

Connecting the best minds and tools across traditional boundaries to improve healthcare

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"Prospects for Health Research, Education and Care in a Globalized Era"**

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For Today

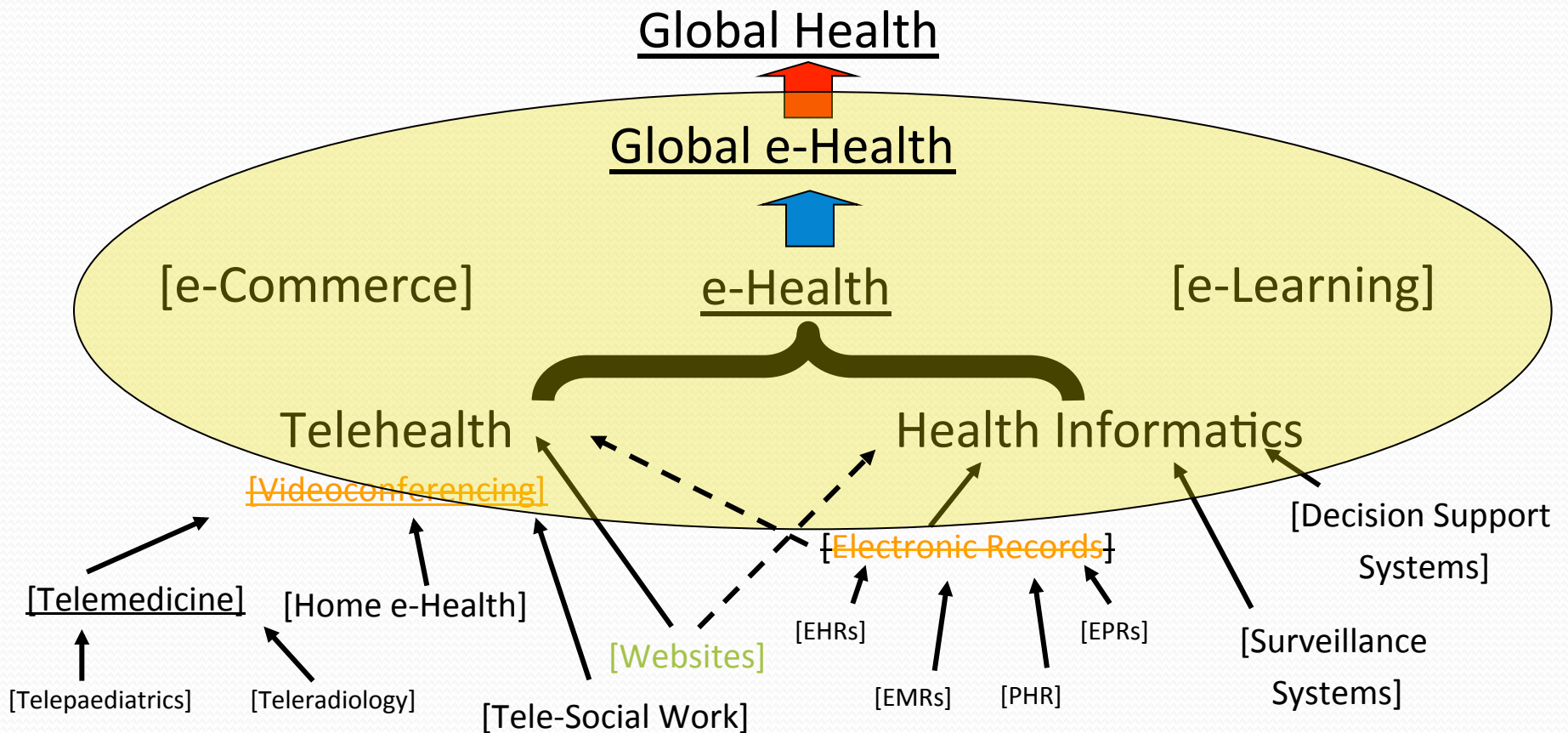
- Scott's "e-Health 101"
 - What you really do need to know –
- Reality Check
- How can we:
 - Connect
 - The best minds and
 - The best (technologically appropriate) tools
 - Across traditional (and cultural) boundaries
 - To improve healthcare

For Today

- Scott's "e-Health 101"
 - What you really do need to know –

What is 'e-Health'

- *Setting the Scene* -



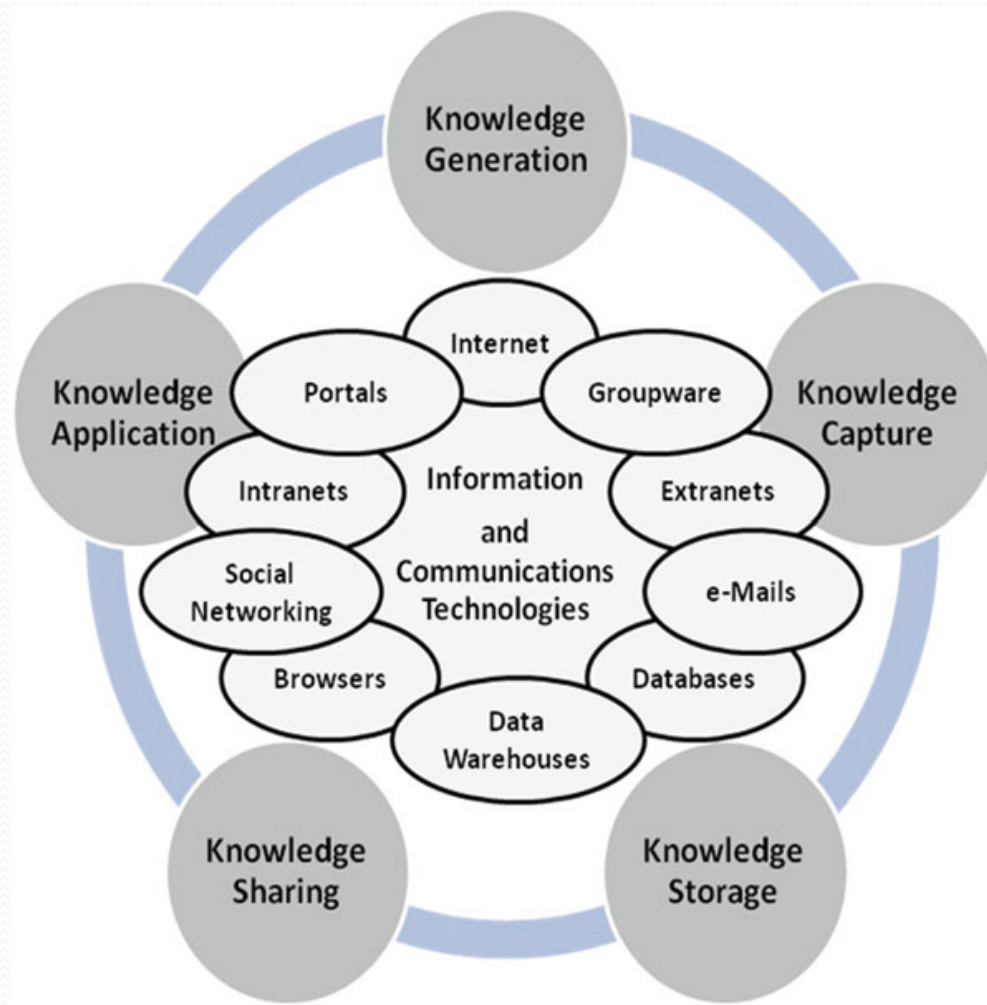
What is e-Health Good For?

- *Leveling the Playing Field* -

1. Eliminating the impact of distance
 - Short and long distance
2. Reducing the impact of time
 - Synchronous and asynchronous
3. Increasing 'access'
 - To information, education, and services
4. Standardising processes
 - Consistency and quality
5. Increasing 'equity' (**not** equality)
 - Of health and healthcare

Connecting? How?

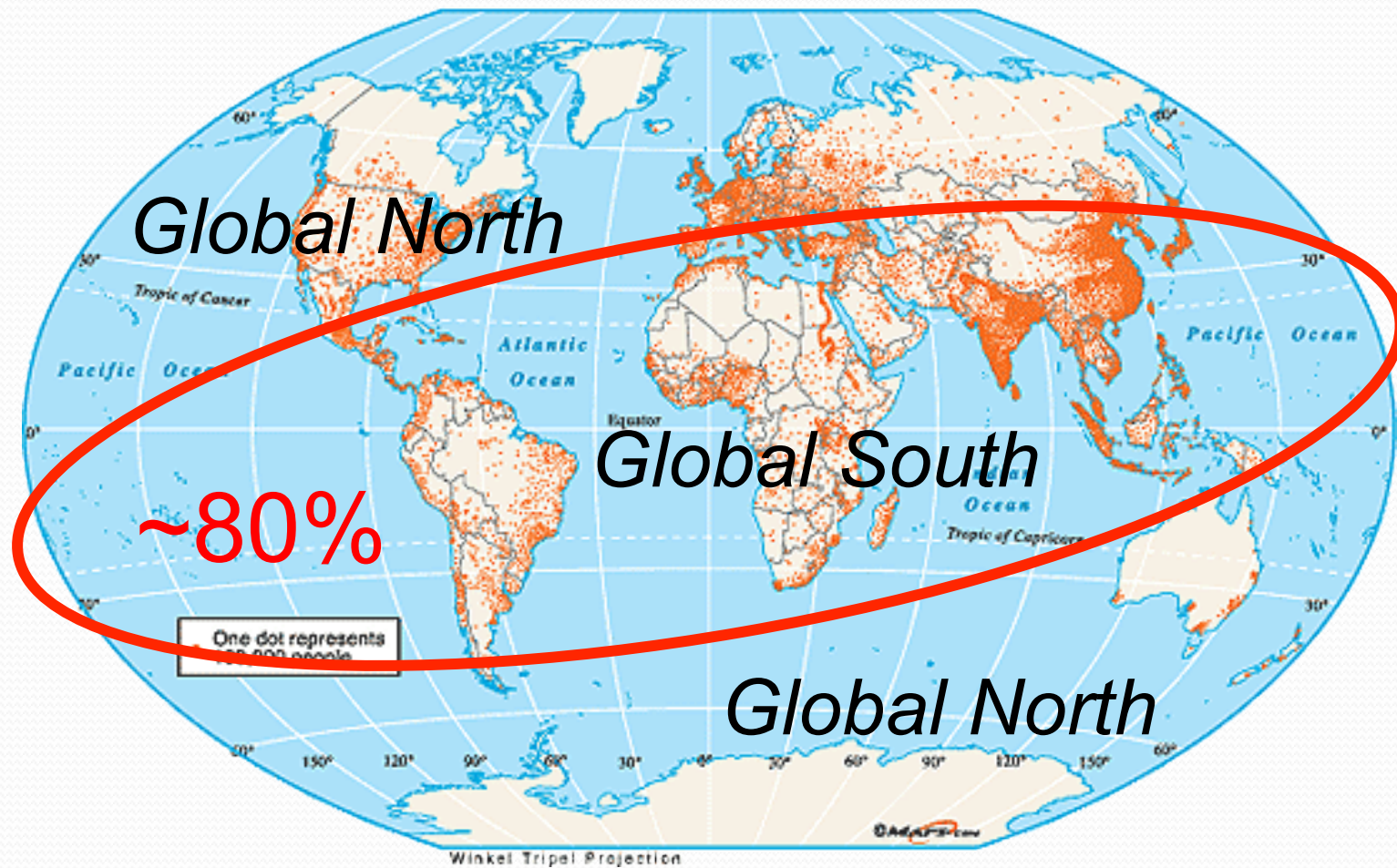
- e-Health -



Who Helps Who?

- 'Global North' and 'Global South' -

World Population Distribution, 2000



Great Expectations

- *From Status Quo to Revolution – Nope, Just to Expectation and Theory -*



"e-Health is a ray of light on the horizon for the health and equity challenges that plague humanity."

Archbishop Emeritus Desmond Tutu

"From the point of view of health, there is really nowhere on the planet that is remote, and no one from whom we are disconnected"

Barry R. Bloom

Harvard School of Public Health

“ I Had a Dream ”

- *Still awaiting the Revolution* -

Anyone

Anytime

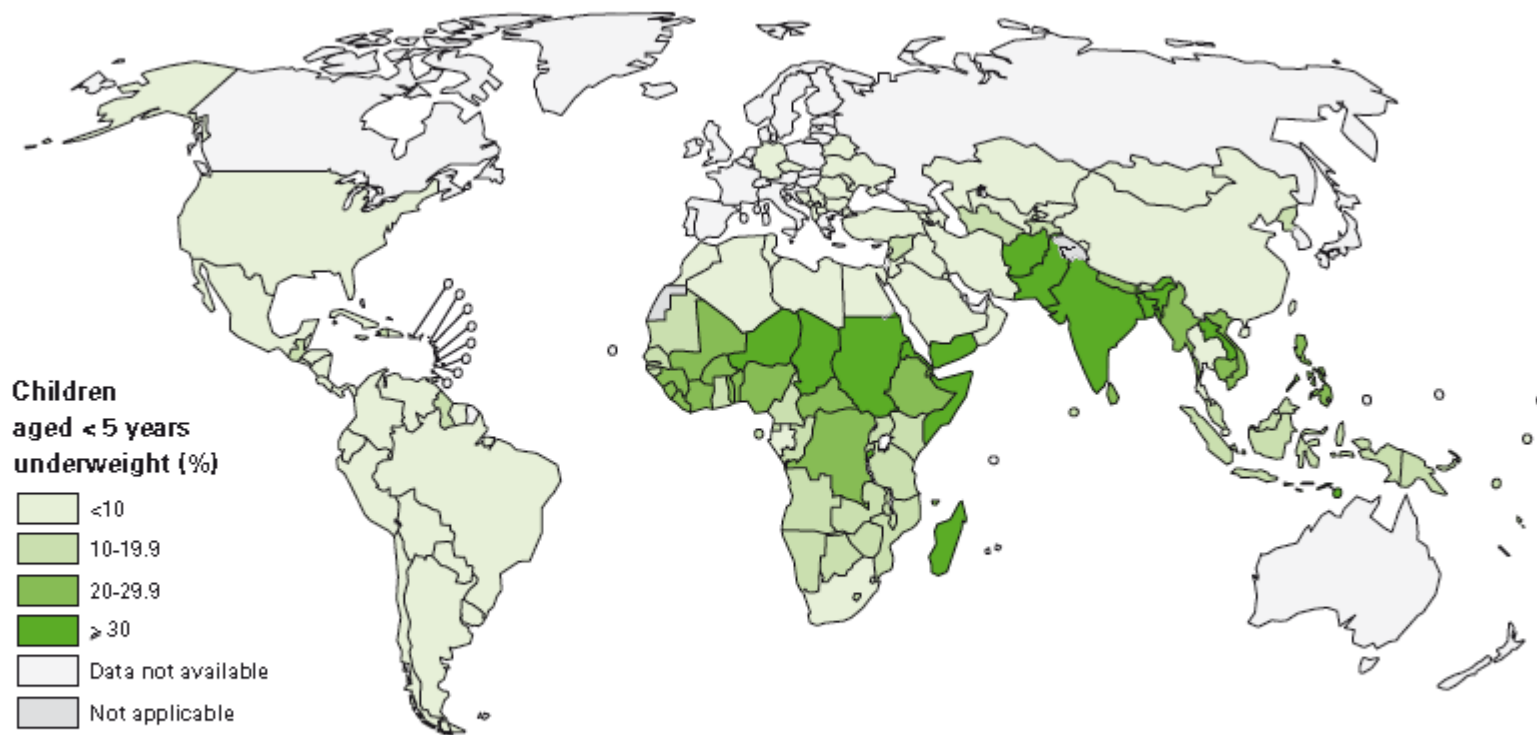
Anywhere

For Today

- Reality Check

Reality Check

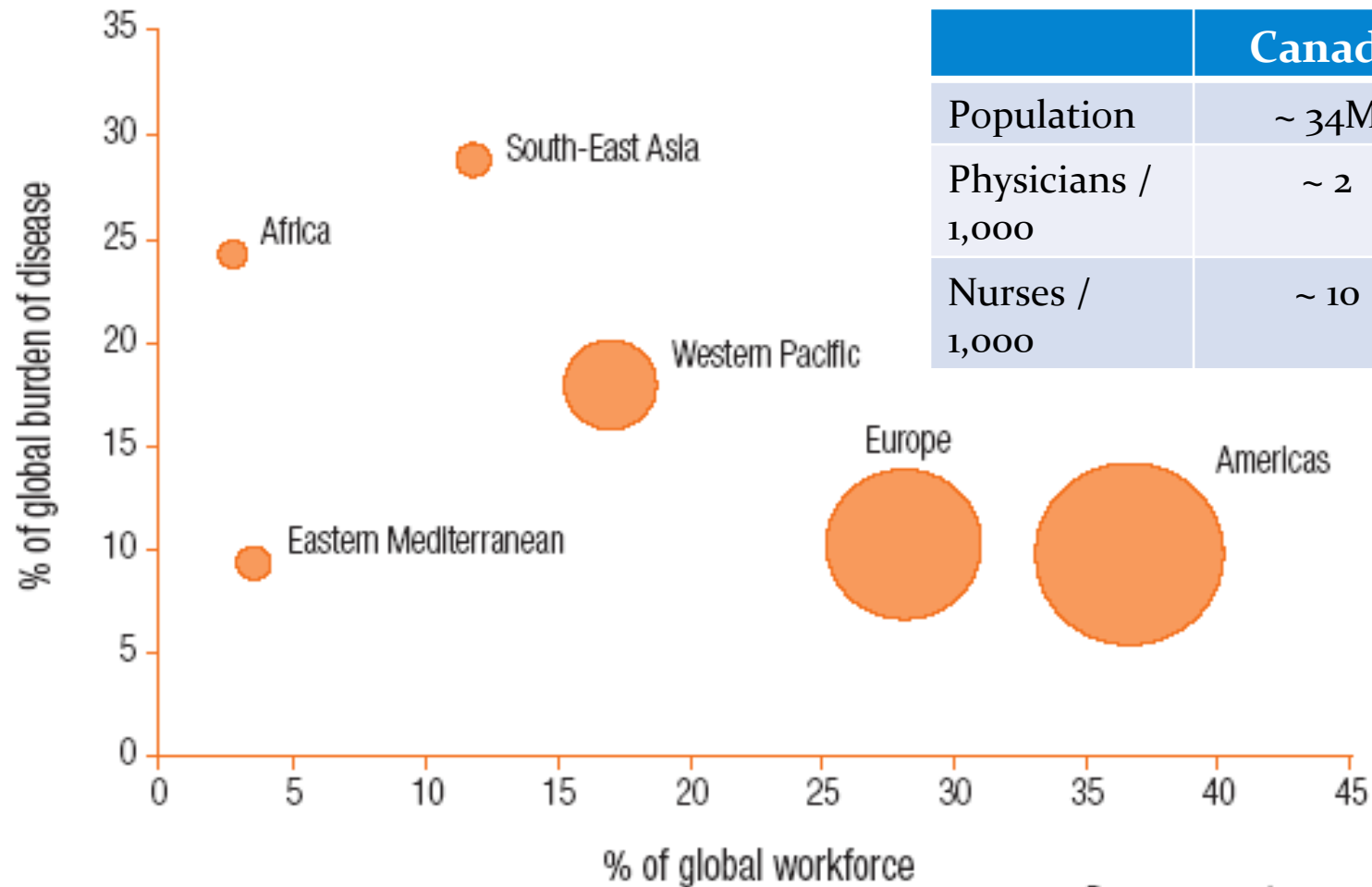
- Just Who Needs Help ~ The Most? -



Percentage of underweight children under 5 years of age
(based on latest available data from 2000)⁶

Reality Check - HHR

- *Just Who Needs Help ~ The Most?* -

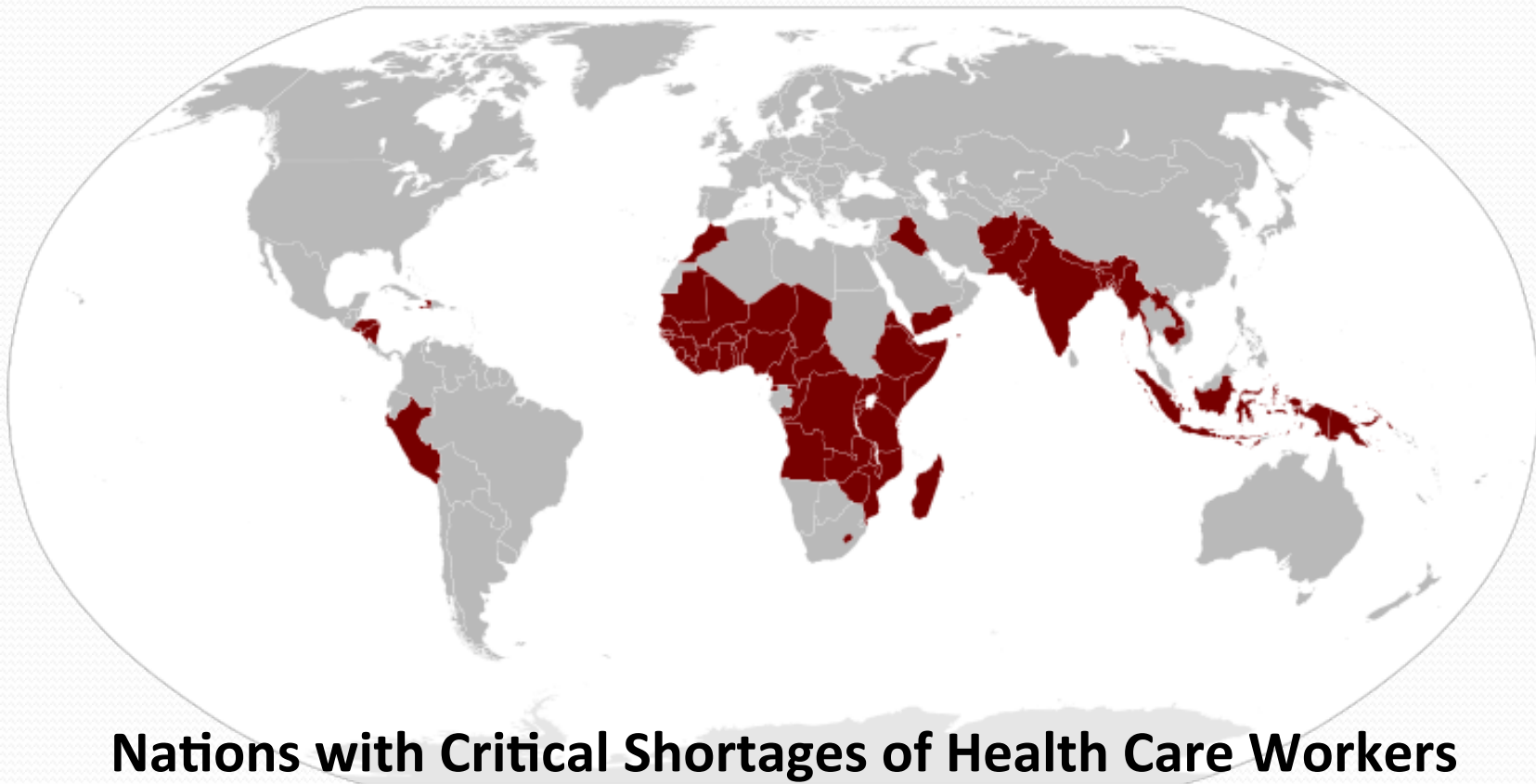


	Canada	Pakistan
Population	~ 34M	~167M
Physicians / 1,000	~ 2	~ 0.6
Nurses / 1,000	~ 10	~ 0.3

Data sources: (3, 18, 19).

Reality Check – HHR

- Just Who Needs Help ~ The Most? -

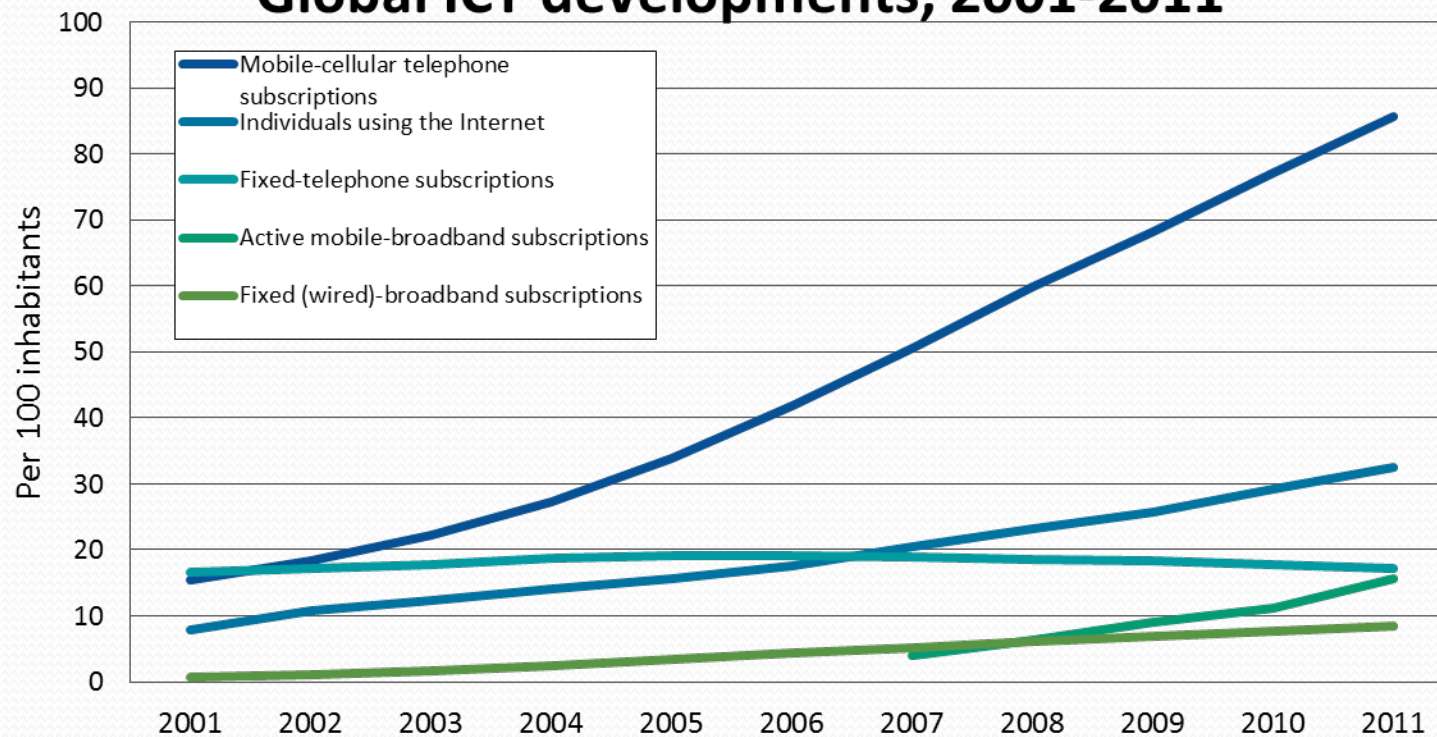


Nations with Critical Shortages of Health Care Workers

Reality Check

- How Do We Connect ~ The Most? -

Global ICT developments, 2001-2011

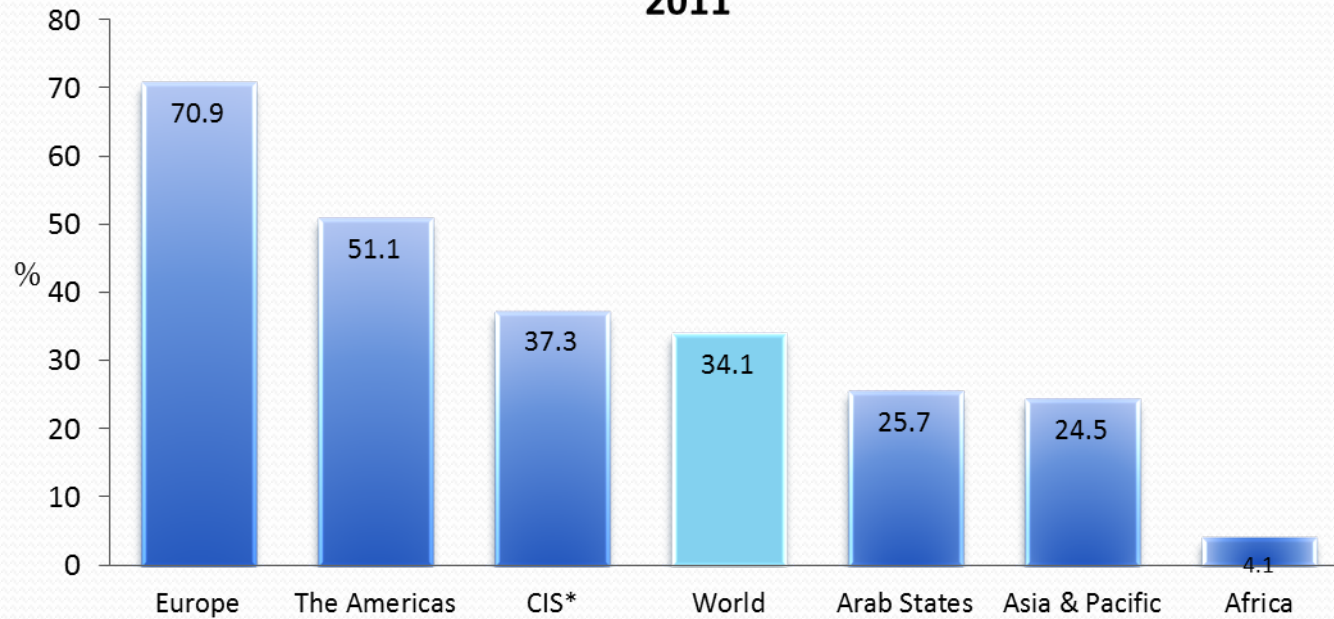


Source: ITU World Telecommunication /ICT Indicators database

Reality Check

- *How Do We Connect ~ The Most?* -

Percentage of households with Internet access, by region, 2011



* Commonwealth of Independent States
Regions are based on the ITU BDT Regions, see: <http://www.itu.int/ITU-D/ict/definitions/regions/index.html>
Source: ITU World Telecommunication/ICT Indicators database

Reality Check

- How Long Does it Take to Connect? -

Time needed to download online content at different connection speeds

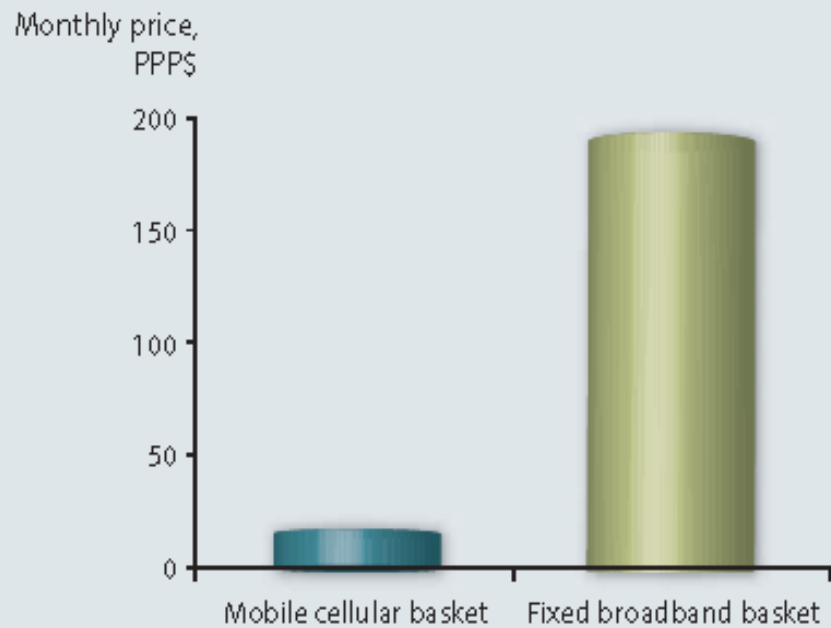
Content \ Connection speed	256kbps	2Mbps	10Mbps	100Mbps
Google homepage (160 KB)	00:00:05	00:00:01 *	00:00:00 *	00:00:00 *
Music track (5MB)	00:02:36	00:00:20	00:00:04	00:00:00 *
Video clip (20MB)	00:10:25	00:01:20	00:00:16	00:00:02 *
CD / low quality movie (700MB)	06:04:35	00:46:40	00:09:20	00:00:56
DVD / high quality movie (4GB)	34:43:20	04:26:40	00:53:20	00:05:20

Source: ITU calculation.
Note: * Rounded values.

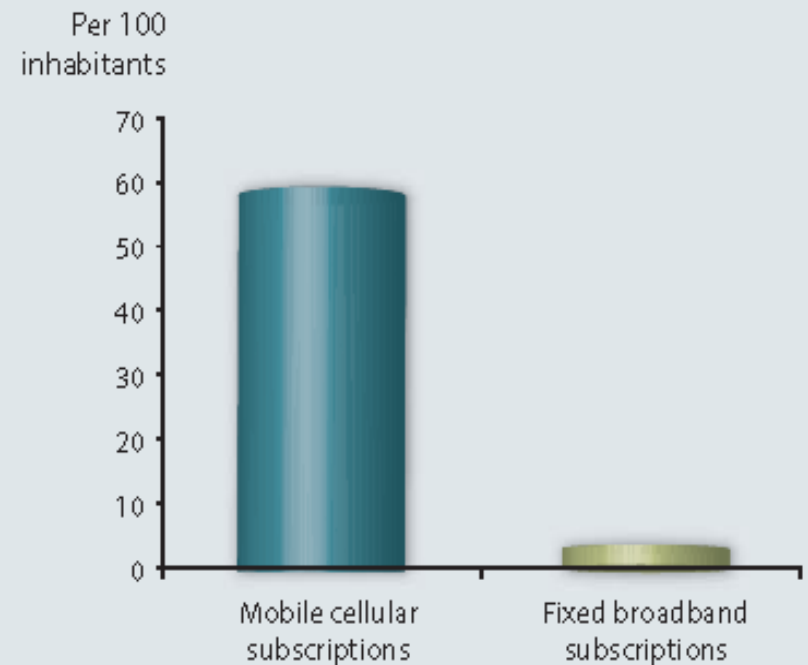
Reality Check

- *What Does it Cost to Connect?* -

Average price in developing countries, 2009



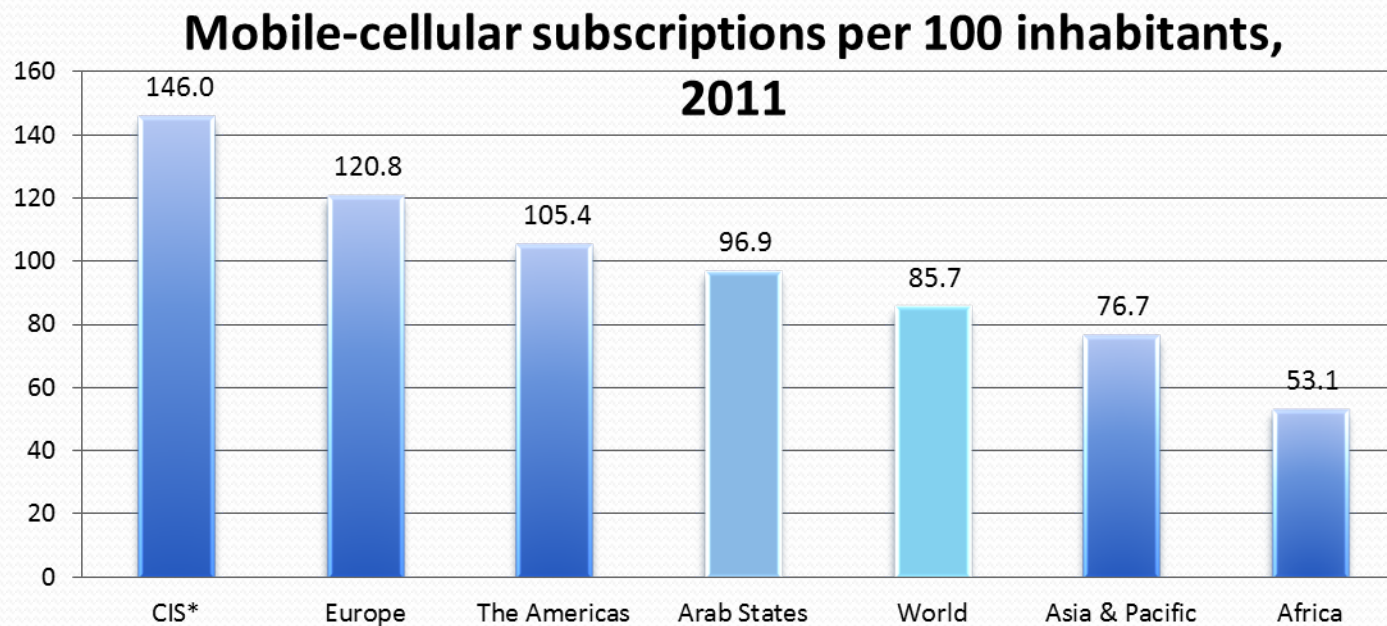
Penetration in developing countries, 2009



Source: *Measuring the Information Society Report 2010, ITU*

Reality Check

- How Do We Connect ~ The Most? -



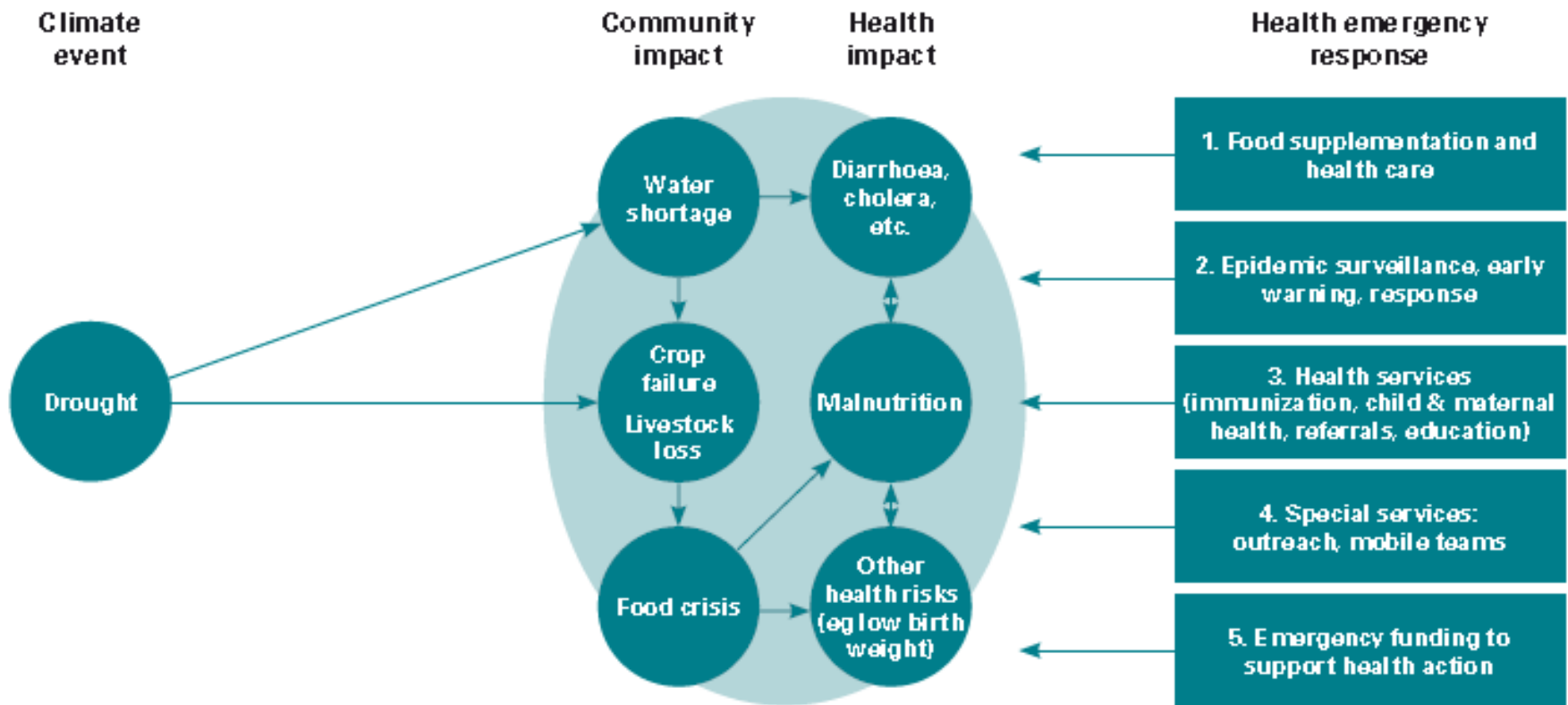
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Source: ITU World Telecommunication /ICT Indicators database

Reality Check - Opportunity Cost

- *What is the Role / Place of e-Health?* -

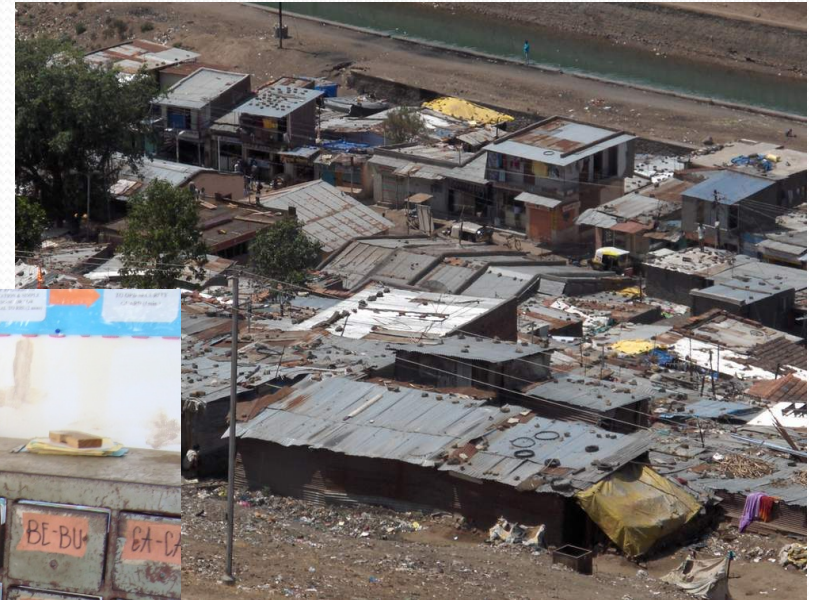


Reality Check - Is e-Health The Answer?

- *What can e-Health really do for them?* -

- EMR Benefits:
 - Accurate medication lists;
 - Legible notes and prescriptions;
 - Immediately available charts

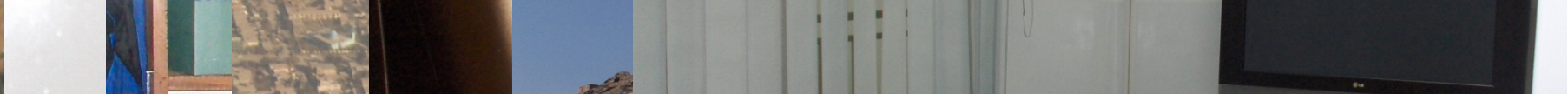
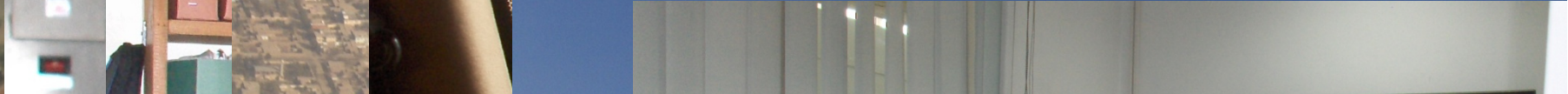
Mongolia



Pakistan



Philippines



2007

2007

2007/1

2007/

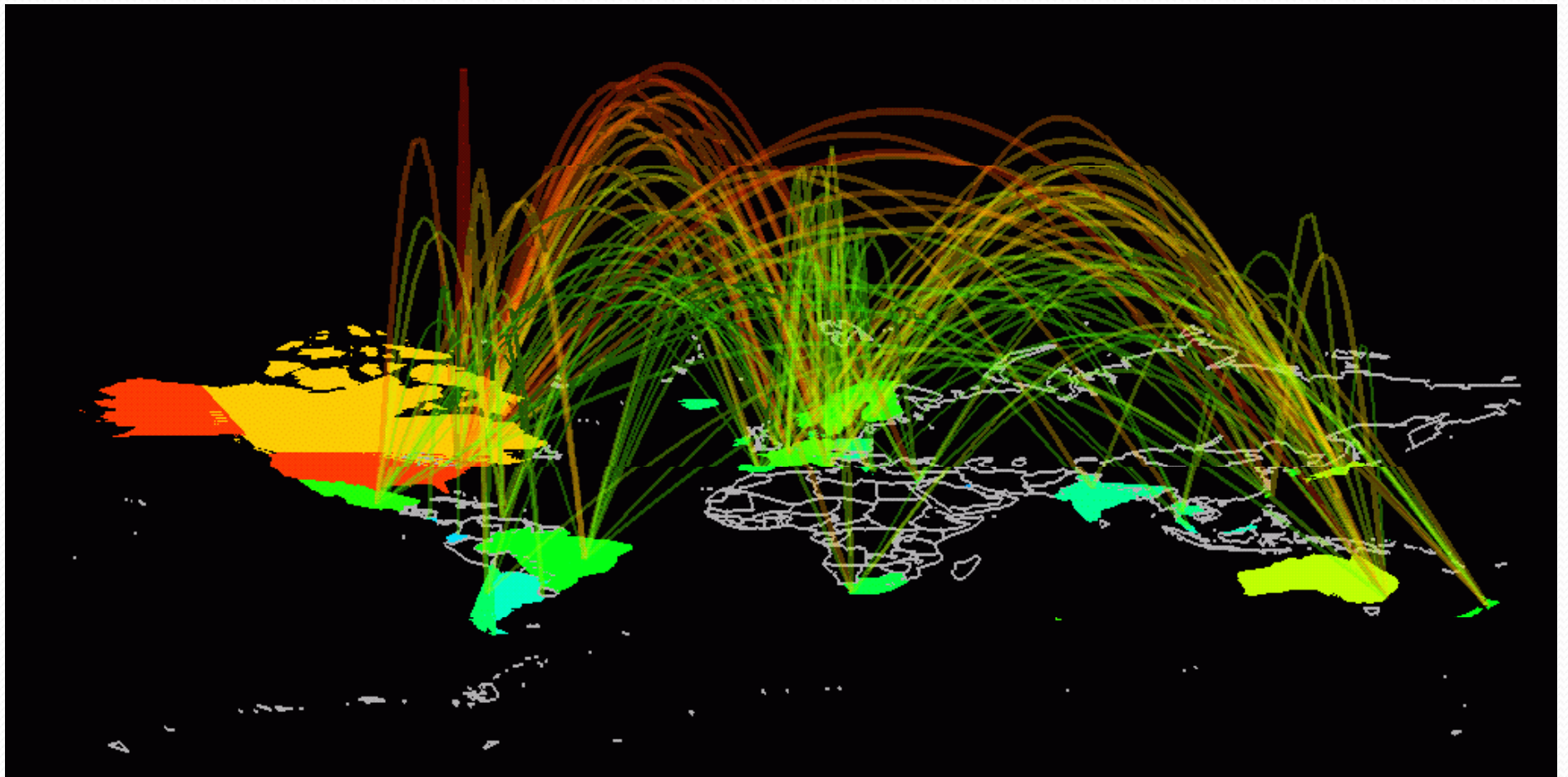
2007/10/23

For Today

- How can we:
 - **Connect**
 - The best minds and
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Connectivity - Critical

- 'Glocal' – But is there an Acceptable Business Case ?! -



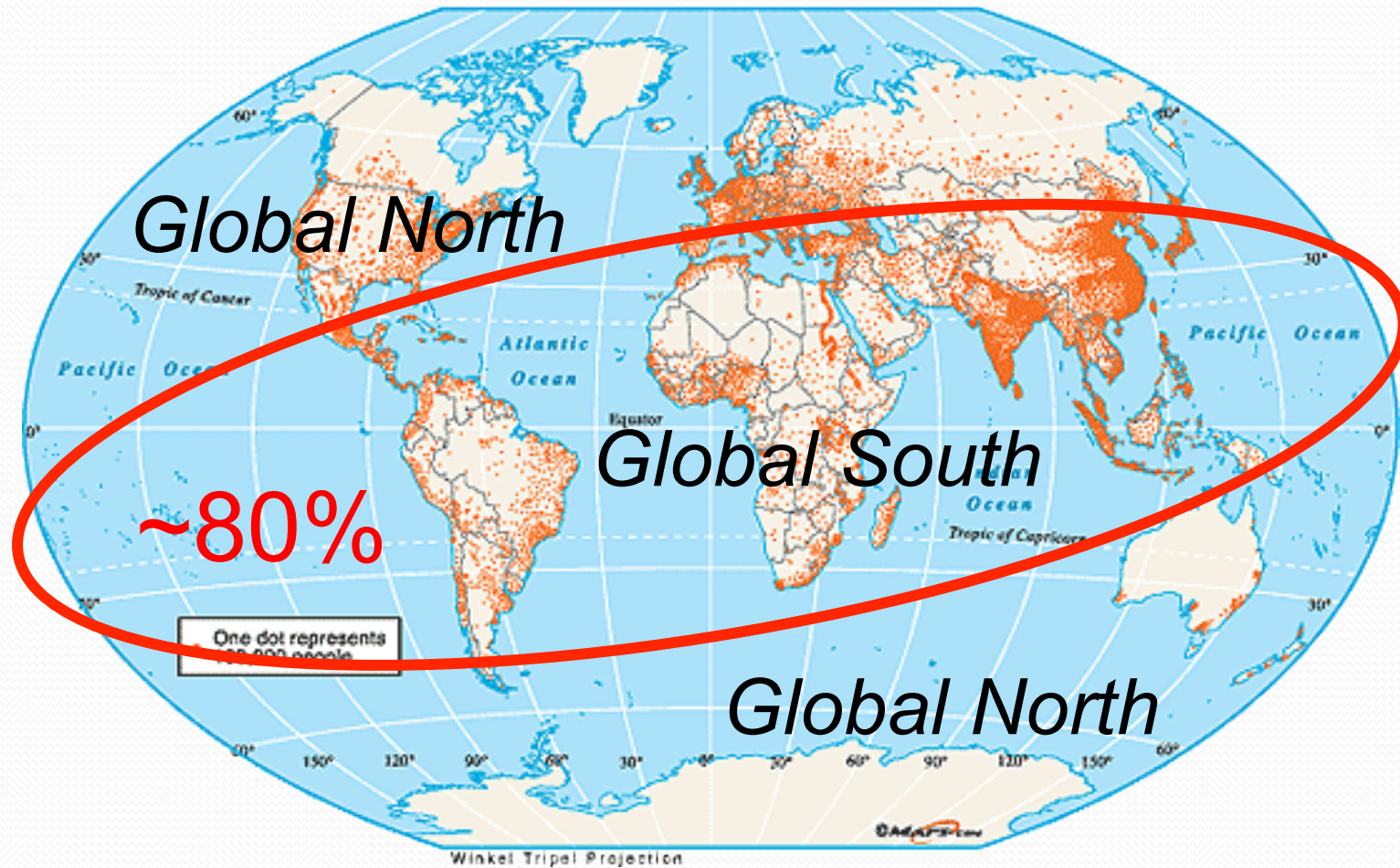
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Who Should We Connect?

- 'Global North' to 'Global South' or 'Global South' to 'Global South' -

World Population Distribution, 2000



Who Should We Connect?

- *The Best Minds* -

- **“Build Capacity to Build Capacity”**
 - Dr. Maurice Mars (UKZN, Durban, South Africa)
- North - South
 - University to University ‘matchmaking’ ?
- South - South
 - University to Community?

Handling HHR Issues

- *Strategic options* -

1. **Make more HHR**
2. Optimise use of the HHR we have
3. Adjust global flow
4. Enhance recruitment and retention
5. **Build capacity**
6. Introduce innovative practice models

Why Should We Connect?

- *The Best Minds* -

- “Build Capacity to Build Capacity”
 - Dr. Maurice Mars (UKZN, Durban, South Africa)
- **H(e)HR – Training and CPD (North-South)**
 - University to University ‘matchmaking’ ?
- **Health Services (North-South then South-South)**
 - University to Community

For Today

- The best (technologically appropriate) tools

'Technologically Appropriate'



‘Technologically Appropriate’

- The most **benign** technological solution that achieves the **desired purpose** within the **confines of** current social, cultural, environmental, and economic conditions of the setting in which it is to be applied, and which promotes **self-sufficiency** on the part of those using it in that setting.
- Characteristics:
 - Simple to adopt and use;
 - Requires few resources to operate and maintain;
 - Sustainable;
 - Environmentally friendly.

For Today

- Across *traditional (and cultural)* boundaries

'Culturally Sensitive'

- *What is acceptable (and available) locally?* -



‘Cultural Sensitivity’

- Respects **local traditions**, expectations of the **healthcare system**, **beliefs** about health and disease, **patterns of usage** of available healthcare services, accepts **local health culture** (such as traditional medicines or influential shamans).

For Today

- Across traditional (and cultural) *boundaries*

Hypothetical Scenario

- *Inter-Jurisdictional Diagnostic Clinical Video-Conference* -



Issues – What Issues?

- Borderless -

Scenario:

- Access Control to an EHR –
 - Will the specialists in the the ‘remote’ hospitals have access to all records entered in AKH,D?
 - Is access to a particular record restricted to the individual who entered the information?
 - Will the specialists have ‘rights’ to enter data (e.g. consult notes) into the EHR?
 - Will the specialists have to generate their own record in their own EHR systems?
 - Will user-initiated overrides be allowed in order to gain access to additional information?
 - Will user access activities be followed by an audit trail?

Issues – What, yet more Issues ...?

- Borderless -

- Consider

- Certification and Training
- Licensure
- Remuneration
- Professional Conduct – e.g. CMPA
- Clinical Standards
- Accountability for Clinical Decisions
- Scope of Practice
- Protection of Personal Health Information
- Data Quality; Collection; Management

- Who?

- Physicians
- Nurses
- Laboratorians
- Therapists
- Administrators
- ??
- ?

Inter-Jurisdictional e-Health

- 'Glocal' e-Health Policy is Needed ~ NOW -

*“...policy in any single jurisdiction may **hamper** or even **cripple** the ability of telehealth (e-health) to fulfill it's potential.”*

Scott RE, Chowdhury MFU, Varghese S. (2002)

For Today

- To improve healthcare

e-Health in the Developing World

- Promise or Peril -



No time – or \$\$\$ - for Mistakes

- *Real-life Lessons* -

- England
 - \$20.6 Billion National Programme for Information Technology (NPfIT) - 2003 to 2010
 - Overall success – ‘limited’
 - Issues – policymakers overlooked published recommendations and persisted with some of the NPfIT’s most criticized components and implementation methods!

Greenhalgh T, Russell J, Ashcroft RE, Parsons W. Why National eHealth Programs Need Dead Philosophers: Wittgensteinian Reflections on Policymakers’ Reluctance to Learn from History. *The Milbank Quarterly*. 2011;89(4): 533-563.

Available online at: <http://bit.ly/vxvWJ8>

e-Health Strategy

- *What it Is ~ What it Does* -

- **Strategy:**
 - Clarity around ***where*** you are going and ***why*** you are going there.
- **e-Health strategy:**
 - Documentation that ***describes*** and ***justifies*** the overall approach to be taken by a country (or organisation) for progressive implementation of e-health solutions.
- **Strategy is key:**
 - Foundation for sustainable e-health implementation.

How Do Policy and Strategy Relate ?

- In Any National or Local Setting ~ Country / Region / Facility -



e-Health

Strategy

A Panacea ?

- The Goose That Lays Golden Eggs -



- e-Health is a facilitator
- e-Health is NOT always the answer



What Are Some Solutions?

To Improve Healthcare ... We Must ...

“Build Capacity to Build Capacity”

1. Human (e-)Health Resources
2. Human (e-)Health Services

To Improve Healthcare ... We Must ...

- *Ensure Promise ~ Not Peril* -

1. e-Health Strategy:

- [Global – Regional] - National - Sub-National - Facility

2. Inter-jurisdictional Policy

- Facilitatory

3. Intra-jurisdictional Will

- Recognition. Respect. Support. Focus.

How ?

- Is This Easy To Do ? No. But It's Darned Important -

What we do now is laying the foundation for what will happen for the next 10, 20, 30 years.



Take the time to do it.

And do it right – first time.

Do or Do Not. There Is No Try!!

- Let's Get Our Collective 'Act' Together -



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Thank You

! Discussion - Disagreement - Debate !