

Accelerating the deployment of emergency AI applications at Radiology One through a platform approach



"CARPL.ai and Avicenna.AI have been outstanding partners in helping us execute Radiology One's long-term vision of combining exceptional radiologists, proven quality programs, and thoughtfully deployed technology to deliver faster, more accurate diagnoses and the highest standard of patient care. Their technology complements - not replaces - the clinical expertise of our radiologists and reinforces our commitment to continuous innovation as we continue to grow."



Kevin Kadakia
Chief Operating Officer,
Radiology One

Problem Statement

Radiology One's mission is to deliver exceptional patient care through industry-leading turnaround times, outstanding diagnostic accuracy, and an unwavering commitment to quality and service. As one of the fastest-growing teleradiology practices, it has built its reputation on a low discrepancy rate sustained by rigorous quality assurance programs, peer review, continuous education, and structured re-education on missed findings.

Combined with seamless communication with referring providers and a strong customer service culture, these processes are the foundation of everything the practice does. As imaging volumes rise and expectations for rapid diagnosis increase, Radiology One sees technology as essential to supporting its radiologists and enhancing patient safety, an extension of its quality-focused culture, not a replacement for clinical expertise. In high-volume teleradiology, the practice needed a reliable way to identify and prioritize time-critical cases before a radiologist even opens the study, while building a scalable infrastructure to support its long-term AI strategy.

Our Solution

To address the complexity of managing multiple AI tools and workflows, Radiology One partnered with CARPL.ai, an enterprise-grade, end-to-end radiology AI platform and one of the largest radiology AI marketplaces, with 300+ applications across 100+ vendors. Its centralized orchestration layer, deep PACS integration, and seamless HL7 connectivity enabled Radiology One to deploy Avicenna.AI's Emergency Suite across its modern imaging infrastructure with minimal disruption to existing workflows. Based on the results returned by Avicenna.AI's algorithms, the platform automatically re-orders the worklist so that life-threatening findings move to the top of the queue and reach a radiologist first.

The partnership has enabled Radiology One to improve workflow efficiency, accelerate turnaround times on critical examinations, and further strengthen diagnostic confidence while preserving the high-quality service its clients expect.

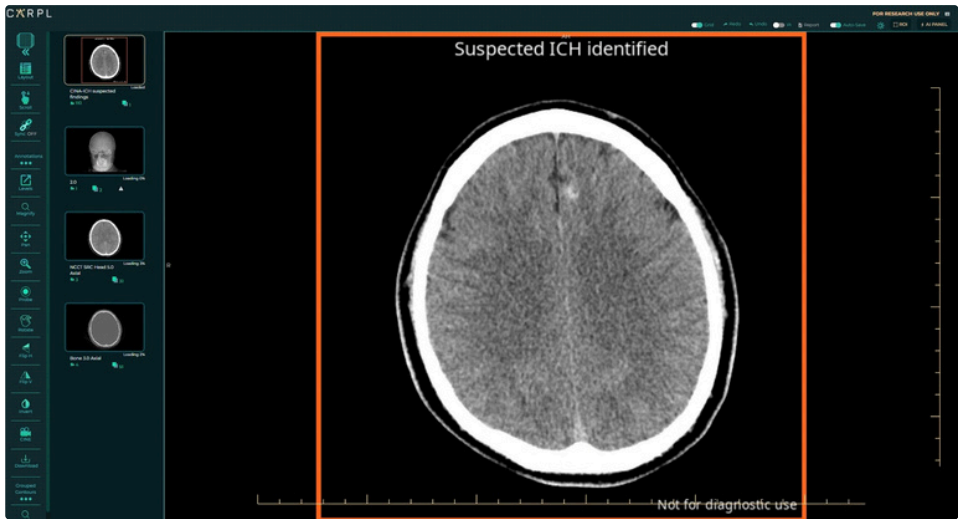
CARPL's centralized AI management has allowed Radiology One to rapidly expand, from two to eight AI applications in only 18 months without disrupting its clinical operations, creating a scalable foundation for future innovation.



Based on the results returned by Avicenna.AI's algorithms, the platform automatically re-orders the worklist so that life-threatening findings move to the top of the queue and reach a radiologist first.

Avicenna.AI's Emergency Suite provides the clinical detection layer behind this deployment. Its algorithms analyse each study on arrival for suspected intracranial hemorrhage, large vessel occlusion, cervical spine injury and pulmonary embolism, and return those results to CARPL.ai for worklist prioritization. Every application in the suite is FDA 510(k)-cleared and CE MDR-marked.

Four of the eight AI applications now in production at Radiology One are Avicenna.AI's Emergency Suite algorithms. Acting as a first-pass triage and a reliable second set of eyes, they help ensure that critical findings are consistently identified, even under significant time pressure.



With deployments in over 16 countries, Avicenna.AI offers clinically validated solutions tailored to the realities of distributed reading environments like Radiology One. This blend of scalability and reliability supports sustainable growth in demanding emergency radiology workflows.

Fig. 1. AI output of Avicenna’s ICH solution on the CARPL Universal AI Viewer

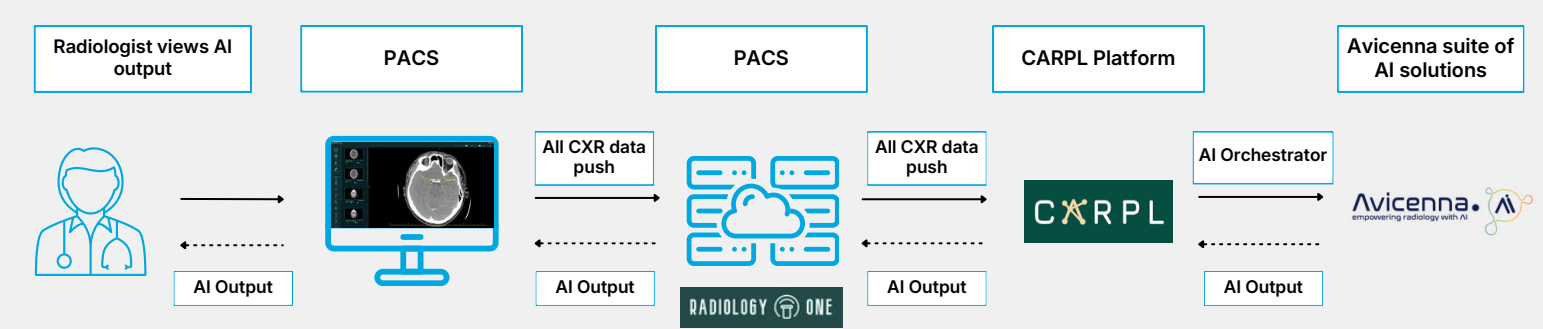


Fig. 2. Imaging workflow at RadiologyOne

Future Roadmap

Looking ahead, Radiology One is excited to continue expanding its AI capabilities through the CARPL.ai platform, including deployment of the universal AI widget for real-time AI monitoring and deeper workflow insights, additional clinical use cases, and direct integration of AI findings into its reporting solutions.



Founded in 2021, CARPL.ai is a global healthcare technology company having the world's largest radiology AI marketplace and platform offering 300+ applications from 100+ AI partners. With regulatory clearances across the globe, it enables radiologists and researchers to seamlessly build, test, deploy & monitor radiology AI solutions into their clinical practice. CARPL provides a single user interface, a single data channel, and a single procurement channel to bring AI solutions into clinical radiology workflows. CARPL has partnerships and integrations with all leading PACS systems which makes it even more seamless for radiology groups and departments to adopt AI. Trusted by leading healthcare organizations worldwide, CARPL serves as the governance layer for responsible, scalable AI adoption in radiology.