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VALUE IN HEALTH

Health-Care Systems and Pharmacoeconomic Research in Asia-Pacific Region

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Introduction

This article presents the state of pharmacoeconomics and outcomes research in eight countries in the Asia-Pacific region: China, Japan, South Korea, Singapore, Thailand, Pakistan, Malaysia, and India. To provide a better background, a summary table of the key attributes of the health-care system is also included within each of the eight countries. This summary table, as shown in Table 1, demonstrates a wide variation on most aspects of the health-care system, insurance programs, total health expenditures (THEs) per capita, and drug expenditures per capita among the eight countries. The range of some of the attributes was as follows: population: 4.25 million to 1.26 billion; Gross Domestic Product (GDP) in 2004: US $620 to $27,800 per capita; number of hospital beds per 10,000 populations: 6.8 to 127.7; number of physicians per 10,000 populations: 3.03 to 21.1; and number of pharmacists per 10,000 populations: 0.53 to 18.9. The ranges for health economics data were the following: health expenditure as percentage of GDP 3.7% to 8.89%; health expenditure per capita from US $62 to $2096; drug expenditure per capita from US $7 to $483.8; drugs as a percentage of total health-care spending from ~8% to 44.1%; and availability of local pharmacoeconomic data from an infancy phase to a better established stage.

Nevertheless, there are similarities among these countries. Western medicine is dominant in all health-care systems, while traditional medicine is still practiced in some countries. Drug pricing and reimbursement are mostly controlled by the government. No reference pricing system exists in any of the countries. Use of pharmacoeconomic data is only required in South Korea.

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This article is organized by country-specific sections, within each a description is presented to describe 1) health-care and financing systems; 2) drug use and its trends in expenditure; 3) drug expenditure management associated with the development of pharmacoeconomic guidelines; and 4) role of pharmacoeconomics and outcomes research in drug expenditure management.

China

Health-Care System and Health-Care Financial System

Universal coverage of health insurance is the future direction of health system reform in China. At present, the urban employees' medical insurance scheme covers about 170 million workers, and the new rural cooperative medical system (RCMS) covers about 726 million populations in 2451 counties by the end of 2007 [1]. Currently, the yearly premium of RCMS in most rural areas is set around 50 yuan (RMB) per insured, in which two-thirds of the contribution is paid by the central and local government, and is used to reimburse the partial cost of catastrophic illnesses.

Drug Management and Expenditures

Before the 1990s, under the planning economy, drug production, distribution, and price setting were totally controlled by the government. After the 1990s, about 8,000 pharmaceutical companies, 16,000 wholesale, and 11,600 retail pharmaceutical enterprises have flourished in China. As a result, price competition and differentials have occurred in the pharmaceutical industry and distribution system. The annual growth rate of pharmaceutical expenditure (11.2%) has exceeded that of GDP (10.3%).

According to data on national health accounts published by the Chinese Ministry of Health, the THE was 866 billion yuan RMB in 2005, which is 4.73% of the national gross domestic product. Based on these data, the health expenditure per capita is roughly 662.3 yuan (US $83); and 44.1% of the sum, about 317 yuan (US $40) per capita, was spent on pharmaceuticals [2].

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