

## Emerging Health Economics and Outcomes Research in the Asia-Pacific Region

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This issue of *Value in Health* presents selected articles from the ISPOR Second Asia Pacific Conference held in Shanghai, March 2006. Under the leadership of ISPOR and the ISPOR Asian Consortium, the ISPOR Asia-Pacific Conference is held every two years in Asia with a twofold mission: to help develop knowledge and capacity for health economics and outcomes research (HE/OR) in Asia; and to promote the use of HE/OR in policymaking processes in Asia, with the goal of improving efficiency in the allocation of resources. With “Improving Evidence and Outcomes in Health Care Decision-Making” as the theme, the Second ISPOR Asia-Pacific Conference was well received, achieving an unprecedented level of participation from the Asian communities. All articles included in this issue underwent the usual anonymous process of peer review.

The Asia-Pacific is a very significant region in the world, with the fastest growth among economies in general and among pharmaceutical markets in particular. It is also arguably the most diverse region in the world—home to long cultural traditions and all the world’s major religions, as well as countries that span the gamut from among the wealthiest to the poorest, the largest to among the smallest, and a wide array of political systems. Health-care systems in the region are very dynamic and diverse as well. Following Australia where HE/OR data are required for national policy setting, countries such as Japan and South Korea have already moved into the initial phase to recommend the use of HE/OR data for drug formulary policymaking, and others such as China have professional organizations beginning to draft pharmaceutical economics guidelines.

In the meantime, most Asia-Pacific countries also confront challenges common to countries around the globe: safeguarding public health, expanding health-care coverage and improving quality while controlling costs, fostering value for money, and finding an appropriate balance of government and market roles in the health sector. To address these challenges, researchers and policymakers alike will no doubt find it important

to increase the analytic and policy relevance of economic analysis [1].

In particular, pharmaceuticals and their regulation play an increasingly important and often contentious role in the health-care systems of the Asia-Pacific [2]. Countries such as China, Thailand, and Pakistan have extraordinarily high drug spending as a percentage of total health spending, leading to drug cost control often as a major target when reforming policy. For example, during the current health-care reform process in China, much debate has been focused on the impact of pricing control and separating prescribing and dispensing functions. Major changes in the policy setting may well rewrite the professional roles of physicians and pharmacists, with modifications to accommodate cultural norms and strong economic interests. India and several other countries host thriving domestic pharmaceutical industries with global importance, although controversy surrounds intellectual property rights, trade (WTO, TRIPS), and pharmaceutical pricing within bilateral trade agreements (Australia-US, Republic of Korea-US). Nations throughout the region struggle with appropriate regulation of drugs, from the ethics of clinical trials to patents, evidence-based purchasing (e.g., Australia’s Pharmaceuticals Benefit Scheme), and direct-to-consumer advertising. Deeply rooted traditions of indigenous medicine are modernizing and integrating into broader health-care systems. Improving access, effective prescribing and appropriate use of medications will be central to controlling infectious diseases, both old and emerging; protecting the global public good of anti-microbial effectiveness; and treating the growing burden of chronic diseases for the aging populations of the Asia-Pacific [2].

There are 20 articles and four policy briefing notes in this special supplement. The 20 articles are organized under four sections: 1) economic evaluation which addresses cost-effectiveness of alternative treatment or use of medications for illness such as diabetes and other chronic illnesses; 2) cost analysis that includes estimation of direct illness treatment costs or intangible costs of illness conditions; 3) health conditions or health-related quality of life among various Asian population; and 4) policy review articles that provide drug pricing, drug safety, and pharmaco-economics research in the Asian-Pacific Region.

These articles represent an important milestone in the evolution of health economics and outcomes

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research and evidence-based medicine in Asia. Their significance lies in showcasing the growing Asian expertise in this area, as well as highlighting the challenges that still lie ahead. The selected articles include empirical and policy analyses from 10 countries of south, southeast and northeast Asia. Many of the articles feature international collaborations among researchers, which can often wed in-depth institutional knowledge of the Asian context with a comparative analytical lens that brings methodological rigor to bear on questions of local and international policy relevance.

The contributions featured here cover a range of health and health-care topics. The continued salience of burden of disease from infectious disease, especially in certain parts of Asia, underscores the importance of studies such as those included here on hepatitis B in China; intraabdominal infections in India; and shigellosis patients in Thailand. In light of the economic, demographic, and epidemiologic transitions shaping Asia's health systems, there will be a growing niche for detailed analyses of cost-effective management of chronic diseases such as diabetes and coronary heart disease (the subject of multiple articles in this volume). Policymakers should also be interested in the evidence regarding the "return on investment" from allocating resources to prevention, such as promoting healthier lifestyles, stemming the increase in overweight and obesity and its medical sequelae. To explore such issues requires careful work on quantifying health-related quality of life and instruments for measuring health status that are appropriate for specific conditions and contexts yet generalizable enough to form a foundation for resource allocation decisions across the health sector. Articles included here begin to address these challenges.

Finally, decision-makers may benefit from enhanced tools to measure costs, predict resource use, and improve budgeting processes. Of course, policymakers face numerous constraints in using economic analyses as the basis for policy decisions. Arguably, even perfect economic analysis based on perfect data cannot be the sole criterion for most policy decisions. For example, ethical concerns arise in every phase of economic evaluation of new technologies and pharmaceuticals, from the drug discovery and clinical trial process all the way to resource allocation decisions, provider agency for patients, and regulation of access [3]. Use of cost-benefit analyses should be a complement to, rather than a substitute for, political and ethical consideration of questions of distributional justice.

Institutional development in evidence-based medicine, and regulatory mechanisms to assure safety and quality, will be other necessary complements to the enhanced managerial processes that health economics and outcomes research can foster. Several contributions focus on these subjects in some depth.

As the knowledge of economic evaluation improves among researchers, providers, policymakers, and

patients, acceptance of their role in the system may grow. As Drummond notes, international experience suggests that "a decision-making process embodying the formal use of economic evaluation is workable. Although it would be wrong to suggest that the introduction of economic evaluation has been problem-free, none of the jurisdictions adopting economic evaluation has thus far sought to abandon it" [4].

Several areas of investment appear to be needed: 1) Investment in research capacity building in Asia to continue to improve the depth and breadth of HE/OR knowledge and communications with international communities; 2) investment in developing well-designed, population-based clinical and economic databases in the public domain; and 3) investment in adapting methods, models, and other tools to the Asian context (such as specific patient populations and institutional arrangements). Moreover, Asian scholars should also be challenged to broaden their perspective when conducting health economics and outcomes research. In particular, policymakers in rapidly growing and relatively stagnant economies alike might greatly appreciate studies on the economic returns from health investment, in addition to its intrinsic value [5,6]. Such research would help build a better understanding and communication between health and other sectors, thus contributing to the justification for increasing public financing for health care.

We hope this collection of articles will inspire more researchers in Asia to take on this work and encourage more decision-makers to have confidence in the improving methods and relevance of health economics and outcomes research for resource allocation in the health sectors of the Asia-Pacific.

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