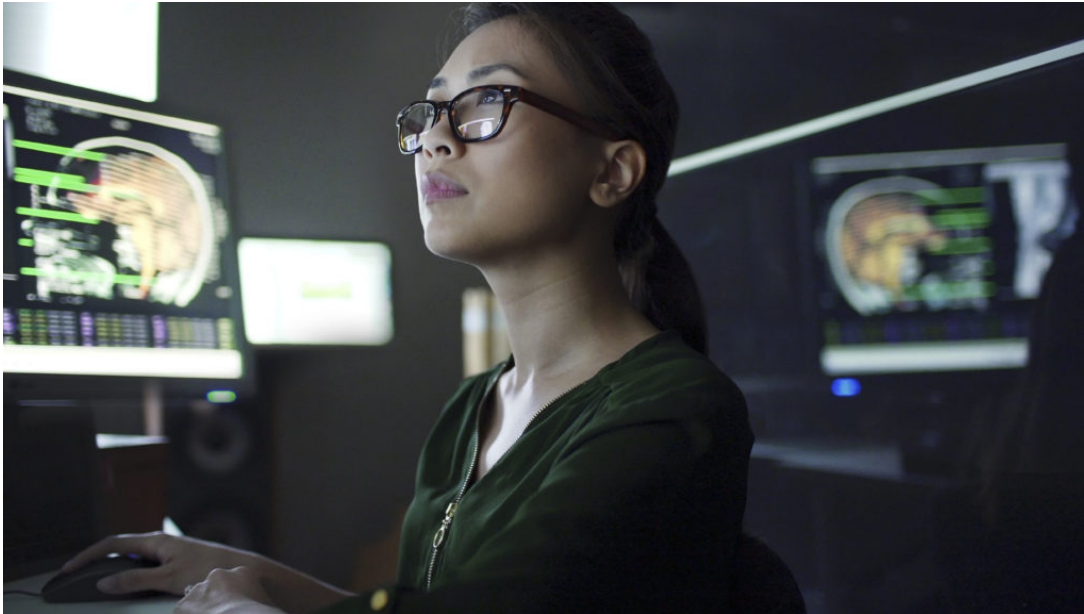**NUANCE** | **WHAT'S NEXT BLOG**

Healthcare AI, Radiology solutions

Integrating AI into radiology workflows to accelerate future growth

Nuance Communications

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Radiology departments have played a critical and active role in healthcare for decades, but it's never been more important to set a technological foundation that allows for future growth. Intelligent solutions that enable radiologists to do more with less, deliver optimal value and patient care, and collaborate in real-time will create an avenue for progress and recovery. Here's how one organization has made it happen.

Health systems and radiology departments continue to face the ongoing challenges of burnout and financial constraints, both of which have been exacerbated by a global pandemic. We know, for example, that the American College of Radiology has adopted CDC guidance to reschedule non-urgent outpatient screening, such as mammography, and interventional procedures. The economic effects are projected to be significant, as volumes have declined by as much as 70 percent in recent months.

At the same time, radiology has played a critical, active role in pandemic response. And when radiology practices begin to rebound, safer and more efficient work practices will become a priority, meaning that staggered shifts and flexible – even remote – work arrangements will become commonplace. These disruptions may be temporary, they may be permanent, or they'll fall somewhere in between. But the reality remains: it's never been more important to set a technological foundation that allows radiology practices to emerge from this crisis poised for growth and prepared for the future.

One Nuance customer – Yale New Haven Health System (YNHHS) – has put this into practice, relying on a combination of artificial intelligence (AI) powered technologies to optimize its radiology department efficiencies and promote collaboration, while balancing workloads and streamlining workflow. In particular, the powerful combination of PowerScribe Workflow Orchestration and PowerConnect Communicator offer YNHHS a holistic diagnostic experience, creating a single platform for integrated, in-context communication and consolidated access to patient imaging and information. Moreover, the platform supports AI-driven workflow in ways that prioritize the most important studies while intelligently

distributing workload among providers based on their unique requirements.

Dr. Irena Tocino, MD, FACR, professor of radiology and biomedical imaging and vice chair of imaging informatics, Yale School of Medicine shares her perspective: "We have AI completely integrated into our workflow. Studies are analyzed first by the AI model. Positive results are automatically prioritized on the appropriate worklist, while negative results move down the list for later review," said Dr. Tocino. Having this solution in place helped YNHHS navigate the challenges that have come with the pandemic – from an influx of COVID-19 patients to the swift transition to remote reading. YNHHS has transformed their reading room experience, keeping colleagues connected, more efficient, and safer in a virtual paradigm, while prioritizing patient care.

Dr. Tocino further describes, "Taking advantage of the high negative predictive value of the pulmonary embolism algorithm, when a technologist does an outpatient pulmonary embolism case, and the patient is still in the CT suite, we can use PowerConnect Communicator to confirm with the radiologist that the patient can go home." This time-saving, in-context communication solution ensures all imaging and relevant data for the technologist/radiologist exchange are included with the alert. The same system speeds communication on consults among radiologists and across specialties.

Technology that injects intelligence into the workflow augments the radiologist experience, increasing efficiencies and accelerating and their ability to deliver optimal value and patient care. Supporting our radiology practices with tools that allow them to work smarter, not harder and enabling them to collaborate in real-time will create an avenue for progress and recovery. Optimizing healthcare systems for growth will mean uncovering new ways to gain efficiencies, improve productivity, and enable the best patient care possible.

Tags: Burnout, PowerScribe, Customer success story