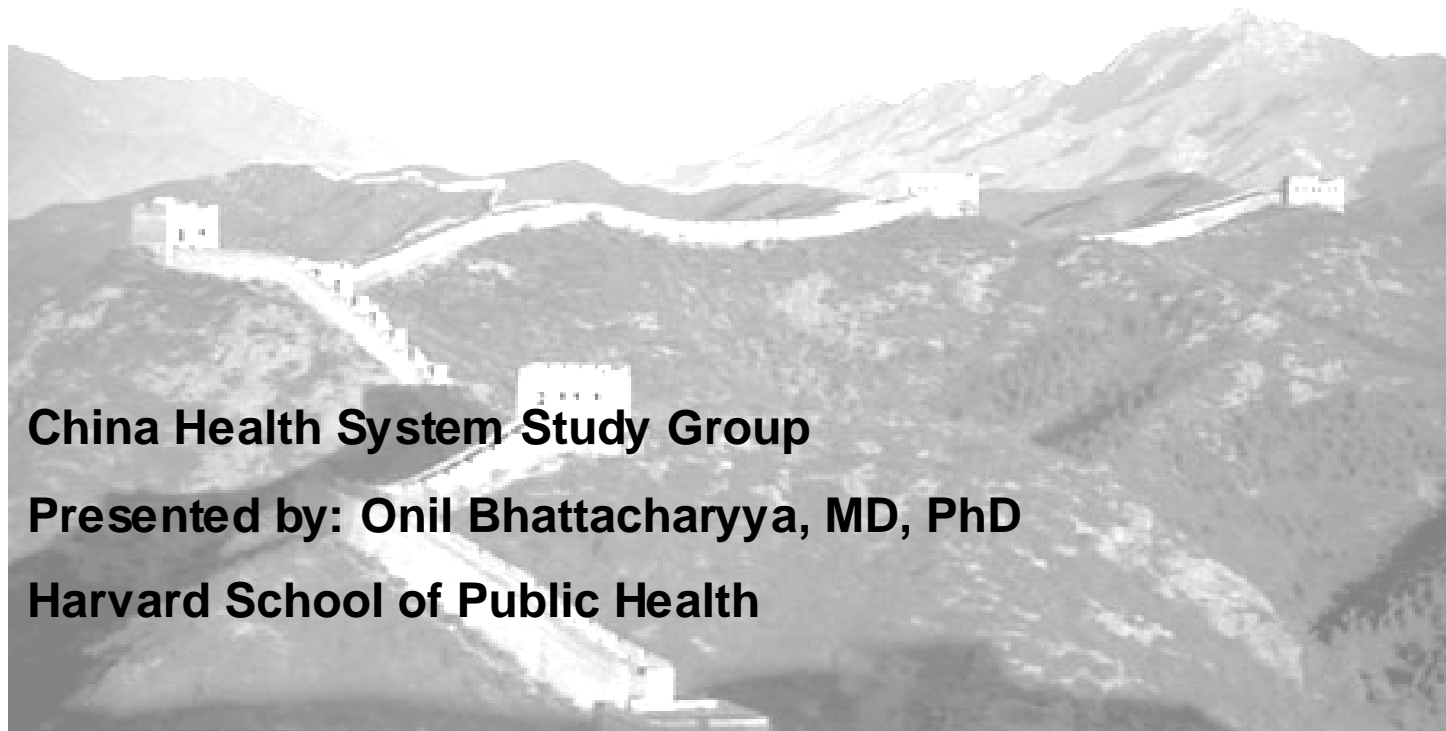


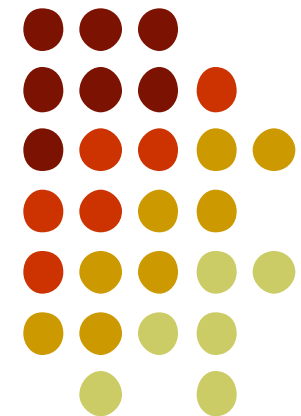
Strengthening community-based health care: Addressing human resource needs



China Health System Study Group

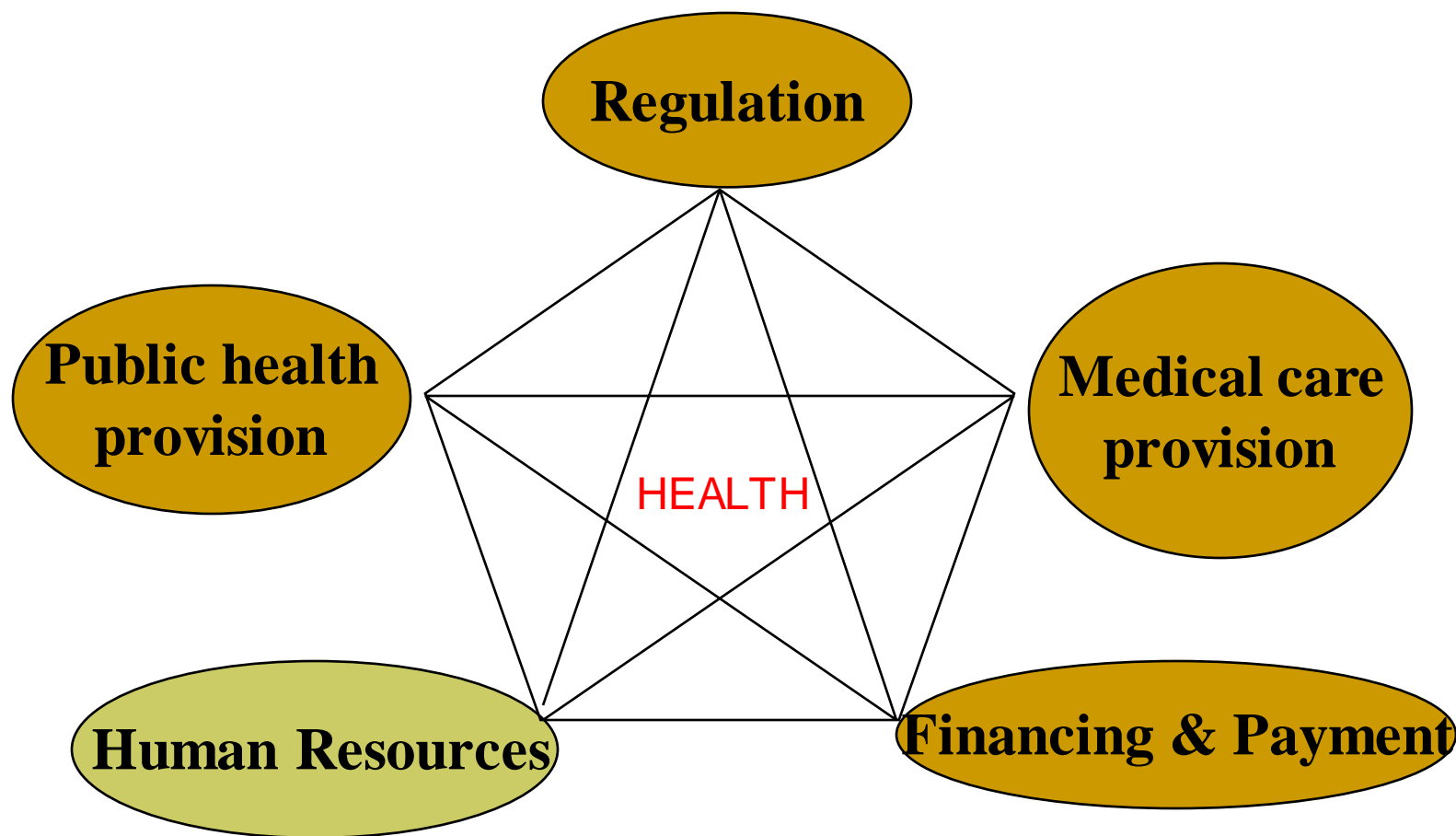
Presented by: Onil Bhattacharyya, MD, PhD

Harvard School of Public Health





Framework of Health System Analysis



Overview



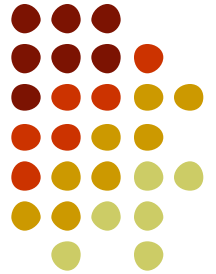
- History of primary care in China
- National health human resources
- Community health services capacity and performance
- Recommendations

Challenges for Primary Care in China



- **Poor access to care**
 - Only 30% of people are insured
- **Low level of government funding**
 - < 10% of operating costs
- **Low utilization**

Opportunity



- Massive economic growth
 - Rise in government revenue
- Increase government spending on health
 - 50% increase in last year
 - Doubling of primary care budget in some cities

History of Primary Care in China



Post-1949

Barefoot doctor in rural areas

- Good access
- High efficiency
- Appropriate to context
- High health impact

Mixed system in urban areas



History of Primary Care in China



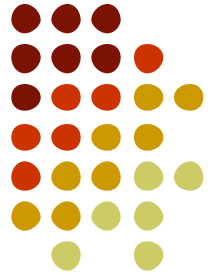
Post-1978 Market Reform

- Investment in high-tech tertiary care



- Rising costs, declining access
- Specialists often seen for as front line provider
- Few training programs for family physicians

History of Primary Care in China



1997 – State Council Health Reform Strategy

- Pilot studies encouraged

1998 – Pilot and scale-up of new models

2007 – Standard-setting and guidelines

2010 – New primary care system established

- First in eastern China, then major cities in west

Goals of primary care reform:

Provide safe, convenient and affordable
basic health services



Overview

- History of primary care in China
- **National health human resources**
- Community health services capacity and performance
- Recommendations

Health Human Resource Trends 1990-2005



	Doctors				Nurses			
	1990	1995	2000	2005	1990	1995	2000	2005
Total	1.56	1.62	1.68	1.52	0.86	0.95	1.02	1.06

Source: 2006 China Human Resources for Health

Health Human Resource Trends 1990-2005



	Doctors				Nurses			
	1990	1995	2000	2005	1990	1995	2000	2005
Total	1.56	1.62	1.68	1.52	0.86	0.95	1.02	1.06
Urban/Rural								
City	2.95	2.39	2.31	2.14	1.91	1.59	1.64	1.66
County	0.98	1.07	1.17	0.96	0.43	0.49	0.54	0.51

Source: 2006 China Human Resources for Health

Health Human Resource Trends 1990-2005

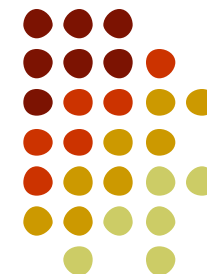


	Doctors				Nurses			
	1990	1995	2000	2005	1990	1995	2000	2005
Region								
East	1.67	1.76	1.82	1.74	0.99	1.09	1.19	1.28
Central	1.47	1.51	1.58	1.37	0.83	0.92	0.97	0.96
West	1.53	1.57	1.62	1.39	0.74	0.8	0.87	0.87

Source: 2006 China Human Resources for Health

Education of Doctors & Nurses

City and County, 2005



	Urban/Rural	
	City	County
Doctors	100.0	100.0
Master and PhD	5.3	0.1
Bachelor	37.5	12.8
Technical College	30.4	35.3
Junior College	22.4	43.7
High School and Below	4.4	8.1
Nurses	100.0	100.0
Bachelor and above	3.0	0.7
Technical College	31.1	21.4
Junior School	59.3	67.8
High School and Below	6.6	10.1

2006 China Human Resources for Health



Overview

- History of primary care in China
- National health human resources
- **Community health services capacity and performance**
- Recommendations

Data Source



- National survey of Urban community health services
- Launched in September 2005
- Response at city and district level was above 85% (1233 regions targeted)

Chen Bowen et al, 2006

Community Health Service Organizations



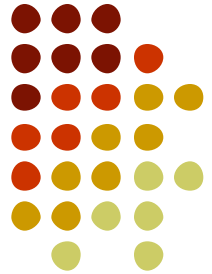
Type of Facility	Number Surveyed	Estimated Total
Community Health Center	3, 032	3, 375
Health Station	9,830	11, 816

There is an estimated 3.5 health stations for every CHC

40% of CHCs are affiliated with hospitals

Chen Bowen et al, 2006

Community Health Service Staff



Provider	Average Staff per Unit	
	CHC	Health Station
Physician	18.1	3.5
Nurse	13.1	2.4
Public Health Worker	3	0.3

Staff Ratio:

1 physician : 0.7 nurses : 0.15 public health workers

Chen Bowen et al, 2006



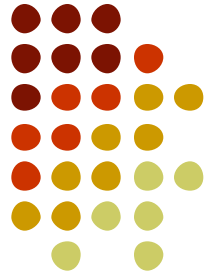
CHS Staff Training

Provider	Bachelor's	Technical College	Junior College
Physician	26%	38%	27%
Nurse	2%	23%	66%

At least 36% of physicians have not received family medicine certification

Chen Bowen et al, 2006

Performance of Community Health Services



- 112 communities from 2004-2005
- 2,240 patients surveyed
- 59% of respondents were aware of community health centers
- 31% had used them

Chen Bowen et al, 2006

Performance of Community Health Services



Dimension	Satisfaction with dimension
Convenience	93%
Affordability	28%
Safety	35%
Overall Satisfaction	48%

Chen Bowen et al, 2006

Conclusions



- Capacity of primary care staff is low
 - But unclear how compares to population needs
- Limited use of community health services
- Crisis of confidence in community health services
 - Low satisfaction
 - Not seen as safe or affordable



Recommendations

- Define role of primary care providers
 - Focus on training specialist vs. technician
- Define role of government in primary care
 - Compete in market or protect vulnerable
- Clarify goals of primary care
 - Measure performance against those goals
- Invest in quality & accountability of primary care before providing broad access

Contributors



- Yuanli Liu
- Wensheng Fan
- Lingling Zhang
- Linlin Hu
- Bowen Chen