Health Information:
Own the facts, own the outcomes

2009 November 11
www.healthmetricsnetwork.org
• Current status of health information systems (HIS)
• Benefits and costs of health information
• Transforming national information systems for health
• Role of ASADI and the African Academies
Current status of HIS

Health Information:
Own the facts, own the outcomes
Health Information: The Problem

Absence of standards and identifiers
Medical records largely irretrievable
Data rarely aggregated and analyzed

HIS investments are donor-driven, not system-building

Profusion of indicators for each disease
Growing Pressures to Deliver Data

- Millennium Development Goals
- Performance or results-based funding
- "Sector" funding requires local decisions for resource allocation
Little investment in HIS and limited capacity to generate or analyse data

Special interests and donors have control of the facts

Decision-making not evidence-based
Data not trusted or used

Weak demand
Using evidence not perceived as a winning strategy

The Vicious Cycle

Donors get their own
Weak HIS
Little investment in HIS and limited capacity to generate or analyse data
Vested barriers to country-owned systems
Those with the most severe health problems are often those with weakest health information systems (HIS)
Information is fundamental to:

- Define target populations for health interventions
- Detect health problems and epidemics
- Shape priorities and strategies
- Deliver quality health care
- Identify and mitigate inequities
- Monitor and evaluate performance
- Prioritize and implement research
- Manage human resources
- Procure essential drugs and commodities
- Ensure transparency and good governance
- Make evidence-based policy
Users of Health Information

- Health ministries (district, regional, and national)
- Researchers and evaluators
- National academies of science
- Legislators and policy analysts
- NGOs and consumer organizations
- Advocacy groups
- Communities, including patients
- Journalists
- Private sector health providers and insurers
- Donors and international agencies
Benefits and Costs of Health Information

Health Information: Own the facts, own the outcomes
It Works: Models of Local Success

- **Mali**: Child registration increased the effectiveness and reduced the cost of immunizing each child by nearly 50% ($2.79 to $1.47 per child)

- **Bolivia**: Information on quality of services tripled appropriate utilization of hospital services

- **South Africa**: Pharmaceutical management system reduced stockouts of essential drugs by 39%
Trend of delivery at health facility by quarter
In Cambodia 2007-Mid 2009

Delivery at HC
Delivery at RH
Delivery at facilities
Costs of Improved Information
Per capita costs (US$) in a model country (30 million population)

<table>
<thead>
<tr>
<th>HIS Subsystem</th>
<th>Low Income</th>
<th>Middle Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Records</td>
<td>0.16</td>
<td>0.86</td>
</tr>
<tr>
<td>Surveillance</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Census</td>
<td>0.25</td>
<td>1.0</td>
</tr>
<tr>
<td>Surveys</td>
<td>0.02</td>
<td>0.33</td>
</tr>
<tr>
<td>Civil Registration</td>
<td>0.05</td>
<td>0.1</td>
</tr>
<tr>
<td>Resource Records</td>
<td>0.02</td>
<td>0.03</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>0.50</strong></td>
<td><strong>1.13</strong></td>
</tr>
</tbody>
</table>
Cost-Effectiveness of Improved Information (TEHIP)

- Per capita increased spend of $.80 in two districts of Tanzania was used to strengthen the HIS and to improve decision making
- Reallocations of resources achieved a 47% reduction in child mortality
- Assuming $2 per capita and discounting at 3%, evidence-based decision making has a cost-effectiveness of $68.50 per DALY gained
Transforming national information systems for health

Health Information:
Own the facts, own the outcomes
One Goal: Three Objectives

Increase the availability & use of timely & accurate health information in country & globally by catalyzing the joint funding & development of core country health information systems.

**Objective 1**
Establish a Common HIS Framework

**Objective 2**
Strengthen Country HIS

**Objective 3**
Access & Use of Health Information
HMN Governance and Management

- Board: 18
- Technical Advisory Group: 15
- Independent Review Committee: 7
- Secretariat Staff: 25
- Donors: 15
- Funding: $55 million for 7 years
<table>
<thead>
<tr>
<th>Countries</th>
<th>Donors &amp; Development Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministries of Health</td>
<td>Gates Foundation</td>
</tr>
<tr>
<td>Ghana</td>
<td>DFID, DANIDA, USAID</td>
</tr>
<tr>
<td>Mexico</td>
<td>OECD/DAC</td>
</tr>
<tr>
<td>Thailand</td>
<td>GFATM</td>
</tr>
<tr>
<td>National Statistics Offices</td>
<td>PARIS21</td>
</tr>
<tr>
<td>South Africa</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technical partners</th>
<th>UN Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa Population &amp; Health Center</td>
<td>UNICEF</td>
</tr>
<tr>
<td>CDC</td>
<td>UN Statistics Division</td>
</tr>
<tr>
<td>Google</td>
<td>World Bank</td>
</tr>
<tr>
<td>Lancet</td>
<td>WHO</td>
</tr>
</tbody>
</table>
Integrating Health Statistics into the National Statistical System

National Strategies for the Development of Statistics
HMN: Principles

- Embed HIS reforms in broader development context
- Link health and statistical constituencies
- Mobilize commitment of donors around a country-led plan to strengthen the HIS
- Focus on users of information
- Engineer incentives for transparency and use
- Deliver and document increased ROI for HIS expenditures
### Number of Countries with Death Registration Data by WHO Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Usable data</th>
<th>Complete coverage</th>
<th>Total countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>4</td>
<td>1</td>
<td>46</td>
</tr>
<tr>
<td>Americas</td>
<td>32</td>
<td>14</td>
<td>35</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>4</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Europe</td>
<td>48</td>
<td>39</td>
<td>51</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>7</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>22</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>117</strong></td>
<td><strong>66</strong></td>
<td><strong>192</strong></td>
</tr>
</tbody>
</table>
HIS Data Sources

Population-based
- Census
- Civil Registration
- Population Surveys

Facility-based
- Individual Records
- Service Records
- Resource Records
Integration of data sources

- Censuses
- Civil Registration
- Population Surveys
- Individual Records
- Service Records
- Resource Records

M&E

Population-based

Institution-based
More integration of data sources

- Censuses
- Civil Registration
- Population Surveys
- Individual Records
- Service Records
- Resource Records

Surveillance

Population-based
Institution-based
Integration of data sources

- Censuses
- Civil Registration
- Population Surveys
- Individual Records
- Resource Records
- Service Records

Population-based vs. Institution-based
All countries that have applied for or received HMN funds
Status to date

- >90 countries using the Framework
- Global resolution endorsing the HMN "Framework and Standards" for HIS
- Country HIS transformation (n=54):
  - 30% strengthened legislation
  - 65% increased resources for HIS
  - 80% improved data supply/quality
  - 75% improved data management/analysis
  - 65% improved dissemination and use
- $446 million mobilized for country HIS reforms
Cumulative Total of Countries that have completed HIS Assessments at Year End, 2005 to 2009 (to date)
Cumulative Total of Countries that have completed HIS Strategic Plans at Year End, 2005 to 2009 (to date)
Cumulative Resources Leveraged for Country Health Information Systems Strengthening, All Sources, 2006-2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Funding for HIS Strengthening: (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>28</td>
</tr>
<tr>
<td>2007</td>
<td>66.7</td>
</tr>
<tr>
<td>2008</td>
<td>158.4</td>
</tr>
<tr>
<td>2009</td>
<td>446</td>
</tr>
</tbody>
</table>

US Dollars (in millions)
Role of African Academies

Health Information: Own the facts, own the outcomes
Tool Development

- Strategic Planning Tool
- Assessment and Progress Tracking Tool
- Policy Toolkit
- Guide for ICT Product & Service Acquisition
- Data Quality Assessment
- Civil Registration and Vital Statistics Toolkit
- Small Area Measures and Surveys
- Human Capacity Building and Curricula
- New and emerging tools
Information Policy Toolkit

- Institutional roles for producers and users
- Legal requirements for data stewardship and sharing
  - International Health Regulations
  - Personal and public health security
  - Accountability and transparency
- Human resourcing for HIS
- Financial resourcing for HIS
- Guidance for ICT and interoperability
ASADI and HIS

- Academies are key stakeholders to demand strengthened HIS, data quality and systematic sharing with scientists and civil society
- Using multiple local sources and triangulation will give national academies a comparative advantage
- Building a culture of evidence requires both formal information systems and research to answer *ad hoc* questions
Special Studies

- Data sharing: Policy and legislation to optimize data stewardship while protecting the public health
- Civil registration and vital statistics: Anchoring in local cultures and institutions
- Small area measures to meet local and national decision-making needs
- Data quality assessment and improvement
- Health as a leading edge for strengthening government accountability to citizens
ASADI and HIS

- Local research is needed to provide "evidence that evidence matters"
- Calculation or modelling of the costs and benefits of information could accelerate commitment to strengthen policies and systems
- Data translation for action
  - All stakeholders must "own the facts"
  - Communicating facts simply & powerfully
- Document that data-driven politicians get re-elected
Local ownership matters

Communities own the facts

Communities own the problem

Communities own the solutions and the outcomes
The Virtuous Cycle

Data are shared with civil society

Citizens demand evidence for public policy

Culture of evidence, transparency and accountability

Improved data quality and analytic capacity
The new source of power is not money in the hands of a few, but information in the hands of many.

-- Megatrends, 2000

www.healthmetricsnetwork.org