Sustainable Immunization Financing in Asia Pacific
August 2017
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# Acronyms

<table>
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<th>Acronym</th>
<th>Description</th>
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<tr>
<td>BCG</td>
<td>Bacille Calmette-Guerin</td>
</tr>
<tr>
<td>DALY</td>
<td>Disability Adjusted Life Years</td>
</tr>
<tr>
<td>DBM</td>
<td>Department of Budget Management</td>
</tr>
<tr>
<td>DoH</td>
<td>Department of Health</td>
</tr>
<tr>
<td>DTP</td>
<td>Diphtheria-Tetanus-Pertussis</td>
</tr>
<tr>
<td>EPI</td>
<td>Expanded Program on Immunization</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>HepB</td>
<td>Hepatitis B</td>
</tr>
<tr>
<td>HPV</td>
<td>Human Papilloma Virus</td>
</tr>
<tr>
<td>HTA</td>
<td>Health Technology Assessment</td>
</tr>
<tr>
<td>IRA</td>
<td>Internal Revenue Adjustment</td>
</tr>
<tr>
<td>JE</td>
<td>Japanese Encephalitis</td>
</tr>
<tr>
<td>LGU</td>
<td>Local Government Unit</td>
</tr>
<tr>
<td>MMR</td>
<td>Mumps-Measles-Rubella</td>
</tr>
<tr>
<td>MR</td>
<td>Measles-Rubella</td>
</tr>
<tr>
<td>NCD</td>
<td>Non-Communicable Disease</td>
</tr>
<tr>
<td>NCPAM</td>
<td>National Center for Pharmaceutical Access and Management</td>
</tr>
<tr>
<td>NEP</td>
<td>National Expenditure Program</td>
</tr>
<tr>
<td>NHI</td>
<td>National Health Insurance Program</td>
</tr>
<tr>
<td>NUVI</td>
<td>New and Underutilized Vaccine Introduction</td>
</tr>
<tr>
<td>OOP</td>
<td>Out of Pocket</td>
</tr>
<tr>
<td>OPV</td>
<td>Oral Polio Vaccine</td>
</tr>
<tr>
<td>PCV</td>
<td>Pneumococcal Conjugate Vaccine</td>
</tr>
<tr>
<td>PhP</td>
<td>Philippines Pesos</td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>Td</td>
<td>Tetanus-Diphtheria</td>
</tr>
<tr>
<td>THE</td>
<td>Total Health Expenditure</td>
</tr>
<tr>
<td>OPV</td>
<td>Oral Polio Vaccine</td>
</tr>
<tr>
<td>TT</td>
<td>Tetanus Toxoid</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>TRAIN</td>
<td>Tax Reform for Acceleration and Inclusion Act</td>
</tr>
</tbody>
</table>
**KEY MESSAGES**

**Overview**
- The Philippines has experienced high rates of economic growth by regional standards (5% annually), allowing for strong government investment in social programs.
- Economic growth is accompanied by a demographic transition characterized by an aging population and a rising burden of NCDs, both of which carry significant implications for population health needs.
- The Philippines includes more vaccines in its NIP than any of its neighbors, but is struggling with sustainable planning and declining low coverage rates.

**Immunization Financing**
- The budget for health flows into the immunization program through three channels. The DoH is responsible for procurement of vaccines for the NIP, and finances campaigns, updates the cold chain, and trains health workers as needed. Local government units cover all operational expenses for local facilities to deliver immunization services.
- The national immunization schedule is variable as some vaccines have been removed due to poor coverage performance.

**Key Findings**
- The limited engagement from PhilHealth, the national health insurance mechanism, in immunization presents opportunities to increase their role. The benefits package includes only immunizations associated with birth, although in practice this is complex and confusing to providers. PhilHealth’s large presence in the healthcare sector could potentially be leveraged for gain in immunization financing.
- High levels of decentralization have led to communication and collaboration issues between the two levels of government, benefitting the coverage issues the country is currently experiencing.
- The Philippines has successfully diversified the domestic revenue supporting the immunization program. In 2015, the NIP was allocated PhP 3.34 billion, of which 42% was funded from the sin tax incremental revenue for health. The sin tax has been instrumental in supporting the health and immunization budgets, allowing for multiple adoptions of new and underutilized vaccines into the immunization package.
- A tax on sugar-sweetened beverages with earmarked revenues for health is a new and emerging opportunity. Specific advocacy efforts to dictate which health issues the funds will support will be required to increase funding for new vaccines or activities to improve delivery performance.

- The Philippines does not currently have a NITAG to make recommendations for the immunization program, or a formal HTA body to produce the evidence to support recommendations. The development of either would have great benefits for evidence-based decision making in the program.
INTRODUCTION

The Philippines has made remarkable progress towards achieving universal health coverage for its population. Its national health insurance scheme, launched in 1995, has matured over two decades to expand population coverage, offer a comprehensive benefit package, give members access to a range of public and private providers, and evolve the way it pays for these services to maximize access and efficiency. Alongside its national insurance mechanism, the Philippines is a highly decentralized state with the Department of Health and local government units (LGUs) sharing often undefined responsibilities. The health landscape thus consists of three major players that often lack in collaboration and has resulted in some poor health outputs, including low immunization coverage rates.

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

The Philippines is a lower-middle income country that has experienced high rates of economic growth by regional standards, allowing for strong government investment in social programs like immunization. The annual rate of growth of the country’s gross domestic product (GDP) was on average 5.1% between 2000 and 2015 (Figure 1).¹ According to a recent World Bank report, while the Philippines’s GDP growth rate has mirrored regional trends for most of this period, it has exceeded the performance of other countries in the region, as well as that of middle income countries on average since 2011.² Despite a weak and challenging external environment, high rates of capital investment and surging domestic demand have contributed to the Philippines’s growth. The report predicts that significant improvements in macroeconomic stability achieved over the past decade, combined with low and stable inflation rates, prudent fiscal management, and comfortable levels of international reserves will likely result in continued robust economic growth in the future.

¹ World Bank (2017b).
² World Bank (2016).
The government’s commitment to reducing extreme poverty and income inequality has successfully resulted in a growing middle class that is likely to use its expanding purchasing power on healthcare. The extreme poverty rate decreased from 13.9% in 2000 to 8.4% in 2015. Although frequent natural disasters undermined household welfare gains, the government managed to mitigate their impact through various social protection programs, like a conditional cash transfer program that has accelerated income growth among the poorest households and enabled them to cover their basic needs. The income of poorer households grew more than the national average, thus reducing income inequality. Robust economic growth, combined with the government’s commitment to an inclusive development agenda, is expected to generate further gains in poverty reduction in the foreseeable future. The number of middle class households is expected to grow by 41.8% between 2015 and 2030, putting the Philippines among the top ten countries in terms of middle class expansion. These middle-class families are expected to experience a dramatic rise in their capacity for discretionary spending, which is likely to translate into increased spending on health goods and services, leisure activities, and education.

DEMOGRAPHIC TRENDS

The Philippines is undergoing a demographic transition characterized by increasing life expectancy and decreasing fertility, both of which carry significant implications for the population’s immunization needs. Economic growth, combined with improvements in public health, has led to steadily increasing life expectancy since 1960. The share of the population that is aged 65 years and older is projected to double from its share of 3.2% in 2000 by 2030 (table 1). Consequently, immunization across the lifespan, as well as a focus

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3 World Bank (2016).
on non-communicable diseases (NCDs), will grow in importance over the next decade and beyond. On the other end of the life cycle, increased uptake of family planning – the contraception prevalence rate tripled between 1973 and 2003 – has contributed to a significant decline in fertility rates over the past fifty years. The fertility rate is expected to decrease further by 2030, though it will remain slightly above replacement rates. Hence, even as the absolute number of children below the age of 14 years will rise slightly between 2015 and 2030, children below 14 years, as a share of the population, will decline, increasing the proportion and voice of the aged.

Table 1. Key Demographic Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1960</th>
<th>1990</th>
<th>2000</th>
<th>2015</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (million)</td>
<td>26.27</td>
<td>61.95</td>
<td>77.93</td>
<td>100.70</td>
<td>123.57</td>
</tr>
<tr>
<td>Population ages 0-14 (% of total population)</td>
<td>47.00</td>
<td>40.94</td>
<td>38.50</td>
<td>31.95</td>
<td>28.32</td>
</tr>
<tr>
<td>Population ages 65 and above (% of total population)</td>
<td>3.11</td>
<td>3.14</td>
<td>3.23</td>
<td>4.58</td>
<td>6.68</td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>57.81</td>
<td>65.29</td>
<td>66.68</td>
<td>68.41</td>
<td>70.47</td>
</tr>
<tr>
<td>Population growth (annual %)</td>
<td>3.35</td>
<td>2.54</td>
<td>2.14</td>
<td>1.56</td>
<td>n/a</td>
</tr>
<tr>
<td>Rural population (% of total)</td>
<td>69.70</td>
<td>51.41</td>
<td>52.05</td>
<td>55.63</td>
<td>53.66</td>
</tr>
<tr>
<td>Fertility rate (births per woman)</td>
<td>7.15</td>
<td>4.32</td>
<td>3.81</td>
<td>2.95</td>
<td>2.53</td>
</tr>
</tbody>
</table>


**HEALTH OUTCOMES**

While the Philippines has made significant gains in improving maternal and child health outcomes, it still has some ground to cover with respect to reducing infant and maternal mortality, and the burden of vaccine preventable diseases. The maternal mortality rate increased from 124 deaths per 100,000 live births in 2000 to 131 in 2009 and then decreased to 114 in 2015, which is still far from the SDG target of less than 70 deaths per 100,000 live births. Infant, neonatal, and under-5 mortality rates decreased slowly but steadily between 2000 and 2015 (Figure 2), and the country is not far from achieving the SDG targets for neonatal mortality (less than 12 deaths per 1,000 live births) and under-5 mortality (less than 25 deaths per 1,000 live births). However, the infant mortality rate is still high. In 2013, the number of deaths among children under the age of one was more than twice (4.1%) the number of deaths among children under five (1.8%). A number of death for children under 14 remain attributable to vaccine-preventable diseases.

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5 World Bank (2017b).
6 Ibid.
7 World Bank (2017b); United Nations (n.d.)
8 Department of Health (2013).
The continued need to invest in vaccines must be balanced with the other pressing health needs. While there is a high incidence of key communicable diseases (13 out of 17 neglected tropical diseases are endemic to the country), the prevalence of NCDs and associated risk factors are rapidly increasing. Between 1995 and 2015, the percent of DALYs associated with NCDs increased from 45.18% to 64.57%.\(^9\) Over the same period, communicable diseases dropped from 30.03% of DALYs to 16.07%.\(^10\) Therefore, the government’s current 6-year plan for the health sector emphasizes health needs associated with all life stages. The Philippines is also the third highest disaster-prone country in the world and the budget must be prepared for quick responses should the need arise.\(^11\)

**STRUCTURAL AND POLITICAL TRENDS FOR HEALTH**

Healthcare coverage and access through PhilHealth has served as a significant political platform for the past three administrations. Expanding health insurance coverage to the informal sector and the poor has also been a priority. Gloria Macapagal-Arroyo won re-election in 2004 with the promise to fully finance and enroll five million new poor households in PhilHealth. Benigno S. Aquino II won the presidency in 2010 with a campaign that promised to improve social services and achieve universal health coverage by 2015.\(^12\) In December 2010, the Department of Health’s Administrative Order No. 2010-0036, entitled “The Aquino Health Agenda: Achieving Universal Health Care for All Filipinos”, was signed. Moreover, one of the main health priorities of the Aquino

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\(^10\) Ibid.

\(^11\) WHO (2015a); Cabral, E (2016).

\(^12\) Ozaltin et. al (2015).
administration was to make vaccination programs free and accessible for the poor, especially the children and senior citizens that fall into this category. However, chief executives (mayor, barangay captain, provincial governor) at the local level have variable levels of prioritization of health. According to informants, the allocation of the LGU budget to health varies between 1%-9%, with little guidance or oversight from the central level.

**The central and local government units share responsibilities for governing the health system.** There are three levels of sub-national government, which are collectively referred to as LGUs: provinces and independent cities; cities and municipalities; and barangays, which are the lowest administrative unit – typically a village, district, or ward. The Department of Health (DoH) provides national policy direction and develops national plans, technical standards and guidelines on health. LGUs, the stewards of the local health system, were granted autonomy and responsibility for their own health services under the Local Government Code of 1991. They are thus responsible for their own budgets, setting their own targets, and for local delivery of health services. Provincial governments provide secondary hospital care, while city and municipal administrations provide primary care. Rural health units, created in the 1950s to improve access to health care, are owned and managed by municipalities. Barangay health stations are managed by rural health units or city health offices and deliver various vertical health programs, including the National Immunization Program.

**The establishment and growth of the National Health Insurance Program has brought the Philippines closer to universal health coverage (Box 1).** In 2013, 79% of the population was covered by PhilHealth. Its members were 40% from the formal sector, 17% from the informal sector, 16% poor households qualifying for the Indigent Program, 14% Sponsored members, and 13% other. Coverage has increased over the years and in 2015 82% of the total population was covered. The mechanism uses case-based payments, where each episode of care is associated with a package of services that are paid in a lump sum.

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13 Junio, JS (2016).
15 Ibid.
16 Honda et. al (2016).
18 Philippine Health Insurance Corporation (February 23, 2015).
The Philippines has a large and thriving private health sector that functions as part of a
dual system under PhilHealth. Nearly 60% of the country’s hospitals, mostly located in
urban areas, are privately owned. The private health sector is regulated by the DoH and
PhilHealth through a system of standards implemented through licensing by the DoH and
accreditation by PhilHealth. The private sector is contracted into PhilHealth and thus
entwined in public health service delivery. Moreover, the private sector has
representatives in various inter-agency technical advisory groups to the secretary of
health (e.g. national immunization committee, national infectious disease advisory
committee). Professional organizations, particularly medical specialty groups, also

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participate in certification systems and programs.\textsuperscript{20} The private sector is eligible for reimbursements from PhilHealth at the same rate as public facilities for the delivery of birth dose vaccines through the infant service package, but must arrange to pick up these two vaccines from public holding facilities. The DoH does not distribute National Immunization Program (NIP) vaccines to private facilities. This arrangement is under discussion however, with support from the Pediatric Society as well as the DoH for delivery of the NIP through private facilities.

**PhilHealth provides limited coverage on the immunization program, but could assume a larger role in the future.** PhilHealth was a large structural shift to a demand-driven health system, but as of today, only cover in-patient care, with a plan to roll out an outpatient coverage in the near future. Birth dose vaccines are part of the package of care for newborns and thus their delivery is reimbursed by PhilHealth at about US$10 (PhP 500). The first dose of these vaccines was included in the infant care package because the clinical protocol for essential newborn care requires that they be administered prior to discharge of the newborn from the delivery facility. Pneumococcal vaccination for the elderly is provided at a discounted price in hospitals for PhilHealth beneficiaries, thanks to a partnership with the manufacturer. Ten years ago, there was considerable dialogue about shifting all of the vertical programs over to PhilHealth. The arguments in favor of shifting programs were that they would be more accessible in the private sector and that PhilHealth offered a potential to improve the public sector through greater competition. The subsequent shifting of the TB program was considered successful.

**Box 2. Could PhilHealth Assume the Immunization Program?**

For PhilHealth to assume the entire immunization program, an extensive shift in the health budget would need to be undertaken. The DoH already pays a subsidy to PhilHealth of PhP 2,400 per family. If this rate was raised closer to PhP 3,000 per family, PhilHealth could potentially take on the immunization program.

PhilHealth representatives have stated that the Board and Benefit Development and Research Department of PhilHealth are considering the shift of immunization from a vertical program to inclusion in the essential benefits package. There is a general shift of support towards more outpatient services being covered by the benefits package.

Moreover, the DoH is receiving enough incremental revenues from the sin tax to cover the current NIP budget. These funds could be shifted over to PhilHealth’s control to cover the NIP. This transition, if taken on, would be gradual, with PhilHealth assuming vaccines across the lifespan in phases.

However, this change would require DoH to lose their full budget and procurement power, thus forfeiting much of the decision-making regarding the NIP. There are potential benefits to be gained in efficiency and incentives for delivery, but it could become a political fight.

\textsuperscript{20} Kwon S and R Dodd (Eds.) (2011).
DEMAND AND ACCESS TO HEALTH SERVICES

Utilization of health services in the Philippines varies considerably across population sub-groups. According to data from the 2013 Demographic and Health Survey, 11% of Filipinos sought medical care in the last 30 days before the survey. Of the 11% of Filipinos who sought care, 7% visited a public hospital or health center, while 4% went to a private facility. The proportion of the population seeking health services was higher in rural areas (12%) than in urban areas (9%). The use of public health facilities tended to be higher in rural areas, while private facilities were more commonly used in urban areas. The use of private health facilities, which provide better quality services, increased with economic status, from 1% among persons in the lowest wealth quintile to 7% among those in the highest wealth quintile. The poorest tend to use public rural health units and barangay health stations.

IMMUNIZATION ACCESS AND COVERAGE

The Philippines includes more vaccines in its NIP than any of its neighbors. The DoH provides free vaccines that protect infants and children from common vaccine preventable diseases through its NIP program (Table 2). The Philippines is a noted early adopter and prides itself as a leader in immunization access.

Table 2. National immunization schedule

<table>
<thead>
<tr>
<th>Antigens</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>At birth</td>
</tr>
<tr>
<td>HepB</td>
<td>At birth</td>
</tr>
<tr>
<td>DTP-Hib-HepB</td>
<td>6, 10, 14 weeks</td>
</tr>
<tr>
<td>OPV</td>
<td>6, 10, 14 weeks</td>
</tr>
<tr>
<td>IPV</td>
<td>14 weeks</td>
</tr>
<tr>
<td>Pneumococcal</td>
<td>6, 10, 14 weeks // adults over 60</td>
</tr>
<tr>
<td>Rotavirus</td>
<td>Minimum age of 6 weeks with a minimum interval of 4 weeks between doses; last dose no later than 32 weeks of age</td>
</tr>
<tr>
<td>Measles</td>
<td>9 months</td>
</tr>
<tr>
<td>MMR</td>
<td>12 months</td>
</tr>
<tr>
<td>HPV</td>
<td>9-10 years (in priority provinces)</td>
</tr>
<tr>
<td>Dengue</td>
<td>Primary school children (in limited areas)</td>
</tr>
<tr>
<td>Td</td>
<td>For older children and adults</td>
</tr>
<tr>
<td>TT</td>
<td>For pregnant women</td>
</tr>
</tbody>
</table>

21 Philippines Statistics Authority (PSA) [Philippines] and ICF International (2014).
22 Ibid.
23 Ibid.
24 Department of Health (n.d.).
The comprehensive NIP package is not matched by population coverage. Overall, immunization coverage rates are low for the region and slowly declining (Figure 3). Routine pediatric vaccines, both those given at birth and those delivered in multiple doses over time, are declining in coverage.\textsuperscript{25} Poor coverage rates have been associated with several issues, but the main underlying problem is lack of accountability within the decentralized system. The flow of information between the DoH and LGUs is weak. Distribution of vaccines is meant to be a pull system, based on local government requests, but a lack of data, and mistrust of available data, has defaulted it into a push system. Little consideration is given to current stock levels at individual centers and needs are rarely communicated or acted upon. Other problems have included global shortages (pentavalent) and supply chain issues (new distribution contractor), but a lack of accountability and communication within the system remains the fundamental issue.

### Table 3. The Philippine’s standings on international vaccination targets

<table>
<thead>
<tr>
<th>Goals of the Decade of Vaccines</th>
<th>Philippine’s Standing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero new cases of polio</td>
<td>Achieved</td>
</tr>
<tr>
<td>Eliminate Maternal and Neonatal Tetanus</td>
<td>16/17 regions have been declared MNT free</td>
</tr>
<tr>
<td>90% Coverage of DTP3 with no district less than 80% coverage</td>
<td>At 60% coverage in 2014, Philippines is still short of this target</td>
</tr>
<tr>
<td>Eliminate Measles</td>
<td>The Philippines still experiences over 100 measles cases annually</td>
</tr>
<tr>
<td>Eliminate Rubella</td>
<td>The Philippines still experiences over 100 rubella cases annually</td>
</tr>
<tr>
<td>Introduce one or more new or underutilized vaccine (NUVI) since 2010</td>
<td>The Philippines has introduced multiple NUVIs since 2010</td>
</tr>
</tbody>
</table>

\[\text{Achieved} \quad \text{Moderate Achievement} \quad \text{Low Achievement}\]


\textsuperscript{25} Ibid.
Autonomy at the local level and varying local priorities have resulted in significant inequities in immunization coverage rates across geographical areas and income quintiles. In 2008, national coverage was 70% among the lowest quintile and 84% in the highest quintile. In 2011, children in poor households (88.2%) were less likely than those in non-poor households (92.6%) to have been vaccinated against the six preventable childhood diseases. Approximately 70% of LGUs have immunization coverage rates lower than the national average, meaning the national average is positively skewed by a minority of LGUs in urban centers. In general, the lowest coverage rates are in difficult-to-reach island provinces, mountainous areas, and areas of armed conflict. Informants also reported high variability in the allocation of health budgets by the LGUs, ranging from 1-9% allocated to health.

Immunization services in the urban areas is split between public and private, whereas in the rural areas its predominately through the public system. The bulk of immunization services in rural and peri-urban areas are provided free of charge at barangay health stations. Delivery is done through community health workers or midwives who administer vaccines in communities and are linked to the barangay health stations. Informants reported that in urban areas, 10-15% of immunization services are accessed through private providers (pediatricians) at full cost to the patient.

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27 Philippines Statistics Authority (October 29, 2013).
HEALTH FINANCING AND IMMUNIZATION

IMMUNIZATION COSTS

The immunization program in 2015 cost US$72,522,957, of which US$67,969,032 was spent on vaccines.28 This provides about US$4.5 million for program costs, including cold chain maintenance, incentives, communications, etc. According to the government reported data, US$65,929,961 of public funds went towards the total routine costs, about 2% of the health budget.29 With new additions to the schedule, this number has surely risen since. However, with costs being incurred by three separate purchasing agents and poor communication between central and local governments, these numbers are only estimates.

Figure 4. Government Expenditure on Routine Immunization and Total Program Costs (US$)

Source: WHO (2017b).

GENERATION

In addition to tax revenue, two key reforms have diversified how the government generates funding for the health sector. The first was the launch of PhilHealth in 1995, making health insurance mandatory for all Filipinos. Insurance contributions from informal sector households, those who take part in the informal economy that is neither taxed nor regulated by the government, represent a new revenue stream for the government, even if it is small in practice (as of 2013, informal sector households represented only 17% of PhilHealth members).30 The second key reform, in terms of generating additional resources for health, is the Sin Tax Reform Act of 2012, which allocates 85% of the

28 WHO (2017b).
29 WHO (2017b); Department of Budget Management (2017).
incremental revenues generated from taxes on tobacco and alcohol for health programs.\textsuperscript{31} 57% of the DoH’s budget was generated from the sin tax in 2016.\textsuperscript{32} The tax law fixes revenue to three buckets: insurance premium subsidies for the poor, public health programs (how much goes to which program is determined annually by the DoH), and infrastructure updates, though these are soft earmarks. The implementation of the tax was phased over five years, so 2017 will be the first year the full tax will be applied to all tobacco and alcohol products.

**Figure 5. Increase of Sin Tax Revenue and Impacts on PhilHealth and DoH Budgets (PhP)**

![Graph showing increased sin tax revenue and impacts on PhilHealth and DoH budgets (in billions of Philippines Pesos).](image)

Source: Department of Health (2016).

**The reform on sin taxes had a positive impact on the NIP.** In 2015, the NIP was allocated PhP 3.34 billion, of which 42% was funded from the sin tax incremental revenue for health.\textsuperscript{33} In 2016, out of the PhP 69.40 billion sin tax incremental revenue, 3% went to the NIP, the highest share among the Millennium Development Goals (MDGs) programs.\textsuperscript{34} Overall, the highest share of the sin tax incremental revenue went to the PhilHealth premium subsidy of indigent families and for senior citizens not yet covered.\textsuperscript{35} PhilHealth generally receives 80% of the funds earmarked for health, with the other 20% going to the DoH. Other earmarking efforts have been undertaken, including earmarks on lottery funds and taxes on the Philippines Amusement and Gaming Corp.\textsuperscript{36} These efforts were unsuccessful in benefitting immunization, but a fund was created for a water sanitation

\textsuperscript{31} Department of Health (2016).
\textsuperscript{32} Ibid.
\textsuperscript{33} Department of Health (2015).
\textsuperscript{34} Department of Health (2016).
\textsuperscript{35} Ibid.
\textsuperscript{36} Lopez, M (October 2, 2015).
and hygiene program in hopes of reaching the target on that sustainable development goal.37

**With the drastic and steady increase in incremental tax revenues in 2016, the DoH had funding resources to directly support PCV, Dengue, HPV, and MR, external to the NIP budget.** In 2016, the DoH financed new vaccines financed from the sin tax revenue, published in the annual report: 3 doses of PCV administered to 613,887 infants, dengue vaccines administered to 489,003 children aged 9 years old and above at public schools, Human Papillomavirus (HPV) vaccine administered to 302,478 females aged 9 years old and above, measles-rubella vaccine administered to 1.3 million grade 1 students and 1.2 million grade 7 students, tetanus-diphtheria vaccines administered to 1.6 million grade 1 students and 1.2 million grade 7 students.38 Most of these NUVIs were introduced through school-based campaigns, which were funded by the DoH, but overseen by the Expanded Program on Immunization (EPI) unit.

**Box 3: The Sin Tax (Earmarked for Health)**

Tobacco, prior to the 2012 reform, was taxed based on the price of each pack (20 cigarettes). Companies, both foreign and domestic, had varying tax percentages, based on legacy status and other preferential loopholes, that created a favorable environment for longstanding companies in the Philippines and a closed market to new tobacco companies. Companies attempting to enter the market were subject to the full tax, and thus were much less competitive on price.

The sin tax reform was passed in 2012 after efforts began in 1997 and made the tax on tobacco and alcohol a fixed price tax, equally applied to all companies. The fixed tax rate was set at 30 Pesos, with a 4% increase per year for inflation. Between 2012-2017 (5 years) the fixed tax was phased up, so each year the tax revenues increased. As of 2017, the fixed price is fully implemented/enforced. The health advocacy groups are continuing to lobby for an increase (up to 60 pesos) with the 4% inflation raise each year.

PhilHealth subsidies for the Indigent Program are financed by the 2013 expansion of sin taxes on alcohol and tobacco. According to the 2012 Health Law, revenues for sin taxes in the previous fiscal year will determine the share of the population to be subsidized each year in the Indigent Program (e.g. 30-35% of the population in 2014). Sin tax revenues are scheduled to increase until 2018, allowing the subsidy to cover a larger share of the population each year. The sin tax incremental revenue for health in the 2016 DoH budget comprises 57% of the total budget.

Despite the introduction of the PhilHealth national health insurance scheme and its promise of financial coverage, out-of-pocket payments are still a major source of revenue for health. Government health expenditure accounted for 20% of total health expenditure (THE) in 2014, down from 48% in 2000.39 Local and central government contributions to this amount are about half and half. Within that, PhilHealth accounted for

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38 Department of Health (2016).
40% of government health spending and 14% of THE in 2014. Donor resources account for a modest share of THE in the Philippines at 1.4% in 2014, and are unlikely to increase as the economy continues to grow. Hence, private health spending, which includes both out-of-pocket payments (OOP) and private health insurance, accounts for nearly two thirds of THE (Figure 6). OOP as a share of THE was 54% in 2014, up from 40% in 2000. This is a remarkable increase given the expansion of PhilHealth during this period. Limits to the benefits package play a part in this. A pneumococcal vaccine is available to PhilHealth beneficiaries, but they must pay for it out of pocket at a discounted price. Though the burden is still on the consumer, this partnership between the vaccine manufacturer and PhilHealth offers insights into potential public-private partnerships to be pursued.

Figure 6: Resources for Health by Source


Additional resources may be earmarked for health under the new sugar sweetened beverages tax. Taxation of sugar sweetened beverages at US$0.20 per liter is currently being considered by the legislative branch with a positive outlook. The TRAIN bill has already passed the House and the Senate will vote on it in October/November of 2017. The TRAIN bill includes new taxation on petrol, sugar sweetened beverages, vehicles and other luxury items. Advocates are trying to also include reforms to the sin tax into the TRAIN bill so that the sugar sweetened beverages, tobacco, and alcohol taxes for health will be on the same bill. The combination with the sin tax reforms will aid in the likelihood of this bill promoting public health rather than simply generating revenue for the government. Earmarking for health promotion and child health is being lobbied by the WHO and other prominent clinical societies. The additional revenue would likely be used to increase PhilHealth’s budget, aiding in the expansion of the benefits package.

40 Ibid.
41 Ibid.
42 WHO (2017a).
44 Philippines Health Insurance Corporation (December 5, 2013).
The Philippines has witnessed a significant increase in total health expenditure over the past decade and a half, though increases in government health spending have been modest. The, as a share of GDP, increased steadily from 3.21% in 2000 to 4.71% in 2014.\textsuperscript{45} As figure 7 shows, the government budget allocated to health, as a share of GDP, increased modestly from 1.53% in 2000 to 1.61% in 2014.\textsuperscript{46} General government health expenditure, as a share of total government expenditure, was similarly stable during this period, fluctuating in the 8-10% range.

**Figure 7. General government health expenditure (2000-2014)**


The central budget preparation process influences both what resources are available for health centrally and locally. Every year, around late February to the middle of March, the annual process of developing the DoH’s budget starts with the issuance of the budget call by the Department of Budget Management (DBM). This informs national government agencies to start formulating their budgets for the year. The budget ceilings issued by DBM are based on available funds in the treasury and projected government income for the year. The DoH and other line agencies prepare annual budget proposals based on these set ceilings, which are consolidated into a national expenditure program (NEP) that is submitted to congress. The congress converts the NEP into a general appropriations bill which must be passed by both houses.\textsuperscript{47} The legislative branch approves the annual budgets of national health agencies and institutions.\textsuperscript{48} Members of Congress can also use their allocation from the Priority Development Assistance Fund, a discretionary

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\textsuperscript{45} WHO (2017a).
\textsuperscript{46} WHO (2017a).
\textsuperscript{47} Kwon S and R Dodd (Eds.) (2011).
\textsuperscript{48} Ibid.
development fund, to finance small-scale infrastructure and community health projects in their constituency. The DBM also develops individual block grants to be transferred to LGUs, known as internal revenue allotments (IRA). The size of these blocks is dependent on LGU population size, land area, and locally generated revenue.

**Local governments have full autonomy over how to budget and utilize their central block transfers.** LGUs prepare strategic five-year health plans focusing governance and financing of health programs. These are reviewed by the DoH and then further revised locally based on the DoH’s suggestions. Development partners utilize these plans prior to providing grants and technical assistance in public health programs of some LGUs which they choose to support. In addition to the IRA, LGUs aggregate health funds from all sources, such as income from user fees, PhilHealth capitation payments and reimbursements, and grants from external sources. In areas where there is an existing province-wide or city investment plan for health, the annual budget is synchronized with the plan. The annual budgets are then locally formulated and passed by respective LGU legislative councils.

**The budget for health flows into the immunization program through three channels (Figure 8).** The DoH is responsible for the procurement of vaccines for the NIP and their distribution to facilities. The distribution is overseen by the Research Institute for Tropical Medicine, but is outsourced to a private contractor. The DoH also finances campaigns, updates the cold chain, and trains health workers as needed. LGUs cover all operational expenses for local facilities to deliver immunization services through locally generated revenue and centrally transferred IRAs. This differentiation of roles between central and local governments splits the costs of routine immunization at about half and half. Overlapping both of these roles, PhilHealth inputs financing by reimbursing the birth doses of vaccines through its infant care package. The roles are not always clear and the flow of funds are difficult to follow. The recent DoH regulation hopes to improve this setting.

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49 Kelekar et. al (2013).
50 Kelekar et. al (2013).
51 Kwon S and R Dodd (Eds.) (2011).
NEW AND UNDER-UTILIZED VACCINES SCALE UP IN COUNTRY

There is a high demand for NUVIs in the central government which has resulted in high levels of adoption, often with no sustainable financing plan. Nearly all new vaccines are
quickly adopted into the NIP. This is often done without consideration for the sustainability of the adoption. Steep increases in funds from immunization due to new sin tax revenue left the EPI unit with additional resources and no plan for how to spend them. This resulted in some hasty introductions before proper planning could be carried out and analyzed to ensure that the system was prepared. This issue has roots in the lack of a NITAG or formal HTA process in the Philippines. No formal body exists to undertake the necessary research to make evidence-based recommendations and plans. A dengue vaccine was introduced quickly after its market entry in 2015 with limited financial planning. It was removed from the DoH budget in 2016 and funded through a supplementary stream of financing from the DBM. In April of 2017, it was concluded that children who had started would finish their doses of the vaccine, but the program was not be expanded.

**INTRODUCTION PROCESS**

The vaccine introduction process in the Philippines is often political. Certain introductions have previously been implemented without transparent decision-making or planning, leading to vaccines entering and exiting the national schedule due to poor roll-outs and political scandals. Though health technology assessments (HTAs) are a policy issue of interest to the Philippines, the process is not very formalized. HTAs are currently housed within the National Center for Pharmaceutical Access and Management (NCPAM), but there is no official institution responsible for them and they are thus implemented in an ad-hoc manner. Previous partnerships with HITAP in Thailand have resulted in assessments of a couple of vaccines.

LGUs have the autonomy to introduce vaccines locally, but often do not have the fiscal capacity to do so. There is precedent for LGUs with a wealthy constituency adopting Food and Drug Administration approved vaccines in their local facilities, even if they are not part of the NIP. This can take place either as a pilot, an early adoption of a new vaccine or the procurement of a different brand than what is included in the NIP to cover shortages.

**DISCUSSION OF IMMUNIZATION FINANCING IN TRANSITION: KEY TRENDS, AND TAKEAWAYS**

The sin tax has been extremely successful in generating revenue for expanding the immunization program, but the fragmented system is leading to poor program performance. Dropping coverage rates promulgates the impression that the system cannot handle such a comprehensive schedule. There is already backlash against allocating sin tax revenue for immunization because it has traditionally been used to adopt additional vaccines. Continued poor performance on coverage rates will increase the difficulty to advocate for sustained immunization finance as the value of the program drops in the country. A main driver of the poor performance is the fragmentation between the Department of Health and LGUs. Working to increase collaboration and communication between these two levels of government in managing the program could go far towards increasing coverage and mitigating the risk to immunization financing.

Though the financing of introductions has been prioritized, transparency around the prioritization process has been minimal. The Philippines has introduced a number of
vaccines over the years with the help of sin tax incremental revenue. The process that leads to the introductions, and why certain vaccines are prioritized, is not well documented, regulated, or understood by external stakeholders. Much of the confusion is connected to the lack of any advisory group, or a NITAG, or the extremely limited utilization of health technology assessments. There is room to improve the prioritization processes through transparency and increased use of data in decision-making. Stakeholders interested in a more predictable, evidence-based, and transparent process for prioritization and vaccine introduction can encourage this shift through the establishment of a NITAG and more regimented use of HTA.

PhilHealth has minimal financial or implementational reach in the immunization program, but should be engaged. Historically, PhilHealth has only been part of the immunization program though the reimbursement of vaccine delivery to infants at the time of birth. PhilHealth as a purchaser is conservative in its reach, both in the extent of the benefits package and reimbursement rates. However, the purchasing power of the institution is growing, and with a high level of popularity amongst the citizenry, there may be room for further engagement to the benefit of the immunization program. The dialogue must begin now to pursue this path. There are additional vaccines for later in the life cycle that can still be made accessible to Filipinos through public funding. If PhilHealth is to be more involved, this could be an entry point to discussions.
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Available at: www.dbm.gov.ph/?page_id=16451.


