Reducing Urban-Rural Medical Gaps

In order to reduce and eventually resolve problems in underpopulated areas and urban-rural medical service discrepancies, we connect with hospitals in rural areas through the telemedicine network and we have established medical systems to provide patients everywhere with advanced medical treatment.

Project to Support Collaborative Emergency Medicine Using the Cloud

Since October 2016, we have been collaborating with six hospitals in Hokkaido (Japanese Red Cross Kitami Hospital, Hokkaido Prefectural Kitami Hospital, Engaru-Kose General Hospital, Furano Association Hospital, Fukagawa Municipal Hospital, and Rumoi City Hospital). We are conducting a project to support collaborative emergency medicine using the cloud. In this project, our medical specialists use their smartphones and tablets, look at patient information sent to the cloud on the Internet, offer advice on diagnoses and treatment plans, and judge whether ambulance transportation to our hospital is necessary. This has made it possible to provide quicker treatments for patients suffering from heart diseases. On December 3rd, 2016, we held a press conference at the Plaza Hotel in New York and presented the project and its achievements. This presentation attracted worldwide attention and interested senior officials and members of the royal family in the United Arab Emirates. We visited Dubai and discussed our project with them, confirming that we can satisfy their medical needs.

Conclusion of a Memorandum of Understanding Regarding International Telemedical Activities with Parkway Pantai, Ltd. (Singapore)

On April 3rd, 2018, we concluded an MOU regarding international telemedical activities with Parkway Pantani, Ltd., a subsidiary of IHH Healthcare Berhad, one of the largest private hospitals in Asia that operates hospitals in Singapore, Malaysia, India, China, Hong Kong, Brunei, and the United Arab Emirates. We will collaborate with Parkway Pantani, Ltd., in applying our telemedical technologies internationally and will provide doctors and nurses in Asia with clinical training opportunities.
### History

1994 Oct. First Telemedicine is conducted between Asahikawa Medical University and Yoichi Society Hospital with the cooperation of Sony

1996 May. Harvard University, Professor Charles L. Schepens visits Asahikawa Medical University to observe experiments in telemedicine

Dec. Commencement of telemedicine between Asahikawa Medical University and Harvard University SERI

1998 Oct. Commencement of telemedicine between Nanking Central Medical University Ophthalmology Department, China and Asahikawa Medical University

1999 July. The Telemedicine Center is completed

2001 Feb. First experiments in the transmission of 3D moving images in 3D-HD (three dimensional-high definition moving images)

2005 Jan. Advances in IP for Telemedicine Centers

May Research commenced for telemedicine using the Asia-Broadband Network (ABB)

Commencement of telemedicine using satellite networks

2007 Feb. Commencement of outpatient care for ophthalmology patients—Telemedicine House Calls

Mar. Successfully held the Virtual Ophthalmology Symposium connecting Japan, Singapore, and Thailand with ABB, while conducting live-surgery transmitting moving images for simultaneous viewing between the three countries

2009 Jan. Selected as a Telemedicine Model Project by the Ministry of Internal Affairs and Communications and commenced promotion of telemedicine

Dec. Commencement of PHR (Personal Health Record) service called Well-Net-Link

2011 May. Conclusion of the China and Japan Telemedicine Project Grant Aid Agreement with the Ministry of Health of the People’s Republic of China

2012 Mar. Establishment of the Telemedicine Cloud Center

May Commencement of operations support and technical guidance to 4 hospitals including on the basis of the China and Japan Telemedicine Project Grant Aid Agreement

2015 Mar. Commencement of the web meeting service to promote telemedicine

2016 Oct. Commencement of project to support collaborative emergency medicine using the cloud (with six hospitals in Hokkaido)

2017 Aug. Conclusion of an MOU with the Sakhalin Oblast in Russia regarding telemedicine

Nov. A group of municipal assembly members from Yuzhno-Sakhalinsk visit the Telemedicine Center

Dec. A group of government delegates from Sakhalin Oblast, including the vice-president and the health minister, visit the Telemedicine Center

2018 Apr. Conclusion of an MOU regarding telemedicine with Parkway Pantani, Ltd., a subsidiary of IHH Healthcare Berhad, one of the largest private hospitals in Asia

2019 Nov. Development of the world’s first 3D-8K medical system

### Activities in Telemedicine

As of May 1, 2019

<table>
<thead>
<tr>
<th>Classification</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
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</thead>
<tbody>
<tr>
<td>General Medical Examination Support</td>
<td>848</td>
<td>706</td>
<td>652</td>
</tr>
<tr>
<td>Radiograph Image Diagnosis</td>
<td>5,623</td>
<td>5,602</td>
<td>4,994</td>
</tr>
<tr>
<td>Pathological Image Diagnosis</td>
<td>21</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>6,492</td>
<td>6,323</td>
<td>5,666</td>
</tr>
</tbody>
</table>

50 domestic facilities

4 international facilities

### Hokkaido Medical Museum in 2018-2019

<table>
<thead>
<tr>
<th>Date</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018 May 15</td>
<td>Protecting the Kidneys from Diabetes</td>
</tr>
<tr>
<td>2018 July 18</td>
<td>Palpitations and Breathlessness Can Be Frightening If Untreated: Better Understanding of Arrhythmia and Heart Failure</td>
</tr>
<tr>
<td>2018 Sep. 27</td>
<td>Tips on How to Enjoy Drinking</td>
</tr>
<tr>
<td>2018 Nov. 15</td>
<td>Protecting from Infectious Diseases: Influenza and Infectious Gastroenteritis</td>
</tr>
<tr>
<td>2019 Jan. 8</td>
<td>Preventing Lifestyle Diseases by Eating Colorful Superfoods</td>
</tr>
<tr>
<td>2019 Mar. 7</td>
<td>On Breast Cancer: For You and Your Loved Ones</td>
</tr>
</tbody>
</table>