



Healthcare Television Trends

Healthcare televisions offer patient-centric and consumer-driven solutions

Hospital-grade televisions are built to meet the needs of a healthcare environment.

By Dan Nathan

Clinical experts agree that a patient's hospital room plays a role in the patient's healing process and overall satisfaction. An often-overlooked technology in the equation is the healthcare television. With the reimbursement model for hospitals changing so quickly, hospitals want to make the inpatient experience more homelike. To meet this goal, hospitals must address the technology that garners large quantities of patient attention both in the hospital and at home. What other technology can efficiently address patient safety, education, entertainment and information?

Hospital televisions aid hospitals in providing a more effective patient-centric experience. Medicare is beginning to tie patient-satisfaction scores to hospital reimbursement, and hospitals across the country are under pressure from administrative executives to raise their quality scores, improve clinical outcomes, increase safety and reduce readmissions. Ensuring the optimal patient experience is an important goal for every health system, but it is difficult to measure satisfaction and gauge the responsiveness of a health system's nonclinical outcomes. These challenges task all employees to meet rigorous

service, quality and safety requirements while reducing costs.

Healthcare Televisions and Patient Safety

In this age of information, patients can choose their providers. Through Internet and printed resources, patients can learn about a hospital's clinical statistics, service offerings and even patient amenities and use that information to compare and choose which hospital they prefer to use for their care. Facility management typically plays an underlying role in how these choices are made, due to increased consumerism and the surge to provide upgraded amenities to enhance the patient experience. As a result, their efforts are now pushed to the forefront.

Compared to consumer sets, healthcare TVs are built specifically for the healthcare environment. These TVs are built with features that make them more suitable and accommodating to hospital usage. For this reason, thermal characteristics enable healthcare displays to withstand the longer operating hours in a hospital. By complying with more stringent Underwriters Laboratories (UL) standards, healthcare models are sturdier and safer than consumer models as well.

The enclosures used in hospital-grade products must withstand twice the force from an impact than is acceptable with other displays, making them more durable. On the following page is a graph that compares the important safety features of a healthcare set and the set consumers have at home.

A New Way of Learning

Over the past 20 years, technology has drastically changed the way we communicate and learn. Traditional educational media such as handouts and brochures are taking a backseat to more interactive tools such as on-demand video education through the bedside television. This learning evolution represents a technological paradigm shift to which hospitals across the country are adapting.

Primary-care providers serve their patients not only through diagnosis and treatment, but through counseling and the coordination of care beyond facility walls. Patient education is a necessary and vital component of these treatment efforts.

Interactive patient-engagement systems are a powerful tool that care providers can implement to engage patients and their families in their customized patient-care plans. Seen as a patient-education tool, the television in hos-

TOPIC	CONSUMER	HOSPITAL-GRADE	COMMENTS
Maximum Operational Temperature Rise	140° F UL6500.7.1.5	77° F UL6500.H.7.1.5	Plastic enclosures that can be touched are required to operate at a much reduced temperature in the hospital environment.
Maximum AC Current Leakage	500 microamperes UL6500.9.1.1	100 microamperes UL6500.H.9.1.1	AC-powered products that can be touched are limited to a much lower leakage (shock) current.
Spilled Liquids and Foreign Objects	4mm enclosure openings allowed on any surface UL6500.9.1.8	No enclosure openings allowed on nonvertical surfaces UL6500.H.9.1.8	Spilled liquids and foreign objects can more easily enter a consumer product, increasing the risk of shock or fire.
Signaling and Nurse Call Controls	Not supported	Supported, must use a UL1069-listed product UL6500.H.1.1.1	Signaling and nurse call controls used with audio and video products must meet additional reliability and safety criteria. Consumer-grade products have no such requirement.
Enclosure Impact Withstand	3.5 joules UL6500.12.1.3	7 joules UL6500.H.12.1.3	The enclosure used in the hospital-grade product is required to withstand twice the force from an impact. The hospital product would prove more durable and less easy to damage.
Control Transformer Construction and Grounding	Transformer meets consumer construction and safety requirements UL6500.14.3.4	Transformer construction and performance must meet stringent UL2601-1 hospital safety requirements UL6500.H.14.3.4	The hospital-grade product's transformer that powers connections for external accessories must meet stringent hospital requirements.
Power Switch	Single-pole power line switch allowed UL6500.14.6.1.1	All-pole power switch required UL6500.H.14.6.1.1	The hospital-grade product's power switch opens both conductors of the power line, completely disconnecting all power. If a consumer product with a single-pole power switch were connected to a wall outlet with bad wiring, power would not be completely "switched off," leaving a possible shock or fire hazard.
Power Cord With Grounding Wire	Not required UL6500.15.1.1	Third-wire grounding conductor required UL6500.H.15.1.1	The hospital-grade product uses a dedicated grounding conductor to safely carry away any fault currents. The consumer product does not offer a safety ground.
Hospital-Grade AC Plug	Not required UL6500.15.1.1	Required UL6500.H.15.1.1	The hospital-grade plug offers improved mechanical properties that provide stronger connection, visual polarity identification and a grounding conductor pin. The consumer product plug lacks these stricter requirements.

pital rooms puts patients at the center of their care, allowing them to receive patient-specific educational sessions and for the provider to gauge comprehension levels. Additionally, these systems stimulate the financial health of a facility by providing additional streams of revenue, coordination of care with clinical staff, and increased reimbursements based on driving down readmissions.

The Show Must Go On, Even in the Hospital

As hospitals across the country look for ways to differentiate themselves from their competitors, HD television as an amenity may be one of the investments that will help accomplish that goal. Healthcare administrators realize that patients and visitors expect

to have access to HD content when they are in the hospital and are making this longer-term investment.

Sixty-nine percent of U.S. households have at least one HD television set, according to new research from Leichtman Research Group, and more and more hospitals are recognizing the trend and making the shift to HD. High-definition hospital television prices have dropped considerably over the past few years, making it much more attractive to incorporate into a large-scale deployment. These sets are also able to transmit high-definition graphics in the form of signage applications, providing not only the best in entertainment, but also the best in information.

Ultimately, new opportunities in market-oriented health policy and practice lies in

"managed consumerism," a blend of the patient-centric focus of consumer-driven healthcare and the provider-centric focus of managed competition. Hospital televisions provide that rare technology that encompasses a solution to the patient satisfaction, education and quality of care conundrum facing today's healthcare facilities. Proper deployment and utilization of this simple yet highly effective technology can make the difference not only in patient care, but also in the perception of the hospital. FC

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