Massachusetts General Hospital (MGH) recently opened a new outpatient surgical suite in the Boston suburb of Danvers and will open a new 28-OR suite on its main Boston campus in 2011. Both suites employ video integration. Here’s a look at the projects.

‘Building for the Third Century’

A new 530,000 sq ft inpatient building is slated to open in August 2011. The name expresses the fact that MGH, founded in 1811, is entering its third century.

Surgical suite: 28 ORs, including 4 interventional rooms and intraoperative MRI and CT ORs.

Specialties: General surgery, trauma, orthopedics, neurosurgery, vascular surgery.

www.massgeneral.org/about/newsarticle.aspx?id=2329

Video integration features

Almost any image or information an OR team would want can be routed through the video integration system. A single integration vendor was used for all of the ORs. Examples of integrated features are:

• images from laparoscopes and related equipment
• surgical microscopes, with ability for viewing by pathologists
• native picture archiving and communication systems (PACS) imaging
• physiological monitoring equipment
• PCs with nursing documentation and the electronic medical record
• HD camera mounted in surgical lights to view surgical field
• HD room cameras linked to control desk for workflow management
• OR dashboard displaying information on patient demographics, surgical milestones, monitoring, etc. This can include the time-out for
surgical site verification so all team members can see the time-out steps.

- telephone equipment with ceiling-mounted speaker and microphone for hands-free phone calls
- audio equipment for MP3 files and iPods
- advanced recording: ability to record 4 (6 in selected ORs) separate, simultaneous HD signals for education purposes
- teleconferencing from ORs to remote locations such as conference rooms
- server-based archiving of images and information.

**Nursing work flow**

Integration features useful to nursing staff include:

- **Easier device connections.** Standardized connectors and device auto-identification will make it easier to add new devices and route images.

- **Standardized HD touch screens.** The standardized user interface on the touch screen in all of the ORs located at the circulating nurse location as well as in the sterile field, including touch screens for the interventional ORs and intraoperative MRI and CT ORs.

- **Preset capabilities.** A surgeon’s room settings and display preferences can be set and recalled for future cases in any of the suite’s ORs.

- **Easier-to-access images.** Radiology images will be easier to pull up and display where needed.

- **Improved audio.** Phone messages will be easier to convey. Music will be easier to play with better sound quality.

- **Display technology.** Two 8K resolution displays in each of the interventional suites will have quad-view of HD signals and ease of assigning/resizing images and video sources.

**Outpatient surgical facility**

The outpatient facility, a partnership between MGH and North Shore Medical Center, with 120,000 sq ft, opened in 2009.
Surgical suite: 8 ORs
4 dedicated pediatric ORs
Related areas: 32 preoperative and recovery bays, 8 pediatric recovery rooms, presurgical testing area.
www.massgeneralnorthshore.org/web/services/mgns_surgery
Specialties: General surgery, urology, orthopedics, surgical oncology, ENT, endoscopy, oromaxillofacial and plastic surgery.

Video integration features
All devices within the ORs are routed through video integration, except computers used for documentation. That includes imaging from laparoscopes, radiology, and some portable equipment.

Video screens display the OR dashboard and surgery in progress.