

Teaching Vaccine Economics Everywhere

Immunization Financing, Financing, Resource Tracking & Affordability

Course Description

Immunization services are a cornerstone of primary health care that continues to grow as new vaccines are developed against persistent and emerging diseases. Despite their established benefits and cost-effectiveness, immunization requires considerable resources logistically and financially. Thus, governments must plan carefully to ensure adequate and sustainable financing for these programs. Strong immunization program performance depends on adequate financing of immunization specific activities at the national, regional and local level, including vaccine procurement and supply chains.

This module provides information on the fundamentals of immunization financing, their sources, financing data systems, and using the analysis for policy change. We will learn how to identify relevant sources of financing, track resources in the system, analyze financing data and planning for long-term sustainability.

Learning Objectives

By the end of this module, participants should be able to:

- Explain why immunization financing matters
- Describe the cost components of immunization programs
- Decide appropriately what vaccines and services get financed and how.
- Describe sources of financing
- Integrate immunization financing with universal healthcare coverage (uhc) financing
- Track resources used in immunization
- Calculate fiscal space and budget
- Building support for immunization financing

Overall course expectations

- Complete pre-readings (Text Book and Papers) and prepare for class
- Complete all course assignments and milestones on-time
- Actively participate in class discussions

Required Reading:

Results for Development (R4D). Immunization financing: a resource guide for advocates, policymakers, and program managers. Washington D.C.: R4D; 2017

Lecture Topics and Assigned Readings

Part I – Immunization fundamentals

Learning objectives:

1. Why immunization financing matters
2. Link between Universal Health Coverage and immunization financing
3. What are the cost components of immunization programs
4. Vaccine finance decision-making

Exercises: Case-study – EPI in Pakistan

Readings:

- Part 1. Results for Development (R4D). Immunization financing: a resource guide for advocates, policymakers, and program managers. Washington D.C.: R4D; 2017.
- Masia, N. A., Smerling, J., Kapfudz, T., Manning, R., & Showalter, M. (2018). Vaccination and GDP growth rates: Exploring the links in a conditional convergence framework. *World Development*, 103, 88-99. <https://doi.org/10.1016/j.worlddev.2017.10.013> *
- Ozawa S, et al. Return on investment from childhood immunization in low- & middle-income countries, 2011–20. *Health Aff.* 2016 Feb 1;35(2):199-207. <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2015.1086>
- World Health Organization. Developing together the vision and strategy for immunization - 2021-2030: Immunization Agenda 2030 - A Global Strategy To Leave No One Behind. Draft One for Co-creation by 5 August 2019. [Immunizationagenda2030@who.int](https://www.who.int/immunizationagenda2030)
- Global Vaccine Action Plan. Monitoring, Evaluation & Accountability. Secretariat Annual Report 2018. Geneva: World Health Organization; 2018. License: CC BY-NC-SA 3.0 IGO.
- Chatterjee S, Das P, Nigam A, et al, (2018), Variation in cost and performance of routine immunisation service delivery in India, *BMJ Global Health* 2018;3:e000794., <https://gh.bmj.com/content/3/3/e000794>
- Brenzel L, Schütte C, Gogudze K, et al. EPIC studies: governments finance, on average, more than 50 percent of immunization expenses, 2010–11. *Health Affairs*. 2016 Feb;35(2):259-65. <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2015.1121>
- Fangli Geng, Christian Suharlim, Logan Brenzel, et al, (2017), The cost structure of routine infant immunization services: a systematic analysis of six countries, *Health Policy & Planning* <https://academic.oup.com/heapol/article/32/8/1174/3859185>
- Nicolas A. Menzies, Christian Suharlim, Fangli Geng, et al, (2017), The cost determinants of routine infant immunization services: a meta-regression analysis of six country studies, *BMC Medicine* <https://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-017-0942-1>
- Griffiths, U.K., Bozzani, F.M., Chansa, C., et al (2016), Costs of introducing pneumococcal, rotavirus and a second dose of measles vaccine into the Zambian immunisation programme: Are expansions sustainable? <https://www.sciencedirect.com/science/article/pii/S0264410X16304741>
- EPIC [Internet]. EPIC immunization costing studies. Available from: www.immunizationcosting.org
- NITAG Resource Center [Internet]. NRC: About. Available from: <http://www.nitag-resource.org/about>
- World Health Organization [Internet]. Immunization, vaccines and biologicals. Vaccine position papers. Available from: <http://www.who.int/immunization/documents/positionpapers/en/>

Part 2 – Sources of Financing

Learning objectives:

- Essentials of health financing
 - Assess financial flows in the health system & framework
- Sources of financing
 - Domestic Public Funding
 - Household Out-of-Pocket
 - Donor financing

Exercises:

1. Donor Architecture for EPI Financing
2. Donor Mapping for India
3. Donor Mapping for Uganda
4. Supply-side Interventions

Readings:

- Part 2. Results for Development (R4D). Immunization financing: a resource guide for advocates, policymakers, and program managers. Washington D.C.: R4D; 2017.
- Kutzin J., Witter S., Jowett M., Bayarsaikhan D. Developing a national health financing strategy: a reference guide. Geneva: World Health Organization; 2017. (Health Financing Guidance No 3) License: CC BY-NC-SA3.0IGO
- World Health Organization. Regional Office for South-East Asia. (2017). Health financing profile 2017: India. World Health Organization. Regional Office for South-East Asia. <https://apps.who.int/iris/handle/10665/259642>. License: CC BY-NC-SA 3.0 IGO
- National Health Systems Resource Centre (NHSRC). Technical Support Institute with National Health Mission (Government of India National Health Mission): Practice Areas - Healthcare Financing. <http://nhsrcindia.org/healthcare-financing>
- National Health Systems Resource Centre (2018). National Health Accounts Estimates for India (2015-16), New Delhi, Ministry of Health and Family Welfare, Government of India. <http://nhsrcindia.org/healthcare-financing>

Supplementary Reading

Domestic/Public Financing Sources

- Brenzel L. What have we learned on costs and financing of routine immunization from the comprehensive multi-year plans in GAVI eligible countries? Vaccine. 2015 May 7;33:A93-8.
- Welham B, Hedger E, Krause P. Linkages between public sector revenues and expenditures in developing countries. Overseas Development Institute; 2015. Available from: www.odi.org/sites/odi.org.uk/files/odi-assets/publicationsopinion-files/9675.pdf

Earmarking & Trust Funds

- Joint Learning Network [Internet]. Earmarking for health. WHO and R4D working paper. Available from: <http://www.jointlearningnetwork.org/earmarking>
- Sabin Vaccine Institute [Internet]. Trust funds. Available from: <http://www.sabin.org/search/content/Trust%20funds>

Donor Financing Sources

- See the Gavi website for information on Gavi support (<http://www.gavi.org/support/>) and on Gavi policies. <http://www.gavi.org/about/governance/programme-policies/>

Part 3 – Understanding Financial Data Systems & Locating Relevant Sources of Financing

Learning objectives:

- How to Integrate Immunization Financing with Universal Healthcare Coverage (UHC) Financing
 - UHC principals

- What is in it
- How to achieve it
- How to work with insurance and state mandates to do better planning and not duplicate
 - Tuning into your country's task force
 - Integrating vaccines with UHC and better planning
- Resource tracking
 - Methods, application and challenges at the country level

Exercises:

1. Resource Tracking
2. System of Health Accounts

Readings:

- Part 1. Brief 2. pg 22-26. Results for Development (R4D). Immunization financing: a resource guide for advocates, policymakers, and program managers. Washington D.C.: R4D; 2017.
- Ghebreyesus, T. A. All roads lead to universal health coverage. *The Lancet Global Health*, 5(9), e839-e840; 2017. [http://dx.doi.org/10.1016/S2214-109X\(17\)30295-4](http://dx.doi.org/10.1016/S2214-109X(17)30295-4)
- Loganathan, T., Jit, M., Hutubessy, R., Ng, C. W., Lee, W. S., & Verguet, S. Rotavirus vaccines contribute towards universal health coverage in a mixed public–private healthcare system. *Tropical medicine & international health*, 21(11), 1458-1467; 2016.
- Bawa, S., McNab, C., Nkwogu, L., Braka, F., Obinya, E., Galway, M., ... & Ongwae, K. Achieving universal health coverage: implementation of a polio eradication intervention to deliver integrated primary health services to hard-to-reach and underserved communities in Nigeria Research. *WHO Bulletin*; 2018.
- Dereje et al/Abt Associates. (2018). Tracking Immunization Spending Using SHA 2011. (Draft Document). In *WHO Guidelines for Approaching Disease/Priority Health Area Expenditure in System of Health Accounts 2011*.

Part 4 – Using Financial Analysis for Policy Change

Learning objectives:

- Strategies for policy change
 - How to be a good policy change advocate, looking for funds and drive off the competition
 - Building parliamentary support for immunization financing
 - Immunization financing legislature and regulation
- Immunization planning and budget cycle
 - Fiscal space & budgeting
 - Fiscal gap calculation

Exercises:

1. Fiscal Space Analysis

Readings:

- Ozawa, S., Grewal, S., Portnoy, A., Sinha, A., Arilotta, R., Stack, M. L., & Brenzel, L. (2016). Funding gap for immunization across 94 low-and middle-income countries. *Vaccine*, 34(50), 6408-6416. <http://dx.doi.org/10.1016/j.vaccine.2016.09.036>

- Barroy, Helene, et al. *Assessing fiscal space for health expansion in low-and-middle income countries: a review of the evidence*. No. WHO/HIS/HGF/HFWorkingPaper/16.3. World Health Organization, 2016.
- Allen R, Hemming R, Potter BH. *International handbook on public financial management*. New York: Palgrave Macmillan; 2016.