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「超高速ネットワークを利用したアジア遠隔医療プロジェクト」TEMDEC (Telemedicine Development Center of Asia)活動報告: 第13巻

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# 8. TEIN プロジェクト

## 8-1. ベトナム訪問報告



#### Visiting plan

## Visiting members

- Shuji Simizu, MD
- Yoshihiko Sadakari, MD
- Yoshiko Houkahe, Engineer
- 4. Minh Cao Duc, Engineer
- Eriko Harada, Coordinator
- Ryoko Yoshida, Coordinator

#### O Piriod: 11-12 October, 2016

October 11(Tue)
Hue Central Hospital
October 12(Wed)
Hue University of Medicine and Pharmacy

#### Meeting result

## O Description of Activity / Summary

- Report 1 (Ryoko Yoshida, Coordinator)
- Report 2 (Yoshihiko Sadakari, MD)
- Report 3 (Yoshiko Houkabe, Engineer)

## Report 1: Ryoko Yoshida, Coordinator

Upon the request of Hue Central Hospital to support their telemedicine activity, we at TEMDEC decided to visit Hue city, Vietnam, to see the current situation and to discuss about future collaborations. Medical doctors and engineers have been actively joining fellowship and engineer training programs at APAN meeting. It seems that Mr. Tran Viet Quang Minh, an engineer of Hue Central Hospital is getting well trained for telemedicine activities. Dr. Pham Nhu Vinh Tuyen, Vice-Director of Medical Training Center, is very interested in telemedicine, too. He recommends young medical doctors to be involved in fellowship programs in telemedicine at APAN. We also took this opportunity to visit Hue University Medical and Pharmacy Hospital. Engineer Nguyen Van Tue, has been very active and supportive of telemedicine, hence we would like to encourage Hue University Medicine and Pharmacy Hospital to be more active in telemedicine. Our visit would help them to recognize the benefit and possibility of telemedicine.

#### Tuesday, October 11: Hue Central Hospital

We visited Hue Central Hospital and had an opportunity to meet Prof. Nguyen Duy Thang, Vice Director of the hospital, Dr. Tran Nhu Nguyen Phuong, Head of Endoscopy Department, together with Dr. Tuyen and his colleagues.

At the meeting, Prof. Nguyen Duy Thang showed his deep appreciation to TEMDEC for inviting doctors and engineer to APAN meetings and Asia Telemedicine Symposium (ATS), mentioning that it had been a great opportunity for them.





Meeting with Prof. ND Thang and his team

After the meeting with the hospital vice director, we moved to another meeting with the staff of the **Endoscopy Department**.









One of activities that TEMDEC supported was introduced.

Endoscopy Department is active in telemedicine, and we received a big welcome from them. Dr. Tuyen gave a presentation to introduce Hue Central Hospital and their telemedicine activities. We could see that they are trying to gain the benefits of telemedicine. However, they also have some issues in expanding their activities such as, infrastructure, connection, human resources and language. For example, their medical doctors who have great interests in telemedicine but they have difficulty in joining international teleconferences due to language issues with their engineers. They are trying to be of help, however, the language issue discourages them to be involved in international telemedicine activities. This is one of the problems we often encounter. Telemedicine is not able to be launched without technical support. Therefore, we may need to find a solution, which can assist them linguistically. Last year, a manual book for telemedicine engineer was published, although it is written in Japanese, and we are currently planning to issue an English version. This would help engineers if the manual book can be translated into other local languages. They would gain knowledge by studying the book and it will encourage them to join into international telemedicine engineering community. If they become more interested in telemedicine by studying the manual book and gain knowledge, it might help them to overcome language issue.

Mr. Tran Viet Minh is the only telemedicine engineer of Hue Central Hospital. He has been very supportive of telemedicine activities, and he is always keen to gain new knowledge to expand telemedicine activity from Hue to throughout Vietnam and beyond. We hope Hue Central Hospital will be involved in telemedicine activity even more, and they would be one of the lead hospitals in telemedicine of Vietnam.

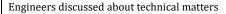
Hue Central Hospital gave us a hospital tour after the discussion.





Hospital tour







This auditorium can occupy about 200 people. It is sometimes used for teleconference.

#### Wednesday, October 12: Hue University of Medicine and Pharmacy Hospital

With the presence of Dr. Nguyen Vu Quoc Huy, the Vice-Rector, we had a meeting with Hue University of Medicine and Pharmacy. Dr. Tran Van Huy, head of Department of Internal Medicine, and Dr. Nguyen Thanh Thao, deputy-head of Office of Science-Technology and International Relations were present at the meeting. Mr. Nguyen Van Tue, telemedicine engineer, belongs to the Office of Science-Technology and International Relations, and he supported all telemedicine activities both in the university and hospital.

At the meeting, collaborations between Vietnam and Japan were introduced. They have active programs not only for medical doctors but also for nurses, and they are aware of the benefit of tele-education. They cited that they had much needs in telemedicine, especially tele-training. For instance, newly established endoscopy centers in Vietnam needs training opportunities and occasions to gain experiences. However, it is not easy for them to travel and study at experienced endoscopy centers due to a high budget and time requirement. Telemedicine is one of the great solutions for them to be educated, without being worried about time and money. Hue University of Medicine and Pharmacy is one of the key hospitals in educating and supporting young endoscopist. They are trying to apply telemedicine to provide a good educational platforms, hence they value that telemedicine is one of the key in their educational development, which can bring knowledge, skill and medical technique to central Vietnam. There are many district hospitals that are keen to gain knowledge, skill and medical technique, and Hue University of Medicine and Pharmacy is trying to provide it to them, using telemedicine.



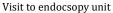


Meeting with Dr. Nguyen Vu Quoc Huy (left) and the team

Mr. Nguyen Van Tue is actually the only engineer who works for telemedicine. He said he could have support from other engineers when necessary, however, due to language issues, he needs to be in charge when a teleconference with other countries is held. They have the same problem as Hue Medical Hospital

After the meeting, we went for a hospital tour. We visited teleconference room to see their set up. Mr. Tue explained that the telemedicine equipment they have was not enough. TEMDEC engineers checked the equipment for telemedicine they had.







Engineers discussion about technical issues

By visiting two key hospitals in Hue, we became more aware of the needs of telemedicine. They are trying to lead healthcare and medical education by using telemedicine, however, the current environment is not adequate to expand their activities. The necessity of adequate equipment, well trained staff, good network, better understanding in telemedicine from their institution, and educational opportunity for engineers is recommended for future telemedicine activities. We hope to continue to support their activities and help their growth in telemedicine in Vietnam and the world beyond.

## 8-2. ネパール訪問報告



## Visiting plan

### O Visiting members

- Shuji Simizu, MD
- 2. Taiki Moriyama, MD
- Yasuichi Kitamura, Engineer
- 4. Ryoko Yoshida, Coordinator
- 5. Yui Hamazaki, Coodinator

#### O Piriod: 8 November, 2016

## November 8(Tue)

- 1. Tribhuvan University Teaching Hospital
- 2. Kathmandu Model Hospital
- 3. Kirtipur Hospital
- 4. Patan Academy of Health Sciences (PAHS)
- Nepal Research and Network (NREN)
- 6. Ministry of Health

#### Meeting result

#### O Description of Activity / Summary

- Report 1 (Ryoko Yoshida, Coordinator)
- Report 2 (Taiki Moriyama, MD)
- Report 3 (Yasuichi Kitamura, Engineer)

## Report 1: Ryoko Yoshida, Coordinator

Nepal is aware of benefits of telemedicine. Dr. Saroj P. Dhital is a senior consultant surgeon in the Department of Surgery in Kathmandu Model Hospital and Kirtipur Hospital in Kathmandu. He has been very interested and one of the active members of APAN Medical Working Group. He also has important roles in telemedicine in Nepal; Founding Chairman of Telemedicine Society of Nepal, and, Founding Director of Center for Rural Healthcare and Telemedicine (PHECT). He has many friends and colleagues to work with to develop telemedicine activity in Nepal, however, he says that they have three major problems. First one is technology problem, which is gradually getting to be solved, because people have more interest in ICT in Nepal. Second is proper medical doctors who accelerate telemedicine activity. Third, cooperation with government. In order to be a help to solve the problems, TEMDEC decided to visit key hospitals in Kathmandu to see the current situation and discuss about the further collaboration.

#### 1. Tribhuvan University Teaching Hospital

Tribhuvan University is the first institution which started medical education in Nepal. Recently they held a teleconference on Ophthalmological topic with Tokushima University Hospital, Japan, and TEMDEC technically supported the event. After a quick visit to the teleconference room at Tribhuvan University Department of Information Technology, we had an opportunity to meet Prof. Deepak Prakash Mahara, Executive Director of the hospital. He showed much understanding on telemedicine activity and its advantage. Another meeting with Prof. Bimal Kumar Sinha, Assistant Dean of the hospital, followed.







Prof. Bimal Kumar Sinha (right)

Prof. Bimal was aware of the telemedicine activity with Tokushima University, and commented that telemedicine was good educational method. It seemed that he gained much interest in remote education by seeing the list of Special Interest Group of APAN Medical Working Group. We hope them to have more opportunity to be involved to our activity in the future.

#### 2. Kathmandu Model Hospital

We visited Kathmandu Model Hospital, the most active institution in telemedicine in Nepal. Dr. Saroj P. Dhital plays an important role as a telemedicine medical doctor and the hospital is obviously the leading institution in telemedicine. We visited teleconference room in the hospital and the telemedicine room at Department of Surgery.





Engineers discussed on technical setup

Group photo with the team

At the meeting, Dr. Saroj introduced the history of the hospital and mentioned about Kirtipur Hospital, newly launched hospital in Kathmandu. Some part of the hospital is still under construction, but it had started functioning, also, the hospital has telemedicine center. Dr. Saroj was very considerable to improve telemedicine environment in Nepal and how to collaborate with other countries.

#### 3. Kirtipur Hospital

We moved to Kirtipur Hospital to see the new telemedicine center Dr. Saroj and his team will use for more activities and to discuss more about future collaboration with Dr. Bharat Pradhan, Director of Kathmandu Model Hospital, and the team.





Entrance of the new hospital

(Left ) Dr. Bharat Pradhan





New telemedicine center

Group photo

The newly-established telemedicine center has a large room with enough seats to contain, probably up to 50 people. More people can join if the space allows. The room is bright and clean, well equipped with teleconference system. Mr. Rojen Shahi is the responsible telemedicine engineer for both Kathmandu Model Hospital and Kirtipur Hospital. NREN (Nepal Research and Education Network) is being very supportive for the hospitals, however, the hospital needs their own skilled engineer to expand more telemedicine activity. Mr. Rojen said that he joined the telemedicine workshop organized by Dr. HS Han, Seoul National University Bundang Hospital, and he was looking for other opportunities to gain knowledge to be skilled telemedicine engineer. Dr. Saroj mentioned that they might need to hire another engineer who can support their expanding activity. There is the needs for educational opportunity for telemedicine engineer, therefore, I think TEMDEC needs to continue to provide opportunities for them.

#### 4. Patan Academy of Health Sciences (Patan Hospital)

The hospital was introduced as one of the active hospital in Kathmandu. We were fortunate to meet the hospital Director Dr. Sishnu Psd. Sharma. Dr. Shimizu introduced telemedicine activity that TEMDEC had been supporting. Dr. Sharma showed a great interest and mentioned that telemedicine for education was very useful and beneficially. After the short meeting with the hospital director, we moved to teleconference room. Mr. Pramod Janawali, telemedicine engineer, introduced their activity and teleconference system they use, which is called "openmeeting".

Patan Hospital is actually a member of ECE (Endoscopy Clun E-conference) group, which is one of Special Interest Group of APAN Medical WG. Even though they had been not very active to join the teleconference due to the time difference, they promised to be involved more to the activity.



#### 5. Nepal Education and Research Network (NREN)

Due to the time limitation, we could spend only a short time at NREN, who had been very supportive to telemedicine activity, however, we were able to promise for more collaboration in the future.





Engineers checking the server

Group photo

#### 6. Ministry of Health

We were very fortunate to receive one more honorable opportunity to meet the Minister of Health, Nepal. At the audience, Dr. Shimizu explained our activity and how it would help the health service in Nepal. To expand telemedicine in Nepal and beyond, understanding and cooperation of the government is necessary. We hope the opportunity provided him an idea of telemedicine and e-health, and it would help the development activity in Nepal.





(Left) Minister of Health, Nepal

Group photo

Due to the limited flight access to Kathmandu, we could manage only one day to spend in Nepal. Therefore, we were not able to spend much time at each institution. Nonetheless, 4 medical institutions and NREN kindly arrange their schedule for us to visit, and we had very honorable opportunity to visit Ministry of Health. I think it proves the great needs of telemedicine in Nepal. Each stopover was short, however, I think it was very fruitful occasion. They all were proud of their telemedicine activity and keen to expand more for domestic and international healthcare education and treatment. Most of remote areas in Nepal are in at high in the mountains. I believe the development of telemedicine will provide great benefits to throughout the country, educationally and medically.