

# Keio University Hospital, Tokyo, Japan

Ensuring the best diagnostic precision, while doubling productivity

“Barco’s medical display solutions have truly brought added value. They have helped us boost productivity, while reducing stress levels: we can work at least two times faster now.”

Dr. Kuribayashi, Professor at the Radiology Department, Keio University Hospital



Tokyo, the world’s largest metropolis, features many hospitals that provide world-class medical services. Located in central Tokyo, Keio University Hospital is one of the biggest and best-known general hospitals in whole Japan. Its roots go back to 1920, when it was spun off from the legendary Keio University.

The spirit of Yukichi Fukuzawa, founder of the University back in 1858, is still very much alive at Keio University Hospital: the hospital constantly strives for progress. It therefore installed a top-notch, new PACS system by GE Healthcare and no fewer than 118 Barco Coronis Fusion and MDRC clinical review displays to view the images. The doctors using the Barco equipment unanimously agree: if more systems would be needed, they’d definitely go for more Barco.

**BARCO**

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#### Customer:

Keio University Hospital, Tokyo, Japan  
Website: [www.hosp.keio.ac.jp/english/index\\_uc.htm](http://www.hosp.keio.ac.jp/english/index_uc.htm)

#### Challenges and objectives:

Top-quality products to support precise diagnosis in hospital and Preventive and Screening Medical center

#### Barco solution and services:

- 52 x Coronis Fusion 6MP DL
- 6 x Coronis 5MP
- 1 x Coronis3 MP
- 59 x MDRC-1119

#### Why Barco

- High-quality, reliable solutions
- MediCal QA Web for quality management



A leading center of Western-style medicine in Japan, Keio University Hospital draws on the talents of Japan's most distinguished and accomplished medical professionals, practitioners, and researchers. In 1987, the hospital was greatly expanded with a new 11-story wing housing ultra-modern facilities and equipment. 29 specialized clinics and 6 major examination clinics currently operate around the clock in this massive 1,044-bed general hospital. Keio University Hospital also features a fully-equipped laboratory, research and medical information divisions.

In line with the vision of its founder, innovation is key at Keio University Hospital. Everyone working at the institution adheres to the original concept of care based on three fundamentals: technique, science, and humanity. In an attempt to raise productivity at the radiology department, while improving the quality of its diagnoses, Keio University Hospital introduced its first PACS system as early as 2005. In 2011, its PACS partner GE Healthcare upgraded the GE Centricity® PACS. With the new system came the need for new medical display systems. "The dual-head medical display systems that had been used with the Centricity® GE RA1000, had reached their end of life: luminance was reduced and the display controller no longer performed optimally. What Keio University needed was a fully stress-free display solution," explained Dr. Sachio Kuribayashi, Professor at the Radiology Department.

#### 118 Barco medical display systems

"We carefully compared the bids of two different suppliers, who both proposed dual-head medical display systems," Dr. Sachio Kuribayashi continued. "Barco best met our requirements for high quality - i.e. high luminance and resolution -, as well as for quick image loading."

In 2011, GE Healthcare installed 41 Coronis Fusion 6MP DL, 1 Coronis 3MP and 4 Coronis 5MP diagnostic display systems. In addition, 46 MDRC-1119 displays were set up for RIS and reporting. One year later, Keio's Preventive and Screening Medical Center was equipped with 11 more Coronis Fusion 6MP DL displays, 2 Coronis 5MP monitors and 13 MDRC-1119 clinical review displays. GE Healthcare seamlessly integrated the Barco displays systems into the Centricity® RA1000 system.

#### Multi-modality imaging

Dr. Kuribayashi and his team praise the loading speed of the images, on all Barco displays, as well as the exceptional contrast, resolution and luminance. What impressed them the most, though, is the bezel-free display of the Coronis Fusion 6MP DL. The high-grade 6MP Coronis display system features a 30-inch color LCD that can be used as 2 seamless 3 MP heads or one wide-screen 6 MP display. In this way, radiologists have the freedom to organize their workspace just the way they want it.

"We read the most diverse images here, ranging from Computed Tomography, Computed Radiography, Magnetic Resonance and Nuclear Medicine through to Digital Radiography and Mammography modalities - both grayscale and color.

The high-grade Coronis 5MP and 6MP DL deliver the most accurate images, for all modalities. For digital mammography and gastro-intestinal imaging, these displays are really a must," Dr. Higuchi at the Radiology Department continued. "Barco's Coronis Fusion 6MP DL diagnostic displays enable every radiologist to read their images without changing workstations, no matter what diagnostic imaging modality they are using."

#### Automatic quality assurance

Another distinct asset, says Keio University, is Barco's MediCal QAWeb solution for quality assurance, which comes as standard with all Coronis diagnostic display systems. MediCal QAWeb tracks, maintains and logs viewing performance, automates QA tasks, initiates display system calibration and establishes an accurate DICOM look-up table calibration. Combined with Barco's patented I-Guard sensor, it ensures fully-automated image quality assurance with no need for the doctors/radiologists to intervene.

#### Work 2x faster

"Barco's medical display solutions have truly brought added value. They have helped us boost productivity, while reducing stress levels: we can work at least two times faster now. And without compromising the diagnoses in any way, as these are even more accurate than previously possible," Dr. Kuribayashi concluded. "If needed, we would gladly go for more Barco in the future."