The Role of Information and Communication Technology in Health

Dr. Michael Scholtz
World Health Organization
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Internet growth, Western Europe

Internet users (millions)

Source: IDATE, World Atlas of Internet
Today we can exchange health information and provide services across geographic, time and social boundaries.
… but not everyone shares the benefits
Global internet traffic flows

Source: Stephen G. Eick, Bell Laboratories; Cybergeography 2001
Equity: Our biggest challenge

We can make a phone that fits in a pocket.

Why can’t we put phones in the poorest parts of the world?

The problem is not one of technology.

The problem is one of will.
Improving health: ICT impacts health systems at all levels

- **Health policy**
- **Health system**
- **Financing**

**Health services**
- Immunization
- Monitoring public health
- Diagnosis & treatment
- Water & sanitation

**Resource Generation**
- Work force planning
- Education & training

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What’s needed

Infrastructure

- affordable, reliable, durable high-speed telecommunications with a global coverage
- affordable rates, tariffs and services

Technology and tools

- must be designed and developed based on user needs.
- cheap and rugged access devices
- people who can install and support them
Education and training

To access, use and manage information
what’s needed

Policies and standards
- Universal, non-proprietary standards for information representation and exchange
- Guidelines for reliable health information

Evaluation
- Evidence & experience to guide development

Coordination
- Vertical systems impede real progress
Networks are vital: To share results, discuss theories... and communicate.
Example Health InterNetwork

One of four major initiatives of the United Nations Millennium Action Plan, launched in Sept 2000

Supporting existing public health programs and priorities through

- **Content**: relevant, high quality, affordable
- **Connectivity**: improving internet access
- **Capacity**: training to use health information effectively
Journal subscriptions in
130 health institutions in low-income countries

No. journals subscribed
- 0
- 1 to 5
- 6 to 10
- 11 to 20
- 21 to 50
- 51 to 100
- over 100

- 56%: 0
- 21%: 1 to 5
- 11%: 6 to 10
- 3%: 11 to 20
- 4%: 21 to 50
- 3%: 51 to 100
- 0%: over 100

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“...you have taken us, by this act, from poverty to wealth in the fields of information”.

El Hadj Boubacar Ball, Senegal
**Our vision**

“Open and unrestricted access to information for health, a global good, by making full use of ICT in health system development.”

**Guiding principle**

“Equitable access to health information”
Proposed Actions 1

- Finance, build and maintain ICT infrastructure and a pricing structure which reflects the ability of the health system to pay for services.
- Ensure services to remote and underserved populations.
- Address standards, norms, laws and regulation towards a free flow of information for health.
Proposed Actions 2

- Address the challenge of ensuring ICT in an unstable world – maintaining services where there is internal instability, disaster and other conditions posing an extra threat to health
- Train and educate the health workforce, researchers and policy makers in making the best use of ICTs in health
More than an Application

Information & Communication Technologies for Health

More than an Application