

Telemedicine

Training programs to disseminate telemedicine across the beneficiary countries



“Ensuring healthy lives and promoting well-being for all, at all ages,” is one of the United Nation’s Sustainable Development Goals (Goal 3).

The aim of this telemedicine project follows the same objective by taking advantage of Information and Communications Technology (ICT). Locally-available medical support is essential to help people live healthy lives, but there are budget, time and skill issues to delivering this everywhere. Telemedicine is the perfect solution for disseminating the necessary medical knowledge and new skills to every corner of the region, in an effective and economical way. The project team therefore believe that the combination of local, on-site support and remote consultation/education can work together to help achieve this SDG, ensuring good health and well-being for all.

There are three important factors for telemedicine to practically work - ACCESS, NEEDS, and SKILLS. Access means good internet connectivity, which is provided by fast and stable networks such as TEIN. Needs covers the variety of health issues doctors want to tackle, such as child/maternal

health and infectious diseases. Skills are the technical engineering skills which make telemedicine possible.

This project focused on two areas. Firstly, to provide engineers with good hands-on training programs, as telemedicine is still new, meaning there is a shortage of skills, especially in beneficiary countries. Secondly, it aimed to organize domestic workshops which brought together doctors and engineers from across individual countries in order to share information and to discuss problems and solutions. These workshops are expected to strengthen ties between these groups and help disseminate telemedicine more efficiently.

The following programs were organized in the latter half of the project from the 1st Call for Proposals.

Hands-on training at APAN45 in Singapore, March 2018

In this one week program, trainees were divided into four teams and assigned to support actual telemedicine sessions, organized by the APAN Medical Working Group. Through the experiences of supporting real-life sessions with team members, the trainees learnt about all the technical requirements for supporting a telemedicine conference, including setting up videoconferencing systems, controlling equipment, planning connectivity tests, and troubleshooting. In this program, 20 engineers from eight countries (Malaysia, Vietnam, Indonesia, the Philippines, India, Taiwan, Nepal and Thailand) participated as both trainees and trainers.

Domestic workshops

(1) Cebu, the Philippines, November 2017

This workshop consisted of three sessions. The first covered

telemedicine activity, with technical updates from hospitals which attended the previous workshop leading to a discussion around their experiences and recent updates. In the second session, new members introduced their institutions and experiences/aims for telemedicine, including challenges such as network infrastructure. The third session looked at activities within particular medical specialisms, with presentations from doctors within the fields of minimally invasive surgery, gastrointestinal endoscopy, infectious disease issues and ophthalmology.

(2) Jakarta, Indonesia, October 2017

In this workshop, participants discussed how to expand the telemedicine program around gastrointestinal endoscopy in Indonesia, given the fact that country is made up of many islands. In fact, most Indonesian participants had to take an airplane or a ship to join the congress in person, which was expensive in terms of time and cost. The 2nd Indonesia Telemedicine Workshop therefore aimed to strengthen the foundation for telemedicine and to expand to other medical fields. The workshop consisted of four sessions, with reports of telemedicine provided from across Indonesia. Even though over 30 minutes were allocated for questions and discussion, there was not sufficient time to cover everything. Overall, while there are many difficulties in rolling out telemedicine in the country, the passion of Indonesian doctors and engineers will overcome these challenges.



(3) Ho Chi Minh City, Vietnam, April 2018

The 2nd Vietnam Telemedicine Workshop was held in Ho Chi Minh City, in conjunction with the Vietnam Association of Gastroenterology and the Vietnamese Federation

for Digestive Endoscopy. 43 people from 13 institutions attended the workshop, with 20 financially supported by the Asi@Connect project. Key telemedicine members from 11 institutions in Hanoi, Hue, Ninh Binh and Ho Chi Minh City participated, sharing their current situations and discussing future plans for telemedicine in Vietnam. As a next step the aim is to expand telemedicine in the country beyond endoscopy to other fields, such as rehabilitation and dentistry.



Overall, the majority of participants evaluated the programs positively. However, during the hands-on program, some trainees expressed a need for more detailed explanations from trainers. Trainers also asked for greater discussion with trainees regarding the schedule prior to commencing technical preparations. This feedback was fully discussed, and will lead to future improvements. The domestic workshops were also evaluated very positively, with participants reporting that they provided valuable opportunities to foster and strengthen their own national teams. The remarkable progress in telemedicine, especially in Indonesia and the Philippines, can be attributed to the organization of these domestic workshops. The project strongly believes that these domestic workshops contributed substantively to these countries' accelerating telemedicine activities.

There are two further SDGs which have strong relationship with the project - #4 (Quality education) and #10 (Reduced inequality). Overall, thanks to the support of Asi@Connect, the project is proud to be meeting the wider UN SDG aim of "promoting prosperity while protecting the planet"

For more information

Asi@Connect : www.tein.asia

TEMDEC : <http://www.temdec.med.kyushu-u.ac.jp/eng/>

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