The 6th Meeting of the Asia Pacific Network (APN) of the WHO Family of International Classifications
Bangkok, Thailand
Thursday 18 July - Friday 19 July 2013

Day 1, Thursday 18 July 2013

1. **Welcome Speech**
   Dr. Suwat Kittidilokkul, the Director of Policy and Strategy, Ministry of Public Health Thailand gave a welcome speech to the participants. Dr. Sopon Mekthon, Deputy Permanent Secretary, Ministry of Public Health gave opening remarks of the Meeting.

2. **Opening Remarks by Video Message (Dr. Ustun, WHO)**
   WHO-FIC Network is supported by bilateral, multilateral relationships. It is not a one-way relationship from WHO. Among the various units composing this Network, APN is one of the key pioneers and I appreciate its activities. I thank Japan Hospital Association, who has served as secretariat of APN for 6 years. APN will start the new era with Dr. Endo designated to New Chair with Co-Chair of Dr. Sukil Kim. I would also like to thank Thailand that is designated to collaborating centre recently for hosting this meeting.

   Our expectation to APN is great. We would like you to have work plan aligned with WHO and WHO-FIC Network strategy and work plan. Our main expectations are a) ICD implementation and education, b) Digitalization of Medical Information System c) Contribution to ICD-11. We would like you to focus on ICD-11 Review, field trials, and providing translation to local languages.

3. **Introduction for Thailand Collaborating Centre [Chair: Dr. Suwat Kittidilokkul (Thailand)]**
   Dr. Suwat Kittidilokkul of Ministry of Public Health introduced the organization, history and entrusted articles of the WHO-FIC Thailand Collaborating Centre that was newly designated in 2012.

4. **Lessons learnt from experiences in Thailand [Chair: Dr. Chamaree Chuapetcharasopon (Thailand)]**

   a) **ICD Mortality Use Cases (Dr. Wansa Paoin)**

   Dr. Wansa Paoin's presentation on mortality use cases of ICD-10 in Thailand during 2002-2013

   i. Development of implementation of ICD in Thailand:
      1950 ICD-7
      1963 ICD-8
      1980 ICD-9
      1994 ICD-10
      2005 ICD-10-TM

   ii. Pattern of death and prevention:
      1950-1965 Infection disease
      1966-1980 Road traffic accident
      1981-1999 Cardio vascular disease
      (Prevention through vaccination & campaign for exercising)

   iii. Sources of cause of death data included death both outside and inside the hospital.
   iv. Improvement of mortality data quality from the hospital was done by training on how to write good medical death certificate to medical students; and addition of verbal autopsy.
   v. System changes from old system (report of local registration) to new system (verification by local health to local registration)

vi. Causes of death: Leading cause of death was changed from heart disease to neoplasm after correction of the way doctor certifying cause of death.
vii. Current activities since 2003: web service cause of death input to death certificate by doctor; using of verbal autopsy (Thai version)
viii. Lessons include: Change management of all key-persons involving in health information system; co-operation with all stakeholders; creation of new leaders in all levels and training of new doctors; keeping on moving.

b) ICD Morbidity Use Cases (Dr. Chammaree Chuapetcharasopon)

Dr. Chammaree Chuapetcharasopon discussed issues about cases where doctors should not be asked to code ICD-10, most of documents are still scanned because there are a lot of part-time doctors, doctors should also write on the application and then scan with no extraction.

Dr. Chammaree also explained how situations at Bumrungrad Hospital are:

i. Coders are responsible for IPC cases
ii. There are not enough coders.
iii. Doctors do the key diagnosis before charging fees.
iv. Doctors do not give reasonable diagnosis on forms.
v. It's difficult to get statistic which seems important for business plans.

Some discussions issues included:

i. Doctors must select ICD-10 before fee can be charged.
ii. Start from small areas to enterprise
iii. Preparation of ICD-10 for specialty & subspecialty
iv. Provision of list in hard copy and on-line
v. 24 hours support with coder mobile service
vi. After implementation: Audit OPD & EMR for medical record department; report problems as 'incomplete cases' which can be categorized in 6 areas.
vii. Reasons: Wrong principle diagnosis; incomplete diagnosis; no external cause; use of ICD-10 for diagnosis.
viii. Reasons for error: Unaware of ICD-10
ix. Suggested ways to improve: Informing doctors; implementing; communicating with EMR vendors.
x. Conclusion: Keys success factors are leader, physician champion, start with small groups.

c) ICF Implementatioin (Dr. Chopunut Pongakkasira)

Dr. Chopunut Pongakkasira gave a presentation o ICF Implementation to measure disability in Thailand.

i. Things that should be done to collect more accurate data: Encourage to use more ICD –ICF; provide a large amount of information for limited cost; register the disabled along with the normal.
ii. Methods to 9 corsets can be done through the Bureau of Policy and Strategy and expert committees, which will involve field trial of 1655 cases and additional 30 cases

d) ICD-10-TM for PCU in Thai Public HealthSystem (Dr. Polawat Witoolkollachit)

Dr. Polawat Witoolkollachit discussed on the Implementation of ICD-10-TM for PCU in Thailand.

i. The implementation cover medical schools in major universities around the country, center and provincial hospitals, primary care units (with 10,068 PCU that provide preventive care).

ii. PCU start ICD-10-TM for PCD coding in 2007
iii. Error rate ranged 70-90 % caused by the facts that there was 1) no ICD book available in PCU; and 2) no training on ICD-coding.
iv. Training of PCU staff encountered problems including complication of ICD full version and inadequacy of staff.
v. Suggested ways to solve such problems: Simplifying ICD; removal of complexity; and simplifying of ICD-10-TM.
vi. The implementation of ICD-10-TM included the test in July 2009 and its verification in October 2009.
vii. Continuous improvement should focus on: setting audit teams; conducting the audit every 3 months; and indentifying the cause.

e) ICD-10-TM Classification of Health Intervention (Dr. Wansa Paoin)

Dr. Wansa Paoin discussed on ICD-10-TM with the focus on:

i. modification of ICD in Thailand in terms of medical and surgical, dental, physical therapy
ii. ICD-10-Tm code structures in 7 digit and 3 axis
iii. Procedures in codes implementation: Selected hospital to start in 2007, and Thai medical to start in 2008
iv. Tools to facilitate included English-Thai index and explanation in Thai language, which makes it easier to understand
v. ICD-10-TM procedure code in ICHI: development of WHO

On behalf of Dr. Chammaree Chuapetcharasopon, Dr Wansa Paoin also added to the presentation of lessons learnt from experiences in Thailand:

i. Thailand started with ICD 7 with the focus on cardiovascular diseases which has also been current situation of Thailand
ii. Vital registration (through the Ministry of Interior) of birth and death rate
iii. Proportion of ill-defined deaths: Thailand was ranked the highest
iv. Severe problem of Thailand includes 70% death outside the hospital.
v. Improvement of mortality data (1999-2001), included in the curriculum in every school from 2003 on.
vi. The process now is to decrease the proportion of ill-defined deaths.
vii. Heart disease is decreasing especially during 1998-1999; better writing of certification by doctors.
viii. The rise of neoplasm
ix. Web service since 2013: Intra-hospital death, cause of death verification and report; extra-hospital death, cause of death report
x. Four key success factors: 1) change management; 2) Co-0peration with stakeholders; 3) Creation of new leaders in all levels every year; 4) Continuity and going-on improvement
xi. Questions and answers session comprised of issues concerning the background and the quality, educational degrees of working staff are various such as political science and general administration; working with local health units; more training should be made especially with 16 provinces around the country; and the use of our own version of ICD-10.

Dr. Chammaree Chuapetcharasopon gave brief introduction about situations in Bumrungrad Hospital which is a private hospital.

i. Doctors at the hospital are not well prepared at ICD-10.
ii. The staff (physicians, nurses, employees) is at the stage of EMR adaption model. They scan documents, are unable to extract everything from electronic medical record, and unable to read doctors' handwriting.

iii. IPD cases: give ICD-10. Not enough coders for OPD documents.
iv. Computers cannot read or detect codes.
v. Good statistics
vi. Errors of coding / intervention by training
vii. Miscommunication among hospitals in cities and provincial localities
viii. The improvement plan as setting an audit team conducting every 3 months might be done.

Dr. Wansa Paoin added with the focus on ICD-10:

i. In 2000 came out the first version tabular list of diseases in various branches of medicine.
ii. Seven digit / 3 axis; anatomical, procedure and details for examples of codes
iii. The surgical procedure codes started in 2007.
iv. The dental procedure codes started in 2010.
v. ICD-10-TM for PCU with English-Thai index with photos and pictures combined with the code
vi. ICD-10-TM procedure codes chapter 17 (Rehabilitation Procedure) was incorporated in ICHI
vii. Medical and surgical in Thai traditional medicine

5. Reports from the APN Country Members (part 1) by representatives from India, Japan, Korea, and Malaysia [chair: Dr. Sukil Kim (South Korea)

India: (Dr. Pradeep Saxena)

Dr. Pradeep Saxena reported about the current status of the health information system in India (from national level to states, districts, CHC, PHC, sub-centers, and villages) gained through the compiled reports of all districts sent to CBHI and MoHFW.

1. Use of ICD-10 coding in India:

    a) ICD-10 was adopted in 2000 for morbidity coding
    b) Current minimum data standards for electronic health system
    c) During 2004 and 2013, 2011 personnel have been trained for ICD-10.
    d) Training course for mater-trainers on family of inter-classification
    e) Fifty batches of half day sensitization workshop were conducted during October 2011 and March 2013.
    f) ICD-10 training was conducted for inter-participants in 2011 and again in 2013.

2. Use of ICD-10 by various organizations in India:

    a) Organization includes major hospitals in urban areas
    b) Reports from states and universities for on-line reporting
    c) CBHI – in annual publication
    d) Registrar General of India (RGI) in mortality coding (medically)
    e) IRDA

3. Status of ICF implementation in India

4. Challenges:

    a) Paper-based reporting
    b) Non reporting
    c) Need of training for a large number of medical and paramedical staff in health information system and ICD

5. New issues:

    a) Parliament of India has passed the regulations

b) Comprehensive proposal and establishment of a NIHI
c) NIHI shall replace CBHI in each state once the proposal is approved.
d) Electronic Medical Record (EMR) – Minimum data standards are finalized to be implemented soon.
e) Each of 35 states will establish an 'Institute of Health Information'

Japan: (Dr. Hiroyoshi Endo)

Dr. Hiroyoshi Endo talked about how the ICD has been used in Japan which included two purposes: a) Classification of causes of death; and b) Classification of diseases.

a) Classification of causes of death comprised some vital statistics gained by the Ministry of Health, Labor and Welfare, based on the law which has enforced the source of data since 1900, form for death certificate including date and time of death, place, direct cause, nature of disease, infant case, name and signature of doctor.

b) Classification of diseases: The information included health insurance payment (free for service) for reimbursement requested by hospitals and clinics for their service provided; a 'receipt' for each medical service provided, mandated by health insurers; ICD is not necessarily utilized for this system; the 'receipt' was changed from paper to digital; role of health information manager; DPC (diagnosis procedure combination) system which is a packaged fixed-rate payment for service was introduced in 2003. For DPC system, ICD is mandatory.

Korea: (Dr Sukil Kim)

Dr. Sukil Kim gave information about:

a) The current ICD in Korea with the maintenance by the National Statistical Office under the law, local extension by large scale hospitals, and KCD-6 since 2011.
b) Use of mortality and morbidity data : vital statistics, administration, clinical care and research and health insurance claim
c) Mortality statistics gained through national death registration system from the operation with the Ministry of Security and Public Administration and the Ministry of Health and Welfare, annual reports, and status of mortality data in Korea
d) Trend of health information system in Korea
e) Hospital morbidity statistics by the main condition of patients
f) Use of ICD for hospital management
g) Health care system included 90% of private sector, only one national health insurer, legal submission of medical claims to reviewer, fee for service system for both outpatient and inpatient services
h) Reimbursement of health insurance and claim review
i) Obstacles included reimbursement purpose and health information manager
j) Clinical coders in Korea comprised the coding education included in HIM program, national license since 1985 and the continuation

Malaysia: (Dr. Syed Aljunid)

Dr. Syed Aljunid gave some outlines of health care system background in Malaysia, health indicators, public health care system, and hospital services.

a) The use of ICD in Malaysia both for mortality and morbidity with the emphasis on morbidity
b) Obstacles included the lacks of financial resources and political will with limited access.

6. Development of Thai Traditional Medicine Information System (Dr. Kwanchai Visithanon)

Presentation on Development of Thai Traditional Medicine Information System by Dr. Kwanchai Visithanon, Director of Strategy of Department for Development of Thai Traditional Medicine. The department (DTAM) was established in 2002 with the service profile in 5 categories: Medical service; midwifery mother and child care; pharmacy practice; massage; and meditation and ritual including Buddhism beliefs.

The development of ICD-10 for DTAM in Thailand was done during 2006 and 2008 which embraced:

a) TTM coding
b) Determination of definition
c) Determination of grouping
d) Development of ICD-10 for TTM soft and pilot exercise
e) MOPH's declaration of the policy on total coverage application of ICD-10 for TTM
f) Distribution of ICD-10 for manual and supply of software
g) Utilization of ICD-10 for TTM as part of in all MOPH health care institutions

The coding of TTM includes:

a) Alphabet and numbers as same as ICD-10
b) Initial alphabet is 'U', followed by 2-4 digit numbers.
c) Divided in 6 categories
d) Extension of ICD-10 to 7 digit into 3 parts

Three types of massage:

a) Royal massage with the use of only fingers and hands
b) Ordinary massage with the use of any body organs
c) Lanna (Northern) massage with the additional use of vegetable oil and feet steps

The utilization of ICD-10-TM is considered as:

a) Systematic
b) Accurate and complete
c) Effective

7. Reports from the APN Country Members (part 2) by representatives from Indonesia, Laos, and Myanmar [chair: Dr. Hiroyoshi Endo (Japan)]

Indonesia: (Dr. Soewarta Kosen)

Dr. Soewarta Kosen reported mainly on the background of health laws and sources of health information in Indonesia, which included:

a) Health information data sources
b) Types of collected data in 'HIS' including health status, etc.
c) Characteristics of improved Indonesian HIS from the network of data-bank, etc.
d) Current achievement of Indonesian CRVS
e) Situational analysis as identified weakness of Indonesian HIS
f) Statistics based on WHO-FIC; providing basic information
g) Individual sample registration system (SRS) among 128 sub-districts
h) Components of the WHO verbal autopsy guidelines in the form of questionnaires
i) ICF, WHO 2001 applied in disability weight survey in 2013

j) The need to emphasize MCCD to refresh medical communities and to enforce compulsory mortality registration
k) Trying to adapt to the health sector and permit the development of HIS to be locally sustained

Laos: **(Dr. Luexay Phadouangdeth)**

Dr. Luexay Phadouangdeth first gave an introduction of Laos (Laos Democratic republic) 890 health centers and hospitals 4 of which are center hospitals. Some other issues included:

a) Current status of health information system in Laos with the division in MOH
b) The weakness of the system could be explained through the low harmoniously in data collection, no monthly or annually report, and unavailable or very limited health representatives. The consequences included the being of untimely and the unavailable.
c) Maternal and newborn health profile of the country
d) ICD-10 coding in Laos with 6 trainers trained in Bangkok and the training of 3 batches of ICD personnel in Vientiane
e) Advantages included supports and funding for the training from the leadership and from WHO and the available TOT
f) Disadvantages included the lack of experienced trainees, some mistakes in taking code, unavailable Laos version of the guidelines, and not-harmonized health insurance system.
g) Plans to solve such problems deal with the reform of health information system, the extension of CID coding, the establishment of web based system and a new ministry, MOHA (home affairs), and also help from inter-agencies.

Myanmar: (Dr. Thet Thet Mu)

Dr. Thet Thet Mu reported on the following aspects:

a) Subsystem of HIS in Myanmar
b) Routine Service: Data flow and how it works
c) Hospital report forms (monthly return) which include part A, part B, and OPD form
d) Standardized hospital report forms for all hospitals
e) ICD-10 English version translated into Myanmar language
f) The development of ICD which started in 1962 with ICD 7 and developed to ICD-10 in 1996 which has still been used until present
g) Strengthening of hospital information system through the training of medical record technicians
h) Utilization of health information through selection, resources, planning, presentations, meetings
i) Weakness: lack of written health information policy; inadequate infrastructure; shortage of manpower; low capacity of human resource; poor favorable working environment; lack of motivation in strengthening of health organization
j) Areas to be strengthened: Capacity building, co-operation with indispensible partners
k) Future plans: Training of medical record technicians; supervision and monitoring on performance; advocacy to authorities; paramedic degree for medical record technicians; training of ICD-10 for medical doctors

Ms. Joon Hong made a presentation on International certificate for ICD-10 mortality and morbidity coding being prepared by WHO-FIC Education and Implementation Committee:

a) Pilot exam was very difficult.
b) Problems included: Use of different versions of ICD-10 by countries; cost for countries to adopt the new ICD version and have it translated; lack of human and material resources in developing countries; translation of exam; assessment or certificate.
c) Essential remarks included: Good communication is essential; more detailed coding is required; maintain the development of the exam to certify; explore the feasibility to develop an on-line exam; use existing questions
d) To produce and reach the aim of high quality of ICD there is urgent need for the co-operation to evaluate, to identify weakness, and to co-contribute to the global network

Day 2, Friday 19 July 2013

1. Report on Regional Activities [Chair: Dr. Wansa Paoin (Thailand)]

A) SEARO Regional Activities (Ms. Jyotsna Chikersal)

Survey in 2012 found that 8 countries have implemented ICD coding for mortality and 7 countries have implemented ICD coding for morbidity. Among other findings are the low completeness of death registration by medical doctors, the necessity of verbal autopsy, the possibility of introducing automatic coding and the necessity of data quality audit.

B) WPRO Regional Activities (Dr. Sukil Kim)

WPRO organized an educational seminar for policy makers of Mongolia and four countries in South East Asia about cancer registry and mortality classification and registration in 2012 at Korean Cancer Centre. WPRO and Korea are collaborating to enhance their activities in this area.

2. Report on the Questionnaire (Dr. Sukil Kim)

The Questionnaire for WHO-FIC implementation database was sent out to each country inquiring the situation about ICD usages for mortality and morbidity. Out of the answers sent back from four countries at that point it is found out that the training is the top priority for APN Region.

3. APN Activities and Work plan [Chair: Dr. Wansa Paoin (Thailand), Dr. Hiroyoshi Endo (Japan)]

The following work plans were agreed;

(work plan 1) To proceed on making an APN module based on the education・certification module of WHO-FIC Education and Implementation Committee (EIC). Small committee will be established to set up the curriculum.

(work plan 2) To prepare a table of ICD training resources that each country can offer.

(work plan3) To make a simplified version of ICD-10 for APN based on the simplified versions of ICD-10 Thailand and Japan.

Future meetings were agreed as follows;

the 7th meeting in 2014 in Malaysia

the 8th meeting in 2015 in Japan

4. Current Status of ICD-11 Development (Web conference led by Dr. Bedirhan Ustun)

At the moment ICD-11 is under the development. The online version and the printed version are due by 2015. In order to develop highly practical classification, it is important that APN takes part in this. We expect that APN will work on the translation of current β version.

APN countries were requested to participate in reviewing and translating β version, and were asked for their comments on applicability of ICD-11 at medical information system of each country. At the field trial, applicability and reliability of ICD-11 will be tested and the comments from the participants will be collected through WHO questionnaire.

5. ICD-11 Field Trial (Dr. Sukil Kim)

Things planned to be done under ICD-11 Field trial were explained using WHO slides.

6. AOB

It was decided that the current working groups would be retained except “the medical information systems group”. They will be renamed to “the mortality use committee” and “the morbidity use committee”.

7. Closing Ceremony

Dr. Suwat Kittidilokkul, the Director of Policy and Strategy, Ministry of Public Health showed his appreciation to the participants and closed the meeting.