King Faisal Specialist Hospital & Research Centre (KFSH&RC) and Cerner: The Smart Room Project

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Why did KFSH&RC select Cerner to work on the Smart Room project?

In 1998, when KFSH&RC leadership were investigating and contemplating a Hospital Information System, we felt Cerner was the only organization that was truly aligned to our mission and our strategic goals. Over the years KFSH&RC and Cerner have formed a partnership and vision to change the landscape of healthcare regionally, both from a clinical and from a patient point of view.

The Smart Room project is a carry-on to that vision and it was an ideal progression of our partnership. Technology plays a critical role in all of our lives and the introduction of smartphones has changed the way we manage our daily lives and routines. We wanted our hospital rooms to be an extension of a patient's home. Care, information, entertainment and healthcare services all a finger click away.

We are all excited at the implication this project will have on healthcare in the region and the outcomes it will produce in raising the bar in clinical and patient focused care.

We feel this project aligns extremely well with Saudi Vision 2030 in that it brings technology to the forefront with a focus on improved citizen interaction and care.

What is KFSH&RC's 10 year vision of implementing Smart Technology?

Smart Technology aligns with Saudi Arabia Vision 2030 and lots of organizations have had to realign themselves and their strategies accordingly. KFSH&RC were fortunate in that we were already progressing towards enhancing our Integrated Clinical Information System through our partnership with Cerner. The vision started by being the first hospital outside of North America to achieve HIMSS Stage 7 Ambulatory Certification which also defined leaderships approach towards creating an intelligent healthcare delivery organization. A paperless environment was key towards the utilization and implementation of Smart Technology.

Our patient portal has helped redefine the boundaries of the hospital and given patients much more active involvement in their care. We have integrated wearables devices to the patients EHR which help save greatly on clinical and patient time and resources. Over the coming years one of the strategically focused vision of KFSH&RC is on predictive care and this can only be established and tracked via Smart Technology at the clinical and patient level.

How has KFSH&RC improved patient care with technology?

As a life critical organization, timely access to patient information is a must. KFSH&RC was one of the first hospitals in the region to have a fully Integrated Clinical Information System that gave all healthcare providers access to vital data as it became available.

As healthcare grows in complexity from a disease and care management perspective, Healthcare Information Technology (HIT) at KFSH&RC has to keep pace and be able to provide adequate solutions that remain clinical and patient focused. HIT has become the driver towards improving the quality of care through increased reliance, systems integration, data mining & analysis and by extending continuum of care to patients' homes via technology.
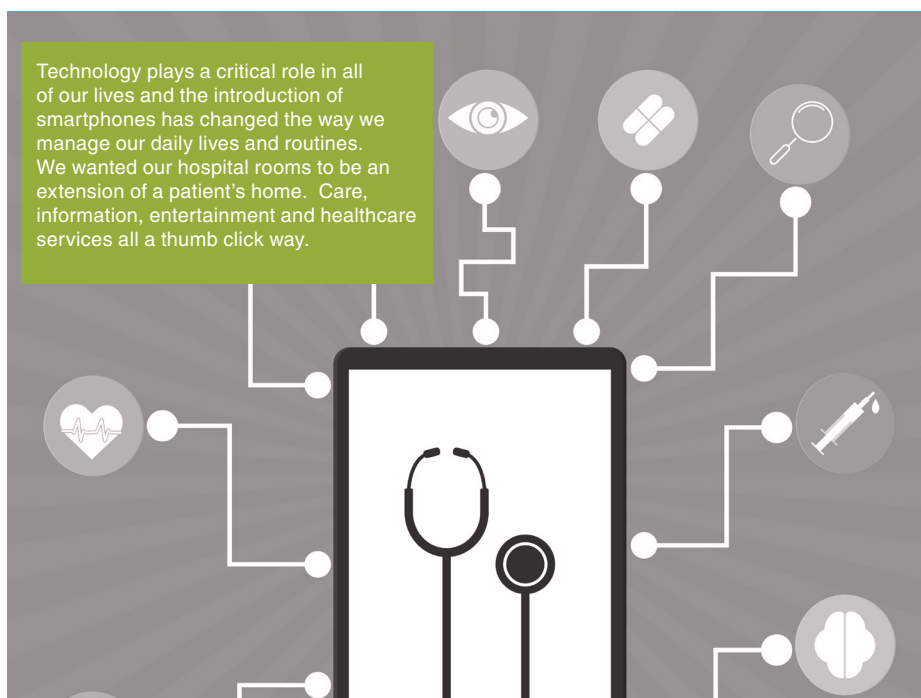
What efficiencies will the clinicians gain through the use of the SmartRoom?

Clinical workflows will be much more organized and clinicians/healthcare providers will be seamlessly provided with the right clinical patient information at the right time. This will lead to improved efficiencies throughout KFSH&RC which will eventually lead to lower costs.

More importantly SmartRooms will lead to patient focused & reliable care, thus higher patient satisfaction, which will also indirectly effect clinical efficiencies.

How does KFSH&RC ensure physician adoption of the SmartRoom?

Constant Physician involvement in the design, testing, integration and implementation and change management phases. Physicians must be knowledgeable towards the SmartRoom technology and its usage. If the Physician is comfortable in introducing the benefits of the SmartRoom as well as talking around the benefits and usage in front of the patients, this would be a win-win.

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Partnership Successes and the Way Forward

Ali Slimani
Sr. Director and General Manager
Cerner Middle East

What is the 2030 Vision in the Kingdom of Saudi Arabia and how is Cerner is working with your clients to achieve this Vision?

As the Kingdom of Saudi implements its Vision 2030, we are looking forward to continue working closely together with our clients, different government agencies, and other organizations to deliver a better healthcare experience for individuals as well as improve the quality of care by using evidence based processes and workflows.

In addition, one of the guiding principles of Vision 2030 is to grow talents of the local populations and we believe our Masouliya (meaning 'Responsibility' in Arabic) program will play a key role in achieving this. Cerner's program will develop the skills required to advance the healthcare and the next generation of Saudi Healthcare Information Technology leaders, ultimately creating an HIT innovation hub in the Kingdom and the GCC.

We, at Cerner, believe that a key driver to improving healthcare services is to leverage Information Technology and we are looking forward to partnering with government agencies, healthcare organizations and engaging in Public-Private-Partnerships (PPP) to deliver value to the Kingdom of Saudi.

Briefly talk about Cerner's partnership with KFSH&RC and how it has grown over the years.

KFSH&RC was a Cerner Classic client since 1996 and then signed as the first Millennium client in the Middle East in 2000.

Since the original Millennium implementation, KFSH&RC has signed on for three more phases, including Nursing & Physician Documentation, Surgical Departments, ICU's, Laboratory, Radiology, Registration/Scheduling, HIM, and the latest being 300 SmartRooms in the newly constructed King Abdullah Tower in Riyadh.

Throughout the partnership, KFSH&RC and Cerner have had many achievements created the first time in the region and worldwide . The most notable one is KFSH&RC achieving HIMSS Stage 7 Ambulatory in 2015, the first organization outside of North America.

KFSH&RC's CIO, Dr. Osama Alswailem, is also an active member of the Client Care Council, an invitation only leadership meeting to ensure that Cerner's support offerings, solutions and tools are designed and implemented based on client requirements resulting in added client value. During the Client Care Council, Dr. Osama shares his feedback on areas of attention needed to meet the needs of the Middle East healthcare delivery.

As we continue in our journey together, Cerner and KFSH carry on seeking opportunities to innovate and improve, not only the patient care experience, but the operational efficiencies and ease of administering care for clinicians.

Some of the values realized adopting Cerner Millennium are:

Problem/Diagnosis documentation by physicians have increased by using more optimized workflows

Through the implementation of health maintenance decision support, the number of positive Fecal Occult Blood results was increased by 300%, over a period of three years, leading to timely diagnosis and preventive care of cancer
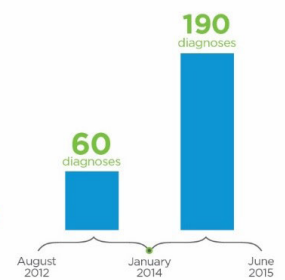
King Faisal Specialist Hospital & Research Centre

300% increase in fecal occult blood detection with automated systems

60 diagnoses
August 2012

190 diagnoses
June 2015

January 2014

Industry Firsts & Achievements

1st HIMSS 6 in patient in the Middle East

1st HIMSS 7 Ambulatory outside North America

Child abuse rule pioneered & shared globally

Paperless Family Medicine Department with Health Maintenance

Significant increase in detection of MRSA and decrease in spread through the use of Cerner's infection control solution

Cerner is a gold sponsor at the Ministry of Health & HIMSS Middle East Conference and Exhibition 2016.

Ministry of Health & HIMSS Middle East Conference and Exhibition 2016

12-13 October 2016
Four Seasons, Riyadh, Kingdom of Saudi Arabia

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