Realizing a vision

**Philips Ambient Experience** helps Sheikh Khalifa Medical City deliver patient-centric healthcare

As the flagship institution for the public health system in Abu Dhabi, United Arab Emirates, the Sheikh Khalifa Medical City strives to practice contemporary medicine comparable to the best hospitals and medical centers in the world. In keeping with that promise, their state-of-the-art Department of Cardiac Sciences is now home to the first Ambient Experience Interventional Suite in the Middle East.

The Sheikh Khalifa Medical City (SKMC) is a 550-bed acute care hospital on the cosmopolitan island of Abu Dhabi. It prides itself for being the only center in the United Arab Emirates that delivers fully integrated adult cardiovascular services. Patients benefit from 24/7 primary angioplasty, electronic reporting solutions in invasive and non-invasive cardiology, and electrophysiology studies and ablations.

Today, SKMC has a new source of pride. A recently completed Philips Ambient Experience Interventional Suite introduces patients and staff to a unique interventional environment. Philips integrates architecture, design and enabling technologies (lighting, sound, projections, RFID) for an experience that is not only clinically outstanding, but emotionally supportive as well.

**Toward a patient-centric future**

Typically sterile and cold, most cath labs are less than patient friendly. They exemplify the purely functional aspect of cardiac care. For a forward thinking institution like SKMC, this is not consistent with their vision. When executives at SKMC had the opportunity to build a new adult cardiac cath lab, they turned to Philips to assist. Philips design leaders have re-visualized the interventional environment to promote physical and emotional comfort while enhancing workflow efficiency. The result is Philips Ambient Experience.
Dr. Scott Strong, acting CEO, recalls, “We were in the process of bringing a new cath lab online and so we had the shell there to work with and we thought as long as we are creating a state-of-the-art cath lab, we might as well make it a state-of-the-future cath lab by employing the Philips ambient technology.”

Philips leverages its expertise in lighting, electronics and medical systems to create an environment that can eliminate unnecessary physical and emotional barriers. Patient and staff are immersed in a relaxing atmosphere that fosters a sense of tranquility and comfort.

“We might as well make it a state-of-the-future cath lab by employing the Philips ambient technology.”

Philips listens

“We needed a new patient holding area and a new cath lab,” says Dr. Nazar Al Bustani, Director of Invasive Cardiology and Deputy Head of Adult Cardiology. “What I had in mind was optimal utilization of space and optimal patient flow between multiple areas including the patient holding area and control room, the existing cath lab and the new Ambient Experience cath lab.”

The new cath lab should remove any obstacles that might interfere with procedural flow. It should help anxious patients relax and busy staff perform effectively. And the new lab must be able to handle an increasing volume of complex and technically challenging procedures. Dr. Al Bustani expects an increase of 75% in the total number of procedures performed.

“Philips was very timely in the way they addressed our needs,” notes Dr. Strong. “They sat down with us and explained things that we weren’t even aware of – new concepts and new considerations. They explored our attitudes and were able to tailor the Ambient Experience product to suit us.” Dr. Al Bustani agrees, “They took the time to discuss our needs and our patient flow in a very professional way. Then, based on this input, the new room was designed.”

“They were able to tailor the Ambient Experience product to suit us.”

A harmony of technology

At the heart of the new Ambient Experience Interventional Suite is the Philips Allura Xper FD20 biplane X-ray system, a cardiovascular X-ray system that provides outstanding support for the full spectrum of cardiac and vascular interventions, while at the same time potentially reducing X-ray dose, contrast requirements and procedure length. Newly installed stent enhancement tools and three dimensional coronary artery imaging will assist Dr. Al Bustani and his team through even the most difficult procedures.
Yet, beyond imaging technology, the new suite presents a ‘human technology interface’ – an interactive environment that re-invents the concept of quality healthcare. Open, stress-free surroundings promote patient comfort and clinician satisfaction.

At SKMC, Philips has considered every aspect of the interventional experience – from preparation to procedure and post-procedure. A patient gets their first taste of Ambient Experience as they are brought into the patient holding area. Each of four private preparation areas is aglow in calming colored lighting. Hospital staff take this opportunity to describe to the patient the ambient ‘theme’ options available in the main suite and help them make a choice using a wireless touch screen. When the patient enters the imaging suite, the space is transformed.

“It’s like nothing they’ve ever encountered before,” suggests Dr. Strong. “The lighting, the sound, the projection, the relaxation, all come together to make a more comfortable environment, in a space not often thought of as delivering a pleasurable experience.”

"The lighting, sound and projection come together to make a more comfortable environment."

Dr. Al Bustani observes first hand what the combination of visual and audio stimuli can accomplish. “We typically see two patient reactions. For many, they just admire the ceiling - particularly the projections which help them stay calm and quiet, without even asking when we will be done with the procedure. The other reaction is that we see the patient being silent for a few minutes and then they simply drift off to sleep.”

**Something for everyone**
The Ambient Experience Interventional Suite is designed for the benefit of all involved. Positive distractions soothe the patient. The clean, clutter-free room enhances staff workflow and is more pleasant to work in. A ‘skylight’ over the table serves two functions – it provides thematic lighting for the patient and procedural lighting for the staff. “What’s nice about the skylight is that we have a lot of control over it,” says Dr. Al Bustani, “particularly if we want to light up a specific area of the patient – I just press on the tableside touchpad and it’s done.” The table surface is uniformly illuminated with virtually no monitor reflection, leading to enhanced visualization of fine vessel detail and reduced eye strain.
Another unique feature that has found acceptance in the Middle East is the privacy glass. This window changes from clear to opaque at the flip of a switch, separating imaging room from control room. Patients are assured an increased level of privacy during procedural preparation and staff can focus on other activities between procedures without impacting the patient.

“We use privacy glass to assure that nobody is looking at female patients except the female staff inside the room.”

“Here in the Gulf area,” explains Fatina Babilli, Cardiac Diagnostics Supervisor, “the culture is a bit stricter regarding women. So when we have a female patient we always want her to feel relaxed. When we prepare any patient we must expose them to some extent, so we use the privacy glass to assure that nobody is looking at our female patient except the female staff inside the room.” During the procedure the privacy glass automatically changes back to transparent, ensuring optimal communication with the staff in the control room.

The universal response from technicians, nurses and physicians at SKMC is very positive. They find the Ambient Experience Interventional Suite a more pleasant, enjoyable environment to work in. And when their patients are at ease it’s more natural to establish conversation during the course of the procedure, which leads to a better patient-staff relationship. In fact, many patients become so comfortable clinicians find they are using less sedation.

Getting the word out
Healthcare is a very competitive industry. Today’s patients are well informed and understand they have options. Philips Ambient Experience is a differentiator that can have a positive influence in the community. Acting CEO, Dr. Strong is aware SKMC has an exceptional marketing opportunity. “The patient experience,” he contends, “is really central to the vision of what we’re trying to achieve here at Sheikh Khalifa Medical City. Patients have their choice of where they can go and we need to provide a quality product, but in a way that meets and exceeds patient’s expectations. With Ambient Experience, we are better able to meet that goal.”

He continues, “The strongest advertising or marketing that we can hope for is word of mouth. If patients go back to their referring physicians and tell them about a wonderful experience, then we’ll see more referrals. My recommendation to anyone who is looking to bring a new cath lab online is to very carefully consider the ambient technology to provide a unique experience to their patients and staff.”

With its high tech and soft touch, Philips Ambient Experience is keeping institutions like Sheikh Khalifa Medical City at the forefront of patient-centric healthcare innovation.