



Doctors and Patients Speak the Same Language Thanks to Video Interpreters

About Paras and Associates

Paras and Associates (www.parasandassociates.net) offers a unique managed service of video interpreter networks to provide interpretation services in hospitals, government, education, the hospitality industry and all customer service lines. The company was formed by a health care project team that designed the Health Care Interpreter Network (HCIN), a system of shared remote interpreter services operated by Northern California public hospitals. Paras and Associates continues to manage the Health Care Interpreter Network as well as build interpretation systems for other organizations and businesses.

Situation

Many hospitals face the tactical problem of interpreting for patients who speak little or no English. The 50 percent of public hospital patients in California who have limited English proficiency often have to wait until an interpreter can be found. Hospital staff may be pulled from their regular jobs to interpret for patients, or the patient's family members are pressed into service. If no interpreters are available, staff is sometimes reduced to calling out to people in the waiting room to find assistance. Hospitals sought to improve patient care by ensuring that all patients have access to competent healthcare interpreters whose assistance could help promote a speedier and more accurate diagnosis.

Solution

Paras and Associates designs new language access solutions to support video-based interpretation services for health care and other industries. The firm uses an MPLS-based IP network to create a virtual contact center that provides trained interpreter professionals in hundreds of different languages. Participating health care providers in the HCIN can access interpreters at their own hospitals or at other network hospitals through videoconferencing and telephone technologies to help overcome the language barriers among doctors, hospital staff and patients.

Network Facilitates Doctor-Patient Understanding

Doctor-patient communication is the heart of good medical care; without effective interpretation, doctors are challenged to provide it. Paras and Associates video interpreter networks help doctors and hospitals use emerging technology to enhance quality, safety, patient care and cultural competence efficiently and cost-effectively.

Hospitals in multi-cultural areas typically have staff members who can interpret two or three common languages, said Melinda Paras, President and CEO of Paras and Associates. After helping to create the HCIN, Paras, a former hospital administrator and hospital board of trustee's president, founded Paras and Associates to assist hospitals and other health care providers with language interpretation. However, providing enough interpreters is expensive.

One hospital was spending \$1.2 million dollars a year to employ interpreters, Paras said, and even this huge expenditure didn't guarantee an interpreter to help every patient who presented at

Paras and Associates Facts

- **Business Needs**
Speedy access to interpreters to ensure quality patient care for patients with limited English proficiency
- **Networking Solution**
Efficient, cost-effective video contact center connects doctors and patients instantly with skilled interpreters
- **Business Value**
Quicker and more accurate diagnoses and improved patient care
- **Industry Focus**
Video interpretation
- **Size**
Serves 5,000 interpretation requests each month

the hospital. To save money and ensure the availability of the right resources, Paras' firm helped develop the HCIN, which currently offers video interpretations in 10 languages, letting patients and caregivers see and speak with one another in a real-time videoconferencing network. For patients who speak other languages, HCIN links seamlessly to commercial telephone interpretation services that offer 24/7 services in 170 languages.

HCIN now routes over 5,000 calls a month, and soon expects to be handling over 10,000 requests each month as the service expands from northern California to include the Greater Los Angeles region. And although the service is still in its early stages, Paras said hospital staff and patients have responded with gratitude.

"The most important thing patients say is they appreciate being able to communicate in person with their doctors," Paras said. "In the past many of them say they left the hospital without fully understanding what had happened. Now they're amazed at the speed at which we can provide an interpreter – they are used to waiting a long time." HCIN provides interpreters for most languages in an average of 22 seconds.

Surveys show that physicians believe that using HCIN lets them better understand a patient's condition. "Hospital staff are incredibly grateful that we have made their jobs so much easier," Paras said.

Hospital administrators have called the video interpretation service "the biggest quality improvement ever implemented in a hospital," Paras said. "We didn't pitch this service as a way to improve quality. We wanted to make it easier for staff to call interpreters, and yet the results have been fairly stunning."

Seconds Make a Difference

In the ER a few seconds can mean the difference between life and death. One California hospital reported that the HCIN helped staff quickly recognize and prevented an impending stroke for a Cambodian patient who spoke no English. Without the network, hospital staff said they would have had only her patient records to reference, which would not have enabled them to diagnose her condition quickly enough to permit preventive action.

"The nurse said to me, 'If this had happened a few months ago we would have done a workup for the complaint she reported last time. Instead we got a Cambodian interpreter online in seconds. It was so incredibly easy. The interpreter helped us realize that the patient was experiencing symptoms indicative of a potential stroke.'" As a result, Paras said, staff got an immediate MRI and took action that possibly saved the woman's life. "The nurse told us candidly, 'I don't know if we would have handled this situation the same way six months ago before the HCIN was here.'"

Another doctor learned that her patient was taking the same medicine that had been prescribed by two different doctors without realizing she was getting an overdose. The interpreter quickly explained the situation. "That was a very important error that we caught because of the video interpretation system," the doctor said.

Because hospitals no longer have to rely on family members to interpret, they have avoided unfortunate situations. In one case, doctors were treating a woman who had just been diagnosed with cervical cancer. The patient's husband was hearing the bad news at the same time he was trying to interpret it for his wife. In addition to being

uncomfortable, "relying on family members to assist can be risky," one ER official said, "because they have to understand the language and medical terminology."

The Right Time for the Right Technology

While telephone interpretation services have long been available, it is only recently that the technology to support reliable video and voice transmission became available at an affordable price. Paras and Associates understood how valuable a video interpreter network could be, and the advent of IP networking enabled them to make their vision a reality. To bring video interpretation to life, Paras and Associates required a network that would connect participating hospitals in one of the world's first Video and Voice over IP Call Centers, and chose an IP network from AT&T as the backbone for the video interpreter service.

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The solution supports the videoconferencing and telephony technologies and enables the secure transfer of patient information. It also provides increased bandwidth with high-performance capabilities to ensure consistent, high speed access to sensitive applications such as VoIP and multi-megabit broadcast quality video.

As a final piece of the puzzle, Paras and Associates identified a call center solution that would automatically route the video and voice calls to the proper interpreters. The AT&T network solution uses Multi-Protocol Label Switching (MPLS) standards, an advanced IP routing technology to give the HCIN scalable, reliable and secure network connectivity. "We knew fairly early on, once we had designed this system, that an MPLS-based network could most effectively connect multiple hospitals, because we didn't want to have T1 lines crossing each other all over the state," she said.

The result, Paras said, "is a very elegant technology and it works quite seamlessly."

Here's how the network works: California hospitals pay an annual membership fee to become part of the Health Care Interpreter Network, which operates as a virtual call center. Hospitals outside California can contract directly with Paras and Associates for this service.

When the need arises, portable video monitors are wheeled into the examination area to enable doctors and patients to see the interpreters, who can also see them. Hospital staff use a remote control to choose the language they need. Their selection is routed through an IP call center that almost instantly connects the caller to an interpreter. "A trained healthcare interpreter appears on the screen, ready to assist the staff and bring comfort to the patient," Paras said.

If a hospital has in-house interpreters, interpretation requests are first routed to them. If they are busy or if the hospital interpreters don't

speak the requested language, the call is routed to an interpreter at another HCIN member. Occasional requests for unusual languages are routed to commercial audio-only interpretation services. While these requests may take a little longer to fulfill, nearly every caller is connected in just a few minutes.

Becoming part of the HCIN is easier and more cost-effective for hospitals that have MPLS-based networks in place, Paras said. "The cost of the solution is greatly reduced because the hospital won't need a separate T1 connection," she said. "We can put this system right into the hospital's existing network at a significantly lower cost."

Picturing the Future of Video Networking

Paras and Associates is already expanding its services throughout the US, especially to states that have laws mandating patient access to interpreters. "Our company is in a big growth process and we are now getting clients from all over the country," Paras said. "We're working on scaling up the business so that it can serve customers effectively anywhere in the United States and we are also preparing for global expansion."

Within a year the company plans to offer a managed video and voice call center interpreter service internationally, beginning with major European industrial cities that have large immigrant populations. It will also expand into the Middle East, Asia and Australia.

Business continuity will remain a priority to ensure continual hospital access to interpreters. "As we're developing our national and global

capabilities we are setting up parallel and redundant systems," Paras said. "This is the beauty of a global MPLS network, which we can use for backup in any circumstance."

Paras is planning to adapt the video and voice contact center solution for other vertical markets. The network will soon have American sign language interpreters available, and hopes to serve travel and tourism as well as government offices. "We expect to attract state and local governments that have significant need for interpretation services," she said. "Offices like the department of motor vehicles often struggle to cost-effectively provide interpretation for people who speak other languages."

The company is also working on a mobile video application that could assist first responders. "There are so many parts of society, especially the service sectors, that have real language needs and we hope to offer them a very cost-effective solution," she said.

Paras credits AT&T with much of the early success of Paras and Associates and the Health Care Interpreters Network. "Our account team really understood our vision," she said. "As we were getting started, we were designing something for which there was no model. They understood what we were trying to do and were moved by it."

Just as important, she said, are the technology recommendations the team made. "They really examined our needs to be sure the technology would meet them. It's hard to look back and see how we could have done it without them."

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