A Whitepaper

Analysis of Total Cost of Ownership for Hospitals Deploying Public WLANs

Introduction

Currently, many hospitals do not offer wireless, high-speed internet access to patients, residents and visitors. Pronto Networks, based in California, has developed a cost-effective, plug-n-play Wi-Fi access device exclusively designed for a hospital WiFi hotspot that is deployed independent of the Internet backhaul. Pronto provides the entire infrastructure (excluding the Ethernet backhaul connectivity) for a WiFi service, and runs all back-office operations as part of its Managed Services Program (MSP).

This paper describes the operation of the service, roles of the various stakeholders in the service, and the ROI parameters that make it an easy business decision for the hospital IT manager.

How It Works

Pronto Networks works with hospitals in determining how the service will be offered, branded, and marketed. This involves determining such things as end-user pricing, allowable authentication/billing methods and the layout of the web portal seen by users. Once these are determined, hospitals work with Pronto Networks in the configuration and network policy information, either via a web-based interface or over the phone. Pronto Networks then implements these policies at its Network Operations Center (NOC).

A broadband connection is required and once connected, the pre-configured Hotspot Controller, shipped from Pronto Networks, downloads its configuration from the Pronto NOC. At this point, the hospital is ready to provide wireless internet service to patients and visitors.

For patients and visitors to immediately gain access, users simply launch a browser from their Wi-Fi enabled laptop or PDA within the hospital. The user then views the customized login page describing the services available and information specific to that location. This home screen also instructs the user on several options for gaining and paying for access. These include credit card, pre-paid cards, service provider account and coupons (Each hospital is to determine what methods of payments will be offered).

Once the user has been authenticated and has entered payment information, he/she can access the Internet at all broadband speeds. To disconnect, the user simply clicks a log-off button and the correct amount is charged to the selected billing method.

Case Study

Over the past several years, Pronto Networks has had significant experience in deploying WiFi solutions in hospitals in North America and Asia. In one instance, a hospital deploying WiFi in just the guest areas, has raised more than tens of thousands of dollars in annual revenues. Pronto Networks achieved this through features such as:

• Brandable and easily modified splash page (Login Page)

• Flexible service and price plans

• Plug n play WLAN equipment

• Content Management

• Full Customer Service (Help Desk)

Keys to Success

Wireless high speed internet access must be easy to manage and maintain from the hospital's perspective, with plug and play access to the end users in a secured environment. The system is enhanced with remote monitoring

of hotspots and end users through firewalls. Pronto Networks supports client devices without requiring any configuration changes by the user.

As another key to success, Hospital IT support is required to implement this initiative.

Market / Customer Acquisition

Pronto Networks and the hospital jointly determine what marketing activities will be required at the hospital to provide the service, and to acquire end-users to generate revenue. The activities could include:

- Offering pre-paid cards
- Developing & print fliers/tents creating awareness of and/or promoting service
- Tie-ins to other products/services offered at the hospital
- On-line transaction incentives on the web portal pages
- Providing free access coupons

The return on investment is estimated at 12 months, with a positive return annually moving forward. Customer analyses indicate a ROI upon achieving a targeted take rate of just 3 subscribers per day.

The table below describes a typical plan offered by Hospitals:

24 hour	$ 9.95
1 week	$25.95
1 month	$44.95

Once a contract has been signed, the normal timeline for implementation is about 3 weeks.

Roles of the Stakeholders

Hospitals own and control the location where wireless broadband services are to be offered across their native WiFi system.

Pronto Networks provides a managed service model, acting more as a "virtual service provider", focusing exclusively on back-end operations such as customer registration, revenue collection and end-user help desk.

Hospital Responsibilities

Hospitals are responsible for the attractiveness of the location and the ability to attract customer traffic. The location needs to be a place where people can efficiently and effectively use their laptops and/or PDAs.

Hospitals are responsible for a site survey and network design to better optimize the wireless system performance.

Pronto Networks Responsibilities

1. Web Portal Configuration:

Pronto Networks and the hospital determine the content of the web portal viewed by users at the hospital and can leverage existing templates provided by Pronto Networks. Login pages often include the logo of the hospital as well as site specific information (such as other goods and services offered at the hospital). Login pages also frequently include the logo of Pronto Networks providing the broadband wireless services (i.e. some type of "powered by Pronto Networks" attribution). The hospital also determines what "white-listed pages"are to be made available to end-users. White pages are web pages that can be accessed without logging on to the Internet and often contain more information about the wireless services being offered, etc.

2. Usage Monitoring:

Pronto Networks provides web-based management tools to hospital IT staff to monitor network activity and usage real-time. These tools will enable the hospital and Pronto Networks to monitor the effectiveness of various promotional efforts.

3. Back Office Operations:

Pronto Networks performs all back-office operations required for the WiFi service including:

• Billing and Revenue Distribution: Pronto Networks tracks end-user activity and bills the end-users via their credit cards or user account. At the end of the month, Pronto Networks electronically distributes the revenue to each hospital customer.

- Network Monitoring: Pronto Networks provides 24/7 monitoring of the hospital to ensure the availability of the network.

- Customer Services: Pronto Networks provides customer service for end-users via an toll free number, and email 24 hours a day, 7 days a week.

- Reporting: Pronto Networks provides on-line reports for hospitals and end users so that each party can track/monitor relevant usage stats.

- System Maintenance: For a minimal monthly maintenance fee per Hotspot Controller, Pronto Networks provides all system maintenance, including regular remote software upgrades, replacement services, etc.