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Universal coverage with supply-side reform: The impact on medical expenditure risk and utilization in Thailand

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ABSTRACT

We estimate the impact on out-of-pocket (OOP) medical expenditure of a major reform in Thailand that greatly extended health insurance coverage to achieve universality while implementing supply-side measures intended to deliver cost-effective care from an increased, but modest, public health budget. Difference-in-differences comparison of groups to whom coverage was extended or deepened with those whose coverage did not change indicates that the reform reduced OOP expenditure by 28% on average and by 42% at the 95th percentile of the conditional distribution. Simulations suggest that exposure to medical expenditure risk was reduced by three-fifths, on average, generating a social welfare gain equivalent to 80–200% of the approximate deadweight loss from financing the reform. Estimated effects on health care access suggest that the policy managed to reduce households' medical expenses while also raising their utilization of both inpatient and ambulatory care.

1. Introduction

Reduction in risk associated with medical expenses is a major motivation of those promoting the cause of universal coverage (World Health Organization, 2010). Yet legislating entitlement to free, or highly subsidized, public health care is far from sufficient to ensure that coverage is effective. Protecting low income households from medical expenditure risk requires that publicly financed health services are accessible without long delays and offer care of sufficient quality such that supposed beneficiaries need not resort to non-subsidized providers in order to obtain effective care.

Thailand legislated universal health insurance in 2001, extending publicly financed coverage to 18 million previously uninsured citizens representing almost a quarter of the population. At the time, it was a lower–middle income country spending less than $200 per capita on health care. Recognition of the difficulty of making good on the promise of universal coverage on such a tight budget motivated the adoption of supply-side measures intended to constrain costs and deliver cost-effective care. A tax-financed single-payer with a fixed budget had, in principle, both the incentive to contain costs and the monopsony power to constrain payments to health care providers and pharmaceutical suppliers. Payment of mainly public providers by capitation for outpatient care and prospectively at a fixed price per condition under a global budget for inpatient care gave providers little incentive to inflate demand or deliver treatments of questionable medical effectiveness. Despite these measures, total health expenditure per capita approximately doubled in real terms between 2001 and 2010, although strong economic growth ensured that the health budget remained under 4% of GDP. We examine whether this major health reform — the coverage extension, funding increase and cost-effectiveness measures — was effective in improving the financial protection of households against medical expenditure risk.

The Thai reform has been trumpeted as a success in improving financial protection (World Health Organization, 2010; Health Insurance System Research Office, 2012). But this is based merely on observed trends in household out-of-pocket (OOP) medical spending

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