



Making Wireless an Indoor State of Mind



## ▶ University of Pennsylvania Healthcare System

### Penn Health System's Top Ranked Hospitals Leverage Wireless Connectivity to Innovate Patient Care



Co-founded in 1751 by Benjamin Franklin, the University of Pennsylvania Healthcare System ("Penn Health") is America's first hospital. Today, this \$2.7 billion healthcare enterprise supports 1,400 full-time faculty and educates 700 students annually, through Penn's School of Medicine, ranked #2 in the nation for receipt of NIH research funds.

Capitalizing on the hospital's growth, Penn Health's executives sought to improve patient care by giving caregivers reliable wireless access throughout the system's three major hospitals: Hospital of the University of Pennsylvania; Penn Presbyterian Medical Center; and Pennsylvania Hospital, its flagship hospital.

First and foremost, Penn Health's executive team wanted to provide always on wireless connectivity so that caregivers could spend more time with patients and less time on routine, administrative tasks. By giving staff real-time access to critical patient data while on the move between ORs, ERs and other wards, medical accuracy could be improved without sacrificing response times. With wireless connectivity, Penn Health executives were confident that they could boost productivity, drive down the costs of care and improve the patient experience. However, first the executive team would have to address the varying wireless coverage needs of caregivers who used a variety of mobile devices, operators and services.

From an IT perspective, the Penn Health team wanted to simplify network management for existing staff so that routine maintenance would not disturb patient areas or require infection control procedures. Centralized management was also desirable, helping to reduce the likelihood of service interruptions throughout Penn Health's vast campus.

Flexibility was also critical for hospital executives; Penn Health needed to keep up with emerging wireless services in order to continue improving patient care in the future. Furthermore, the right solution had to seamlessly scale to accommodate Penn Health's expanding campus without costly parallel networks for each wireless service.

The Penn Health executive team needed a comprehensive wireless infrastructure solution that perfectly fit into the unique hospital ecosystem while spurring innovative care practices that set the hospital apart from competitors.

#### The Company ▶▶▶▶

Co-founded in 1751 by Benjamin Franklin, the University of Pennsylvania Health System has over 1,400 staff and 24 facilities. The \$2.7 billion enterprise provides world-class education, research, and healthcare programs.

#### Challenges ▶▶▶▶

- ▶ Boost caregiver productivity with real-time access to patient information in ORs and ERs
- ▶ Allow staff to reliably use wireless devices, services and WLAN throughout the hospital campus
- ▶ Seamlessly scale to meet future requirements without affecting patients and operations

#### Benefits ▶▶▶▶

- ▶ Provides pervasive wireless coverage for multiple cell services, devices, operators and WLAN over a single infrastructure
- ▶ Wire-it-Once™ infrastructure enables new wireless services in telecom closets, avoiding disruption and parallel networks
- ▶ LAN-like tools simplifies management

## The Solution

After thorough evaluation, the Penn Health team selected the MobileAccess Universal Wireless Network because of the solution's ability to meet the rigorous demands of healthcare environments and deliver multiple wireless services over a common infrastructure.

The innovative MobileAccess Universal Wireless Network simultaneously delivers robust wireless coverage for all of the hospital's mobile operators, devices, and services, including WLAN, over a single wireless infrastructure. Using a hybrid fiber and coax cabling infrastructure, the MobileAccess solution reliably delivers critical patient data to caregivers' laptops, PDAs, while maintaining signal strength throughout coverage areas.

MobileAccess also delivers converged WLAN services over the same common infrastructure used to deliver all other wireless services. Additionally, Penn Health can now spread the initial costs of WLAN cabling and labor across multiple wireless projects. Plus, by housing WLAN access points (APs) in readily-accessible telecom closets instead of on ceilings, the hospital's operational costs are reduced and management is simplified.

The Penn Health team was also impressed with the MobileAccess solution's modularity; adding new wireless services is as simple as adding the appropriate wireless service module in existing telecom closets. With Wire-it-Once™ infrastructure, Penn Health's wireless capabilities gracefully scale with the expanding campus -- no re-wiring or re-engineering is required. The result is a future-proof solution that is more cost-effective and manageable than parallel network alternatives.

From a management perspective, the MobileAccess solution gives IT staff end-to-end visibility into the network with real-time, LAN-like management tools so that staff can maximize uptime without RF expertise. And by clustering all intelligent network components in telecom closets, ongoing maintenance does not require penetration of hospital ceilings, eliminating the need for infection control procedures and patient evacuations.

## About MobileAccess

MobileAccess Networks is an enterprise wireless innovator that provides a universal platform for connecting the people and applications that drive business. The company's intelligent, in-building infrastructure solution is the key to mainstream wireless connectivity in hospitals, office buildings, public venues and other large-scale facilities. The MobileAccess Universal Wireless Network delivers business-quality performance, scalability, security and signal reliability to more than 1000 customers, including Aladdin Resort and Casino, ALLTEL Stadium, American University, Clarian Health Partners, Hearst Corporation, Lehman Brothers, Northwestern Memorial Hospital, Oakland International Airport, SeaMobile and The Homer Building. For more information, visit [www.mobileaccess.com](http://www.mobileaccess.com).



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