



Visiting Nurse Service Relies On Avaya IP Telephony to Deliver Vital Healthcare Services across the Big Apple

Challenge:

Strengthen system reliability and enhance business continuity to keep essential services flowing on behalf of more than 100,000 home healthcare clients; Enhance contact center capabilities to deliver performance data needed to manage and improve the quality of client service; Increase operational efficiencies and network management through the implementation of IP Telephony platforms and applications.

Solution:

Comprehensive converged communication solution that would ensure business continuity and continuous communication across the Metropolitan Area Network, creating an “always on” intelligent communications environment to support mobile workers and clients utilizing the latest unified communications and mobility applications.

Value Created:

- Faster linkage of people, processes and contact center resources creates more productive internal collaboration for critical services delivery
- More secure, reliable, and agile business operations to ensure business continuity
- Converged network management improvements significantly reduce costs and deliver net annual savings of \$900,000
- Highly efficient contact center delivers more personalized client interactions
- Mobile workforce drives increased responsiveness to patients with easy-to-use communication tools

NEW YORK, New York USA – With over 7,800 highly skilled care providers, Visiting Nurse Service of New York (VNS) is the largest not-for-profit home health care agency in the nation.

The personal touch is what sets this organization apart and these caregivers spread out from one end of New York City to the other to serve an average of 25,000 patients each day. Always focused on providing its clients with the best-in-class care, VNS sought a solution that would provide “the prescription” for enhanced client services and operations.

Challenge:

Ensuring Availability and Optimizing Services for Clients

VNS continually seeks to improve and enhance its delivery of client services. VNS believed that new communication solutions coming on the market could significantly improve the organization’s performance and provide the foundation for future gains, and was eager to take advantage.

A major area for continuous improvement especially important for VNS is business continuity. Since VNS provides a healthcare lifeline for thousands of shut-in clients, to be out of reach is simply out of the question.

In terms of business continuity, there were times when data network problems knocked regional VNS offices

offline and shut off the essential flow of clinical, human resources and financial information. A series of events, including virus attacks, a neighborhood power outage in 2001 that affected a major VNS site in Manhattan and the September 11 terrorist attacks in New York, brought home the need to strengthen the organization’s communication continuity and capabilities, according to Randy Cleghorne, VNS director of IT planning and management and chief technology officer.

“Our clients depend on VNS not just for their comfort, but for their health and in some cases, their very lives,” says Cleghorne. “We can never accept a circumstance when VNS is not available to our clients.”

Another area for enhancement was identified in the VNS contact center and the supporting Centrex system. While Centrex served VNS well for years, the organization believed newer technology could deliver enhanced contact center capabilities. VNS also realized that a new system would offer opportunities for greater efficiencies based on easier administration.

“When we first implemented Centrex, it was very cost effective and a good business decision for us,” says

Cleghorne. "However, based on our continuous assessment of new technologies, we realized we should seriously consider a new strategic platform for keeping VNS on the cutting edge in providing superior client service."

In early 2002, these possibilities led VNS to start the search for a new telecommunication solution. From a half dozen early contenders, VNS narrowed the field to two: an Avaya solution, proposed by an Avaya BusinessPartner, and Cisco.

"It came down to two vendors," says Cleghorne. "The tipping point for us was the Avaya ability to support our call center. Our folks would attend presentations from Avaya and their eyes would just light up, thinking about how they could improve processes."

Solution:

Assessment and Action

When VNS chose the Avaya solution, Cleghorne asked Avaya Global Services to conduct an IP Network Readiness Assessment in order to prepare for this major IP telephony implementation.

Using the Avaya ExpertNet™ VoIP Assessment Tool, Avaya network consultants mapped the routers, switches and connections in the VNS network then tested real-time network performance using simulated VoIP (voice over Internet protocol) traffic. A comprehensive Network Optimization Report documented the problems discovered and suggested alternatives for resolution. The results made Cleghorne an enthusiast.

*"In big bold letters **doing the network assessment is what made this work**," she says. "Seeing what we actually had and what we needed in our network was an eye opener. The assessment made the implementation go smoothly. We were able to put in a*

more redundant networking infrastructure that has better enabled us to support both voice and data."

The Avaya BusinessPartner hired Avaya Global Services to help manage the project and handle the implementation. Contact center integration was assigned to Avaya. "Without a good project management team, this would have failed miserably. I had a very good team," Cleghorne recalls.

The Avaya IP Telephony solution sends voice communication over the Cisco-based data network. A SONET (synchronous optical network) made up of voice- and data-grade T-carrier circuits connects nine sites: two major VNS locations in Manhattan and regional offices in Brooklyn, Queens, the Bronx, Staten Island and Westchester and Nassau Counties. At the center is Avaya Communication Manager software running on twin Avaya Media Servers at Five Penn Plaza, site of the VNS Data Center. In normal operation, this server pair controls communication across all VNS offices and 2,700 Avaya IP telephones.

A short distance away, a second pair of Avaya Media Servers at the VNS Manhattan regional office provides backup. In case of system problems, this server pair can quickly take over communication control. Twelve Avaya Media Gateways serve the other VNS regional offices. In seven of these offices, Avaya Media Servers are deployed in local survivable processor (LSP) mode. If network links from the Manhattan servers to a regional office go down, these LSP processors take over and keep calls from VNS clients flowing to the regional staff. Analog lines in each office provide emergency service in the event of power failure.

In the contact center, the Avaya Call Center software distributes incoming

calls to an expanded roster of agents. Groups such as the Mobile Intake Help Desk, a unit of 14 agents who support 100 VNS home care consultants deployed in hospitals across the New York area, now receive calls channeled through the Avaya Call Center software.

Avaya Modular Messaging provides other new capabilities for employees. Integrated with the organization's Microsoft Exchange e-mail system, Modular Messaging stores voice messages on the Exchange server. Users can manage voice messages on their computer, or check e-mail messages by phone.

Business Value Created:

The Avaya solution for VNS erased concerns about system reliability and business continuity. A more robust network virtually eliminated frame relay problems and cut voice communication problems to zero. Redundant servers at the two main Manhattan locations provide reassurance that VNS professionals will be available for their clients. Some analog lines remain in service to provide connectivity in case of a power blackout.

Going Mobile

In August 2004 the Republican National Convention, which took place across the street from the VNS data center, tested the system's flexibility. VNS staff in several groups requested alternative work arrangements to avoid the potentially congested neighborhood. The organization was also concerned about possible power or political disruptions. VNS activated the backup Avaya Media Servers to offset possible power outages at the main location, and relocated several groups of contact center agents and employees to regional offices.

"It worked well," says Cleghorne. "People were quite pleased with their ability to just pack up what they needed from their desk, go to another location, log into the phone, and answer."

In the contact centers, call distribution based on agent skills now helps callers reach the right agent faster. Seeing that they could deliver more personalized customer interactions and faster service by funneling calls to their groups through the Avaya Call Center software, contact center managers have been quick to take advantage of the expanded capacity. The Avaya Call Center software now serves some 250 VNS agents, up from the maximum of 100 possible before the Avaya solution. When clients call their regional offices after hours, they are automatically transferred to the main contact center.

"The agent groups are thrilled," says Cleghorne. "One group had thought about automatic call distribution and said 'oh, that costs money.' And we said 'what are you talking about? It comes in the package.'"

Part of the thrill for contact center managers is their newfound ability to gather and analyze contact center performance statistics. Before, answering questions about such key issues as call volumes or speed of answer required an educated guess. *"With Avaya Call Management it's no longer a guess,"* says Cleghorne. *"Managers can actually report on what their call volumes and peak times are. As an example, we're working on a major project for the mobile intake group, and this information will help them justify the budget they're requesting."*

The Avaya solution also helps VNS employees connect and collaborate more productively with their peers and clients. Five-digit dialing now links all locations — a major must-have in the eyes of VNS leaders, and faster linkage

of people and processes fosters more productive internal collaboration.

Enhanced mobility provides additional benefits. A more mobile workforce, reachable regardless of location, drives increased responsiveness to customers and more agile operations. Avaya Modular Messaging delivers voice messages, fax and e-mail to over 1,000 employees over their PCs or their telephones. Not only is it easier and faster to check and manage messages, but users can respond faster and work more effectively from any location. VNS call center agents can also work from anywhere using laptops equipped with Avaya IP Agent software and simply logging into the Avaya Media Server.

For a select group of VNS staffers like Cleghorne, who must be quickly available in any circumstance, Avaya Extension to Cellular (formerly EC500) instantly bridges office calls to their cellular phones. Callers no longer have to carry and dial a laundry list of reach numbers to make contact. *"I can give them a single point of contact,"* says Cleghorne. *"The only number they need to know is the office number, and that's it. Right now the packet I carry around with me is at least ten pages, and it contains all the varying phone numbers to reach people in an emergency. This has the potential to reduce or completely eliminate that."*

The advantage in flexibility and enhanced business continuity is clear: even if a VNS site became inaccessible, the client service staff could easily continue their work from another VNS location, or even from home.

The straightforward administration of IP endpoints provides benefits that are clear to Cleghorne. Moves, adds and changes, which previously required precious staff resources and often took up to a month to complete, are quick and easy.

"Now, moving is not a big deal. Moving now happens with my desktop team. They log out the phone, they move you, they plug you in, and you come right back up."

Another huge payoff for VNS: a net savings of \$900,000 yearly in communication expenses.

"We've reduced our communications costs with the Avaya IP Telephony implementation," says Cleghorne. *"For instance, voice messaging is now in-house. We don't pay for any calls made within campus with our IP network, so our local toll and regional costs are significantly less."*

With a 110-year tradition of solving problems for others, Visiting Nurse Service of New York is extending that proud history, and solving its own communication challenges with one of the most advanced communication solutions anywhere.

Learn More

For more information on how Avaya can take your enterprise from where it is to where it needs to be, contact your Avaya Client Executive or Authorized Avaya BusinessPartner, or visit us at www.avaya.com

ABOUT VISITING NURSE SERVICE OF NEW YORK

With a mission to provide vital home health care services to a population of more than 10 million, Visiting Nurse Service of New York has a very big responsibility. Each day this 110-year-old non-profit organization dispatches some 5,000 clinicians, therapists and home health aides to provide a wide variety of in-home services, including senior and private care, after-hospital and rehabilitation therapy, hospice care, children's and family services and more.

In all, the VNS staff of 7,800, located in nine major locations and in hospitals across the area, makes more than two million visits to some 100,000 clients each year across Nassau and Westchester Counties and the five boroughs of New York. In addition to meeting this huge medical need, VNS serves critical emergency services functions and coordinates with city agencies to respond to some 9-1-1 assistance calls.

Applications	Systems	Services
<ul style="list-style-type: none"> • Avaya MultiVantage™ Communications Applications • Avaya Communication Manager 2.0 • Avaya Call Management System • Avaya Call Center • Avaya IP Agent • Avaya Extension to Cellular (formerly EC500) • Avaya Modular Messaging 	<ul style="list-style-type: none"> • Avaya S8700 Media Servers • Avaya S8300 Media Servers • Avaya G700 Media Gateways with Local Survivable Processor 	<p>Avaya Global Services:</p> <ul style="list-style-type: none"> • Avaya ExpertNet™ VoIP Assessment Tool • IP Network Readiness Assessment • Business Communication Consulting • Product Support (Maintenance) • Applications Consulting and Integration

All statements in this Case Study were made by Randy Cleghorne, VNS director of IT planning and management and chief technology officer.

