

# Patterns of Health Expenditures and Financial Protections in Vietnam 1992-2012

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Health financing has been considered as an important building block of a health system and has a key role in promoting universal health coverage in the Vietnam. This paper aims to describe the pattern of health expenditure, including total health expenditure and composition of health expenditure, over the last two decades in Vietnam. The paper mainly uses the data from Vietnam National Health Account and Vietnam Living Standards Survey. We also included data from other relevant published literature, reports and statistics about health care expenditure in Vietnam. The per capita health expenditure in Vietnam increased from US\$ 14 in 1995 to US\$ 86 in 2012. The total health expenditure as a share of GDP also rose from 5.2% in 1995 to 6.9% in 2012. Public health expenditure as percentage of government expenditure rose from 7.4% in 1995 to nearly 10% in 2012. The coverage of health insurance went up from 10% in 1995 to 68.5% in 2012. However, health financing in Vietnam was depending on private expenditures (57.4% in 2012). As a result, the proportion of households with catastrophic expenditure in 2012 was 4.2%. The rate of impoverishment in 2012 was 2.5%. To ensure equity and efficient goal of health system, policy actions for containing the health care out-of-pocket payments and their poverty impacts are urgently needed in Vietnam.

**Keywords:** Health Financing; Health Expenditure; Out-of-pocket Household Payment; Vietnam

## INTRODUCTION

Health financing has been considered by all health system stakeholders in Vietnam as an important building block of a health system and has a key role in promoting universal health coverage in the country. Like other developing countries, Vietnam is now using both public financial sources (state budget, social health insurance fund and international aids) and private contributions (direct out-of-pocket payments by households and other private health expenditure) to finance health care service provision. Since Doi Moi (renovation) in 1986, multiple health financing reforms have been taking place in the health system in Vietnam. Central among these were the introduction of user fees and legalization of private medical practices in 1989, the initiation of health insurance schemes at the national level in 1992 and the take-over by the central government of the responsibility for paying salaries to the public health staff at the commune level in 1994. To support health care for disadvantaged populations in Vietnam, the Government has launched Decision 139/2002/QĐ-TTg on health care financing for the poor and Decree 36/2005/ND-CP on free health services for children under 6 yr of age. In 2006, the Government issued Decree 43/

2006/ND-CP on financial autonomy, ownership, and accountability of public administrative organizations. The Law on Health Insurance was passed in 2009 which stipulates that all children under 6 yr of age, the elderly, the poor and the near-poor would be compulsorily enrolled. Under the law, the government is responsible for fully subsidizing the health insurance premiums for children under six, the elderly, the poor and ethnic minorities, and for partially subsidizing premiums for the near-poor and students. The law also provides a roadmap for enrolling all other groups in the population. In 2012, the Ministry of Health issued the Decree No. 85/2012/ND-CP on the operational and financial mechanism and medical service prices for application in state health service facilities. In 2013, the Minister of Health has signed Decision No. 5380/QĐ-BYT approving the project to pilot capitation payments for medical services paid by health insurance, etc.

As a number of health financing reforms are well underway in Vietnam, it is crucial for health policy makers to understand the achievement and challenges of the interventions they have introduced so that they can make timely and appropriate decisions on needed changes or adjustments. As an attempt of providing evidence for health policy making process, built from

previous studies on Vietnam's health financing situation (1-3), this paper aims to describe the pattern of health care expenditures and financial protections over the period 1992-2012 in Vietnam.

## METHODS

Data reported in this paper were obtained from 2 main data sources, including 1) National Health Account; and 2) Vietnam Living Standard Survey. In addition, we extracted data from other relevant published literature, reports and statistics about health care expenditure in Vietnam. We used both online and manual search methods to gather the information. The sources of online data included international and national journal articles and studies from multiple electronic bibliographic databases. The key search terms were "universal health coverage", "health financing", "health insurance", "health payment", "health expenditure", and "health expenses". In addition, search engines such as Google and Google Scholar were also used. The research team members also conducted manual searches to collate government documents, reports, publications related to health financing in Vietnam.

## RESULTS

The total health expenditure in Vietnam has increased over the period 1995-2012. In nominal term, the per capita health expenditure at exchange rate in Vietnam increased from US\$ 14 in

1995 to US\$ 86 in 2012 (the increase of 6 times). The total health expenditure as a share of GDP also rose from 5.2% in 1995 to 6.9% in 2012 (Table 1).

The public funding for health in Vietnam had also increased (from 33.9% in 1995 to 42.6% in 2012). Public health expenditure as percentage of government expenditure rose from 7.4% in 1995 to nearly 10% in 2012 (Table 2).

Coverage of health insurance as measured by enrollment rates has also increased significantly over years. The coverage went up from 10% in 1995 to 68.5% in 2012. As a result, health expenditure from social security funds as percentage of government expenditure increased from 7% in 1995 to 36% in 2010 (Table 3).

Fig. 1 shows the private health expenditure as share of total health expenditure during 1995-2012. The figure indicates that health financing in Vietnam was heavily depending on private

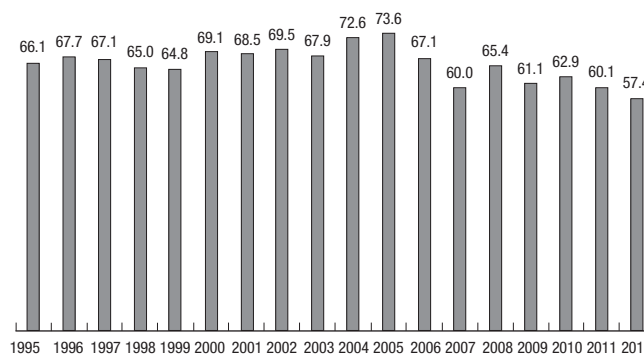


Fig. 1. Private health expenditure as share of total health expenditure in Vietnam 1995-2012. Note: Figures for 2012 are estimated ones.

Table 1. Health expenditure in Vietnam 1995-2012 (in nominal term)

Health expenditure	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012*
Per capital health expenditure (US\$)	14	16	17	17	18	21	23	22	25	31	37	47	58	70	77	83	85	86
Total health expenditure as % of GDP (%)	5.2	5.1	4.9	4.9	4.9	5.3	5.6	5.1	5.2	5.5	5.9	6.5	7.1	6	6.5	6.9	6.8	6.9

\*Figures for 2012 are estimated ones. Source: Vietnam National Health Account 2012.

Table 2. Public health expenditure in Vietnam 1995-2012

Public health expenditure	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012*
Public health expenditure as % of total health expenditure (%)	34	32	33	35	35	31	32	31	32	27	26	33	40	35	39	37	40	43
Public health expenditure as % of government expenditure (%)	7.4	7.1	6.5	7.9	7.5	6.6	7	6.3	6	5.5	5.2	7.5	9.2	8	8.5	10	10	9.5

\*Figures for 2012 are estimated ones. Source: Vietnam National Health Account 2012.

Table 3. Coverage and financial contribution of health insurance in Vietnam 1995-2012

Financial source	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Coverage of health insurance (%)	10	12	12	13	13	14	15	17	21	23	29	45	44	47	58	60	64	69
Social security funds as % of government expenditure (%)	7	9.6	11	17	16	20	17	20	22	29	34	39	32	36	36	36		

Source: Vietnam National Health Account 2012.

**Table 4.** Catastrophic health expenditure and impoverishment rates (%) in Vietnam during 1992-2012

Expenditure types	1992	1998	2002	2004	2006	2008	2010	2012
Catastrophic expenditure	8.2	5.8	4.7	5.7	5.1	5.5	3.9	4.2
Impoverishment	5.3	3.3	3.4	4.1	3.1	3.5	2.5	2.5

Source: World Health Organization and Hanoi Medical University 2014. Note: Catastrophic health expenditure: catastrophic health expenditure occurs when a household's total out-of-pocket health payments equal or exceed 40% of household's capacity to pay. Impoverishment: a non-poor household is impoverished by health payments when it becomes poor after paying for health services (3,12).

expenditures (57.4% in 2012), especially the household out-of-pocket health payments (48.8% in 2012).

As a result, Vietnam has faced problems of catastrophic expenditures and impoverishment. Table 4 shows that the proportion of households with catastrophic expenditure in 2012 was 4.2%. The rate of impoverishment in 2012 was 2.5%.

## DISCUSSION

Health financing system is one of six health system building blocks that constitute a health system. The health financing system clearly affects almost all the goals of the health care and plays a central role in improving equity, risk protection and efficiency (4). The level of total health expenditure as a share of GDP of 6.9% in Vietnam is higher than that of other countries of similar or higher income in the region such as Laos, Cambodia, the Philippines, Thailand, Indonesia, and China (5). WHO's Health Financing Strategy for the Asia Pacific Region 2010-2015 emphasized the importance to monitor progress towards universal health coverage through health financing indicators such as total health expenditure as a share of GDP (5).

In Vietnam, state budget plays a critical role in protecting public health and ensuring equity in health care. The level of state budget for health as percentage of total state budget in Vietnam has nearly doubled since 2005 (5). The increase in the state budget for health care can lead to better funding for health care for among the poor, the children under 6 yr, implementation of national health target programs, epidemic control, and district health system upgrades. The growth in state budget for health can be explained in part by the increases in the allocation norms for financial support to the poor in accordance with Prime Ministerial Decision No.139/2002/QĐ-TTg and changes in the mechanism to use this funding through purchase of compulsory health insurance for the poor under Decree No.63/2005/ND-CP. In addition to the finance sourced from government budget, the health sector also received finance that was sourced from the government bonds for investing in premises of the health facilities at the grassroots level and provincial general hospitals (6).

Social health insurance (SHI) is the key mechanism for achieving universal health coverage in Vietnam. The Law on Health Insurance is an important step on the path to universal health coverage because it integrated the existing health insurance program with the program for the poor, thus bringing together

all groups into one program. The recent expansion of coverage of health insurance has been financed largely through tax subsidies to cover insurance premiums for the poor, near-poor and other vulnerable groups. As SHI expanded rapidly during 2006-2010, the government share of SHI revenues rose from 29% to almost 50%. Government health spending increased at a faster rate than economic growth from 2006 to 2010. Meanwhile, contributions from employers, employees, and individuals have declined as a share of total revenues. Vietnam, like other countries in the region, has recognized that expanding coverage based on contributory mechanisms alone is not feasible in a context where a large share of the population is still poor, in the informal sector, or both (7). Even though the number of people with health insurance in Vietnam has increased sharply (43.7% in 2008) the contribution of the health insurance fund as a portion of total health expenditure was only 17.6% in 2008 (8). Policies to expand coverage of health insurance in Vietnam and, more importantly, to enhance impacts on financial protection should be emphasized. In addition to the task of increasing 3 dimensions of insurance coverage (breadth, depth, and height), Vietnam's health insurance program faces a further challenge regarding the financial sustainability of the scheme. Since 2003, outlays have risen faster than revenues in both the compulsory and voluntary programs (9). By 2007, overall health outlays exceeded its revenues (1).

Even though health spending in Vietnam is not low, the structure was not yet optimal (e.g. public spending on health share of total health spending including state budget, health insurance and external grants are always lower than private spending (OOP and other private spending) on health share of total health spending). Over the years, private spending on health with majority of OOP always stood at more than 50% as a share of total health spending and with the current health financing mechanism (OOP spending higher than the suggested level by WHO), financial risk was quite obvious to the patients and their families when using healthcare services. High OOP payment easily leads to catastrophic health expenditure and becomes impoverished due to health expenditure in Vietnam. Household direct OOP payment is an important indicator for assessing equity in a health system in general and in a health financing system in particular. According to the WHO, the level of OOP as a share of the total health expenditure greater than 40% can result in inequity in health care in a variety of ways (5). The share of private health expenditure (mainly from the OOP) in

Vietnam was higher than that of other countries in the Asia Pacific region such as Thailand, Laos, Cambodia, China, etc. (5).

Our study revealed that many households in Vietnam incurred catastrophic level of health expenditure and/or were pushed into poverty (impoverishment) because of health care payments. The prevalence of the catastrophic health expenditure and impoverishment of Vietnam were lower than the corresponding figures for China in 2008 (catastrophic health expenditure: 14%; impoverishment: 6.8%) but higher than that for Cambodia in 2007, for Laos in 2008 and for the Philippines in 2009 (2). An analysis by Xu K et al. (3) showed that the proportion of households facing catastrophic payments from out-of-pocket health expenses in Vietnam in 1998 was 10.5%, which was the highest level among 59 countries included in the study. Another study by Van Doorslaer et al., using various cut-off points to define catastrophic levels, confirmed the fact that the rates of catastrophic payments in Vietnam were very high compared to other countries in Asia (10,11).

The OOP is still high partly because fee-for-service mechanism is the most common provider payment method in Vietnam. The Ministry of Health and Ministry of Finance jointly set the medical service fee schedule, with maximum fees that are applied to services in the public sector. The fee schedule covers services such as hospital examination and inpatient stays, laboratory and diagnostic imaging services, and surgeries or procedures. In addition, patients pay for all drugs and material costs. Fees are paid either by patients as out-of-pocket payments, or by the insurance scheme through provider reimbursement. Traditional medicine services are also covered in the comprehensive government fee schedule. SHI covers acupuncture, herbal medicines, and Chinese traditional medicine treatment. Fees do not yet cover all cost components, and public facilities continue to receive state budget subsidies. The private sector is permitted to charge what it wants to cover its costs. In addition, medical technologies become more and more high-tech that lead to increase the cost of care, etc.

As a short review, this paper just provides a snapshot of pattern of health expenditure and financial protection in Vietnam over the last two decades. Further research works based on more detailed and sophisticated analyses are needed to give more insights into health financing situation in Vietnam.

## CONCLUSION

Vietnam has made marked improvements via health financing reform over the past few decades and that has helped in improving the coverage of health care in the country. These achievements have been reflected in total national health expenditure; total national health expenditure as % of GDP; state budget for health as percentage of total state budget; the coverage of health insurance and other health financing related indicators. How-

ever, there are still several equity-related issues in health financing system in Vietnam that need to be addressed in the coming time: dependence on private expenditures, especially out-of-pocket household payment. To ensure equity and efficient goal of health system, policy actions for containing the health care out-of-pocket payments and their poverty impacts are urgently needed in Vietnam.

## DISCLOSURE

The authors have no conflicts of interest to disclose.

## AUTHOR CONTRIBUTION

Study design: Hoang VM. Data analysis, writing: Hoang VM. Revision of the manuscript: Oh J, Tran TA, Tran TGH, Ha AD, Luu NH, and Nguyen TKP. Approval of final manuscript: all authors.

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