

Using the Effective Vaccine Management (EVM) assessment tool to build immunization supply chain (ISC) capacity at national and subnational levels

Dan Brigden (WHO)
Srihari Dutta (UNICEF)
Olamide Folorunso (UNICEF)
12/01/2023

Agenda



- Building ISC capacity at national level Dan Brigden (WHO)
- 2. Building ISC capacity at **facility** and **individual** level Srihari Dutta (UNICEF)
- Building EVM capacity at national level Olamide Folorunso (UNICEF)

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A global initiative to improve immunization supply chains.

The Effective Vaccine Management (EVM) global initiative provides materials and tools needed to **assess** and **monitor** vaccine supply chains and help countries **improve** their supply chain performance.



EVM
Setting a standard for the vaccine supply chain



What is EVM?

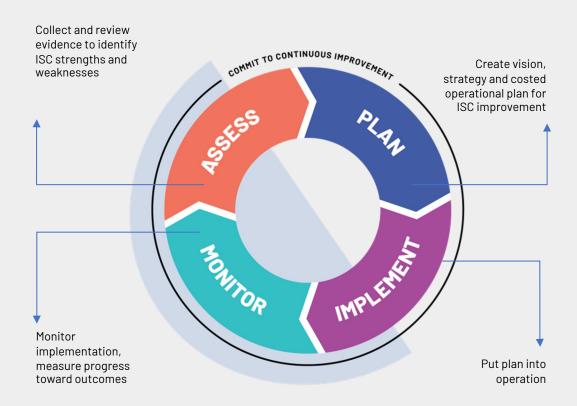


- A set of standards that together define the optimal immunization supply chain
- 2. A questionnaire that can assess if a health facility meets those standards
- A secure website to create and manage EVM assessments, and to analyze which standards have been met at national or subnational levels
- 4. A mobile app that is used to administer the questionnaire
- 5. An improvement planning tool that can be used to develop a continuous improvement plan (cIP) based on the assessment findings

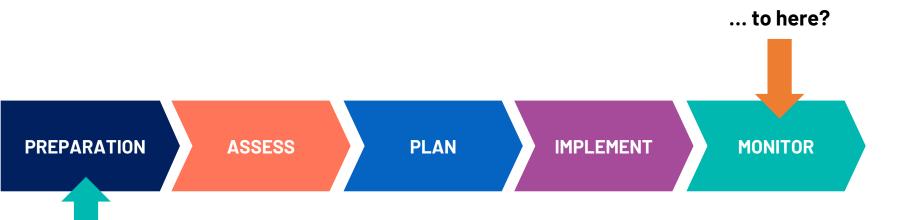
EVM supports continuous improvement

To put it another way...

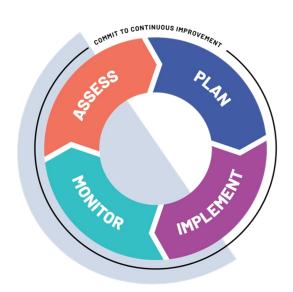
- 1. Assess your supply chain
- 2. Make an improvement plan
- 3. Improve your supply chain
- 4. Ensure the plan is working







How do we get from here...



Creating an EVM assessment

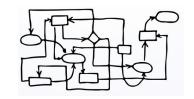
With EVM2, countries are in the driver's seat.

Countries can assess any aspect of their supply chain, whenever they choose.

While a Full, National EVM assessment remains the global benchmark, countries can customize assessments by type, range, sample and scope to meet their needs.



EVM assessment - process



EVM Manager

On EVM website:

- 1. Create assessment
- Assign locations to assessors



EVM Assessor

On EVM app, for each assigned location:

- Download questionnaire
- Collect data at health facility
- 3. Upload completed questionnaire

EVM Manager

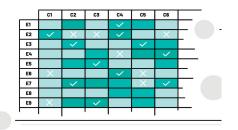
On EVM website:

- Review, validate and approve uploaded questionnaires
- 2. Finalize assessment
- 3. Analyze results
- 4. Generate EVM Report
- 5. Download cIP Development Tool





More insights, greater clarity



The EVM2 framework provides greater clarity on every aspect of ISC performance. EVM2 assesses 19 criteria:

- E1-9 Facility operations
- M1-4 Facility management
- R1-6 National programme management

The added criteria provide necessary details to identify and address root problems to supply chain management.

Criterion scores can be analyzed by input, output and performance categories.

Heat-map: This graph presents the criteria and category scores for one or more location in an assessment, or for an entire assessment. Locations to include can be defined by state, district, or supply chain level.

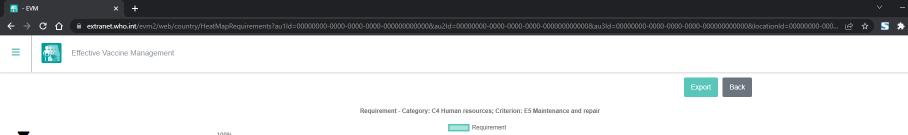
Total number of locations included: 45

×
Level
All selected (4)
AU1
All 💙
AU2
All
AU3
All
Location
All
Assessment
National Assessme
Trational Assessmin 1
Criterion type
Facility operations & ma ✓
Apply
Export

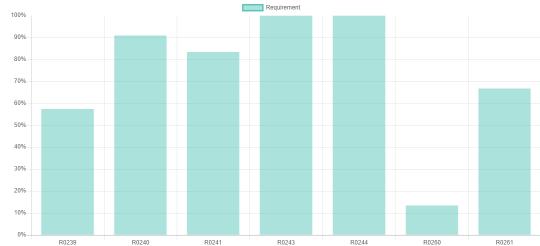
		Infrastructure	Equipment	Information technology	Human resources	Policies & procedures	Financial resources			TOTAL
		C1	C2	C3	C4	C5	C6	OUTPUTS	PERFORMANCE	
Vaccine arrivals	E1			50	100	85	100	81		83
Temperature management	E2			58	85	39		20	98	68
Storage and transportation capacity	E3	93	60		99	43	100	86	100	75
Facility infrastructure and equipment	E4	85	79	81			83	73		80
Maintenance and repair	E5			38	67	13	88	53	91	65
Stock management	E6			67	91	46		59	70	68
Distribution of vaccines and dry goods	E7		100	40	79	26	84	72	100	69
Vaccine management	E8				89	49		100		71
Waste management	E9		65		73	28	100	62	92	76
Annual needs forecasting	M1				90	81		97	1	79
Annual work planning	M2				92	84	96	74	77	84
Supportive supervision	МЗ	100	100	85	76	74	20	78		85
iSC performance monitoring	M4			74	60	30		25		44
TOTAL		86	75	68	81	45	95	64	83	72

Heat-map: This graph presents the criteria and category scores for one or more location in an assessment, or for an entire assessment. Locations to include can be defined by state, district, or supply chain level.





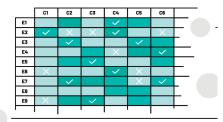
EN ▼



Total number of locations included: 45

	Requirement
R0239 - At least one staff is assigned to carry out routine refrigeration maintenance tasks.	57.51
R0240 - At least one staff is assigned to maintain an inventory of cold chain equipment.	90.86
R0241 - At least one staff is assigned to carry out routine vehicle maintenance tasks.	83.33
R0243 - Refrigeration technicians or services are available to maintain and repair cold chain equipment.	100
R0244 - Auto mechanics or services are available to maintain and repair vaccine transportation vehicles.	100
R0260 - Responsible staff are trained in routine refrigeration maintenance.	13.36
R0261 - Responsible staff are trained to maintain an inventory of cold chain equipment.	66.71

C4 Human resources (input category)



C4.1 Staffing

C4.2Training

C4.3Knowledge At least one member of staff is responsible for forecasting vaccine and dry goods needs.

At least one member of staff is responsible for annual work planning.

RR0242 is applicable at all levels, e monitoring tasks.

but weighted differently per level:

R0237 Two or more members of staff are able to inspect vaccine shipments.

B0238 Two or more members of staff are able to inspect vaccine shipments.

RPR(5), as N(5), so N(1), as N(1),

R0242 Building maintenance staff or services are available to maintain buildings.

Refrigeration technicians or services are available to maintain and repair cold chain equipment.

This C4.1 requirement is applicable to

RE5 (MaintenancetandsRepair) out vaccine distribution tasks.

Adequate number of staff is assigned to manage immunization waste.

C4 Human resources (input category)

							_
	C1	C2	C3	C4	C5	C6	
E1				/			
E2	\	×	×	>		×	
E3		\			>		
E4				×		>	
E5			/				
E6	×			~	×		Г
E7		\			×	\	
E8							
E9	×		/				Г

C4.1	Staffing	R0255	Responsible staff are trained how to carry out ISC performance monitoring tasks.
C/. 2	Training	R0258	Responsible staff are trained how to inspect vaccine shipments.
C4.2 Training		R0259	Responsible staff are trained how to monitor vaccine temperatures.
C4.3	Knowledge	R0260	Responsible staff are trained in routine refrigeration maintenance.
		R0261	Responsible staff are trained to maintain an inventory of cold chain equipment.
		R0262	Responsible staff are trained in vaccine stock management.
		R0263	Responsible staff are trained how to carry out vaccine distribution tasks.
		R0267	Responsible staff is trained in immunization waste management.



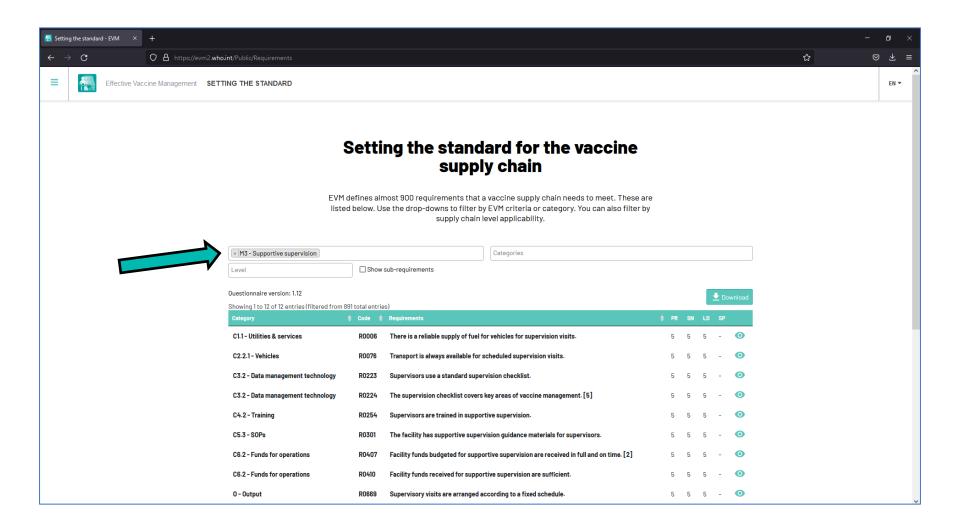
	C1	C2	C3	C4	C5	C6	
E1				<			
E2	>	×	×	>		×	
E3		<			>		Γ
E4				X		/	
E5			<				
E6	×			~	×		
E7		<			×	/	
E8							
E9	×		/				Г

C4.1	Staffing	R0268	Responsible staff are knowledgeable of key principles and procedures of temperature monitoring.
C4.2	Training	R0272	Responsible staff are knowledgeable of key principles and procedures of vaccine & dry goods storage.
C4.3	Knowledge	R0274	Responsible staff are knowledgeable of key principles and procedures of vaccine stock management.
		R0277	Responsible staff are knowledgeable of key principles and procedures of vaccine distribution.
		R0286	Responsible staff are knowledgeable of key principles and procedures of vaccine management.
		R0294	Responsible staff are aware of key principles and procedures of immunization waste management.

Heat-map: This graph presents the criteria and category scores for one or more location in an assessment, or for an entire assessment. Locations to include can be defined by state, district, or supply chain level.

Total number of locations included: 45

	Total Humber of locations in				Information	Human	Policies &	Financial			
Level			Infrastructure	Equipment	technology	resources	procedures	resources			TOTAL
All selected (4)			C1	C2	C3	C4	C5	C6	OUTPUTS	PERFORMANCE	
AU1	Vaccine arrivals										
[All v	Temperature management										
AU2	Storage and transportation capacity		What	does	S EVM I	nave t	n sav				
AU3	Facility infrastructure and equipment	ah			tive su		_	83			
All	Maintenance and repair				20	67	4.0	88			
Location	Stock management		at Fac	ility i	<i>l</i> lanage	ment	ievei?				
All	Distribution of vaccines and dry goods										
Assessment	Vaccine management										71
National Assessm∈ ➤	Waste management					73					
Criterion type Facility operations & ma	Annual needs forecasting										
	Annual work planning								74	77	
	Supportive supervision	МЗ	100	100	85	76	74	20	78		85
	iSC performance monitoring	M4			74						
	TOTAL								6.4		70

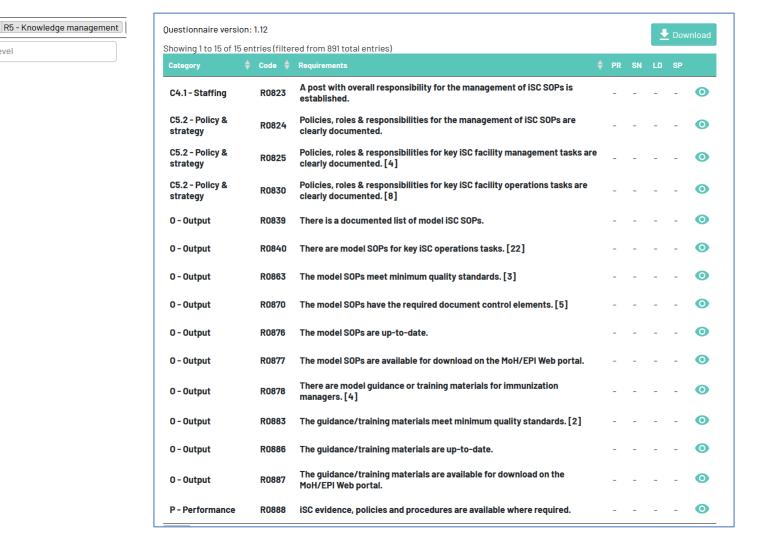


× M3 - Supportive supervision	_			Categories						
Level	Show									
Questionnaire version: 1.12								<u>+</u>	Dov	wnload
Showing 1 to 12 of 12 entries (filter	ed from 89	1 total entries)								
Category 💠	Code 💠	Requirements				PR	SN	LD	SP	
C1.1 - Utilities & services	R0006	There is a reliable supp visits.	oly	of fuel for vehicles for supervision		5	5	5	-	0
C2.2.1 - Vehicles	R0076	Transport is always ava	aila	able for scheduled supervision visits.		5	5	5	-	0
C3.2 - Data management technology	R0223	Supervisors use a stan	nda	rd supervision checklist.		5	5	5	-	0
C3.2 - Data management technology	R0224	The supervision check management. [5]	list	t covers key areas of vaccine		5	5	5	-	0
C4.2 - Training	R0254	Supervisors are traine	d ir	n supportive supervision.		5	5	5	-	0
C5.3 - SOPs	R0301	The facility has suppor supervisors.	rtiv	e supervision guidance materials for		5	5	5	-	0
C6.2 - Funds for operations	R0407	Facility funds budgete in full and on time. [2]	d fo	or supportive supervision are receive	d	5	5	5	-	0
C6.2 - Funds for operations	R0410	Facility funds received sufficient.	l fo	r supportive supervision are		5	5	5	-	0
0 - Output	R0669	Supervisory visits are	arr	anged according to a fixed schedule.		5	5	5	-	•
O - Output	R0670	Supervisors maintain a	a re	ecord of visits and findings.		1	1	1	-	0
O - Output	R0671	All scheduled visits tak	ke p	place.		5	5	5	-	•
0 - Output	R0672	Staff receive feedback	k fr	om supervisors. [2]		5	5	5	5	0
50 🗸						Prev	ious	1		Next

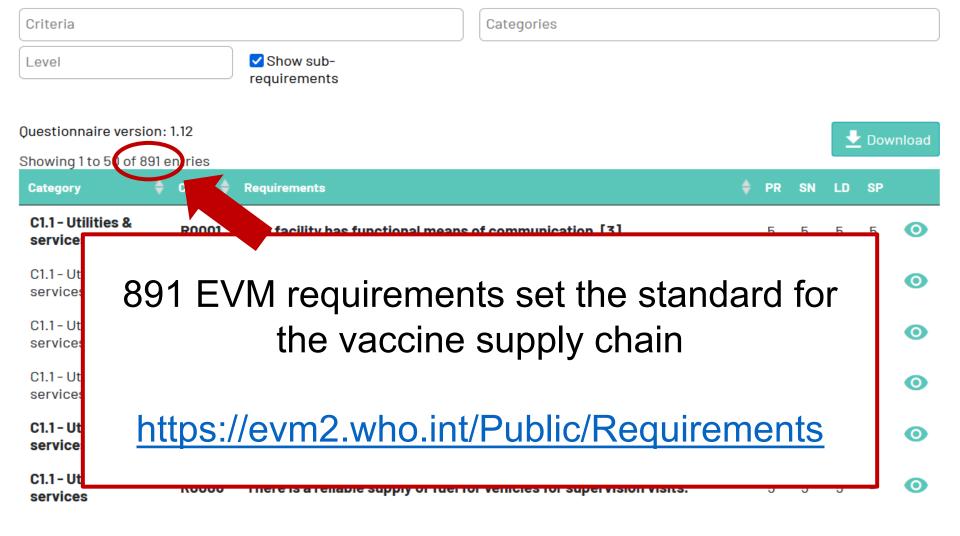
Infrastructure management	R1
Equipment management	R2
IT systems management	R3
Human resources management	R4
Knowledge management	R5
Financial resources management	R6
Strategic planning	ST
TOTAL	

What does EVM have to say about human resources management (R4) and knowledge management (R5) at national immunization programme level?

* R4 - Human resource	es manager	Categories	Categories									
_evel		□ Show sub- requirements										
uestionnaire version:		from 891 total entries)				<u> </u>	Dov	vnload				
	Code \$	Requirements	\$	PR	SN	LD	SP					
C5.2 - Policy & strategy	R0809	Policies, roles & responsibilities for the management of human resources for the immunization supply chain are clearly documented.		-	-	-	-	0				
C6.3 – Funds for development	R0810	Program funds are available to fill vacant program management posts.		-	-	-	-	0				
C6.3 – Funds for development	R0811	Program funds budgeted for staff development are received in full and on time. [2]		-	-	-	-	0				
0 - Output	R0814	There is an ISC training curriculum.		-	-	-	-	0				
O - Output	R0815	There are up-to-date records of iSC staff training.		-	-	-	-	0				
0 - Output	R0816	The iSC training materials meet minimum quality standards. [4]		-	-	-	-	0				
0 - Output	R0821	The ISC training materials are available for download on the MoH/EPI Web portal.		-	-	-	-	0				
P - Performance	R0822	Recruitment, training and knowledge of iSC staff meet EVM standards.		_	-	-	_	0				



Level



Download the cIP Assistant Tool

TOMITOR IMPOLINATION

Once an assessment has been completed, the EVM manager can download an Excel tool to help prepare for the continuous improvement planning (cIP) workshop.

The tool includes a list of every requirement score from the assessment. EVM managers can use the tool to generate a list of improvement activities that address the weaknesses identified.

Agenda



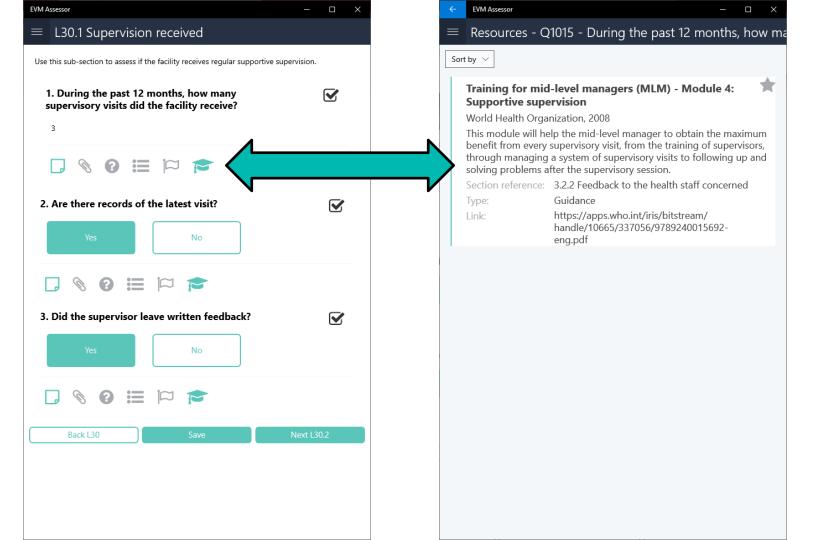
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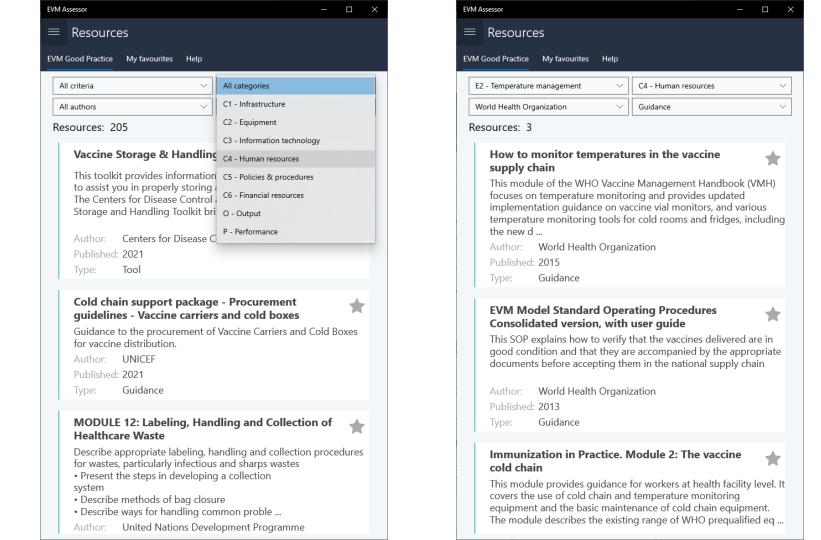
Building ISC capacity at facility & individual level



EVM is also a tool for **self-assessment and self-learning** beyond the national assessment.

- Anyone can use My Facilities.
- The EVM app can be used for data analysis as well as data collection.
- 3. Key ISC resources (for example, WHO guidance or training material) have been embedded within the EVM app and can be referred to my assessors or those being assessed at the point of need.

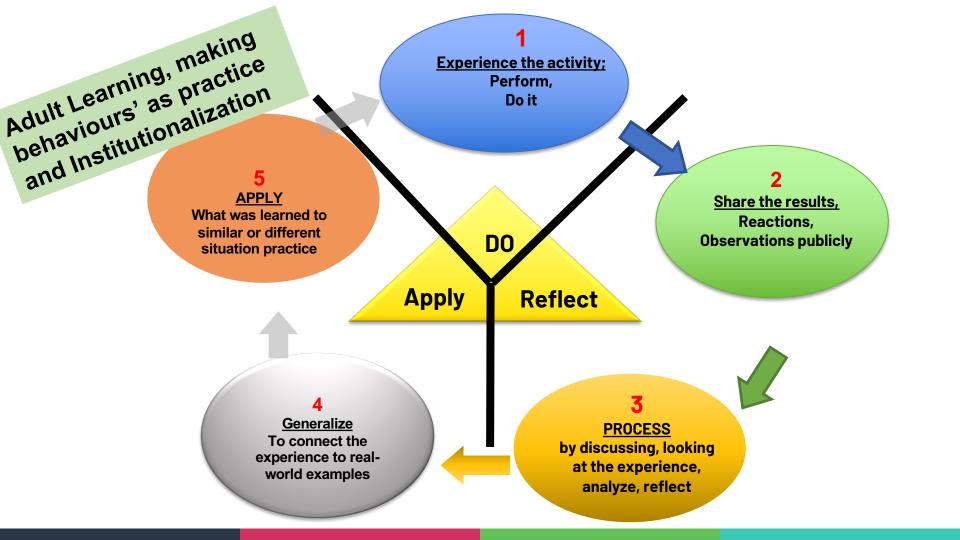




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Building ISC Capacity At The Facility & Individual Level





Improvement in the Immunization Supply Chain of their Country/ State/ District and HF

- 1. Vaccine Arrival procedures
- Temperature Monitoring
- 3. Vaccine Storage
- 4. Equipment Maintenance
- 5. Stock Management
- 6. Distribution
- 7. Vaccine Management
- 8. Waste Management
- 9. Needs planning, forecasting and Supervision

Sustainable institutionalization and working as change agent

- Continuous capacity building(<u>not done for MOH</u>) of MOH staff and advocacy to internalize EVM initiative and related process through skill transfer
- MOH and Public health professionals use the EVM tool as a routine tool to assess, monitor, and evaluate the performance of EPI SC
- Engage staff of all levels, Policy makers, planners and implementers
- Establish National and regional resource pools to support and guide MOH in implementing the EVM initiative
- Continuously build and assess the performance of the national resource pool
- Inter-country resource exchange and country visits during the EVM process
- Make EVM part of the country's public health teaching curriculum
- Structured review of cIP implementation and root cause analysis for delayed implementation
- Advocate health supply chain system to use principles of EVM
- EVM scores to be seen every day by the facility manager

Agenda

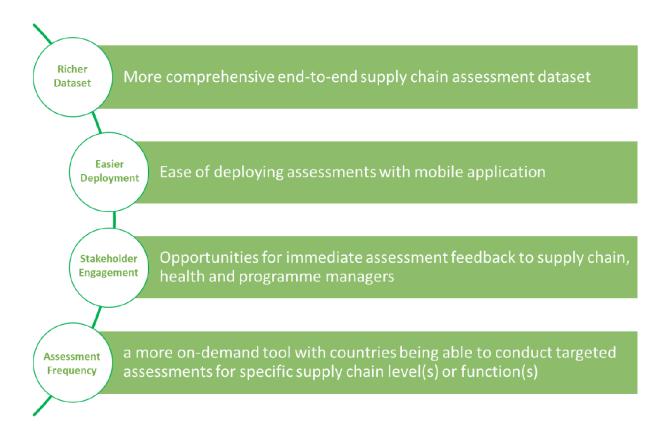


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EVM 2 Assessments Evolution

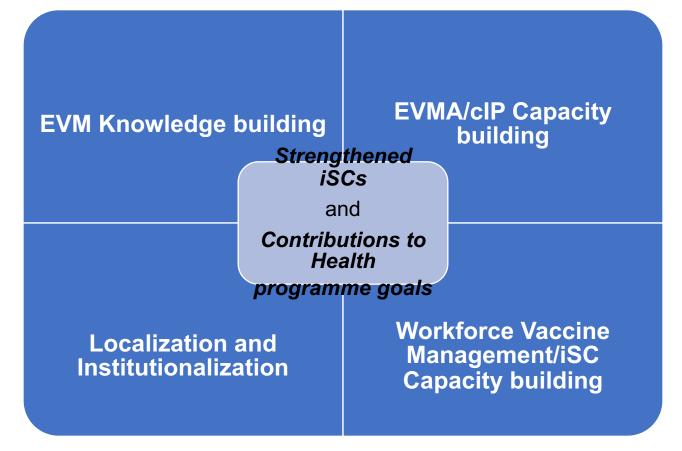
2019	2020	2021	2022
Iraq	Cambodia	Bangladesh	Comoros
Maldives	Cameroon	Burundi	Gambia
Pakistan	Djibouti	Côte d'Ivoire	Guinea
	Indonesia	Eritrea	India
	Kenya	Ghana	Jordan
	Madagascar	Lebanon	Kyrgyzstan
	Nepal	Malawi	Liberia
	Niger	Mongolia	Mauritania
	Sudan	Nigeria	Qatar
	Uganda	Sri Lanka	Sao Tome and Principe
	Viet Nam	Tanzania	Sierra Leone
		Togo	Tajikistan
		Zambia	Tunisia
			Uzbekistan

EVM 2 Roll-out: Initial experiences*

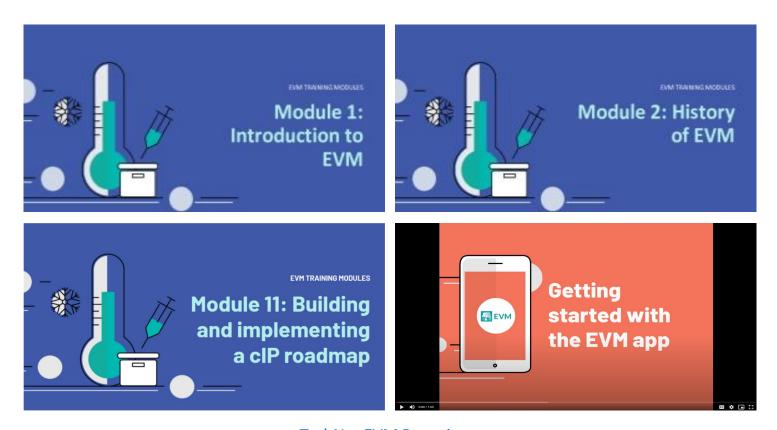


^{*} Systematic EVM 2 deployment lessons and experiences in 2023

Capacity Development through EVM 2



EVM Knowledge building



TechNet EVM Repository

EVMA/cIP Capacity building (1/2)

Global EVM Capacity Building Workshop. Rwanda. <u>95 F2F Participants</u>



EAPRO and ROSA EVM Workshop. Bangkok. <u>70 F2F Participants</u>



MENA EVM Capacity Building Workshop. Morocco. 45 F2F Participants



PAHO/LACRO EVM Workshop. Morocco. <u>70 F2F Participants</u>



EVMA/cIP Capacity building (2/2)



EVM Webinar Series

Session 1: What is Effective Vaccine Management (EVM) and why is it so important?

Access webinar

Session 2: Planning and delivering an EVM assessment - who, when and how?

Access webinar

Session 3: Developing and implementing a continuous improvement plan (cIP)

Access webinar

Session 4: What does EVM tell us about the evolution of immunization supply chains from 2010 to 2022?

Access webinar

Localization and Institutionalization- Catalyzing government and local Institutions' engagement e.g., LTAs

Terms of Reference (TOR): Establishment for Institutional Long-Term Arrangements (LTAS) for Effective Vaccine Management Scale-up

1.0. BACKGROUND

The Effective Vaccine Management (EVM) process assesses supply chain functions, identifies bottlenecks and develops recommendations for improvement and has long been a critical continuous improvement approach to strengthening immunization supply chains.

The new mobile-based version- EVM2.0¹, was developed building on lessons from planning, executing and evaluating the EVM process and is currently being rolled out across countries.

Early country adopters have described an updated criteria/category list (such as human resources and waste management), the possibility of targeted assessments and a more robust dataset and automation, as few of the benefits of EVM 2.0.

In the next two (2) years, more than forty (40) countries have planned or are due for an EVM assessment, with a need to sustainably provide technical assistance in planning, training and preparation, to conduct assessments and in the development of continuous improvement plans (rIP)

To effectively scale EVM deployment, in the short to long-term, UNICEF aims to prioritize the engagement of in-country and regional supply chain vendors (*including academic, private, non*governmental organizations and partner institutions) and enter into Long-Term Arrangements (LTAS) and individual contracts with these organizations, for the provision of EVM-related and capacity building activities.

2.0. PURPOSE AND OBJECTIVES

The purpose of this Request for Proposal for Services (RFPS) is to seek qualified vendors with significant knowledge of vaccines, supply chain (especially for immunization), primary health care, health systems and health systems strengthening programming (design, execution and evaluation), bottleneck analysis, solutions and innovations in Low and Middle-Income Countries (LMICs).

As a result of this RFPS and to provide technical assistance to countries through different EVM phases (preparation, assessment, planning and monitoring) and capacity building of EVM Framework components, UNICEF wishes to enter into a non-exclusive Long Term Arrangement for Services (LTAS) for an initial two (2) year period, with the possibility of extension for additional one (1) year under the same terms and conditions based on satisfactory performance.

3.0. DESCRIPTION OF ACTIVITIES

Under the direct supervision of the Regional/Country Office Health/Immunization/Supply Chain/EVM focal point and overall coordination of the Health Specialist, Programme Group, the selected institution(s) shall perform activities in the below four (4) key service areas during the LTA period.

LTAs Institutions

1. Vendor: Ganeshaid Consultancy Company Limited

Nguyen Van Ngoc Street, Ba Dinh District 6th Floor No. 26, 10000 Hanoi, Vietnam. Contact Person: Dorothy Lead Position: Managing Director Email: dleab@aneshaid.com

2. Vendor: I See Information Technology (ISEET Accelerating Digital Transformation)

Wasfi Al Tal Street, 11194 Amman, Jordan.

Contact Person: Amjad Hiary Position: Founder and CEO E-mail: amjad@iseet.co

3. Vendor: The Balanzan Institute (TBI)

Somgande Rue 25.09 Secteur 25 1246, Kadiogo, 9367 Ouagadougou, Burkina Faso

Contact Person: Dr. Modibo Dicko

Position: Organization and Information Secretary

Email: dickom@thebalanzan.org

4. Vendor: The National Institute of Health and Family Welfare (NIHFW)

Baba Gang Nath Marg, Delhi, 110067 Munirka, India.

Contact Person: Nidhi Kesarwani,

Position: Director Email: director@nihfw.org

5. Vendor: University of Rwanda Single Project Implementation Unit (East Africa

Community Regional Center of Excellence), Kigali, Rwanda

Contact Person: Dr. Stephen Karengera

Position: Director

Email: Stephen.karengera@gmail.com

<u>Countries supported</u> <u>by LTAs Institutions</u> (2022)

- 1. Benin
- 2. Congo
- 3. India
- 4. Liberia
- 5. Sao Tome and Principe
- 6. Sierra Leone
- 7. Togo
- 8. Tunisia

¹ Effective Vaccine Management (EVM)

Localization and Institutionalization-Supply chain improvement plans Implementation Tool (SCIP)



Globally tracking cIP
Development and
implementation

Systematic EVM Process Monitoring

(S)NLWGs presence and functionality mapping

Workforce vaccine management and iSC Capacity building

Development of e-modules leveraging EVM framework for the Technical modules

Strategic Modules (Suggested) Topics

- Developing and implementing national supply chain strategies
- How to develop interventions to ensure reaching the underserved and unreached populations
- Understanding WUENIC data and identifying zero dose and underserved populations
- Evolution of the Gavi Alliance Immunization Supply Chain strategy, UNICEF Immunization roadmap and linkages with Immunization Agenda 2030
- Digital solutions and technology as supply chain enablers
- Effective uptake and scaling of supply chain innovations

Leadership/Management (Suggested Topics

- The health programme leader- personalities, leadership and management
- Effectively managing and leading teams
- Making decisions and working effectively with partners
- Introduction to project management
- Communication, influencing and providing and managing feedback
- Leveraging conflict positively
- Risk mitigation and change management
- Motivation in the workplace
- iSC Performance monitoring
- Effective data collection, data analytics, presentation and use of data for action

Technical Modules (Suggested) Topics

- Managing immunization (and other PHC services) waste across the supply chain
- CCE decommissioning and safe disposal
- Creating and managing CCE inventories
- UCC maintenance (& repurposing)
- Effective cold chain forecasting and planning
- Efficient stock management: Using a case study, introduce basics of stock reporting and analysis (scope, formats, frequency, data sources, physical inventory etc.) including interpretation and use for action
- Principles of vaccine management at different supply chain levels
- Vaccine forecasting and supply planning
- Principles and strategies of distribution (up to the last mile) and optimizing along the chain
- Supply chain resilience

Pipeline EVMAs- 2023 to 2025

2024

Cambodia Cameroon **Cape Verde** Djibouti Indonesia Kenya Kyrgyzstan Madagascar Myanmar Niger Papua New Guinea

Sudan

Swaziland

Uganda

Viet Nam

Zimbabwe

Bangladesh Burundi Côte d'Ivoire Eritrea Ghana Lebanon Malawi Mongolia Nepal Nigeria Sri Lanka Tanzania Togo

Zambia



THANK YOU evm2.who.int

