



PCV-OPTIMISE

Pneumococcal Conjugate Vaccine Economic Optimisation Tool



WHAT THIS TOOL DOES: Compares alternative PCV optimisation strategies against your current programme to estimate budget impact, savings and cold-chain needs – to help make affordable, sustainable decisions

STRATEGIES ASSESSED

- Product switches
- Switching from a 3-dose schedule (3p+0 or 2p+1) to a 2-dose schedule (1p+1)
- Vial presentation optimisation
- Combined strategies

TOOL OUTPUTS

- Ranked strategies by cost savings
- Programme costs
- Procurement cost
- Budget impact
- Potential savings
- Cold-chain volume

KEY ASSUMPTIONS

- Vaccine prices are expressed per dose
- One-off switch costs are applied only in the year of introduction
- Wastage rates are presentation-specific
- Costs are undiscounted, consistent with budget impact guidelines
- Cold-chain requirements are estimated but not monetised



WHAT THIS TOOL DOES NOT DO:

It does not compare health outcomes for the different strategies assessed; results are financial only. This analysis supports, but does not replace, country expert judgement.

HOW TO USE THE TOOL

STEP	WHAT YOU DO	WHERE TO GO	WHAT YOU NEED READY
1	Select optimisation strategies Select the current PCV product and schedule, then choose the strategies and scenarios to evaluate.	Scenario Builder	- Current product - Current schedule - Current vial size presentation - Time period to evaluate
2	Enter country and programme inputs Enter or review demographic, procurement, programme cost and financial inputs relevant to your setting.	Country Inputs	- Demographics: birth cohort, growth, coverage - Procurement: vaccine/supply prices, freight, handling, wastage, buffer - Programme: delivery and switch costs - Financing: country co-financing share and transition phase
3	Review results View key results including scenario ranking, costs and savings, and cold-chain requirements. Calculations are performed automatically based on your inputs.	Dashboard	- All Step 2 inputs complete
4	Validate and interpret results Understand and visualise the results. If any outputs appear unexpected, review the Validation Checks sheet.	Interpretation / Charts	- No outstanding warnings on the Validation Checks sheet
5	Explore uncertainty around key assumptions (optional) Explore how changes in key assumptions affect the results.	What if Assumptions Change	- Alternative values or plausible ranges for vaccine price, wastage rate, coverage and programme costs

TIPS

- Verify current PCV product and schedule
- Replace defaults with local data where available
- Document key assumptions when sharing results with stakeholders
- Resolve validation warnings before interpreting results
- Refer to VPOP toolkit for further guidance about optimisation strategies

DATA SOURCES

- EPI programme, UNICEF Supply Division Price Data, PAHO Revolving Fund Vaccine Prices, WHO MI4A Vaccine Purchase Database, ThinkWell (2024). Immunization Delivery Cost Catalogue, Published literature



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Designed for EPI managers, NITAGs, Ministries of Health, and technical partners

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HELP
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