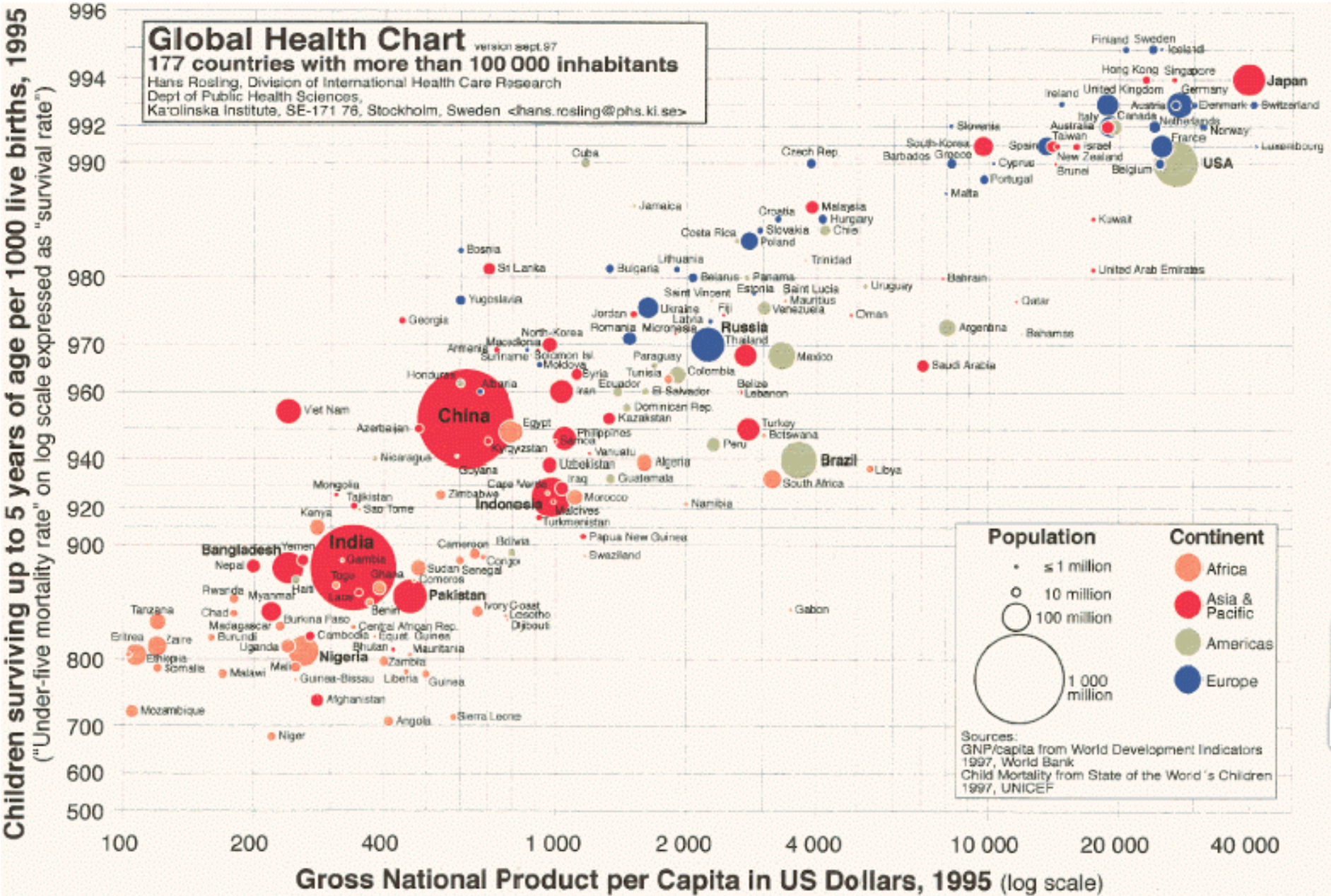


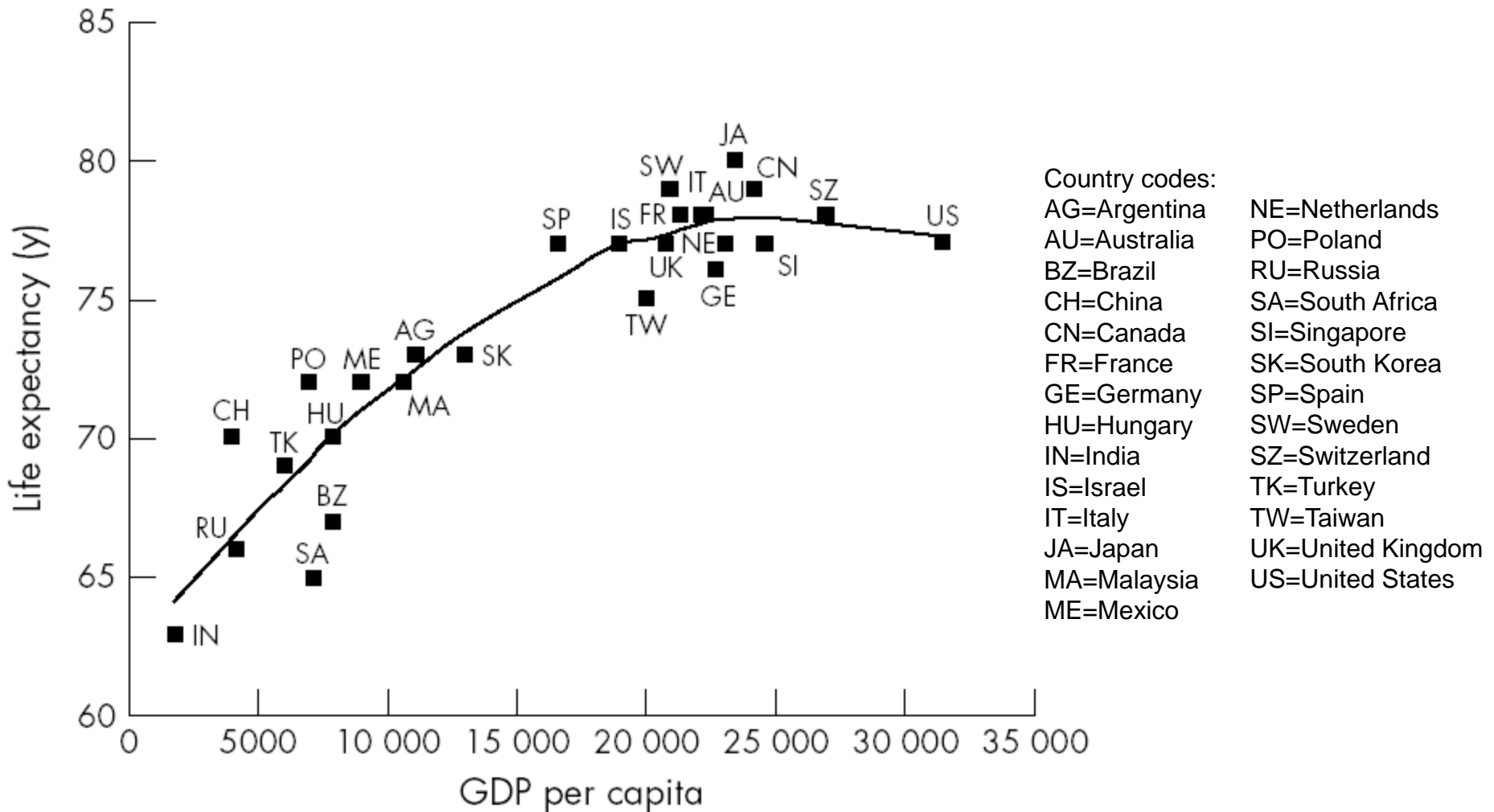
# MEASURING PRIMARY CARE: Theory, Policy, and Practice

Southby Lecture  
George Washington University  
Washington, DC  
April 21, 2011

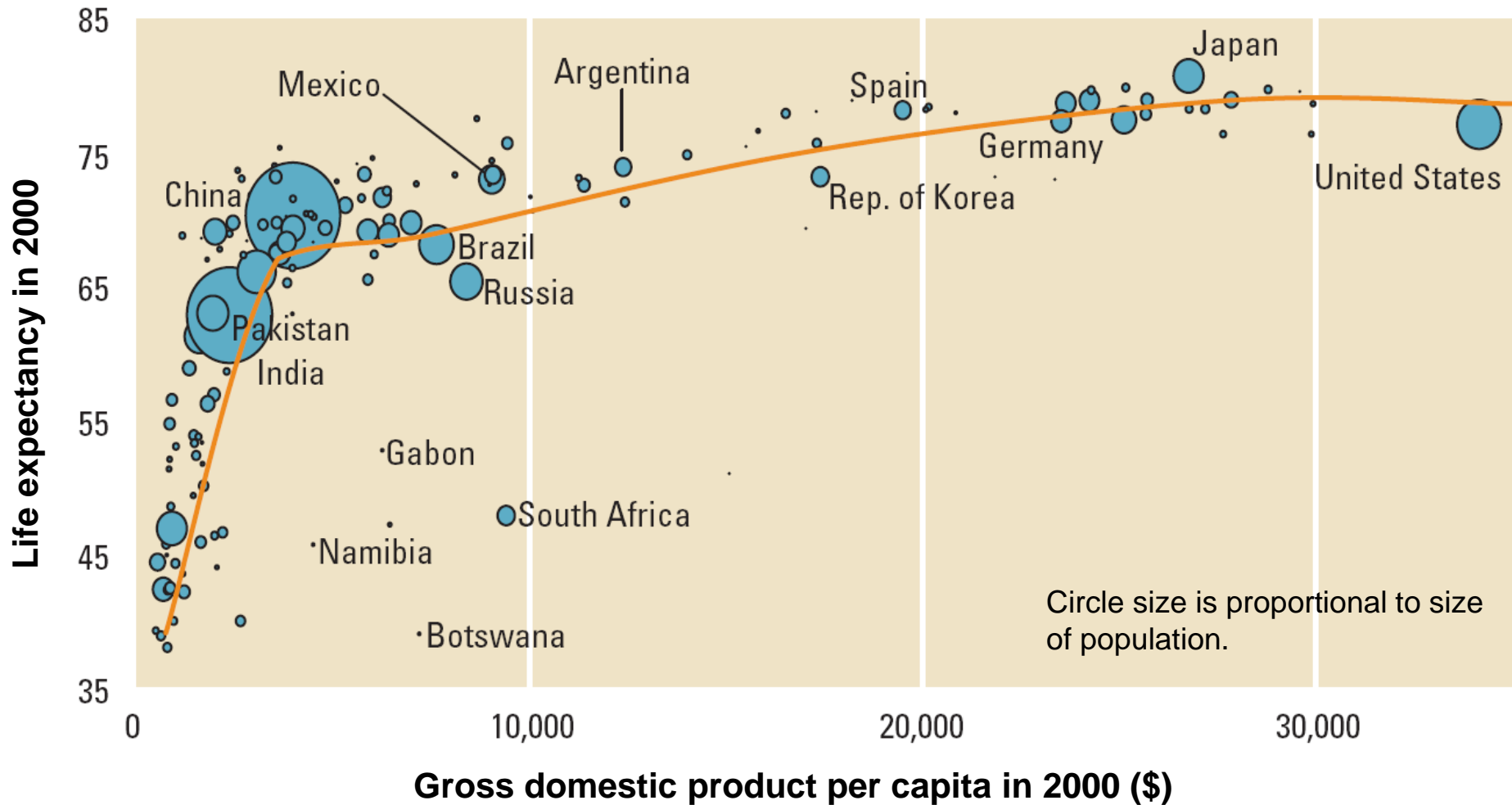


Source: Karolinska Institute: [www.whc.ki.se/index.php](http://www.whc.ki.se/index.php).

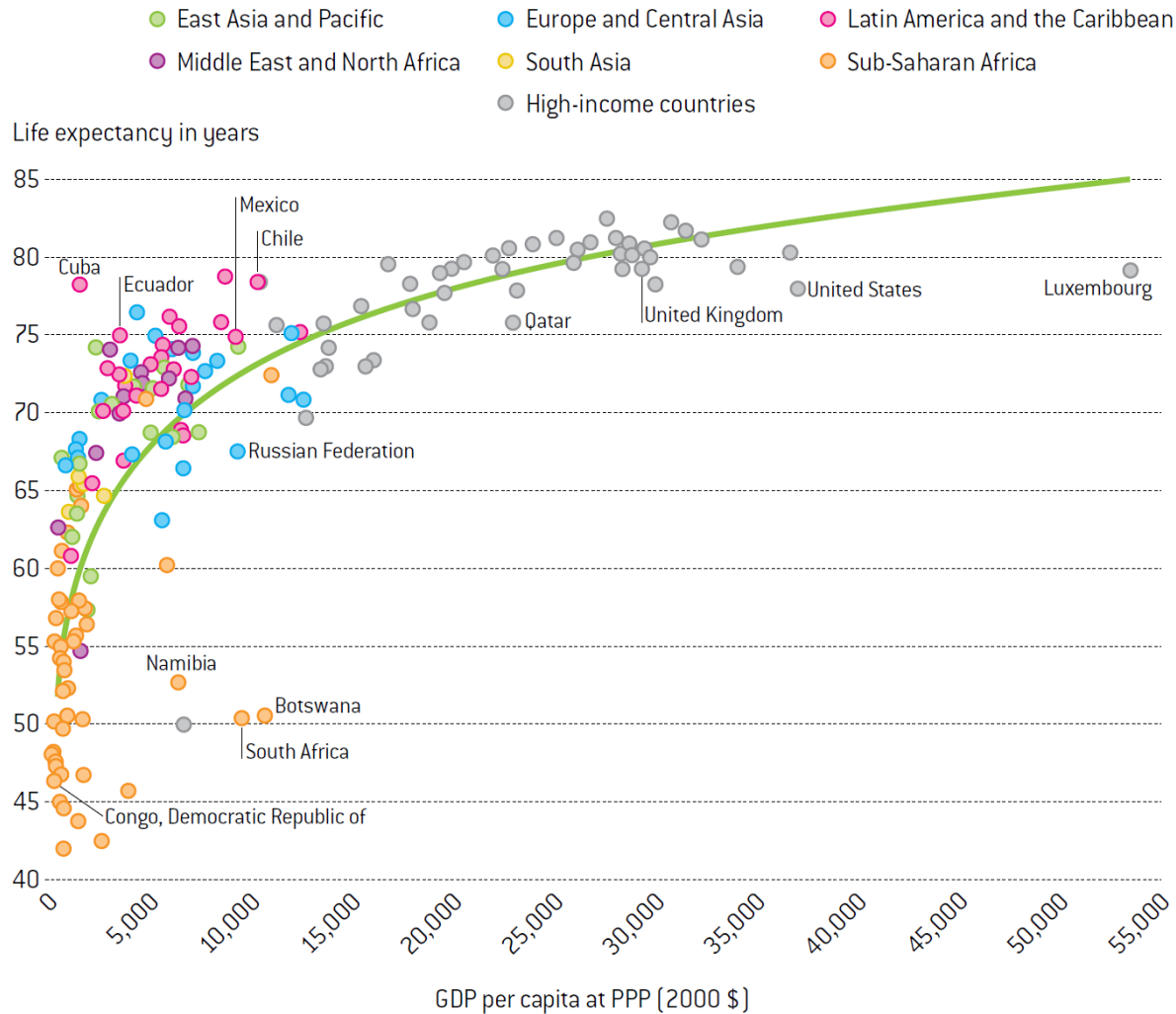
# Life Expectancy Compared with GDP per Capita for Selected Countries



# Life Expectancy and Income per Capita



# Relationship of Life Expectancy at Birth and GDP per Capita at PPP



Note: Equation:  $y = 6.3290 + 7.2225 * \ln(\text{GDP per capita})$ ;  $R\text{-squared} = 0.6339$ .  
 Source: IFs Version 6.32 using WDI data (2006 or most recent by country).

# Primary health care oriented countries

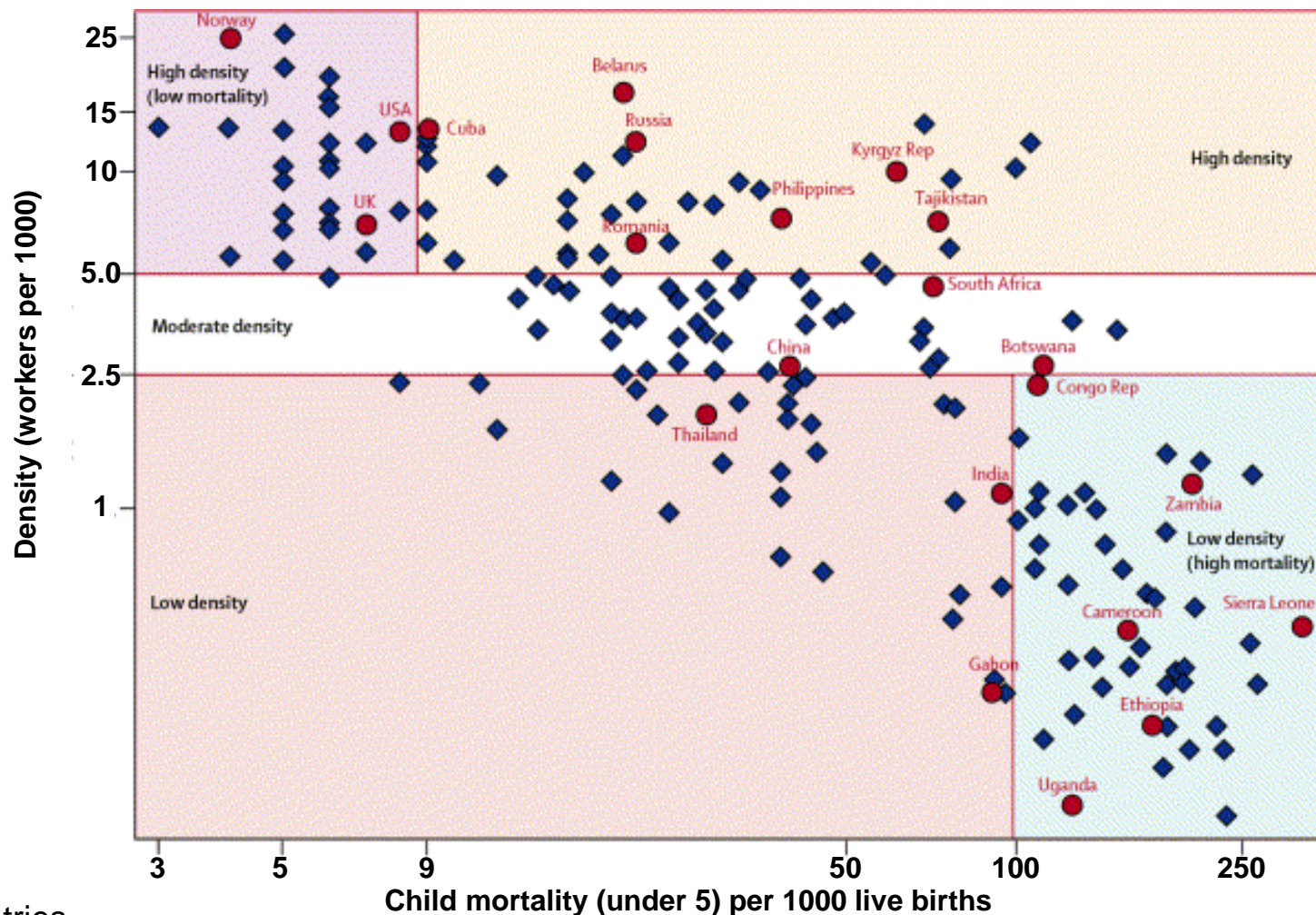
- Have more equitable resource distributions
- Have health insurance or services that are provided by the government
- Have little or no private health insurance
- Have no or low co-payments for health services
- Are rated as better by their populations
- Have primary care that includes a wider range of services and is family oriented
- Have better health at lower costs

# WAYS OF MEASURING PRIMARY CARE

1. Physician/population ratios
2. Who performs what tasks and how well
3. Adequacy of primary care functions



# Country\* Clusters: Health Professional Supply and Child Survival



\*186 countries

Source: Chen et al, Lancet 2004; 364:1984-90.

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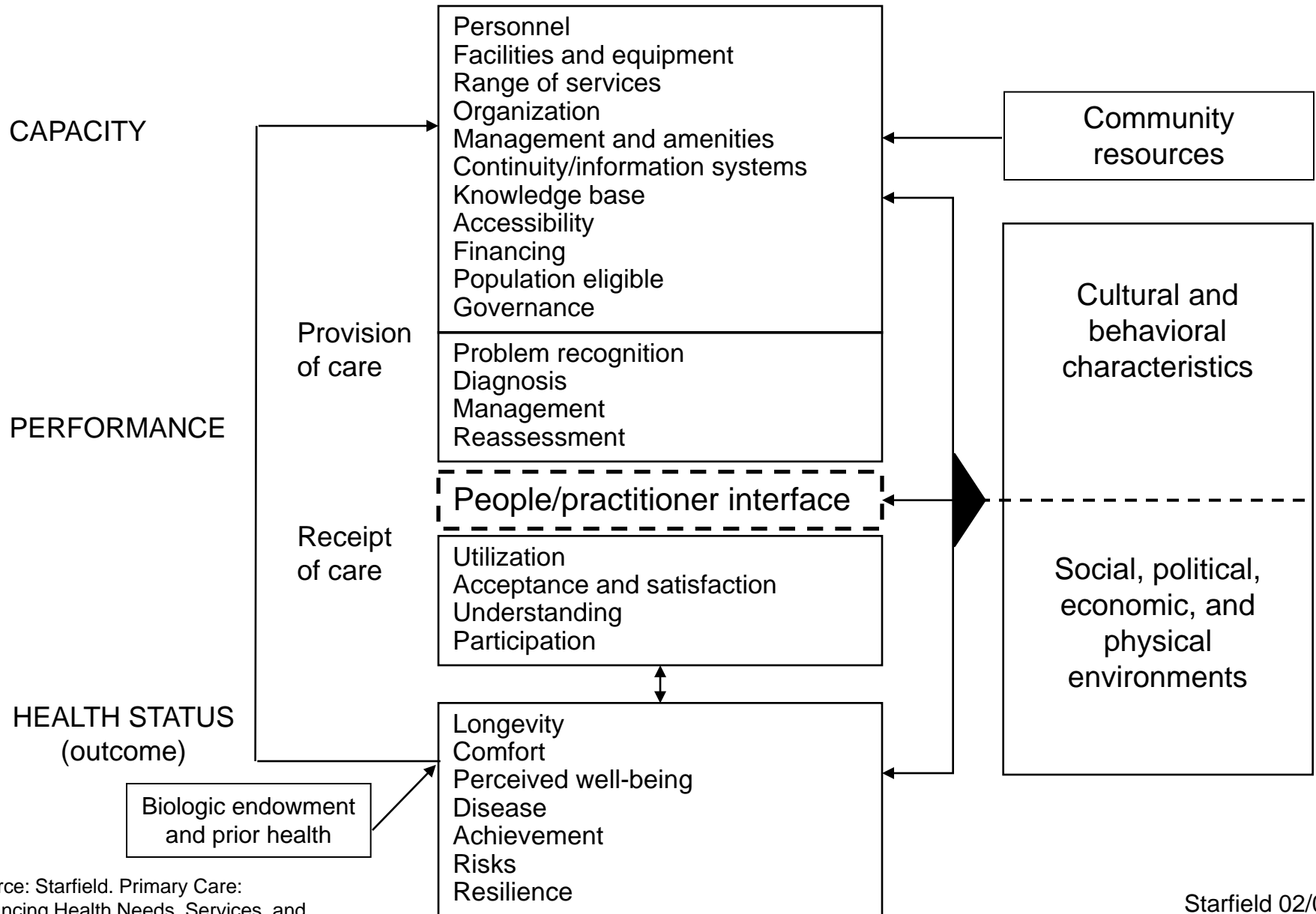
## PREMISE:

Problems are easier to solve when the pathways to their generation are known.

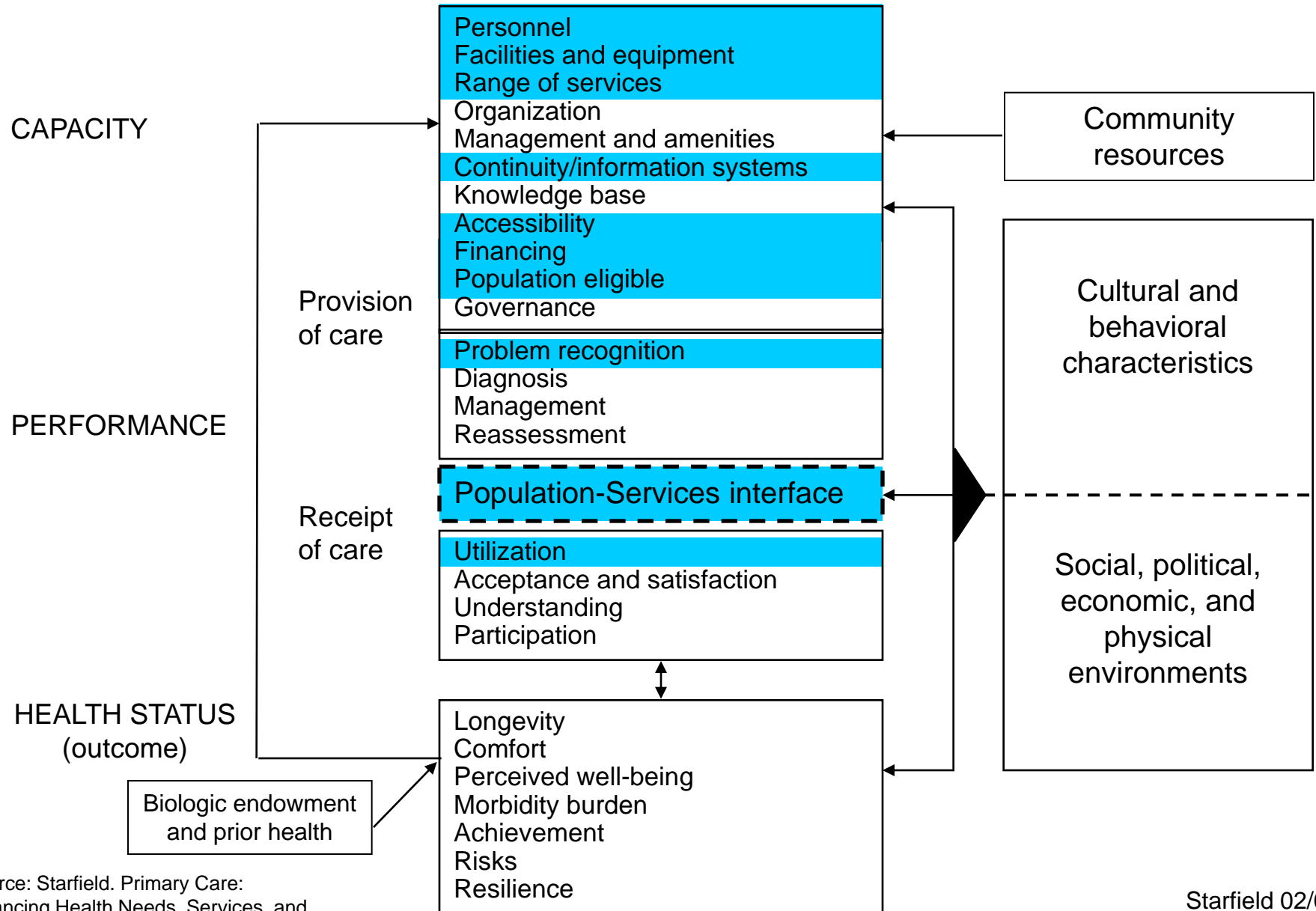
In the absence of adequate knowledge of pathways, theory is a guide.

In health services, there are theories that can be helpful.

# The Health Services System



# Primary Health Care Oriented Health Services Systems



# Primary Care Orientation of Health Systems: Rating Criteria

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- Practice Characteristics
  - First-contact
  - Person-focus over time
  - Comprehensiveness
  - Coordination
  - Family-centeredness
  - Community orientation

# PCAT: First Contact Subdomains

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Accessibility

Use for first contact



# PCAT: Longitudinality Subdomains

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Extent of relationship

Interpersonal relationships

# PCAT\*: Comprehensiveness Subdomains

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Services available

Services provided (received)

\*Primary Care Assessment Tool

website: [http://www.jhsph.edu/pcpc/pca\\_tools.html](http://www.jhsph.edu/pcpc/pca_tools.html)

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PCM 5810

# PCAT: Coordination Subdomains

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Information system  
adequacy

Coordination/integration  
with care provided  
elsewhere

The PCAT is used to assess the achievement of primary care from the point of view of people in the community, by patients, and by health professionals and managers. The systems PCAT is used to examine the characteristics of policy that are conducive to clinical primary care.

# PCAT

## (Primary Care Assessment Tool)

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A family of comparable instruments (adult, child) (community, patients, facilities, providers, managers) to assess the strength of:

- Primary Health Care systems
- First-contact access and use
- Longitudinality (identification with a place/provider; interpersonal relationships)
- Comprehensiveness (services available, services provided)
- Coordination (information transfer; integration of care)
- Community orientation
- Cultural sensitivity
- Family-centeredness



# PCAT Versions

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## Primary Health Care

Systems assessment (policy makers and managers)

## Primary Care

Adult consumer long/short

Child consumer long/short

Facility long/short

Provider long/short

# PCAT Languages

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- English
- Spanish
- Catalan
- Portuguese
- French (Quebec)
- Korean
- Mandarin, Cantonese
- Philippine languages
- Vietnamese
- In progress (2011): Greece, Malaysia

Some of the countries in which the PCAT is being used or is planned for use (other than just for research: as of 2011)

US (some patient-centered medical home demonstrations); Spain; Uruguay; Turkey; Vietnam, Malaysia, Hong Kong; Korea; Brazil; South Africa

# UTILITY OF THE PCAT

- TO COMPARE ONE TYPE OF FACILITY WITH ANOTHER
- TO COMPARE ONE TYPE OF PRACTITIONER WITH ANOTHER
- TO COMPARE ONE COUNTRY OR REGION WITH ANOTHER
- TO DETECT PARTICULAR FUNCTIONS THAT APPEAR TO BE SUBOPTIMAL, AND EXPLORE WHY

# USE OF THE PCAT IN HONG KONG

HEALTH PLANNING AUTHORITY  
INTEREST IN THE ROLE OF PRIMARY  
CARE: CROSS-SECTIONAL  
TELEPHONE AND CLINIC SURVEYS OF  
CONSUMERS AND PATIENTS

Source: Samuel Wong, 3/27/11



# USE OF THE PCAT IN CHINA

Hong Kong research council and a government think tank (Bauhinia Foundation) evaluation of primary care services in cities in the Guangdong region and Shanghai (after recent primary care reform in China).

Local governments have also supported its use in Hunan province and Taiwan.

# Use of the PCAT in Brazil

- The Portuguese versions of various forms of the PCAT have been used in many areas of Brazil. Most of the studies have been supported by the Ministry of Health and local health secretariats. They have been published by the Brazilian Ministry of Health to be widely available as an evaluation tool applied to the Family Health Strategy (more than 50% of the population covered).
- Source: Erno Harzheim, 3/31/11; James Macinko 4/1/11

# EVALUATION OF US PATIENT-CENTERED MEDICAL HOME

An evaluation of primary care practice transformation activities in various areas of the country used the provider, facility, and consumer PCAT tools; the evaluations were funded by a one of the largest private health care health care organizations and by several state health care agencies (for Medicaid patients and for children), and by the national (government) health services research agency.

# ONTARIO, CANADA

The Ministry of Health and Long-Term Care has commissioned a 5-year evaluation of its Family Health team initiative that includes the administration of the PCAT, which is used to compare the performance of the teams over time and with two other primary care delivery models. The PCAT was also used in Ontario to assess the Ministry's primary care reform pilot sites in the early 1990s and to assess primary care delivery in other studies in Ontario and Canada.

# SPAIN

In Catalonia, PCAT studies have been conducted by the Agency for Public Health of Barcelona and the Catalan Department of Health. PCAT was incorporated in the last Catalan Health Survey (2006).

Source: M. Pasarin and S. Berra, 4/1/11

# URUGUAY

- After a seminar in Montevideo, representatives of the Public Health Services Administration (ASSE) and university researchers agreed to develop a plan to implement PCAT in the country, in regions, and in teams of clinical providers. The national director of primary care stated: ‘Thus the PCAT will be incorporated as a powerful tool to think, reflect, and monitor if we are changing. PCAT has the potential to take into account the user’s gaze, the worker, and the manager point of view....’
- Source: Miguel Pizzanelli, 3/30/11

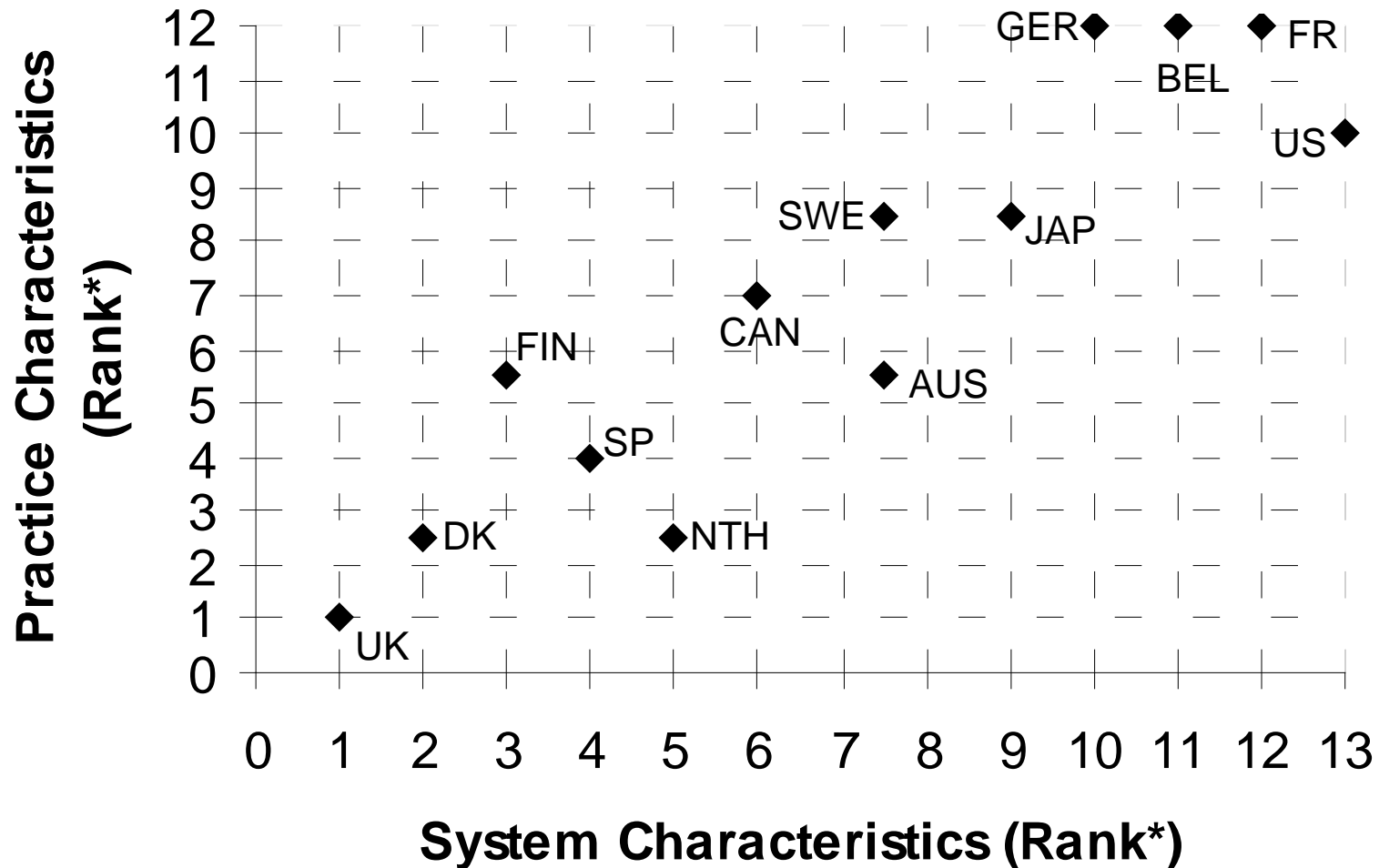
# SOUTH AFRICA

- The family medicine department of the University of Capetown, with the support of the director of two subdistricts in Western Cape province, will administer the PCAT in public facilities to obtain baseline data before the anticipated national health insurance reform.

# THE SYSTEMS PCAT



# System (PHC) and Practice (PC) Characteristics Facilitating Primary Care, Early-Mid 1990s



\*Best level of health indicator is ranked 1; worst is ranked 13;  
thus, lower average ranks indicate better performance.

Based on data in Starfield & Shi, Health Policy 2002; 60:201-18.

# Primary health care oriented countries

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# The Primary Care Assessment Tool – Systems Version

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This tool assesses the primary health care and primary care characteristics at the system level. It addresses all of the primary care functions.

It is being considered for widespread use in comparing the primary care orientation of different health systems, both within and across countries.

- As of the beginning of 2011, the Systems PCAT has been tried in Brazil (a local area) and in Austria (the country)
- Great interest has been expressed in using the Systems PCAT in various areas of the world
- The Systems PCAT, when validated through studies in Latin America, will be recommended for use either before or concomitantly with one or more of the other versions of the PCAT.

# DOMAINS OF THE SYSTEMS PCAT

- Equity in distribution of resources
- Universality of financing
- Role of government in policy regarding quality, comprehensiveness, and payment for services
- Accessibility of services
- First contact care
- Person focused care over time(Longitudinality)
- Comprehensiveness of services in primary care
- Records and Coordination o f care
- Family Orientation; Community Orientation,

# SYSTEMS PCAT: BACKGROUND CHARACTERISTICS

- Supply of primary care physicians
- Payment of primary care physicians and nurses
- Types of primary care providers
- Training of primary care providers

Plans are to test the Systems PCAT widely in Latin America, both alone and in conjunction with other versions of the PCAT (Consumer, Patient, Clinician, Manager) in both adults and children, with the purpose of providing information to improve the effectiveness, efficiency, and equity of health services.

Website:

[http://www.jhsph.edu/pcpc/pca\\_tools.html](http://www.jhsph.edu/pcpc/pca_tools.html)