

Optimizing Patient Centric Care through Medical Imaging Services

Weill Cornell Medicine Department of Radiology's Pathway to Thriving in a Changing Healthcare Environment

The healthcare market in the United States is experiencing a tsunami of change, dynamically altering the provider landscape. Consolidation is transforming the make-up of networks and health systems, bringing with it both exciting benefits and challenges. As healthcare providers look to implement strategies and IT investment choices that can enable and support revenue and margin growth, the overarching priority is enhancing the patient experience across the continuum of care.

Providers are trying to be nimble in the wake of change, and as such are focused on finding positive financial, quality and performance measures that can drive optimal results, outcomes and patient experiences. The more progressive provider organizations were quick to realize that the imaging service line can, and must, actively contribute to higher patient loyalty to the system by providing a better patient imaging experience.

“Strategically, it is about adapting to the changing healthcare environment—not only adapting but thriving” states Keith Hentel, MD, Executive Vice Chairman, Department of Radiology at Weill Cornell Medicine, a leading academic medical center, part of Cornell University, “while providing the best care and patient experience.”

WEILL CORNELL MEDICINE BY THE NUMBERS



1.7 MILLION
Annual Patient Visits



500,000
examinations performed and interpreted each year.



4
Hospitals



7
Outpatient Imaging Centers

Part of
Cornell University

CHALLENGES AND IMPERATIVES

For a large academic radiology practice spread across multiple locations, undergoing both organic growth and inorganic transactional changes can result in a variety of challenges. Weill Cornell Medicine provides imaging services at four New York hospitals and seven outpatient imaging centers.

Prior to deploying its enterprise imaging solutions, the network had a dedicated imaging scheduling center for all of its outpatient sites. The IT systems it was using were not delivering optimal performance and outcomes. The staff had to rely on a complex scheduling protocol reference manual to sort out the optimal scheduling of patients for their imaging exams.

Consolidation of existing practices into the group brought with it issues ranging from scheduling inefficiencies, disparate service level agreements, different exam libraries, and difficulty managing the credentials and specializations of various physicians. Each time a new practice was introduced into the organization, the department faced a potentially long and costly IT integration process. Adding a separate image management and dictation system with every new acquisition was clearly inefficient and unsustainable. Reflecting on this process, Hentel stated, “We needed something that could sort these various practices out and allow us to bring on practices in a somewhat facile manner.”

SOLUTIONS AND OUTCOMES

Radiology at Weill Cornell Medicine found solutions to its operational and environmental hurdles through the combination of a common reading platform with a distributed worklist and an integrated referral management solution. The technology investment also has enabled and accelerated various quality improvement initiatives through the use of advanced analytics.

Workflow orchestration yields extensive benefits

The department’s investment in a unified reading platform with a distributed worklist solved a multitude of challenges, issues, and operational points the group was facing.

Ease of New Practice Integration

The IT investments made things easier on the organization on multiple levels regarding changes resulting from growth in scale

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post transactions. Hentel believes, “It is significantly easier from an administrative perspective, and has significantly improved our agility.” Having all radiologists working from an integrated worklist, regardless of the legacy solutions in place in various locations, considerably enhances the group efficiency as well as the radiologist experience. According to Hentel, this platform has become “the backbone that is allowing us to launch images in a way that our radiologists don’t realize they are from a different system.”

THE NEW ENTERPRISE IMAGING PLATFORM HAS YIELDED A **POSITIVE IMPACT ON PRODUCTIVITY**

Productivity Gains and Sub-specialization

The new enterprise imaging platform has yielded a positive impact on productivity, enabling the group to align itself on a uniform service level agreement across the enterprise. The single system approach has allowed Weill Cornell to be adaptable when serving the needs for sub-specialized radiology services across locations, as well as the ability to export that expertise to other hospitals in the community. “The fact that it allows to read from multiple sites on one worklist is very important,” explains Hentel, “We use it for turnaround times for Emergency Department reads; we have different targets for different modalities and we consistently hit our targets.

This is due to in large part in us being able to highlight priority cases on the radiologist worklists.”

Enterprise alignment through IT Integration

For optimal utility and value, correctly integrating departmental IT solutions with enterprise electronic health record (EHR) systems is a critical component of care coordination and healthcare integration. Along these lines, the radiology department at Weill Cornell Medicine has also integrated the imaging IT platform with the enterprise patient portal, leading to substantial time savings related to patient-wait times on the day of their imaging exams. This is achieved, for example, by having patients fill out safety forms online prior to coming into the practice, where their reception can be personalized.

Patient-centered Radiology Services

Weill Cornell Medicine had been using a traditional radiology information system (RIS) for managing imaging exams. With that RIS, it saw some difficulty in getting the optimal context about the patient to the radiologist

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during the read, and saw a lack of ability to easily move useful information about the patient through different encounters. This is because the RIS was viewed as very exam focused. Hentel said, “Traditional RIS systems are great in terms of tracking imaging exams, but when you know things about a patient it is very hard from that information to persist from exam to exam.” Communicating even simple information from point to point, such as name preference, nurse/tech preferences, or vascular access issues, are small factors that can go a long way in creating an optimal experience for a patient.

The department now seeks to follow patients through their journey while incorporating relevant data and information to enable better context and improve the overall patient experience. The new unified reading platform with a distributed worklist actively contributes to this system capability. “One of the big things that set the solution apart from other imaging technology that is out there, is it is very patient-focused as opposed to being imaging exam-focused,” said Hentel. “That may not be an obvious distinction, but it is a big distinction.” Leveraging patient information

from the EHR during the read is done to provide optimal context to the radiologist at the time of interpretation. “We pull in info from Epic and display it as part of the patient summary, which has been very important for the radiologists,” points out Hentel.

Scheduling investment improves imaging services outcomes

The new integrated referral management solution also helps Weill Cornell’s dedicated imaging scheduling center centralize scheduling for all outpatient imaging sites. “If you look at our schedulers, they are highly efficient. We have a call abandonment rate of about 1%, which is significantly better than the industry standard. This is, in part, because we have effective scheduling technology,” explains Hentel.

Leveraging these new capabilities, the radiology department expanded the referral management solution to performing direct-to-physician online scheduling. It has a future strategic goal to further leverage it to provide direct-to-patient scheduling via a patient portal. It is also being explored in terms of use for inpatient scheduling, a process that is beginning with interventional radiology practices.

CONCLUSION

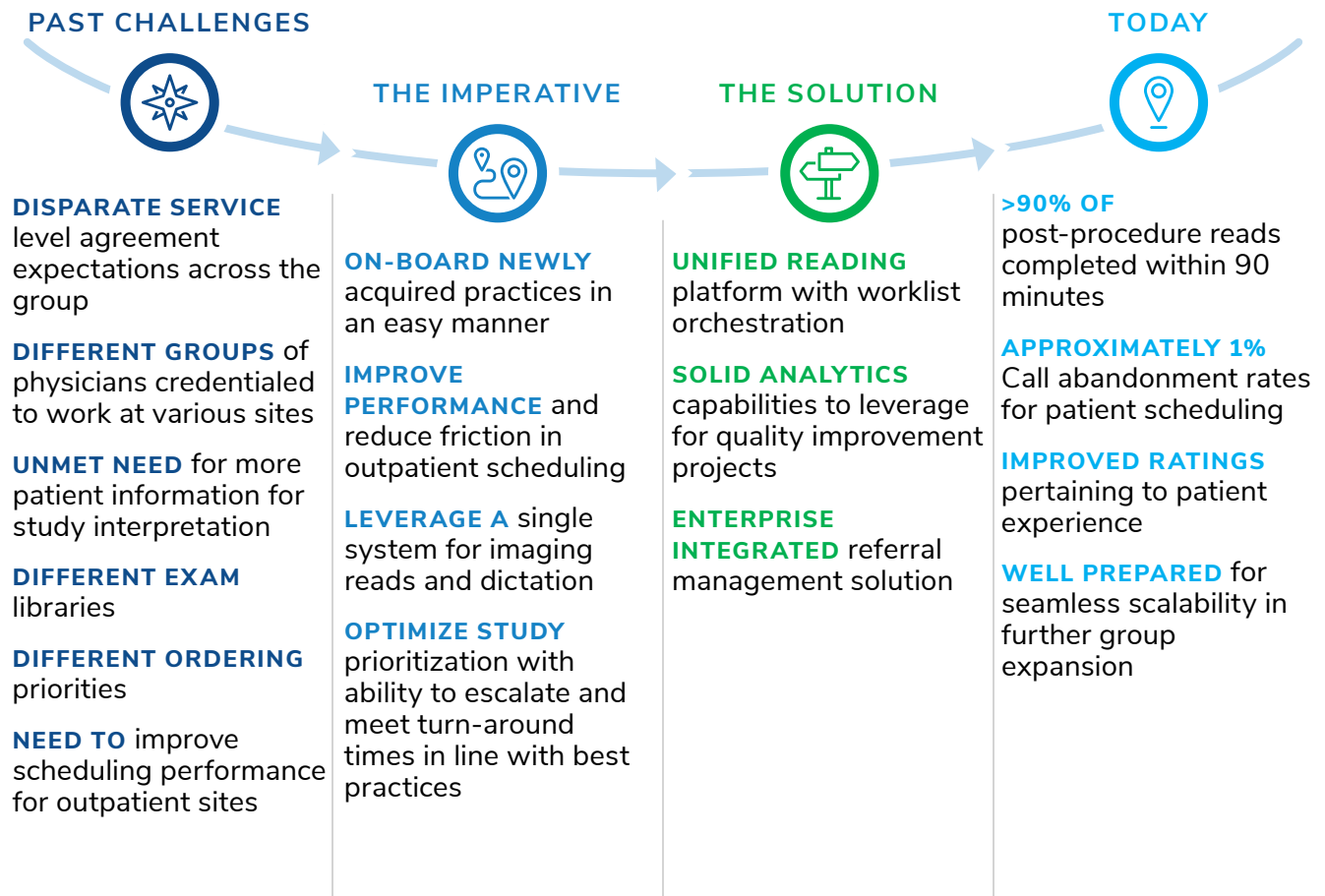
Optimal radiologist workflow directly correlates with productivity, best-practices in case assignment and prioritization, and many other factors that impact provider performance and patient care. The goal of Weill Cornell

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Leveraging a Unified Enterprise Imaging Platform to Drive Efficiency and Scale

Medicine's Department of Radiology is to provide outstanding patient-centered care overall, using its expertise to drive optimal organizational goals and patient outcomes. In that context, the Department of Radiology has strived to find optimal tools and solutions

that enable radiologists to practice at the highest levels and standards, thereby providing outstanding performance for the overall organization—positively and directly impacting patient satisfaction.



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