

Cisco Patient Connect Solution: Inpatient Room Application

Personalize the patient experience throughout the healthcare journey. Connect. Inform. Educate. Engage.

The patient experience has always been a top priority for healthcare providers. But in today's digital, consumer-driven world, patients are savvier and better connected than ever. They have new tools at their disposal—health information sites, provider ratings, social media to share their experiences. They now use those ratings and recommendations to select healthcare providers the same way they shop for other products and services. And with reimbursement rates tied to Hospital Consumer Assessment of Healthcare Providers (HCAHPS) survey scores, patients' perceptions of their experience will have a direct impact on your bottom line.

What are you doing to deliver the personalized care your patients demand, and stand out from other providers? How are you empowering caregivers to improve the timeliness, safety, efficiency, and quality of care? And how will you deliver more personalized attention to the growing numbers of patients entering the healthcare system while keeping costs under control?

The Cisco Patient Connect Inpatient Room Application gives you the platform to improve and personalize patient experiences at the point of care. Patients can use their in-room TVs and personal devices to stay securely connected with caregivers, loved ones, and hospital services. And they can access information, educational content, and entertainment tailored just for them.

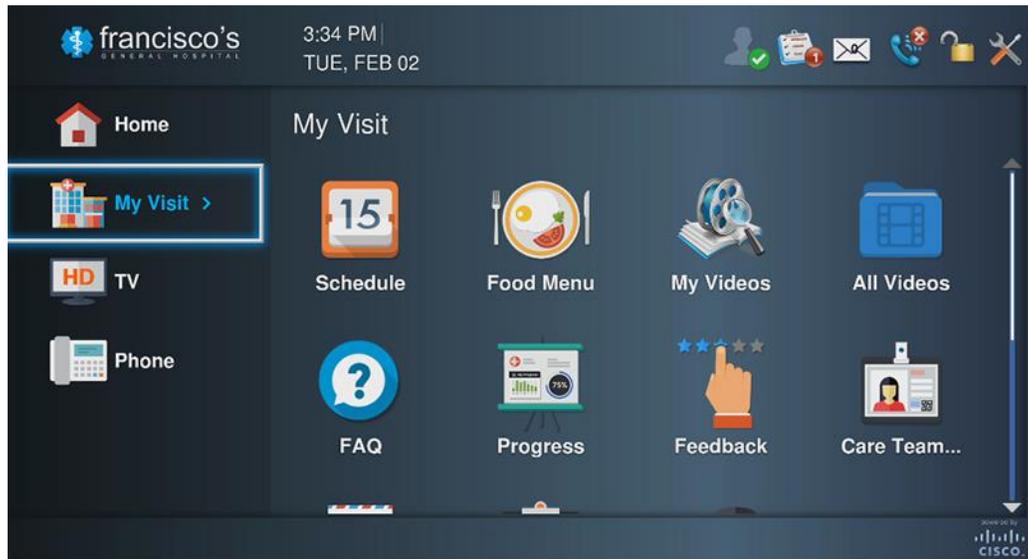
At the same time, Cisco Patient Connect streamlines clinical tasks. It automates delivery of content, information, and collaboration capabilities across the care continuum. So caregivers can work more efficiently and cost-effectively, and focus more of their time on direct patient interaction.

With Cisco Patient Connect, you can:

- **Improve patient satisfaction by delivering a state-of-the-art interactive experience:** Use video communications and screen-sharing across patient-room TVs and patients' and caregivers' personal devices. Connect patients, care teams, hospital services, and friends and family everywhere. HDTV, web access, and movies on-demand keep everyone entertained.
- **Engage patients at all stages of the in-patient stay:** Provide personalized content and services for admissions, progress tracking, education, and discharge instructions. It's all delivered automatically—without needing extra hospital staff.
- **Improve care quality:** Automate content delivery, patient education, and clinical workflows so that the right information gets to the right place, at the right time.
- **Protect and extend your investments:** Do all of this with an open, integrated architecture that builds on your existing investments in Cisco's industry-leading IP networking, video collaboration, wireless, and security solutions. So you can easily deploy and manage a secure, consistent experience everywhere.

Figure 1 shows the main home screen for a patient that has been admitted. It integrates relevant information that will assist the patient during their stay. Common tasks and options are combined into the easy-to-navigate page, allowing the patient to always have access to current information.

Figure 1. Patient View Home Screen



Features and Benefits

Table 1 discusses key features and benefits of Cisco Patient Connect. It describes how the solution uses patient preferences, location, presence, environmental, and hospital system information to deliver a better patient experience and personalized care.

Table 1. Highlighted Features and Benefits

| Feature | Benefit |
|---|---|
| Personalized patient services and information | Provides a superior patient experience by delivering relevant educational content, facility information, instructional medical information, and more in the right place, at the right time |
| Dynamic video calling and collaboration | Enriches patient and staff interactions by bringing video collaboration, such as translation services, concierge services, and remote consultation, to the bedside |
| Mobile device integration | Puts relevant information at patients' and caregivers fingertips, with the ability to securely view and share applications and services from personal devices anywhere in the hospital |
| Experiences tailored to each patient, department, and location | Enables customized displays of patient and staff information, speed dial lists, real-time patient status, and more |
| Nutrition and food ordering | Gives patients more control of their meal choices with the ability to view various options and personalized order meals from their bedside based on policy-based meal restrictions based on information derived from electronic health records (EHRs) and hospital nutrition systems |
| Patient surveys | Provides the capability to the provider to present customized patient surveys based on a set schedule or on an ad-hoc basis |
| Educational videos | Improves patient satisfaction and care outcomes by delivering high-quality video entertainment and education content tailored to patients' status, condition, and location based on information derived from electronic medical record (EHR) diagnostic codes or as determined by the care provider |
| Relaxation and entertainment | Increases patient comfort by delivering relaxation videos, music, and even premium TV shows and movies from a converged IP platform |
| Customized clinical workflows | Delivers personalized patient schedules, tasks, goals, progress notes, and admit-discharge workflows automatically to the bedside TV or touchscreen |
| Privacy protection | Keeps patients' information private when guests and visitors are in the room by letting patients set personal passwords |

| Feature | Benefit |
|--|--|
| Simplified management and integration through IP technologies | Lowers costs with a platform that can be integrated with existing Cisco video collaboration, wireless LAN location services, and other technologies, and builds on existing investments and skill sets |

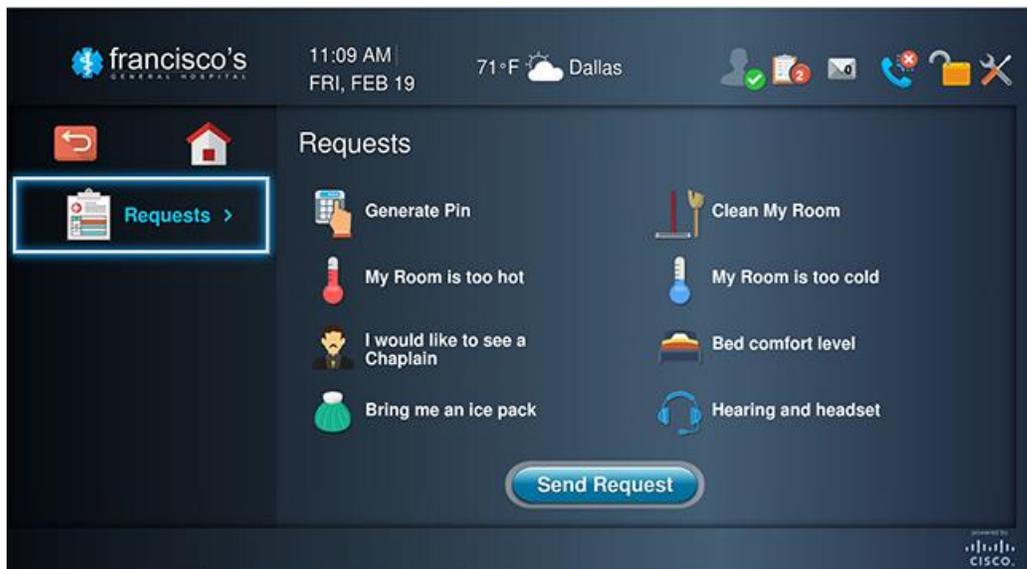
Figure 2 shows the video collaboration screen. Cisco Patient Connect makes it easy for patients to stay in touch with friends and family, as well as reach members of their care team. Patients can see their entire care team by name and role, and use speed dial lists customized by department, room type, and/or location.

Figure 2. Video Collaboration Connects The Patient With Friends, Family and Their Care Team



Figure 3 shows a portion of the requests page. Cisco Patient Connect lets the care team create common pre-defined messages. Pre-defined messages reduce confusion and misunderstanding. Patients can quickly send any of the pre-defined messages with only a few clicks. Creating custom pre-defined messages to suit the hospital-specific work flows and other unique characteristics of the hospital decrease work load and improve efficiency.

Figure 3. Create Pre-defined, Frequently Used Patient Requests



Transform the Patient Room Experience

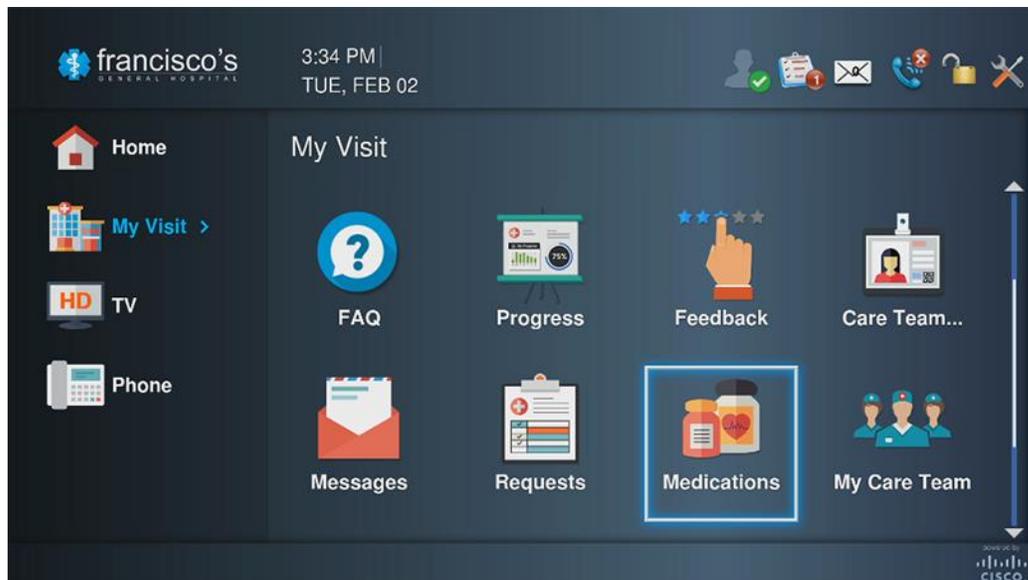
The Cisco Patient Connect inpatient room application delivers personalized content, information, and services through the patient room television monitor (such as a footwall TV or swing-arm monitor). Through these services, patients can access high-quality entertainment and customized information and education about their condition and treatment, and access services, such as video translation or concierge services.

Cisco Patient Connect in-room capabilities include:

- **Entertainment services**, including broadcast-quality television and premium movies delivered over the IP network, and music and video entertainment
- **Education and relaxation content**, including personalized health education videos, as well as relaxation videos, images, and music to help patients relax and improve the overall patient experience
- **Video collaboration**, through integration with Cisco unified communications, contact center, and remote expert solutions that bring a complete set of collaboration capabilities to the in-room TV or the clinician's mobile device
- **My Visit interactive patient view**, which provides services, content, messages, and information tailored to patients and their conditions
- **Clinician and management tools**, including dashboards to track status, assign patient tasks and content, manage patient surveys, and more

Figure 4 shows the tasks section of the main home page for a patient that has been admitted. This page integrates relevant information that will assist patients during their stay. Common tasks and options are combined into the easy-to-navigate page, so the patient always has access to updated information.

Figure 4. Patient Connect Combines All Relevant Patient Stay Information Into One Seamless Interface



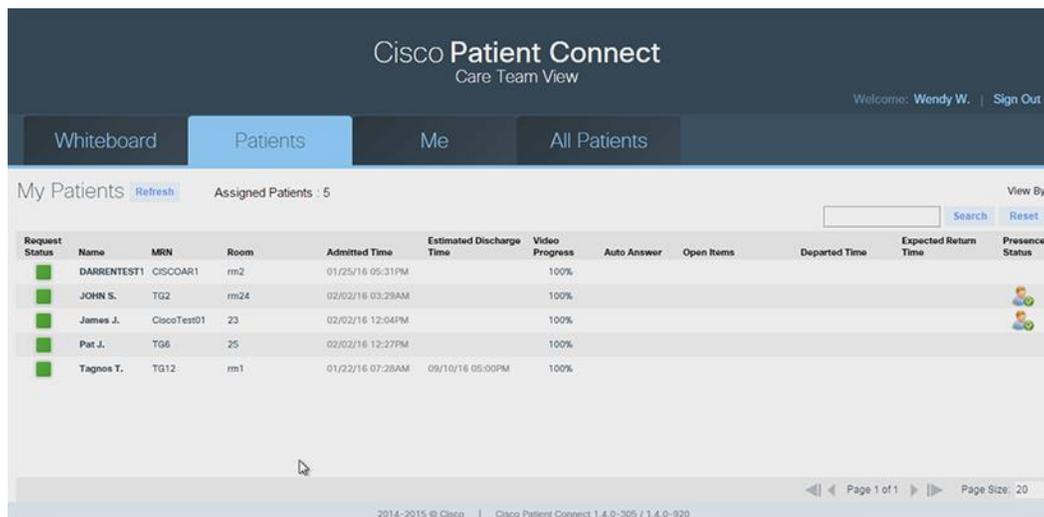
Selected Solution Components

Cisco Patient Connect includes everything that is needed to transform and personalize the experience in patient rooms. Components include:

- **Cisco Interactive Experience 4600 Series Client hardware running the Cisco Patient Connect solution:** The platform for state-of-the-art in-room experiences, this remotely managed web client solution connects to the in-room TV screen or interactive touchscreen. It supports a number of peripherals to interact with the application, such as video cameras, wireless keyboards, or pillow speakers. It runs the included Cisco Patient Connect web-based applications previously described, as well as third-party clinician- and patient-facing applications. And it enables secure, seamless integration and screen-sharing with patients' and providers' personal mobile devices.
- **Care team view application:** The care team application integrates with your EHR and allows clinicians to track patient progress and assign care plans or media content using an in-room computer or their own mobile devices. Nurses, doctors, and other clinicians can view patient information and schedules, check status of patients' requests, and assign and track tasks to patients, such as pain surveys. They can share information directly with patients (such as reviewing test results or imaging from the EHR) by casting the screen from their personal devices to the in-room TV.

Figure 5 shows how care team members are able to view information such as real-time patient status, discharge readiness, requests, messages, feedback, and the current schedule for individual patients. Other pages, allow the care team member to see all of the patients under their current care.

Figure 5. The Care Team View Interface Provides Tools for Interacting With The Patient And Managing Common Tasks



| Request Status | Name | MRN | Room | Admitted Time | Estimated Discharge Time | Video Progress | Auto Answer | Open Items | Departed Time | Expected Return Time | Presence Status |
|----------------|--------------|-------------|------|------------------|--------------------------|----------------|-------------|------------|---------------|----------------------|-----------------|
| ■ | DARRENTTEST1 | CISCOAR1 | rm2 | 01/25/16 05:31PM | | 100% | | | | | |
| ■ | JOHN S. | TG2 | rm24 | 02/02/16 03:29AM | | 100% | | | | | |
| ■ | James J. | CiscoTest01 | 23 | 02/02/16 12:04PM | | 100% | | | | | |
| ■ | Pat J. | TG6 | 25 | 02/02/16 12:27PM | | 100% | | | | | |
| ■ | Tagnos T. | TG12 | rm1 | 01/22/16 07:28AM | 09/10/16 05:00PM | 100% | | | | | |

- **Real-time, personalized patient information:** Providers can view each patient's real-time status and presence information, such as Available, Do Not Disturb, Staff in Room, Screen Sharing in Progress, Audio/Video Call in Progress, Watching TV, or Out of Room. Providers see patients' names as they've customized them (such as a nickname or alias the patient prefers) as well as patients' full legal name.

- **Administrative tools:** Cisco Patient Connect includes an intuitive, easy-to-use management tool that allows administrators to manage devices and videos, configure workflows (such as for admitting and discharging patients), manage food menus, configure notifications, and more. Administrators can customize password protection options to protect patients' privacy. And they can configure presence alerts, staff names and roles, and preset speed dials for different departments, room types, and locations.
- **Patient survey tools:** Providers can create, modify, and manage surveys to get real-time feedback about patient satisfaction. The solution enables development of multiple surveys and provides the capability to present them based on a specific patient condition or status, or a standard process (for example, each patient receives a survey at 2 p.m. on the second day of their stay). Survey results can then be tracked over time to measure progress against key patient satisfaction criteria and organizational imperatives.

Product Specifications and System Requirements

Cisco Patient Connect consists of backend servers and client side hardware and software. Three backend servers consisting of the integration server, the experience server for Patient Connect, and the Cisco Interactive Experience Manager are required run Cisco Patient Connect. The client configuration includes a Cisco IEC 4650 thin client connected to a compatible HDTV, controlled by either a compatible hospital pillow speaker or IR remote.

| Product | Specifications and Requirements |
|--|--|
| Cisco Interactive Experience Client 4650 | Required model—IEC 4650. For additional details see: http://www.cisco.com/c/en/us/products/video/interactive-experience-clients/index.html |
| Cisco Interactive Experience Manager | Server with 18 vCPUs, 20GB RAM, 500 GB Disk |
| Cisco Patient Connect—Integration Server | Server with 12 vCPUs, 20GB RAM, 500 GB Disk |
| Cisco Patient Connect—Experience Server | Server with 8 vCPUs, 16GB RAM, 500 GB Disk |
| Minimum VM server CPU performance required: Intel Xeon E5-2697 v2 2.70 GHz (Cisco SKU: UCS-CPU-E52697B). High Availability server configurations will require additional backend services and resources. | |

| Additional non-Cisco components | Specification |
|---|---|
| Compatible HDTV | (1) HDMI input, supporting 1,920 × 1,080 progressive scan resolution |
| Input and control device | Compatible hospital bed pillow speaker or IR wireless remote |
| Webcam for Video calling | Compatible webcam with microphone such as Logitech Webcam C920-C Smoke Global |
| Contact Cisco for the current list of supported and compatible third-party devices. | |

Cisco Patient Connect consists of two configurations, a base and an enhanced version. Table 2 describes how the enhanced version builds upon the existing base platform by adding additional features and functions. Each feature in the enhanced version extends Cisco Patient Connect to include additional capabilities to more deeply integrate into hospital systems, add care team workflow management, and expand patient resources.

Figure 6. Cisco Patient Connect Base and Enhanced Versions

| Features | Base | Enhanced |
|---|---------------------|----------|
| IPTV | x | x |
| Web Browsing | x | x |
| VOD Capability & Krames Educational Content | x | x |
| Support / Maintenance | x | x |
| Collaboration—Video Call | x | x |
| Multi Language Support | English and Spanish | x |
| EMR Integration—Care Team Information | | x |
| First Run Movies on Demand from Swank Motion Pictures | | X |
| Mobile Device Enablement for Patient and Care Team | | X |
| Screen Sharing/Casting in Patient Room for Care Team Mobile Devices | | X |
| EMR Integration—"My Visit" Information | | x |
| Pain Survey | | x |
| Nurse Dashboard/Portal | | x |
| Advanced Admin Portal | | x |
| Messaging / Notification | | x |
| Patient Satisfaction Surveys | | x |
| Meal / Nutrition Integration | | x |
| Staff Assignment Integration | | x |
| Contextual Educational Content | | x |
| RTLS Integration | | x |
| Medication Information | | x |

Ordering Information

The following table provides ordering information for Cisco Patient Connect components. For more details and ordering assistance, please refer to the Cisco Patient Connect ordering guide located [here](#).

| Part # | Product Description |
|---|---|
| IEC and IEM | IEM - http://www.cisco.com/c/en/us/products/video/interactive-experience-manager/index.html , IEC - http://www.cisco.com/c/en/us/products/collateral/video/interactive-experience-clients/datasheet-c78-735525.html?cachemode=refresh |
| IEC-4650-HW-K9 | Cisco IEC 4650: DC, 4 GB, 32 GB DOM, WIFI, BT |
| IEP-4600-SW-01-K9 | IEC 4600 software + license |
| IEP-MGR-FL-10 | 10-pack IEM license bundle |
| IEP-MGR-FL-50 | 50-pack IEM license bundle |
| IEP-MGR-FL-100 | 100-pack IEM license bundle |
| IEP-MGR-FL-500 | 500-pack IEM license bundle |
| IEP-MGR-FL-1000 | 1000-pack IEM license bundle |
| R-IEP-BASE-20-K9 | IEP Manager Server Base Software License |
| SPVAC-C7416-S= | Logitech Webcam C920-C Smoke Global |
| Cisco Patient Connect Base Package | |
| Server License | |

| Part # | Product Description |
|---|---|
| CPC-BAS-S-D01 | Cisco Patient Connect base server |
| Subscription License* | |
| CPC-BASE-L-D1 | Cisco Patient Connect base subscription |
| Cisco Patient Connect Enhanced Package | |
| Server License | |
| CPC-ENH-S-D01 | Cisco Patient Connect server |
| Subscription License* | |
| CPC-ENH-L-D1 | Cisco Patient Connect subscription |

*Subscriptions orderable in 1-/3-/5-year term license

Warranty and Support Information

All Cisco hardware and software products are covered by warranty for a minimum of 90 days. Some products have longer warranty coverage periods.

- Cisco UCS[®] C-Series servers (optional components) have a 3-year extended warranty.
- All Cisco Patient Connect software has a 90-day standard warranty.

Details of Cisco warranty terms and conditions are available at www.cisco.com/go/warranty.

In addition to warranty coverage, Cisco proactive and traditional technical support service contracts are available to extend the support of the solution. Support services include online interactive tools and resources, direct access to Cisco hardware and software Technical Assistance Center (TAC) engineers, software and content updates (maintenance and upgrades), onsite engineering support, and Cisco hardware replacement.

Cisco and Partner Services

The Cisco Patient Connect solution offers a broad partner ecosystem. Our partners provide solution development, content creation, and deployment to support a successful implementation. The Cisco partner ecosystem includes the following:

- **Deployment partners:** These trained channel partners and systems integrators specialize in Cisco Patient Connect solution deployments.
- **Solution-development partners:** These partners continue to develop integrated solutions to further extend the capabilities of the Cisco Patient Connect solution.
- **Content-creation partners:** These partners know how to plan, create, design, and optimize content for the Cisco Patient Connect solution.

For more information, visit <http://www.cisco.com/web/partners/index.html>

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For More Information

To learn more about Cisco Patient Connect, visit: www.cisco.com/go/patientconnect



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