

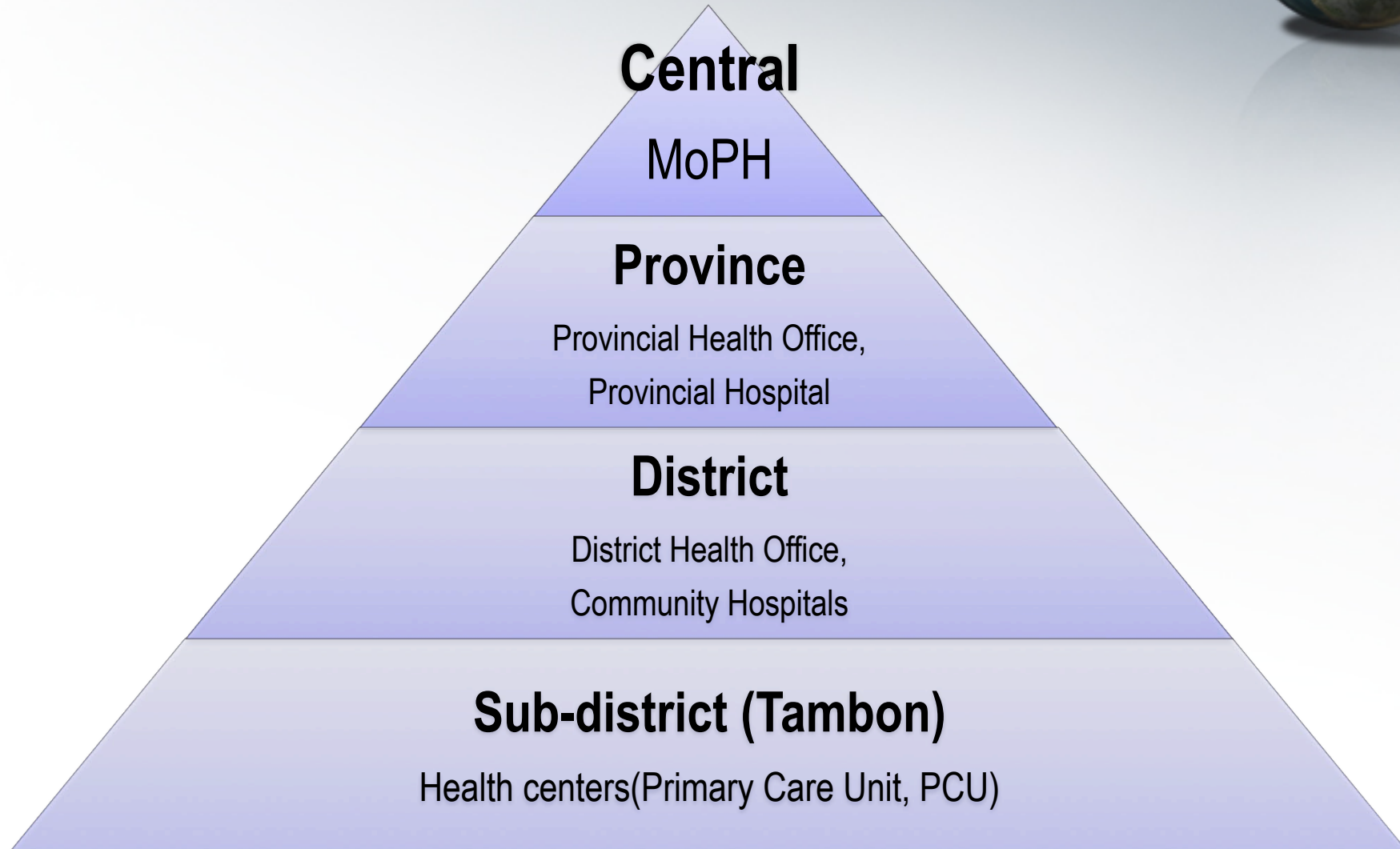
Thailand Primary Health Care Information Systems

4th WHO-FIC Asia-Pacific Network Meeting
Act City Hamamatsu Congress Center,
Hamamatsu, Japan
14-15 September 2009



*Boonchai Kijsanayotin MD., PhD. (Health Informatics)
Bureau of Policy and Strategy, Ministry of Public Health*

Health Services Hierarchy



Level of Health Service Providers



University Hospitals

(Teaching Hospital 500-2000 bed)



Provincial Hospitals



Community Hospitals



Primary Care Units (PCUs)

Primary Care Unit (PCU)



- Front line health providers
- 10,068 PCUs across the country
- Provide preventive care and primary medical care
- 3-5 employees/PCUs
- Nurses, health workers and public health professionals
- **NO DOCTOR**



619 Public's Clinics in Bangkok

Proportion of Primary Care Services



Services	Average visits/ month	Percentage of visits
Primary care services	11,859,532	64.45%
Other healthcare services	6,542,771	35.55%

Primary Care Services Setting



Services setting	Number of facilities	Percentage of primary care services
Primary Care Units (primary care practices with no doctors in-charge)	16,805	92.66%
Hospitals' primary care services (ambulatory care and clinics)	1,332	7.34%
Total	18,137	100.00%

PCU Information System



- Both paper and computerized
- Collect : individual and aggregated records of person, family, insurance and facilities
- 99.8% have PC, 50% Internet connection
- 80% use MoPH's application –HCIS (Health Center Information System)
- **Spend 40% of their work hours on data management and reports**

How information was used?



Two type of health information

- Administrative data
- Clinical data

How they are used?

- Mostly for administration
 - Reimbursement
 - Facility Activity Monitoring
 - Measurement and evaluation
- Clinical used
 - Medical Record Keeping

National Minimal Standard Health Data Set



Two minimal standard data sets:

- Standard data set for health insurance (12-file data set)
 - Hospital setting
 - IP, OP, Charge, ICD 10 Diagnosis, ICD 9 TM Procedure
 - Aim: reimbursement (DRG calculation)
- Standard data set for PCU (18-file data set)
 - PCU setting
 - OP, prevention promotion health activities data, charge
 - ICD 10 diagnosis
 - Aim: report facilities activities

Interoperability for health information systems



Interoperability needs **STANDARDS**

- ❑ Semantics standards

 - ❑ Coding : ICDs, National Drug Codes

 - ❑ Medical Terminology: SNOMED-CT, LOINC

- ❑ Syntactic standards : HL7 messaging standards, HL7-CDA
(Clinical Document Architecture)

- ❑ Core data sets standards

- ❑ Security and Privacy standards

Health Information Development Model

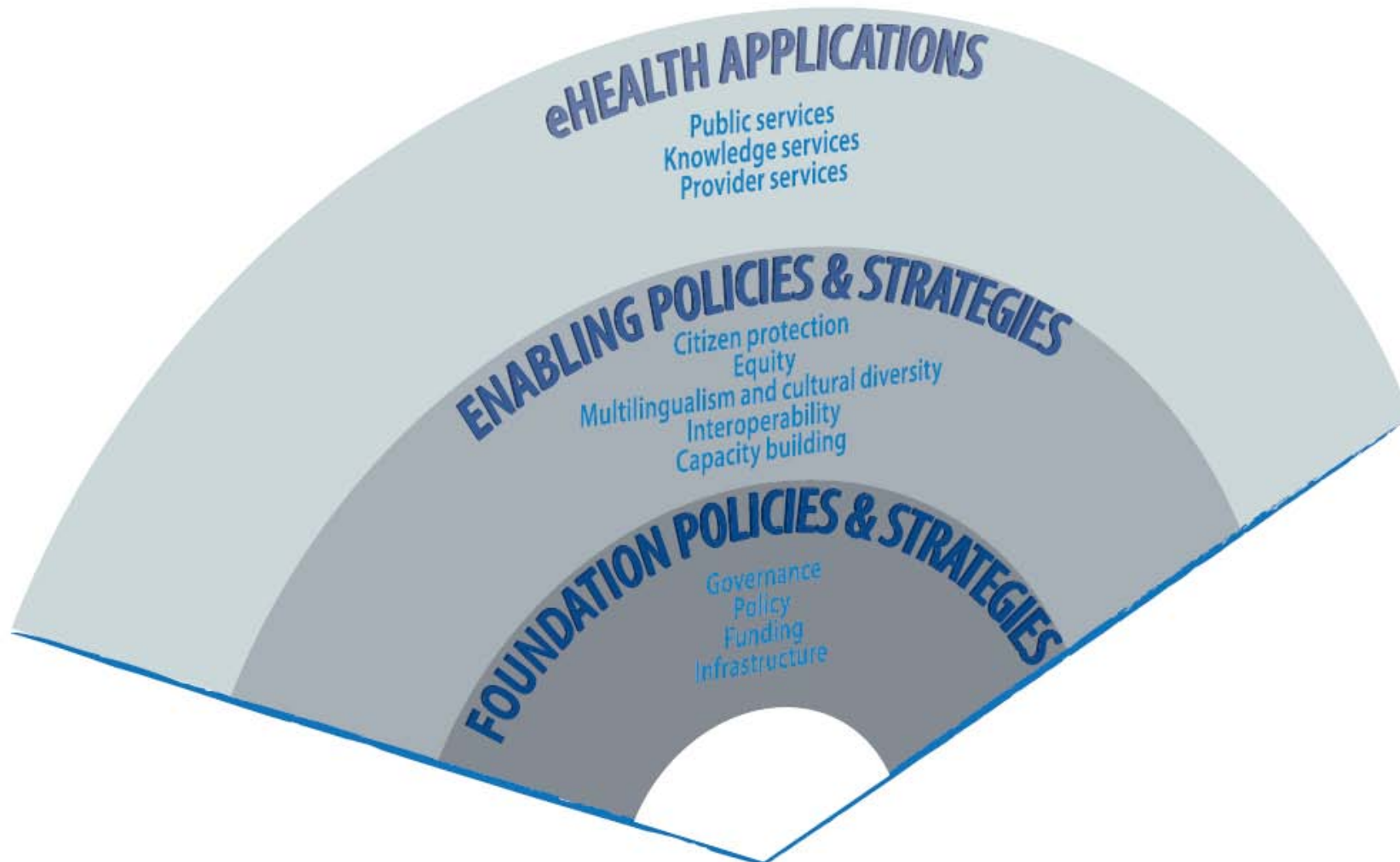


Figure 3. eHealth Development Model