

VIETNAM COUNTRY BRIEF

# Sustainable Immunization Financing in Asia Pacific

August 2017

BREAKING NEW GROUND





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#### **Authors:**

This report was prepared by Martha Coe and Jessica Gergen.

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TABLE OF CONTENTS

Acronyms..... 4

Key Messages..... 5

Introduction..... 6

Context..... 6

Structural and Political Trends for Health..... 8

Demand and Access to Immunization Services ..... 10

Health Financing and Immunization ..... 12

New and Underutilized Vaccine Scale Up ..... 19

Immunization Financing in Transition: Key Trends and Takeaways..... 20

References ..... 22

## ACRONYMS

BCG	Bacille Calmette-Guerin	NCD	Noncommunicable Disease
CHC	Commune Health Center	NIP	National Immunization Program
DALY	Disability-Adjusted Life Years	NITAG	National Immunization Technical Advisory Group
DHC	District Health Center	NUVI	New and Underutilized Vaccine Introduction
DTP	Diphtheria-Tetanus-Pertussis	OOP	Out of Pocket
EPI	Expanded Program on Immunization	OPV	Oral Polio Vaccine
Gavi	Global Alliance for Vaccines Initiative	PCV	Pneumococcal Conjugate Vaccine
GDP	Gross Domestic Product	SHI	Social Health Insurance
HepB	Hepatitis B	TT	Tetanus Toxoid
HPV	Human Papilloma Virus	UNFPA	United Nations Population Fund
HTA	Health Technology Assessment	VHW	Village Health Worker
ICC	Interagency Coordination Committee	VND	Vietnamese Dong
IPV	Inactivated Polio Virus	VSS	Vietnam Social Security
JE	Japanese Encephalitis	WHO	World Health Organization
MoH	Ministry of Health		
MR	Measles-Rubella		

## KEY MESSAGES

<p><b>Context</b></p>	<ul style="list-style-type: none"> <li>- Vietnams’ strong economic growth continues to propel the country forward, mirroring its aggressive commitment towards investing in social programs.</li> <li>- The demographic transition is slow, but epidemiological transition is advanced. Much of the population is projected to remain working age for the next few decades. Conversely, NCDs now account for 73% of total deaths in Vietnam and re-prioritization efforts are underway to better fund chronic disease care.</li> <li>- Vietnam’s commitment to immunization over the previous decades has produced very strong immunization coverage rates, but a conservative NIP package.</li> </ul>
<p><b>Immunization Financing</b></p>	<ul style="list-style-type: none"> <li>- Within Vietnam’s decentralized system, the central government provides immunizations, but limited financing for operations relies on a campaign structure with delivery occurring on dedicated immunization days.</li> <li>- Financing for immunization is mainly generated through central government revenues (taxes, loans, grants), though efforts to increase cost-share within the system could increase provincial inputs over time.</li> </ul>
<p><b>Key Findings</b></p>	<ul style="list-style-type: none"> <li>- The support from Gavi has allowed Vietnam to move forward in expanding their package of vaccines and reaching remote areas and their exit will leave a gap in financing.</li> <li>- The government has relied on macroeconomic growth for budget increases, and has not explored innovative financing mechanisms like earmarked taxes.</li> </ul>
	<ul style="list-style-type: none"> <li>- Decentralization has not been fully embraced by the central government, creating some fragmentation and a lack of clarity regarding authority and accountability in the health system.</li> <li>- The Ministry of Health is pressing for the national health insurance to include immunization in a new preventative services package prior to the exit of Gavi funding.</li> </ul>
	<ul style="list-style-type: none"> <li>- The central government has complete autonomy over decisions regarding the immunization program.</li> <li>- Prioritization of NUVis is competing with several other health issues, and historically Vietnam has been conservative in prioritizing new vaccines, so additions are likely to remain few in the coming years.</li> <li>- The NITAG is quite nascent, heavy in government representatives, and reliant on external agendas and WHO recommendations.</li> <li>- Domestic manufacturing of products is a critical issue for the Ministry of Health and the Ministry of Finance. There is only one vaccine in the current schedule not produced locally and it is co-financed by Gavi.</li> </ul>

## INTRODUCTION

Vietnam's export driven economy has propelled the country's GDP forward. The government has capitalized on growth by investing in social programs, such as health. The commitment to expenditure, however, has been unmatched by revenue and the country's debt is growing. Desire to increase the immunization package must be tempered and weighed carefully against budget constraints and an increasing burden of non-communicable diseases. Understanding the political economy of the country, the financing flows, and how these factors support or deter the prioritization of funding for health care generally, and immunization programming specifically, will be essential to ensuring continued robust coverage rates and an expanded schedule of immunization, financed in a sustainable manner.

This brief is one of six in a series that analyzes how countries in Asia Pacific, undergoing financial and/or political transitions, prioritize and fund their immunization programs. The brief contains valuable information for all stakeholders interested in promoting sustainable and robust immunization programs and illustrates a variety of ways to engage in realizing this outcome.

## CONTEXT

### ECONOMIC TRENDS

**Vietnam's strong economic growth continues to propel the country forward and has been matched by an aggressive commitment towards investing in social programs.** With one of the fastest GDP per capita growth rates in the world, Vietnam has grown tremendously over the previous decades.<sup>1</sup> Since 1990 the country has averaged growth of 5.37% GDP per capita.<sup>2,3</sup> The GDP growth rate is projected to remain steady in the years to come, remaining above 6% past 2020, ensuring continued revenue (Table 1).<sup>4</sup> Part of Vietnam's economic success is their dedication to investing in the people of the country. About 44.9% of the budget is invested back into civic programs, part of which allows for free access for all to immunization services.

**Table 1: Economic Indicators**

	2000	2005	2010	2015	2020
<b>GDP growth (Annual %)</b>	6.8	7.5	6.4	6.7	6.2
<b>Per capita growth (%)</b>	5.4	6.3	5.3	5.5	-
<b>Government Revenue (% GDP)</b>	-	-	-	-	22.3
<b>Government Expenditure (% GDP)</b>	-	-	-	-	27.4

Source: World Bank (2017b).; International Monetary Fund (April 2017).

**The concerted effort to support immunization services is hindered by rising debt and a decreasing tax base.** Vietnam's public expenditure has outpaced revenue, leading to a climbing debt. As a percentage of GDP, Vietnam's debt is 60% and expected to reach

<sup>1</sup> World Bank (2017b).

<sup>2</sup> Ibid.

<sup>3</sup> Jennings, R. (January 5, 2017).

<sup>4</sup> International Monetary Fund (April 2017).

67.5% by 2020.<sup>5</sup> The increasing gap will put strain on Vietnam's spending abilities. Their desire to fund social programming, including immunization, will be tempered as debt payments cut into program spending. Vietnam is exploring ways to generate more fiscal space in the wake of this trend.

## DEMOGRAPHIC TRENDS

**Though the life expectancy continues to increase, a stable fertility rate around replacement will maintain the needs of routine immunization programming for children.**

The fertility rate in 2014 was 2 births per woman.<sup>6</sup> This rate has been steady since the turn of the century and is projected to remain at 1.9 birth per woman through 2050.<sup>7</sup> By maintaining the replacement rate, Vietnam is able to slow down the rate at which its overall population is aging (a common trend in the region). In 2016, 6.9% of the population was older than 65.<sup>8</sup> The recent population growth is centered on the working age group. This has spurred economic growth, both in production capacity and an increased number of tax payers. By 2030, the World Bank estimates that the population over 65 years old will nearly double in size, representing 12.4%.<sup>9</sup>

**The high number of Vietnamese that live in rural areas and that migrate within the country present challenges for immunization financing.** Approximately 65.8% of the population resided in rural settings in 2016.<sup>10</sup> This figure has dropped steadily over time (it was 75.62% in 2000), but remains well above the majority and will remain so for the coming years.<sup>11</sup> The dispersed population creates demands for resource inputs to reach and maintain high coverage levels. Similarly, increasing mobile and internal migrant populations make monitoring and forecasting for immunization difficult.<sup>12</sup> Due to stringent laws around registering for residence in a district, low-income migrants have difficulty gaining status and entering the system.<sup>13</sup> To navigate this landscape, a limited number of immunization days – 2-3 per month – serve as the main delivery mechanism for children.<sup>14</sup>

## HEALTH OUTCOMES

**Vietnam made unprecedented progress on its Millennium Development Goal targets, considering its achieved outcomes and value for money.** Vietnam reached its Millennium Development Goal (MGD) on maternal mortality, cutting it from 139 deaths per 100,000 live births in 1990 to 54 by 2015 (Figure 1).<sup>15</sup> The country was just short on both child mortality goals, still drastically improving upon these rates between 1990 and 2015. On other basic health indicators, like life expectancy or adult mortality, Vietnam performs

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<sup>5</sup> Ibid.

<sup>6</sup> World Bank (2017b).

<sup>7</sup> World Bank (2017a.)

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

<sup>10</sup> World Bank (2017b).

<sup>11</sup> At a steady rate of change, it will take nearly 29 years to be 50%-50%.

<sup>12</sup> "National EPI Review Vietnam" (August, 2015).

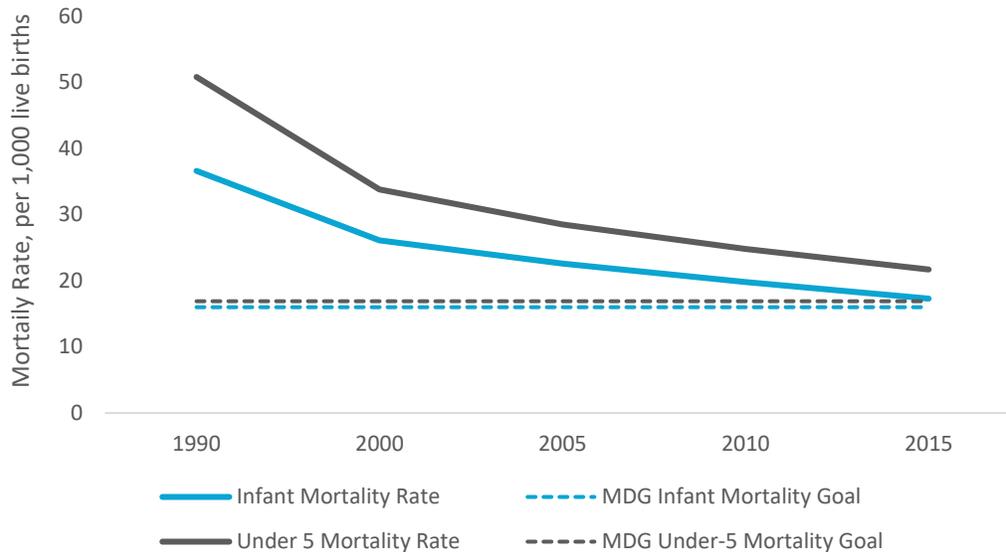
<sup>13</sup> To gain permanent residence status in a new district, one must either purchase land, marry into a family already holding permanent residence, or live in rental housing with an official lease and a minimum amount of livable space. (De Luca, April 8, 2017).

<sup>14</sup> "National EPI Review Vietnam" (August, 2015).

<sup>15</sup> World Bank (2017b).

extremely well, even outpacing its neighbors that have more money (Indonesia) or greater health coverage (Thailand).<sup>16</sup>

**Figure 1: Newborn and Child Health Indicators**



Source: World Bank (2017b). and author’s calculations

**Strong achievements in immunization are transferring focus from vaccine-preventable communicable diseases to the growing burden of non-communicable diseases.**

Vietnam’s profile switched drastically between 1990 and 2015 with communicable diseases falling from 27.28% of disability-adjusted life years (DALYs) to 9.56% over that period of time and non-communicable diseases rising from 45.84% to 72.51% of DALYs.<sup>17</sup> Non-communicable diseases (NCDs) now account for 73% of total deaths in Vietnam, though a number of communicable diseases still remain prevalent.<sup>18</sup>

**STRUCTURAL AND POLITICAL TRENDS FOR HEALTH**

**There are three major trends affecting the Vietnamese health system and these will have profound effects on the immunization program.** The Vietnamese political model is committed to the provision of basic services through its socialist policies. The dedication of the state to provide basic services has kept immunization prioritized. However, Vietnam is simultaneously undertaking continued efforts to liberalize its economy, effectively making increased room for private enterprise, administratively decentralize to provinces, and achieve universal health coverage – in part by moving strategic purchasing over to a third party.

**The expansion of the private sector is creating a dual system for access to immunization services, especially in urban areas.** In the private sector, the government has worked to increase transparency in business and create a more even playing field between private

<sup>16</sup> Ibid.

<sup>17</sup> Institute for Health Metrics and Evaluation (2016).

<sup>18</sup> WHO (2014).

enterprise and state-owned enterprises.<sup>19</sup> There are now 183 private hospitals throughout the country and over 35,000 private clinics.<sup>20</sup>

**Decentralization has not been fully embraced by the central government, creating some fragmentation and a lack of clarity regarding authority and accountability in the health system.** Administrative duties have been handed down to provincial governments giving the local party influence, if not control. Therefore, local health officials answer to local political and administrative officials, not the Ministry of Health (MoH). However, there is still a tendency for provinces to look to the MoH for guidance and support in their work. Should a provincial medicine center not deliver on its health functions such as immunization coverage, there is a friction between charging the MoH or the political officials of the province for this failure. It is noted that the MoH is reluctant to release control, still acting as the head of the system.<sup>21</sup> Provinces, on the other hand, are not beholden to central MoH directives and do not always act on these directives, creating issues of accountability. Plans to create provincial centers for disease control by 2025 will help to navigate the network.<sup>22</sup>

**Vietnam's immunization program is autonomous of its national health insurance mechanism though the MoH is pushing for inclusion of prevention services within the benefits package.**<sup>23</sup> Social health insurance (SHI) was introduced, at the provincial level, in 1992. The first pro-poor policy was decreed in 1994 when the poor were exempted from paying user fees, though no directives on how services would be paid for were made.<sup>24</sup> The SHI scheme was expanded in 1998 to cover civil servants and a number of other groups (veterans, etc.) and all the provincial pools were combined into a national pool (though still effectively managed at the provincial level). This pool was transferred over to the fiscally conservative Vietnam Social Security office in 2002, the same year that the Health Care Fund for the Poor was created. This effort culminated in 2008 when the Health Insurance Law passed consolidating the national system. Though Vietnam Social Security (VSS) is the purchaser, the MoH designed the benefits package and is still involved in revisions. The current focus on curative care in the benefits package is being called into question as the burden of NCDs rises. The MoH, in partnership with UNICEF, UNFPA, and WHO, is driving efforts to include preventative services, inclusive of immunization, within the benefits package.

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<sup>19</sup> Nguyen, H. (May 6, 2016).

<sup>20</sup> Tuan, PL (2015).

<sup>21</sup> Lieberman, S. and A. Wagstaff (2009).

<sup>22</sup> Ministry of Health, Vietnam (March, 2016).

<sup>23</sup> Gaskill, S. and N.L. Hien (2015).

<sup>24</sup> Tien et. al (August 2011).

### Box 1. Can VSS and the National Health Insurance Scheme Absorb the Immunization Program?

Under the current Health Insurance Law (passed in 2014), preventive services are not included in the national health insurance benefits package. The MoH plans to include a preventive services package into the national health insurance in the medium term. The first step is to add these services to the benefits package during its revision, set tentatively for 2017.

The shift towards preventative services in the VSS is a new one. There has been considerable dialogue among policy makers and important international organizations concerning the need for prevention and screening services, given the NCD burden and aging population.

The second step is to revise the 2014 Health Insurance Law and relevant sub-law documents to ensure that coverage of these services is included in the legislation (planned for 2019-2020). UNFPA, WHO, UNICEF, and the World Bank are involved in advocacy work surrounding this step.

Currently, the advocacy partners are helping to calculate a reimbursement price for the immunization package. A previous proposal stipulated that the reimbursement rate to fully immunize a person was US\$10. However, more recent budgeting work done by the MoH and WHO shows that, given the current schedule and interest in new introductions, it would need to exceed this limit. UNFPA, WHO, and UNICEF have been engaged in dialogue with VSS and the MoH to raise the price of the package to US\$20 to cover the entire NIP and potentially 1 or 2 more vaccines not currently in the budget.

There has also been significant discussion of the possibilities of copayments for some vaccines, including new and underutilized vaccines. This is considered a tough sell for both policymakers and citizens who expect public immunization services to be free. However, due to the burgeoning middle class and the private sector availability of full-price NUVIs, paying subsidized prices out of pocket for NUVIs could be accepted.

## DEMAND AND ACCESS TO IMMUNIZATION SERVICES

### IMMUNIZATION ACCESS AND COVERAGE

**Vietnam's commitment to immunization in recent decades, through free and mandatory delivery, has produced strong immunization coverage rates for its national immunization program package (Table 3).** Vietnam has high coverage, reaching 97% of the third dose of the pentavalent vaccine.<sup>25</sup> In 2015, only 8% of districts had less than 90% coverage of the third pentavalent dose.<sup>26</sup> This rate dropped from 12% in 2014 demonstrating increased equity in service.<sup>27</sup> While the majority of immunization services are provided through commune health centers (CHCs) on dedicated immunization days, a number of communities in the rural, mountainous areas do not have easy access to facilities. To maintain coverage in these areas, the national immunization program (NIP)

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<sup>25</sup> WHO (2016).

<sup>26</sup> Gavi (2016b).

<sup>27</sup> Ibid.

provides mobile units to administer vaccines every 2-3 months.<sup>28</sup> Despite extra efforts, lower coverage rates point to inequities for minority ethnicities, remote areas, and migrant populations.

**Table 2: Vietnam’s Immunization Schedule**

Vaccines	Schedule
1 BCG, HepB	Birth
2 Pentavalent, OPV	2 months
3 Penta <sub>2</sub> , OPV <sub>2</sub>	3 months
4 Penta <sub>3</sub> , OPV <sub>3</sub>	4 months
5 IPV	5 months
6 Measles	9 months
7 JE	2 doses in first 12 months
8 DPT booster, MR	18 months
9 Cholera (in specific geographical areas), JE <sub>3</sub>	2-5
10 Typhoid (in specific geographical areas)	3-10
11 TT	Pregnant women

Source: “National EPI Review Vietnam” (August, 2015).

**Private sector access for immunization services is increasing, especially in the urban centers of Hanoi and Ho Chi Minh City.** Approximately 60% of outpatient care is private.<sup>29</sup> Quality issues, user fees charged at hospitals, and increasing numbers of people utilizing public services with financial coverage under the national scheme drives patients to the private sector. The populations in second-tier cities are moving into the middle class and now have the money to access private options, avoiding long waits and crowds at public facilities.<sup>30</sup> Private immunization delivery is growing within this landscape.<sup>31</sup>

**Within Vietnam’s decentralized system the central government provides immunizations, but limited local financing for operational needs affects immunization access.** Supplying qualified human resources outside of city centers is a constant struggle for Vietnam where better pay and opportunities exist at larger hospitals in major cities.<sup>32</sup> The irregular inputs from provinces, supported by a rising share of out-of-pocket (OOP) and SHI reimbursements for services (rather than investments from government funds), means that the cold chain is not always managed and human resources are not sufficiently available in the remote areas that need them. Operational issues must be addressed, but whether accountability for financing and delivery of services lies with the MoH or the provincial governments is not yet clearly defined and understood throughout the health system.

<sup>28</sup>Nguyen et. al (2015); “National EPI Review Report: Vietnam” (April, 2009).

<sup>29</sup> Tuan, PL (2015).

<sup>30</sup> Sieburg et. al (May, 2015).

<sup>31</sup> “National EPI Review Report: Vietnam” (April, 2009).

<sup>32</sup> Ibid.

**Table 3. Vietnam’s Standings on International Vaccination Targets**

Goals of the Decade of Vaccines	Vietnam’s Standing
Zero new cases of polio	Achieved in 2000
Eliminate Maternal and Neonatal Tetanus	Achieved in 2006
90% Coverage of DTP3 with no district less than 80% coverage	97% coverage of DTP3 nationally, but 91 districts below 80% coverage
Eliminate Measles	Vietnam still experiences limited cases of measles, though they had a major outbreak in 2014.
Eliminate Rubella	Vietnam still experiences hundreds of cases of rubella annually
Introduce one or more new or underutilized vaccine (NUVI) since 2010	2 NUVis on the schedule

■ Achieved    
 ■ Moderate Achievement    
 ■ Low Achievement

Source: Strategic Advisory Group of Experts on Immunization (2016).

## DEMAND

**Demand for immunization is high in Vietnam but the population is sensitive to product safety.** Immunization coverage is high in Vietnam, at 97%, and its value is understood by the population who were willing to pay for a non-NIP brand, even traveling internationally to access them when supply is short.<sup>33</sup> Media reports of adverse events for a common vaccine in 2012-2013 damaged vaccine confidence in the general population and a measles outbreak followed in 2014. Anti-vaccination sentiment is an issue that the MoH works to combat, though their allies are limited. Pediatricians are not well organized to advocate successfully and there is limited activity of civil society organizations.

## HEALTH FINANCING AND IMMUNIZATION

### IMMUNIZATION COSTS

According to self-reported numbers, the immunization program in Vietnam cost the government US\$15,258,863 in 2015, a relatively small portion of health expenditure at 0.5% of the public health budget and only 56% of the total cost of the immunization program to all sources of funding.<sup>34</sup> US\$10,800,000 of public funds for immunization were spent on vaccine procurement – 70% of program costs.<sup>35</sup> The other 30% was for operational costs, a limited amount for outreach, transportation, incentives, and monitoring of the program. Provinces and districts should split operational costs with the

<sup>33</sup> Tuoi Tre News (November 17, 2015).

<sup>34</sup> WHO (2017b).

<sup>35</sup> Ibid.

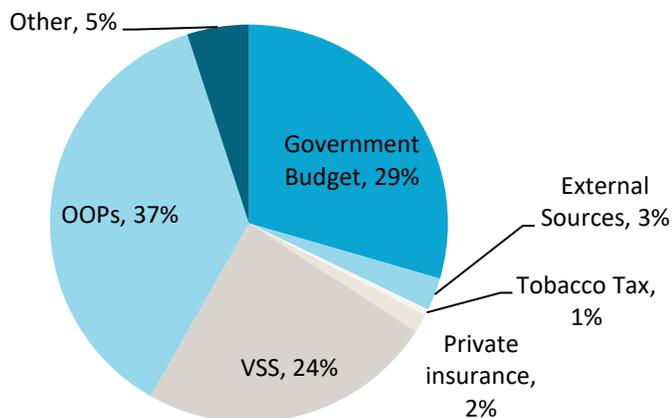
MoH 50%-50%, but local financing for operational needs is highly variable and often absent.<sup>36</sup>

## GENERATION

**Financing for immunization is mainly generated through central government revenues (taxes, loans, grants), though efforts to further decentralize the system could increase provincial inputs over time.** Decentralized provincial programs generally rely on national transfers to fund programming. Some provinces do contribute additional funds for immunization campaigns, minor repairs to facilities, trainings, and allowances for health workers.<sup>37</sup> The levels of input from local budgets varies widely, averaging about 10% of NIP financing.<sup>38</sup> The limited local funding could be mobilized to increase fiscal space for NIP programming and the planned provincial centers for disease control could be good local advocates.

**The health system is increasingly drawing its revenue from insurance reimbursements and out of pocket payments rather than supply-side subsidies.** The government's general budget accounts for 29.49% of total health expenditure (Figure 2).<sup>39</sup> OOPs account for 36.76% of total health expenditure (THE), the largest portion, followed by VSS inputs at 24.07%.<sup>40</sup> When the insurance law passed in 2008, VSS accounted for only 14.43% of the total health expenditure.<sup>41</sup> Nominal inputs come from external resources (2.66%), private insurance (1.5%), the tobacco tax (1%), and other sources (5.02%).<sup>42</sup> The government has shown little motivation at pursuing further inputs from the tobacco tax or other innovative mechanisms, relying instead on macroeconomic growth to boost the budget.

**Figure 2: Total Health Expenditure by Source**



Source: WHO (2017a).

**OOPs have remained high despite the rise in insurance coverage under VSS.** Coverage has risen steadily over the past decade, from 42% in 2006 to 71.6% in 2014.<sup>43</sup> Despite the increase of what should provide financial protection, OOP levels have remained resilient

<sup>36</sup> "National EPI Review Vietnam" (April, 2015).

<sup>37</sup> Ibid.

<sup>38</sup> "National EPI Review Vietnam" (April, 2015).; SABIN Vaccine Institute (2017).

<sup>39</sup> WHO (2017a).

<sup>40</sup> Ibid.

<sup>41</sup> Ibid.

<sup>42</sup> Ibid.

<sup>43</sup> Joint Learning Network (March 16, 2015).

during this time as the main source of financing to the health system.<sup>44</sup> This could be for a variety of reasons. Notably, the decentralized system allows for user fee rates to be set locally. This could account for some of the high payments. Reimbursements are contingent on following the gatekeeping policy and, should a patient skip a level within the system (say, go straight to a district hospital), they are responsible for a portion of the payment.<sup>45</sup> Patients who can afford it often elect to go to the private sector which charges higher fees for services. It can be noted, however, that OOPs are mainly sourced from richer households and only 4% are incurred by the bottom two quintiles.<sup>46</sup> OOPs are spent mainly on public providers (58%) while only 25% are spent on pharmacies and the remaining 17% on private providers.<sup>47</sup>

**The support from Gavi has allowed Vietnam to expand their package of vaccines and reach remote areas and their exit will leave a gap in financing.** Gavi provided \$7,951,578 for vaccines and vaccination in Vietnam in 2016.<sup>48</sup> The majority of this (\$4,755,596) went to co-financing the pentavalent vaccine.<sup>49</sup> Vietnam is set to increase its co-financing levels through 2019 until it fully finances pentavalent procurement in 2020. Another \$3,562,452 went to health system strengthening and the balance was owed from Vietnam for IPV co-financing.<sup>50</sup> Strengthening activities were focused on remote areas and building local capacity to communicate, market, and deliver vaccines.<sup>51</sup> The exit of Gavi funding in 2019 will create a major hurdle for sustainability of the immunization program and the NIP team is already developing and implementing its transition plan – considering ideas of co-payments for NUVIs or housing immunization within the national health insurance scheme.

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<sup>44</sup> WHO (2017a).; \*Note that OOPs have dropped since the introduction of NHI in 2008.

<sup>45</sup> Sieburg et. al (May 2015).

<sup>46</sup> Somanathan et. al (2014).

<sup>47</sup> Lieberman, S. and A. Wagstaff (2009).

<sup>48</sup> Gavi (2016a).

<sup>49</sup> Ibid.

<sup>50</sup> Ibid.

<sup>51</sup> Gavi (2016b).

## Box 2. Gavi Transition Plan

Transition planning in Vietnam is in full swing. Despite access to Gavi prices through 2025, Vietnam is only utilizing Gavi financing for the rollout of pentavalent.

The transition plan involves a series of activities to aid in the achievement of sustainable financing and strong immunization programs without external financing from Gavi. All activities relating to sustainable financing for immunization in the transition plan are financed by Gavi with strong technical assistance and support from WHO, UNICEF, and the World Bank.

Activities regarding sustainable immunization financing include:

- 1 Provide technical support to build political commitment for sustainable immunization financing through advocacy to high-level policymakers using new immunization decree;
- 2 Provide technical support to build political commitment for sustainable immunization financing through advocacy with provincial level using cost-sharing provisions in the new immunization decree;
- 3 Review the various options for financing core public health programs, including immunization, and list the pros/cons of various approaches based on international experience and consideration of different domestic financing options in Vietnam.

The stated outputs of these activities are three-fold:

- 1 Increased central budget and health insurance coverage of vaccines;
- 2 Increased provincial budgets;
- 3 Policy brief outlining options for financing core public health programs.

Source: Ministry of Health, Vietnam, (n.d).

## ALLOCATION AND EXPENDITURE OF RESOURCES

**Vietnam has prioritized health, allocating 8.5% of the central budget to the health sector.** The government's per capita expenditures rose faster than economic growth between 2002 – 2015, rising an average of 13% annually.<sup>52</sup> Approximately 88.6% of expenditures are dedicated to treatment and prevention while 10.7% is invested in the development of the system, 0.6% expended on management, and 0.1% on other items.<sup>53</sup> Though the health sector ranks sixth in budget size, social security (whose office runs the SHI program) receives 12.8% of the budget as well (Table 4). Other social programs, including social security and education and training rose sharply over this period as well, adding to the country's increasing debt.<sup>54</sup>

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<sup>52</sup> World Bank (2017b).

<sup>53</sup> WHO Western Pacific Region (2016).

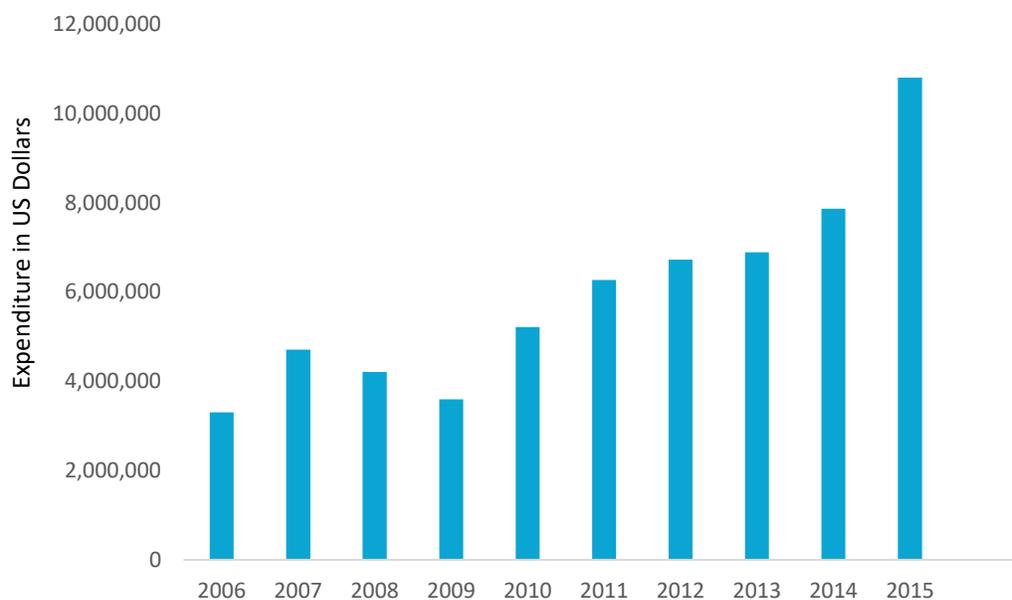
<sup>54</sup> The Ministry of Finance of the Socialist Republic of Vietnam. 2017.

**Table 4: Vietnam’s National Budget by Sector**

Sector	Budget Percent (Billion VND)	of budget
Education and Training	215,167	21.5%
Environment Protection	215,167	21.5%
Social Security / Social Subsidies	128,294	12.8%
Administration	127,930	12.8%
Economic	105,822	10.6%
Health, Population and Family Planning	84,610	8.5%
Defense	84,610	8.5%
Science and Technology	11,243	1.1%
Security	11,243	1.1%
Culture and Information	7,350	0.7%
Radio & TV Broadcasting	4,530	0.5%
Sports Activities	2,891	0.3%

Source: The Ministry of Finance of the Socialist Republic of Vietnam. 2016.

**Figure 3: Government Expenditure on Routine Immunization (US\$)**



Source: (WHO, 2017b).

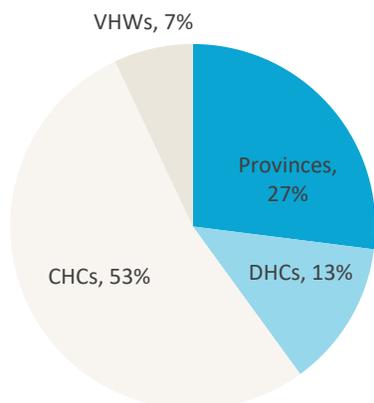
**Vietnam puts great emphasis on its immunization program, incentivizing delivery of services.** “The Law on Prevention and Control of Infectious Diseases” was passed in 2007 and ensures that the state will provide funds to prevent epidemics and for the use of

vaccines as recommended by the Ministry of Health.<sup>55</sup> This law has been backed by financing upgrades, including budget bumps (Figure 3).<sup>56</sup> Vietnam spent \$27,466,716 on routine immunization in 2015, inclusive of all sources.<sup>57</sup> The government's input rose, on average, 15% annually between 2010-2015, though only 56% of the current budget is funded by the government.<sup>58</sup> However, the central government's commitment is made clear in the increasing reimbursement rate for fully immunized children. The incentive amount received by CHCs for each fully immunized child doubled between 2008-2013, from 1,500 VND to 3,000 VND.<sup>59</sup> The majority of the immunization budget is spent at the CHC level (Figure 4).<sup>60</sup>

**Box 3. Performance-Based Payments for Fully Immunized Children Drives High Coverage (Innovative Financing Box)**

The incentive program, which began in 2014, offers 3,000 VND for each fully immunized child. Payments are calculated monthly and paid directly to facilities. Facilities have full autonomy in how these funds are used and most either split them amongst staff or host parties for staff and families. The program has been well received, but efforts are underway to have provinces cover at least half of the program costs. About 1/3 of provinces already do so through local revenue.

**Figure 4: Share of Budget Spent at Different Levels of NIP Programming**



Source: "National EPI Review Report: Vietnam" (April, 2009).

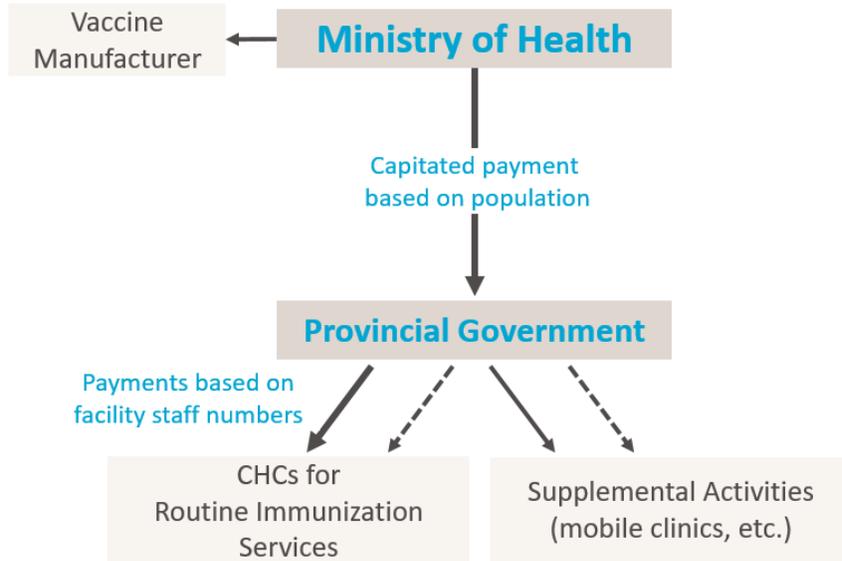
**Service delivery of immunization is provided for free by the central government as a line item under a vertical preventative care payment.** While VSS makes capitated payments to district hospitals for outpatient care and uses fee-for-service and diagnostic related group payments for inpatient care, preventative health programs (except for some cancer screenings) are fully funded by the central government. The central government procures all vaccines for the NIP and makes population-based payments to provinces who then

<sup>55</sup> The National Assembly (November 21, 2007).  
<sup>56</sup> WHO (2017b).  
<sup>57</sup> Ibid.  
<sup>58</sup> Gavi (2016b).; WHO (2017b).  
<sup>59</sup> Gavi (2016b).  
<sup>60</sup> "National EPI Review Report: Vietnam" (April, 2009).

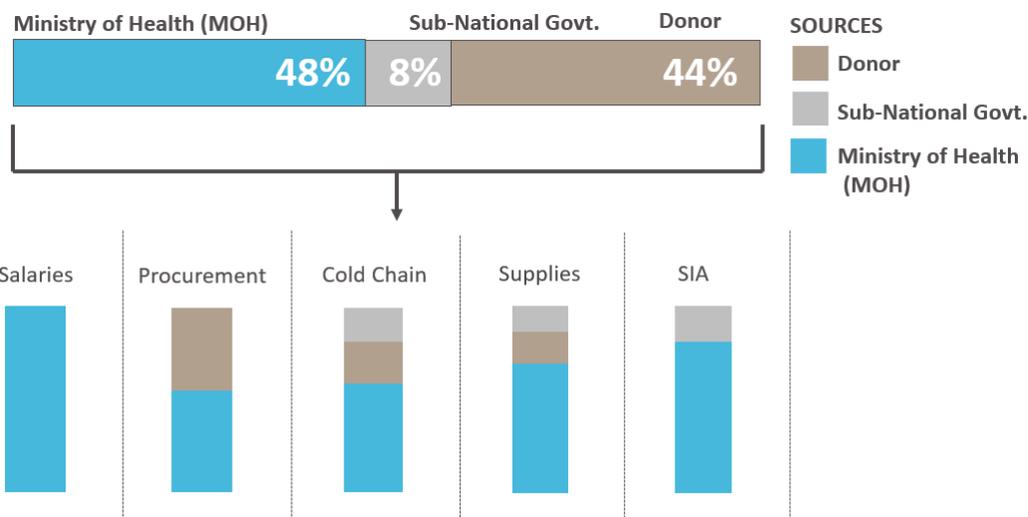
disburse funds to public facilities based on staff numbers (Figure 5). Provinces can also add supplemental funds to support routine services and campaigns, though the capacity to do this varies greatly by province.

**Figure 6. Who Pays for Immunization?**

**ACTORS.**



**ALLOCATION.**



**Inefficiencies in immunization financing allocation offer potential gains in fiscal space.**

Using line-item budgeting down the system for immunization programming presents opportunities in allocation efficiency gains. The payment to provinces based on population does not take into account different needs between the provinces (operational updates, disease burden, etc.). Payments from provincial governments to facilities based on staffing does not reflect the healthcare needs of a facility as human resources are often distributed unequally between urban/rural facilities. Utilizing a different provider payment mechanism could increase the efficiency in how resources are allocated. Similarly, the

increased utilization of data and evidence in planning and decision-making could increase the allocative efficiency of the system. The 2015 review of the NIP found that there is limited use of data for planning and management. Defaulters and dropouts within the system were not tracked or monitored. Better collection of data, supported by the 2017 introduction of the digitized *Optimize* tool, can help create these efficiency gains.

#### **Box 4. Increasing Efficiency in the National Immunization Program with *Optimize***

Monitoring within the immunization program was done with hard-copy booklets in most provinces until June of 2017. Pediatric vaccine delivery was recorded in immunization booklets that were the responsibility of the parent to maintain. One of the big challenges with a paper-based system is that health centers do not have the records, making it more difficult to track defaulters. Even if service delivery is recorded in a facility register, it is often too much work per month to manage and monitor this list. The high rate of migration between districts and community health centers only adds to the challenge.

In June of 2017, the MoH launched a national immunization information system, based on the 7-year rollout of PATH's *Optimize* platform, a digital immunization tracking system. This effort is supported by a public-private partnership between the MoH and Vietnam's largest telecom company, Viettel. The partnership ties mobile service to the platform so that immunization appointment reminders can be sent to individual's telephones.

Online service centers allow parents to access information on immunization and the status of their children ([www.tiemchung.gov.vn](http://www.tiemchung.gov.vn)) and facilities to update and monitor coverage data ([www.tiemchung.vncdc.gov.vn](http://www.tiemchung.vncdc.gov.vn)).

## **NEW AND UNDERUTILIZED VACCINE SCALE UP**

**Vietnam is actively looking to introduce new and underutilized vaccines into its NIP and production repertoire.** Vietnam has local production capacity for a few vaccines not yet on the national schedule. Their dedication to running a self-sufficient immunization program has led to high levels of capacity in production as a way of guaranteeing affordable prices, security of supply, and quality control. National manufacturers produce all of the vaccines in the NIP besides the pentavalent vaccine, currently being co-financed by Gavi. For this reason, Vietnam is not seriously considering using national funds to introduce some of the other new vaccines of interest which are not manufactured locally. However, vaccines produced by external manufactures are licensed and sold in the private market or are piloted by non-government entities.

**The process of introducing new vaccines in Vietnam is difficult with nascent use of health technology assessments, budget constraints, and preference for local production.** The developing national immunization technical advisory group (NITAG) makes recommendations for NUVIs but does not have authority to make budget decisions. Members of the NITAG include the National Institute of Hygiene and Epidemiology, a representative from the expanded program on immunization (EPI) unit, the Minister of Health, Pasteur Institute, other ministry representatives, and other academics. Vietnam is interested in health technology assessments (HTA) and has high capacity in local institutions like the National Institute for Hygiene Epidemiology, but there are no concrete

criteria to examine a new vaccine and weigh its value. Recommendations are usually based on presentations from national and international institutes with heavy regard for WHO recommendations. The NITAG has been active, approving and recommending most vaccines supported by the WHO, but the EPI unit does not have the budget to introduce them all. Advocacy could support a change regarding this challenge, but the NITAG does very little to move their recommendations forward within the government. Strength of the NITAG is likely to develop over time with the regional move towards HTA inclusion in decision-making. At this point, the strong preference for domestic production, and the associated cost savings, dominate NUVIs.

## IMMUNIZATION FINANCING IN TRANSITION: KEY TRENDS AND TAKEAWAYS

**Strong central control of the immunization program has driven robust coverage rates, but with shrinking fiscal space, there is need for more program financing, some of which can be collected from the provinces.** Operational funding is especially in need. Currently, 70% of the central NIP budget is spent on vaccines and this percentage is set to increase as Gavi co-financing decreases through 2019. Operational expenses are meant to be split 50%-50% between central and local governments, but inputs at the local level are highly variable and often absent. The MoH has identified the delivery incentives program as an area of opportunity for co-financing. A third of provinces already cover 50% of their incentive programs and the MoH hopes to have all provinces doing so in the near future. Stakeholders should support provincial prioritization of immunization to increase fiscal space for the program.

**Prioritization of universal health coverage has produced positive results under VSS, creating the potential for the national health insurance to absorb the immunization program in the wake of Gavi's exit.** Vietnam's national health insurance reached 71.6% coverage of the population in 2014. Adding a preventative services capitation payment to public facilities would be another option to increase financing for operational expenses. This additional financing, sourced from the government and premium payments, would help to diversify the revenue sources for the immunization program with the exit of Gavi, increasing its sustainability and promoting growth as budget bumps are unlikely to continue. As part of its Gavi transition plan, the MoH is already working towards this goal by drafting new legislation for the national health insurance and providing research on the costs of including a preventative services package. They are receiving international support from the World Bank, WHO, UNICEF, and others. Strong support will be necessary to advocate for this change to the system.

**Vietnam has begun to implement efficiency measures to improve performance in the immunization program, but more can be done to ensure allocative efficiency.** The new *Optimize* platform will allow for greater data generation and better tracking of service delivery within the immunization program. The new digital system offers a pivotal moment to start increasing the utilization of data within the program. The most recent EPI review stated that local data was not systematically used for forecasting and planning within the program. The nascent NITAG relies on presentations of external organizations and recommendations from the WHO to direct its recommendations and thus there is very limited production of HTAs within the system. The increased production of available

local data can support an increase in localized assessments and improved program planning. Stakeholders can support this move to increase the likelihood that funding is going to needed health interventions.

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