

# The Current Capacity and Future Development of Economic Evaluation for Policy Decision-Making: A Survey among Researchers and Decision-Makers in Thailand

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## ABSTRACT

**Objective:** This study aims to explore the knowledge, experience, and attitudes toward economic evaluation (EE) among decision-makers and researchers in Thailand.

**Methods:** Researchers were purposively selected from Thai academics and both public and private research organizations related to EE. Decision-makers at the provincial level were purposively selected from the members of the Management Committees of Provincial Health Offices, and those at hospital level were randomly selected from members of the public and private hospital formulary drug committees throughout Thailand. The self-administered postal questionnaires were distributed. Univariate and bivariate analyses were applied.

**Results:** Of the total 2575 questionnaires distributed, 758 (29.4% response rate) were completed and sent back. The majority of researchers

and decision-makers were not familiar with technical terms commonly used in health EE, e.g., incremental cost-effectiveness ratio, discounting, and sensitivity analysis. More decision-makers (70.6%) had never had EE training compared to researchers (50.0%). Both roles indicated that value for money was one of the important issues to consider for health technology adoption.

**Conclusions:** An extensive unmet demand for EE training among Thai researchers and decision-makers still exists. Findings from this study contribute to the short- and long-term plans for research capacity building.

**Keywords:** capacity, economic evaluation, pharmacoeconomics, survey, Thailand.

## Introduction

Because of the growing health needs of an aging population and the advancement in health technology, especially pharmaceuticals, health-care costs have been rapidly increasing in the Thai health-care system. Rising health expenditure has caused concerns among policymakers and practitioners to make the most efficient use of scarce health-care resources. As a consequence, economic evaluation (EE) or pharmacoeconomic assessment defined as a “policy research” that identifies, measures, and compares the costs and consequences of medical technology [1] was introduced to guide health-care resource allocation decisions [2,3]. Recently, the first national guidelines for conducting EE were endorsed in March 2008 by the subcommittee for the development of the National List of Essential Drugs (NLED), which is the only pharmaceutical reimbursement list in Thailand, and referred to by all major public health planners. In addition, the revision of the 2008 NLED included pharmacoeconomic evidence which was officially incorporated in the drug selection process for the first time in Thai history [4].

Because EE is a relatively new discipline in Thailand, there was wider concern over the feasibility of using EE for decision-making, especially at the local or hospital level [5]. Teerawattananon et al. extensively documented the potential and barriers of using EE for informing health-care coverage decisions at the national level; however, there was no study examining these

challenges at the subnational level [6]. Ross proposed that the use of EE by decision-makers is influenced by three main factors [7]. The first is that the users have knowledge of the method, the second is whether they perceive any overall benefit in using it, and the third is if they perceive the relative importance of marginal efficiency compared with other objectives as a factor influencing resource allocation decisions in their particular health-care system. In addition, it is also recognized that the potential constraints to the use of EE come from not only about the lack of understanding and support among the potential users but also the barriers related to the production of EE information. Expanding local research capacity is essential because decision-makers prefer to use locally relevant information over international data.

This present study aims to explore decision-makers' knowledge, experience, and attitudes toward the use of EE at the subnational level as well as to assess the current human capacity and gaps in EE among those decision-makers and Thai scholars. This study focused on two groups of decision-makers. The first are the members of the Management Committee (MC) of each Provincial Health Office (PHO), who are responsible for capital investment at health centers, community hospitals, and provincial hospitals, supporting vertical public health programs and human resource development at the provincial level. The MC normally consists of heads and deputies of PHO, heads of PHO's departments, heads of District Health Offices, and directors of community and provincial hospitals. The second are the members of the Hospital Drug Formulary Committees (HDFCs), who are responsible for the selection of drugs purchased and used in each hospital. The HDFC includes heads of hospital pharmacies and representatives from each group of physicians, e.g., surgeons, pediatricians, internists, obstetricians, and

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