

## Japanese Telemedicine Gains Momentum with Virtual Meetings

### Executive Summary

**Customer Name:**

Hokkaido University, Graduate School of Medicine

**Industry:**

Higher Education and Research

**Location:**

Sapporo, Japan

**Number of Employees:**

10 board members, 4,309 employees

**Challenge:**

- Implement expansive telemedical infrastructure
- Allow remote doctors access to medical information and records
- Eliminate cost of managing and maintaining servers

**Solution:**

- Cisco WebEx Meeting Center solves accessibility and firewall problems
- Hospitals can exchange information without expensive network alterations
- Patients get better care with input coming from specialists across Hokkaido

**Results:**

- Increased frequency of conferences, from once every six months to once a month
- Collaborated with doctors from multiple locations to foster industry improvement
- Enabled young doctors to get valuable advice from veteran professionals

Hokkaido University uses online tools to collaborate with remote doctors and improve patient care.

### Challenge

Founded in 1876 as the Sapporo Agricultural College, National University Corporation Hokkaido University has cultivated an atmosphere geared toward practical, comprehensive learning. In the Graduate School of Medicine, researchers wanted to develop a telemedical infrastructure that would allow remote doctors to collaborate more efficiently on patient treatment plans. The only trouble was in finding the right technology to support such a system.

At the time, doctors in networked hospitals were using self-managed servers to download computed tomography (CT) and magnetic resonance imaging (MRI) images in order to make remote diagnoses. However, with the high cost of setting up and managing these servers, many hospitals remained ill-equipped for remote collaboration.

“Server setup and maintenance laid a heavy burden on us,” says Dr. Hiroki Shirato, professor of medical radiology at the Graduate School of Medicine. “We tried using self-managed servers in the past, but they were just inefficient and problematic. In particular, the university’s firewall protection made it almost impossible to gain access from off campus.” Without the right networking solution, the school’s telemedical plans needed to be put on hold.

### Solution

Around that time, team members from Hokkaido University happened to use Cisco WebEx™ technology while participating in an international collaborative research conference. After that initial demonstration, Masako Wada, a teaching assistant in the Graduate School of Medicine, was convinced that WebEx Meeting Center would address many of their challenges, including costly server maintenance and firewall restrictions. “As long as the Internet is available, we can easily connect with remote medical professionals through a WebEx meeting,” Wada says. “I knew from the start that it would be very useful to us.”

Dr. Shirato and his team immediately decided to put WebEx® technology to the test. There was a patient at the National Health Insurance (NHI) Hospital in Ashoro who had just undergone a CT scan. Using interactive Cisco® WebEx tools, medical specialists from three different hospitals were able to review these images together and collaborate on a successful treatment plan. “The day after we held our first WebEx meeting, we received an email from the head of the NHI Hospital, expressing his enthusiasm over how well everything went,” says Dr. Shirato. “We were all very excited.”

## Results

Thanks to WebEx technology, Hokkaido University now interacts with medical professionals on a much more frequent basis. Dr. Shirato's team uses the online solution not only for collaborating with doctors on patient treatment plans, but also to conduct large-scale meetings with the prefecture's leading healthcare providers as well. Due to the busy schedules of presidents, directors, and faculty members, these types of conferences used to take place just twice a year. But with WebEx Meeting Center, it is now possible to interact once every month.

The WebEx capability has been especially useful in maintaining communication between Sapporo Medical University and Asahikawa Medical College, the school's partners in the government-sponsored Coordination, Support, and Training Program for Translational Research. This project, sponsored by Japan's Ministry of Education, Culture, Sports, Science, and Technology, aims to establish a center of advanced medical technology and clinical therapy by connecting companies and experts from all over the world.

**“Using our deployment of WebEx technology as an example, we want to enhance the infrastructure of telemedicine across Hokkaido.”**

**Dr. Hiroki Shirato, professor of medical radiology, Graduate School of Medicine, Hokkaido University**

WebEx meetings have also made it easier for young doctors located in isolated and under-populated areas to receive advice from veteran doctors and professionals. “I made a very successful presentation using WebEx technology,” says Dr. Shirato. “I shared my ideas and talked about future plans with other medical professionals, which I think is a great way for geographically-scattered researchers to gain recognition for their work as well. My goal is to foster everyone's research, no matter where researchers are located.”

## Next Steps

Looking ahead, Dr. Shirato and his team hope to use Cisco WebEx technology in strengthening collaboration among geographically-scattered cancer treatment centers. Because Hokkaido is such a large prefecture, he also sees the potential for using the technology in emergency and crisis management situations as well. "Using our deployment of WebEx technology as an example," he says, "we want to enhance the infrastructure of telemedicine across Hokkaido."

## For More Information

- To find out more about Cisco WebEx, go to: <http://www.cisco.com/go/webex>.
- To read other collaboration case studies, go to: <http://www.cisco.com/go/customers>.
- To provide feedback or participate in the WebEx customer reference program, email: [real.results@webex.com](mailto:real.results@webex.com).

## Product List

Cisco WebEx Meeting Center



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