Integrating Merge Eye Care PACS™ into Hospital Systems
Bascom Palmer Eye Institute | Miami, FL

At Bascom Palmer Eye Institute, physicians treat approximately 250,000 patients and perform more than 12,000 surgeries annually, conduct innovative biomedical research and present progressive, industry-leading academic programs to ophthalmologists and other physicians in the community and worldwide.

Exponentially Expanding Images
Bascom Palmer Eye Institute became interested in digital photography when the first cameras came on the market in the early 1990s. According to Rick Stratton, Bascom Palmer’s Senior Systems Analyst, who joined the Institute in 1986, Bascom Palmer has always had the most current photography and diagnostic equipment. “As a teaching hospital, it’s important that our physicians have access to a wide variety of the very latest technology and equipment,” noted Stratton. “That makes us different from many eye care practices that purchase equipment from one or two vendors and while it’d be much easier to manage modalities from one or two vendors, it’s important that we give our physicians a variety of options to use as needed for patient care.”

By the mid 2000s, with the growing number of cameras, thousands of images, four practice locations and multiple services provided for different subspecialties (retina, glaucoma, cornea, pediatrics and neuro-ophthalmology), the need to develop a new departmental structure and organization became obvious. “Doctors were spending precious time looking through different systems to find reports and images, Stratton recalled. “Or worse, they couldn’t find needed information at all.” So, Stratton and others began looking at options to centralize image management and decided to leverage Merge Eye Care PACS (then OIS Symphony Web).

Stratton had been using Merge Eye Care PACS since 2002 and was confident with the solution and their ability to use it as a central image repository. Over the next few years, as hardware was phased out, Bascom Palmer Eye Institute created a centralized image repository with Merge Eye Care PACS housing images from multiple modalities.

Moving from a Centralized to a Virtualized Environment
The next phase in Bascom Palmer Eye Institute’s image management infrastructure evolution was to move to a virtual server environment to make better use of resources. In traditional server environments, an application runs on a dedicated server, but because the application isn’t running all the time, the server it runs on is frequently idle.

CUSTOMER PROFILE
• Serves as the Department of Ophthalmology for the University of Miami Miller School of Medicine in Miami, Florida
• Operates centers in Miami, Naples, Plantation and Palm Beach Gardens, Florida
• For the past nine years, ranked the #1 eye hospital in the country in U.S. News & World Report’s Best Hospitals issue
• For more information visit bascompalmer.org

CUSTOMER CHALLENGES
• Centralizing management of images captured across many different modalities
• Providing access to images captured at multiple centers and offices
• Deploying and maintaining systems that are highly scalable

SUCCESS WITH MERGE
• Improved workflow for physicians who can access all patient images from a single source
• Access images from anywhere via the Internet without impacting network performance
• Ability to leverage a virtual server environment
or under-utilized. In a virtualized environment, a physical server is divided into multiple “virtual servers” and applications running on those virtual servers can all share resources. Bascom Palmer Eye Institute was one of the first clients to utilize Merge Eye Care PACS in this way and worked closely with Merge (then OIS) through the deployment in the Center and in satellite offices.

“While it might sound complicated, running Merge Eye Care PACS in a virtual environment has greatly simplified our IT requirements by significantly reducing the number of servers we need to deploy and manage,” said Stratton. “And it’s especially useful in the satellite offices where we have neither the IT resources nor the physical space to house servers for every application that we’re running in those locations.”

Continued Integration of Merge Eye Care PACS

In addition to IT benefits, clinicians have also benefited from integrating Merge’s solution into their daily workflow. “The Merge Eye Care PACS interface is very much geared to the clinician,” said Stratton. “Doctors are presented with ophthalmology-specific tools that make it easy to view, diagnose and manage their patient’s images.” Being able to access images from any center or satellite office is extremely useful. Some of the satellite locations are not that far apart geographically, so it’s not uncommon for patients to visit different offices for their first appointment and follow-up visits. Regardless of where they are, physicians can access any of a patient’s images at any time, regardless of which location the images were originally captured.

Accessing images with Merge Eye Care PACS, however, doesn’t mean endlessly waiting for large images to come across the network or destructively compressing images for faster downloads. Merge Eye Care PACS delivers data efficiently. When an image is requested, it distributes enough data to fill the viewer’s screen so they quickly see a high-quality image. If the viewer wants to pan around the image, Merge Eye Care PACS continues to deliver just that data they need. “Our three satellite offices have different network bandwidth and now they all get the same great performance accessing images,” said Stratton. “When you first login, the system measures your bandwidth and delivers data to you in the most efficient way based on your unique situation.”

Integrating with other hospital systems is also important for Bascom Palmer Eye Institute. “The days of ophthalmology doing our own imaging and keeping independent medical records are far behind us,” noted Stratton, who has begun to prepare for integration with the hospital’s Epic EMR system by instituting a HL7 query/respond interface to the Epic master database. The benefit is that when a patient arrives at Bascom Palmer Eye Institute, staff can sync patient data with data from the hospital EMR record, reducing data re-entry and ensuring that all patient information is kept in a single record. “Physicians appreciate being seamlessly handed off from one system to another and not have to reenter any data,” explained Stratton.
About Merge

Merge is a leading provider of clinical systems and innovations that seek to transform healthcare. Merge’s enterprise and cloud-based solutions for image intensive specialties provide access to any image, anywhere, any time. Merge also provides health stations, clinical trials software and other health data and analytics solutions that engage consumers in their personal health. With solutions that are used by providers and consumers and include more than 20 years of innovation, Merge is helping to reduce costs and improve the quality of healthcare worldwide.