Latin America has historically prioritized investment in immunization programs, with public access to the national program supported by legislation. Latin America protects against an average of 19.9 diseases through national immunization program schedules, higher than any other region. The success is in large part due to the leadership of Latin American governments and PAHO’s role as a champion for immunizations. The technical guidance and support that PAHO provides to national immunization programs is complemented by the operation and wide usage of their Revolving Fund which improves access to new vaccines and creates efficiencies in the procurement process. In addition, programs in the region extend beyond pediatric vaccines. 28 of 33 countries in the region have adopted influenza vaccines for adult populations into their public immunization programs. This access is accompanied by legislation in 73% of countries that cements the immunization program as a national priority. 17 countries have implemented legal provisions defining immunization as a public good to be provided free of charge by the government and 21 countries define the public immunization schedule through legislation.

Despite strong political support for current programs, countries continue to face challenges in adding new vaccines across the life course to their national schedules as well as achieving high coverage rates across and within countries. While commonly used in the region, immunization legislation is not often accompanied by protected budgets for the programs. Funding for public programs is thus dependent on annual decisions made by legislators. As of 2017, only 13 countries in the region had legislation in place requiring that funds in the national budget be reserved for immunization. In addition, some countries have highly inflexible immunization budgets, and have not added any new vaccines into their public immunization program schedule in recent years. For instance, Mexico has not added a new vaccine to its public immunization program since 2012. Even among traditional vaccines, coverage rates vary greatly, both across and within countries. While seven countries in the region reported DTP3 coverage of at least 95% in 2017, ten countries reported DTP3 coverage of less than 85% that same year. Within Brazil, as with other countries in the region, there is also a wide variation. In the highest populated state of São Paulo, 10.4% of municipalities have less than 50% coverage of the pentavalent vaccine while 43.3% of municipalities have over 95% coverage.

**FIGURE 1**

Average Number of Diseases Protected Against by Vaccines


1 Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Kitts & Nevis, St. Lucia, St. Vincent & Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela
There is an increasing need to address the financing challenges facing Latin American governments in order to achieve sustainable and growing immunization programs in the region. Demographic changes, a higher burden of non-communicable diseases, increased availability of new health technologies, and health system reforms are creating challenges to governments’ efforts to meet growing health needs with limited resources. Latin America is projected to experience the largest increase in health care expenditure of any region over the next 75 years. Annual GDP growth in the region is projected to remain at its current level of 3% through 2022, thus limiting the ability of governments to substantially increase resources for the current and future health needs, including investment required growing the national immunization programs. In addition to demonstrating the full value of vaccination when making the case for added investment in current programs, it is now necessary to focus on improving a government’s ability to pay for all aspects of their current and future immunization program. This requires a deeper understanding of trends and architectures influencing immunization financing as well as challenges and opportunities for additional financing.

TRENDS AFFECTING SUSTAINABLE IMMUNIZATION FINANCING

The ability of country governments to resource public immunization programs is influenced by trends ranging from the available budget headroom and how resources for immunization budgets are sourced, to the existing and emerging financing structures that involve a broad spectrum of stakeholders.

Budget Headroom Limitations

Despite overall high levels of health spending and legislative commitment to immunization, government spending on immunization is not growing across the region, and in some cases, is decreasing. The overall region increased government investment in health in recent years, with per capita government spending on health rising 11% from US$296 in 2010 to US$329 in 2015. Yet this higher spending has not consistently translated into increased immunization budgets. Since 2013, routine immunization budgets in the Caribbean are stagnant, and shrinking in Central America. Though South American governments have increased immunization budgets, growth is inconsistent across countries. The Colombian government’s expenditure on routine immunization decreased between 2013-2016, despite having an increased health budget overall during that same time period.

Fragmented Public Insurance Schemes

Public insurance schemes in the region are highly fragmented, resulting in coverage overlaps and administrative inefficiencies that place additional financial burden on health systems. A 2016 Inter-American Development Bank study found that Latin American and Caribbean countries are, on average, less efficient than OECD countries in health spending. The majority of insurance schemes in Latin America are highly fragmented and poor integration and coordination between schemes within countries have led to inefficiencies and waste in healthcare systems.

FIGURE 2

Total Expenditure on Routine Immunization by Region (USD)

In Argentina there are more than 500 insurance schemes in place, including national social insurance schemes and provincial health insurance schemes, with overlapping coverage of individuals resulting in additional administrative costs. All individuals in Argentina may access certain care from public facilities at no cost. Due to limited coordination within the fragmented system, the cost of services rendered for individuals with formal coverage are commonly covered by the government that runs the public facilities, rather than by their insurance scheme. Challenges with integration and coordination also plague the Mexican healthcare system, with 12% of enrollees in the public health insurance Seguro Popular estimated to have coverage from multiple sources in a system with six insurance mechanisms. With multiple insurance schemes that do not share data or coordinate on population coverage, Mexico devotes 9% of its health expenditure to administrative costs, significantly higher than the OECD average of under 3%.

Variation in immunization program performance exists across insurers for both coverage rates and access to vaccines. Despite widespread adoption of legislation mandating that immunization be provided free for all citizens, disparity among coverage rates exists across different insurance schemes within countries. 2014 data from the Mexican Ministry of Health, for example, showed that while over 80% of children completed their full vaccination schedules, results were significantly higher for those covered by the employment-based social insurance schemes than those covered by Seguro Popular. In Colombia, a system of health maintenance organizations (HMOs) function with distinct networks of public and private providers. Immunization rates have been found to vary based on HMO affiliation.

Decentralization Challenges

Health delivery and financing are largely decentralized in the region, raising issues of equitable resource mobilization and efficient tracking and reporting among different sub-national governments. Health functions in the region are routinely designated to local levels of government. For example, Brazil delegates responsibility for health delivery to around 5,000 municipal health councils and the financing and delivery of Argentina’s basic package of services is the responsibility of the provinces. Such decentralized structures can influence program resourcing as different local governments have different abilities to supplement health budgets from local tax revenues. Differing capabilities in resource mobilization often result in varied program performance, based on locality. Argentina reports regional inequalities in health infrastructure and performance, with wealthier provinces performing better on maternal, newborn, and child health indicators, including immunization. Fiscal decentralization has also presented challenges with resource tracking for immunization, precluding an overall understanding of the immunization program budget in some countries. In Mexico, states depend on fund transfers from the central government to fund program delivery, but states are not required to report their specific budget allocations or expenditures to the central government. This lack of transparency in budget data creates significant challenges for the Ministry of Health to obtain a comprehensive understanding of state-level resource needs and usage.

While these trends present challenges in securing financing for immunization programs, they also offer engagement opportunities to ease government affordability barriers. While program-specific engagements can have impact, engaging at the systems level to address policy and financing issues can often create new opportunities that bring in additional stakeholders for sustaining and increasing financing for public immunization programs. Many of the challenges to sustainable immunization financing are embedded within the larger health system and impact immunization in turn. Stakeholders across country health systems can work to engage in ways that bring in new funds and ensure the efficient use of current funds for the benefit of immunization. Latin America’s strong use of legislation to promote immunization programs can be leveraged to facilitate the opportunities presented below.

1. Facilitate new financing mechanisms

Latin American countries are tapping into innovative financing mechanisms to mobilize new domestic resources for immunization and improve program performance. Most countries in the region have public health taxes in place on goods that adversely affect health, commonly referred to as sin taxes. Many have earmarked those sin tax revenues for health programs. In Argentina, tobacco tax revenues are earmarked for health via legislation passed in the mid-1990s, and
gambling tax revenues have been earmarked for health since 1948. Some countries have already established hard earmarks on tax revenue for immunization specifically. Costa Rica earmarks a portion of its lottery proceeds to its National Immunization Fund. There is also a demonstrated appetite for innovative financing mechanisms to improve program delivery efficiency in the region. Argentina’s Plan SUMAR uses results-based financing with indicators specifically linked to immunization outputs. Additionally, the use of social impact bonds to scale health interventions has been under consideration in several countries including Brazil, Haiti, Mexico, and Colombia.

Private sector partners are emerging as potential actors that can be leveraged for improved public immunization programs. Public immunization programs within the region are engaging with the private sector to increase program performance through new partnerships. The Mexican Ministry of Health has undertaken a partnership with the Carlos Slim Foundation to introduce electronic immunization records for citizens in order to address existing gaps in coverage data. This partnership has been rolled out in eight states to date and allows for patients and decisionmakers to have accurate data on both personal immunization records as well as population coverage data.

2. Strategically leverage purchasers outside of ministries for immunization
Public insurance purchasers can be leveraged to increase access to vaccines not yet included in a public schedule for targeted populations as well as work towards achieving increased coverage goals. Vaccine procurement budgets and public immunization programs are typically established at the national level, which can leave gaps for sub-populations with different epidemiological needs. To overcome a shortcoming in the national program, some insurance schemes are adding vaccines outside of public schedule for their beneficiaries. In Mexico, several employment-based social insurance schemes procure hepatitis A and varicella vaccines for at-risk populations, despite these vaccines not being on the national schedule. Chile has implemented a Special Vaccination Program which coordinates among insurance schemes, National Immunization Program officials, and healthcare providers to procure and deliver vaccines outside of the public schedule to patients requiring them. For countries with low coverage and access challenges for the public immunization program, initiatives such as the “convenios” used in Colombia and Mexico can be introduced, which allow any citizen to receive any vaccine found on the public schedule from any facility, regardless of their insurance coverage.

FIGURE 3
Financing Mechanisms for National Immunization Programs

<table>
<thead>
<tr>
<th>Ways to mobilize new resources for immunization and improve program performance</th>
<th>Financing Mechanism</th>
<th>Under consideration in Latin America?</th>
<th>In use in Latin America?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earmarked Taxes</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Trust Funds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Results-Based Financing</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Impact Bonds</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

24
3. Engage at the national and sub-national levels for financing and performance issues

When immunization programs rely on sub-national governments to finance immunization programs and deliver on targets, engagement at this level is crucial. In decentralized contexts, accountability is necessary to ensure that sub-national governments are appropriately financing their immunization programs, or that performance is meeting national targets. There are multiple ways to create lines of accountability. Countries can mandate that resources be dedicated and spent at local levels. In Brazil, spending on health is regulated by laws which establish minimum standards, including at the local level. Additionally, programs can be designed and implemented at the sub-national level to incentivize program targets. The Inter-American Development Bank is providing sub-national technical support to eight countries in the region participating in the Salud Mesoamérica Initiative, which uses results-based financing and has indicators specifically linked to vaccination coverage. Municipalities in Colombia are held responsible for delivering public immunization program vaccines to both insured and uninsured individuals and receive a 10% bonus payment the following year in the budget transfer from the Ministry of Health and Social Protection if municipal coverage rates reach 88%.

**FIGURE 4**

Leveraging Trends to Address Affordability Challenges for Immunization

**Status Quo**
- Immunization budgets must compete for limited resources
- Focus on national level actors only
- Public insurance purchasers are underutilized for immunization
- Lack of accountability for program performance

**Systems Thinking**
- Facilitate new financing mechanisms
- Engage additional actors at national and sub-national levels
- Purchasers outside the MoH are strategically leveraged for immunization
- Introduce accountability mechanisms to improve program outcomes

**End Goal**
- Increased national budgets and strong systems to absorb the increased budgets efficiently for sustained and growing immunization programs

**CONCLUSION**

Whether interested in designing an innovative financing mechanism or leveraging expertise for program improvement, governments can co-create solutions with additional stakeholders to achieve sustained and growing immunization budgets. In order to capitalize on trends in the region for the benefit of public immunization programs, governments should explore partnering with other public and private stakeholders. Such partners can help to explore and implement innovative financing mechanisms to bring in new funds (additionality) and improve the use of current funds (efficiency) for the benefit of immunization programs. To move forward on innovative financing mechanisms that can bring additionality or efficiency, development organizations and private sector partners can provide knowledge and resources traditionally unavailable to governments, and in turn build relationships with governments by serving as a valued and trusted partner. Through exploration of such partnerships, governments can meaningfully work to address affordability challenges and achieve sustained and growing immunization programs.
RESOURCES


