

SUSTAINABLE IMMUNIZATION FINANCING IN THE EUROPEAN UNION

Overview

With growing attention on the topic of immunizations, this policy brief analyzes the key trends driving sustainable immunization financing in the European Union and the United Kingdom. New outbreaks in the region have put public immunization programs back in focus for many countries. This brief examines different ways that financing can play a role in improving immunization programs and the driving factors in the region that determine how financing is structured. The brief provides examples of how different countries finance various immunization program costs and considers how the key trends apply to individual country contexts. Our findings show that there are three key trends driving immunization financing in the region: i) political prioritization drives program funding rather than fiscal space constraints, ii) performance improvement efforts are drawing on financing practices, and iii) an increasing spectrum of actors are engaging to provide comprehensive programming. Regionally, immunization financing is seen mostly as a responsibility of the individual member states. But with ongoing challenges for immunization programs across Europe, the brief argues there are opportunities for external regional level actors to engage in financing discussions by providing guidance through cross-country learning and dialogue.

Introduction

Countries in the European Union (EU) provide strong immunization programs to their populations, but they face ongoing challenges to adopt new vaccines into public programs and to maintain or achieve high coverage rates across vaccines. In 2019, EU countries protected against an average of 17 vaccine-preventable diseases through their public program, though this included a range of 14 to 28^{*} vaccines. The region is second only to Latin America in providing access to vaccines.^{^1} As the global community looks towards a life-course approach to immunization, and healthcare generally, EU countries have been early adopters of several adolescent and adult vaccines.² Public schedules range from the inclusion of three adolescent and adult vaccines (Bulgaria) to seven (Greece).³ Even where introductions have occurred, schedules in place often apply to limited cohorts. This landscape creates room for increasing access to vaccines in many countries across the region. Countries in the EU are also facing challenges in achieving and maintaining high coverage across vaccines on their current schedules. The vaccination rates for measles-mumps-rubella (MMR) have decreased by 2 to 3% across countries in the region since 2014.⁴ Severe coverage challenges in specific markets have resulted in re-emerging outbreaks. In 2019, the WHO removed the UK's measles-free status, achieved in 2017, along with Greece and the Czech Republic.⁵ Further along the life-course, flu vaccine coverage rates are well below the EU target of 75%. The median coverage rate in the region is 47.1% with the highest national coverage rate achieved in Scotland (72.8%).⁶ These challenges are under increased focus in light of the COVID-19 pandemic which has reignited the conversation on prevention and public health.

FIGURE 1

Average Number of Diseases Protected Against by Vaccines



Source: WHO Schedule by Antigen Database, March 2019. (https://apps.who.int/immunization_monitoring/globalsummary/diseases)

*Note: pediatric and adult vaccines are broken out to capture distinct cohorts covered, thus pediatric and adult flu vaccines are counted as ² distinct vaccines.
^Latin America has an average of ¹⁹ vaccines per schedule. Note that the Yellow Fever vaccine is more relevant in endemic regions such as Latin America. The region also has access to the PAHO Revolving Fund which aids countries to access vaccines

Increasing health care costs and the prioritization of curative and long-term care in public spending will continue to affect the amount that countries invest in prevention and immunizations. Government expenditure on health as a percentage of total government expenditure is growing year to year.⁷ Between 2010 and 2016, the average portion of the public budget spent on health in the EU rose from 15% to 17%.⁸ From 2010, the percent of the EU population over 65 years old has risen from 17.5% to over 20%.⁹ As population demographics continue to shift, health expenditure will remain focused on non-communicable diseases (NCDs) and long-term care. As part of the health budget, prevention services and immunization programs currently receive relatively low levels of investment. On average, prevention expenditure is 3% of a country's total health budget in the EU, while the national immunization program is only 9% of the prevention budget – less than 0.5% of the overall health budget.¹⁰ The relatively small budget allocated for prevention and immunization across countries is unlikely to increase dramatically in the near term, as countries focus on investments in other costly health services.

FIGURE 2

Domestic general government health expenditure (% of general government expenditure) for EU countries

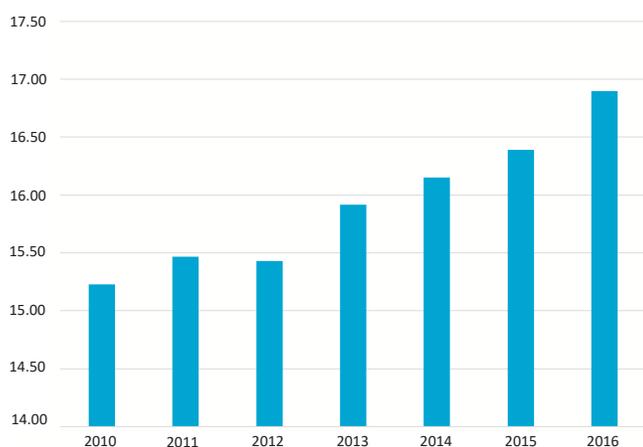
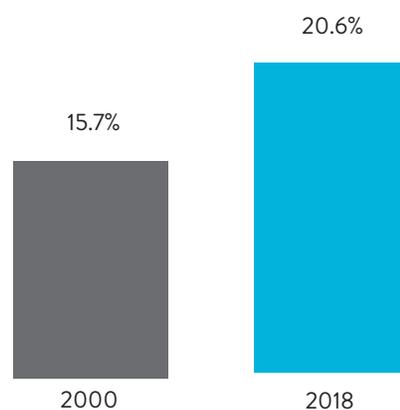


FIGURE 3

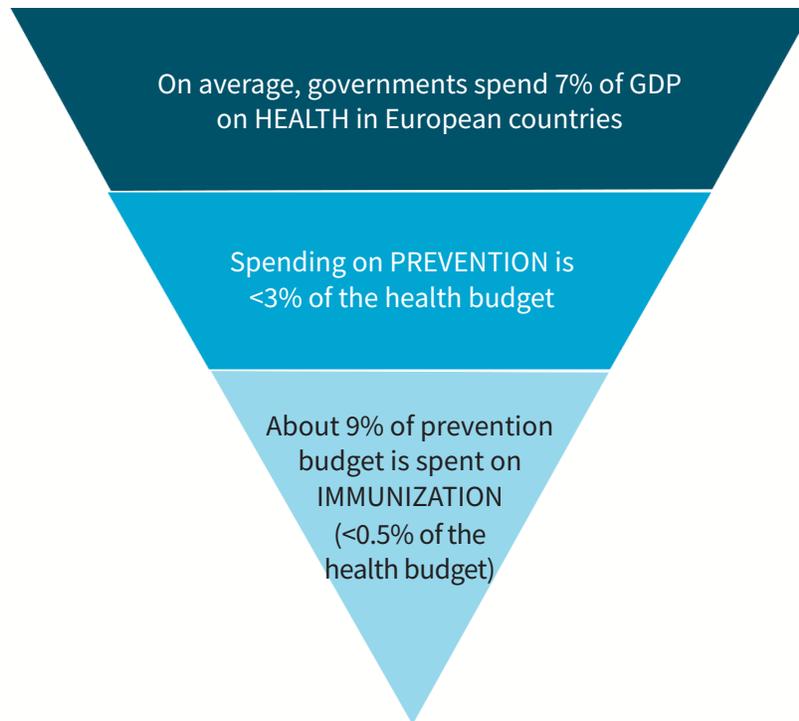
Population in the EU, Aged 65+ Years



As countries across Europe look for solutions to address challenges of growth and/or coverage, it is important to understand the structures and trends influencing immunization financing and how it relates to program performance. Sustainable immunization financing, a public health priority, can be defined as increased national budgets and strong systems to absorb the increased budgets efficiently for sustained and growing immunization programs.¹¹ Immunization financing considers both the level of funding and how the funds are used to deliver the programs. The architecture of a national immunization program dictates how funds are resourced, where they are held, and how they are used. It is crucial to understand the structures and trends driving immunization financing to be able to address challenges related to coverage rates or the introduction of vaccines for increased population protection. Without strong financing practices, immunization services may be limited or inefficient.

FIGURE 4

Immunization budget is less than 0.5% of the health budget



TRENDS AFFECTING SUSTAINABLE IMMUNIZATION FINANCING AND HOW COUNTRIES ARE ENGAGING

The ability of EU governments to deliver strong public immunization programs is influenced by some common financing trends, ranging from political prioritization of the program, performance improvement efforts, and an increasing spectrum of engaged actors.

Political Prioritization Drives Resourcing Decisions

In a region where most countries are classified as high income, the availability of resources is not necessarily the challenge, but rather how governments prioritize their funding. Most of the countries in the EU region are high income, with only 2 of 28 – Bulgaria and Romania – classified as upper-middle income.¹² The availability of fiscal resources is not necessarily the dilemma, but rather the challenge lies in channeling those resources toward immunization and prevention programs. When there is political will and support, governments tend to find the fiscal resources through general allocations, rather than calling upon innovative finance mechanisms to raise resources (Box 1).

This political process was observed following the 2008 economic crisis when prevention budgets were drastically cut, though overall health spending was generally maintained.¹³

More recently, funds are being channeled toward immunization budgets to tackle the ongoing threats to vaccine coverage rates. Some countries, including Italy and Poland, have earmarked or “ring-fenced” budgets for prevention and public health. In Poland, the government passed an act on public health in 2015 requiring, in part, that the National Health Fund spend a minimum of 1.5% of its budget on preventive services.¹⁴ Although the legislation served

Box 1. Sin Taxes in Europe

Some European countries have utilized earmarked excise or “sin” taxes to fund NCD programs. The sector-specific resources generated through this innovative mechanism are not currently used for immunization programming. In Finland, Iceland, Poland, Serbia, Montenegro and Switzerland, a tobacco tax finances NCD related services, while Belgium, Denmark and the UK, among others, have mandated a sugar tax to support these types of services.²⁶

Source: European Observatory on Health Systems and Policies

to establish a guarantee for prevention programs, the rate of investment is low when **the region averages 3% of the health budget spent on prevention**. In 2014, Italy instituted a 5% protected budget earmarked for prevention services.¹⁵ Italy is also actively working toward an adolescent and adult vaccination approach through the National Plan for Vaccine Prevention 2017-2019, which unlocked new funding to achieve an expanded schedule.¹⁶

Current national immunization programs (NIP) performance challenges are driving governments to prioritize an increased immunization budget. In Romania, the government is responding to poor vaccination performance rates by making the immunization program a funding priority. In 2017, the measles coverage rate fell to 75%.¹⁷ In 2018 the government tripled the immunization budget to nearly €65 million.¹⁸ After losing the WHO measles-free status, the UK launched the 2019 measles and rubella elimination strategy, calling on increased investment to immunization programs. Although these budget increases seem promising, it will be important to monitor how the increased funding impacts coverage rates over the next few years.

Countries Will Adapt Financing to Focus on Performance Improvement

Countries are addressing the coverage rate challenges by targeting both demand and supply-side approaches.

On the demand side, many countries have focused on legislation to mandate immunizations for improved coverage rates.¹⁹ On the supply side, countries are leveraging financing to improve immunization program performance. Active purchasing links the transfer of funds to providers, at least in part, to aspects of their performance or the health needs of the population they serve.²⁰ Countries are increasing the use of active purchasing to provide new delivery channels for vaccination services and incentivizing high-quality outcomes through performance-based financing.

1. New Delivery Channels: In countries from Sweden to Spain, school-based programs are a common mechanism to reach adolescent cohorts. While in Ireland, France, Portugal and the UK, pharmacy-based vaccination services are available to increase access for individuals who might not routinely visit their general practitioner (GP). In Wales and England, flu vaccines are delivered through the pharmacy. In Northern Ireland, the government is experimenting with pharmacy-based delivery for the shingles vaccine. As part of Scotland's three-year vaccine transformation program, pharmacists support GPs for vaccine delivery.

FIGURE 5

Delivery channels for vaccinations



School-based Programs

A school-based vaccination program is used in countries such as Sweden, Spain, UK, among others, to reach the adolescent population.



Pharmacy-based Deliveries

Pharmacy-based vaccinations are available in countries, such as Ireland, France, Portugal, to increase access for individuals who might not routinely visit their GP.



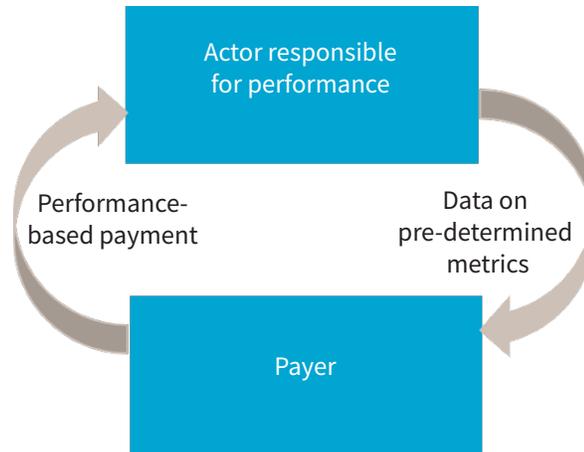
Routine General Practitioner (GP) Visits

Routine GP visits are the traditional delivery system for childhood, adolescent, and adult vaccinations.

2. Performance-based Financing: Performance-based financing is the practice of providing incentives to achieve a set target. In effect, it aims to change provider behavior in order to reach the target. The UK has a call/recall program where a GP is paid a bonus fee for reaching out to the parents of unvaccinated children at least three times. The program incentivizes provider outreach in efforts to increase coverage rates. In Romania, a GP is paid a fee for service for each vaccination delivered. The country recently increased the fee to €7 for each vaccinated individual to incentivize providers to deliver more vaccinations and address coverage challenges. Estonia strives to achieve high performance through its quality bonus system, where physicians receive an annual cash bonus for achieving target coverage rates for specific services, including immunizations.²¹

FIGURE 6

Performance-based financing

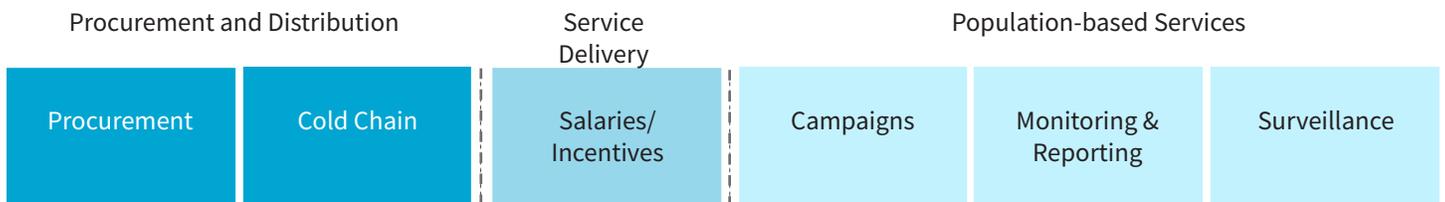


Immunization Program Stewardship Is Increasing in Complexity

As immunization programs grow, more actors are being leveraged to finance and deliver services, creating complex systems that are not always accountable, cohesive, or well-coordinated. Public immunization programs have multiple costs, including 1) procurement and distribution, 2) service delivery, and 3) population-based services such as campaigns, surveillance, monitoring, and reporting. Countries across the EU are finding complex ways to spread these costs by leveraging multiple financing actors. Box 2 details how multiple actors can work together to deliver a comprehensive public immunization program.

FIGURE 7

Immunization costs



Box 2. Complexities of Multiple Actors and Pools in Immunization Financing

1. Each cost within an immunization program can be financed by different actors within the system. For example, the Ministry of Health can cover the procurement costs of the vaccines, the insurance purchaser can reimburse GPs for administering the vaccine, and sub-national governments can provide funds for surveillance and monitoring.

2. Multiple actors can cover all the costs for specific segments of the population. For example, in Spain, each of the 19 autonomous regions finances the procurement, cold chain, salaries/incentives, campaigns, monitoring and reporting, and surveillance costs for their respective communities.

3. Individual vaccines can draw on funding from unique actors. In the UK, most vaccines are procured centrally through the Department of Health and Social Care. But the pneumococcal and flu vaccines are procured directly by the GPs, who are reimbursed by NHS England for each eligible patient vaccinated.

4. Beyond funding, different vaccines may leverage unique delivery channels, bringing in additional actors to provide vaccination services. In the Netherlands, youth and adult vaccinations are delivered through different channels. Until an individual is 18, vaccinations are delivered by youth officers and covered under the NIP, which is run through the Public Health Authority. Adult vaccinations are administered through GPs and covered as a benefit through the social health insurance scheme.

There are benefits of leveraging multiple financing streams to provide better access points for immunization programs, but with increasing complexity, countries need to think about measures to maintain coherence in vaccination programs.

1. Splitting the budget between multiple actors can make it difficult to understand the overall costs and needs of the program. Without a clear overview of the program, planning and implementation can become overly complicated.
2. If system incentives are not aligned across actors, providers may behave in unexpected ways. For example, lack of incentives for the delivery of an adult vaccine in the UK resulted in lower coverage rates when compared to other adult vaccines for which the delivery was financially incentivized.
3. If lines of accountability are not created between engaged actors, program implementation may suffer. To ensure accountability and alignment in Spain, a system is in place that relies on consensus and puts in place a compulsory agreement for all regional actors to implement the national plan in Spain (see Box 3).

Box 3. Creating Accountability in Spain

Spain's 19 autonomous regions have complete control over their immunization programs. To ensure public safety within the country, the governments have devised a system to create alignment across the various actors.

1. Regional ministers, along with the Minister of Health, meet and come to a consensus on the national immunization program's schedule.
2. Each region decides how and when to implement the NIP for their population.

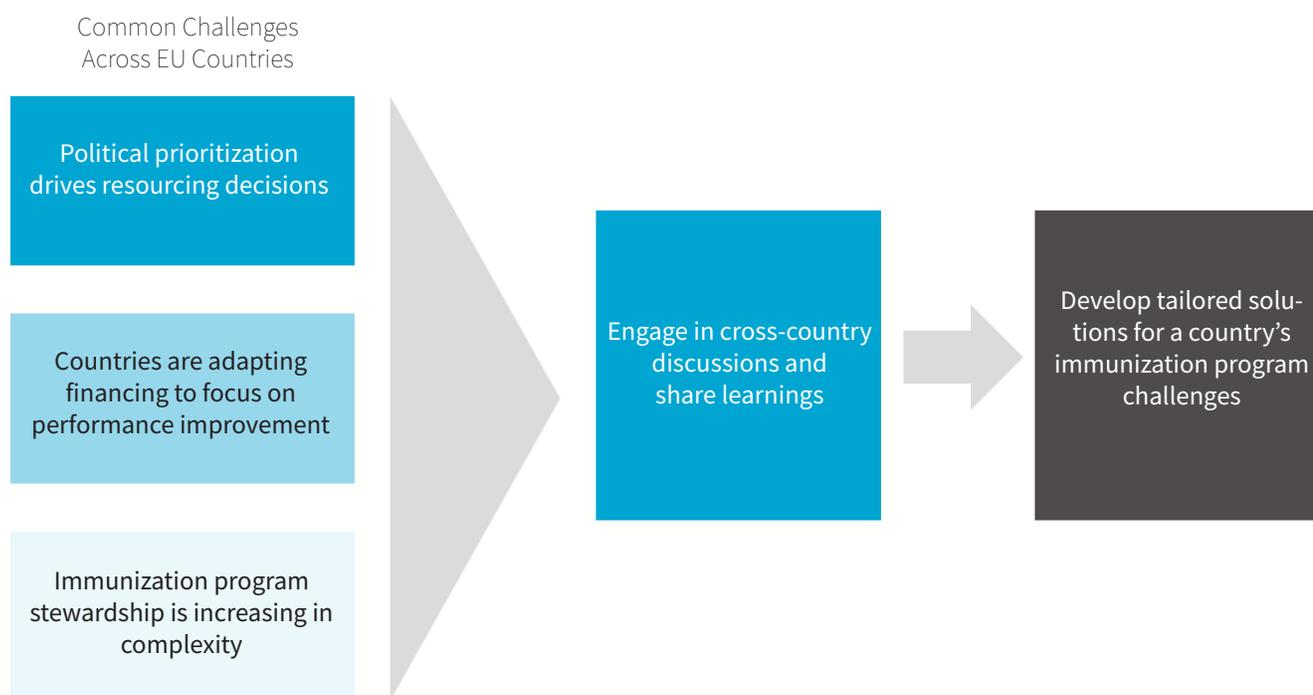
This structure allows for consensus amongst various sub-national actors, while the law makes it a compulsory agreement for the regional actors to implement, allowing for accountability in the system.

REGIONAL LEVEL GUIDANCE: A CALL FOR ENGAGEMENT

Regional actors are actively engaged on the topic of immunization but provide little guidance on the topic of financing. The European Commission, European Centers for Disease Control and Prevention (ECDC), and other regional organizations prioritize the topic of immunizations, but the conversation primarily focuses on surveillance and cross-border threats. The ECDC focuses on regional surveillance of measles and influenza, interoperability on coverage and performance rates, and the creation of a standardized methodology to collect information from member states.²² Vaccines Europe focuses on improving access to immunization, raising awareness about the value and benefit of vaccines, and proactively representing the industry on key issues at the EU level.²³ The European Joint Action on Vaccination (JAV) is a three-year effort, launched in 2018, to enhance confidence in vaccinations, improve forecasting supply needs for preparedness, ensure cross-border cooperation in the EU, and set priorities for research and development for vaccinations.²⁴ Finally, the European Council Roadmap for Vaccination (2019 – 2022) promotes coordination across countries.²⁵ The objective of the council and roadmap is to strengthen coordination between member states, industry and relevant stakeholders to increase coverage rates, enhance vaccine policy development, align vaccine schedules and strengthen vaccine supply in case of emergency. The 2018 EC council recommendation did include a provision for sustainable funding to increase vaccination coverage rates, but financing decisions are the responsibility of individual member states, and regional actors tend to stay removed from the discussion.

FIGURE 8

Leveraging key trends to address challenges across EU countries



Despite unique country contexts, there is space for external actors to engage on sustainable immunization financing in Europe. Although individual countries have their unique contexts, common challenges allow for greater conversation around shared or common solutions. External actors, including Vaccines Europe, NGOs, development organizations, and other stakeholders, can facilitate knowledge sharing and dialogue of best practices across countries in the EU. These actors often work on an even larger scale and can bring global learning to the region. Through the exploration of cross-sector and cross-country partnerships and learning, governments can meaningfully work to address sustainable immunization financing challenges and achieve strong and growing immunization programs.

European countries have strong immunization programs, but ongoing challenges to maintain and grow coverage rates across the region are pushing countries to leverage financing for solutions. The key trends influencing sustainable immunization financing will be crucial to understand. They provide a new perspective on how countries look for opportunities for program enhancements and understand immunization financing. Knowing the importance of immunization financing within the region allows for dialogue in what has become an individualized mission by country. While countries address the challenges within their unique context, regional players and other external actors have the opportunity and ability to engage in dialogue and foster cross-country learnings to build stronger immunization programs now and prepare for future needs in the European Union.

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