Challenges in the healthcare industry

Today’s healthcare providers are being tested to the limit. The need to cut costs, increase efficiency, and improve the quality of patient care is constant. And it does not end there. Hospitals are also having to face up to other tough challenges such as increased demand for services from an ageing population, a general decline in public funding and a changing regulatory framework that is shaping consumer-driven healthcare.

Healthcare organizations are increasingly looking to IT to help respond to these challenges through digital transformation and e-health solutions. Achievement of these goals, however, can be complex. The reality is that many hospitals need to deliver change within a fragmented IT and budgetary environment, making it difficult to take advantage of new, advanced technologies that better enable IT and healthcare process optimization.

Benefits of the Cisco and Imatis Mobile Care Solution

The Mobile Care solution can help hospitals enhance clinical processes by improving staff responsiveness, combining multiple disjointed communications systems, and simplifying collaboration. This results in increased quality of care, as well as in workload reduction for both clinical and non-clinical hospital personnel.

Healthcare organizations that deploy Mobile Care can take advantage of the following benefits:

- Improved patient satisfaction and care
- Enhanced employee satisfaction
- Reduced errors due to more direct communications
- Less chaotic ambient environment without overhead pages
- Faster service to patients
- Rapid medical team assembly
- Better communication support for a mobile working staff
- Rapid resolution of orders or errors from other hospital departments
- More efficient use of resources, leading to financial savings

Solution Overview: Mobile Care from Cisco and Imatis
Capabilities of the Mobile Care Solution

Mobile Care incorporates the Imatis® Hospital Communication System with Cisco handsets, unified communications, security, and wireless network infrastructure to help healthcare organizations manage work processes and communications more efficiently. Through integration with third-party, open, or proprietary systems and a flexible workflow engine, the Imatis Hospital Communication System detects, localizes, prioritizes and routes information between technical installations, IT systems, clinicians, patients, and service workers to improve mobility, workflow, and collaboration within the hospital.

Using Mobile Care, hospitals can optimize information flow and personnel logistics, which are key elements in any hospital operation. The system provides clear responsibilities through role management and, by coordinating processes more efficiently, helps ensure that the right materials and information are available at the right place at the right time by using any Web-enabled device such as Cisco® IP phones. In addition, the hospital is able to set appropriate targets and measure their processes.

The effect of intelligent workflow and communications is improved efficiency and productivity through better usage of resources, leading to better quality of care. This includes making sure tasks are done, employees are more satisfied as a consequence of less stress, workloads are better balanced between staff, and of course improved patient satisfaction.

The Mobile Care solution helps users quickly and easily manage workflow, communicate more directly with staff, enable superior patient-nurse communications, enhance efficiency, decrease ambient noise, and increase productivity by:

- Quickly and accurately paging nurses and simultaneously communicating patient needs to them
- Establishing two-way communication to save time and increase quality
- Defining clear responsibilities among staff by connecting roles directly to a Cisco wireless handset
- Allowing clinicians to log on in several roles from the same device to avoid using multiple pagers, phones, and semi-manual systems for alert handling
- Efficiently and rapidly assembling a medical team, for safer and better patient care
- Sharing clinical information by directly forwarding text from specific information systems—such as lab, pharmacy, or radiology—to a Cisco wireless handset, for clearer communications and less ambiguity
- Streamlining hospital functions by expediting patient services like housekeeping, transportation and security
- Improving time to patient treatment and increase patient satisfaction
- Reducing time wasted on non-clinical activities, leading to improved employee satisfaction
- Meeting governmental patient safety standards and goals
Business Benefits of Mobile Care

**Streamline communication systems.** Most healthcare organizations today are burdened by multiple disjointed communications systems, including multiple in-house phone systems, overhead paging systems, pagers, and typically more than one data network. The Mobile Care solution from Cisco and Imatis helps reduce the time spent attempting to reach other staff members. A 2006 Forrester study concluded that, “Every minute engaged in tracking and locating others reduces a nurse’s availability for the patient.” The dynamic role-based functionality in the Imatis Hospital Communication System allows clinicians to log on in multiple roles from the same handheld device.

**Improve staff collaboration.** By leveraging Cisco Mobility and Cisco Unified Communications technologies, clinical workflow can be greatly enhanced and streamlined. This results in an enhanced level of care, improves patient flow, and reduces nursing workload. Messages from different areas of the hospital can go directly to a Cisco 7921 mobile handset, eliminating any ambiguity and reducing the need for callbacks and verification. By integrating clinical information, status alerts can be sent to a fellow clinician’s mobile device faster than ever before, allowing them to receive data anywhere with wireless coverage in a hospital building, and improving access to information and response times. The dynamic Imatis role-based Hospital Communication System allows clinicians to request the information they want as an individual or as a role.

**Increase efficiency of support services.** Using the Cisco IP Phone 7971 or Cisco Wireless IP Phone 7921, hospital staff can quickly and efficiently request that a room be cleaned in preparation for a new patient or have an unexpected mess attended to. In addition, facilities-oriented requests can be sent to various mobile staff to retrieve a wheelchair, or contact security with a special code or one-button alert. If the message does not get through or is not acknowledged, business intelligence built into the system can send the request again or send it to an alternate staff member using built-in escalations. The phone itself also keeps a history of alerts for nurses to manage their requests. The Cisco solution helps stat alerts get sent faster than ever before, to state-of-the-art mobile devices, improving access to information and response times.

**Why Cisco and Imatis?**
Cisco is the leader in healthcare connectivity for collaboration and a catalyst in transforming healthcare based on its industry innovation, participation, and collaboration. A new culture of mobility is reshaping the ways hospitals do business. Since early 2005, more laptop and notebook computers have sold than desktops, and 95 percent of notebooks are Wi-Fi-enabled. But the most powerful notebook will live up to its full potential only when connected back to a state-of-the-art communications system, as provided by Cisco.

Imatis AS is a leader in innovative software solutions for the healthcare industry. Its products focus on connecting people, information, processes, and systems within a healthcare organization. Its applications provide an excellent platform for point-of-care and mobile services. The Imatis role-based portal and applications run on Cisco wireless IP phones, mobile phones, patient terminals, wireless computers and PDAs—both inside and outside the hospital building—to create a true mobile care environment.

To learn more, visit: [www.cisco.com/go/wireless](http://www.cisco.com/go/wireless), [www.cisco.com/go/healthcare](http://www.cisco.com/go/healthcare), and [www.imatis.com](http://www.imatis.com)