Role and Importance of INDEPTH HDSS Sites for Health Systems Strengthening

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INDEPTH ISC, Maputo, Mozambique, October 2011
Since inception of INDEPTH
How has the scene changed?
Reflecting back  - - - - -  and looking forward

1998

- Health services in disarray and decay; Health for all by 2000 failing;
- Stagnation of health spending
- Health reforms aimed at cost efficiency
- Stagnation of health indicators

Since 2000

- Reconception of health systems (2000, 2007, 2009);
- Explosion of GHI’s and health spending
- Health reforms aimed at universalism and equity
- Health indicators starting to improve mid-decade

Adapted from WHO World Health Report 2008
Foundation documents

- Everybody's Business: Strengthening Health Systems to Improve Health Outcomes (WHO's Framework for Action)
- Now More Than Ever: Primary Health Care
- Systems Thinking for Health Systems Strengthening
The future is not what it used to be

- What is changing now?
  - GHI’s are paying more attention to health systems
  - But still increasing fragmentation of health systems
  - And still increasing verticalization; less decentralized ownership

- What is still lacking?
  - Integration: Need to fuse vertical with horizontal initiatives
  - Governance: Need to establish the architecture and leadership for global health and national health systems
Health systems
A non-linear framework of connected sub-systems

“What happens in the spaces between the sub-systems is as important as what goes on within them; and is usually neglected”.

Source: de Savigny and Adam (2009)
Basic health system framework

A linear framework

**Inputs & Processes**
- Governance, leadership, regulatory issues
- Finances
- Human resources
- Infrastructure
- Procurement logistics & supplies
- Information

**Outputs**
- Strengthened system
- Improved services
  - efficiency
  - access
  - availability
  - affordability
  - acceptability
  - quality
  - safety

**Outcomes**
- Increased
  - coverage
  - utilization
  - responsiveness

**Impacts**
- Improved
  - survival
  - nutrition
  - equity
- Reduced
  - morbidity
  - impoverishment due to health expenditures

**Other Determinants of Health**
(Economic, Social, Political)

Modified from WHO and HMN
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INDEPTH’s emerging HDSS focus

Modified from WHO and HMN
Why health systems in INDEPTH?

Context matters....
Health system change is now the major determinant of progress to health MDGs

- In HDSS districts in the past decade in Africa ....

  → Progress towards MDG 4 has been driven mostly by changes in:

  - health spending, health services and intervention coverage (i.e. health system change)

  → And not by changes in:

  - National wealth
  - Household wealth
  - Climate
  - Fertility
  - Nutrition or
  - Education

- But how well do HDSSs monitor their District Health System?
Giving weight to all available DHS data, Tanzania is forecasted to achieve MDG 4 ahead of schedule…

Tanzania’s national progress to the MDG 4:

63% reduction since 2000 is primarily due to Health System change

Source: Data from Tanzania DHS 2010
Some contemporary health system realities in our HDSS Districts
Fragmentation !!
Medicines & Technologies sub-system – Tanzania 2007

And all health system building blocks are increasingly fragmented!
Consequences? Sub-system failure

Antimalarial stock outs!

A continuing challenge of global, national and local drug procurement and supply chain systems.

Situation last week in 5,061 public health facilities in Tanzania (October 20, 2011)

Source: Real-time weekly monitoring and visualization of ACT supply chains. SMS for Life Tanzania
Even in our HDSS districts - Ifakara, Tanzania

Source: Real-time weekly monitoring and visualization of ACT supply chains. SMS for Life Tanzania
But some HDSS districts do better - Rufiji, Tanzania

Source: Real-time weekly monitoring and visualization of ACT supply chains.
SMS for Life Tanzania
Anti-malarial stock outs in HDSS Districts in Ghana last week...

Source: Real-time weekly monitoring and visualization of ACT supply chains.
SMS for Life - Ghana Health Service
System effectiveness of ALU in Kilombero Ulanga Tanzania

1000 simple malaria fevers

Sought care

Sought care within 24 h

Accessed ACT provider within 24 h

Correctly diagnosed or prescribed

ACT stocked in

Adhered to treatment

Treatment effective

148 cases successfully treated

47 lost

82 lost

121 lost

55 lost

57 lost

3 lost

487 lost

852 failures to treat effectively

Source: INDEPTH INESS 2011
All interventions have system-wide effects
But some interventions are “system-level”

i.e. interventions aimed at ailing health systems

And they are already happening in our HDSS Districts
Some health system revolutions that will be transformative

- Point of care diagnostics (RDTs)
- mHealth (mobile technologies)
  - Improving real-time HMIS
  - Improving procurement & supply chain management
  - Improving patient adherence
  - Improving continuity of care
  - Improving surveillance as an intervention
- Systems thinking and systems science
How can INDEPTH and HDSS sites better position themselves to account for health systems contexts?

Past  Population Observatories  DSS

Present  Population & Health Observatories  HDSS

Future  Population, Health & Health System Observatories
What are some implications for INDEPTH and HDSS sites?
Some potential approaches

- Initial focus: **District Health Systems**
- Produce **District Health Profiles** from HDSS data
- Share INESS tools for monitoring District Health System context and change
- Share experiences in data linkage between HDSS data and Health Facility data
- Work towards interoperability between Open HDS Open DHIS and
- Develop and apply **District Health System Audits**; for example, for:
  - Neonatal deaths; Maternal deaths
  - Social protection and equity
  - Health care access and cost of illness studies
  - Systems effectiveness in achieving effective universal coverage for essential interventions
  - NCD effects
Messages

RCTs for single intervention efficacy insufficient, unacceptable and unnecessary for social and health policy changes in health systems

System interventions are already happening; we just need to document their effects

- Systems-level interventions and monitoring in HDSS sites will:
  - Document synergistic effects real-world implementation of proven interventions
  - Have greater relevance to systems and policy development
  - Enhance demand and sustainability for HDSS
Future?

Documenting health systems contexts and effects needs to become core in order to interpret population health changes in the HDSS

- INDEPTH’s next five years… Time to:
  
  → Develop, test, learn from, and extend system-wide interventions / innovations
  → Maximize knowledge and policy impact of HDSS efforts and investments
  → Evolve to population, health and health system observatories
Thank you

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