



# Healthcare mobile communication solution: Increase availability and efficiency of on-the-move healthcare workers with integrated communications from Motorola and Connexall



In the mission-critical hospital environment, Motorola's TEAM VoWLAN solution allows healthcare workers to remain more focused on patient care by providing push-button instant access to information as well as co-workers.

Employee accessibility is critical in the hospital environment. Nurses, doctors, technicians, maintenance and transport staff must be able to instantly reach and be reached by colleagues. And yet, in this time-sensitive environment, efficient communication is not always easy. Few hospital workers can be found behind a desk with convenient access to a desk phone and computer. By nature, healthcare employees are constantly on the move between floors, patient rooms and lab areas, handling routine tasks and addressing critical issues as they arise.

Cell phones are not a viable solution to the hospital communication challenge, as their usage is prohibited in certain areas of the hospital. Additionally, construction materials used in parts of the building can reduce or block coverage altogether. As a result, healthcare organizations have typically relied on overhead paging to reach mobile employees and disseminate urgent messages. However, overhead paging can disrupt the healthcare environment — often disturbing patients as they try to sleep, rest or relax. And the public nature of overhead paging does not provide the level of discretion required by law for some messages, causing the recipient to take additional steps to learn the pertinent and sensitive details.

Communication inefficiencies can have a profound impact in the healthcare environment. For doctors, nurses and technicians, additional time spent on administrative tasks and tracking down colleagues directly translates into less time available to care for patients. According to a recent study, the average nurse spends only about 31 percent of his or her time in direct patient care.<sup>1</sup> And with the current nursing shortage across the U.S., inefficiencies in working processes can further stress the system and erode quality of care.

## TEAM VoWLAN integrated voice and data solution

Motorola's Total Enterprise Access and Mobility (TEAM) Voice over Wireless LAN (VoWLAN) solution provides a cost-effective platform for providing mobile voice and data access to on-the-move healthcare workers. The TEAM VoWLAN solution easily integrates into many existing wireless networks and PBXs, ensuring seamless coverage throughout the entire wireless LAN (WLAN) coverage area — inside the hospital building and throughout campus grounds.

## KEY BENEFITS

- Increases productivity and efficiency in the healthcare environment
- Helps ensure that mobile workers are instantly available and accessible when needed
- Increases available time for direct patient care
- Enables immediate decisions at point of care
- Enhances patient care

<sup>1</sup> APPLICATION BRIEF: Increase availability and efficiency of on-the-move healthcare workers with Motorola's TEAM VoWLAN solution and Connexall

## 6 key business services... all in a single device

The TEAM VoWLAN solution provides nurses, physicians, technicians, custodial staff and more with the six key voice and data services they need to stay productive while on the move:

- **PBX Telephony**

Extend the features and functionality of a desk phone to a mobile device.

- **Push-to-Talk services**

Empower users with robust, instant communications — including the ability to call an individual or a group (with up to 255 definable groups).

- **Corporate email, calendar, contacts and other personal information management (PIM) tools**

Keep your workers in touch and on top of their schedule, task list and more.

- **Text messaging**

Enables fast and efficient communications between workers over the WLAN — improving response times to customer demands and changing business conditions.

- **Internet/Intranet access**

Provides on-the-spot easy access to web-based applications and information as needed throughout the business day.

- **Line of business applications**

Enables healthcare workers to access critical patient information and receive, respond and escalate notifications and alarms enhancing patient care.

Competitively priced with voice-only Wi-Fi solutions, the TEAM VoWLAN solution offers powerful, enterprise-class Windows Mobile® business smartphones that deliver high performing voice services such as PBX telephony and push-to-talk (PTT) voice services, and a lot more. Workers have mobile access to email, directory contacts, schedule, text messaging and customized business applications — all in an easy-to-carry, pocket-sized device. Motorola's superior engineering delivers a toll-quality voice experience comparable to traditional wireline service in any corner of the hospital campus.

The TEAM VoWLAN solution extends desk phone functionality to the mobile device, so employees get advanced call handling capabilities, including unified voicemail, extension dialing, call transfer, hold and much more. In addition, PBX integration ensures that all calls placed to and from the mobile device are fully trackable and incorporated in the Call Details Records (CDR) — providing the audit trail needed to resolve issues and demonstrate compliance in the sensitive healthcare industry.

The TEAM VoWLAN devices can be shared among shift workers who do not have a dedicated PBX extension — allowing hospitals to purchase and maintain fewer devices. Configurations can be incorporated based on user groups, so nurses might have permission to place calls inside and outside the four walls, while other staff may be limited to calls within the four walls. And the high capacity battery easily lasts longer than eight hours, making it ideal for the extended shifts that are typical for many healthcare workers.<sup>2</sup>

Motorola's TEAM VoWLAN solution integrated with **Connexall** provides extended data communications capabilities, giving on-the-spot access to the data needed to be effective and offer high quality patient care. Connexall provides the platform for TEAM VoWLAN devices to receive notifications, alerts and alarms from a wide variety of healthcare systems, such as patient monitoring, nurse call, hospital-wide bed status, porter management, security and just about any event-generating system.

Connexall gives healthcare organizations the power to dramatically improve alarm information by creating information immediacy. Staff response times are optimized. With a reduced need for overhead alarms, noise levels are greatly reduced with the elimination of overhead paging, resulting in a quieter healing environment. Your staff receives real-time updates through dashboard displays. Responses are quicker and easier with one-touch callback and communication acknowledgment capabilities. And, as Connexall is completely vendor neutral, you can leverage existing technology infrastructure, allowing you to enhance existing equipment, or choose new, best-of-breed systems.

Unlike other Wi-Fi phones and standalone point solutions, Motorola's TEAM VoWLAN solution offers a complete platform that can serve your communication needs today, as well as expand to meet your needs in the future — whether you need new functionality or increased capacity. Users and devices are authenticated on the WLAN network and by the TEAM solution, providing a high level of security for voice and data communications. The server-based architecture enables easy integration with a range of legacy TDM and SIP-based PBXs to leverage your existing infrastructure investments, and delivers enterprise-level scalability, supporting up to 4,500 users per server.



In the critical hospital environment, nurses, doctors, technicians, maintenance and transport staff must be able to instantly reach and be reached by colleagues. Cell phones are not a viable solution — usage is prohibited in certain areas of the hospital, and, due to construction materials used throughout the hospital, there are many areas where a connection is not available. Motorola's TEAM VoWLAN solution solves this problem, allowing hospitals to give workers the mobile voice and data services they need to act as swiftly as possible — all on a small, lightweight and durable enterprise-class smartphone.

## Improve the efficiency of nearly every worker in the hospital environment...and the quality of patient care

Just as your computer network connects your computers, the TEAM VoWLAN solution and Connexall connect your workers to each other, creating a virtual 'people' network that allows all the mobile workers inside the hospital walls to reach anyone at the press of a button. And the TEAM VoWLAN solution goes beyond voice, providing workers with access to critical data as well. Regardless of 'who needs what' inside your hospital walls, the TEAM VoWLAN solution enables it in seconds.

### Nurses

The TEAM VoWLAN solution gives nurses immediate access to other staff — whether they need to notify a physician of a change in a patient's condition or contact the pharmacy for an urgent medication order. And no matter where they are on the hospital campus, nurses are easily reachable to quickly resolve issues or answer urgent questions. The easy-to-carry Windows Mobile device provides the capability to access essential diagnosis, treatment and patient data right at the point of care — providing the real-time information needed to make better and faster decisions at the patient's bedside. Integration with Connexall creates direct two-way communication between patients and staff. This enhances nurse mobility while prioritizing requests as they are received - leading to more efficient

workflow. Patient requests are answered faster and with less back-and-forth communication between nurse and patient, leading to increased patient satisfaction.

By connecting the nurse call station at the patient's bedside to the nurse's TEAM VoWLAN device, the unit clerk does not have to spend time searching for the 'right' nurse - reducing the need for overhead paging and creating a better healing environment for patients.

### Physicians

Doctors can instantly access personnel and departments in the hospital, from nurses to pharmacy staff, radiology, scheduling and more. Using PTT or dialing from the directory, doctors spend less time on hold or tracking down colleagues and more time where it matters most — with patients. And with email and text messaging capabilities always in hand, doctors are free to move and multi-task throughout the facility without missing important communications, regardless of the method of communication.

### Department managers

Your department heads for the emergency room, radiology, maintenance and more are always on the go and in demand. The TEAM VoWLAN solution provides a pocketable deskphone, keeping these high level mobile workers connected at all times, available to answer questions immediately, push urgent tasks to department personnel and respond to escalation situations as

they arise in order to keep departments moving at peak efficiency at all times. Included in the core of Connexall is robust management reporting capability, providing management teams with data relevant to their specific departments, and allowing for precise fine tuning of workflow processes. Managers can leverage this tool to improve overall operational efficiency and manage workload.

#### **Patient transport staff**

Equipping transport personnel with TEAM VoWLAN smartphones improves the execution of patient dispatch orders. Connexall enhances the porter communications process so that with a simple click of a mouse or keypad, a user can request transport of patients, specimens, or other materials. A pre-defined porter will receive a notification on his or her TEAM VoWLAN device to complete the transport request. Automating porter requests means that clinicians can spend time focusing on what matters the most - patients - instead of coordinating support requests and tracking down hard-to-find staff.

#### **Equipment maintenance staff**

The TEAM VoWLAN solution enables biomedical technicians to perform equipment inspections and maintenance quickly and efficiently. Work orders can be scheduled ahead of time and pushed directly to the device to help ensure maintenance is performed on time. Voice and PTT capabilities can be used to help maintenance personnel quickly determine the location of a particular device that requires servicing. When a fridge fails in a hospital, it can potentially damage the medications, vaccines, or blood stored inside. The longer it takes for someone to notice that a fridge is not working, the higher the likelihood of losing these expensive and potentially life-saving items. Connexall's integration of alarms and fridge temperature tags means less waste, since fridge failure or dramatic changes to the pre-set temperature sends alarm notification to appropriate staff. Immediate information ensures staff can take immediate action and transfer temperature-sensitive items before they are damaged.

#### **Patient families**

TEAM VoWLAN smartphones can be offered to the families of either critically ill patients or patients in surgery so they can be easily reached throughout the facility if needed.

#### **Technicians**

With the TEAM VoWLAN solution deployed across the hospital, X-ray, ultrasound and other medical technicians can promptly reach or be reached by a physician whenever needed, so patients are not kept waiting and urgent situations receive immediate attention.

#### **Custodial staff**

With voice, text messaging and push-to-talk communications, the TEAM VoWLAN solution provides an efficient and always-on communication link between supervisors and janitorial staff — custodial workers are easily accessible wherever they are on the hospital campus. Supervisors can push planned maintenance as well as emergency tasks to employees. As a result, critical situations — such as a spill in the emergency room, a clogged sink in a patient's room or a problem with the heating in the lobby — are addressed quickly to ensure safe working conditions and an enhanced patient experience.

#### **Improve productivity...reachability... and patient care**

With the TEAM VoWLAN solution and Connexall, healthcare employees have the tools they need to increase availability, shorten response times and improve productivity. Robust on-the-spot voice and data communications provide faster access to the people and information needed to complete a task, request assistance or make a decision at the point of care. Employees can get more done in a day, managers can maximize hospital resources and the quality of patient care is greatly enhanced — and all with a pocketable and affordable device that leverages the network infrastructure you already have in place and can easily scale to meet the needs of virtually any number of workers.

For more information on how your healthcare operations can benefit from Motorola's TEAM VoWLAN solution and Connexall, please visit:  
Motorola: [www.motorola.com/TEAM](http://www.motorola.com/TEAM)  
Connexall: [www.connexall.com](http://www.connexall.com)

1 Government Health IT; What Nurses Want; John Pulley; March 31, 2008; [http://www.govhealthit.com/print/4\\_15/features/350264-1.html](http://www.govhealthit.com/print/4_15/features/350264-1.html)

2 Battery life: 9 hours talk time; 170 standby with high capacity battery; note that talk and standby times vary based on shift/user profiles.





**MOTOROLA**

[motorola.com](http://motorola.com)

Part number AB-TMVOWLANHC-Conn. Printed in USA 10/10. MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © 2010 Motorola, Inc. All rights reserved. Connexall® is a registered trademark of Globestar Systems Inc. All Rights Reserved. Information Immediacy is a trademark of Globestar Systems Inc. All other trademarks are the property of their respective owners. For system, product or services availability and specific information within your country, please contact your local Motorola office or Business Partner. Specifications are subject to change without notice.