#### Regulation for e-health implementation:

implication for F/OSS adoption

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#### **Current Situation**

- 33 Provinces with 495 Districts and 78 000 villages
- The Health Care Structure :
  - 1318 Hospitals with 136 766 beds (2009)
  - **8**548 Health Centers (2009)
- Accessility for health is good, only 6 % live in a distance more than 5 km from the health facility (2007)
- Health Care Trend: Healthy Life Style, SPA, Anti-aging, high tech etc.

#### Economy

- Economic Development growth 5-6 %/year
- Out pocket Exp: 51 % (2007)
- Health budget since 2006 increased by 200% (was 2-5 % but still 2.3 % AB)
- 2007 HB = Rp 20 trillion = \$ 210 mill
- Decentralization = 80 % to the Province and District

#### National Policy

- Improve the access of health to the whole population
- Focus on the pro poor
- Reduce the IMR and MMR.
- Improve health care in the remote area
- Improvement of HHR
- Disease control (communicable disease and non communicable diseases)
- Proactive measure on disaster and pandemic
- PENINGKATAN PROMOSI DAN PENCEGAHAN PENYAKIT DAN MASALAH KESEHATAN

#### What is e-Health?

The World Health Organization broadly defines eHealth as the use of information and communication technologies (ICT) for health

#### To Implement e-health

- Although the need for clear policy, guidelines and regulation that covers both private and government is important. As a whole the implementation of e-health should consider:
- Good Governance: standard, regulation, etc
- Ensuring qualified manpower: hirarchy, CPD, accreditation etc
- Reliable communication infrastructure
- Funding

#### Foundation of e-Health

eHealth foundation actions include mechanisms which help build an enabling environment for the successful use of ICT for health. These can include a supportive eHealth policy framework; attention to rationale infrastructure development; a cohesive and cost-effective approach to procurement; adequate funding in line with country program objectives; building enduring partnerships; and training the health work force.

## Integration

- E-health should support the implementation of health programs, such reducing IMR, MMR, malaria etc.
- Reduced cost, reduce operating cost, reduce travel time, eficiency manpower, improve accuracy etc
- Should be part of the development on health (national health development plan)

#### E-Health

- Telemedicine
- Health surveys
- Patient monitoring
- Surveillance
- Video conference
- Health information

- Patient registration
- Patient records
- Billing system
- Distance learning

## Existing Regulation

- National e-health policy or strategy
  - Health Information System Development Policy and Strategies
  - Ministry of Health Decree Number 837/MENKES/SK/VII/2007 Regarding Development of National Health Information System Online
- UU No 29 Tahun 2004 tentang Praktik Kedokteran
- Permenkes Nomor 269/Menkes/Per/III/2008 tentang Rekam Medis
- Kepmenkes Nomor 377/Menkes/SK/III/2007 tentang Standar Profesi Perekam Medis dan Informasi Kesehatan
- SK MENKES 858/MENKES/SK/IX/2009 TENTANG PETUGAS PENGELOLA SIK DI PROPINSI DAN KABUPATEN/KOTA
- Pedoman Penyusunan Kurikulum dan Modul Pelatihan Berorientasi Pembelajaran (Pusdiklat)
  - Metode penyelenggaraan pelatihan (dalam kelas, kalakarya, pembelajaran jarak jauh, ataupun magang)
  - STANDARISASI KODEFIKASI BIDANG KESEHATAN
  - STANDARISASI JENIS DAN JUMLAH SDM
  - STANDARISASI HARDWARE DAN SOFTWARE

## E-health Regulation

- Credentialing through Electronics Sertification
- System accreditation
- Security
- Compatibility
- Privacy, Sharing etc
- Capacity of the manpower

#### What else

- Capacity building for medical staff (mind set)
- Ethics in e-health
- Information Propiate technology
- Integration with the program
- Networking national, international
- Research and Development
- Improve the acceptance of the community
- Promote the use of F/OSS

## Why Open Source

- The use of F/OSS solutions for promoting access to information and knowledge; diversity of choice and affordability; meeting the needs and requirements of users; and strengthening cultural and linguistic diversity, and local content.
- Improving the localization of software such that it meets local needs
- Reducing software piracy, thereby avoiding penalties by the World Trade Organization (WTO) on intellectual property rights (IPRs)

#### Challenge

The adoption of F/OSS in the public sector requires strategic planning at the national and regional levels, building ICT skills and capacities, and the establishment of partnerships between the private and public sectors that sustain the availability of support services for open-source software.

## Implication F/OSS to eHealth

- Development of eHealth moving forward :
  - Anybody can developed it, many companies in Indonesia have done it
  - Todays: open source software has developed many application
  - The e-health application can be used by anybody
- Cheap, no lisence

# Implication eHealth Regulation for F/OSS

- F/OSS can be developed following to regulation standard of eHealth
- F/OSS can be develop according to eHealth application purposes
- To strengthened the R&D on F/OSS

## Thank You