AI: Opportunities, Capabilities and Limits

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Teamplay Digital Health Platform for Performance Management in Radiology

An overview of teamplay applications for performance management in radiology and how they offer a clear overview of performance data and facilitate radiology directors or clinical administrators to make fast and well-informed decisions.

Key Points

- The teamplay digital health platform enables digital transformation by facilitating easy access to solutions for operational, clinical and shared decision support.
- The teamplay performance management applications allow radiology directors to access, monitor and compare their institution’s key performance indicators in a single dashboard accessible from anywhere, anytime.
- The teamplay digital health platform combines two different deployment models - cloud and on-edge deployment to enable integrated solutions according to specific use cases and requirements.
- With the teamplay digital health platform, radiology operations can be optimised by accessing and analysing data more effectively, understanding the workflow, optimising operations by taking direct measures and creating a culture of continuous improvement.
The healthcare environment for radiology directors can be extremely challenging. Not only do they have to stay compliant with nationally defined reference levels for applied radiation, but they are also expected to increase efficiency, produce results and provide a data privacy-compliant way to share and manage medical images. In addition, protocol management can be a time and resource-consuming effort. In simple words, radiology teams have to achieve better outcomes and results with less investment and resources. One way to overcome this change is through digitalisation. Siemens Healthineers’ teamplay performance management applications allow radiologists to better utilise patient data, improve workflow and optimise daily operations.

**Benefits of Teamplay Applications**

With teamplay performance management applications, clinicians can access objective data insights to make well-informed and prompt decisions and improve radiology operations. Streamlining operations in a radiology department is not limited to scanning more patients. It is also important to optimise processes and deliver high-quality care while complying with national regulations.

Some of the key benefits of teamplay applications for radiology directors include:

- Ability to monitor quantities like imaging throughput, dose levels, utilisation of staff, rooms, and department resources down to each device and procedure.
- Simplify reporting and gain insights into where workflows need adjustments.
- Link with other teamplay users and their data for comparable benchmarks and effortlessly exchange images and reports.
- Easily connect with other healthcare professionals, hospitals, and institutions through teamplay’s rich cloud-based network.
- Access metrics from your own imaging fleet and a shared pool of imaging data.
- Connect and collaborate in a trusted environment with high data privacy and security standards to improve patient outcomes and quality of care.

**Teamplay Performance Management Applications**

The teamplay performance management applications allow radiology directors to access, monitor and compare their institution’s key performance indicators in a single dashboard accessible from anywhere, anytime. Some of these indicators include:

- **teamplay Dose – Simplify radiation dose management**
  The application helps identify areas of improvement and administer best-practice exams. All insights in teamplay Dose are based on data extracted from the radiation data of scanners.

- **teamplay Usage – Increase efficiency and expedite imaging fleet utilisation**
  Explore workflow-specific data on patients and exams and/or focus on the efficiency and performance of individual devices, identifying optimisation potential to do more with less.

- **teamplay Images – Share and discuss images in a secure environment**
  With teamplay Images, images can be shared in a secure environment and additional collaboration features help engage with other peers.

- **teamplay Protocols – Speed up protocol management by remote access**
  Speed up protocol management by editing protocols remotely and distributing these protocols to the image fleet.

**Teamplay Digital Health Platform – Enabling Your Digital Transformation**

The teamplay digital health platform is an enabler for digital transformation in radiology. 6500 institutions in more than 75 countries are already benefitting from this platform by using a broad range of applications developed by Siemens Healthineers and third parties. The teamplay digital health platform enables digital transformation by facilitating easy access to solutions for operational, clinical and shared decision support:

- **Powerful marketplace**
  Access to innovations and solutions in digital health and AI from Siemens Healthineers and curated partners. These solutions can help radiology departments transform a complex multisite, multivendor imaging environment into an integrated imaging service line with a patient-centric focus throughout the entire workflow.

- **Digitally enabled collaboration**
  Sharing and collaborating with peers and patients via standardised interfaces between institutions and care settings.

- **Scalable deployment models**
  Innovative and flexible software deployment combining cloud and on-edge to serve your individual needs with a broad portfolio of transformative and AI-powered applications. The deployment models are based on the client’s infrastructural demand and preferences and offer flexibility and scalability with future-readiness. The applications can be accessed easily via the digital marketplace that provides state-of-the-art SaaS (software-as-a-service) business models and
scalable computing power.

**Seamless interoperability**
One vendor-, system-, device-neutral digital health platform for cross-departmental and cross-institutional interoperability in a secure and regulatory-compliant environment. It allows easy connection of devices and systems, aggregates data from various sources and provides advanced analytics that results in actionable insights. With the teamplay healthcare digital platform, big data can be converted into smart data and can be used to increase the effectiveness of clinical routines through improved patient outcomes and reduced cost.

**Strong platform partner**
Secured environment to consume, deploy or operate digital solutions globally by leveraging Siemens Healthineers’ ever-expanding infrastructure and services with over 32,000 connected systems, 6500 institutions in 75 countries and more than 30 million patient records accessible cross institutionally through seven major data centres worldwide.

**Data Where It Needs To Be**
Digital solutions require an innovative and flexible software deployment. Siemens Healthineers’ teamplay digital health platform offers this flexibility by combining two different deployment models - cloud and on-edge deployment to enable integrated solutions according to specific use cases and requirements. Leveraging the benefits of both deployment models is called hybrid computing which is enabled by edge technology. With hybrid computing, you can:

- Manage local and global data as per preferences and regulatory requirements and ensure continuous operations.
- Benefit from instant data processing and storage on the local edge device and aggregate and balance load in the cloud when needed.
- Benefit from fully managed operations remotely from cloud: up-to-date software and algorithms, state-of-the-art security and high availability of apps.

**Conclusion**
Overall, Siemens Healthineers’ teamplay digital health platform enables radiology departments to connect different imaging modalities and generate, collect, analyse and access patient data through a range of powerful applications. The teamplay performance management applications provide greater transparency in the workflow and help radiologists increase their productivity and better balance their department’s resources. With centralised protocol management, clinicians can deliver a higher quality of care and ensure standardisation. With better data analysis, clinicians can perform in-depth analytics with intuitive dashboards. In addition, the teamplay performance management applications help radiology teams understand cost inefficiencies within their workflow and can implement changes accordingly to optimise operations. In other words, radiology operations can be optimised by accessing and analysing data more effectively, understanding the workflow, optimising operations by taking direct measures and creating a culture of continuous improvement.