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Utilising the Workflow Engine of Enterprise Imaging at King Faisal Specialist Hospital

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On 14 August 2020, King Faisal Specialist Hospital - Jeddah, in the Kingdom of Saudi Arabia went live with the Agfa HealthCare Enterprise Imaging for Radiology platform. HealthManagement.org spoke to Mustafa Hamdy, Regional Manager, Middle East region for Agfa HealthCare to learn more about the deployment and their future outlook in this region.

Key Points

- King Faisal Specialist Hospital – Jeddah is one of three hospitals that make up the King Faisal Specialist Hospital & Research Centre (KFSHRC).
- They were the first hospital in the Middle East to achieve HIMSS EMRAM Level 7.
- In August 2020, Agfa HealthCare and the King Faisal Specialist Hospital, Jeddah, went live with the Enterprise Imaging for Radiology platform.
- Agfa HealthCare and the King Faisal Specialist Hospital & Research Centre will work together as strategic partners to implement the Artificial Intelligence capabilities utilising the powerful workflow engine of Enterprise Imaging platform.
- Enterprise Imaging features that meet the hospital’s specific needs include remote reporting, peer learning, web deployment and accessibility, and an integrated viewer that enables patients to view their images and reports on a mobile device.

Can you give us a short overview of the healthcare sector in the Kingdom of Saudi Arabia? Any key points that you would like to highlight about healthcare in this region?

Health care in Saudi Arabia is a national health care system in which the government provides free health care services through a number of government agencies like MOH hospitals, National Guard hospitals, Ministry of Defense, Ministry of interior hospitals and group of specialist hospitals like King Faisal Specialist Hospitals. There is also a growing role and increased participation from the private sector in the provision of health care services. Saudi Arabia has been ranked among the 26 best countries in providing high quality healthcare.

Healthcare is one of the main focus areas of the ambitious Saudi Vision 2030 and National Transformation Program 2020 (NTP) that seek to improve the quality of healthcare services and facilities across the Kingdom of Saudi Arabia.

Agfa HealthCare has recently deployed Enterprise Imaging at the King Faisal Specialist Hospital in Jeddah. Can you tell us something about this healthcare facility?

King Faisal Specialist Hospital – Jeddah is one of three hospitals that make up the King Faisal Specialist Hospital & Research Centre (KFSHRC). This tertiary referral hospital offers primary and highly specialised inpatient and outpatient medical care and participates in many clinical and research studies. The 500-bed facility in Jeddah has a top-notch radiology department that also provides training in diagnostic and interventional imaging to radiology, medical, paramedical, nursing, and medical students.

On Friday, 14 August 2020, Agfa HealthCare and the King Faisal Specialist Hospital – Jeddah, in the Kingdom of Saudi Arabia, went live with the Enterprise Imaging for Radiology platform. Despite the challenges of carrying out the entire project during the COVID-19 containment efforts,
the go-live was smooth and successful. The large-scale Enterprise Imaging implementation at King Faisal Specialist Hospital – Jeddah is expected to handle 120,000 studies yearly.

**Before Agfa HealthCare introduced EI within this healthcare facility, what kind of system did they have in place?**

In 2010, the hospital became a customer of Agfa HealthCare with the IMPAX PACS, but by 2019, it was time to move to a next-generation image management solution. After a competitive tender, the hospital chose to stay with Agfa HealthCare, and implement Enterprise Imaging.

Agfa HealthCare and STC (Saudi Telecom) decided to partner together since 2016 mainly to address the cloud solutions and started offering that service and actively implemented quite some important installations for Ministry of Health which went live also this year using STC cloud technology. STC is also a partner to KFSH in the connectivity projects and that was also a reason for KFSH to align with STC and Agfa to deploy that important project on the premises of King Faisal Specialist Hospital in Jeddah.

**What challenges was the King Faisal Specialist Hospital facing, and why did they decide to move to Enterprise Imaging?**

Enterprise Imaging offers a single, unified imaging platform, with embedded clinical tools and a powerful workflow engine, for maximised productivity. Features that meet the hospital’s specific needs include remote reporting, web deployment and accessibility, and an integrated viewer that enables patients to view their images and reports on a mobile device.

Agfa HealthCare and the King Faisal Specialist Hospital & Research Centre will work together as strategic partners to implement the Artificial Intelligence capabilities utilising the powerful workflow engine of Enterprise Imaging platform.

**What challenges did Agfa HealthCare face when deploying Enterprise Imaging at this hospital in terms of resources, acceptance, transition etc.?**

The implementation project faced serious challenges due to the global COVID-19 pandemic. The Kingdom of Saudi Arabia instituted a 3-month curfew starting in March. The hardware for the Enterprise Imaging deployment was delivered in April. While the installation of the hardware had to be done on-site, all other work, including configuration and initial training, was done remotely.

Following the end of the curfew, the on-site engineer was able to take his place at the facility, and the Agfa HealthCare application specialists could complete the training of the hospital staff in person.

Despite the challenges in the face of the pandemic, the go-live went very smoothly, thanks in large part to the excellent collaboration and hard work of the hospital and Agfa HealthCare teams, and the project coordination by the Hospital and Agfa HealthCare project managers.

**Is this the first hospital in Saudi Arabia to deploy Agfa HealthCare’s EI platform, or are there other successful implementations already in place in this region?**

We have deployed already Agfa HealthCare Enterprise Imaging platform in several other healthcare organisations in Saudi Arabia. However, King Faisal deployment was unique because of their size, specialisation, clinical demand and very well structured infrastructure.

Their ambition towards digitisation is endless. They are a pioneer in different HealthCare IT aspects, and were the first hospital in Middle East to achieve HIMSS EMRAM level 7. They are very serious in their approach to Artificial Intelligence (AI).

Enterprise Imaging, radiology, workflow, COVID-19

The large-scale Enterprise Imaging implementation at King Faisal Specialist Hospital – Jeddah is expected to handle 120,000 studies yearly.

**What have been the major outcomes? Has the deployment been successful, and what benefits has the hospital already seen since EI was implemented?**

Enterprise Imaging offers a new generation of image management, creating a secure ecosystem of medical images with advanced image processing, tools to facilitate collaboration and peer learning, and platform performance and stability.

The platform provides the King Faisal Specialist Hospital, Jeddah with a number of key features that fit its specific needs, including remote reporting, advanced clinical applications, and an integrated viewer that enables the patients to view their own images via the mobile application.
What future collaboration is planned with King Faisal Specialist Hospital?
The modern, up-to-date platform meets the imaging IT vision of the KFSHRC’s pioneering IT department. Currently we are working with King Faisal Specialist Hospital management team as strategic partners in several initiatives. Some of these include:
• Ongoing deployment of Enterprise Imaging for the new hospital in Madinah, expected to be fully deployed in 2021.
• Further collaboration with AgfaHealthCare to validate some of the Artificial Intelligence algorithms in Enterprise Imaging platform.

At Agfa HealthCare, we support healthcare professionals across the globe to transform the delivery of care. Our focus is 100% on providing best-of-suite Imaging IT software solutions that enable secure, effective and sustainable imaging data management. From product development to implementation, our unified Enterprise Imaging Platform is purpose-built to reduce complexity, improve productivity and deliver clinical value. We use our proven track record as an innovator, our in-depth medical knowledge and our strategic guidance to help healthcare providers achieve their clinical, operational and business strategies.