increase in extreme cases is most significant—SOI by 36% and ROM by 24%—reflecting a much more accurate picture of the severity and acuity of their patient population that is so important to risk adjusted outcomes measurement.

Automation expands CDI specialists coverage

"Nuance CAPD is always working in the background—24/7—and it reviews all patients in our system, not just Medicare patients. We have resources in CDI that are able to spend time on cases they would never have gotten to," said Nelson. By adding an automated component to their CDI efforts, CDI specialists have time to expand their coverage beyond the high-impact, high-complexity cases, and focus on areas they didn't have time to review previously."

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Ehab Hanna, MD
Chief Medical Information Officer
Universal Health Services

UHS administrators and physicians alike are pleased with the collaborative approach taken to solve multiple quality improvement challenges. “We’ve been very happy with the results and our physicians can see the positive impact that real-time documentation has had on patient quality outcomes,” added Nelson.

“I’ve been around a long time, and everybody talks about the soft stuff, but you rarely get to this level of clinical quality and financial benefits. We had a good CDI program, but Nuance CAPD has made our program even better. We improved reimbursement without seeing more patients, or adding more CDI staff. We just get credit for the good work we are already doing.”

To learn more about how Nuance Healthcare can help you improve financial performance, raise the quality of care, and increase clinician satisfaction, please contact us at 877-805-5902 or visit nuance.com/healthcare.

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