# Telemedicine Center

#### **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.



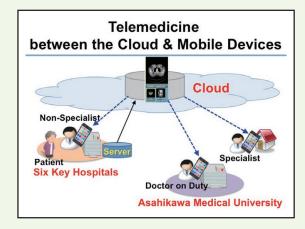
International Conference through the Telemedicine Network

# Topics

#### **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-Kosei 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.

This project is highly valued, and in December 2019, Dr. AZUMA Nobuyoshi, deputy director of our hospital and professor of the Division of Vascular, Respiratory and Surgical Oncology at the Department of Surgery, won the Hokkaido Science and Technology Award.





### Hokkaido Medical Museum in 2019-2020

| Date              | Theme  |  |  |
|-------------------|--|--|--|
| 2019 May 23       | Understanding Visual Disturbances: Diseases Masquerading as Presbyopia |  |  |
| 2019 July 11      | What is the Newest Surgical Approach to Colorectal Cancer?             |  |  |
| 2019 September 26 | Relationship of Dysphagia Required in the Community                    |  |  |
| 2019 November 12  | Elderly with Dementia and Family caregivers                            |  |  |
| 2020 January 23   | Seniors and Mental Health  |  |  |

## **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
  - Dec. Commencement of PHR (Personal Health Record) service called
- 2011 May Conclusion of the China and Japan Telemedicine Project Grant Aid Agreement with the Ministry of Health of the People's Republic of
- 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
- 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
  - Nov. Development of the world's first 3D-8K medical system
- 2019 Nov. The minister and deputy minister of the Ministry of Health of Sakhalin Oblast, Russia, visited the Telemedicine Center

#### Activities in Telemedicine



As of May 1, 2020

50 domestic facilities 4 international facilities

|                     | 0 |
|---------------------|---|
|                     | 0 |
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| Classification                      | 2017  | 2018  | 2019  |
|-------------------------------------|-------|-------|-------|
| General Medical Examination Support | 706   | 652   | 609   |
| Radiograph Image Diagnosis          | 5,602 | 4,994 | 4,776 |
| Pathological Image Diagnosis        | 15    | 20    | 13    |
| Total                               | 6,323 | 5,666 | 5,398 |

