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Revolutionizing radiology:

How new tools can help alleviate staffing shortages and improve health care efficiency

August 6, 2024

Radiologists play a critical role in interpreting medical images and providing reports that guide doctors' life-saving decisions, but the workforce is struggling with a global staffing shortage, which can increase diagnostic errors and visual and mental fatigue as radiologist work overtime.

The annual growth rate of radiologists entering the US workforce between 2010 and 2020 was only 2.5%, which equates to about 1 radiologist serving 11,200 people. Radiologists workloads will also grow as medical data increases—researchers estimate we'll have over 6,000 exabytes of medical data in 2025.

That would equate to trillions of medical images, and at a basic processing rate of roughly 15 minutes per image, it would take more than 3 billion radiologists working 24 hours a day, 7 days a week, 365 days a year, to process all that imaging data manually in 2025.

Legacy tools and manual processes can't keep up, but artificial intelligence (AI) applications can rapidly accelerate and improve the time and effort spent on medical imaging diagnostics.

Google Cloud's Medical Imaging Suite (MIS)

To help the health care sector combat these critical challenges, Google Cloud introduced the groundbreaking Medical Imaging Suite (MIS)—a pivotal advancement in medical technology that leverages the robust capabilities of cloud computing and AI to help transform radiology diagnostics.

MIS offers:



Robust imaging storage solutions:

MIS's secure, cloud-based storage options enhance the accessibility and management of medical images.



AI-assisted diagnostic tools:

Incorporating AI tools facilitates quicker and more accurate diagnoses, significantly reducing the margin for error and improving patient outcomes.

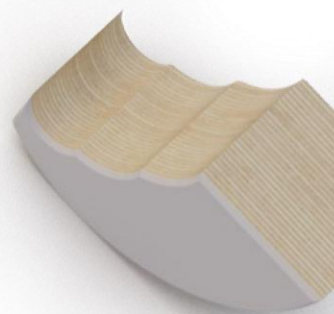


Scalable deployment options:

The flexibility of MIS allows healthcare providers to implement solutions that best meet their current needs while accommodating future growth.

Enhancing diagnostic accuracy and reducing radiologist burnout

[In a newly released paper from Deloitte](#), I invite you to learn more about MIS's meticulous design to help improve diagnostic accuracy and operational efficiency in radiology departments. By automating routine tasks and employing advanced AI for image analysis, MIS can help reduce the workload on radiologists, give them more time to focus on complex cases, and mitigate the risk of burnout.



Real-world impact:

Deloitte's implementation successes

[The paper](#) also outlines a number of recent Deloitte deployments of MIS, demonstrating its efficacy and potential. These case studies illustrate how MIS helps streamline the process of medical imaging ingestion and de-identification, and enhance the precision in identifying and locating something as debilitating as a brain tumor.

It's through these real-world applications that we can help other health care providers clearly see the suite's capacity to handle intricate imaging tasks efficiently and set a new standard in medical diagnostics.

With Deloitte's extensive background and experience helping health care clients transform operations while contributing to improved patient care, along with our alliance with Google Cloud, we are at the forefront of harnessing today's most advanced technologies to optimize health care for the better.

To learn exactly how, explore the full capabilities of the Google Cloud Medical Imaging Suite, [available here](#). By accessing the complete paper on our website, you can gain a deeper understanding of this transformative technology and learn how Deloitte and Google Cloud aren't just responding to the present needs of a radiologists, but actively helping to improve the health care industry for the future.



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