Accelerating Achievement of the health-related MDGs: the imperative for health systems science

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1. Why health systems matter
2. The state of health systems research
3. Accelerating better science for health systems
4. Global Symposium on Health Systems Research
Why health systems matter
Health and Wealth

The graph shows the relationship between life expectancy and per capita health care spending in international dollars. Countries such as Cuba, Singapore, Japan, Switzerland, the United States, Namibia, South Africa, Botswana, and Sierra Leone are marked on the graph. The data suggests a positive correlation between higher health care spending and increased life expectancy.
"People in poor countries are sick not primarily because they are poor but because of other social organizational failures including health delivery, which are not automatically ameliorated by higher income"

Angus Deaton, WIDER Annual Lecture, September 29, 2006.
“Good Health at Low Cost”

‘Good health at low cost’
25 years on
What makes a successful health system?

Edited by Dina Balabanova - Martin McKee - Anne Mills

First Global Symposium
ON HEALTH SYSTEMS RESEARCH
"The issue"

...we face a formidable gap between innovations in health (vaccines, drugs and strategies for care) and their delivery to communities in the developing world...

Madon et al. Science December 2007
"although the plight of the bottom billion lends itself to simple moralizing, the answers do not!"

Paul Collier
The Bottom Billion
### Common challenges to scale up services for HIV, TB, malaria, and immunization

#### HIV/UA assessment report
- HR crisis
- Inadequate financing
- Affordable commodities
- Stigma, discrimination...
- Monitoring and Eval
- Accountability

#### Global Plan to stop TB
- HR crisis
- Inadequate financing
- Quality drugs
- Laboratory capacity
- Partnership alignment

#### World Malaria report
- HR crisis + Community
- Inadequate financing
- Drug efficacy
- Information system
- Monitoring and Eval.

#### GAVI/Norad report
- HR crisis
- Inadequate financing
- Leadership and management
- Inter-agency coordination
Why are poorer populations…

• Two times more likely to have TB?
• Three times less likely to access care for TB?
• Four times less likely to complete TB treatment?
• Five times more likely to incur impoverishing payments for TB care?
World Health Report 2006

Critical shortage of health workers in 57 countries;

4.3 million more health workers needed to provide essential interventions.
Primum non nocere (first do no harm)?

>100 million impoverished due to expenditure on health!
Systems Performance Shortfalls

- **Scale** --- safe, proven and cheap interventions not reaching those in need
- **Scope** --- comprehensive services responding to needs and expectations are the exception
- **Distribution** --- those with unmet needs are disproportionately those with lesser means
- **Protection/Safety** --- too many are worse off through encounters with the health system
- **Systems capabilities** --- primitive frameworks and responses to dealing with complex challenges
The “state” of health systems research
An Assessment of the Interactions between health systems and Global Health Initiatives
Synergies leading to systems transformation
Evidences of positive spill-overs

- **Patients:** empowered, treated with respect
- **Providers:** improved CARE
- **Information:** EMR, SMS alerts...
- **Supplies:** improved procurement, distribution ..
- **Infrastructure:** new and better ..
- **Financing:** largely free
Evidences of negative spill-overs

- **Patients:** Stigma prevails…
- **Providers:** Better paid projects…
- **Information:** Multiple reporting…
- **Supplies:** Stock outs …
- **Infrastructure:** HIV labs…
- **Financing:** Selective free services…
Figure 1: Conceptual framework of the interaction between global health initiatives and country health systems.
Assessing the nature of the interactions

- Positive, synergistic
- Equivocal, unclear, mixed
- Negative, undesired
• Planning and Coordination
  • Demands of GHI planning processes overwhelm national capacities
  • GHIs responsive to country systems needs through new funding windows

• Community Involvement
  • GHIs have accelerated non-state sector/civil society engagement in health sector planning, delivery and accountability
3

Accelerating better “science” for health systems
Systems research falling short too often
(Peters, Saharty and Siadat 2009)

- lacking taxonomic and conceptual rigor
- systemic weaknesses in methods/designs
- weak measures – from inputs to outputs to outcomes
- problems related to "generalizability” in various contexts...
- lack of standards for assessing the strength of evidence
- limited understanding of needs of decision-makers related to "evidence" on what works (and what doesn’t!).
Short-comings increasingly visible against gold standards in clinical evidence...

- taxonomies
  - ICD, SNOMED
- hierarchy of methods
- strength of evidence
  - GRADE, EPOC
- standards for research synthesis
Understanding the big picture!
The need for systems theory

“not so close as to be concerned with the action of a single individual, but not so far away as to be ignorant of the internal pressures in the system.”

George Richardson

The need for greater rigor!

• Terms and taxonomies
  – *Applied, complexity, delivery, diffusion, evaluation, formative, implementation, operations, policy, program, process, realist, services, scale-up, spread, systems, translation two or “T2”...etc. etc.*

• Methods and Measures
  – What methods are the best “fit for purpose”?  
  – How to measure health systems strengthening?  
    • What is the best measure of universal coverage?  
  – Criteria to assess strength of evidence?
Health Systems

A health system consists of all organizations, people and actions whose primary intent is to promote, restore or maintain health.

The main goals are:
- Improving health and health equity
- Responsiveness,
- Financial fairness

The intermediate goals are:
- Greater access and coverage
- Quality and safety
# Monitoring & Evaluation of health systems reform/strengthening

## A general framework

### Indicator domains

- **Governance**
  - Infrastructure / ICT
  - Health workforce
  - Supply chain
  - Information
- **Financing**

### Data sources

- **Administrative sources**
  - Financial tracking system; NHA
  - Databases and records: HR, infrastructure, medicines etc.
  - Policy data
- **Facility assessments**
- **Population-based surveys**
  - Coverage, health status, equity, risk protection, responsiveness
- **Clinical reporting systems**
  - Service readiness, quality, coverage, health status
- **Vital registration**

### Analysis & synthesis

- Data quality assessment; Estimates and projections; In-depth studies; Use of research results; Assessment of progress and performance of health systems

### Communication & use

- Targeted and comprehensive reporting; Regular country review processes; Global reporting
Developing and reviewing “new” methods

POOR ECONOMICS

ABHIJIT V. BANERJEE & ESTHER DUFLO

A marvellously insightful book by two outstanding researchers on the real nature of poverty.

AMARTYA SEN

SYSTEMS THINKING for Health Systems Strengthening

Alliance for Health Policy and Systems Research

World Health Organization
The essential requirements for task shifting

- Quality assurance
- Regulatory framework
- Sustainability
- Involvement of service users
Exploiting hybrid vigor!

Diverse constituencies converging on HSR

• Policy and system designers
  - financing, governance, workforce etc.

• Scaling-up intervention implementers
  – HIV, TB, Malaria, NTDs, NCDs, Immunization, etc.

• Monitoring and evaluators
  – inputs, outputs, impacts

• Knowledge Translators
  – why isn’t evidence being applied?
Part of a bigger opportunity

• Despite challenges....health systems research is a rapidly growing, dynamic area of health research

• There is an urgent need, nonetheless to:
  – nurture more and better health systems research within and across countries that addresses critical health sector performance shortfalls
  – ....and usher in a new era of “systems sciences” in health that can stand tall and proud alongside biomedical and clinical sciences.

- Independent Commission
- “Development” and “equity” focus
- “Essential National Health Research”
- An international health research “system”
- More human and financial resources required to focus on health development.
Valuing knowledge to redress inequities

• "humanity’s greatest advances are not in its discoveries – but in how those discoveries are applied to reduce inequity. Whether through democracy, strong public education, quality health care, or broad economic opportunity – reducing inequity is the highest human achievement”

• Bill Gates, Harvard Commencement Speech, June ‘07
No other US$ 5 trillion economic sector would be happy with so little investment in research related to its core agenda: the reduction of health inequalities; the organization of people-centred care; and the development of better, more effective public policies. — The world health report 2008

Mark your calendar now – the World Health Organization and partners will convene the inaugural global symposium on health systems research on 16–19 November 2010. Researchers, policy makers, funders, and other stakeholders representing diverse constituencies will gather in Montreux, Switzerland to share evidence, identify significant knowledge gaps, and set a priority research agenda that reflects the needs that are common across low- and middle-income countries.
Call for abstracts
November 2011

31 OCTOBER– 3 NOVEMBER 2012 – Beijing, People's Republic of China

Inclusion and Innovation Towards Universal Health Coverage.

"The whole is greater than the sum of its parts" – Aristotle, Metaphysics, 350 BC

Organizers of the Global Symposium on Health Systems Research (HSR) are pleased to announce the Second Global Symposium – Inclusion and Innovation.