The Learning Network for Countries in Transition (LNCT) is a country-driven network dedicated to supporting countries through peer-to-peer learning as they transition away from Gavi support to full domestic financing of their national immunization programs. LNCT supports its member countries on their paths to achieving Gavi’s vision for a successful transition: countries having successfully expanded their national immunization programs with vaccines of public health importance and the ability to sustain these vaccines post-transition with high and equitable coverage of target populations, while having robust systems and decision-making processes in place to support the introduction of future vaccines. Over several years, LNCT’s learning exchanges have generated a collection of insights and lessons learned about the experiences of countries moving through this transition. The purpose of this brief is to synthesize those insights and some key lessons we have learned since LNCT’s inception in 2016.

Transition success is measured not only in the ability of a country to sustainably self-finance the procurement and delivery of vaccines, but also to equitably maintain and expand coverage to all targeted populations. Therefore, as countries in transition work to ensure the availability of resources when and where they are needed, it is also necessary to ensure they have the technical capacity to reach unvaccinated and under-vaccinated populations, address issues of vaccine hesitancy, improve the operation and efficiency of their delivery systems, and establish robust procurement processes. In addition, the transition from Gavi support does not happen in isolation but may occur during other economic, health, and donor funding transitions during which broader government reforms, such as decentralization, or health sector reforms are being instituted or considered. These reforms require the immunization program to consider the engagement of new actors and institutions and how to adapt the roles and responsibilities within its program structure.

The transition process is complex. Through LNCT, country members and partners supporting countries have shared their own experiences during transition and several common lessons have emerged. The lessons in this brief are meant to be widely applicable across most transitioning countries and responsive to the most common challenges transitioning countries face.

**Lesson #1: Preparing for a successful and sustainable transition takes time, especially where institutional capacities are weak, so it is necessary to begin transition preparations as soon as the transition timeline is established.**

Successful transition requires extensive planning to ensure that countries develop the appropriate institutional capacities and fiscal space to sustain and continue increasing coverage rates and introduce additional essential vaccines to the routine immunization schedule. If not managed well, countries risk backsliding in vaccine coverage and the ability to introduce new vaccines. In addition to the financial aspect of transition, countries must prepare for the programmatic aspect, or ensuring technical and operational capacities such as procurement and maintenance of an efficient and well-functioning supply and cold chain. Additionally, with the prospect of simultaneous transitions, failure to adequately prepare for Gavi and other donor transitions could be destabilizing for the health system at large. The Gavi transition is small compared to the financial requirements of other transitions, and there is a risk of competing priorities for commodities procurement and operational funding. Many of these other transitioning programs are also looking to integrate within the primary health care (PHC) system and determining how to effectively deliver across these programs under an approach which aims to strengthen PHC is important.
Lesson #2: Successful transition requires an explicit and sustained commitment to immunization from institutional and political leaders at both the national and subnational levels. Political commitment should be visible in the continuous prioritization and allocation of financial and programmatic resources to meet and sustain immunization coverage targets.

Achieving successful transition requires an explicit and sustained commitment from leadership at the highest political levels. While political commitment is often measured in the prioritization of immunization program and related financial resources, it may also be reflected in the willingness of leadership to enact the legislative and regulatory changes that will contribute to a successful transition and their efforts to strengthen domestic technical capacities to effectively manage immunization programs. Political commitment is especially critical for maintaining institutional and financial support for immunization during political and economic shifts that may take place during or after transition.

In Georgia, increasing immunization coverage has been a political priority in recent years. Since 2012, the EPI program budget has increased seven times and five new routine vaccines have been introduced. When Georgia fully transitioned from Gavi assistance in 2018, the EPI budget increased by 20%. In India, in 2017, the prime minister made a highly visible commitment to strengthening routine immunization and rapidly expanding coverage when he launched Intensified Mission Indradhanush, a signature initiative of his administration with the goal of reaching and sustaining 90% coverage by 2020. To facilitate implementation of the initiative across all levels of government, a chain of support and supervision was established from the national level through states to districts. Close involvement of the prime minister was important for generating and sustaining political will for the initiative. It ensured the commitment of all national and subnational stakeholders. And in Nigeria’s Kano State, routine immunization coverage increased from 19% in 2013 to 46% in 2018 as a result of the state’s commitment to strengthen its technical capacity to deliver quality immunization services while also increasing its share of the program’s financing from 30% in 2014 to 100% in 2017.

Lesson #3: Countries in transition need a strong stakeholder engagement and coordination platform that allows for routine communication and alignment of activities and has the institutional support to be maintained after transition.

The transition process is relevant for a range of actors inside and outside of the health system at both the national and subnational levels, as well as inside and outside of the government. It involves a wide and diverse range of actors with an equally wide and diverse set of priorities. Transition stakeholders may include ministries of health, finance, and local government; legislative bodies; agencies overseeing vaccine procurement and regulation; a national health insurance purchaser; academic and research institutions; multilateral and bilateral donors; and both for-profit and non-profit private sector actors, such as private providers, faith-based organizations, and civil society organizations. An effective stakeholder engagement and coordination structure or mechanism helps ensure a more efficient and successful transition. This mechanism should be led by an individual or institution with the authority to convene the necessary stakeholders and influence how they implement activities that either support or hinder the immunization program’s goals.

1 https://publications.jsi.com/JSIInternet/Inc/Common/_download_pub.cfm?id=22337&lid=3
Nigeria’s Community Engagement Strategy for Strengthening Routine Immunization in Northern Nigeria aimed to engage and sustain community participation and responsiveness to immunization and other PHC services by utilizing and leveraging key community mobilizers and leaders within the traditional architecture of the community. It was developed to address both supply and demand-side factors that contribute to zero dose and under-immunized children to increase immunization coverage and equity. It was especially critical to address factors contributing to low demand for immunization. The strategy empowered communities to take the lead in identifying, owning, and resolving issues that contribute to low or stagnating immunization rates. Its governance structure clearly defined the roles and responsibilities of the state, local government area, ward, and community stakeholders. A critical component of India’s Intensified Mission Indradhanush was multi-sectoral collaboration at the national and district levels. The prime minister’s office and cabinet secretariat facilitated coordination between health and 12 other non-health ministries at the national level. At the district level, district magistrates and district task force teams brought together these same ministries to fill staffing gaps, improve communication around vaccines and immunization, and increase community mobilization for vaccination. These multi-sectoral actors were willing to support the immunization program so long as their roles were clearly defined and feasible with the resources available.

Lesson learned #4: Countries in transition must mobilize not only the funding needed for vaccines, but also funding for critical operational costs, including cold chain and logistics, service delivery, and health promotion.

While funding for vaccine procurement is a top priority for most transitioning countries, operational and other programmatic components are often underfunded, which presents a significant risk to successful transition. Countries in transition must ensure the availability of resources for all aspects of the immunization program. Domestic resource mobilization strategies may include one or more means of increasing the amount of resources available for immunization, including the use of realistic cost and expenditure data to estimate resource requirements during planning and budgeting, improving funding flows to allow timely access to allocated funding, improving efficiency through integration and better use of the resources available, and the strategic use of evidence to build champions for immunization across health and finance ministries and to advocate for the resources needed to meet current and future immunization goals.

In Georgia, insufficient funding for operational expenses was a critical issue prior to transition. The national immunization program’s budget has since allocated funding for the updating of cold chain equipment and funding for communications to promote vaccination. A few years prior to transition, Vietnam recognized the need to upgrade their cold chain equipment and expand its cold chain capacity. To finance their share of the new cold chain equipment, they opted to mobilize domestic resources rather than rely on Gavi HSS funding. Transition was the impetus to consider longer-term sustainability.

2 https://www.bmj.com/content/bmj/363/bmj.k4782.full.pdf
Lesson learned #5: Effective use of evidence to advocate for immunization resources requires thoughtful consideration of the audience and what types of evidence and messaging will be most compelling to their priorities and perspective.

Maintaining a high performing immunization program requires sustained commitment and funding over time. Ongoing communication and advocacy are needed to maintain investments and to stimulate additional investments to achieve immunization program goals. Advocating for resources for immunization at national and sub-national levels requires demonstrating the health and economic impact of proposed investments to convince decision makers to allocate funding for immunization. Bridging the gap between health and finance stakeholders requires an evidence-based advocacy approach that goes beyond emphasizing the health impact of immunization to emphasize the positive impact of immunization on human capital, productivity, and long-term economic growth.

Armenia’s high-performing immunization program has benefited from close collaboration among the Ministry of Health, the Ministry of Finance, and the Standing Committee on Health Care, Maternity, and Childhood in Parliament. The Ministry of Finance and Ministry of Health have a working agreement that calls for funds for vaccines and injection supplies to be released in full by April of each year to ensure smooth procurement through UNICEF Supply Division. The two ministries have a working agreement that makes immunization a priority program and calls for the budget line for vaccines and injection supplies to be maintained even if other areas need to be cut.3

Lesson learned #6: Strong resource mobilization and technical capacity at subnational levels is a critical element to successful and sustainable transition, especially in more decentralized health systems.

Many LNCT countries have increasingly decentralized health systems and are interested in developing strategies to support subnational entities to identify immunization needs, mobilize resources, plan, and implement immunization activities. Countries recognize that engagement with subnational levels is critical for sustainable financing (especially the sustainable financing of operational costs), coverage, and equity. It is important that national immunization program managers understand funding allocation and disbursement processes, as well as bottlenecks, so they can identify opportunities to improve funding availability and management at subnational levels.

Following devolution in Pakistan, provincial governments were expected to manage their own budgets for the immunization program, but there were significant challenges at subnational levels, including limited human resource capacity, low budget allocation, and non-integration of the immunization program into the provincial health delivery system. Program management capacity also varied across provincial health departments, specifically in the areas of planning, policy making, procurement, surveillance, monitoring, and reporting. The National Immunization Support Program used a results-based financing approach to the components of the program focused on the provincial level. This approach incentivized provincial implementation, including (1) strengthening provincial management, governance, and stewardship functions through strengthened oversight to target bottlenecks in program management and oversight; (2) improving service delivery performance through improved planning, management of human resources, and strengthened supply chain at the point of service delivery; and (3) strengthening demand generation by exploring

and expanding innovative strategies to empower communities to access immunization services and promote health-seeking behaviors.4

Lesson learned #7: Simplifying and streamlining pharmaceutical regulation and procurement processes may attract more suppliers by enhancing market conditions for vaccine manufacturers.

Ensuring the sustainability of immunization programs post-transition requires that countries establish regulatory and procurement processes which ensure access to high-quality, affordable vaccines, and immunization commodities. Stringent and costly regulation requirements and low profitability are deterrents for some vaccine manufacturing providers to enter country markets and respond to tenders.

Georgia has instituted reforms to simplify and streamline their pharmaceutical regulation and procurement processes to attract more suppliers to the smaller Georgian market. These reforms include fast track registration, reduced registration fees, multi-year contracting, and the exclusion of pharmaceutical products from VAT and import taxes. Additional procurement practices were introduced to encourage international participation by improving flexibility and transparency, including an e-procurement platform, international access to the procurement database and reports, acceptance of international electronic tender documentation in English, and the elimination of the requirement to have representation of a local agent. Indonesia also uses an e-procurement platform to improve accountability, transparency, and timeliness in the procurement process. Mongolia has a fast-track registration process to reduce the time for manufacturers to be registered in-country to one month. Through legislative changes, Armenia made possible direct procurement from pooled mechanisms, multi-year contracts, and simplified registration for WHO pre-qualified pharmaceutical products registration.

Lesson learned #8: Countries must ensure clear roles and responsibilities for financing and carrying out immunization functions between the MOH and the insurance agency and establish effective processes for collaboration and information sharing.

To achieve and sustain UHC, many LNCT countries have introduced or are considering the introduction of a national health insurance system (NHI). NHI 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. When NHI is created alongside a traditional budget-funded health care system, there can be fragmentation in financing and confusing payment incentives for providers. Sometimes there is an overemphasis 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 NHI systems serving different populations with different benefit packages. Some population groups, services, and functions might “fall through the cracks.”

Among LNCT countries, there are models of countries with NHI systems where immunization is not included in the benefits package and the MOH or provincial governments are carrying out all immunization functions including financing and service delivery, such as in Ghana and Vietnam. In Indonesia, immunization services are included in the benefits package, but because the NHI program does not cover the entire population, district governments are also providing services.

Finally, as in Georgia, there are models in which immunization services are almost completely provided for within the NHI benefits package and there is no other separate delivery system.

Lesson learned #9: The risks of integrating immunization into health insurance schemes with low population coverage and funding solvency issues may outweigh potential benefits.

The population coverage of a national health insurance scheme 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 health insurance coverage. 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. Additionally, the implementation of a national health insurance scheme 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. Furthermore, as additional vaccines become available, decisions regarding their adoption could impact the financial sustainability of the health insurance scheme.

Lesson learned #10: Effective public-private partnerships for immunization require a regulatory or policy framework that incentivizes collaboration, ensures alignment of expectations, allows for flexibility, and encourages routine and transparent communications.

Many LNCT countries have successfully engaged a wide variety of non-government stakeholders to strengthen their immunization programs, including for-profit and not-for-profit providers, faith-based organizations, community groups, and professional associations. Besides playing an important role in service delivery, these organizations can provide critical support to a wide variety of immunization functions, including advocacy, demand generation, management of vaccine hesitancy, workforce training, and logistics. With the many benefits of engaging the private sector to support immunization programming, especially increasing coverage among hard-to-reach or vulnerable populations, come challenges such as ensuring quality and routine data collection.

In Sudan, both for-profit and non-profit providers are supporting the national immunization program’s efforts to increase coverage and reduce disparities in access to services. The private sector is actively engaged in service delivery, with 55% of private, for-profit health facilities offering immunization, largely concentrated in Khartoum State. Non-profit providers often operate in rural areas, with some in urban areas, and provide services in conflict areas or other hard-to-reach areas. The government regulates these providers through the Directorate of Private Care Facilities and the Humanitarian Aid Commission, with the Expanded Program on Immunization providing supportive supervision to private providers at the national, state, and district levels. The government provides vaccines to all private providers, along with other essential resources, except for refrigerators. Though Sudan has a well-organized program, there is still a need to strengthen training and monitoring and develop a policy framework for public-private engagement. In Georgia, 95% of health facilities are private, and those providing immunization services to children must do so at no charge. While the National Center for Disease Control procures and provides vaccines to these facilities at no charge, private providers are responsible for procurement and maintenance of cold chain equipment. Regional and municipal public health centers are responsible for supervision of private facilities, and immunization is the only clinical service in which supervision is done on a
regular basis. Because of the predominance of the private sector, it was essential for the government to introduce interventions to incentivize government’s cooperation with private for-profit service providers to achieve better routine immunization coverage.

Lesson learned #11: Innovative solutions that are successfully implemented and able to scale often have the following characteristics: an effective public-private partnership; addresses an existing challenge or gap in the immunization program; feasible; effective; and aligned with the overall health system’s approaches and goals.

From the use of SMS technology to send vaccination reminders or collect real-time immunization data to outsourcing cold-chain maintenance, LNCT countries recognize the potential for innovative approaches or technologies to have a significant impact on their immunization programs. However, countries recognize that innovation for the sake of innovation may not always represent an improvement in effectiveness or efficiency, and instead seek out innovations that address an identified gap or challenge in their programming while also being appropriate for their country context. In addition, innovations are often introduced with donor funding, and it is not always clear from the onset whether the government will continue to provide funding and how the innovation will be incorporated into the health system.

*Cote d’Ivoire* partnered with the mobile telecommunications company, Orange, to implement M-Vaccine which leverages mobile technology to improve immunization coverage. It uses text and voice messaging to educate caregivers about immunization, send appointment reminders, create personalized immunization schedules, and improve data availability, quality, and use. Orange solicited feedback from health workers multiple times during the development process and learned that the application was too complicated. Simplifying the application led to increased use. In partnership with Coca-Cola, *Nigeria* piloted the use of an outsourcing model for the maintenance of refrigerators and vaccine cold chain equipment for Project Last Mile. While the initial plan was to scale-up to all states following a successful pilot, the national MOH was not able to expand the project due to a lack of political will at the state level to guarantee funding and because it ran counter to the country’s broader goal, which is to build capacity in the public service system for activities that impact service delivery. Drawing from lessons learned through the partnership, the country is adopting a system which has the potential to be less expensive while aligning with the country’s broader goals. With the support of Gavi and UNDP’s Electronic Vaccine Intelligence Network and in partnership with Logistimo, *India* rolled out a digitized logistical information management system to more than 11,000 primary health centers in 13 states. Logistimo’s machine learning capabilities helped India optimize its stock management by reducing the stockout rate to less than 1% and allowing the country to save up to US$ 150 million in vaccine costs every year.

Lesson learned #12: Issues of vaccine hesitancy are often conflated with low demand for vaccination, while each of these has their own root cause(s) and therefore requires different approaches to improve vaccination coverage. Countries must understand the issues they are facing and the underlying causes to effectively develop a tailored approach to increasing immunization coverage.

The global trend of increasing rates of vaccine refusal or delays due to lack of awareness or trust in the importance, safety, or effectiveness of vaccines has only further complicated transitioning countries’ efforts to achieve and sustain target coverage levels.
In Indonesia, to overcome vaccine hesitancy rooted in the religious belief that vaccines are “haram” due to their ingredients, they engage with religious leaders to approve of and encourage vaccination. In Lao PDR and Vietnam, the challenge is low demand for vaccination among ethnic minorities with a long-standing mistrust of the government. Efforts to reach these populations include adapting communications to their local context and engaging health care workers who come from these communities and are trusted by them. In Pakistan, they realized that people were not opening the door for male polio vaccinators, so they started hiring female health workers to provide vaccinations in the community. In Ghana, they thought they were facing low demand for vaccination in the capital city of Accra. The health workers spent some time in the more impoverished areas of the city ahead of one immunization campaign. They attended church services and spoke with members of the community after the service, and this simple effort led many to come in for vaccination.

The elements of a successful transition are increasingly well known, but the path each country chooses towards that goal will be based on its own specific context. However, there is still much to be gained from sharing mutual experiences and learning from one another.