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Future Trends in Radiology and Healthcare

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An overview of the big trends in radiology/healthcare and what this means for the future of radiology, GE Healthcare and the industry.



Key Points

- Data will need to be more integrated to provide longitudinal insights, enabling quicker and more impactful decision-making with Artificial Intelligence (AI).
- Staff shortages and burnout among radiologists have been an issue for years and are now more widespread than ever.
- Technology will play a key role in reducing disparities in outcomes by making care more accessible in rural and remote areas.
- Demand for theranostics, a combination of the terms therapeutics and diagnostics, is expected to increase.

Four key trends in radiology/healthcare were highlighted during the Radiological Society of North America (RSNA) Congress in Chicago this year. These include:

Using AI to Transform Data into Actionable Insights

There is an abundance of data in healthcare, but it is spread across too many places and is not actionable. The clear expectation from our customers is to make data more integrated to provide longitudinal insights, enabling quicker and more impactful decision-making with Artificial Intelligence (AI).

On-device AI continues to be important, meaning AI embedded into the device, the CT/MR/ultrasound scanner, but the clear feedback was that GE Healthcare was already pretty good with regard to pixel AI. However, departmental AI or enterprise AI will become more important in the future. This includes GE Healthcare's no-show app, Imaging Insights, or the Edison Orchestrator - the workflow management system that simplifies the selection, deployment, and usage of AI.

Healthcare Workforce Shortages & Burnout

Staff shortages have been a top priority for leaders across healthcare. Burnout among radiologists has been an issue for years and is now more widespread than ever. There is also the problem of rad-tech shortages.

Work overload is commonly cited as one of the main causes of burnout. But workload may not be the root cause in radiology. Burnout in radiology may be more related to a radiologist's ability or the amount of time they need to provide the kind of care they want.

AI can provide intelligent assistance in the radiologists'

workflow, automating repetitive and tedious tasks, so they can focus more of their time on the actual read and put together their insights to provide a narrower differential diagnosis. Also, a less focused benefit of AI is that it can reduce a radiologist's diagnostic uncertainty. It also supports them in creating richer and more definitive reports that can translate into more informed clinical decisions with higher diagnostic confidence. Using AI this way can increase radiologists' satisfaction with their work. This could help reduce stress, leading to less radiologist burnout.

Therefore, when considering the adoption of AI into practice and workflows, think beyond increasing productivity or reporting turnaround times. Instead, find ways in which it can assist with providing more meaning and higher levels of work satisfaction.

Using Technology to Increase Access to Care

Technology will play a key role in reducing disparities in outcomes by making care more accessible in rural and remote areas.

The Vscan Air, for example, may be called the doctor's new stethoscope. It is a portable ultrasound system that fits into the pocket and can generate high-quality ultrasound images. Areas in rural India, Sub-Saharan Africa, and other parts of the world where there is little or no access to medical care or imaging, in particular, could benefit from such a device. With a device like this, a doctor or midwife can examine, for example, a pregnant woman and decide if the pain she's having is normal or if she needs to travel probably 15 hours to get medical care.



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Imaging Technology Will Be Used In New, Innovative Ways

Think of theranostics. Theranostics is a combination of the terms therapeutics and diagnostics and describes the combination of using one radioactive drug to identify (diagnose) and a second radioactive drug to deliver therapy to treat the main tumour and any metastatic tumours. It is expected that

the demand for theranostics will increase as imaging equipment is needed for many uses. This is especially significant following the FDA approval of several new drugs and therapies, including Lutetium-177 PSMA-617 – an exceptional therapy for advanced prostate cancer. GE Healthcare is “all in” with regard to theranostics. ■



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