

HOSPITAL INTRODUCTION: CLINICS & TECHNOLOGY

(Airlangga University and Soetomo General Hospital)

(Dr. Budi Widodo and Agus Adianto, ST.)



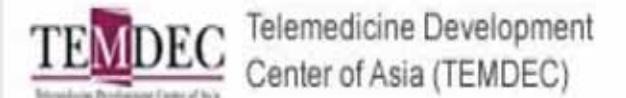
The Indonesian Society for
Digestive Endoscopy (ISDE)



Universitas Indonesia



Cipto Mangunkusumo National
General Hospital Jakarta



Introduction

- UPeDDi: Unit Pengelolaan Data Digital (digital data management) - 2006
- Implementation from master plan for developing system and information technology
- Colaboration between Airlangga University and Dr. Soetomo Hospital
→ improving medical knowledge and skill

Implementation UPeDDi

- Airlangga Medical e-Library
- Evaluasi and SURE
- SIAKAD (academic information system)
- **Teleconference**

Utilization UPeDDi for Teleconference

- Telemedicine

- Teleconference Dean of Airlangga univ – Indonesia Univ – Gajahmada Univ – Diponegoro univ.
- Dept. Surgery
- Dept. Neurosurgery
- Dept. Dental Medicine
- Dept. Internal Medicine – Gastroentero-hepatology Division
 - APAN 40 – Telemedicine
 - Teleconference Live demonstration Indonesia Univ – Airlangga Univ
- Dept. Digestive surgery
- Dept. Anatomy

Gastroentero-hepatology Division

- Endoscopy room
 - 2 bed for gastroscopy and colonoscopy
 - 1 bed for EUS
 - 1 bed for ERCP – Radiology diagnostic center
- Room for discussion



Gastroentero-hepatology Division

- Staff
 - Head of gastroentero-hepatology division:
 - Prof Iswan A.N, MD
 - Senior staff:
 - Poernomo B, MD
 - Herry Purbayu, MD
 - Titong S, MD
 - Ummi M, DM
 - Junior Staff
 - Budi W, MD
 - Ulfa K, MD
 - Husin T, MD
 - Amie v, MD
 - Miftahussurur, MD

Hospital Telemedicine resource –Key person



- **Doctor :**

Dr. Budi Widodo

Soetomo General Hospital Indonesia



- **Engineer :**

Agus Adianto, ST.

Faculty of Medicine Airlangga University



- **Clinical Coordinator :**

Dr. Iswan Nusi

Soetomo General Hospital Indonesia



- **Facility Coordinator :**

Dr. Musofa Rusli

Information System Unit Faculty of Medicine Airlangga University

Future: We hope....

- Continuing this programme:
 - Lecture
 - Case Discussion
 - Live Demonstration – supervision ??
- Its possible to access for another internist, endoscopist and gastroenterologist ??
 - International area
 - Regional area
 - National area
 - Local area

Hospital Telemedicine resource

- Internet

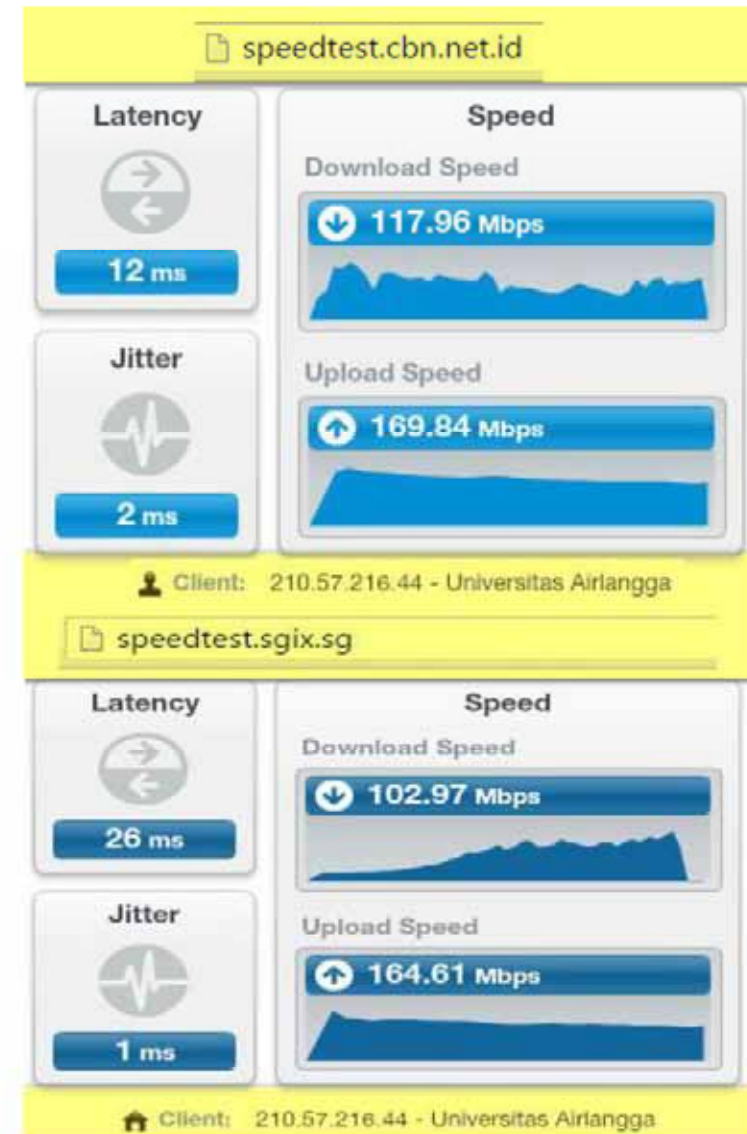
- ASTINET ISP Provider



- Bandwidth 170 Mbps

- Static route using public ip

- Sonic Wall Network Security Appliance



Hospital Telemedicine resource

- Equipment
 - Teleconference room on AMEC



Hospital Telemedicine resource

- Equipment
 - Teleconference devices
 - Hardware

AVer HVC330 - Multipoint Video Conferencing System



PANASONIC KX-VC600 HD Visual Communications System



Hospital Telemedicine resource

- Equipment

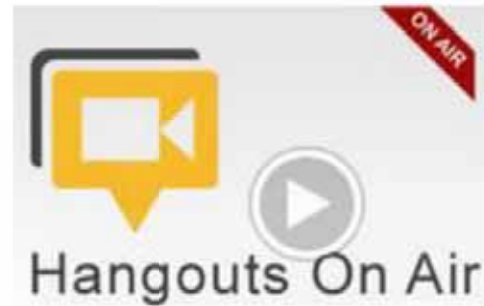
- Teleconference Other devices

1. HP ENVY Phoenix 860-010 Desktop (Intel Core i7, 16 GB RAM, 10 TB HDD, NVIDIA GeForce GTX 960 GPU)
2. DarkCrystal HD Capture Pro
3. SONY DV CAMCORDERS DCR-VX2100E
4. Logitech Conference Cam BCC950 Video Conference Webcam, HD 1080p Camera with Built-In Speakerphone.
5. Behringer XENYX X1222USB USB Mixer with Effects



Hospital Telemedicine resource

- Equipment
 - Software



Hospital Telemedicine resource

- Experience

Session outline	
Title	Surgery
Date & Time (Indonesia time)	11:00-12:30, January 22 (Wed), 2014
Topic	
Style	Live demonstration
Operator	Go Wakabayashi / Iwate Medical University /JP
System	Vidyo?
Organizer	Ho-Seong Han
Abstract:	Welcome to Surgery session! Live demonstration of liver surgery will be performed by Professor Wakabayashi, Iwate Medical University, Japan, streaming out to various Asia-Pacific regions. Professor Han HS will moderate the session and discuss with the expert surgeons in hepato-biliary-pancreatic fields.

Hospital Telemedicine resource

- Experience

Session outline	
Title	HPB
Date & Time (Taiwan time)	14:00-15:30, August 12 (Tue), 2014
Topic	Combined vascular resection and reconstruction in the field of HPB surgery.
Style	Teleconference
Organizers	Ho-Seong Han/Seoul National University Bundang Hospital/KR, Hiroaki Shimizu/Chiba University /JP
System	Vidyo
Server	Kyushu University Hospital
Abstract:	The topic of the HPB session at this time teleconference is focused on combined vascular resection and reconstruction in the field of HPB surgery. This may be a good chance to learn advanced surgical techniques and also to be able to make a live discussion about these techniques. Several expert surgeons will be invited to demonstrate their skillful techniques with a video clip. Off course, other centers are also welcome to present any surgical procedures in HPB surgery.

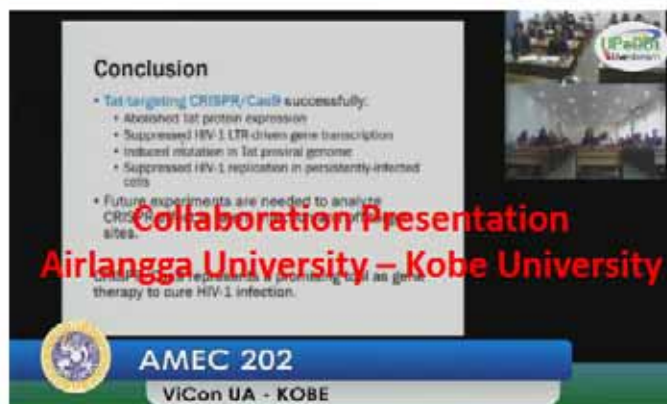
Hospital Telemedicine resource

- Experience

Session outline	
Title	Indonesian Endoscopic session
Date & Time (Malaysia time)	14:00-15:30, Aug. 13 (Thu), 2015 @ GMT+8
Topic	Live endoscopy in Indonesia
Organizers	Dr. Dadang M, Dr. Ishida T, Dr. Shimizu S
Style	Live
System	Vidyo/H323
Server	Kyushu University
Introduction/Abstract:	<ol style="list-style-type: none">1. Introduction by Prof. Shimizu S, Dadang Makmun2. Live Demonstration (case 1)3. Short lecture from Kobe University4. Discussion5. Live Demonstration (case 2)6. Discussion7. Closing remarks

Hospital Telemedicine resource

- Experience



Hospital Telemedicine resource

- Current problems
 1. To date there is no significant problem.
 2. Operation rooms (for endoscopy procedure) are located widespread in hospital area --> problems with stable connection via cables.
- Expectation
 1. Hopefully in the future we have a solid team, and additional device support for smooth event teleconference.
 2. Develop cable network in priority area in hospital. Full cable coverage is not possible to build at this time.