



## About Woburn Pediatrics

With two locations in Massachusetts, Woburn and North Andover, Woburn Pediatrics has served the medical needs of the community for more than forty years.

## The Challenge

Woburn Pediatrics' legacy hardware controller-based wireless LAN could no longer accommodate the connectivity requirements of the growing practice. Ensuring reliable access to the practice's EMR system was critical.

## The Solution

Woburn Pediatric Associates deployed ADTRAN's Bluesocket® virtual Wireless LAN (vWLAN) solution running on VMware® with Bluesocket 802.11n access points. The practice wisely leveraged their VMware investment and avoided the need for costly hardware controllers in their Wi-Fi® network.

## The Benefit

Physicians, nurses and staff easily access patient medical information from any room within the practices' two locations. The Bluesocket vWLAN® solution delivers enormous scalability for future growth and provides cost efficiencies while maximizing resource utilization.

# Woburn Pediatrics Deploys ADTRAN's Bluesocket vWLAN Solution to Support Mobile Electronic Medical Record System

## Award Winning Care

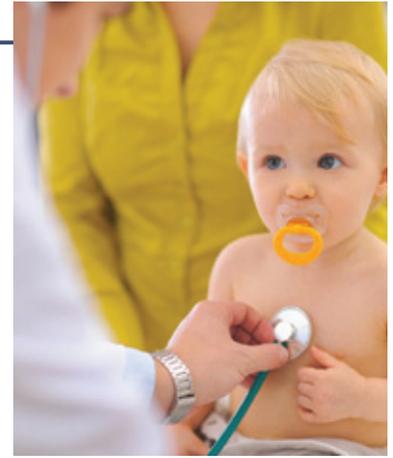
Woburn Pediatrics Associates is affiliated with the following hospitals: Winchester Hospital, the Floating Hospital for Children at Tufts Medical Center, Children's Hospital and Mass General Hospital. As part of the New England Quality Care Alliance which consists of about 1,500 physicians, Woburn Pediatrics was proud to be awarded the "Best Overall MHQP Patient Experience Score in Network 2010". This award was based on survey responses submitted to the Massachusetts Health Quality Partners and is a true testament to the practice's commitment to deliver superior healthcare.

## A Tradition of Quality Healthcare

As the first pediatrics practice established in Woburn, MA in 1967, Woburn Pediatrics Associates has a long standing tradition of meeting the health needs of the community. Their aim has been to provide the highest quality healthcare to their patients. Since first opening, the practice has experienced various stages of expansion, including several moves to larger office space within Woburn and the opening of a second office in North Andover, MA. Over the years, numerous physicians and pediatric nurse practitioners have joined the practice.

## Utilizing Technology to Enhance Care

An early adopter of an Electronic Medical Record (EMR) system, Woburn Pediatric Associates uses the system to provide digital storage of patient charts and to



"Our legacy WLAN solution could not meet our needs. Facing a 'rip-and-replace' upgrade, I decided to evaluate other Wi-Fi solutions. The ideal solution, ADTRAN's Bluesocket vWLAN®, provided future-proof scalability, cost-effective access and ease of use."

– IT Manager

track patient histories, medications and test results. At Woburn Pediatrics, the physicians and nurses access the EMR system on mobile tablets to document every encounter in a patient's medical record. This real-time access to medical records has proven to reduce medical record errors and enhance patient care.

As Woburn Pediatrics has grown so has the number of tablets in use at any given time. It quickly became clear that the existing hardware controller-based WLAN could not scale to meet the practice's needs. Having deployed VMware, Woburn Pediatrics understood the numerous benefits of virtualization and decided to investigate a virtual WLAN solution as an alternative. Woburn Pediatrics liked the fact that the Bluesocket vWLAN solution brings the power of virtualization to Wi-Fi networks since it adds greater scale, capacity and innovation through software rather than additional hardware.

## Virtualization Extended to the WLAN

Applying virtualization to wireless networks, can solve critical capacity and scaling burdens and provide other substantial benefits facilitated by a virtualized environment. ADTRAN's Bluesocket vWLAN is the only wireless LAN solution with control and management virtualized on software residing on a hypervisor (e.g. VMware) or on an appliance. Rather than deploying hardware controllers to operate a wireless network, vWLAN leverages virtualization to eliminate the constraints, and costs of physical hardware controllers.

## Distributed Architecture = Scaling and Capacity

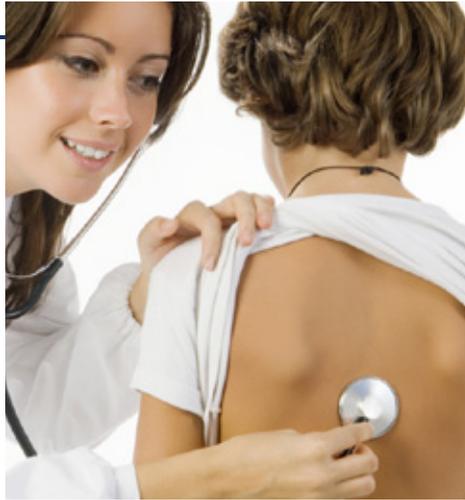
vWLAN, designed as a distributed architecture, separates the control and data plane to allow for separate scaling and greater capacity. Adding more access points (data plane) doesn't drive an increase in the control plane or a need for additional control plane investment. vWLAN makes scaling the network simple and cost effective - and only limited by the size of the data center capacity. The Bluesocket vWLAN solution can support 1,500 access points and up to 48,000 users per software instance. In addition, system capacity is no longer determined by the backplane capacity of the hardware controller; rather with vWLAN, capacity is a function of the aggregate throughput of all access points combined.

## Increased Reliability and Security

vWLAN's reliability is based on the dependency of the data center as opposed to the traditional single purpose hardware controller. Due to the need to protect patient information and ensure compliance with the Health Insurance Portability and Accountability Act (HIPAA), wireless security is a constant concern. vWLAN leads the way with a secure 802.11n solution that takes advantage of intelligent access points to enforce security policies at the edge. A full stateful firewall is configured at the access point to ensure that any unwanted traffic never enters the network.

## vWLAN's HIPAA Advantage

Due to its distributed architecture, deploying the Bluesocket vWLAN solution does not affect the network's data path since no traffic is being routed through a hardware controller on the network. This maintains the network's HIPAA compliance, and avoids costly network re-certification.



**“ADTRAN’s Bluesocket vWLAN solution provided everything I was looking for, plus it can run as a virtual machine on our existing VMware infrastructure.”**

– IT Manager

## Eliminating Hardware = Substantial Cost Savings

By abolishing the functional need for hardware controllers, vWLAN thereby eliminates the associated cost of controllers such as CAPEX and OPEX. vWLAN decreases the Total Cost of Ownership (TCO) of the Wi-Fi network and will dramatically reduce energy usage since legacy hardware controllers typically account for 80% of the total energy usage within a wireless network.

## vWLAN: The Best Medicine for Wi-Fi

The Bluesocket vWLAN solution increases the productivity of the staff and physicians by delivering the critical wireless connectivity to access medical records and healthcare applications, thereby increasing the accuracy and speed of client care and ensuring an exceptional patient experience.

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