



Activity Report 2018

Faculty Of Medicine Universitas Brawijaya – Saiful Anwar General Hospital Malang

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Today's Talk

- **Relevance of Telemedicine in Indonesia**
 - **2018 Activity**
 - **Telemedicine and Medical Needs in Our Institution**
 - **Future Plans**
-



Indonesian Archipelagos

Relevance of **TELEMEDICINE** for Indonesia



- ▶ Indonesia is an archipelago, some patients find it difficult to travel to clinics, hospitals, or doctors' offices for any number of reasons.
- ▶ Inadequate infrastructure in rural/district hospitals
- ▶ Large number of in/outpatients requiring referral for specialized care
- ▶ Low-availability of Health Experts/specialist in district/remote hospitals
- ▶ Shortage of adequate opportunities for training or continuing Medical Education for Doctors in Rural/ Remote Health facilities
- ▶ Remote healthcare services and technology are quickly becoming common-place for healthcare.
- ▶ Telemedicine enables practitioners to evaluate, diagnose and treat patients remotely using the latest telecommunications technology.

Role of Telemedicine

- ▶ **CLOSED THE GAP:**
Shutting the breach between a modern and a rural hospital
- ▶ **A GOLDEN BRIDGE:**
Bridging an inadequate of latest technology on one-to- another
- ▶ **INTER-CONNECTION:**
Linking a hospital to another hospital
- ▶ **EDUCATION HUB:**
Media for upgrading knowledge, skill and competence of MD/NR

Our Milestones in Telemedicine



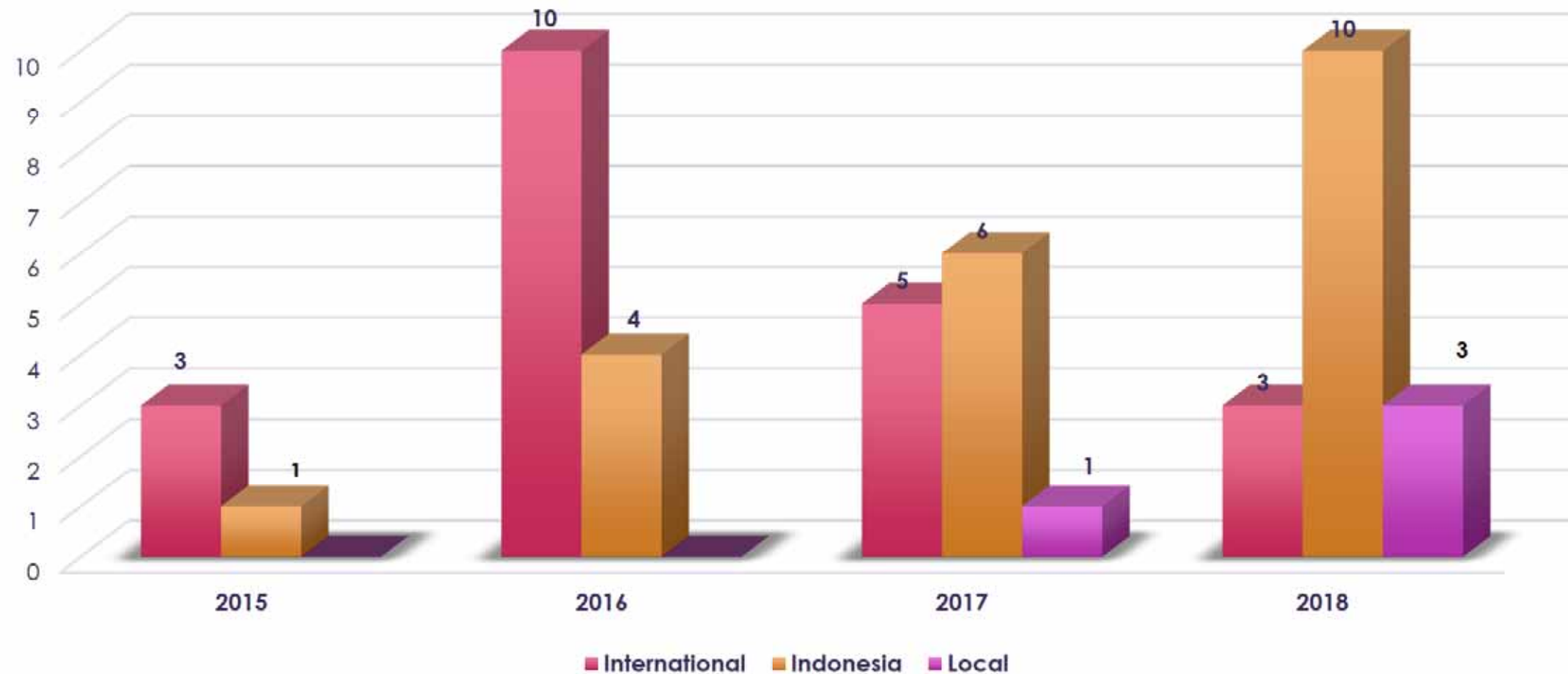
2018 Activity



Participate on Teleconference Session

ACTIVITY 1

Teleconference Activity in Internal Medicine Department

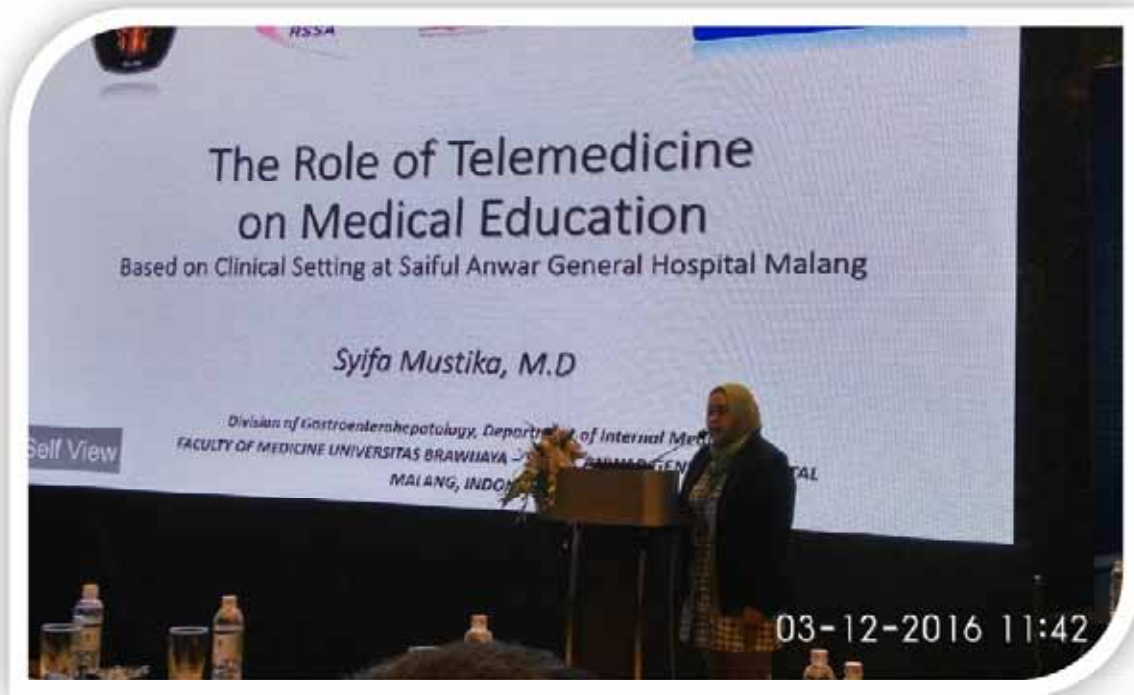




We are actively participate in:

1. ECE Meeting since 2015
 2. Indonesian Gastroenterology Telemedicine Network Since 2016
 3. APAN and ATS Session since 2017
 4. Lecture and Case Conference with Affiliation Hospital
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2016 -1st Indonesia Telemedicine Workshop

2017 -2nd Indonesia Telemedicine Workshop



2018 Activity



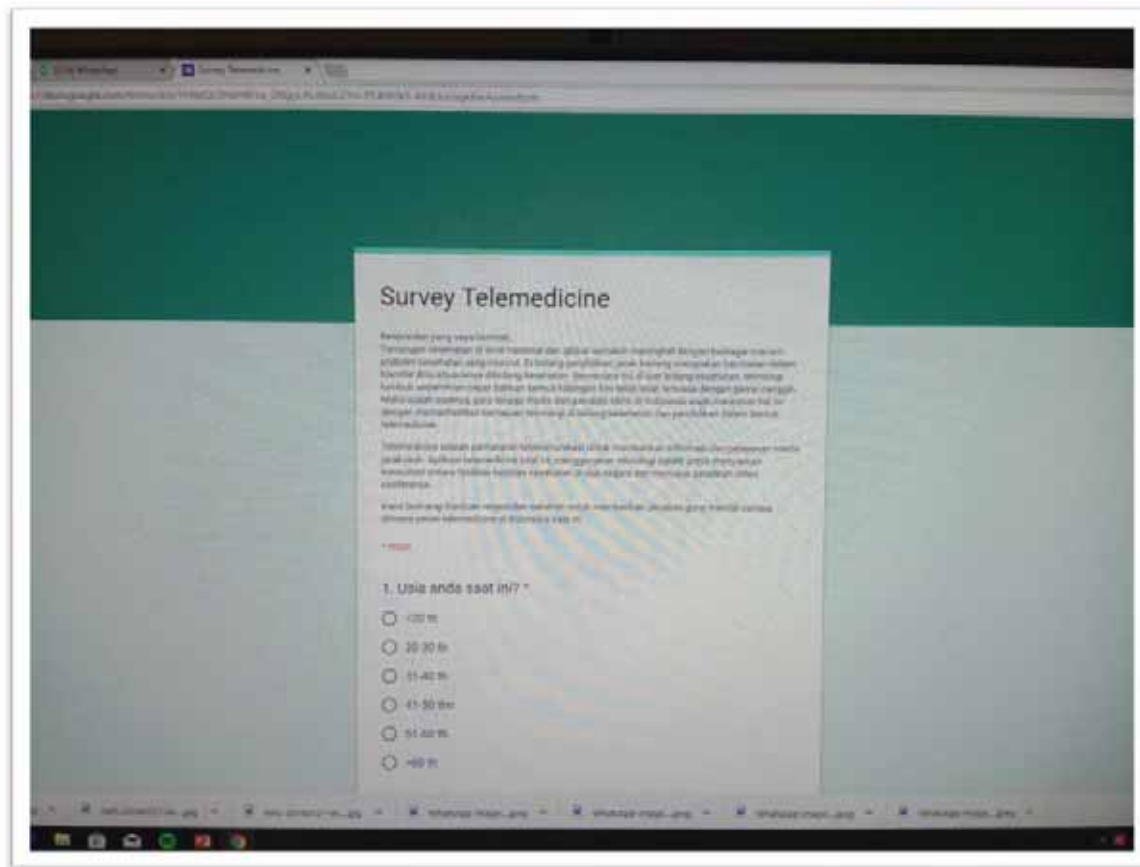
Conduct Study on Telemedicine

ACTIVITY 2

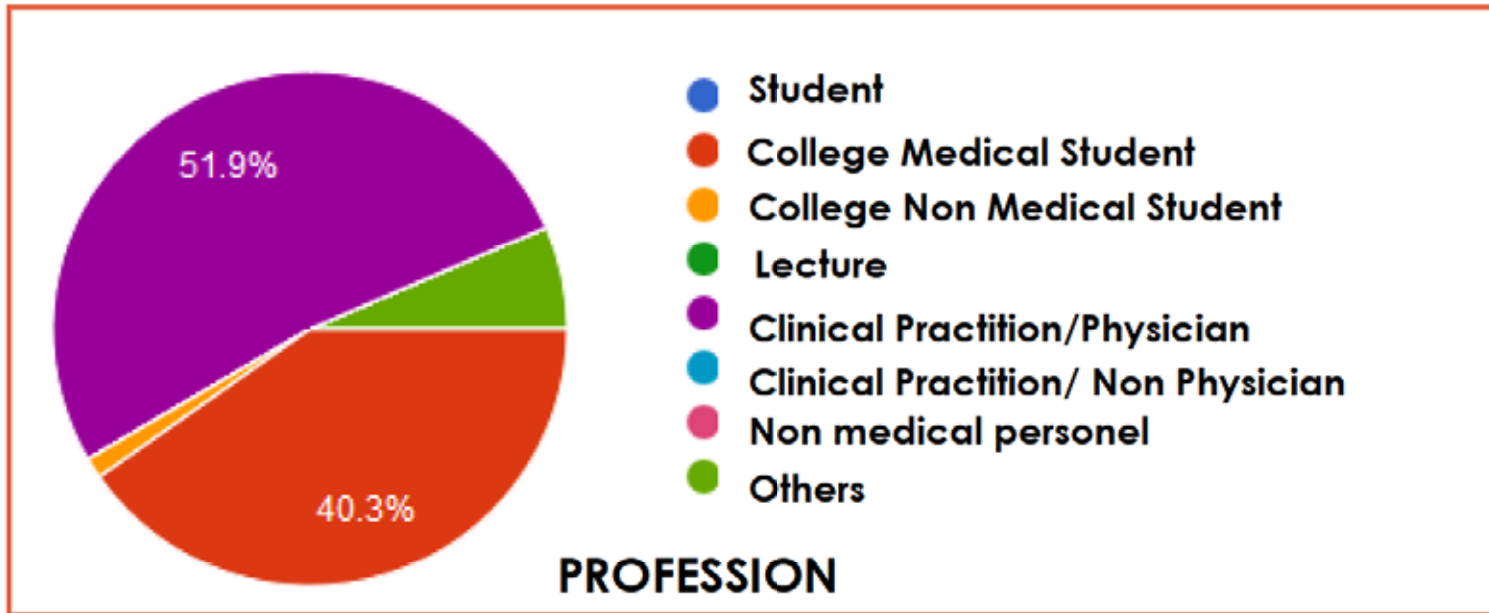
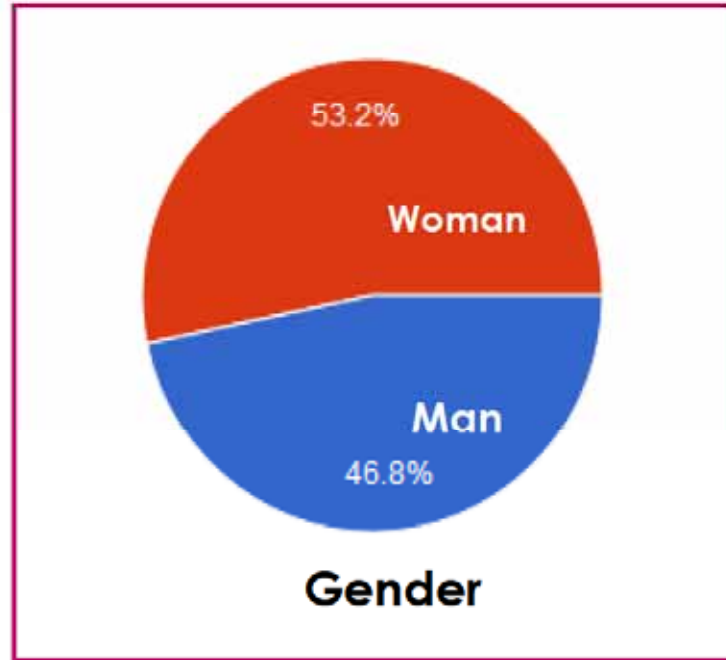
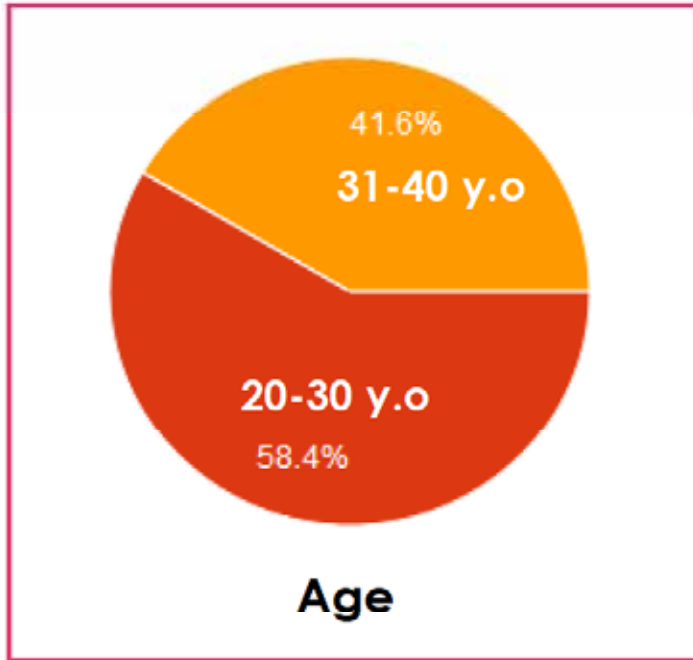
Survey Study on The Role of Telemedicine in Clinical Setting ¹

- ▶ In medical education, telemedicine usually done in the ***apprenticeship model*** through telementoring, where trainees “learn by doing” under the guidance of experienced mentors.
- ▶ The aim is to know the ***role of telemedicine in medical education*** based on ***clinical setting*** in our hospital.
- ▶ A survey using ***web questionnaire given to the medical students, residents and doctors*** who work at Internal Medicine Department Saiful Anwar General Hospital Malang, after joining the teleconference
- ▶ Total 273 respondent, analysed the information regarding ***aspects of clinical practice, education and awareness on telemedicine.***

Web Based Telemedicine Survey

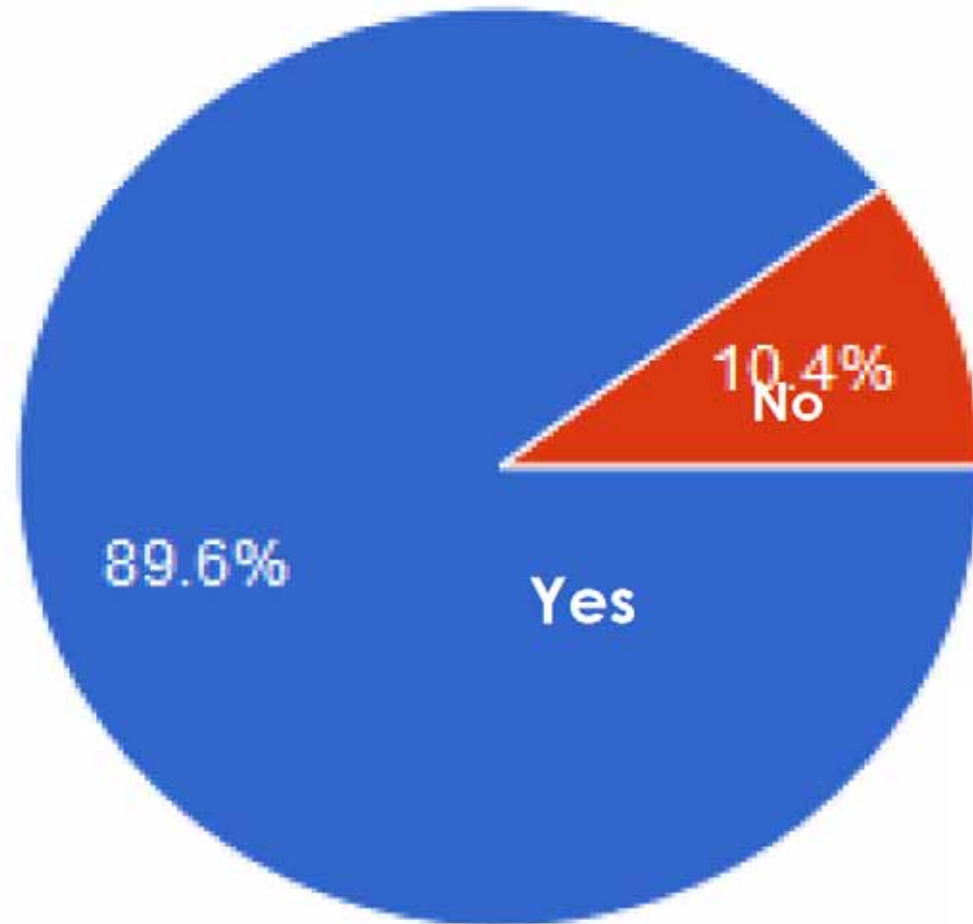


[https://goo.gl/forms/
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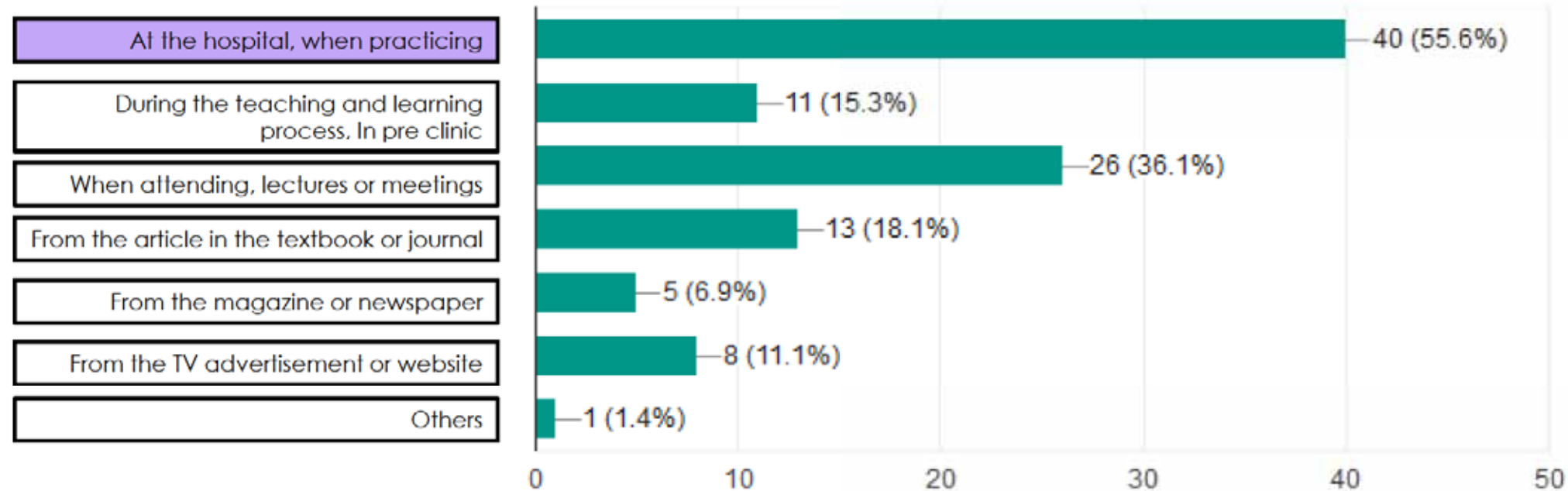




Have You Ever Heard About Telemedicine?



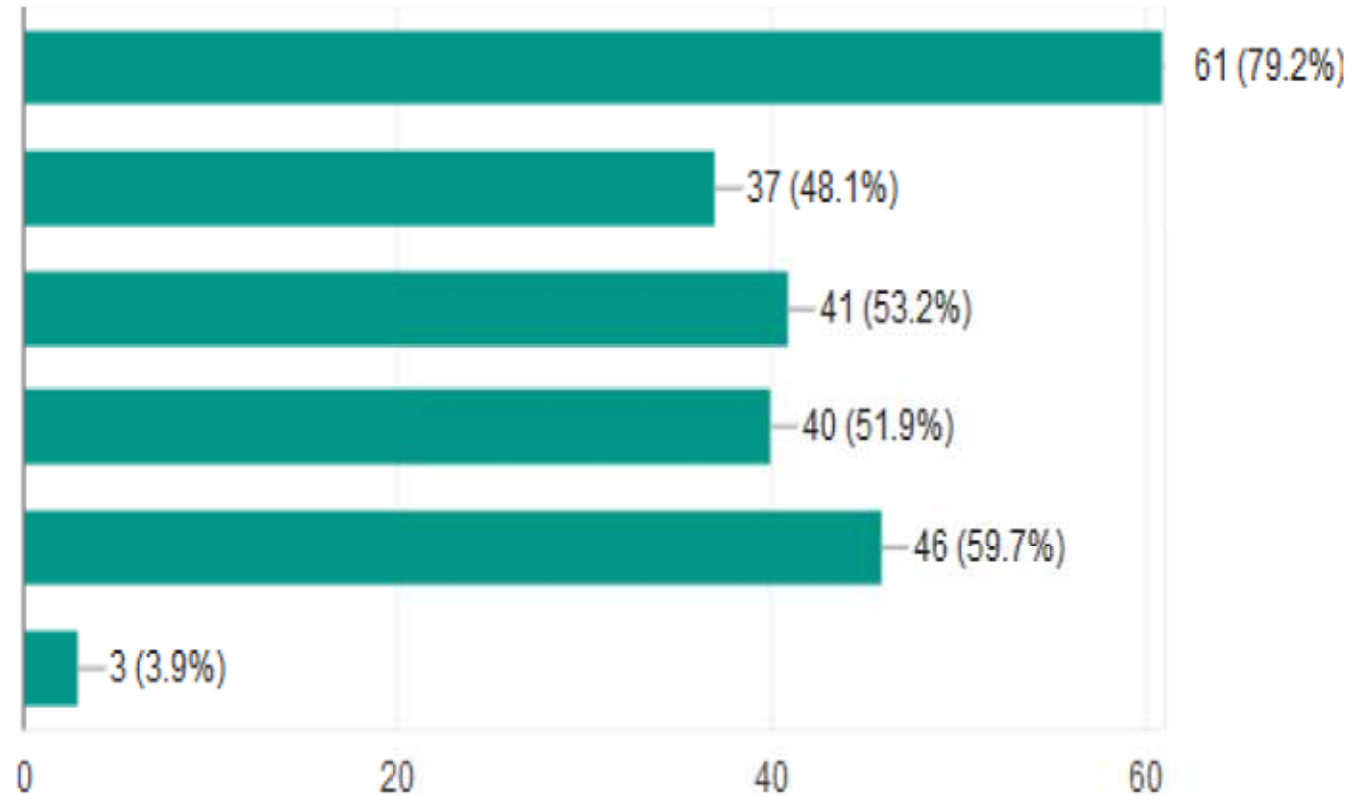
Where is first awareness of telemedicine? (may choose more than 1 choice)



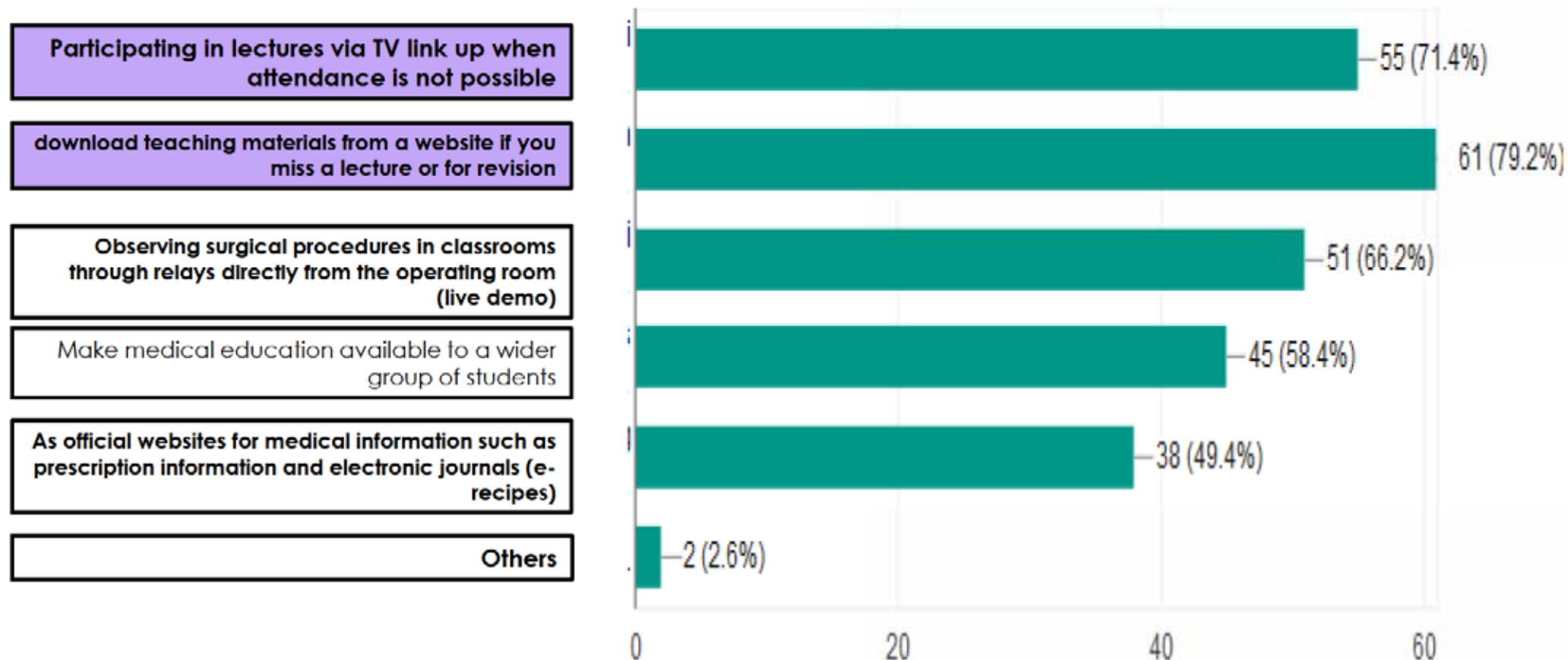
What is the role of Telemedicine in the medical field in the next 5-10 years? (may choose more than 1 choice)



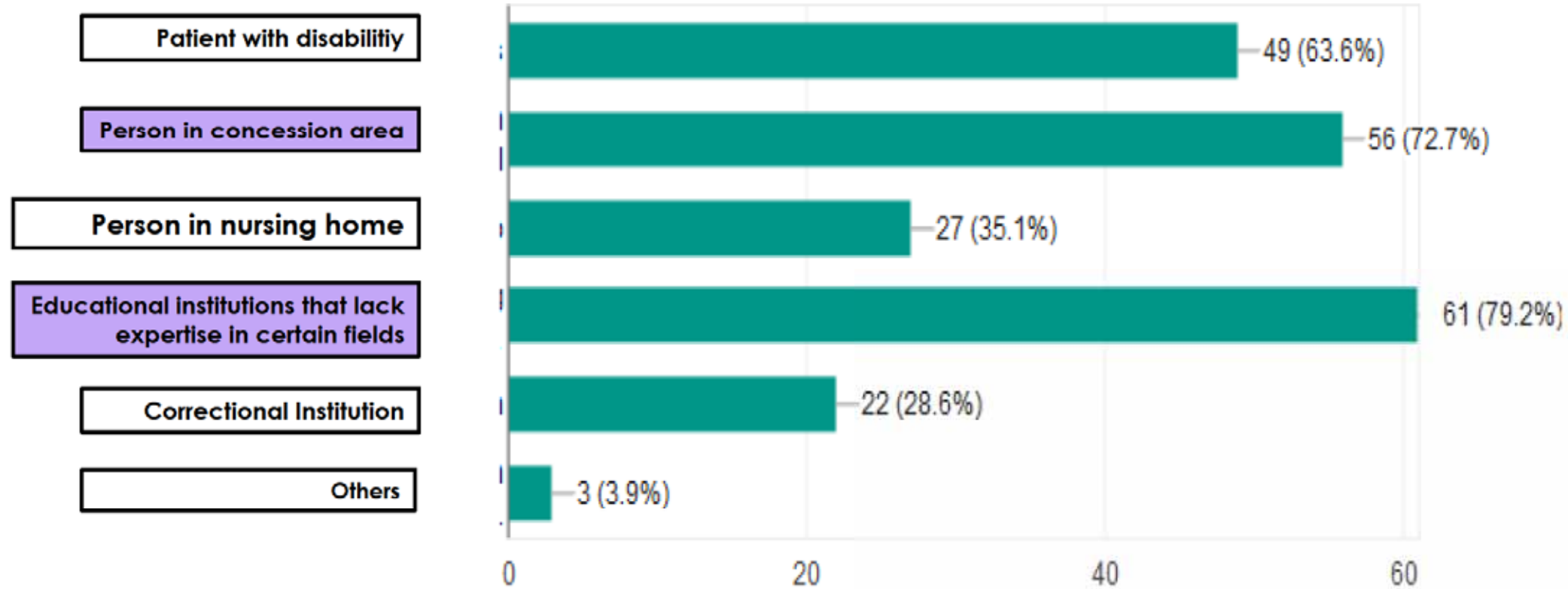
- Radiology; sending images from radiographers to radiology specialists
- Anatomical pathology; specialists see preparations on a computer screen
- Dermatologist see skin lesions through a video link from a general practitioner
- Delivery of fetal cardiotocography information (obtained through midwives who make home visits) to obstetric specialists in the nearest hospital
- Follow-up such as home visits to an elderly patient who uses electronic facilities at home such as television / cellphone / computer
- Others



What is the role of Telemedicine in the teaching and learning process and continuing medical education in the following fields? (may choose more than 1 choice)



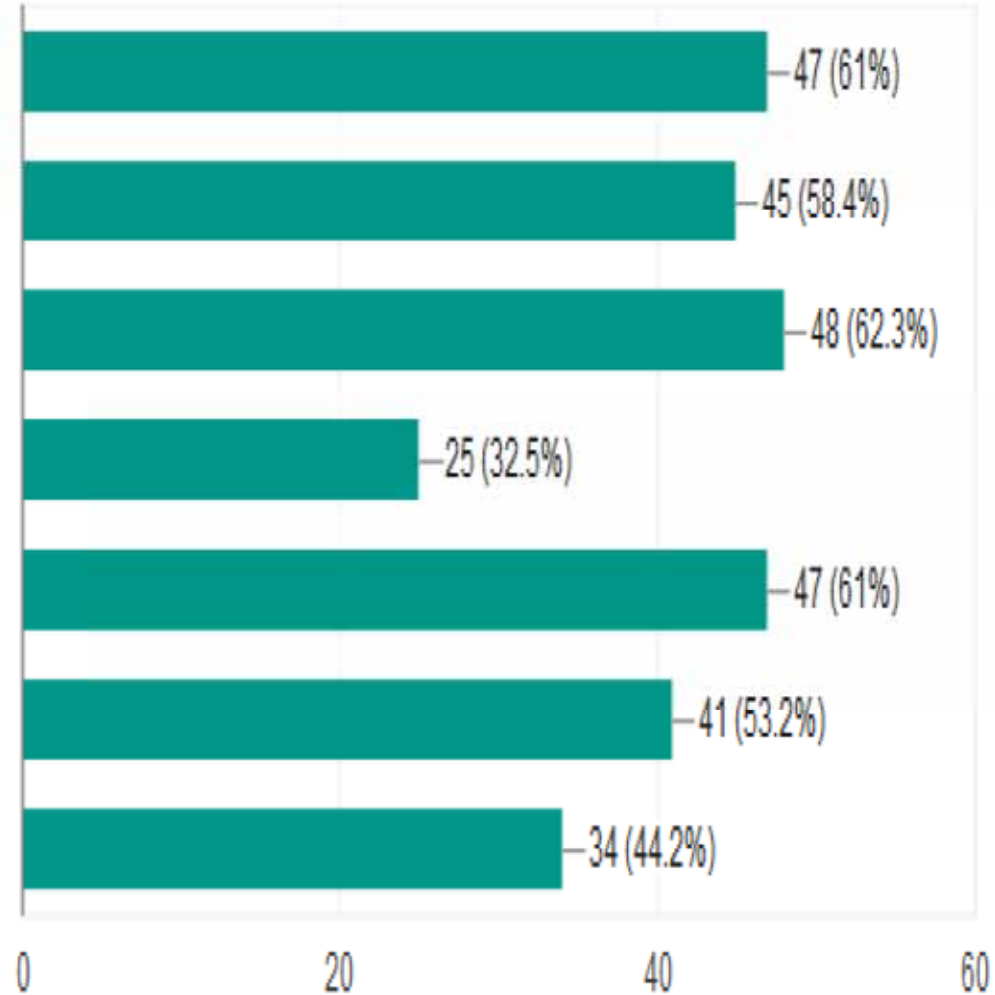
Who will get benefit from the use of Telemedicine ? (may choose more than 1 choice)



The impact of telemedicine on learning, training and health in the future (may choose more than 1)



- I want to attend lectures / courses using Telemedicine
- Patients should be motivated to have access to medical information available on medical sites so that they have knowledge of their health conditions
- Telemedicine combined between the ease of public access to health information will make a healthier population in the future
- The use of Telemedicine will obscure the differences in primary and secondary health facilities with the relationship between patients, nurses, doctors, and interactive consultants
- The use of telemedicine increases scientific and clinical skills
- The use of Telemedicine can improve team collaboration
- The use of Telemedicine can improve health services, especially in terms of disease prevention



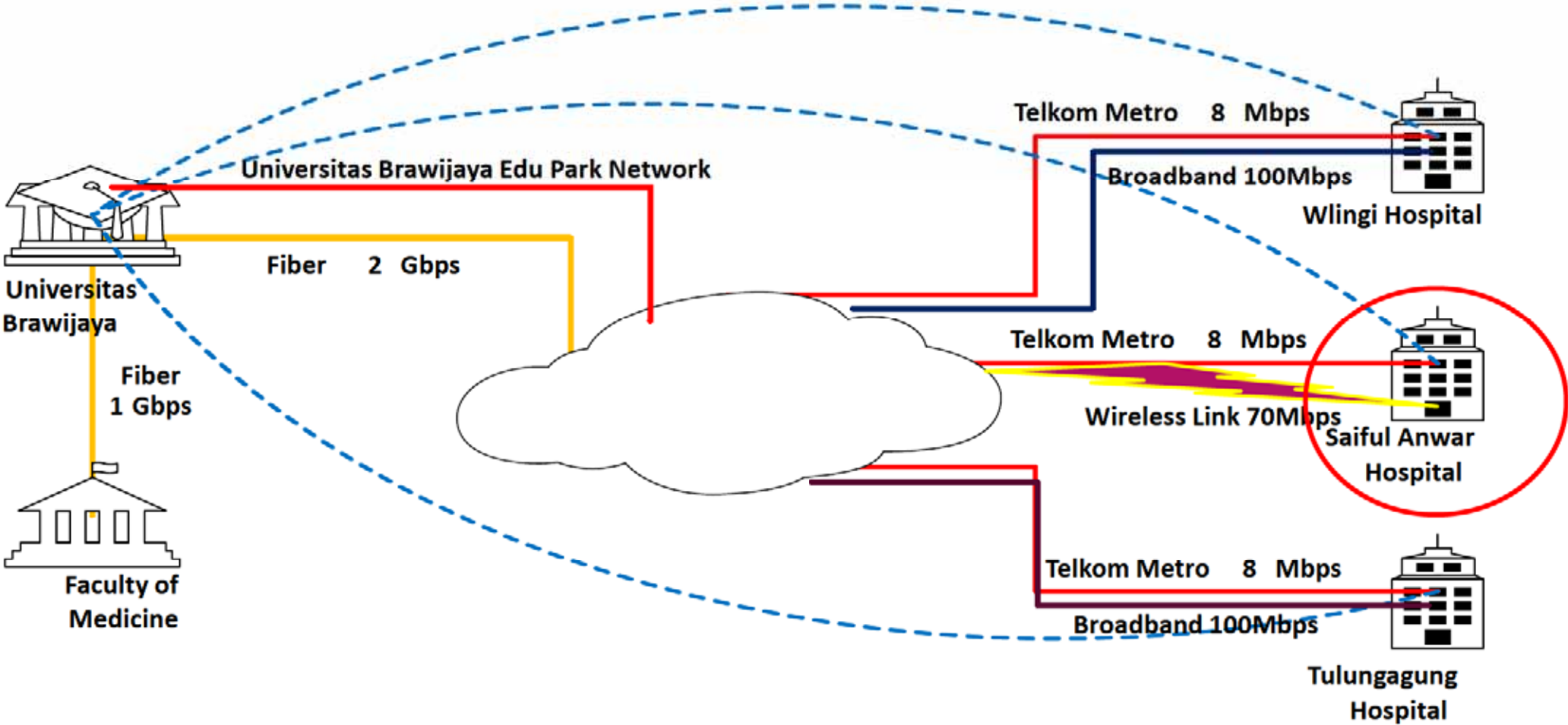
2018 Activity



Establish Educational Networking

ACTIVITY 3

Our Video Conference Connection



Teleconference with Our Affiliation Hospital



Telemedicine and Medical Needs in Our Institution

- ▶ Gain knowledge from leading Institute or Center regarding new technique, teaching methods or skill and distinguished cases → ***APAN Network and ECE Meetings***
- ▶ Transfer of experience and teaching among our affiliation Institution → ***Indonesian Gastroenterology Network***
- ▶ Existing telemedicine set-up and activities already supported by the university and hospital but needs more effort on human resources
- ▶ Setting or establishing MoU to make a mutual relationship and networking between country/institute.

The Barriers



- ▶ **Reimbursement**
- ▶ **Regulation (Government)**
- ▶ **Licensure**
- ▶ **Lack of Interests**
- ▶ *Language*
- ▶ **Hi-tech Equipment (Infrastructures)**

Future Plans

- ▶ Publishing paper related to Telemedicine
- ▶ Conduct routine sessions with affiliation hospital monthly
- ▶ Broadcasting Live Demo Events
- ▶ Transfer experience and teaching among our affiliation Institution or from the expert/excellence center
- ▶ ***Proposed to be host of 4th Indonesia Telemedicine Workshop 2019***



**“TELEMEDICINE PROVIDES
HEALTHCARE**

**WHERE THERE IS NONE
AND**



**IMPROVES THE HEALTH CARE
WHERE THERE IS SOME”**



Thank You