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Inequalities in Universal Health Coverage: Evidence from Vietnam

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Summary. — Exploiting a window of opportunity in Vietnam, this paper examines the impact of social health insurance on target population groups. Significant inequalities in the coverage of service utilization and financial protection are found across groups. Persons with disabilities, and retirees to a lesser extent, experienced relatively high rates of service utilization and were most at risk of health care-induced poverty. A higher level of targeting in the design of benefit packages is recommended.

Key words — universal health coverage, social health insurance, matching methods, South East Asia, Vietnam

1. INTRODUCTION

Universal health coverage (UHC) is widely recognized as essential to enhancing health, social cohesion and sustainable human and economic development (Evans, Marten, & Etienne, 2012; WHO, 2010). Guided by principles of providing access to all the services that people need without causing financial hardship, UHC is now a key policy goal of many low- and middle-income countries (LMICs). One significant means through which these countries aim to achieve UHC is the introduction of social health insurance (SHI) schemes (Giedion, Alfonso, & Diaz, 2013; Hsiao & Shaw, 2007; Lagomarsino, Garabrant, Adyas, Muga, & Otoo, 2012). Schemes often include a compulsory contributory scheme for civil servants and formal sector employees; a voluntary contributory scheme for the self-employed and employees in the informal sector; and a non-contributory membership for those that have limited capacity to pay a premium e.g., persons living below the official poverty line and other low-income and marginalized groups such as persons with disabilities, ethnic minority persons, and the elderly.

Categorizing people in groups that represent common affiliations or identities is argued as an intrinsic aspect of human life, influencing individual well-being, capabilities, preferences, and behavior (Stewart, 2005). The impact of SHI is likely to differ across population groups due to both observable (e.g., health status, ability to pay, education) and unobservable (e.g., underlying health status, social capital) differences which jointly determine demand for healthcare (Zweifel & Manning, 2000). The supply of health services is further likely to differ across population groups. For example, the quality and accessibility of local health services will likely contrast sharply between formal employees and ethnic minority persons that live predominantly in urban and remote areas, respectively; and persons with disabilities encounter physical barriers which may limit their accessibility to the supply of health services.

There currently exists little evidence on the efficacy of SHI in meeting the objectives of UHC in providing access to affordable care across different population groups. This can be explained by different administrative structures, eligibility conditions, benefits, and co-payments across SHI schemes. The lack of evidence on the inequalities in coverage represents a significant gap to inform the financing and targeting of SHI benefit packages. Benefits that reflect target populations' needs are recognized as important to both the financial sustainability and equality of UHC (Giedion *et al.*, 2013); "*the challenge [for UHC] is not to cover everyone. Or even to give everyone the same cover. Rather, the challenge is really about narrowing inequalities in coverage*" (Wagstaff, 2011).

Remedying inequalities and injustices is a focus of the next development agenda in which no-one—irrespective of ethnicity, gender, geography, disability, and race—can be left behind and denied universal human rights and basic economic opportunities (United Nations, 2013). To this end, it is advocated that goals and social protection programs, including those around health, are designed to reach all population groups and excluded groups, in particular.

This paper evaluates the impact of SHI across population groups in Vietnam. We exploit a window of opportunity in 2006 in which all SHI enrollees were eligible for the same benefits and co-payments. [1] Matching methods are applied to a rich collection of household and community living standards data collected in the Vietnam Household Living Standards Survey. The methodology matches insured persons with uninsured persons according to the target group characteristic and a range of other characteristics, such as age, level of education, employment sector, and geographical region. Providing that selection into insurance is determined by these characteristics, and that other distributional assumptions are met, then our results provide an unbiased estimate of the treatment effect (Abadie & Imbens, 2006). While the unconfoundessness principle cannot be directly tested, the Health Insurance Law (2008) in Vietnam identifies population target groups on the basis of defining characteristics and eligibility is mandatory for all groups except for farmers, the self-employed, and students for whom eligibility was group based at the time of survey. Unlike many other LMICs, SHI schemes in Vietnam are managed by a single administrative agency which further limits its variability in the impact of SHI on population groups. Outcomes are evaluated against the objectives of UHC and include a range of utilization and economic burden outcomes. Applying a combination of matching estimators, we found significant inequalities in the use of health care and coverage of financial protection across target groups. Persons with

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disabilities, and the elderly to a lesser extent, experienced relatively high rates of service utilization and associated expenditures which induced a higher rate of poverty.

The rest of the paper is organized as follows. The next section provides an overview on the development of SHI in Vietnam. This is followed by a description of the data and methods. The final section concludes with a discussion of the results, policy implications, and lessons learned for other LMICs on the path toward UHC.

2. BACKGROUND

The story of the development of SHI in Vietnam is similar to that of many other LMICs.[2] A contributory compulsory scheme was first established in 1992 for public servants and employees in state-owned enterprises and the private formal sector in conjunction with a non-contributory scheme for social beneficiary groups including retirees, war veterans and their relatives (meritorious persons), and persons with disabilities. A voluntary scheme was subsequently introduced in 1994 for non-formal workers, especially farmers and the self-employed, students and dependents of the compulsory scheme. In 2003, the non-contributory social beneficiary scheme was extended, under a funding arrangement known as Health Care Fund for the Poor (HCFP), to include households classified as poor, ethnic minorities in selected mountainous provinces, and households in especially socio-economic disadvantaged communes. From 2005, children under the age of six were added to the list of non-contributing groups. In 2008, the Health Insurance Law integrated existing schemes into one national program and identified 24 population groups that trace the development of the above schemes (Socialist Republic of Vietnam, 2008).

The universality of a SHI system depends on its ability to enroll and collect premiums from the non-poor, and the government's capacity to subsidize premiums for the poor or near-poor. Governments can compel formal sector employers to enroll their employees in SHI and deduct employee contributions from their salaries. Commonly, employers also pay a share of the SHI premium to create incentives for workers to enroll and avoid adverse selection. This is the case in Vietnam where the premium for formal employees is set at 6% of salary, with employees contributing 4% and employers contributing 2%. By contrast, enrollment of the self-employed and workers in the informal sector depends on voluntary contributions. Enrolling non-formal workers is a significant hurdle to universal coverage with premiums often subsidized by government according to an ability to pay schedule as is the case in Vietnam.[3] The premiums of the poor and near-poor are usually fully or partially subsidized by government. In Vietnam, the rate is calculated at 3% of the minimum wage and is paid by the state.

With formal employees typically comprising a small fraction of the LMIC population (~10%) and low uptake of voluntary insurance among the non-formal sector, premiums received are often insufficient to cover benefits for the poor and near-poor. Fiscally constrained LMICs may have to compromise and provide the poor and near-poor with fewer benefits than members of contributory and voluntary schemes.[4] This is the case for Columbia and Thailand, for example, where multi-tiered benefit systems exist (Hsiao & Shaw, 2007).[5] By contrast in Vietnam, the SHI benefit package is the same across all target groups and includes outpatient and inpatient treatment by public or registered private healthcare providers (however, the number of private providers remains low).[6] The package is comprehensive and covers consultation, diagnostic tests, medical procedures and surgery, rehabilitation, and drugs. While the list of covered items is extensive, an expenditure cap of approximately US$35 per episode exists for high-tech or high-cost services (Tran, Hoang, Mathauer, & Nguyen, 2011). A copayment of 20% was re-introduced in 2010 for all target groups except for meritorious[7] persons and children who were exempt. Retirees, the poor, and social beneficiaries incurred a copayment of 5%.

While there is debate on the content of SHI benefit packages, it is generally agreed that services must be cost-effective and achieve both gains to health and protection against impoverishment from catastrophic medical expenses (Hsiao & Shaw, 2007). There is a growing literature on the impact of SHI in LMICs examining the impact of individual schemes due to different management, benefit, and eligibility arrangements. Typically, studies do not disaggregate by target group thus inequalities in coverage across the population remain largely unknown (e.g., Barros, Machado, & Sanz-de-Galdeano, 2008; Nguyen, 2012; Sepehri, Sarma, & Oguzoglu, 2011; Trujillo, Portillo, & Vernon, 2005; Wagstaff, 2010).

Vietnam boasts a relatively high number of studies, partly due to the existence of high quality national survey panel data. Results are mixed across studies and schemes. For the HCFP, using 2004 and 2006 data Axelson, Bales, Pham, Ekman, and Gerdtham (2009) found a small positive impact on utilization and a strong negative impact on out-of-pocket expenditure whereas Wagstaff (2010) found no impact on use of services with an additional round of data and difference estimator. For the voluntary scheme, using the same two earlier rounds of data Nguyen (2012) reported a positive impact on inpatient and outpatient visits but no significant impact on out-of-pocket expenses whereas Jowett, Deolalikar, and Martinsson (2004) found a sizable reduction in expenses using self-collected cross-sectional data from three provinces. Sepehri *et al.* (2011) found no effect on outpatient expenditures for the compulsory and voluntary schemes and a modest expenditure reduction for the poor scheme from the 2004 and 2006 data.

Vietnam presents a unique case study to evaluate universal health coverage as all SHI schemes are managed by a single agency (Vietnam Social Security) and benefit packages are uniform across groups. In the year 2006, copayments were also unified across groups and schemes hence our evaluation is confined to this period. Prior to 2005, formal employees and voluntary target groups incurred a 20% co-payment that was re-introduced in 2007 for voluntary target groups only. Another important consideration is that group eligibility requirements into the voluntary scheme (at least 10% of commune residents and school students participating) were still in place in 2006 which limits problems of adverse selection.[8] Furthermore, the 2006 Vietnam Household Living Standards Survey (VHLSS) is the only round of the survey to date which included a disability module, enabling identification of this important target group using a measure consistent with contemporary international classification of disability (Madans, Loeb, & Altman, 2010; Washington Group, 2008).

In 2006, 52% of the Vietnamese population was covered by insurance with current estimates at approximately 60% (Somanathan, Huong, & Tran, 2013). Figure 1 presents the coverage of selected population groups identified in the Vietnam Health Insurance Law. High rates of coverage were recorded for state employees, the poor, and ethnic minority persons, and students at close to or above 80% coverage. Roughly half of non-state employees, the retired and disabled