HEALTHCARE PURCHASING NEWS
Industry leader for over 30 years
People, Places, Processes & Products that Influence the Supply Chain

HDTV in hospitals: A clearer picture of opportunity

By Steve Sholtis- January 26,2009

Almost all healthcare facility managers are asking themselves and their vendors the same question: Is upgrading to high-definition television (HDTV) sets really necessary?

The answer is really about inevitability. Because of the correlation between household-like amenities in the patient room and patient satisfaction, more and more hospitals want to make the in-hospital experience as home-like for patients as possible. Now is the right time for hospitals to become educated about their options so they can make intelligent, cost-effective decisions in preparing to migrate their facilities to HDTV. Studies by Alex Moskalyuk of ZDNet.com indicate that out of 106 million total U.S. households, more than 28 million (25 percent) may currently own HDTV displays, and that number could double by the end of the 2008 holiday season. More than 95 percent of U.S. off-air television stations are already broadcasting a high-definition signal.

The high-definition trend is seen on both the patient and clinician side of the hospital. Increasingly, hospitals around the world are finding clinical applications for HD video- for example, as an aid for endoscopic surgical procedures and PACS.

Facilities personnel should exercise forethought in their choices in technology for hospitals to stay ahead of the curve and provide the optimal patient experience.

Technology & HDTV

The transition to HDTV brings several opportunities to enhance both patient and family comfort and education. Emerging technological developments, government regulations, and demographic changes have positioned these enhancements as considerable benefits from a facility profitability standpoint.

While the wide-screen, crystal-clear HDTV picture is a benefit from an amenities standpoint, it certainly is not the only technological detail that should be considered in your television purchase. "Healthcare-grade HDTVs offer a range of non-technical benefits to a facility as well, from space savings to better aesthetics and safety designs, such as curved corner chassis and front-mounted speakers," explained Mike Brooks, senior director of product strategy and technology at Philips.

"Perhaps the most significant benefit of the latest flat-panel HDTVs is energy savings, which can total more than 60 percent versus other display options. This can save a 100-bed hospital more than $15,000 over the lifetime of the sets," Brooks said.

The key to successfully navigating your way through all of the options is to assess the wants and needs of your facility and then engage a trusted technology partner. As technology in healthcare televisions is changing rapidly, utilizing a trusted partner can alleviate future television overhauls.

"Questions from facilities now center on the capability of that television within the hospital setting," Brooks said. For example, is the television Pro:Idiom compatible? Pro:Idiom is a technology used in hospitals and hotels to protect against HDTV content piracy. It prevents copying of the signal by ensuring that if the cable is connected to anything other than the TV in the room, the signal is scrambled. This protection is mandated by Hollywood studios. Televisions that are not Pro:Idiom enabled will be unable to display the full range of HD content available today.

Emerging trends in the healthcare setting have raised pertinent questions in the purchasing process of HD televisions. Interactive patient education systems (video on-demand and/or Internet-enabled units) are becoming integral to the patient and staff satisfaction standards in hospitals. With rising regulations such as HCAHPS, the Joint Commission, and AAMI, on-demand education systems are quickly becoming valuable mainstay technologies that increase the efficiency of hospital personnel and provide valuable patient satisfaction metrics. In most cases, the televisions serve as the visual delivery method for complying with regulatory standards. The question when purchasing HD televisions then becomes, do my televisions support these technologies?

The other technology trend related to HDTV involves the increasing number of inputs and programming sources used by patients during their stay. The industry calls this trend "device shifting" – the term for viewing TV programming on PCs, cell phones and other devices, not just immobile TV sets. With the regimented schedule of a hospital stay and viewer loyalty to programming, this trend will only grow. Most television shows are now broadcast in HD via the internet to support the general public's busy lifestyles.

The drawback to "device shifting" has always been the delivery method. In many cases, iPod screens, cell phones, computer monitors, and portable DVD players just do not produce the same viewer satisfaction that a television produces. Most of these devices do output to a television and have different offerings for resolution, allowing the television to serve as the visual delivery mechanism. A trusted technology partner can make sure your new television purchases serve both the near term and future needs of your facility, for example, by offering a connectivity panel that makes it simple for the guest to plug any device into the TV.

From home theatre to operating theatre

Audio-visual technology also holds the key to excellence in the operating room. HD programming is more than six times clearer than traditional analog and digital programming. Utilizing HDTV in surgery allows the clinician to see tiny details that are not visible via traditional televisions or the naked eye.

Allowing healthcare professionals to view still and moving pictures with the increased clarity and accurate image reproduction of HD helps surgeons carry out medical procedures with an increased precision.

The technology also allows for the recording of surgical procedures for detailed records of operations, which can be used for educational and legal purposes.

The good news

HD display prices have dropped considerably over the past few years, making it very attractive to incorporate this technology into a large scale deployment. Before you invest in HD televisions for your patient rooms, be cognizant of the content format that your facility receives. A sharp, high-definition picture is achieved by your facility receiving HD-formatted content. Your technology partner will be advantageous in helping the facility focus on the opportunities associated with compatibility, technology, and future broadcast standards.

Here are the options for choosing the right solution for your facility:

Consumer-grade televisions: High-definition sets come in various grades and models, each with their own set of benefits to a healthcare setting. Consumer high-definition TV sets are the least expensive of the three varieties, but do pose some technical challenges to overcome. Consumer grade sets tend to have a shorter lifespan than commercial and healthcare grade sets. They also are manufactured without clone capabilities making large scale deployments very time consuming.

Commercial-grade televisions: Commercial-grade televisions provide a good mix of consumer features with healthcare features. They have warranty options and SLAs that mirror healthcare grade sets, but do not have the aesthetic elements designed specifically for healthcare sets. Compared to the consumer sets, commercial grade sets are manufactured with a different end user in mind. For example, on commercial grade sets, the speakers are optional and standard definition tuners are not present. This allows for a narrow profile, and the availability to put "more TV" in an existing space. A typical 42" consumer model has about the same dimensions as a 50" commercial grade LCD. Commercial grade televisions also have enhanced resolution capabilities such as resolution, brightness, contrast ratio, and refresh rate.

Healthcare-grade televisions: "Manufacturers design healthcare grade HDTV sets specifically for use in the hospital setting," said Brooks. "These sets meet the stricter electrical standards in hospitals, and are sturdier than consumer models. They also include numerous features designed to ease installation and ongoing patient satisfaction, such as volume-limit controls, cloning technology, different inputs for pillow speaker control, and front panel locking control functionality that ensures the hospital's most efficient and effective implementation and use. Perhaps most importantly, these sets have a warranty that covers hospital use, unlike consumer models. Ours even offer a 72 hour guaranteed advanced exchange, so if something does go wrong your patients are minimally impacted." Brooks also recommends that hospitals should look for a set with multiple input devices such as HDMI (high-definition multimedia interface) to help ensure long-term value.

Enlist a trusted technology partner

Established technology providers with full service solutions can deliver all of the necessary hardware that your hospital will need through the analog to digital conversion. The largest benefit from a technology partner comes from meshing the hospital's needs with the growing technology trends. Upgrading a hospital to digital television represents a considerable investment. A quality partner will have the relationships and expertise to deliver the maximum ROI (return on investment). A consultation will be more than worthwhile in helping your facility achieve optimal outcomes in the hospital's education and communications endeavors and therefore maximize your patient's enjoyment of their hospital stay.

Steve Sholtis, vice president of communications systems at TeleHealth Services, has spent over 25 years in the healthcare television and communications industry, working jointly with TV manufacturers to incorporate feature rich healthcare enhancements into their product lines.

Link: http://www.hpnonline.com/inside/2009-02/0902-HDTV.html