

# Catastrophic and poverty impacts of health payments: results from national household surveys in Thailand

Supon Limwattananon,<sup>a</sup> Viroj Tangcharoensathien<sup>b</sup> & Phusit Prakongsai<sup>b</sup>

**Objective** To estimate the incidence and describe the profile of catastrophic expenditures and impoverishment due to household out-of-pocket payments, comparing the periods before and after the introduction of universal health care coverage (UC).

**Methods** Secondary data analyses of socioeconomic surveys on nationally representative households pre-UC in 2000 ( $n = 24\,747$ ) and post-UC in 2002 ( $n = 34\,785$ ) and 2004 ( $n = 34\,843$ ).

**Findings** Households using inpatient care experienced catastrophic expenditures most often (31.0% in 2000, compared with 15.1% and 14.6% in 2002 and 2004, respectively). During the two post-UC periods, the incidence of catastrophic expenditures for inpatient services at private hospitals was 32.1% for 2002 and 27.8% for 2004. For those using inpatient care at district hospitals, the corresponding catastrophic expenditures figures were 6.5% and 7.3% in 2002 and 2004, respectively. The catastrophic expenditures incidence for outpatient services from private hospitals moved from 27.9% to 28.5% between 2002 and 2004. In 2000, before universal coverage was introduced, the percentages of Thai households who used private hospitals and faced catastrophic expenditures were 35.8% for inpatient care and 36.0% for outpatient care. Impoverishment increased for poor households because of payments for inpatient services by 84.0% in 2002, by 71.5% in 2004 and by 95.6% in 2000. The relative increase in out-of-pocket impoverishment was found in 98.8% to 100% of those who were poor following payments made to private hospitals, regardless of type of care.

**Conclusion** Households using inpatient services, especially at private hospitals, were more likely to face catastrophic expenditures and impoverishment from out-of-pocket payments. Use of services not covered by the UC benefit package and bypassing the designated providers (prohibited under the capitation contract model without proper referrals) are major causes of catastrophic expenditures and impoverishment.

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Une traduction en français de ce résumé figure à la fin de l'article. Al final del artículo se facilita una traducción al español. الترجمة العربية لهذه الخلاصة في نهاية النص الكامل لهذه المقالة.

## Introduction

Health care in most Asian countries is financed by out-of-pocket (OOP) payments by individuals.<sup>1,2</sup> A recent study on health equity in 13 countries in the Asia-Pacific region, the EQUITAP project,<sup>3</sup> indicated that Sri Lanka and Thailand had the lowest share of OOP expenditures for health care within this group.<sup>4</sup>

These expenditures have been cited as the major factor jeopardizing an equitable health system in developing countries.<sup>5–7</sup> Where there is no financial risk-pooling mechanism, poor people have to meet the costs of health care from OOP payments; this drives many households into poverty.<sup>8,9</sup>

In Thailand, universal coverage (UC) was launched in 2001 to ensure equitable access to health care for the entire population. The country took

nearly three decades to progress from the targeting approach to the adoption of universal entitlement and citizens' rights to health care. UC provides a comprehensive range of services, including outpatient and inpatient services, disease prevention and health promotion, to populations not covered by the existing Civil Servant Medical Benefit Scheme and Social Security Scheme.

The UC scheme applies a capitation contract model that encourages registered members to use services provided by designated providers. Beneficiaries are required to register for and use services provided by a contractor network, typically a district health system (district hospital and health centres) where they live. Taxes finance this programme, although it requires a nominal payment of 30 baht (US\$ 0.70) per visit or admission. However, those

who bypass the designated providers must provide full payment for services received.

Impoverishment due to health-care costs has clearly declined since the introduction of the UC policy in 2001.<sup>10</sup> The incidence of these catastrophic expenditures was reduced from approximately 5.4% during the period before UC became available to around 3% after UC was introduced. A similar trend was seen in poverty that followed OOP expenditures (impoverishment due to direct payment for health care), which decreased substantially from 18.3% before UC to 8–10% after UC.

Utilization of services also significantly increased with UC, especially in the district health-care system. In addition, evidence indicates that service utilization favours the poor<sup>11</sup> due to their geographical proximity to services.

<sup>a</sup> Department of Social and Administrative Pharmacy, Khon Kaen University, Khon Kaen, Thailand.

<sup>b</sup> International Health Policy Program, Ministry of Public Health, Nonthaburi 11000, Thailand. Correspondence to Viroj Tangcharoensathien (e-mail: viroj@ihpp.thaigov.net).

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