SNOMED CT Malaysia: Stakeholder Engagement

October 2014
Definition of stakeholder

“In a narrow sense, the stakeholders are all those identifiable groups or individuals on which the organisation depends for its survival, sometimes referred to as primary stakeholders: stockholders, employees, customers, suppliers and key government agencies. On a broader level, however, a stakeholder is any identifiable groups or individual who can affect or is affected by organisational performance in terms of its products, policies and work processes. In this sense, public interests groups, protest groups, local communities, government agencies, trade associations, competitors, unions, and the press are organisational stakeholders”.

(R.E. Freeman, 1984)
Introduction

- Malaysia became 22nd member country in December 2012

- Subscription of SNOMED CT was with the intention of using it in Big Data Analytics and parallel with the Malaysian Health Data Warehouse (MyHDW) project
Who are the ‘STAKEHOLDERS’?

- **TOP MANAGEMENT**
  - Director General of Health,
  - Secretary General of Health,
  - National Release Centre (NRC)

- **USERS**
  - Clinicians,
  - Data managers,
  - Information managers

- **TECHNICAL TEAM**
  - Vendors,
  - System provider (eg: Knowledge Technology Group – MiMOS)

- **SPONSORS**
  - Government/cabinet,
  - Head of services
• National Release Centre (NRC), Malaysia provides:
  – Versioning control and distribution of refset and all health informatics standards
  – Act at IHTSDO interphase
  – Provide training
• NRC also provides a clear understanding on the use of SNOMED CT to gain interest and support from the top level management
  – by addressing an increasing demand for access to data and information and
  – the issue of interoperability: the ability of diverse systems to work together
• Concern of early deliverables for early buy-in

• In initial phase, HIC focused on involvement of clinicians for early buy-in of SNOMED CT adoption
  – Cardiologist group
  – Oncologist group
  – Head of services will ensure the standardization of SNOMED CT implementation by the same group in the private sectors (eg: National Heart Institute) using the same refset.

• University Malaya Medical Centre (UMMC)
Clinicians - Cardiology Group:
  – There was an early work on SNOMED CT done by National Heart Institute (NHI)
  – Strong commitments from the group, led by Cardiology Head of Services, Malaysia
  – To avoid confusion and miscommunication of the concept and preferred term used by the clinicians

Data managers/Information managers:
  – Use of data for research and analysis
• Government/cabinet:
  – Provides funding (membership fees/development etc)
  – Governance

• Head of Services:
  – The intention of involvement of Head of Services is to ensure refset developed will be used by the group
  – Champions in promoting further refset development to the other clinical group
• Provide technical advice, assistant and consultations
• Developing tools- MiHarmony
Reference Set Development -
Timing of stakeholders engagement (clinicians)

- Approach was to identify and clarify their role and function and the timing of involvement

- Early timing:
  - Understanding of the concepts in the registry form and searched of the terms in the workbench which is done together with the clinicians is time consuming.

- Right time:
  - Initial work done by HIC team and presented to the clinicians and they will endorse once agreed.
Reference Set Development - Timing of stakeholders engagement (clinicians)

**Early Timing**
- Refset development sessions with clinicians (stakeholders)
- Time consuming – need more sessions

**Right Time**
- Refset development by NRC Malaysia
- Presentation to clinicians (stakeholders)
- Consensus (agreed by stakeholders)
- Endorsement
- Refset sent to IHTSDO
Roles of involvement:

- Provide understanding of the variables and values in the registry form

- Agreed on the terms used (preferred term and the concept) – consensus

- Promoting the use of SNOMED CT refset and involvement by other stakeholders
### Example: NCVD ACS & PCI
### Section 1: Demographics

<table>
<thead>
<tr>
<th>(ACS S1 no 6 &amp; PCI S1 no 7) Ethnic Group</th>
<th>ETHNIC GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ACS S1 no 6 &amp; PCI S1 no 7) Malay</td>
<td>MALAYS (ETHNIC GROUP)</td>
</tr>
<tr>
<td>(ACS S1 no 6 &amp; PCI S1 no 7) Chinese</td>
<td>CHINESE (ETHNIC GROUP)</td>
</tr>
<tr>
<td>(ACS S1 no 6 &amp; PCI S1 no 7) Indian</td>
<td>INDIAN (RACIAL GROUP)</td>
</tr>
<tr>
<td>(PCI S1 no 7) Punjabi</td>
<td>PUNJABI</td>
</tr>
<tr>
<td>(ACS S1 no 6 &amp; PCI S1 no 7) Orang Asli</td>
<td>ORANG ASLI</td>
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<tr>
<td>(ACS S1 no 6 &amp; PCI S1 no 7) Kadazan</td>
<td>KADAZAN</td>
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<tr>
<td>(ACS S1 no 6 &amp; PCI S1 no 7) Melanau</td>
<td>MELANAU</td>
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<tr>
<td>(ACS S1 no 6 &amp; PCI S1 no 7) Murut</td>
<td>MURUT</td>
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<tr>
<td>(ACS S1 no 6 &amp; PCI S1 no 7) Bajau</td>
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<tr>
<td>(ACS S1 no 6 &amp; PCI S1 no 7) Bidayuh</td>
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</tr>
<tr>
<td>(ACS S1 no 6 &amp; PCI S1 no 7) Iban</td>
<td>IBAN</td>
</tr>
<tr>
<td>(ACS S1 no 6) Others</td>
<td>OTHER ASIAN ETHNIC GROUP</td>
</tr>
<tr>
<td>(PCI S1 no 7) Other Malaysian</td>
<td></td>
</tr>
</tbody>
</table>
NCVD ACS
Section 4: CLINICAL PRESENTATION AND EXAMINATION

(ACS S4 no 1) Number of distinct episodes of angina in past 24 hours
*MORW OF ANGINA PECTORIS; <24 HOURS

(ACS S4 no 2) Heart rate at presentation
HEART RATE

(ACS S4 no 3) Blood pressure at presentation:
BLOOD PRESSURE

(ACS S4 no 3a) Systolic
SYSTOLIC BLOOD PRESSURE

(ACS S4 no 3b) Diastolic
DIASTOLIC BLOOD PRESSURE

(ACS S4 no 4) Anthropometric
BODY MEASURE

(ACS S4 no 4a) Height
BODY HEIGHT MEASURE

(ACS S4 no 4b) Weight
BODY WEIGHT

(ACS S4 no 4a+4b) BMI
BODY MASS INDEX

(ACS S4 no 4c) Waist circumference
WAIST CIRCUMFERENCE

(ACS S4 no 4d) Hip circumference
HIP CIRCUMFERENCE

(ACS S4 no 4c+4d) WHR
WAIST/HIP RATIO

(ACS S4 no 5) Killip Classification code
*KILLIP CLASSIFICATION FINDING

(ACS S4 no 5) Killip Classification code
*KILLIP CLASSIFICATION (ASSESSMENT)

(ACS S4 no 5) Killip Classification code I
*KILLIP CLASS I

(ACS S4 no 5) Killip Classification code II
*KILLIP CLASS II

(ACS S4 no 5) Killip Classification code III
*KILLIP CLASS III

(ACS S4 no 5) Killip Classification code IV
*KILLIP CLASS IV
## NCVD PCI

**Section 5: CARDIAC STATUS AT PCI PROCEDURE (No 5, 6)**

<table>
<thead>
<tr>
<th>Angina Type</th>
<th>Classification</th>
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</thead>
<tbody>
<tr>
<td>(PCI S5 no 5) Angina type</td>
<td>ANGINA</td>
</tr>
<tr>
<td>(PCI S5 no 5) Atypical Angina</td>
<td>ATYPICAL ANGINA</td>
</tr>
<tr>
<td>(PCI S5 no 5) Chronic Stable Angina</td>
<td>STABLE ANGINA</td>
</tr>
<tr>
<td>(PCI S5 no 5) Unstable Angina</td>
<td>PREINfarction SYNDROME</td>
</tr>
</tbody>
</table>

### Canadian Cardiovascular Score

- **Canadian Cardiovascular Society Classification of Angina Finding**
- **Canadian Cardiovascular Society Classification of Angina (Assessment)**
- **Angina, Class 0**
- **Angina, Class I**
- **Angina, Class II**
- **Angina, Class III**
- **Angina, Class IV**
Refset Development

Cardiology
Sent to IHTSDO

SMRP
Used by MIMOS for MiHarmony

Oncology
Cardiothoracic