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Registered Professional UKChip
Overview

- Current State
  - Vietnamese HealthCare Context
  - Vietnamese Technology Context
  - Barriers to public health & informatics
  - Informatics opportunities and drivers
  - Strategic Framework

- Future State
  - Political environment
  - 5 year strategic plan

- Perceptions of Vietnam

- Launch of the Open Research Group
Vietnamese HealthCare Context
Vietnamese Healthcare Context
Vietnamese HealthCare Context

- 70% of the population live in rural areas
- Many different cultural groups
- True population unknown
- Little change in healthcare provision over time
- Traditional medicine still the first option for many
- New health issues
- Low health literacy
- Loss of role models
- External entity control over projects.
Vietnamese Healthcare Context

The 4 tiered Vietnamese healthcare structure.

- **Commune Health Centres:** 2,000 – 10,000 persons. Implementation of national health programs.
- **Poly Clinics and General Hospitals:** First point of in patient and emergency care.
- **Provincial Hospitals:** Long term treatment and critical care.
- **National Hospitals:** Specialist Institutes. Professional training and medical research.

Referral path
## Vietnamese HealthCare Context

<table>
<thead>
<tr>
<th>Context</th>
<th>Vietnam</th>
<th>Thailand</th>
<th>Laos</th>
<th>Indonesia</th>
<th>Philippines</th>
<th>Aust.</th>
<th>U.S.</th>
<th>Norway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urbanisation %</td>
<td>30</td>
<td>34</td>
<td>33</td>
<td>44</td>
<td>49</td>
<td>89</td>
<td>82</td>
<td>79</td>
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<tr>
<td>Health workers per 1000</td>
<td>1.22</td>
<td>0.3</td>
<td>0.27</td>
<td>0.29</td>
<td>1.15</td>
<td>3</td>
<td>2.7</td>
<td>4.1</td>
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<td>Maternal deaths per 100k</td>
<td>59</td>
<td>48</td>
<td>470</td>
<td>220</td>
<td>99</td>
<td>8</td>
<td>24</td>
<td>7</td>
</tr>
<tr>
<td>Child mortality per 1000</td>
<td>19.61</td>
<td>15.41</td>
<td>56.13</td>
<td>20.06</td>
<td>18.19</td>
<td>4.55</td>
<td>5.98</td>
<td>3.5</td>
</tr>
<tr>
<td>Health spend as % of GDP</td>
<td>7.2</td>
<td>3.9</td>
<td>4.5</td>
<td>2.6</td>
<td>3.6</td>
<td>8.5</td>
<td>16.2</td>
<td>9.7</td>
</tr>
<tr>
<td>Hospital beds per 1000</td>
<td>3.1</td>
<td>2.1</td>
<td>0.7</td>
<td>0.6</td>
<td>0.5</td>
<td>3.82</td>
<td>3.1</td>
<td>3.52</td>
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<tr>
<td>Yrs of education / literacy</td>
<td>10/94</td>
<td>12/92.6</td>
<td>9/73</td>
<td>13</td>
<td>12/92.6</td>
<td>21/99</td>
<td>16/99</td>
<td>17/100</td>
</tr>
</tbody>
</table>

Comparison of healthcare environments
Technology context in Vietnam

- IT industry overview
  - 1,000 software outsourcing and IT businesses
  - Most 10-30 employees
  - 120,000 working in software and IT services in 2011
  - Annual growth rate 25-35% over the past 10 years.

- Mobile uptake in Vietnam
  - 143 mobile phones per 100 people
  - 30% use their phone to access the internet
  - 35% use it for social networking
  - 95% of those aged 15-24 have internet access
  - Government initiatives to strengthen the mobile/Internet technology context by 2015
    - The licensing of 4G services
    - Ensuring 40-45% of households have a telephone and Internet access
    - Providing mobile coverage to 90% of the population
Barriers to public health/informatics maturity

- Subjectivity is endemic in the healthcare system
  - No equity, consistency or sustainability.
- Information systems are poor
  - Paper rules the day
  - There is no unified data collection, storage or distribution system
  - No standards, interoperability, policy or governance framework
  - No measurement or evidence based decision making.
- Insufficient training in technology and informatics
  - Unable to implement solutions
  - No identified opportunity to specialise in health systems development or informatics.
Barriers to public health/informatics maturity

- Vietnamese culture
  - Doctors are all power
  - Many patients do not know what their diagnosis is
  - Traditional medicine
  - Most health information comes from older members of the community
  - Fragmented populations make ubiquity difficult.

- International interest and investment
  - Little investment in public health
  - Perception problems regarding access, business operations, investment processes and research potential.

- Geography
  - Terrain, accessibility, Infrastructure implementation
  - Lack of understanding by external parties.
Informatics opportunities & drivers

• Opportunities
  - Growing technology maturity and increased training options
  - The government is ready to invest and aware of technologies
  - External investment and interest in the region
  - Vietnam has reached a tipping point
  - The per capita income has increased and the stakeholders are demanding and can afford better healthcare.

• Drivers
  - The current healthcare model is clearly failing
  - Internal migration = condensed populations & access to technology and broadband connectivity
  - Defined government policy direction towards equity in healthcare
  - Defined focus on public health issues
  - Need evidence based decision making – do more for less.

Informatics provides a proven tool to take advantage of a number of these drivers and improve healthcare provision for all Vietnamese.
Strategic framework

• Achieving, sustainability and population support will require large scale education from four angles:
  • to inform the general Vietnamese population on the technology, benefits and personal impact of public health initiatives and EHR systems
  • to increase the skills and knowledge of Vietnamese technology developers and managers
  • to increase the skills and knowledge of Vietnamese medical professionals
  • to inform external parties of the Vietnamese environment and technology landscape.

• Need a culturally sensitive, strategic and sustainable framework to guide.
Strategic framework

**Critical success factors**
- Develop and agree on clear and measurable objectives
- Develop an informed environment
- Develop principles, standards & guidelines
- Government support
- Build a team to proactively manage and drive change
- Collaborative Approach

**Enablers**
- The world
  - Deep Industry, Technical & Commercial Skills
  - Seed funding
  - Tools, Templates and Methods
  - Evidence based solutions
- Vietnam
  - Training
  - Independence
  - Trusted Advisors

**Approach**
- Understand technical and commercial education needs and develop programs to address the knowledge gap
- Research global standards and the Vietnamese context to determine best practice
- Build a centrally coordinated, globally integrated, cross functional team
- Develop independent and technology agnostic solutions through research and development
- Secure funding both locally and internationally
- Analyse and prioritise target areas
- Develop culturally specific information delivery and education initiatives
- Use of open, non-proprietary methods and solutions to best enable skills transfer
- Long term planning by a stable, consistent collaborative team to provide sustainable outcomes for Vietnam and its people.
Strategic framework

- Critical activities for success:
  - Develop and promote a centralised, co-ordinated effort to identify research opportunities rather than follow a fragmented, narrow focussed approach.
  - Focus on programs not projects.
  - Have a coordinated internationally funded strategic approach to reduce the reliance on a single source of funding and ensure program longevity.
  - Implement and manage a structured, strategic approach to solutions development instead of trial and error, isolated attempts.
  - Apply and monitor internal control and external collaboration. The Vietnamese must be empowered to ensure projects are implemented, championed and sustained in a culturally sensitive way.
  - External collaborators are required to ensure rigor, global standards and sufficient expertise is applied. Develop, Implement, Evaluate, Review.
  - There should be a ubiquitous solution to health research. Too much work only solves part of a problem or benefits a very small subsection of the population and little measurable value is delivered.
“Knowledge is the enemy of disease. The application of what we know already will have a greater impact on health and disease than any drug or technology likely to be introduced in the next decade.”

Muir Grey MEDINFO 2007
Current state

- Vietnam wants to change
- Vietnam wants a sustainable healthcare system
- Vietnam's near neighbours have much to share and/or gain
- The time is right to change.

- So what does the future hold for Vietnam?
- What is the strategic direction supported by the Ministry?
- What does this mean for the world?
Thank you
Public Health in Vietnam Today: Background and Context

Regional overview, comparative data and specific issues in Informatics for Vietnam

23 August 2013

Dr. Anna Shillabeer, Brian Anderson
“We are all developing countries now!”

Professor Tony Payne
Direct of Sheffield Political Economy Research Institute
7 January 2013

www.speri.dept.shef.ac.uk
Vietnam’s Commitment to Health

“Health is the most precious asset... Every citizen is entitled to health protection, rest, recreation and physical exercise; assurance of hygiene in work, food, physical exercise; assurance of hygiene in work, food and living environment and provision of professional health care services.”

Law on People’s Health Protection and Care (1989)
### Regional Global

<table>
<thead>
<tr>
<th>Country</th>
<th>2011 Ranking</th>
<th>Regional Ranking</th>
<th>Global Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>9.0</td>
<td>1</td>
<td>42</td>
</tr>
<tr>
<td>Vietnam</td>
<td>6.8</td>
<td>2</td>
<td>83</td>
</tr>
<tr>
<td>Cambodia</td>
<td>5.7</td>
<td>3</td>
<td>117</td>
</tr>
<tr>
<td>China</td>
<td>5.2</td>
<td>4</td>
<td>135</td>
</tr>
<tr>
<td>Singapore</td>
<td>4.6</td>
<td>5</td>
<td>147</td>
</tr>
<tr>
<td>Thailand</td>
<td>4.1</td>
<td>6</td>
<td>160</td>
</tr>
<tr>
<td>Philippines</td>
<td>4.1</td>
<td>7</td>
<td>157</td>
</tr>
<tr>
<td>India</td>
<td>3.9</td>
<td>8</td>
<td>164</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>3.8</td>
<td>9</td>
<td>170</td>
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<td>Malaysia</td>
<td>3.6</td>
<td>10</td>
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<td>Lao PDR</td>
<td>2.8</td>
<td>11</td>
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<tr>
<td>Indonesia</td>
<td>2.7</td>
<td>12</td>
<td>179</td>
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<tr>
<td>Myanmar</td>
<td>2.0</td>
<td>13</td>
<td>186</td>
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</tbody>
</table>

In 2011, Vietnam was second only to Australia in percent of GDP spent on Healthcare.
Human Development Index (HDI) for
2012 HDI for Selected Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Regional 2012 Ranking</th>
<th>Global Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>0.938</td>
<td>1</td>
</tr>
<tr>
<td>Singapore</td>
<td>0.895</td>
<td>2</td>
</tr>
<tr>
<td>Malaysia</td>
<td>0.769</td>
<td>3</td>
</tr>
<tr>
<td>China</td>
<td>0.699</td>
<td>4</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.690</td>
<td>5</td>
</tr>
<tr>
<td>Philippines</td>
<td>0.654</td>
<td>6</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.629</td>
<td>7</td>
</tr>
<tr>
<td>Vietnam</td>
<td>0.617</td>
<td>8</td>
</tr>
<tr>
<td>India</td>
<td>0.554</td>
<td>9</td>
</tr>
<tr>
<td>Cambodia</td>
<td>0.543</td>
<td>10</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>0.543</td>
<td>11</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>0.515</td>
<td>12</td>
</tr>
<tr>
<td>Myanmar</td>
<td>0.498</td>
<td>13</td>
</tr>
</tbody>
</table>

HDI is divided into Very High, High, Medium and Low.

Southeast Asian countries are predominantly in the Medium quartile.
### GNI Component of HDI (in PPP, USD)

<table>
<thead>
<tr>
<th>Country</th>
<th>2012 Regional Ranking</th>
<th>2012 Global Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myanmar</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Singapore</td>
<td>61,100</td>
<td>1</td>
</tr>
<tr>
<td>Australia</td>
<td>43,170</td>
<td>2</td>
</tr>
<tr>
<td>Malaysia</td>
<td>16,530</td>
<td>3</td>
</tr>
<tr>
<td>Thailand</td>
<td>9,430</td>
<td>4</td>
</tr>
<tr>
<td>China</td>
<td>9,210</td>
<td>5</td>
</tr>
<tr>
<td>Indonesia</td>
<td>4,810</td>
<td>6</td>
</tr>
<tr>
<td>Philippines</td>
<td>4,400</td>
<td>7</td>
</tr>
<tr>
<td>India</td>
<td>3,840</td>
<td>8</td>
</tr>
<tr>
<td>Vietnam</td>
<td>3,440</td>
<td>9</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>2,730</td>
<td>10</td>
</tr>
<tr>
<td>Cambodia</td>
<td>2,360</td>
<td>11</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>2,070</td>
<td>12</td>
</tr>
</tbody>
</table>

India and Vietnam switch places when GNI is isolated. This is due primarily to a 10 year longer life expectancy in Vietnam.
Corruption Perception Index

Transparency International

http://www.transparency.org
### 2012 Corruption Perception Index

<table>
<thead>
<tr>
<th>Region</th>
<th>Regional Ranking</th>
<th>Global Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>87</td>
<td>1</td>
</tr>
<tr>
<td>Australia</td>
<td>85</td>
<td>2</td>
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<tr>
<td>Malaysia</td>
<td>49</td>
<td>3</td>
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<tr>
<td>China</td>
<td>39</td>
<td>4</td>
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<tr>
<td>Thailand</td>
<td>37</td>
<td>5</td>
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<tr>
<td>India</td>
<td>36</td>
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<tr>
<td>Philippines</td>
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<td>7</td>
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<tr>
<td>Indonesia</td>
<td>32</td>
<td>8</td>
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<tr>
<td>Vietnam</td>
<td>31</td>
<td>9</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>26</td>
<td>10</td>
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<tr>
<td>Cambodia</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>21</td>
<td>12</td>
</tr>
<tr>
<td>Myanmar</td>
<td>15</td>
<td>13</td>
</tr>
</tbody>
</table>

Corruption and GNI map very closely and Vietnam holds 9th place in both categories within the region.

Source: Transparency International Corruptions Perception Index 2012
## Collected Statistics (sorted by HDI)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
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<td>81</td>
<td>5,939</td>
<td>9.0%</td>
<td>3.9</td>
<td>3.9</td>
<td>5</td>
<td>43,170</td>
<td>0.938</td>
<td>85</td>
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<td>2,286</td>
<td>4.6%</td>
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<td>2.7</td>
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<td>61,100</td>
<td>0.895</td>
<td>87</td>
<td>5,312,400</td>
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<td>73</td>
<td>346</td>
<td>3.6%</td>
<td>1.2</td>
<td>1.8</td>
<td>7</td>
<td>16,530</td>
<td>0.769</td>
<td>49</td>
<td>29,239,927</td>
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<tr>
<td>China</td>
<td>73</td>
<td>278</td>
<td>5.2%</td>
<td>1.5</td>
<td>3.6</td>
<td>15</td>
<td>9,210</td>
<td>0.699</td>
<td>39</td>
<td>1,350,695,000</td>
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<tr>
<td>Thailand</td>
<td>74</td>
<td>202</td>
<td>4.1%</td>
<td>0.3</td>
<td>2.1</td>
<td>12</td>
<td>9,430</td>
<td>0.690</td>
<td>37</td>
<td>66,785,001</td>
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<tr>
<td>Philippines</td>
<td>68</td>
<td>97</td>
<td>4.1%</td>
<td>NA</td>
<td>1.0</td>
<td>25</td>
<td>4,400</td>
<td>0.654</td>
<td>34</td>
<td>96,706,764</td>
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<tr>
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<td>95</td>
<td>2.7%</td>
<td>0.3</td>
<td>0.6</td>
<td>32</td>
<td>4,810</td>
<td>0.629</td>
<td>32</td>
<td>246,864,191</td>
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<tr>
<td>Vietnam</td>
<td>74</td>
<td>95</td>
<td>6.8%</td>
<td>1.2</td>
<td>2.2</td>
<td>22</td>
<td>3,440</td>
<td>0.617</td>
<td>31</td>
<td>88,775,500</td>
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<tr>
<td>India</td>
<td>64</td>
<td>59</td>
<td>3.9%</td>
<td>0.6</td>
<td>NA</td>
<td>61</td>
<td>3,840</td>
<td>0.554</td>
<td>36</td>
<td>1,236,686,732</td>
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<tr>
<td>Lao PDR</td>
<td>66</td>
<td>37</td>
<td>2.8%</td>
<td>0.3</td>
<td>0.7</td>
<td>42</td>
<td>2,730</td>
<td>0.543</td>
<td>21</td>
<td>6,645,827</td>
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<tr>
<td>Cambodia</td>
<td>62</td>
<td>51</td>
<td>5.7%</td>
<td>0.2</td>
<td>0.8</td>
<td>43</td>
<td>2,360</td>
<td>0.543</td>
<td>22</td>
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<tr>
<td>Bangladesh</td>
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<td>27</td>
<td>3.8%</td>
<td>0.3</td>
<td>0.6</td>
<td>46</td>
<td>2,070</td>
<td>0.515</td>
<td>26</td>
<td>154,695,368</td>
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<tr>
<td>Myanmar</td>
<td>64</td>
<td>23</td>
<td>2.0%</td>
<td>0.5</td>
<td>NA</td>
<td>62</td>
<td>NA</td>
<td>0.498</td>
<td>15</td>
<td>52,797,319</td>
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</tbody>
</table>
### Table 1: Basic health indicators in the Five-year health sector plan, 2010~2015

<table>
<thead>
<tr>
<th>No.</th>
<th>Indicators</th>
<th>Year 2010</th>
<th>Year 2011</th>
<th>Target for 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Average life expectancy (years)</td>
<td>72.9</td>
<td>73.0</td>
<td>74.0</td>
</tr>
<tr>
<td>2</td>
<td>Maternal mortality ratio (per 100 000 live births)</td>
<td>68</td>
<td>67</td>
<td>58.3</td>
</tr>
<tr>
<td>3</td>
<td>Infant mortality rate (per 1000 live births)</td>
<td>15.8</td>
<td>15.5</td>
<td>14.8</td>
</tr>
<tr>
<td>4</td>
<td>Under-five mortality rate (per 1000 live births)</td>
<td>23.8</td>
<td>23.3</td>
<td>19.3</td>
</tr>
<tr>
<td>5</td>
<td>Population size (million people)</td>
<td>86.93</td>
<td>87.84</td>
<td>&lt;93*</td>
</tr>
<tr>
<td>6</td>
<td>Decrease of crude birth rate (%)</td>
<td>0.50</td>
<td>0.50</td>
<td>0.10*</td>
</tr>
<tr>
<td>7</td>
<td>Population growth (%)</td>
<td>1.05</td>
<td>1.04</td>
<td>0.93</td>
</tr>
<tr>
<td>8</td>
<td>Sex ratio at birth (boys/100 girls)</td>
<td>111.2</td>
<td>111.9</td>
<td>&lt;113</td>
</tr>
<tr>
<td>9</td>
<td>Under-five child malnutrition rate (underweight)</td>
<td>18.0</td>
<td>16.8</td>
<td>15.0</td>
</tr>
<tr>
<td>10</td>
<td>HIV/AIDS prevalence rate (%)</td>
<td>&lt;0.3</td>
<td>&lt;0.3</td>
<td>&lt;0.3</td>
</tr>
</tbody>
</table>

Note: Targets from the Five-year health sector plan for the period 2011–2015, include several MDGs. Targets marked with (*) are adjustments made in the National Target Program for Population and Family Planning 2012–2015.
Informatics goals set forth in the Five-Year Health Sector Development Plan 2011-2015

Potential for Healthcare Informatics in Vietnam
Vietnam's Ministry of Health (MOH) is responsible for:

1. Developing national strategies and programmes
2. Planning and budgeting manpower allocation
3. Technical direction
4. Supervision of national institutions and facilities.
Vietnam’s 5 Year Health Plan

Vietnam’s plan is based on WHO Six Building Blocks of Health Systems

HIS and Informatics, however, is not a current focus

Service provisioning is the focus

It appears difficult to have one without the other, however
Six Building Blocks of Health Systems

**SYSTEM BUILDING BLOCKS**

- SERVICE DELIVERY
- HEALTH WORKFORCE
- HEALTH INFORMATION SYSTEMS
- ACCESS TO ESSENTIAL MEDICINES
- FINANCING
- LEADERSHIP / GOVERNANCE

**OVERALL GOALS / OUTCOMES**

- IMPROVED HEALTH (LEVEL AND EQUITY)
- RESPONSIVENESS
- SOCIAL AND FINANCIAL RISK PROTECTION
- IMPROVED EFFICIENCY

THE SIX BUILDING BLOCKS OF A HEALTH SYSTEM: AIMS AND DESIRABLE ATTRIBUTES
Six Building Block As Used In Plan

**Inputs**
- Health workforce
- Financing
- Information
- Medical products, vaccines
- Leadership/governance

**Process**
- Service provision
  - Access coverage
  - Quality, equity, efficiency

**Outcomes/Objectives**
- Socio-economic development
- Health status
- Social equity

**Figure 1. Framework of the Vietnamese health care system**
Outline in Five-Year Plan for HIS

“The input components for the health care system should possess the following basic criteria.

**Health information** system is one that ensures the production, analysis, dissemination and use of reliable and timely information on health determinants, health system performance and health status.”
IT and Informatics Goals in Five-Year Plan

Based on our review of the MOH’s Five-Year Plan 2011-2015 and JAHR 2012 Report, these areas were identified as opportunities for progress:

– Health Information Systems and Policy
– Health System Governance
– Health System Management
– Bachelor of Public Health and Medical Technology
IT and Informatics Goals in Five-Year Plan

#1 Health System Policy
1.1 Vital Healthcare Statistics Reg.
1.2 Master IT Plan
1.3 Improvement of data quality
1.4 ICD10 & ICD9CM coding
1.5 Patient privacy best practice

#2 Health System Governance
2.1 Improve Reporting
2.2 Improve asset management
2.3 Automate KPI monitoring
2.4 Automate non-compliance reports

#3 Health System Management
3.1 EMR and smart-card integration
3.2 Distance medicine
3.3 Improve Mgmt. Information System

#4 ICT and Informatics Ed
4.1 Bachelors Healthcare ICT
4.2 Masters for practitioners
4.3 Continuing Education Online
Health Information System and Policy

Health information systems should support evidence-based policy decisions and optimization of scarce-resource allocation

- **Potential research assistance:**
  - 1.1 Vital Statistics Register System
  - 1.2 Master IT plan 2015 and beyond
  - 1.3 Improvement of data quality and local, regional, central databases and private sector
  - 1.4 ICD10 and ICD9-CM coding best practices to support healthcare informatics and capitation/case-mix proposed
  - 1.5 Patient data privacy best practices
Health System Governance

Health information systems should support governance, compliance monitoring, best practices Key Performance Indicators as well as ISO and TQM system informatics

- 2.1 Improve information and statistical reporting for local and central authorities
- 2.1 Asset management, inspection and maintenance records of devices and technology
- 2.3 Monitoring of Key Performance Indicators (KPI’s) as defined by MoH
- 2.4 Supervision and information on out-of-spec or non-compliance
Health System Management

Health information systems management and monitoring of the quality systems and make information available when and where it is needed.

- 3.1 Research or pilot EMR and “smartcard” identification of patients and providers to:
  - Improve patient referral system compliance
  - Improve “continuum-of-care” record keeping/sharing at same location and among referral locations
  - Provide quality metrics for hospital administrators, based on 127 points developed by MoH

- 3.2 Assistance in research or pilot for distance-medicine projects

- 3.3 Increase statistical analytics and strategic planning capacity through system design and training
Education and certification is major focus of the JAHR 2012 report. A Bachelor degree in Public Health and Medical Technology is suggested.

in Public Health and Technology to include:

- Health informatics
- Health Statistics
- Health ICT
Health management information systems are inadequate to monitor clinical effectiveness, to monitor quality and safety of care and to set up and maintain provider payment systems in public sector facilities, but even more so in private facilities with few obligations to report to the authorities.

Health Service Delivery Profile, Viet Nam, 2012
Open Research Gateway.

Dr. Anna Shillabeer

Founder: Open Research Gateway
Registered Professional UKChip
Overview

- Open Research Gateway
  - A new research initiative for Vietnam
  - A sustainable model for health research in Vietnam
  - A model that is open, transparent, portable and extensible.

- Aim; to bring together global resources with a evidence-based, outcomes focussed operational model that will solve problems at a population level.
Overview

- The Open Research Gateway will facilitate an open and free interchange of ideas not limited by affiliation or geographic loyalty.

- It is focussed on:
  - Solving problems in health through the application of what the world already knows
  - Education, standardisation, inclusion and empowerment.

- It will assist in opening Vietnam to the research world in a coordinated and effective way.
Issues in Vietnamese research

• It is a relatively unknown context in which to work.
• Research is a new concept to Vietnam.
• Cultural and language barriers.
• Political barriers.
• There are many stakeholders to satisfy – internal and external.
Vietnamese research success factors

- Researchers need:
  - To understand the culture – people and operational
  - To understand the requirements of funding providers
  - To understand who the key stakeholders are and how to find them
  - To have access to good data.

- Supporters of research need to:
  - Know who is in the field – local and external
  - Know what is the best focus – ROI and impact
  - What is already being done
  - Understand the operational environment
  - Be sure of measurable outcomes
  - Be able to monitor and manage projects.
Vietnamese research success factors

- If a project is not Ministry supported – it will not happen.
- If the Vietnamese people are not empowered – it is not sustainable.
- If the project or outcomes are not accessible to rural areas – it will have low impact.
- If the project outcomes are not cheap and easy to implement and maintain – it will not survive.
ORG as a solution

- ORG aims to provide a place where researchers can come together and learn about Vietnam.
- It will be a place where solutions can be developed – people, process and tools.
- It will provide access to key projects being run in Vietnam.
- It will support project teams by providing contextual guidance.
- It will provide a dashboard for reporting on funded projects – transparency and compliance.
- It will provide access to people, data and mechanisms to succeed on the ground.
Open Research Gateway Interactions

Open Research Gateway Components

- Project Databases
- Published data repository
- Central System
- Firewall

Analytic tools:
- OLAP
- Statistical Analysis
- "Big Data" Analytics

Reporting tools:
- Collaborative lifecycle
- Regulatory, funding, etc.

Workflow tools
- Collaboration Tools

Registered Institutions & Individuals

Firewall

Remote Data collection
- Peer Review & Non-related research
- Registered Institutions & Individuals
- Funding Sources

Ministries & Regulatory Bodies

Programmers & Analyst

Mobile Access

Medical & Other Devices

Internet Access

Project Teams
ORG as a solution

- Have support from:
  - RMIT University Vietnam
  - IBM
  - Ministry of Health
  - Ministry of Science and Technology
  - Local businesses in Vietnam – technology and infrastructure
  - Local hospitals in Vietnam.
ORG as a solution

Evidence based health.

- **PEOPLE**
  - Patients
  - Policy makers
  - Health professionals
  - Auxiliary support

- **PROCESS**
  - Policy
  - Collaboration
  - Training
  - Investment

- **TOOLS**
  - Analytics & data
  - Project management
  - ICT
  - Standards
  - Education

- **PROGRAMS**
  - Sustainable
  - Measurable
  - Manageable
  - Appropriate
  - Supported
  - Accessible
Operational model

- ORG will initially provide free membership to any research focussed individual.
- As capacity builds a small membership fee will be required to provide access to data, project support, personnel etc.
- Individuals & projects rather than organisations supported.

- How to get involved:
  - Leave your business card with us
  - See us on linkedIn - OpenResearchGateway ORG
  - Email us at openresearchgateway@gmail.com
  - Watch out for our web portal launch soon.
Thank you

Questions, comments and collaborations welcome.
Thank you