Digital Media in Healthcare:

Enhance Patient Experience and Lower Costs
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The Cisco Digital Media System is a comprehensive suite of applications for digital signage, desktop video, and interactive TV over the IP network. You can use it to centrally manage the delivery of education and training to patients and clinicians. Benefits may include more efficient resource allocation, higher patient satisfaction, and greater convenience for clinicians and staff.

What You Will Learn
Healthcare organizations face the competing demands of delivering high-quality care and reducing labor costs. You can address both with one investment in the Cisco® Digital Media System:

- Lower labor costs by delivering information with digital media
- Differentiate the patient experience by giving patients options for watching pre- and post-procedure videos, providing entertainment, and educating patients about healthy lifestyles
- Enhance direct care by educating patients using digital media
- Provide video training on healthcare guidelines
- Improve emergency communications by quickly disseminating emergency alerts and codes in all or select locations

Challenge: Increase Competitiveness While Containing Costs
To thrive in today’s competitive healthcare environment, you need to improve the patient experience and better allocate scarce staff resources to deliver care.

The patient experience is more important than ever. Patients increasingly consider the care experience when they select hospitals and physicians. They want easy access to complete information about their procedures. And patient ratings of hospitals and physicians are widely available online, an extra incentive for you to deliver a positive experience that patients will remember.

Today most hospitals use TVs on mobile carts to show videos on pre-operative education, discharge instructions, and treatment education. Finding a TV cart takes time while patients wait. Nurses spend more time documenting that patients have received discharge instructions. Maintaining a library of DVDs on different topics and in different languages is a growing part of the staff workload. A better solution could reduce labor costs and increase the efficiency of patient care.

Optimize the Patient Experience and Clinical Workflows
The Cisco Digital Media System is a comprehensive suite of applications for digital signage, desktop video, and interactive TV over the IP network. You can use it to centrally manage the delivery of education and training to patients and clinicians. Benefits may include more efficient resource allocation, higher patient satisfaction, and greater convenience for clinicians and staff.

Inform and Empower Patients
Ready access to information about procedures helps increase patient satisfaction. With the Cisco Digital Media System, patients can watch instructional videos over the network on Cisco Enterprise TV in their rooms or a waiting room, in a variety of languages. This can save the costs of personal translators or dedicated instructors. Patients can watch at home, using desktop video, to prepare questions for their physicians. The option to watch multiple times benefits patients who are nervous or physically uncomfortable during the first viewing. And the Cisco Digital Media System logs all sessions, automatically documenting when patients receive discharge instructions.
Improve Hospital Communications
Using digital signage and Cisco Enterprise TV in lobbies, waiting areas, cafeterias, staff lounges, and nursing stations can save labor costs and enhance the patient experience:

- **Disseminate emergency information:** Display exit instructions on digital signage. Distribute alerts about infant abductions, asset movement violations, or security breaches on digital signage in staff areas. The Cisco Digital Media System can scroll alerts, notifications, and codes across the bottom of the screen while a video continues to play.
- **Provide directions to rooms and buildings:** Use wayfinding applications available from Cisco partners.
- **Advertise hospital information:** Publicize hours and services, blood drives, laboratory directions, and pharmacy location and hours.
- **Facilitate check-in and make the wait seem shorter:** Display check-in instructions to speed the registration and admissions process. Show helpful information on patient wait times, queue length, and status. Provide video education about nutrition, exercise, diabetes prevention, and more.

Increase Staff Performance and Productivity
Clinicians and caregivers need ongoing training on new equipment and procedures as well as regulations and best practices. In many hospitals, staff can only watch training videos in certain places and at specified times. This lack of flexibility interferes with direct patient care and also contributes to caregiver fatigue. A nurse who has just finished a hard shift might prefer to watch a mandatory training video at a more convenient time.

With the Cisco Digital Media System, clinicians and caregivers can take interactive, multimedia training at their convenience. Use it to deliver live or prerecorded training on topics such as:

- New equipment, ranging from IV infusion pumps and stents to adjustable beds and stretchers
- Evolving guidelines for aseptic techniques and other topics
- Compliance with mandates that can result in fines if not implemented, such as not leaving obstacles in the corridors

Staff can watch training videos on Cisco Enterprise TV in common areas or from a home or office PC using desktop video. The Cisco Digital Media System management software creates a log showing who has taken training so that your hospital can demonstrate compliance.

Improve the Work Environment and Patient Experience
After you invest in the Cisco Digital Media System for training and patient education, you can also use it in other ways to improve the work environment or patient experience:

- **Display moving art or nature scenes in treatment waiting areas to create a soothing environment**
- **Display operating room status based on information from operating room applications**
- **Display locations of mobile equipment like wheelchairs and IV pumps, saving staff the time and effort of searching**

Solution Components
The Cisco Digital Media System has what you need to create, manage, deliver, and display digital content to digital signage, desktop video, or Cisco Enterprise TV:

- **Create:** Digital Media Encoders convert audio and video sources to a digital format that you can transmit over the hospital network for desktop video.
- **Manage:** Cisco Digital Media Manager makes it easy to schedule content, set up live webcasts, import videos, and organize and publish the content for digital signage, Enterprise TV, and desktop video. Different departments can use the software to control their own content, including who can access it and scheduling.
- **Deliver:** Cisco Digital Media Players handle digital media content display and playback across the high-definition displays used for digital signage and Enterprise TV.
- **Display:** Cisco LCD displays provide a high-definition viewing experience and include built-in speakers.

A single, intuitive interface, the Cisco Digital Media Manager, is used to manage and design digital content, control user access, and manage system components, as shown in Table 1.

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Table 1. One Interface to Manage, Design, and Distribute Content
You can deliver practically any media file to almost any end device without worrying about the format, using the Cisco Media Experience Engine (MXE) 3000. It extends the value of Cisco Digital Media System by enabling trainers or administrators to create content once, customize it as needed, and distribute it in the right format to play on digital signs, the Cisco Video Portal, and mobile devices. The Cisco MXE 3000 takes in content from a wide range of video sources, including commercial video-editing software, and then transcodes it to most formats, including QuickTime, Windows Media, and MPEG-4. Easy-to-use editing and production capabilities let you customize content with hospital logo overlays, transitions, file clipping, and color and video quality enhancements to create a broadcast-quality video experience.

Why Cisco?
Cisco combines long experience working with healthcare organizations with leadership in video content delivery. The Cisco Digital Media System meets your needs in the following ways:

- **Low total cost of ownership**: Using a single system to manage and publish digital assets for digital signage, desktop video, and Enterprise TV reduces capital and operational costs compared to purchasing separate systems.

- **Video expertise**: More than 600 organizations worldwide use the Cisco Digital Media System, and thousands of customers use Cisco IPTV solutions.

- **Corporate strength and stability**: Cisco is an established company that you can count on to support your solution as needs change.

- **Comprehensive services**: Cisco and our certified partners provide comprehensive service offerings to help design, deploy, and operate the solution as well as consultation on your content strategy. We also offer the Cisco Academy of Digital Signage, a global qualification program that teaches media professionals to create and optimize content for digital signage.

**Conclusion**
Today’s hospitals need innovative approaches to deliver an excellent care experience without increasing human resource costs. A single investment in the Cisco Digital Media System helps your organization by:

- Empowering patients to receive instruction at flexible locations and times
- Giving clinicians and caregivers the flexibility to take training and continuing medical education at their convenience
- Saving staff the time once spent finding and setting up mobile TV carts for patient education, walking to designated training areas, and documenting that patients have received discharge instructions
- Improving hospital communications, from emergency alerts to advertising

**For More Information**
To read more about the Cisco Digital Media System, visit: [www.cisco.com/go/dms](http://www.cisco.com/go/dms)
To read more about Cisco Healthcare solutions, visit: [www.cisco.com/go/healthcare](http://www.cisco.com/go/healthcare)
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