

Comprehensive Vaccine Management (CVM) Approach
Country gap analysis questionnaire

Thematic area	Questions	Country findings	Norms and standards (not exhaustive, to be finalized)
System Optimization & Segmentation	How is vaccine distribution planning and implementation monitoring done? What systems are in place for distribution to HTR/missed/ZD communities? <i>Please specify processes and tools used.</i>		-Healthcare waste management guidance -Equity considerations in supply chains (UNICEF and VillageReach)
	Has the supply chain introduced any sustainable optimization measures aimed to increase timely distribution of vaccines up to the last mile and minimize carbon footprint? <i>Please indicate implementation lessons</i>		
	Is there a strategy, system and process for appropriate disposal, recycling, re-using and management of immunization-related wastes at the national and sub-national levels?		
	What context-based innovative interventions would improve supply chain delivery and distribution up to the last mile?		
Data Visibility & Use	How is demand planning and forecasting, for vaccines and devices, done in this country? <i>Please specify any tools used for demand planning and forecasting.</i>		-Traditional forecasting methods (Target population, previous consumption...) -WHO revised guidance on vaccine forecasting (under publication) -Buffer stocks: to be set based on the new guidance (from the "25%" to a rational-based estimation by SC level)
	What methodologies/approaches (e.g., target population, consumption or both etc.) are used and what assumptions are taken into consideration when forecasting?		
	What data informs these forecasts and what are the sources of these data? What systems are used to triangulate data from different sources?		
	Is supply planning done in this country? If yes, how is it done and what data is used when conducting supply planning?		
	Are forecast performance reviews done? If yes, how is it done and what details are reviewed?		

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	Is supply chain data monitored and reported in this country? If yes, which data? What are the sources of data? How is the data reported?		-Wastage rate: national figures from routine monitoring and /or study to be used first.
	Does the forecast and supply planning process consider specific methodologies to target identified underserved and unreached populations?		-WHO vaccine wastage calculator now provides bases for assessing and anticipating wastage from service delivery context.
	What buffers are built into forecasts? Have these been adapted to context from multi-year experiences with monitoring stock consumption and wastage patterns?		-Placement of orders account for stock at hand.
	What supply chain data visibility and monitoring platforms exist in this country and what are the experiences of use by the country team? <i>Please specify SC data types and tools available.</i>		- EVM Requirements on data/stock management
	Does this country track and report any of the DISC and/or IA2030 supply chain indicators? If yes, how frequently and where is the data reported?		-WHO policy statement: Multi-dose Vial Policy (MDVP), revision 2014.
	How is supply chain data used by EPI stakeholders (managers, supervisors, officers and partners)? <i>Please specify the process.</i> Are there specific challenges limiting use of data for decision/action by EPI stakeholders? <i>Please specify</i>		
	How are vaccines and devices stock monitored and reported? <i>Please specify processes and tools used.</i>		
	What stock and inventory management norms and tools (including technology) are adopted and used in this country? <i>Please specify.</i>		
	Is there a system for regular reporting of vaccine needs against allocation, consumption, wastage, stock levels etc. (e.g., forms of Vaccine Accountability Reporting) in place in this country? If yes, what aspects of the programme does it apply and to what level has it been deployed and effectively used? <i>Please specify processes, tools used and country team experiences of use.</i>		

	What systems/tools/processes are in place to rapidly respond to stock incidents (such as over-stock, stock-outs, abnormal wastage levels, vaccine expiries including its tracking, monitoring, reporting, mitigation, and resolution) at national and sub-national levels and what are the country team experiences of using these?		
	How are vaccine expiries managed (tracked, monitored, reported, mitigated and resolved)? <i>Please specify processes and tools used.</i>		
	Has the country adopted the Multi Dose Vial Policy (MDVP)? How is it being implemented? <i>Please specify the process.</i>		
	How is closed vial wastage tracked, monitored and reported? Does this occur at all supply chain levels? <i>Please specify processes and tools used.</i>		
	What are the root causes of vaccine wastage in this country? How was this determined?		
	If applicable, how are the identified root causes being mitigated?		
	Has the country undertaken a Vaccine Wastage Assessment?		
	What context-based innovative interventions would improve data visibility and use at national and sub-national levels in the country?		
Capacity development and professionalization	Does the country have a National Logistics Working Group (NLWG) or an equivalent Supply Chain Technical Working Group with oversight for EPI logistics?		-Cf. ToRs for NLWG -EVM Requirements on HR/capacity building
	Does the country have subnational Logistics Working Groups? If yes, at what SC levels?		
	How do the NLWGs/SNLWGs oversee implementation of SC strategic and improvement plans?		
	How do the NLWG and SNLWGs operate vis-à-vis membership, meeting frequency, standing agenda items, use of data for action, addressing follow-up actions etc.?		

	Are there other PHC health commodity supply chain TWGs? If yes, is there a relationship between the NLWGs/SNLWGs and these TWGs?		
	Does the country have a human resource policy/plan for efficiently ensuring appropriate capacity development and increasing supply chain professionalization?		
	What context-based innovative interventions would improve supply chain governance, capacity building and supply chain professionalization at the national and sub-national levels in the country?		
Smart integration and harmonization	Has there been a review/ an assessment of opportunities for resource sharing/integration between immunization programmes and other public health supply chains in the country?		-WHO/UNICEF Joint statement on integration
	What supply chain functions have been identified for integration implementation?		
	What integration interventions are being implemented at the national or sub-national level and what are the lessons for the country team?		
	Are there alternative innovative business models that could be implemented to ensure that efficiencies are built into supply chain processes		
	Are there policy, SOPs, guidance etc. changes required to successfully implement integration interventions?		
	What context-based innovative interventions would improve efficiencies across different public health supply chains at the national and sub-national levels in the country?		
Fundamental infrastructure	How are cold chain inventories kept and monitored? How is cold chain planning done in this country? How is CCE performance monitored? <i>Please specify processes and tools used.</i>		-CCE planning and guidance -CCE Needs calculator -Solarisation guidance -Decommissioning guidance
	Is there an updated (last one year) national cold chain storage infrastructure gap analysis and rehabilitation and expansion plan that includes needs for up to at least a decade?		

	Is there a national maintenance strategy developed and being implemented across supply chain levels?		
	What systems are being used to ensure appropriate preventive and corrective maintenance across all supply chain levels?		
	Is the country prioritizing and implementing sustainable technology solutions such as solarized sites, vehicles and facilities?		
	What context-based innovative interventions would improve capacity and sustainability of national and sub-national supply chain infrastructure?		
Strategic planning	How does the country plan for the immunization supply chain programme? Does the country implement joint planning sessions with other public health supply chains?		-EVM 2.0 Framework -WHO/UNICEF cIP Guidance
	Does the country have a comprehensive supply chain strategy (standalone or embedded in other national health strategies) for steering supply chain implementation in the country?		
	Does this country have a recent (less than two years) validated comprehensive supply chain assessment results such as the EVM(A) composite score, maturity model results etc.? Does the country undertake EVM self-assessments? If yes, when was the last assessment undertaken? <i>Please verify with EVMA Heat Map</i>		
	What context-based innovative interventions would improve iSC strategic planning at national and sub-national levels?		

CVM Country Analysis

Key Country Facts

Total population (Year)¹: XXXX Birth cohort (Year)¹: XXXX Surviving Infants (Year)¹: XXXX DTP3 coverage²: WUENIC % - JRF %

Number of ZD children (Year): XXXXX

Top 20 Gavi share of vaccine investment³: XXXX

iSC architecture Description (Number of Levels): XXXX

Coverage Trend⁴

Zero Dose Trend⁴

iSC performance

Stock Performance Trend⁵

EVM Snapshot⁶

Key iSC Performance Takeaways

- (Stock performance synthesis): Two sentences on Stock Performance and issues seen in chart above.
- (EVM synthesis): Two sentences on EVM and issues seen in chart above.
- (Zero dose synthesis): Two sentences on Zero dose picture and issues seen in chart above.

CVM Gaps and Improvement Recommendations⁷	
CVM Gaps	Recommendations for Country Consideration
System Optimization & Segmentation (<i>Distribution and network design; Waste Management</i>)	
<ul style="list-style-type: none"> • Gap 1: XX • Gap 2: XX 	<ul style="list-style-type: none"> • XX • XX
Data Visibility and Use (<i>Data-driven forecasting & supply planning; End-to-end vaccines & dry commodities stock management; Strengthened iSC data quality, visibility & use systems; Vaccine wastage tracking & use for agile forecasting and vaccine availability</i>)	
<ul style="list-style-type: none"> • Gap 1: XX • Gap 2: XX 	<ul style="list-style-type: none"> • XX • XX
Capacity Development and Professionalization (<i>Availability and functionality of national & subnational technical working groups; Optimal supply chain and health worker number, capacity, skills, and tools; Supply chain professionalization</i>)	
<ul style="list-style-type: none"> • Gap 1: XX • Gap 2: XX 	<ul style="list-style-type: none"> • XX • XX
Smart Integration and Harmonization (<i>Rational supply chain functions integration and harmonization</i>)	
<ul style="list-style-type: none"> • Gap 1: XX • Gap 2: XX 	<ul style="list-style-type: none"> • XX • XX
Fundamental Infrastructure (<i>Agile cold chain inventory and planning systems for current and future needs; Preventive and corrective maintenance systems; Adequate cold chain and dry storage capacity; Solarization</i>)	
<ul style="list-style-type: none"> • Gap 1: XX • Gap 2: XX 	<ul style="list-style-type: none"> • XX • XX
Strategic Planning (<i>iSC planning, performance monitoring and management; National EPI/PHC supply chain strategies and master plans</i>)	
<ul style="list-style-type: none"> • Gap 1: XX • Gap 2: XX 	<ul style="list-style-type: none"> • XX • XX

Data Sources

1. UN Estimates
2. WHO Immunization Repository
3. Gavi Secretariat
4. UNICEF, WHO and Gavi Zero dose analysis
5. Stock Management Tools (Thrive360, SMT etc.)
6. EVM Secretariat Dataset
7. CVM Approach Country Analysis