Global Health Chart
177 countries with more than 100,000 inhabitants
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Children surviving up to 5 years of age per 1,000 live births, 1995
("Under-five mortality rate" on log scale expressed as "survival rate")

Gross National Product per Capita in US Dollars, 1995 (log scale)


Starfield 09/04
IC 5644 n
Life Expectancy Compared with GDP per Capita for Selected Countries

Country codes:
AG=Argentina
AU=Australia
BZ=Brazil
CH=China
CN=Canada
FR=France
GE=Germany
HU=Hungary
IN=India
IS=Israel
IT=Italy
JA=Japan
ME=Mexico
NE=Netherlands
PO=Poland
RU=Russia
SA=South Africa
SI=Singapore
SK=South Korea
SP=Spain
SW=Sweden
SZ=Switzerland
TK=Turkey
TW=Taiwan
UK=United Kingdom
US=United States

Life Expectancy and Income per Capita

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

Note: Equation: $y = 6.3290 + 7.2225 \times \ln(\text{GDP per capita})$; $R$-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

Sources: Starfield and Shi, Health Policy 2002; 60:201-18.
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

Density (workers per 1000) vs. Child mortality (under 5) per 1000 live births

*186 countries


Starfield 07/07
HS 6333 n
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

CAPACITY

Provision of care

PERFORMANCE

Receipt of care

HEALTH STATUS (outcome)

Biologic endowment and prior health

Personnel
Facilities and equipment
Range of services
Organization
Management and amenities
Continuity/information systems
Knowledge base
Accessibility
Financing
Population eligible
Governance

Problem recognition
Diagnosis
Management
Reassessment

People/practitioner interface

Utilization
Acceptance and satisfaction
Understanding
Participation

Longevity
Comfort
Perceived well-being
Disease
Achievement
Risks
Resilience

Community resources

Cultural and behavioral characteristics

Social, political, economic, and physical environments

Primary Health Care Oriented Health Services Systems

CAPACITY
- Personnel
- Facilities and equipment
- Range of services
- Organization
- Management and amenities
- Continuity/information systems
- Knowledge base
- Accessibility
- Financing
- Population eligible
- Governance

PERFORMANCE
- Problem recognition
- Diagnosis
- Management
- Reassessment

Population-Services interface
- Utilization
- Acceptance and satisfaction
- Understanding
- Participation

HEALTH STATUS (outcome)
- Longevity
- Comfort
- Perceived well-being
- Morbidity burden
- Achievement
- Risks
- Resilience

Community resources
- Cultural and behavioral characteristics
- Social, political, economic, and physical environments

Biologic endowment and prior health

Primary Care Orientation of Health Systems: Rating Criteria

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

PCAT: First Contact

Subdomains

Accessibility

Use for first contact

website: http://www.jhsph.edu/pcpc/pca_tools.html
PCAT: Longitudinality Subdomains

Extent of relationship

Interpersonal relationships

website: http://www.jhsph.edu/pcpc/pca_tools.html
PCAT*: Comprehensiveness Subdomains

Services available

Services provided (received)

*Primary Care Assessment Tool
website: http://www.jhsph.edu/pcpc/pca_tools.html
PCAT: Coordination Subdomains

Information system adequacy

Coordination/integration with care provided elsewhere

website: http://www.jhsph.edu/pcpc/pca_tools.html
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.

website: http://www.jhsph.edu/pcpc/pca_tools.html
PCAT
(Primary Care Assessment Tool)

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

website: http://www.jhsph.edu/pcc/pca_tools.html
PCAT Versions

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

website: http://www.jhsph.edu/pcpc/pca_tools.html
PCAT Languages

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

website: http://www.jsph.edu/p CPC/pca_tools.html
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.

Source: Samuel Wong 3/30/11; L Shi 3/30/11
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.

Source: R. Malouin 4/2/11
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.

Source: Dale McMurchy, April 7, 2011
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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Sources: Starfield and Shi, Health Policy 2002; 60:201-18.
The Primary Care Assessment Tool – Systems Version

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 concurrently 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 of 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