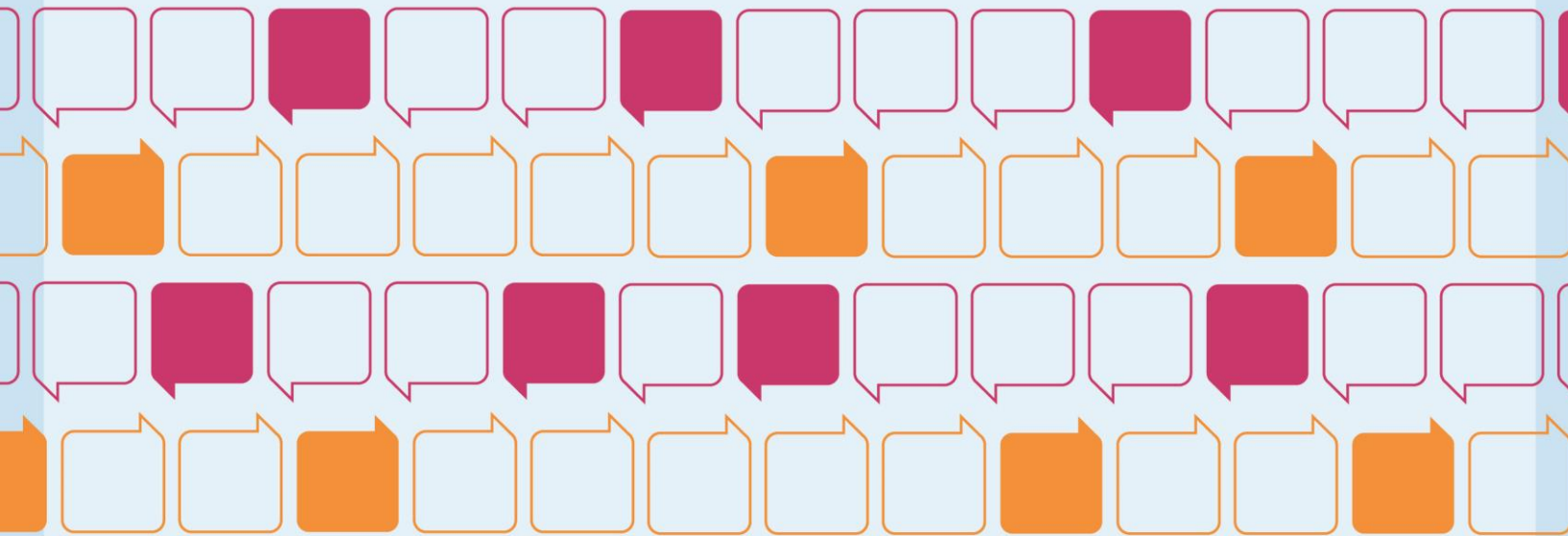


WORKSHOP REPORT

Immunization and National Health Insurance

Tangerang, Indonesia
July 2, 2019



Introduction

Many LNCT countries have introduced national health insurance (NHI) systems in their move towards Universal Health Coverage, while others are planning to introduce NHI. LNCT countries identified the issue of how immunization programs adapt to and align with national health insurance as a priority for LNCT support. In response, the Learning Network for Countries in Transition (LNCT) organized a one-day workshop on Immunization and National Health Insurance with the participation of seven country delegations. The seven countries at the workshop - Georgia, Ghana, Indonesia, Lao PDR, Nigeria, Sudan, and Vietnam - were invited because they all identified national health insurance as a priority topic for them. Delegates included a mix of staff from Ministries of Health, Finance, and National Health Insurance offices. The workshop took place on July 2, 2019, immediately preceding the main LNCT network-wide meeting, which ran from July 3-5, 2019. The goals of the workshop were to:

- Help country teams gain an understanding of their country's arrangements for national health insurance and how the immunization program fits in compared to other country systems.
- Identify how their systems are changing and potential risks and opportunities for immunization program functions.
- Prepare countries to argue for how immunization functions could best be handled, using global evidence.

This report summarizes the discussions during the meeting. Annex 1 contains the meeting agenda. Annex 2 includes the list of country delegations and facilitators. Links to the PowerPoint presentations from the meeting are provided below.

What we mean by National Health Insurance

National health insurance refers to a way of organizing health financing that relies completely or heavily on public funds (including earmarked payroll taxes, other dedicated taxes, and budget transfers). It pools risks and defines specific entitlements for those covered, and financing of services is separated from provision. Box 1 provides definitions of related key terms and explains why we are using the term “national health insurance” over “public health insurance” or “social insurance.”

Snapshot of National Health Insurance and Immunization: Country Experiences

Country experiences ranged from **Nigeria**, where national health insurance is still quite immature with very limited population coverage (a voluntary program for federal workers, and immunization is in the benefits package), to **Georgia**, where coverage of NHI is universal. Table 1 provides a snapshot of where the seven countries are in the development of NHI and its relationship to the immunization program.

Immunization services are included in the health insurance benefits package in **Georgia**, and services are delivered almost entirely by private providers contracted by the NHI agency. Immunization services are included in the capitated payments for primary health care; the government delivers vaccines and injection supplies to providers separately.

In **Indonesia**, immunization is also in the health insurance benefits package. The government procures vaccines centrally and distributes them to providers. Immunization is bundled into the JKN capitated payments to both public and empaneled private health facilities, but there is some confusion over whether all providers are responsible for immunization service delivery and whether insured individuals are entitled to free immunization (for national immunization program (NIP) vaccines) at empaneled private

providers. These private providers are permitted to charge a fee for the injection services for NIP vaccines.

The benefits packages in other countries focus on curative care and exclude immunization, which continues to be funded directly through the MOH budget. In these cases, the government provides immunization services through its public delivery network. In **Ghana**, the MOH provides services, but the National Health Insurance Authority contributes funding for vaccine procurement. This arrangement can generate problems because the National Health Insurance Authority is not accustomed to vaccine procurement cycles and may not have available funds at the time of vaccine payments. The MOH has faced budget cuts and is experiencing many challenges in adequately funding service provision.

Similar to Ghana, immunization services are not included in the benefits packages in three other countries -Lao PDR, Vietnam, and Sudan - but country delegations indicated that there is some discussion about the possibility of including them in the package with other preventive activities.

National Health Insurance: Key Concepts and Issues

The workshop opened with an [overview presentation](#) by Cheryl Cashin and Annie Chu on national health insurance systems. There are many ways to organize the health system in the move to Universal Health Coverage. One way is through a traditional budget-funded system, where the health system is financed through the government budget and run by the Ministry of Health, with services, including immunization, delivered through a network of public providers. **Immunization programs are typically described and understood within the context of traditional budget-funded systems.** Although this can be an effective approach to achieve Universal Health Coverage, it was not the focus of the workshop as all countries participating in the workshop have moved to more mixed systems, with one or more national health insurance systems established, or plans in the works for such systems. The objective of the meeting was to better understand where countries are in the evolution of NHI systems and key considerations of how immunization program functions might best fit in as these systems evolve.

National health insurance may be established to inject additional resources into the health system, to create explicit commitments to the population in terms of service benefits, to introduce a purchaser-provider split, and/or to increase flexibility in the use of funds to improve efficiency and quality. While national health insurance systems bring the expectation of increased funding for the health sector, especially if a dedicated funding stream is created for health insurance (such as from a Value-Added Tax, or VAT, or employer/employee contributions, or a tobacco tax), even these dedicated funds can be offset by reductions in other parts of the health budget. The Ministry of Finance may see the increase from the dedicated funding stream and make cuts elsewhere. Even when dedicated funds provide robust funding stream for the NHI system, budget pressures often emerge, particularly when the benefits package is overpromised relative to revenues or when provider payment incentives encourage inefficient service utilization. Both Ghana's and Indonesia's health insurance systems are under tremendous budget pressures at the moment.

When national health insurance is created alongside a budget system, there can be fragmentation in financing and confusing payment incentives for providers. Sometimes there is an over-emphasis on curative services, both in the benefits package and in what providers deliver, and public health and prevention activities can be crowded out. This can be exacerbated when there are multiple national health insurance systems serving different populations with different benefit packages. Some population groups, services, and functions might "fall through the cracks." Preventative services may be left out of the benefits package to allow more direct government control.

The purchaser-provider split creates an opportunity to be strategic about what services to buy, from whom to buy them, and how to buy the services. The insurance agency can create service packages and enforce service delivery standards. All of this requires information systems to support these activities and to monitor quality. The structure of provider payment systems is key to what providers have the incentive to deliver. Fee-for-service payment incentivizes providers to deliver more services and to minimize their costs for the services. Capitated payment systems, based on number of enrolled persons per provider, give providers the incentive to increase enrollment and minimize the costs per person. These inherent incentives are important and need to be balanced, but just as important is setting the payment levels adequate to the service expectations and the costs of services.

In sum, many countries have chosen to use national health insurance as a way to organize health system functions to achieve Universal Health Coverage. National health insurance can bring benefits, but it can also bring unintended consequences, especially for immunization and other public health programs which may or may not be in the benefits package but may “fall through the cracks” for various reasons. As national health insurance is developed, it needs to be monitored and evaluated closely to identify unintended consequences and make policy adjustments.

Immunization and National Health Insurance

Following the national health insurance overview, Grace Chee gave a [presentation](#) on how key immunization functions could be handled as national health insurance is introduced and expanded. There were several design issues for consideration, including:

- Will immunization services be in the national insurance benefits package, or funded and provided more traditionally by the MOH, or both?
- Who will be responsible for vaccine financing, procurement and distribution?
- What entity or entities will be responsible for other key national immunization program functions, such as policy setting, ensuring quality, training? Note that functions such as training and monitoring/quality assurance would need to be approached differently if immunization services were in the benefits package, under a purchaser-provider split.
- Will providers understand their responsibilities, and will the population know where to seek services, if immunization services are in the benefits package?
- Will provider payment mechanisms be designed to provide sufficient incentives for immunization?
- And, how might all this be handled in a situation of multiple insurance pools?

As described earlier, there was a great deal of experience to share around these issues at the workshop, as countries had models ranging from where the MOH/provincial governments are carrying out all immunization functions including service delivery (Ghana and Vietnam), where immunization services are in the benefits package and district governments are also providing services (Indonesia), to where immunization services are almost completely provided under the benefits package of the national health insurance and there is no other separate delivery system (Georgia).¹

Each design issue raises secondary challenges. For example, if immunization services are included in the benefits package, will the entire population be covered? Are groups not entitled to insurance at risk of lower coverage? How will new vaccine introductions be evaluated? Might insurance financing offer more flexibility and scope for immunization requirements? If immunization services remain the responsibility of the MOH, as the budget for insurance grows, how might the MOH budget be impacted? Might immunization services be crowded out at public facilities by attention to NHI-reimbursed services (unless there are payments for immunization)? Is the system putting an extra burden on the population to seek

¹ With the exception of village health posts in very rural areas.

care at different locations? Are inefficiencies being introduced in service delivery if the population gets curative care from providers financed by the insurance scheme and immunization at public facilities?

In terms of program functions like vaccine procurement, policy setting, and quality assurance, it is important to flesh out what entity is responsible and how the functions might need to change. In some settings, the national health insurance agency carries out vaccine procurement (Thailand), in others, the national health insurance agency relies on the MOH to conduct procurement. For vaccine procurement, there is a strong argument to keep the function centralized, with an entity that has the specialized skill in working with vaccine forecasts and carrying out the whole vaccine procurement cycle.

Recognizing the public health importance of immunization, many insurance systems that include immunization services in the benefits package have tried to introduce incentives for providers to achieve high immunization coverage in payment systems, such as:

- Performance bonuses on top of capitated payment for primary health care
- Performance bonuses based on immunization coverage rates
- Additional fee-for-service payments per vaccine delivered

While these approaches can create important signals about the priority of immunization and additional financial incentive, they often do not lead to significant changes in immunization coverage rates and require strong information and monitoring systems. Getting the underlying payment systems right (adequate funding for capitated payments, for example) and submitting feedback to providers on their achievements, may be more effective than more sophisticated incentives.

Grace Chee summed up the presentation with a few observations. There is no one “perfect” model. The MOH may need to work with broad design decisions around national health insurance and try to tailor policies that make sense for immunization. Learning is important as the system evolves over time, in order to identify problems and adjust policies as needed. It is essential to have clarity on “who does what” and the population must understand where they can receive services.

Immunization and Health Insurance in Mexico: Lessons from a Fragmented System

Adolfo Martinez Valle, former Director of Performance Evaluation, Ministry of Health, Mexico [gave an overview](#) of how immunization is handled in Mexico, where there are six separate national insurance institutions that are vertically integrated, serve different populations, and provide different benefits packages. Entitlements in the five insurance schemes are based on employment status. The sixth, “Seguro Popular”, introduced in 2003, covers both those in the informal sector and the poor who do not have coverage under the other schemes.²

The Mexican government followed the introduction of “Seguro Popular” with significant budget reallocation towards health, allowing per capita spending to rise dramatically for those under “Seguro Popular,” although it is still less than per capita spending under the employment-based insurance schemes. “Seguro Popular” has not managed to address the immunization coverage disparities across Mexican states, which ranged from 64% to 95% in 2017. This is, in part, due to disparities in the distribution of health infrastructure across Mexico.

² The other schemes covered formal sector workers and their families (IMSS), government workers and their families (ISSSTE), oil sector workers and their families (PEMEX), and schemes branches of the military.

Vaccine procurement is handled separately across insurance schemes. The schemes do not take advantage of pooled procurement, and they do not use the PAHO Revolving Fund (although that may change in near future).

Adolfo closed his presentation by offering the following lessons:

- Multiple insurance schemes introduce fragmentation, but they have a long history and are a political reality in Mexico. Integration across the schemes, however desirable from an efficiency and equity point of view, would be very difficult without a strong consensus, political will and strategic plan. This has impacted the effectiveness of vaccine procurement and distribution and overall program efficiency.
- There are still significant disparities in immunization coverage across states in Mexico. Mexico needs to invest in a better information system to plan, monitor, evaluate, and adjust policies.

Discussion

The workshop included time for discussion within country teams and across specific issues. This section summarizes some of the key points from the rich discussions that were held in the afternoon.

- National health insurance is not a goal in and of itself, there are many ways to organize health financing to achieve Universal Health Coverage.
- Social insurance does not necessarily mean additional funding for immunization; but it would alter the flow of funding for immunization which may provide reliability while also adding complexity.
- There is no “one size fits all” approach to national health insurance, broadly speaking, and to national health insurance and immunization. Some of the questions about immunization and NHI also are relevant to other disease control programs.
- National health insurance offers some opportunities, such as more options for purchasing services strategically, but there are also some risks, particularly for priority public health programs such as immunization. Achieving the benefits and minimizing the risks requires strong NHI policy design and implementation, with engagement from stakeholders including immunization policymakers and program managers.
- Information systems and data are critical for monitoring intended and unintended impact and guiding policy decisions.

Issues to consider when determining whether immunization services should be integrated into the benefits package:

- When thinking about financing immunization within national health insurance, it's important to recognize this does not need to be an all-or-nothing decision. Certain functions may shift to health insurance, while other functions like policy and standard setting, can remain covered by the MOH
- If the current system (of MOH provision of immunization services) is working well, then consider the added value and risks of including immunization in national health insurance to avoid introducing unnecessary complexity into an important public health function.
- If immunization services are in the benefits package, the government needs a back-up plan to ensure the uncovered population can receive immunization services for free until near 100% insurance coverage is reached, and that both health providers and the population are aware of this entitlement. The government needs special provisions for supply-side gaps and services for remote and vulnerable populations; national health insurance providers might have challenges in reaching hard-to-reach areas, while the MOH can employ other strategies to reach these areas.
- Health legislation may also be important, both in terms of making immunization compulsory and/or a human right and requiring that national health insurance cover preventive services.

- In some countries, national health insurance requires co-pays. If immunization is included in the benefits package, and co-pays are applied, it could discourage immunization.
- Even where immunization services are included in the national health insurance benefits package and there is strong commitment to immunization (such as in Georgia), program elements can get lost in the transition, especially for elements such as communications and advocacy.
- Immunization is a public good and governments seek to have very high coverage. The coverage of national health insurance needs to be considered when evaluating whether immunization services should be in the benefits package. The risks to immunization programs are greater (and probably outweigh the benefits) at low levels of national health insurance coverage.
- National health insurance may not actually result in a significant increase in health resources. It could be risky to make immunization dependent on a scheme that may have increasing budget constraints over time. That said, if immunization is outside of the insurance scheme, remaining with the MOH, it could still be impacted if the MOH budget is cut to reallocate resources to the insurance scheme.
- Several participants noted that outreach services for immunization would not easily fit into national health insurance service provision. This is a concern particularly for Lao PDR and Sudan. However, it is not impossible to structure a benefits package and purchasing arrangements that include outreach services for immunization and a way to pay for and incentivize them.
- Federated systems can be complex as each state may have its own laws and regulations governing health insurance.
- Incorporating immunization into a fragmented health system with multiple insurance pools is quite risky as it may lead to inefficiencies and differential access across subgroups of the population.

Provider payment challenges for immunization services:

- Mixed payment mechanisms seem very appealing for immunization: capitation with fee for service or some sort of performance incentives.
- With fee for service or performance incentives, there will be a need to have an independent verification component for actual service delivery.
- Focusing on financial incentives alone will not ensure high immunization coverage rate: recognize the importance of a “culture of immunization” and of feedback to service providers.

Next Steps

In the evaluations, participants indicated that the workshop was very informative and relevant to their work. Comments included: “The most helpful aspect was learning from other country challenges”; “Meetings on this issue should be held regularly”; “It is wise to incorporate the NHI and National Immunization Program together in the meeting”; “Please organize this meeting again”; “The presentations were very helpful as was the free flow/exchange of information among country participants.”

Participants found the presentation on lessons from Mexico very interesting as well as experiences from the other countries at the workshop (Georgia and Ghana experience mentioned in particular in the evaluations). LNCT Network Coordinators will be reaching out to country delegations to define the additional activities that LNCT can facilitate within this workstream. Follow-up activities may include webinars on specific country experiences or briefs and information products on specific issues relating to the topic.

Table 1. Snapshot of Immunization and National Health Insurance

Country	Year national health insurance established/ current coverage/is immunization in the package?	Responsibility for immunization functions	NHI payment mechanisms for immunization
Georgia	<p>Universal coverage introduced in 2013 under the Social Services Agency (SSA), Ministry of Labor, Health and Social Affairs. Entire population covered.</p> <p>Immunization included in benefits package.</p>	<p>National Center for Disease Control and Public Health is responsible for overall NIP national functions, including vaccine procurement and distribution.</p>	<p>Immunization services are bundled into the capitated payments to private primary health care facilities (there is also very limited public sector provision). Vaccines and injection supplies are provided by the government.</p>
Ghana	<p>National Health Insurance Scheme (NHIS) was introduced in 2003. Funded by a portion of Ghana’s VAT (value added tax).</p> <p>About 41% population coverage in 2015.</p> <p>Immunization excluded from benefits package.</p>	<p>The MOH is responsible for the NIP. The MOH provides financing for the public delivery network, where immunization services are provided. The MOH budget has been cut and funding is highly constrained. Vaccines were previously funded through the MOH budget, but currently NHIS is also responsible for funding for vaccines.</p>	<p>Not applicable, immunization is not in benefits package.</p> <p>Of note, public facilities are relying more and more on claims payment from the NHIS for curative care. Concerns that curative care may be crowding out preventive services such as immunization.</p>
Indonesia	<p>In 2014, several insurance schemes consolidated into the Jaminan Kesehatan Nasional (JKN).</p> <p>JKN coverage reached 81% at the beginning of 2019 with universal coverage the ultimate aim.</p> <p>Immunization is included in the JKN benefits package. At public health facilities, anyone can obtain free immunizations. At contracted private facilities, a JKN card is required for free immunization (for private facilities that are not empaneled JKN providers, the government still supplies vaccines for free but the facility can charge consultation fees).</p>	<p>The central government is responsible for procuring vaccines and carrying out other national level functions. District governments are responsible for service delivery.</p>	<p>JKN contracts with public and private facilities. JKN pays a capitated fee to primary health care centers based on number of JKN beneficiaries enrolled there. Immunization is bundled into this, but there is some lack of clarity on roles and responsibilities.</p>

Country	Year national health insurance established/ current coverage/is immunization in the package?	Responsibility for immunization functions	NHI payment mechanisms for immunization
Lao PDR	<p>Multiple NHI Schemes: National Social Security Fund-SASS for government employees and their dependents; National Social Security Fund-SSO for formal sector workers; and several other funds. The National Health Insurance, established in 2016, will integrate the Health Equity Fund, the Community-Based Health Insurance, and the Free Maternal, Neonatal and Child Health Program to cover the informal sector.</p> <p>Fragmentation causes confusion and duplicative administrative structures.</p> <p>Coverage across the schemes estimated at 60% in 2017.</p> <p>Immunization is not in the benefits package; government is assessing option to include immunization into benefits packages.</p>	<p>MOH is responsible for national NIP functions, such as vaccine purchase, training. Immunization services are the responsibility of provincial health departments.</p>	<p>Not applicable, not in NHI benefits packages.</p>
Nigeria	<p>The National Health Insurance Scheme is a public-private partnership that covers about 4% of the population (federal employees and their dependents, voluntary).</p> <p>Nigeria is setting up the Basic Health Care Provision Fund (BHCPF), which will provide federal tax funds to newly established State Health Insurance Agencies (SHIA). States expected to provide counterpart funding. Some states have created benefits packages. Immunization is expected to be a key service within the BHCPF.</p> <p>Immunization still handled as a parallel program.</p>	<p>Federal government purchases vaccines and carries out other national level functions. State and local governments are responsible for primary health care delivery.</p>	<p>Immunization services included in the capitation payment from the NHIS to private providers. The BHCPF in the initial design, may use fee-for-service payment for immunization</p>
Vietnam	<p>The current Health Insurance Law was passed in 2014. Vietnam Social Security covers about 88% of the population. The self-employed and employees of small enterprises are the main groups not covered.</p> <p>Immunization is excluded from the benefits package and is funded by the government budget.</p>	<p>MOH procures vaccines and carries out other national level NIP functions. Service delivery is the responsibility of provincial governments.</p>	<p>Not applicable, not in benefits package. Provinces are responsible for operational RI costs, but are raising insufficient funds.</p>

Annex 1. Agenda

Immunization and National Health Insurance Workshop, July 2, 2019

Objectives: Country teams would gain an understanding of their country’s arrangements for national health insurance and how the immunization program fits in, in part by comparing and contrasting with other country systems. Countries would identify how their systems are changing (where relevant), and potential risks and opportunities for immunization program functions. They would then be better prepared to argue for how immunization functions could best be handled, using global evidence.

Participating countries: Georgia, Ghana, Indonesia, Lao PDR, Nigeria, Sudan, Vietnam.

Time	Session Details
8:30-9:00	Registration
9:00-10:00	Welcome/Introductions and Icebreaker <i>Gavi, BMGF, R4D</i>
10:00-10:45	Session 1— Key concepts in social/national health insurance <i>Cheryl Cashin, R4D, Annie Chu, WHO</i>
10:45-11:00	Coffee break
11:00-11:45	Session 2—Immunization functions in different systems <i>Grace Chee, R4D</i>
11:45-12:30	Session 3—Country group work Country group work with facilitators to apply concepts to their own systems and understand how their systems might differ from other countries. Identify issues for further discussion in afternoon.
12:30-13:30	Lunch – Mangan Restaurant at the JHL Solitaire Gading-Serpong
1:30-14:15	Session 4—Lessons from Mexico’s experience <i>Adolfo Martinez Valle</i>
14:15-15:45	Session 5—Concurrent problem-solving discussions Issues-based small group discussions. Small groups will discuss the pros and cons of different approaches to the issue, implementation challenges, and specific experiences in their respective countries. After 40 minutes, there would be a transition point whereby participants would move to a second issue for the remaining time.
15:45-16:00	Coffee break
16:00-16:40	Session 6—Country team work Countries regroup to synthesize learning and apply it to their countries. Summarize key insights and next steps, what they want to learn more about, and select what to present in country panel
16:45-17:30	Session 7—Summing up <i>Country panel</i>
17:30-18:00	Closing thoughts and next steps <i>Gavi, BMGF, Gavi, R4D, UNICEF</i>

Annex 2: Meeting Participants

Country Delegations

COUNTRY	PARTICIPANT	POSITION	EMAIL
Georgia	Ekaterine Adamia	Head of Public Health and Health Programs Division of Health Care Department of the Ministry	eadamia@moh.gov.ge
Georgia	Khatuna Zakhashvili	Head of Communicable Disease Department, National Center for Disease Control and Public Health	episurv@ncdc.ge
Georgia	Nino Gogichaishvili	Head of Unit of Executed Tasks Management Department of Universal Healthcare Management, Social Service Agency	nino.gogichaishvili@ssa.gov. ge
Georgia	Irine Javakhadze	Chief Specialist, Consolidated Budget Formulation Division, Ministry of Finance, Georgia	i.javakhadze@mof.ge
Georgia	Gia Kobalia	Deputy Head of Finance-Economic Department National Center for Disease Control and Public Health	g.kobalia@ncdc.ge
Ghana	Kwame Amponsa- Achiano	New Vaccine and Vaccine Safety Coordinator, EPI	kachiano@gmail.com
Ghana	Brian Sampram	Sr. Health Planner, Budget Analyst, MOH	bryancesy@gmail.com
Ghana	Justina Darko	Sr. Health Planner, Deputy in charge of Immunization, MOH	darko.justina@gmail.com
Ghana	Ernest Owusu Sekyere	Ministry of Finance liaison for Health	esekyere@mofep.gov.gh
Ghana	Yaw Opoku-Boateng	Deputy Director, Quality Assurance	yaw.boateng@nhia.gov.gh
Indonesia	Risca Ardhiningtyas	Staff, Bureau of Planning & Budgeting, MOH	Risca.ardhya@gmail.com
Indonesia	Putry Isti Syaprilida	Staff, Bureau of International Cooperation, MOH	putryistisyaprilida@gmail.co m
Indonesia	Syamsu Alam	Head of Subdivision for Basic Immunization, EPI Unit	syamsumala@yahoo.com
Indonesia	Hashta Meyta	Technical Staff, EPI Unit	meyta.hashta@gmail.com
Indonesia	Nana Tristiana Indriasari	Health Financing and Insurance Directorate	Tristiana26@yahoo.com

Indonesia	Irma Marlina	Head of Subdivision for Social Assistance Expenditure	irma.hutajulu@gmail.com
Indonesia	Imam Subekti	Chief Specialist of EPI Team	imamsubekti@yahoo.com
Lao PDR	Bounpheng Philavong	Director of Department of Hygiene and Health Promotion	pbounpheng@gmail.com
Lao PDR	Panome Sayamoungkhoun	Deputy Director of Mother and Child Health Center	panomemchc@gmail.com
Lao PDR	Kongxay Phounphenghack	Head, EPI Section	kongxay123@gmail.com
Lao PDR	Phouvieng Khammany	Deputy of budget and finance	pv_khammany@hotmail.com
Lao PDR	Bouaphat Phonvisay	Deputy Director of National Health Insurance Bureau	bouaphat@gmail.com
Nigeria	Misari Ndidi Ibiam	Assistant General Manager, National Health Insurance Scheme Nigeria	misariibiam@yahoo.com
Nigeria	Ganiyu Salau	Deputy Director Finance and Account and Accountability Manager	ganiyu.salau@nphcda.gov.ng
Nigeria	Ibrahim Abubakar Matazu	Assistant Director (Social Sector) Federal Ministry of Finance	ibromatazu@yahoo.com
Nigeria	Garba Bello Bakunawa	Gavi Focal Desk Officer, National Primary Healthcare Development Agency	Garba.Bakunawa@nphcda.gov.ng
Sudan	Sawsan Eltahir Suliman	MCH director	Sawsaneltahir18@gmail.com
Sudan	ELseddig Eltayeb Wahaballa	EPI Manager	Seddig75@yahoo.com
Sudan	Fatima Ibrahim	Planning Unit- EPI	FIFI_epi@hotmail.com
Sudan	Haidar Hashim	NHIF	Haidarhashim55@yahoo.com
Vietnam	Duong Thi Hong	Vice Director of National Institute of Hygiene and Epidemiology, Deputy Manager of Expanded Program on Immunization	dth@nihe.org.vn
Vietnam	Tran Thi Thu Nguyet	Senior official, Department of Communication, emulation and reward, MOH	thunguyettran@gmail.com
Vietnam	Dang Thi Thanh Huyen	Deputy Head of National EPI office, National Institute of Hygiene and Epidemiology	epi.huyen1@gmail.com
Vietnam	Le Thu Huyen	Planning and Finance Department, MOH	Huyennt.khtc@moh.gov.vn

Facilitators and Resource Persons

PARTICIPANT	ORGANIZATION	EMAIL
Logan Brenzel	Bill & Melinda Gates Foundation	Logan.Brenzel@gatesfoundation.org
Tetrawindu Hidayatullah	CHAI Indonesia	thidayatullah@clintonhealthaccess.org
Praveena Gunaratnam	CHAI Lao	pgunaratnam@clintonhealthaccess.org
Nam Tong	CHAI Vietnam	ntong@clintonhealthaccess.org
Santiago Cornejo	Gavi Secretariat	scorejo@gavi.org
Joanna Wisniewska	Gavi Secretariat	Jwisniewska@gavi.org
Grace Chee	LNCT (R4D)	gchee@r4d.org
Cheryl Cashin	LNCT(R4D)	ccashin@r4d.org
Helen Saxenian	LNCT (R4D)	helensaxenian@gmail.com
Miloud Kaddar	LNCT (R4D)	mkaddar@hotmail.com
Elizabeth Ohadi	LNCT (R4D)	eohadi@r4d.org
Meghan O'Connell	LNCT (R4D)	moconnell@r4d.org
Leah Ewald	LNCT (R4D)	lewald@r4d.org
Eka Paatashvili	LNCT (R4D/Curatio)	ekapaatashvili@gmail.com
Uchenna Igbokwe	Solina Group, Nigeria	uchenna.igbokwe@solinagroup.com
Adolfo Martinez	Universidad Nacional Autónoma de México	adolfomartinezvalle@gmail.com
Annie Chu	WHO Vietnam	chua@who.int