

ISPOR 2nd Asia-Pacific Conference

SHANGHAI WORLDFIELD CONVENTION HOTEL • SHANGHAI, CHINA • 5-7 MARCH 2006

FIRST PLENARY SESSION: Pharmacoeconomics and Outcomes Research in Asia-Pacific: China, Japan, South Korea, Singapore, Thailand, Pakistan, Malaysia and India

Category/Country	China	Japan (1\$=JP¥120)	South Korea (2003 data)	Singapore (2004 data)	Thailand	Pakistan	Malaysia	India
DEMOGRAPHICS								
Size of nation (km2)	9.60 million	378 k	98,585	699	514 k	804 k	330 k	3,29 k
Population - all	1.26 billion	128 million	47.8 million	4.25 million	65 million	162 million	25 million	1.03 billion
Percent age distribution (aged 14, 15-64, e65)	1-14 yr. 20.3% 15-64yr. 71.2% >65yr. 8.5%	13.9 % (age<=14) 66.6 % (15~64) 19.5 % (>=65)	20.0%, 71.7%, 8.3%	0-14: 16% 15-64: 75.9% 65yrs: 8.1%	0-14 years: 23.9% 15-64 years: 68.6% 65 years and over: 7.5%	39.6% 56.3% 4.1%	32.6%, 62.9%, 4.5% (2001)	aged 15=35.6%, age 65 =4.1%)
Average citizen income in US dollars (GDP)	9101 Yuan (RMB) equal to \$1109 USD per capita	\$32,725 (JP¥3,927,000)	12,651\$	US\$27,800 per capita	GNI per capita 2540 USD (WDR 2004)	US \$ 736 (2004 - 2005)	4,700 USD (2005)	Per capita income: US\$ 530/year (2003)
HEALTH CARE								
Health care (i.e. traditional medicine, western medicine)	Both of them are part of health system. For instance, there were 18393 hospital beds in China in 2004 16.2% belongs to traditional medicine hospitals, which contain 8.3% patients in hospitalization	western medicine	western + traditional medicine	Western medicine (dominant part of the healthcare system) plus traditional medical practice	Western medicine is the dominant part of the healthcare system, while traditional medical still practiced	Traditional and western medicine. People approach the traditional system more than the western system in the rural areas due to quality issues	Yes	Both western and traditional systems of Medicine are part of health care system.
Number of hospitals (<100 beds, 100-500, 500-1000, >1000 beds)	<100 beds 30867 100-500 beds 6568 500-800 beds 715 >800 beds 243 (2004 data)	3,667 (<=100beds) 4,970 (100~500) 416 (500~900) 69 (>=900)	Total 1,425	29 (13 public; 16 private)	NA	Public: 916 hospitals Private: 520	Public: 48, 58, 15, 4 (Total=125) Private: 189, 29, 0,0 (total= 218) (Year 2004)	No. of hospital beds is 665,639. Population per hospital bed is 1,451 (1998 data)
Number of hospitals beds /10,000	2.4	142.6	71	Total beds: 11,844 (Public: 8813) 29 beds/10,000 population	462 population per hospital bed, 21.65 beds / 10,000 population	6.8/ 10,000	17.8 (2003)	6.9 (1998)
Number of primary care clinics/10,000	NA	7.5	4.91	17 public polyclinics; 1480 private clinics	Total 9.765 PHC clinics serving 58.9 million population, 1.67 PHC clinics / 10,000 population	Public: 4554 dispensaries, 5290 Basic Health Units, 522 Rural Health centers, 285 TB centers Private: 340 dispensaries, 450 diagnostic clinics, 300 maternal and child health centers	1.2 (public) 2.0 (private)	Total number of health care centres including Sub-centres Primary health centres & Community health centres is 163181
Number of physicians/10,000	15.0	20.6	16	15	3	7.3 (2003)	7.2 (2003)	5.2
Number of pharmacists/10,000	1.26 (15*0.084)	18.0	.53	3	1.1	3.4 (1996)	14.0 (2004)	0.8
HEALTH CARE INSURANCE								
Health insurance system (types)	There are two types health insurance sys- tems: Basic employee's medical insurance in urban China, which contains personal medical savings accounts (paid for ambulatory service) and pooled fund (paid for inpatient and cata- strophic illnesses) and new type cooperative medical scheme in rural China (which has pooled fund and/or family med- ical savings accounts). Other supplementary insurance schemes are also existed.	Universal coverage (Nation-wide)		Public and private insur- ance available. (Public: MediShield and IncomeShield Plan MA & MB.) MediShield is an opt-out scheme for all Medisave account hold- ers who are Singapore Citizens or Permanent Residents. IncomeShield Plan MA & MB offers higher claimable limits compared to MediShield, but also has higher deductibles	Thailand achieves Universal Coverage in 2002. There are current- ly three public insurance schemes covers the whole population in Thailand Social Health Insurance (SHI) for private sector employee Civil Servant Medical Benefit Scheme (CSMBS) for public sec- tor employee, depen- dants and pensioners The Universal Coverage Scheme (UC) covers rest of the population	1. Private insurance (only 0.5% of GDP), as a proportion of the GDP, Pakistan's private insurance industry is the smallest compared to other developing countries.2. Employees Social Security Scheme covers 1.2 million indi- viduals, which repre- sent 3.06% of total work force. 3. Smaller social health insurance i.e. workers welfare fund, Zakat, Bait-ul- mal, employee's old age benefit, Guzara program and workers participation fund.	Public (none) Private Insurance and Employees Benefit	The health insurance mar- ket in India is very limited covering about 10% of the total population. The exist- ing schemes can be cate- gorized as: (1) Voluntary health insur- ance schemes or private- for-profit schemes; (2) Employer-based schemes; (3) Insurance offered by NGOs / commu- nity based health insurance, and (4) Mandatory health insurance schemes or gov- ernment run schemes (namely ESIS, CGHS).

ISPOR 2nd Asia-Pacific Conference

SHANGHAI WORLDFIELD CONVENTION HOTEL • SHANGHAI, CHINA • 5-7 MARCH 2006

FIRST PLENARY SESSION: Pharmacoeconomics and Outcomes Research in Asia-Pacific: China, Japan, South Korea, Singapore, Thailand, Pakistan, Malaysia and India continued

Category/Country	China	Japan (1\$=JP¥120)	South Korea (2003 data)	Singapore (2004 data)	Thailand	Pakistan	Malaysia	India
HEALTH CARE INSURANCE continued								
% of population with insurance coverage	135 million employees covered by urban medical insurance, and 165 million rural residents covered by cooperative medical scheme. Both together are covered about 23% population in China	100% for Japanese	97.5%	>2 million contributors to MediShield in 1999	SHI 13% CSMBS 10% UC 74%	3 - 5% approximately	25%	Approximately 10%
Reimbursement method	Including deductible, co payment and ceiling. There has drug reimbursement list (A and B) for urban medical insurance system	Fee for service, but partly flat payment	fee-for-service	Including deductible, co-payment and claim ceiling.	SHI - inclusive capitation for ambulatory care and admission, fee schedule for additional pay for high cost care CSMBS - fee for service reimbursement UC - capitation for ambulatory care, global budget and DRG for inpatient care	Out of pocket (98.35% of private expenditure on health (2002)	Mostly fee for service	
HEALTH CARE EXPENDITURES AND CONTROLS								
Health expenditure (% of GDP): public/private	5.62%(2003 data)	8.58 %	2.8%/2.8%	4.3% GDP (Public: 0.9%) 2002 data	4.4% GDP (2002), public 70% Private 30%	0.9% of GDP in public sector and 3.2% of GDP, 2002 in Private sector	4.5%(2.0% public; 2.5% private)	For the period 1998, the total health expenditure as a percentage of the GDP was 5.1%. Public expenditure on health was 18% of the total expenditure on health. The total government health expenditure as a percentage of the total government expenditure was 5.6%.
Health expenditure per capita: public/private	¥509.5(\$62) (2003 data)	\$2,035 (JP¥244,200)	348\$	US\$1105 per capita (Public: \$307 per capita) 2002 data	321 PPP \$ (2002) 90 US\$ (2002)	62 US \$ (year 2002)	RM 301 Public; RM 367 Private (2003)	The per capita total expenditure on health in India is US\$ 23, of which the per capita Government expenditure on health is US\$ 4.
Drug spending per capita	¥224.7(\$27.4) (2003 data)	\$393 (JP¥47,160)		~US\$75 per capita	115.69 PPP\$ (2002) 32.44 USD (2002)	7 US \$ (2004)	USD 27. (2003)	Data not available
Drugs of total health spending (%)	44.1% (2003 data)	23.3%	28%	~8% (estimated)	36.04%	80% of total health expenditure on buying medicines	12% (2003) (Public sector)	15%
National drug budget	No Data. Total drug exp ¥290.4(\$35.4) billion	\$60.5 billion (JP¥7,253.8 billion)		No data available. Total drug exp: US: \$311 million	Integrated in capitation budget for SHI and UC scheme. No drug budget ceiling for CSMBS.	298,350 US \$(Pak Rs. 17,901,000) (2004 -2005). This is the Drug Controller Budget, Ministry of Health. No other figure is available.	RM 751million (2003) RM 808 million (2004) (Public Sector Only)	The estimated expenditure on health and family welfare is Rs.10,280 crore
Pricing/reimbursement	Gov'n't control	Gov'n't control	Gov'n't control	No specific reimbursement for drugs as included in DRG and global budget for public hospitals or polyclinics.	No specific reimbursement for drugs in SHI and UC as drug expenditure are included in the capitation for ambulatory care and global budget and DRG for inpatient care Beneficiaries covered by CSMBS reimburse drugs for OP and IP based on hospital price list, generally cost plus 15% margin.	Government according to laws that are in the process of being amended. Reimbursement for the minority that comes under insurance coverage.	Control in Public Sector	
Reference pricing-international	No	No	No	No	No	No	No	Data not available

ISPOR 2nd Asia-Pacific Conference

SHANGHAI WORLDFIELD CONVENTION HOTEL • SHANGHAI, CHINA • 5-7 MARCH 2006

FIRST PLENARY SESSION: Pharmacoeconomics and Outcomes Research in Asia-Pacific: China, Japan, South Korea, Singapore, Thailand, Pakistan, Malaysia and India continued

Category/Country	China	Japan (1\$=JP¥120)	South Korea (2003 data)	Singapore (2004 data)	Thailand	Pakistan	Malaysia	India
HEALTH CARE EXPENDITURES & CONTROLS continued								
Reference pricing-national clusters	No	No	No	No	National List of Essential Drug (NLED) was referred as the minimum pharmaceutical benefit package for all three public insurance schemes, Reference price for National List of Essential Drugs was promulgated for purchase by government hospitals, according to Procurement Regulation	No	No	Data not available
Use of pharmacoeconomics	Yes, but has not been required by Government in registering new drugs Recently pharmacoeconomics evaluation guidelines are under prepared by pharmacoeconomics	Yes, but not Govn't's requirement	Recommended, but not required	Not legal requirement but implicitly used in the selection of drugs for inclusion into Standard Drug List maintained by Ministry of Health.	Increasing application of evidence from pharmacoeconomics for the revision of National List of Essential Drugs, as NLED is referred as minimum drug package for all public insurance schemes. PE is not applied at the hospital level.	No	Very limited but developing	Data not available
Co-payments	10% of annual salary as deductible, 10% and over for drugs, based on HI categories. Ceiling usually set on 4 times of annual salary and wages in urban medical insurance system.	30%	Yes	Public sector healthcare institution heavily subsidized for citizens and permanent Co-payments for standard drugs at public institutions.	No co payment for drugs in SHI and UC, Beneficiaries covered by CSMBMS have to pay in full for drugs outside the NLED	No	Yes, in public sector but subsidy up to 80 -90% of cost in public sector	Data not available
Profit/revenue controls	No. some cities now are conducting hospital global budget control and revenue capping.	No	No	Singapore has a mixed healthcare market with free market private providers. Public hospitals are allowed to keep a portion of profits. Profit control at public hospitals by requiring the returning of excess profit once a limit is reached.	Free market for private hospital sector, Government hospitals allows 15% margin for drug sales	No	No	Data not available
Clinical practice guidelines	Have, but not required by Govn't	Have, but not required by Govn't	partially	Well developed by MOH and updated regularly	Well developed by Royal Colleges, but lack of enforcement mechanisms, or other incentive structure fostering the use of CPG.	No	Yes	Guidelines available at State levels, not at National level
Drug budgets/financial incentives aimed at prescribing doctors	No. unless case payment, global control & hosp revenue capping policy implementation	No	No	Blocked budget at public hospitals with no separate drug budget account to encourage prudent and rational drug prescribing.	In the future, the CSMBMS has a policy to harmonize payment mechanism with the other two schemes (SHI and UC), namely capitation for ambulatory care, and global budget with DRG for inpatient care. Capitation and global budget sends a strong signal towards efficient use of diagnostic and therapeutic services including drugs.	No	No	Data not available
Availability of local pharmacoeconomic data	Yes, from some Chinese literatures	Yes, from Japanese literature, but limited	Yes	Limited	At an infancy phase	No	Very limited	In infancy stage at present