Primary Health Care and Health Information Needs In Malaysia

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OUTLINE

- Background of Malaysia
- Overview of PHC in Malaysia
- Health Information in PHC
- Teleprimary Care
- Disease Classification System
- Use of Health Information
- Conclusion
Malaysia

Population: 27 Millions

Two main areas:  
- West Malaysia (Peninsular Malaysia)
- East Malaysia (Sabah & Sarawak)

Size: 329,000 sq. km

GNP per capita: US 6,146 (RM 22,420) - 2007  
(Upper-middle-income)

Urban population: 56%

Literacy rate: 86%

Elderly population: 5.7% (> 60 years)

Access to safe water: 89%
# Primary Care Facilities – (2008)

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Numbers</th>
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<tbody>
<tr>
<td>Public</td>
<td>Health Centres</td>
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<td></td>
<td>Community Clinics</td>
<td>1,927</td>
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<td></td>
<td>Maternal and Child Health Clinics</td>
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<td>Mobile Health Clinics</td>
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<td></td>
<td>Dental Clinics</td>
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<td>Mobile Dental Clinics</td>
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<td>Private</td>
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<td></td>
<td>Private Dental Clinics</td>
<td>1,435</td>
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UTILISATION OF HEALTH SERVICES: Out-patient Visits

- Public: 21.5%
- Private: 57.2%
- Multiple: 19%
- Traditional: 2.3%
UTILISATION OF HEALTH SERVICES - Admissions

- Public: 80.4%
- Private: 19.6%
Three Tier System
(1957 – 1973)

MCQ

HSC

MHC

(50,000 people)
Three Tier System

- Three levels of health care facilities
  - Main Health Centre
    - 50,000 people
  - Health Subcentre
    - 10,000 people
  - Midwife Clinic
    - 2,000 people
Three Tier System

- One Rural Health Unit
  - One Main Health Centre
  - Four Health Sub-Centre
  - 20 Midwife Clinics
- Population coverage
  - 50,000
Three Tier System

- Operational research carried out funded by World Bank from 1969 – 1971
  - More than 10% of the population “underserved” by Three Tier System
  - Underserved in Sabah is 41% and Sarawak 68%
- 1973 in Mid-term review of Second Malaysia Plan decision made to convert Three Tier to Two Tier system
  - Should be completed by 1985
Two Tier System

- Two types of Facilities
  - Health Centre
    - For 15,000 – 20,000 people
  - Community Clinic
    - For 3,000 – 4,000 people
    - Run by two Community Nurses (Jururawat Masyarakat)
      - Specially trained midwife who can provide simple out-patient care
TWO TIER SYSTEM

(15,000 - 20,000 People)
The Primary Care Clinics and Health Centres

KLINIK DESA (LAMA) Ulu Langat, Selangor

PUSAT KESEHATAN (Lama) Ulu Langat, Selangor
Primary Care Facilities in Malaysia
Health Centre in Malaysia
Primary Care Facilities In Rural Area: Staff Quarters
PRIVATE CLINICS

- Main provider of primary care in Malaysia
  - For every 10 primary care visits, 6 visits in private clinics and 4 in public health facilities
- Estimated number 6,000 – 7,000
- Owner has to registered with MMC
  - Annual Practice Certificate
- Must be owned by Doctors
  - Medical Assistants, Nurses and other staff cannot own the facilities
PRIVATE CLINICS

Ownership

- Single Owner (Solo-practitioner)
  - Small size and numbers of clinics
  - Small Capital
  - Short operating hours
  - May have very limited facilities/equipment

- Group Practice
  - Has chain of clinics
  - Bigger capital
  - Longer operating hours
  - May have more expensive equipment
    - Portable Blood Analyser
    - X-ray machine
    - Ultrasound machine
Private Clinic
PRIVATE CLINICS

- Mostly in urban areas
  - Some has gone into rural areas and small towns because of competition in cities

- Provide Services:
  - General Out-patient Care
  - Specialist Services
    - If it is owned by a specialist
  - Drugs Prescriptions
  - Simple procedure
    - Minor Operation
      - Circumcision
      - Incision and Drainage
  - Laboratory Services
    - Blood and Urine Examination
Why Patients Prefer Private PHC Facilities?

- Longer opening hours
  - After office hours
  - Weekends
- Shorter waiting time
  - No appointment/walk in
- Easier to get treatment by doctors
  - Public facilities by MA and Nurses
- Better interpersonal quality
- Clinics are well equipped
HEALTH INFORMATION SYSTEM IN PHC
Collection of Health Information

- Individual Health Records
  - Individual records maintain at each PHC facility
  - No link with other PHC facilities
  - New record created if patient visit to other PHC
Collection of Health Information

- Household Health Records
  - Not routinely maintained
  - Only for Maternal and Child Health Services
    - Compiled at MOH level
- Household surveys
  - Every 10 years
  - National Morbidity Survey
  - Detail household information on 10% of the population
Aggregation of PHC Data

- Patient level data only available at health care facility level
- Summary data aggregated at
  - District
  - State
  - National
Data Collection Method

- Public Facilities
  - Paper based in most PHC facilities except for 56 Teleprimary Care Clinics

- Private Clinics
  - Paper based send to MOH HQ
Teleprimary Care in Malaysia

“Bridging Rural Communities to Better Health Care”

Pilot project started 2 year ago

Components:
- Patient Management System
- Clinical Management System
- Clinical Support System
- Epidemiology and Population Health
Teleprimary Care in Malaysia: Objectives

- To provide a system for storing, archiving and retrieving medical records electronically.
- To facilitate collection and analysis of data on population health.
- To provide system for real-time consultation on patient management between the peripheral clinic and the hospital specialist.
- To allow join management of patient by the health clinic personnel and the hospital specialist consistent with the concept of seamless and borderless health care.
- To improve the disease surveillance system by providing alert and auto-notification features within the system.
- Provide more opportunities for specialist care to patients from rural area.
- Reduce traveling cost to patient.
Legal Framework for Information Gathering

- Government Facilities
  - Routine data collection

- Private Facilities
  - Private Health Care Facility Act 1998
  - All private PHC Facilities and hospitals required to send information to MOH

- Private Health Insurance Companies
  - Regulated under Insurance Division of National Bank
  - No specific requirement to submit patient level information
Information Capture and Coding

- Public PHC Facilities
  - Non-TPC Facilities
    - Coding done by Medical Assistants using ICD 10
    - Few received basic training in ICD
  - TPC Facilities
    - Coding done by Clinicians (Doctors and MA)
    - Use pull-down menu in the IT System
    - No formal training in ICD.
Coding System

- **Diagnosis**
  - ICD-10 in all public facilities
  - ICPC in some private clinics using Primacare Health Information System

- **Procedure**
  - ICD9-CM for Ambulatory Services in Hospitals Using Case-mix
  - No procedure coding in most public PHC facilities
  - ICPC in some private clinics
Use of Health Information

- Public PHC
  - Medical Record Keeping
  - Facility Activity Monitoring

- Private PHC
  - Medical record keeping
  - Reimbursement
Conclusion

- PHC system is well developed in Malaysia
- Curative services in PHC are mainly provided by private clinics
- Public PHC facilities provide most of the MCH services
- ICD10 is the main disease classification in PHC
- Health Information System in PHC is still in development stage
- Need to coordinate development of information system in TPC with overall PHC system
THANK YOU

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