

King Hamad University Hospital

More performance for better patient outcomes

King Hamad University Hospital (KHUH), opened in 2012, is the second largest public hospital in Bahrain. It offers the complete range of healthcare services and provides therapy and diagnostics at the highest level, due not only to the excellent in-house expertise but also to the close collaboration with other Bahrain medical facilities, especially the Bahrain Defence Force Hospital.



To meet the requirements of such top-of-the-line healthcare services from a technical point of view, Sh. Khalid Bin Hamad Al-Khalifa, responsible for the IT infrastructure at KHUH, screens potential business partners very carefully and critically: "For us it is very important to ensure that our systems run properly, therefore we prefer technology whose functionality and performance is tried and tested." When it turned out that the PACS implemented in early 2012 did not meet the demanding performance standards, in particular the need to exchange data with other hospitals, Sh. Khalid Bin Hamad Al-Khalifa called Yousuf Mahmood Husain W.LL (YMH).

YMH is a renowned partner of VISUS, the Germany-based provider of IT solutions for the management of medical data with focus on the management of images and networks between medical institutions. The VISUS product family JiveX is no new player on the Bahrain market. Sh. Khalid Bin

Hamad Al-Kahlifa had opted for this IT solution made in Germany when he worked for the Bahrain Defence Force Hospital: "During that time I came to appreciate the flexibility and functionality of JiveX. So when we had to switch systems at King Hamad University Hospital, JiveX was the natural solution: proven outstanding performance, an excellent and user-friendly interface and a slew of specialized tools for diagnostic imaging plus – and that was particularly important for us – the ability to establish data exchange networks with other hospitals."

Stronger networks mean better patient care

Since in Bahrain, patients can choose their hospital there is a certain degree of patient fluctuation between several medical institutions. Therefore, the smooth exchange of images and reports between hospitals is crucial for high quality care in order to ensure that no

information is lost in the healthcare system and that all previous diagnoses and treatments are taken into account. The first partner with whom King Hamad UH will share images will be the Bahrain Defence Force Hospital, but as Sh. Khalid Bin Hamad Al-Kahlifa stresses: "Our plan is to buildup a nationwide network with other public hospital for the exchange of images – independently from the PACS being used in the other facilities. JiveX allows vendor-neutral integration due to its flexibility and interoperability."

At King Hamad University Hospital, JiveX will be implemented in the radiology as well as the nuclear medicine department. The latter will play an even more important role in the near future since the hospital is planning to establish a specialized oncology centre. With JiveX the IT team is confident to master this challenge: "We assume that there will be up to 25 percent more traffic in the PACS, but we know that the performance is not going to suffer because JiveX can intelligently handle this huge amount of data", the Head of IT explains and adds, "Moreover JiveX is capable of hosting not only radiological but also all other medical data and centralize them in a vendor-neutral medical archive. While such an archive is not part of the current plan, JiveX allows us to set it up in the future. And this is what we think a strong partnership is all about: to have the flexibility for development in whatever future direction."

Background information JiveX implementation

The VISUS JiveX enterprise PACS was chosen to replace the existing PACS at KHUH owing to the very positive experience with JiveX in the Kingdom of Bahrain. The twin server was set up in a clustered configuration to provide high levels of fail-over and redundancy. With the replacement of the previous PACS smooth migration of the legacy image data was essential and successfully performed using the automatic query retrieval services available in JiveX. JiveX was seamlessly integrated with the Radiology Information System and the Hospital Information System for a filmless and paperless environment.

With its mobile viewer the JiveX Enterprise PACS meets the increasing user need to access data from anywhere within the facility. The users have responded very positively to the PACS solution in terms of user-friendliness, ease of use and broad range of functionalities.



About King Hamad Hospital

King Hamad University Hospital (KHUH), located in Muharraq, Kingdom of Bahrain, has 311 beds and 1952 employees. The hospital provides medical services employing state-of-the-art therapy and management practices as well as teaching and research services. King Hamad University Hospital includes fully equipped medical educational facilities within the frame of a mutual cooperation with the Royal College of Surgeons in Ireland - Medical University of Bahrain.

The KHUH's new Oncology Centre is a project led by the KHUH Projects Engineering Team. The new facility was

developed in line with UK design standards, currently one of the highest international standards of healthcare design, and will bring firstclass cancer care and research facilities to Bahrain in a translational medicine environment.

The 127,000 m² hospital, with its distinctive and elegant design, is affiliated to the Bahrain Defense Force. It features nine in-patient departments, nine digitalized operating theaters equipped with state-of-the-art medical technology and the most sophisticated (OR1) systems, an intensive care unit with a capacity of 12 beds and a pediatric ward.



Major Khalid bin Hamad Al Khalifa
Head of ICT Department
King Hamad University Hospital
(under Bahrain Defense Force)

KING HAMAD
UNIVERSITY HOSPITAL
مستشفى الملك حمد الجامعي