

King Faisal Specialist Hospital & Research Centre (KFSH&RC) in Riyadh recently became the first Middle East hospital to attain HIMSS Analytics Stage 7 Ambulatory EMRAM, achieving the highest level of Health Care IT Adoption. HIMSS speaks to **CIO Dr. Osama Alswailem** to find out more about his hospital's journey towards a paperless environment, his thoughts on the future of Middle Eastern healthcare, and how he views his change of role from MD to CIO as a paradigm shift in his career.

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**Congratulations on achieving HIMSS Analytics Stage 7 Ambulatory EMRAM! Please share with us your key success factors of this achievement. What were some of the challenges along the way?**

Thank you, because I feel this has been my greatest achievement to date! Being there when the original idea of implementing an EMR in the hospital was raised in 1998, to physically implementing it and now watching it reach this point has been surreal. For me, it has been like watching a child grow and mature into a professional, self-sufficient human being.

This effort required enormous amounts of synergy between clinicians, informatics, administration, IT and our partners/vendors. **The biggest challenge has been, and I believe it still exists in Healthcare, is in systems controlling and dictating how clinicians tackle patient care.** We didn't want to compromise the Physician – Patient relationship but rather wanted to enhance it. I continually enforced this concept to the team and the partners because this was a key success factor for the hospital.

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**KFSH&RC is one of the first hospitals in the region that bought into the concept of electronic records. What were the key drivers of such a decision? What were some of the challenges along the way?**

**Forethought from leadership** at that time is what really deserves the credit. KFSH&RC decided to develop an Integrated Clinical Information System (ICIS) in 1998. We were **one of the first hospitals internationally** to even consider doing this throughout the entire facility. The **drivers at that time were patient safety, clinical quality and hospital-wide operational efficiencies.**

The **biggest challenges were with regards to change management and clinical uptake.** Clinicians felt it was a cumbersome process in using the system while trying to engage the patient. It took away from patient time. Without



**View from the grounds: The KFSH&RC facilities** Photo credit: KFSH&RC

their support, no system would have succeeded but driving and showing the value-add slowly became evident once reports started to populate and generate. We could now measure quality and performance at several levels. Patients could move from one area to the next without paper records. Lab results were now visible instantly. **The system began to identify lots of areas of improvement and efficiency that otherwise would have gone unnoticed.**

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### What's next for HITA & KFSH&RC?

**KFSH&RC is in the process of drastically expanding its facilities in both Riyadh & Jeddah.** We have introduced smart technology throughout each new facility. Introducing technology from the onset is much easier than through change management. I value a mature organization that has been developed through the roots than one that has just been built because wisdom and lessons learned are never inherent and are lost.

Health Information Technology Affairs (HITA) was restructured in 2014 and we are finalizing that transformation. **We have become the SPinE –**

### **Strategic Partner for Innovation & Excellence for KFSH&RC.**

We are shifting from a proactive / reactive nature to one of a predictive and strategy-driven organization. This requires lots of growth from a leadership point and to view each challenge from a different perspective. **Shifting staff mindsets to think and act more strategically is the current challenge.**

Also, you will see a **greater focus from HITA and KFSH&RC towards regional healthcare improvement** via sharing of case studies, implementation strategies and lessons learned, best practices, etc. in the coming months.

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### What are your thoughts on the future of healthcare in the region?

Education & Healthcare are key components in any developing country. You will see many new Hospitals & Clinics, facility expansions and also global brands entering the KSA market in the coming years. But I believe **talent shortage will be a limiting factor for many.** Currently over 80% of the healthcare workforce in the GCC is made up of foreigners. This is unsustainable and not just a GCC issue but a global talent issue.

We have to change and address the social and cultural barriers that are affecting the healthcare industry regionally. **We need to make the clinical profession attractive to newer generations** and ensure they see the value and work-life balance that it can bring. The same applies for Health Informatics as the systems will only evolve to greater capabilities once they are continually engaged.

Also, with the introduction of the Apple and Google Health Kits, the reach of the hospital is expanding to patients' homes through their smartphones. **KFSH&RC has started using wearable devices to capture patient vitals for various pre & post-surgical requirements.** Patients can now be educated and engaged remotely to play a more active role in their health. You will see greater adaption of wearable devices in the clinical environment.

Likewise, you will start to see **greater Patient continuum of care on a national level through the integration of information and services.** Various government directives are calling for an increased flow and share of information amongst institutions, registries and healthcare providers. This clinical integration will ensure that patients are provided with adequate care, irrespective of location and/or boundaries.

## Not many MDs become CIOs. What are the challenges and benefits of such a move?

It was a **paradigm shift from a career perspective** because I went from interacting and caring for patients for over 7 years to developing and enhancing systems. I was part of the electronic medical record assessment team in 1998 that brought and implemented the EMR in KFSH&RC, so in a sense I was being groomed for what was to come.

I believe **one of the biggest benefits has been that coming from a medical background adds more value to the IT drivers and it becomes natural to align to the hospital's strategy.** I can relate better to the business versus technical managers and it removes a layer of complexity that otherwise always exists.

The biggest challenge has been getting technical staff to see how their actions impact patient care directly. To them it's just a system and a program but I feel they sometimes don't grasp the impact these systems and programs have on patients. **Once I am able to communicate and embed this into their character, it makes the outcomes that much more significant.**



**Dr. Osama Alswailem** Photo credit: KFSH&RC