

STRENGTHENING IMMUNISATION SUPPLY CHAINS

Gavi iSC Strategy for 2021–2025

Foreword



Immunisation supply chains make it possible for Expanded Programmes for Immunisation (EPI) to deliver lifesaving vaccines to communities. Over the last several decades, gains in immunisation coverage have prevented countless cases of disease and saved millions of lives. The Gavi Alliance is a proud partner in this work and has helped vaccinate more than 822 million children in 73 countries receiving its support since its founding in 2000.

Over the last strategic period (2016-2020) Gavi invested more than \$270 million in supply chains and close to \$230 million in the Cold Chain Equipment Optimization Platform (CCEOP) to commission over 54,580 pieces of cold chain equipment in 52 countries. Ministries of health made considerable progress strengthening their supply chains with these investments, making vaccines available to people who need them, where and when they need them.

Over the next few years, the Alliance will have the opportunity to support Gavi countries to reach more children, especially the 10.6 million 'zero-dose' children who have not been reached with a single dose of DTP-containing vaccine. This will depend on supply chains that are able to deliver potent vaccines and other supplies from the manufacturers to the last child. It is time for us to rethink our strategy and take a holistic approach by balancing the investments in hardware and infrastructure, including cold chain equipment and maintenance and solar equipment for places without electricity, with softer elements—like the use of data for decision making, supply chain design to reach the last mile, innovation, and learning from and engaging the private sector—to ensure effective vaccine management at all levels. This updated strategy also calls for the smart integration and harmonisation of the immunisation supply chain within universal health coverage where pertinent and needed. Finally, success will be achieved for the strategy through the engagement, coordination, and collaboration of our global, regional, and country-level immunisation supply chain (iSC) partners in a robust community of practice, to support country-level implementation of the strategy.

As co-chairs of the Immunisation Supply Chain Steering Committee (iSC2), we thank you for your continuous commitment to making immunisation supply chains robust, resilient, and able to meet programmatic demands, especially in turbulent and challenging times.

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EVM	Effective Vaccine Management		Health Systems Strengthening
CCEOP	Cold Chain Equipment Optimization Platform	Isc	Immunisation Supply Chain
Gavi	The Global Alliance for Vaccines and Immunisations	Isc2	Immunisation Supply Chain Steering Committee
GVAP Global Vaccine Action Plan M&E		Monitoring and Evaluation	
IA	Immunisation Agenda	(N)LWG	(National) Logistics Working Group
ISCL	Immunisation Supply Chain And Logistics	PHC	Primary Health Care
KPI	Key Performance Indicator	R&D	Research and Development
МОН	Ministry Of Health	SC	Supply Chain
TA	Technical Assistance	TWG	Technical Working Group
UNICEF	United Nations Children's Fund		
WHO	World Health Organization		
CCE	Cold Chain Equipment		
EPI	Expanded Programme for Immunisation		

Overview

The context for change

- · What is the strategic context?
- Where have we come from?
- Why is the updated strategy needed?
- The shift from Gavi 4.0
- · How can this strategy be used?
- · Who is this strategy relevant for?

7 The priorities for change

- · What challenges does the strategy address?
- · What is the iSC vision?
- What are the impact goals?
- · What are the investment priorities and intermediate outcomes?
- What are the enablers?
- iSC Strategy Theory of Change

? The action for change

- How are the investment priorities building on the Five Fundamentals?
- · What are practical approaches for the strategy to become implemented into action?
- How can the strategy be adapted for different contexts?

The platforms for change

- · What are the responsibilities of the different actors to bring about change?
- The Gavi Alliance Theory of Action: supporting for impact
- · What are the forums and channels for advancing this strategy?

K Measuring progress

- Which high level targets will guide the operationalization of the strategy?
- How will progress be measured?

Annex

- iSC Challenges
- · What are some example use cases?

Content overview Map

















How will progress be measured?

Minter address to a read and

2021-2025 iSC Strategy

Theory of Change

* Additional Info in annex

Gavi Alliance Theory of Action

The context for change



Where have we come from?

The shift from Gavi 4.0

Why is the strategy needed?

How can this strategy be used?

Who is this strategy relevant for?



What is the strategic context?

Leaving no-one behind with Gavi 5.0

In June 2019, the Gavi Board approved a new five-year (2021–2025) strategy ('Gavi 5.0'), with a vision to '**leave no-one behind with immunisation**' and a mission to save lives and protect people's health by increasing equitable and sustainable use of vaccines. By the end of the Gavi 5.0 strategic period, we aim to have protected more than 1.1 billion children, preventing 22 million deaths and generating another US\$80–100 billion in economic benefits.

Strong and efficient supply chains will be critical to achieving these results

To ensure more children have access to life-saving vaccines and to reach zero-dose populations, iSCs must ensure vaccines are available where and when they are needed.

Co-creating an iSC strategy

Because of constraints on travel and opportunities for face-to-face workshops, the Gavi Alliance Global iSC2, in collaboration with various global and country stakeholders, **met virtually in 2020** and developed an updated iSC strategy for the Gavi 5.0 strategic period

Where have we come from?

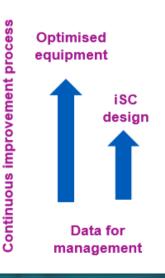
Our iSC strategy theory of change, introduced in 2015 with Gavi 4.0, has been driving progress towards the Alliance's coverage and equity goals.

Driven by the former iSC strategy's theory of change. investments were made in five fundamentals:

- Cold chain equipment
- System design
- Data for management
- Continuous improvement
- Leadership and management

VISION: Immunisation supply chains provide potent vaccines efficiently to all

If countries have reliable financing & the following fundamentals in place...



Coordination, Resources Management, Human

...vaccines will be Available In the right place



Potent Providing a high level of immunity

...Risks of vaccine loss will be mitigated

...and systems will be



Efficient & Resilient Resources aoina further

...helping to achieve sustainable improvements in





Where have we come from?

Significant improvements have been achieved since the inception of the Gavi Alliance immunisation strategy.

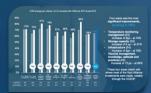
The interventions conducted by countries, with support from the Gavi Alliance and its partners, increased countries' effective vaccine management (EVM) assessment scores. At portfolio level, while all areas had improved EVM scores, notable progress was seen in the following:

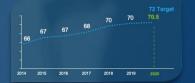
- Storage capacity (E3) and vaccine management, knowledge, aptitude, and practices (E8) are both at a score above 80% (the threshold at which optimal performance is seen). These areas match the Gavi Alliance's investment priorities, notably through the CCEOP, which helped increase countries' cold chain capacity dramatically.
- As a result, areas such as Infrastructure (E4)
 and temperature management (E2) have seen a
 good increase in their respective scores, directly
 benefiting from the investments on storage
 capacity, and better management of equipment.

While such progress is commendable, more can be done. For robust and resilient supply chains, we must prioritize investments based on context and need and focus on system improvements beyond making capital investments. This is further validated from EVM scores, where we can still see some areas that are lagging behind, with scores below 70%:

- Maintenance of Cold Chain Equipment (E5)
- Stock management (E6)
- Distribution (E7)
- And Information system (E9)

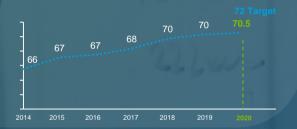
To align the 2021–2025 strategy with Gavi 5.0, iSC2 focused its efforts on these four areas. This will encourage the investment needed to bring EVM scores to their optimal level, and maintain and sustain the improvements made during the first strategic period.





Regular improvement on average EVM scores across the portfolio during previous strategic period

Evolution of EVM composite scores since iSC strategy's inception



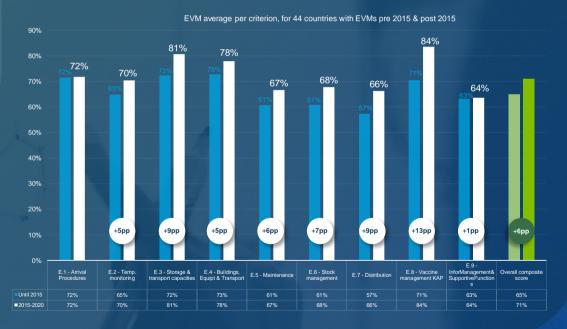
Four areas saw the most significant improvements, scoring ≥ 70%:

- Temperature monitoring management (E2)

 Increase of 5pp at 70%
- Storage capacity (E3)
- Increase of 9 pp at 81%
- Infrastructure (E4)
 Increase of 5pp at 78%
- Vaccine management, knowledge, aptitude and practices (E8) Increase of 13 pp – at 84%

These four areas match with where most of the Gavi Alliance investments were made, notably through the CCEOP.

Solid improvement in EVM1 scores for each criterion since iSC strategy inception (2015)



^{*} SOURCE WHO - Analysis covering the 44 Gavi countries who had both EVMs before 2015, and new EVMS since 2015 – 2015 being first year of Gavi immunization supply chain (ISC) strategy. Composite score across the nine EVM criteria, at national level – Afghanistan, Burundi, Benin, Burkina Faso, Central African Republic, Côte d'Ivoire, Democratic Republic of the Congo, Compo, Compos, Compos, Eritrea, Ethiopia, Guinea, Bissau, Haiti, Indonesia, India, Kyrgyzstan, Liberia, Lesotho, Mali, Myanmar, Mozambique, Mauritania, Malawi, Nigeria, Papua New Guinea, Democratic People's Republic of Torazania, Uganda, Udenia, Senegal, Solomon Islands, Sierra Leone, Somalia, South Sudan, Sao Tome and Principe, Chad, Togo, Tajikistan, United Republic of Tanzania, Uganda, Udekistan, Vietnam, Zambique, Muritania, Allawi, Nigeria, Papua New Guinea, Democratic People's Republic of Torazania, Uganda, Udekistan, Vietnam, Zambique, Mauritania, Malawi, Nigeria, Papua New Guinea, Democratic People's Republic of Tanzania, Uganda, Udekistan, Vietnam, Zambique, Mauritania, Malawi, Nigeria, Papua New Guinea, Democratic People's Republic of Torazania, Uganda, Udekistan, Vietnam, Zambique, Mauritania, Malawi, Nigeria, Papua New Guinea, Democratic People's Republic of Tanzania, Uganda, Udekistan, Vietnam, Zambique, Mauritania, Malawi, Nigeria, Papua New Guinea, Papua New Guinea

Why is the updated strategy needed?

Clear direction for meaningful action

This iSC strategy is needed to guide **action** on priority needs at all levels; improve **alignment** with countries and partners; target **allocation of resources**; and ensure **accountability** to achieve results.



Outlines what can be done

Advocates for greater focus on priority needs

Promotes global best practices and identification of needs

Incentivises and drives action based on country needs and global priorities



ALIGNMENT

Distinguishes between partner roles and relative strengths

Encourages partners to collaborate and complement each other

Structures knowledge-sharing across countries and organisations

Supports integration with broader supply chain and health systems strengthening efforts



ALLOCATION OF RESOURCES

Facilitates targeted investments that will contribute to stronger supply chain performance

Focuses investments on priority areas that are responsive to needs



ACCOUNTABILITY

Monitors status and progress of country implementation and TA by partners

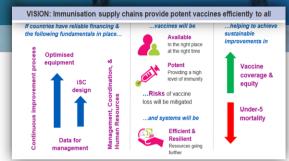
Sets the standard for the quality of country performance and TA that is provided to countries by partners

Links with existing measurement tools (i.e., EVM) and other standardized KPIs

The shift from Gavi 4.0

The 2021 – 2025 Gavi Immunisation Supply Chain Strategy is aligned with Gavi 5.0 and builds on the successes we've had to date.

- Focuses on Gavi 5.0 Leaving no-one behind and an emphasis on zero-dose.
- Builds and expands on the five fundamentals in the previous strategy. The new investments priorities are:
 - more holistic, incorporating key supply chain elements required to attain strategy goals, and
 - boost investments in areas that need the most attention.
- Identifies stakeholders and assigns clear responsibilities, setting accountability at all levels and harmonises partner efforts.
- Takes a clear measurement approach to enable and monitor progress against the strategy.





The priorities for change

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GAVI 5.0 IMMUNIZATION SUPPLY CHAIN STRATEGY (2021–2025)

TO ADDRESS THIS...

The Challenge

Inconsistent availability of high-quality vaccines and limited reach of vaccine supply chains in underserved populations threaten access as well as immunization coverage and equity outcomes, and put vaccine investments at risk





> to make real time data available at all levels of the





to design and optimize supply chains



> to adequately staff all levels of iSC with motivated and



to ensure vaccines are stored and transported in



to intergrate and harmonize iSCs with other public



- ▶ Extended Reach
- ▶ Vaccine Availability
- ► Efficiency
- ► Responsiveness
- ► Sustainability



Strong supply chains enable DELIVERY OF LIFE-SAVING VACCINES TO EVERY PERSON when needed, no matter where they are



What are the types of **challenges this strategy addresses** along the vaccine journey?

Grounding in the challenges along the vaccine journey

- As immunisation programmes expand to include new, life-saving vaccines and strive to reach more people, often in harder to reach areas, they are increasingly constrained by their supply chains.
- Immunisation supply chains have traditionally been designed with a siloed, one-size-fits all approach and are not always able to deliver vaccines when and where they are needed.
- Stronger supply chains help ensure that vaccines stay safe and
 effective and reach the people who need them. They help to
 reduce under-5 mortality and improve overall health in countries
 and contribute to increasing immunisation coverage and make it
 more equitable. Strong supply chains also help to protect the
 investment in vaccines by reducing waste.

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The Vaccine Journey

ANALYSIS, FORECASTING,& ORDERING

Statistical analysis that combines programme, consumption, and population data sets and guides national forecasting is conducted. Supplies are ordered [or requested] based on forecasting estimates.

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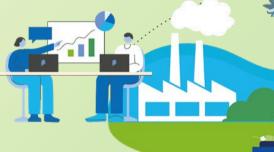
VACCINE ARRIVAL

The vaccines are manufactured and arrive at a port in the destination country through transport with refrigeration capacity. The vaccines are then transported by refrigerated lorry to a cold room in a national or regional storage facility, depending on the existing supply chain design.

3

VACCINE STORAGE & DISTRIBUTION

Most vaccines are stored in refrigerators between 2C and 8C. Some are stored in freezers between -25C and -15C. They are then carried in portable ice boxes (likely by motorbike, boat, or insulated vans) to primary health facilities.



DATA COLLECTION & USE

Records are maintained and reported accurately; data are used by EPI and iSC managers and their teams to inform action.



WASTE MANAGEMENT

Waste generated by vaccinations is disposed of safely and sustainably.



IMMUNISATION

The vaccines are administered to those who need them in facilities or through immunisation outreach campaigns. There is community-based accountability for iSC performance and innovation.

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WE FOCUS ON.

Investment Priorities & Expected Outcomes



Data Visibility & Use

 to make real time data available at all levels of the SC and encourage data use by decision makers to improve SC performance



trategic Planning

to a country-led strategy informed by people's needs, that is adequately financed



System Optimization & Segmentation

 to design and optimize supply chains that reach everyone and minimize cost and waste



Capa

Capacity Development & Professionalization

 to adequately staff all levels of iSC with motivated and competent workforce



Fundamental Infrastructure

 to ensure vaccines are stored and transported in well-functioning equipment to ensure quality;



Smart Integration & Harmonization

 to intergrate and harmonize iSCs with other public health supply chains, program functions and overall health system to maximize resources



TO ACHIEVE...

Impact Goals

- Extended Reach
- ▶ Vaccine Availability
- ► Efficiency
- ► Resilience
- Responsiveness
- ▶ Sustainability



SUPPORTED BY...

Enablers

Country Leadership, Governance & Stewardshi Domestic & International Fund Partner Alignment & Coordination

Innovation

Private Sector Engagement

AND FULFILL...

Vision
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TO EVERY PERSON when needed, no matter where they are



What is the iSC vision?

The vision is the **future state** of iSC that we want to see. To develop the vision statement, a visioning activity, defined as the mental process in which images of the desired future (goals, objectives, outcomes) are made real and compelling, was conducted.

Meaning resilient, sustainable, efficient, adaptive Meaning that supply chains and availability of vaccines and related supply are a critical component of ensuring the delivery of immunisation services

Strong supply chains enable delivery of potent life-saving vaccines to every person, when needed, no matter where they are.

Meaning that we focus on equitable access to immunisation services for each population segment Meaning that sufficient vaccines are available whenever they are needed in a timely manner

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Strong supply chains enable DELIVERY OF LIFE-SAVING VACCINES
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The goals are the **direct changes** we aim to achieve. The goals unpack the vision into tangible outcomes and create a framework around which investment priorities can be made.

EXTENDED REACH

Equitable supply chains extend reach of vaccines to the last mile to serve underserved and zero-dose populations.

VACCINE AVAILABILITY

High-quality vaccines are available in adequate quantities, when and where they are needed.

SUPPLY CHAIN EFFICIENCY

Well-functioning supply chains minimise operational costs and product waste, with interconnected people, systems, and structures in place.

SUPPLY CHAIN SUSTAINABILITY

Government-led supply chains focus on activities that provide immediate benefit without compromising the needs of future generations financially, programmatically, or environmentally.

SUPPLY CHAIN RESILIENCE

Supply chains are agile and prepared to adapt to sudden changes including natural disasters and outbreaks of infectious disease.

SUPPLY CHAIN RESPONSIVENESS

People-centred supply chains respond to the needs and preferences of people throughout their life course.

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Domestic & International Funding Partner Alignment & Coordination

Innovation

Private Sector Engagement

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What are the investment priorities & intermediate outcomes?

The goals are the **direct changes** we aim to achieve. The goals unpack the vision into tangible outcomes and create a framework around which investment priorities can be made.

1. DATA VISIBILITY & USE

to make real time data available at all levels of the SC and encourage data use by decision makers to improve SC performance

2. STRATEGIC PLANNING

to a country-led strategy informed by people's needs, that is adequately financed

3. SYSTEM OPTIMIZATION & SEGMENTATION

to design and optimize supply chains that reach everyone and minimize cost and waste

4. CAPACITY DEVELOPMENT & PROFESSIONALIZATION

to adequately staff all levels of iSC with motivated and competent workforce

5. FUNDAMENTAL INFRASTRUCTURE

to ensure vaccines are stored and transported in well-functioning equipment to ensure quality

6. SMART HARMONIZATION

to integrate and harmonize iSCs with other public health supply chains, program functions and overall health system to maximize resources

What are enablers?

Enablers are critical elements that help the Vaccine Alliance, including countries, develop the chosen priorities. Just like the strategic priorities, they **contribute to reaching the final goals** and vision.

COUNTRY LEADERSHIP, GOVERNANCE, & STEWARDSHIP

Country governments are central stewards, providing oversight for the entire supply chain across sectors.

DOMESTIC & INTERNATIONAL FUNDING

Make the most of domestic and international resources with context-specific funding cycles considered.

PARTNER ALIGNMENT & COORDINATION

Coordinate partner support and investments to minimise duplication and achieve collective impact.

INNOVATION

New approaches, tools, and processes strengthen immunisation supply chains.

PRIVATE SECTOR ENGAGEMENT

Engage with and leverage the strength of the private sector as partners in iSC.

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Capacity Development & Professionalization to adequately staff all levels of iSC with motivated

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How can this strategy be used?

Scenarios for use

The iSC Strategy gives national and sub-national stakeholders a framework to plan and execute supply chain improvement strategies and interventions. It maps a series of actions, from programme planning through advocacy, to drive and sustain high-performing iSCs as the foundation for EPI and primary health care (PHC) systems strengthening. The strategy is meant to be adapted to country and programme contexts. The following scenarios provide possible use cases.

Programme Planning,
Prioritisation,
Design &
Development

Programme Implementation

Assessment, Monitoring & Evaluation

Continuous Improvement Advocacy, Learning, & Growth

Resource Mobilization

By programme and supply chain managers to objectively decide what interventions to undertake within available timelines and design and develop supply chain improvement roadmaps and annual work plans; and support delivery of EPI and PHC strengthening strategies and interventions.

By programme and supply chain managers and their teams to guide country programme implementation that is driving innovation at all levels of the supply chain; and establish a benchmark for supply chain interventions.

By programme and supply chain managers to use data for action supplemented by periodic assessment, gap analyses, and identification of opportunities for supply chain performance improvement based on the principles of effective vaccine management.

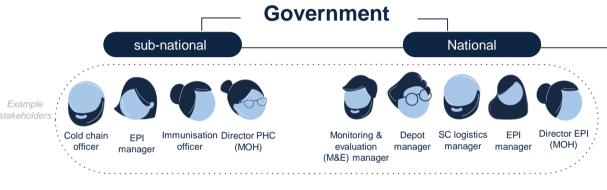
By supply chain managers and their teams to develop and implement holistic continuous improvement plans informed by findings from routine data use and supply chain assessments within a system and culture of continuous improvement.

By national and subnational stakeholders to create awareness and advocate for funding/TA support to socialise supply chain improvement within broader health systems strengthening plans; and prioritise areas for supply chain staff capacity building and development. By programme and supply chain managers, national and sub-national EPI and health programme leadership, and parliament members as a framework for prioritising iSC strengthening needs for domestic and external resource mobilisation.

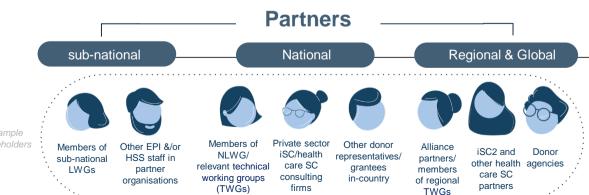
Who is this strategy relevant for?

The stakeholder groups

How this strategy is relevant for them



For government, this is a framework for developing countryspecific iSC improvement strategies and annual work plans; guiding investment proposals and directing partner activities; leadership and coordination of programme implementation at all iSC levels; assessment and benchmarking of supply chain strengthening, and performance monitoring. Additionally this strategy is a framework for continuous improvement and advocacy to budget holders and decision-makers within government and partner agencies to prioritize iSC strengthening.



For partners, this is the framework for aligning organisational strategy for iSC with the country priorities guided by global best practices, and defining the scale and scope of support (both financial and technical) that you can provide to the immunisation programme at global, regional, and country levels. This strategy is also a framework for articulating iSC work stream proposals to donors and securing funding for technical and financial support for national and sub-national implementation.

Who is this strategy relevant for?

The stakeholder groups

How this strategy is relevant for them

Civil society and academia sub-national **National** Global Faith-based Sub-grantees Community-Institutions **Public** Private Universities of iNGOs based of higher R&D organisations research (social accountability for learning organisations institutes

For national and sub-national civil society organisations, this is a framework for monitoring the quality and value of iSC services, vis-a-vis limiting supply-side barriers to service delivery from the end-user perspective, and holding the government accountable. It is also a framework for advocating and lobbying parliament for support to the immunisation programme at corresponding levels to meet communities' health needs.

For academia, this is a framework for developing learning programmes and packages, leveraging innovative methods of instructional design, building capacity of iSC and non-iSC actors on iSC, and effective vaccine management. This framework can also guide research and development in iSC systems and technologies.

Private sector service providers

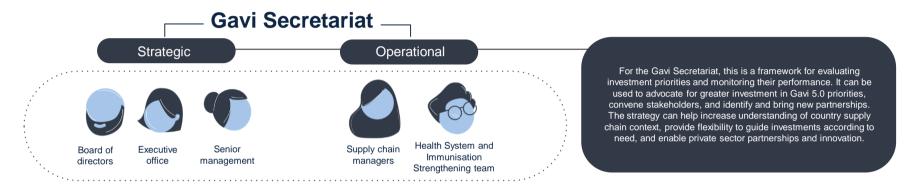


For the private sector, this is a strategy for the design and development of products and services to deploy within the iSC and/or integrate with other health commodity supply chains to meet programmatic needs. Additionally, it provides a framework for standardization of services across service providers to the programme at national and sub-national supply chain levels, and to identify and support implementation of best practices from private to public supply chains.

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The action for change

- How are the investment priorities building on the Five Fundamentals?
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How are the investment priorities building on the Five Fundamentals?

From the 5 Fundamentals

6 priority investment areas

Result

ISC DESIGN

New approaches to supply chain design aim to improve supply chain performance and contribute to increasing immunisation coverage.

DATA FOR MANAGEMENT

Managers need reliable and relevant data to manage key aspects of immunisation supply chains, including vaccine availability, quality of storage and transport facilities, and stock management efficiency

SUPPLY CHAIN LEADERSHIP

Next-generation immunisation supply chains require dedicated and competent managers as well as adequate numbers of skilled, accountable, motivated and empowered personnel at all levels of the health system.

OPTIMISED EQUIPMENT

Reliable, well-maintained and cost-effective cold chain equipment is vital to ensure that there is adequate, sustainable vaccine storage for current and planned vaccines, maintenance requirements are kept low and running costs are reduced

CONTINUOUS IMPROVEMENT PROCESS

Supply chains are dynamic systems that must be continuously monitored, managed and improved. The new comprehensive Effective Vaccine Management (EVM) approach provides a structure for continuous improvement.

SYSTEM OPTIMIZATION & SEGMENTATION

Design the supply chain and individual segments to reach everyone be cost-effective, efficient, reduce and manage waste.

DATA VISIBILITY & USF

Digital systems enable visibility of data throughout the supply chain and processes and tools support the use of quality data for decision-making to drive continuous SC performance and improvement.

CAPACITY DEVELOPMENT & PROFESSIONALIZATION

Build local supply chain talent, cadres and capabilities among individuals and in partnership with local organisations.

FUNDAMENTAL INFRASTRUCTURE

Continued support to maintain adequate cold chain equipment (CCE) capacity and SC infrastructure.

STRATEGIC PLANNING

Country leadership develop and finalize national multi-year supply chain operational and strategic plan that defines priorities & interventions, incorporates the needs of people, allocates responsibilities & maps progress towards a common vision for the country's iSC.

SMART INTEGRATION & HARMONIZATION

Connect people, products, programs, and functions in contextappropriate ways, to improve efficiency and performance. Sharpened focus on supply chain optimisation, segmentation, and extending reach.

Sharpened focus on digitization and data use

Enhanced with shift toward local leadership, professionalized cadres, and local capacity building organizations

Sharpened focus on maintenance

Introduced new area of focus on smart integration and harmonization

Enhanced country ownership to define strategy and focus on addressing people needs.

What are practical approaches for the strategy to get implemented into action?

Note: dot colour refers to colour attributed to each investment area in the slides that follow

For each of the investment priorities, the strategy offers:

- Common challenges that should be adapted to different settings (see the vaccine journey).
- Major areas of opportunity to overcome these challenges.
- Illustrative practical actions that countries can take to overcome these and other challenges. These are a jumping-off point for further discussion and revision at the country level.
- A series of considerations for adapting these actions to the level of maturity of the supply chain and the population groups that it serves.

INVESTMENT PRIORTIES & INTERMEDIATE OUTCOMES

DATA VISIBILITY & USE

to make real time data available at all levels of the SC and encourage data use by decision makers to improve SC performance

- STRATEGIC PLANNING
 - to a country-led strategy informed by people's needs, that is adequately financed
- SYSTEM OPTIMIZATION & **SEGMENTATION**

to design and optimize supply chains that reach everyone and minimize cost and waste

CAPACITY DEVELOPMENT & PROFESSIONALIZATION

> to adequately staff all levels of iSC with motivated and competent workforce

FUNDAMENTAL INFRASTRUCTURE

to ensure vaccines are stored and transported in well-functioning equipment to ensure quality

SMART HARMONIZATION

to integrate and harmonize iSCs with other public health supply chains, program functions and overall health system to maximize resources

ENABLERS

COUNTRY LEADERSHIP. **GOVERNANCE. & STEWARDSHIP**

DOMESTIC & INTERNATIONAL **FUNDING**

PARTNER ALIGNMENT & COORDINATION INNOVATION

PRIVATE SECTOR **ENGAGEMENT**

What are **practical approaches** for the strategy to get implemented into action?

Investment Priorities & Areas of Opportunity within the Investment Priorities

Data visibility and use	Capacity development and professionalization	Fundamental infrastructure	Strategic planning	System optimization and segmentation	Smart integration and harmonization
Digitize and integrate information systems (eLMIS, Barcoding, Track & Trace)	Supply chain competencies and structures	Continue support to maintain adequate CCE capacity	Conduct comprehensive supply chain planning	Continuously review and optimise existing systems	Conduct analysis and identify opportunities for integration
Collect, analyse, and use data	Strengthen and apply skills	Integrate temperature and other SC data	Consider various financing approaches	Improve processes, from forecasting to waste management	Develop guidance and evidence for integration
Active vaccine & syringe stock management, including wastage tracking & mitigation	Identify effective incentives & motivators	Invest in appropriate SC resources, either building capacity or outsourcing	Strengthened national and subnational governance mechanisms	Apply approaches from other settings and sectors	Connect broad community of SC actors at national and sub-national levels
Establish a monitoring & accountability framework	Create healthy work environments			Strengthen data-driven forecasting and agile supply planning	

The comprehensive vaccine management approach supports attainment of the iSC 5.0 strategic vision, and emphasizes a few areas of focus for targeted strengthening within the investment priorities

	Areas of opportunity	Practical Actions [note: these are illustrative]
Data visibility and use		Digitize paper systems to ensure availability of timely, high-quality logistics and cold chain data.
	Digitize information systems (eLMIS,	Systems should ensure traceability throughout the SC to ensure product safety and security.
	Barcoding, Track & Trace)	Implement systems that allow dynamic management of inventory and inform operational and strategic decisions
		• Integrate latest technology (e.g., radio frequency identity tags to notify when a vial leaves the refrigerator and automatically order a new vaccine or remote temperature monitoring devices to capture temp data.
		Analyse the incentives and motivations for collecting and using data and develop approaches that are responsive to the findings.
	Collect, analyse, and use data	Ensure range of skills available for implementing & managing info system (e.g., data architecture, data analysis skills).
	use data	Implement and empower data use teams (of both SC and programme staff) at all levels of the SC to routinely review and act on data. Create and review analyses that triangulate programme and supply data.
		Use prescriptive analytics to identify what went wrong and why, and take action to prevent reoccurrence.
	Integrate digital systems	Identify opportunities to integrate LMIS across programmes; work towards integrating KPIs to support routine monitoring across programmes.
	Establish a monitoring & accountability	Implement monitoring and accountability framework and use routine data complemented by regular audits to ensure high performance and appropriate use of funds.

	Areas of opportunity	Practical Actions [note: these are illustrative]
Capacity development and professionalization		Break down job descriptions and create clear roles and responsibilities, including RACI Matrix (laying out expectations daily, monthly, yearly; e.g., translate JDs and SOPs into tangible tasks)
	Supply chain	Ensure that a career pathway for SC staff exists and supply chain management Professionals are valued (include SC managers as a cadre of civil servants).
	competencies and structures	Review, optimize, and strengthen organizational structures and policies.
		Implement electronic HR systems to ensure accountability in performance.
		Build a range of SC skills at all levels (from leadership to community health workers). Introduce SC into curriculum for secondary education; strengthen pre-service education and in-service capacity building.
	Strengthen and apply skills	Functional rotation in the staff, including across SC functions and levels (so that national staff go to the sub-national level and vice versa) to improve understanding of how everything works.
		Apprenticeship, mentoring, and sponsorship programmes with: 1) south-to-south exchanges; 2) collaboration with regional centres of excellence; 3) universities; and; 4) private sector firms.
	Identify effective incentives & motivators	Identify motivations and incentives for SC staff and implement responsive approaches.
	Create healthy work environments	Ensure working conditions support performance, including a favourable environment and culture, by making sure policies and procedures, resources, and supervision are in place

	Areas of opportunity	Practical Actions [note: these are illustrative]
Fundamental infrastructure		Create a maintenance plan that can be monitored digitally so that CCE is maintained and replaced regularly and on time.
	Continue support to	Outsource maintenance functions to private sector, particularly in hard-to-reach areas.
	maintain adequate CCE capacity	Support and leverage investments in solarisation and electricity access of health facilities in energy-poor communities
		Implement policies and procedure for equipment disposal and decommissioning.
	Integrate temperature and other SC data	Develop a "super app" to monitor stock and send alerts about temperature diversions and emergency orders.
		Use remote temperature monitoring to monitor functional status of equipment
	Invest in appropriate SC resources, either building capacity or outsourcing	Consider combining delivery for different products (depending on the requirements) and whether outsourcing or insourcing is the most efficient approach to distribution and storage
		Invest in a suite of vehicles fit-for-purpose (drones, trucks, motorcycles) to ensure systems deliver productsto health facilities in line with their requirements and aligned with the design of the system

	Areas of opportunity	Practical Actions [note: these are illustrative]
Strategic planning		Strengthen stewardship and oversight role of the government in overseeing the entire SC.
	Conduct comprehensive supply chain planning	Create a continuous improvement plan that engages all stakeholders across the SC to create a comprehensive, costed plan for iSC.
		Move away from siloed structures and collaborate with the broader PHC and UHC systems to enable iSC operations.
		Conduct research to understand true costs at different levels and benchmarks to more efficiently coordinate the SC and ensure funding is sufficient and available.
	Consider various financing approaches	Consider different financing structures (e.g., approaches to incentivise performance, finance key supply functions like CCEOP) or mechanisms that are performance based.
		Advocate for funding at the sub-national level.

	Areas of opportunity	Practical Actions [note: these are illustrative]
	Continuously review and optimise existing systems	Review and redesign systems and processes based on data/analysis to create more efficient SCs that respond to the needs of clients wherever they are.
ion		Review product and customer characteristics and conduct segmentation analysis to inform the design of SCs that better reach clients.
System optimization and segmentation		Implement a digital information system across all SC levels to improve performance, transparency, and accountability for roles/responsibilities and funds.
າ and se		Continuously review the SC to make design and process improvements to respond and adapt to context changes.
mizatior		Implement systems to monitor the performance of and track the maturity of the SC over time (adapting globally available SC maturity models).
em opti	Improve processes, from forecasting to waste management	Streamline forecasting models, processes, and tools; triangulate with consumption data to better respond to demand.
Syst		Detail procedures and processes and integrate vaccination waste into overall waste management.
	Apply approaches from other settings and sectors	Consider new partnerships with technology companies and academia and south-to-south exchange to learn about approaches applied in other settings and infuse new ideas into the SC.

Areas of opportunity
Conduct analysis and identify opportunities for integration

integration

Practical Actions (note: these are illustrative)

Review the requirements of different products and customer segments to inform integration.

distribution, and functions with other health SCs where possible.

governance, and accountability.

Disseminate "how-to" guidance and evidence on the benefits of integration.

Move away from siloed immunisation structures and use 'smart' approaches to integrate forecasting.

Connect national and sub-national supply chain actors through working groups and other forums.

Engage and empower civil society to monitor and ensure accountability of SC performance.

Identify opportunities to integrate working groups and other collaboration platforms across health programmes.

Set up a clear framework for collaboration with the private sector, including when and where to engage (including for outsourcing),

	Areas of opportunity	Practical Actions [note: these are illustrative]
EN AB LE	Strengthen supply chain leadership and stewardship	Build skills for effective leadership/stewardship of the SC and support government in this role.
RS Coun try leade rship, gover	Include & align new and existing partners in a meaningful way	Seek partnerships with tech companies, academia, private sector to infuse new ideas into the SC.
nanc e and stew ardsh ip; innov		Align key partners and stakeholder in the SC, including in roles and responsibilities.
ation; privat e secto r enga geme		Connect with regional and global organizations, including communities of practice
nt; partn er align ment & coord		Identify and build more local institutions with SC capabilities, including to provide TA and capacity-building support
inatio n, dome stic & intern ation al fundi ng	Infuse innovation into the supply chain	Embed innovation into the SC, including technologies and process innovation. Engage the private sector to find creative solutions for local challenges
	Identify and apply new funding structures and approaches	Consider different financing structures (e.g., approaches to incentivize performance, finance key supply functions like CCEOP)

How can the strategy be adapted for different contexts?

For a global strategy to be relevant to a country supply chain, it has to be able to adapt to the context. This section provides considerations for adapting the strategy based on **population segments** and **supply chain maturity**.

Adapting to population segments

The iSC serves a diverse set of customers, including those in urban settlements, rural and remote areas, conflict areas, of different genders, and internal and cross-border migrants. Reaching them requires a segmented approach to SC management, and consideration of their requirements in design and execution.

Adapting to the supply chain maturity

Supply chains have varying levels of overall and segment specific maturity. In this section we provide considerations for adapting the strategy to each maturity level. These considerations take advantage of opportunities (e.g., leapfrogging past levels of maturity) and explain any risks.

Numerous maturity frameworks have been developed to help countries and partners assess SC level of maturity.* For the purpose of this strategy, we compiled several maturity models to create a generic maturity ranking from 1 to 4 (least to most mature).

Important note: Population segments and maturity overlap in a single supply chain. For example, a supply chain may serve conflict areas and be at an earlier stage of maturity. Other aspects of the country context (e.g., level of decentralization, size of birth cohorts, level of fragility) should also be considered in the SC approach.

The adaptations	Population segmentation	System maturity level
System optimisation and segmentation	Consider different SC segments and approaches in your design to better reach key populations, including: Supplies chains that go beyond the health facility to reach hard-to-reach populations. Different modes of transport to reach different populations, including direct delivery. Different resupply and inventory procedures (e.g., more product kept in inventory in very rural and conflict areas). Consider predictability of supply or service volume: It may be preferable to accept a higher level of wastage in settings where there is less predictability of supply or service volume, because the cost of wastage is preferred to a "missed vaccination."	 In the design of the SC, there are opportunities for countries in earlier stages of maturity to skip a step (leapfrog). For example, they might go straight to digitization of SC or outsource cold chain rather than build capacity. Take advantage of strengths in less mature SCs, such as agility. Understand the relative maturity of different regions in a single country as you design and implement a new system.
Smart integration and harmonisation	 Consider customer characteristics: Create SC segments to serve different customers (urban settlements, rural/remote areas, conflict settings, etc.) Consider coordination with a range of SC actors including private sector in urban settings and humanitarian organisations in conflict settings. 	Engage with the private sector by adapting and adopting successful practices or through outsourcing may accelerate SC maturity by Leveraging technology and process and practice innovation. Outsourcing key functions to the private sector rather than building capacity. Ensuring the capacity within government to serve as steward of the entire SC, including oversight and monitoring of performance across sectors and actors. Create a more integrated SC in which actors are connected from end-toend through: National and sub-national working groups that engage supply chain actors across sectors and programmes Engaging civil society to help advocate and monitor the SC to ensure accountability.
Data visibility and use	Consider the capacity and infrastructure available when creating information systems. Ensure systems: Allow you to be responsive to different populations. Collect data in different ways depending on capacity and infrastructure. Are interoperable/able to connect with other systems, for example humanitarian programmes working with cross-border and migrant populations.	 The maturity of the information system evolves in stages. At the beginning it is more paper-based, but as it matures, it increasingly includes other capabilities, such as: Using technology to shift or do tasks automatically. Using analytics and improving data use. Integrating data from other sources (such as service data), and triangulating data to make better decisions.

The adaptations	Population segmentation	System maturity level
Capacity development and professionalization	Consider different staffing structures to respond to service requirements by population groups, such as: more flexible staffing approaches. For example, more populous urban areas that require more personnel for service delivery and complementary systems, like SC. accessing context-specific technical assistance to respond to the needs of different supply segments.	 Clarify roles and responsibilities and put systems and structures in place. Create pathways for professionalization of the SC workforce that are aligned with the system maturity level.
Fundamental infrastructure	Consider the type of CCE required to meet the needs of each of the population segments. This includes: appropriately powered by solar or other technology for reliability in rural and remote areas. supports mobility and flexibility for conflict settings and migratory populations longer hold over cold boxes if the service extends past service hours in urban settings Consider transport needs: A full suite of available transport options is available and supply segments are thoughtfully designed to use each option (drones, trucks, bikes) to ensure the most reliable availability.	Where appropriate, outsource CCE, transportation, or other infrastructure requirements. This reduces the need to invest heavily in building infrastructure, and instead take advantage of existing private sector capacity. In earlier stages of maturity, there is opportunity to: Be purposeful in the selection of the best and most appropriate technologies and/or equipment. Take advantage of newer - and potentially lower cost - technologies already tested in other settings.
Strategic planning	 Consider the needs of different population segments in iSC planning and costing exercises. A segmentation analysis that focuses on the specific requirements of population groups and products is an important input to these processes. 	Support government stewardship over the public/private health and immunisation SC: Strengthen and support the government in this role, includes strengthening skills (oversight, contracting, etc.) Clarify the role of partners vis-à-vis the government, for example in generating evidence and to inform government policy to guide implementation Use innovative, robust financing strategies to promote supply chain sustainability

The adaptations

Population segmentation

System maturity level

Enablers

Country leadership, governanc and stewardship; innovation; private sector engagement; partner alignment & coordination; domestic & international funding Consider segmenting the SC to serve different population groups.
 This can also identify areas to engage the private sector and other new partners to serve these groups.

- Supply chain governance structures and leadership evolve as countries move through the different stages of maturity.
 - In earlier stage, governance structures and processes for the SC begin to be put into place.
 - In the most mature supply chains, government is the steward of the public/private supply chain, seamlessly engaging private sector and other actors in operation and strategy
- As the supply chain matures and governance and processes strengthen, there are opportunities to apply innovation from the private sector or from more mature SCs to inform what processes would work best.

The platforms for change

- What are the responsibilities of the different actors to bring about change?
- The Gavi Alliance Theory of Action: supporting for impact
- What are the forums and channels for advancing this strategy?



What are the **responsibilities** of the different actors to bring about change?

Governing principle: country leadership, governance and stewardship

Country governments are central stewards of iSC, providing oversight for the entire supply chain across sectors. The Gavi Alliance, tapping into each partner's value add, will devote its effort to enhance capacity of both country staff and partners, advocate for SC, manage the strategy's implementation, improve engagement and alignment of partners as well as finance necessary investments as identified by countries. The Alliance is therefore directly strengthening the enablers of the overall Theory of Change and contributing to achieving the strategy's vision

Collective effort is needed

Strengthening supply chains is a long-term undertaking, which complements Gavi's broader health system strengthening efforts. As many actors are involved, clear responsibilities and complementarities need to be established to make the most of everyone's support. These responsibilities for the Gavi Alliance stakeholder, are captured in the following slides,

Government

Steward the SC, including coordinating, convening, directing, and leading all other actors in the country.

Advocate for SC (e.g., at ministry level), relay results, impact, challenges, and needs for the programme to access timely support for key interventions and the development of appropriate policies.

 \rightarrow immunisation programme staff at all levels share results, impact, challenges, and needs of the programme.

Develop national strategies and master plans that cover prioritised investments and related support, for holistic system strengthening.

ightarrow all levels of the supply chain reliably identify bottlenecks and implement best practices; communication between SC levels boosts generation of adapted solutions; the government provides appropriate technical assistance and tailored support.

Participate in iSC-wide conversation.

Engage with non-MOH government departments (e.g., local administrative units) the EPI depends on for action, budgets, plans, and oversight. This will help translate objectives into implementation at the local level.

What are the **responsibilities** of the different actors to bring about change?

The Gavi Alliance stakeholders: supporting for impact

Partners at global level

(e.g., iSC2 members, the Global Fund, technical assistance providers, humanitarian aid organisations)

Advocate

Advocate for supply chain using global level forums, levers, and communication channels through their networks of offices.

Finance

Encourage coherent and impactful investments in line with country funding cycles.

Coordinate donor support, leverage resources, and encourage cooperation across programmes

Manage

Oversee the iSC strategy, monitor progress, and ensure that global/regional/country/technical resources are organized efficiently to identify and respond to country programme needs as per the Theory of Change.

Enhance capacity

Identify the need for and support the creation of quidance and tools.

Support the design of country needs-centred technical assistance interventions to build sustainability

Improve engagement

Find strategic complementarities between partners and potential new collaboration.

Create and maintain partnerships for an iSCwide community (e.g., the private sector, manufacturers),

to spark thought leadership

Improve collaboration across all levels to support countries by using existing in-country presence, sharing timely information, and relaying quidance, tools, and investment information.

Partners at regional level

(e.g., WHO and UNICEF regional offices, regional working groups)

Advocate

Advocate for the supply chain using global level forums, levers, and communication channels through their networks of offices.

Improve engagement

Improve collaboration across all levels to support country-based partners, using existing connections, sharing timely information, & relaying guidance, tools, and investment information

Manage

Inform the design of country needs-centred technical assistance interventions; prepare information to share on performance progress.

Finance

Encourage coherent and impactful investments in line with country funding cycles

Partners at national level

(e.g WHO & UNICEF country offices, expanded partners JSI, PATH, VillageReach, CHAI)

Advocate

Advocate for the supply chain using globallevel forums, levers, and communication channels through their networks of offices.

Improve engagement

Improve collaboration across all levels to support countries by sharing timely information and relaying guidance, tools, and investment information

Enhance capacity

Support the design and delivery of **country needs-centred technical assistance** interventions to build **sustainability**.

Management support to countries

Provide **support to countries** in the activities planned in their national strategy/master plan.

The Gavi Alliance Theory of Action: supporting for impact

Governing principles: COUNTRY LEADERSHIP, GOVERNANCE, & STEWARDSHIP

Building on each core and expanded partner's value add...



Co-chairs iSC2, major funder for organisations and countries. reports to board, influences for advocacy, has convening power.



Co-chairs iSC2 technical expertise, significant on-ground implementer, linkages with country governments, setting standards and performance measurement.



Technical expertise, linkages with country governments, setting standards and performance measurement



Major funder of organizations an countries, has convening power. influences for advocacy







Implementation at scale. providing a combination of policy and technical knowledge



Major funder for organizations and countries, convening power,

ENHANCE CAPACITY

Lead development and revision of tools and guidance: support a countrydriven agenda; reflect countries' priorities; and design interventions that fit the reality of each country's situation for sustainability, support countries planning efforts.

MANAGE

Oversee the iSC strategy; monitor progress; and ensure that global/regional/country/technical resources are organized efficiently to identify and respond to country programme needs as per the Theory of Change. Partners also support implementation.

... the Gavi Alliance will conduct

Creating an enabling environment for effective vaccine management and SC performance in countries

Building a community of practice TA. global guidance standards etc...

FINANCE

Coordinate donors support, leverage resources and encourage cooperation across programmes, and encourage coherent and impactful investments in line with country funding cycles to achieve sustainability, Levers: HSS grant, TCA, SFA, PSP, VIGs, OPs; encourage and finance innovations (e.g., through INFUSE)

ADVOCATE

Share results, impact, challenges and needs for the programme, and disseminate information, global technical goods through common messaging at all levels, in all forums. proactively and whenever the opportunity emerges.

IMPROVE ENGAGEMENT

Create and maintain an iSC-wide community involving stakeholders at all levels of the supply chain. Global actors are needed to design the infrastructure and encourage learning exchanges.

Maintain existing partnerships and build new ones (e.g., with humanitarian actors in conflict settings)

...which will provide the following results

Alliance partners and stakeholders have increased capability and work in coordinated & harmonised manner in priority areas.

Partners' investment are addressing and overcoming SC-related barriers to immunisation

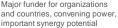
A sound measurement and accountability framework is in place to ensure value is provided to countries for investments made in supporting them.



...and directly contribute to strenathening countries' programme. and feed into the strategy's Theory of Change enablers







What are the **forums and channels** for advancing this strategy?

To deliver on this iSC strategy, stakeholders will improve collaboration with existing groups, leverage partnerships and platforms to share information, operationalize the strategy, and gather lessons to take action.

Existing channels

- Leverage centres of excellence.
- Strengthen the operations of national logistics working groups
- Use available platforms, such as TechNet-21, to share resources, tools, information, and good practices; ask questions; and become an active member of the iSC community.
- Strengthen country network approach with focal points at each level.
- Leverage WHO collaborative centres in different regions to improve competencies in specific areas.
- Use iSC2 as a forum for partner organisations align on key priorities.

Potential new platforms to explore

- Develop national strategies and master plans for holistic systems strengthening.
- Increase collaboration between the Interagency Coordinating Committee and its equivalent for Global Fund (Country Coordination Mechanism).
- Develop more centres of excellence.

Measuring progress

- Which high level targets will guide the operationalization of the strategy?
- How will progress be measured?



What changes will we see and how will progress be measured?



2021 Baseline 82.5% (92% MCV)

2025 95% (95%* MCV)

- Measured monthly via LMIS
- Reviewed by iSC2 bi-annually
- Reported by UNICEF & WHO

Improved performance of immunisation supply chains

Composite EVM Scores

Average composite EVM score across countries conducting an EVM assessment.



2023 Mid-strategy

A.Q.E. EVM Scores

The percentage of countries with >=80% score in A-availability. Q-quality, and E-efficiency EVM indicator categories, for countries that undergone an EVM2.



- Measured on an ongoing basis
- Reviewed by iSC2 bi-annually and reported annually

*: subjected to revision after mid-strategy review 2023

What changes will we see and how will progress be measured?

CHANGE MEASURE & TARGETS METHOD

Increased investments in iSCs in key priority areas



System Optimization & Segmentation

Number of priority countries that have completed a system design assessment and adopted recommendations, including for last mile delivery into national supply chain strengthening roadmaps





Smart integration & Harmonization

% of countries that have a supply chain strategy / masterplan for the integration of immunization supply chain into the national health commodities supply chain with plans to reach zero-dose population.

2021 Baseline	2023 Mid-strategy	2025
35% (20 countries)	56% (32 countries)	80% (46 countries)

** Definition of functional CCE: Operable cold chain equipment that protects vaccine potency by maintaining a safe storage temperature range in challenging environmental conditions as defined by WHO PQS specifications. Cold chain equipment will be considered functional unless any of the following criteria met: a Refrigerator had 5 or more heat alarms of over 10-hour duration (above +8C), b. Refrigerator had 1 or more freeze alarms of over 1 hour duration (below -0.5C), c. Refrigerator had 1 or more heat alarms of A8-hour duration (relabove +8C)



Fundamental Infrastructure

of Gavi countries that will have a CCE functionality** rate of 90%

2023 Mid-strategy	2025	
12 countries	25 countries	

Data Visibility & Data Use

of Gavi countries that have a vLMIS solution and processes for data use

2021 Baseline	2023 Mid-strategy	2025	
18 countries	30 countries	47 countries	

Capacity Development & Professionalization

% of countries that have conducted an EVM2 assessment have a score above 80% in the C4 category : "recruitment, training and knowledge of staff meet EVM standards"

 ,	- 3 -			
2021 Baseline		2023 Mid-strategy	2025	
54% (7 of 13 countries)	/	65%	70%	



Strategic Planning

of Gavi countries will have conducted an EVM2 and have a cIP - oversight by a functioning NLWG.

2021 Baseline	2023 Mid-strategy	2025
13 countries	30 countries	57 countries

- Measured on an ongoing basis
- Reviewed by iSC2 bi-annually and reported annually
- Reported by UNICEF

- Measured on an ongoing basis
- Reviewed by iSC2 bi-annually and reported annually
- Reported by Gavi monitoring and performance management
- Measured on an ongoing basis
- Reviewed by iSC2 bi-annually and reported annually
- Reported by UNICEF

- Measured on an ongoing basis
- Reviewed by iSC2 bi-annually and reported annually
- Reported by WHO

*: subjected to revision after mid-strategy review 2023



Let's connect!

Strong iSC enable delivery of potent life-saving vaccines to every person when needed, no matter where they are.

Want to collaborate on strengthening immunisation supply chains?

You can get in touch with the Alliance-wide community through several channels.

For getting support to strengthen your immunisation supply chain:

- Through your senior country manager
- Through your UNICEF and WHO country offices
- Through our expanded partners' country offices (PATH, CHAI, JSI, VillageReach)

For more specific information, please contact the iSC2 co-chairs: Michelle Seidel (mseidel@unicef.org) and Karan Sagar (ksagar@gavi.org).

For more general information, news, discussions, and latest publications on immunisation supply chain are available on TechNet-21, the technical network for strengthening immunisation services: https://www.technet-21.org/en/

Annex

- iSC Challenges
- What are some example use cases?
- Gavi iSC 5.0 Theory of Change



Challenges

Optimisation

The supply chain is not always designed to be cost-effective, efficient, reduce waste and optimally respond to customer needs

Integration

People, products, programmes and functions are not always integrated in context-appropriate ways

Visibility

Data visibility and use for decisionmaking is not always supported throughout the supply chain

Capacity

Local supply chain talent, capacity and professionalization is not always invested in or prioritised

Infrastructure

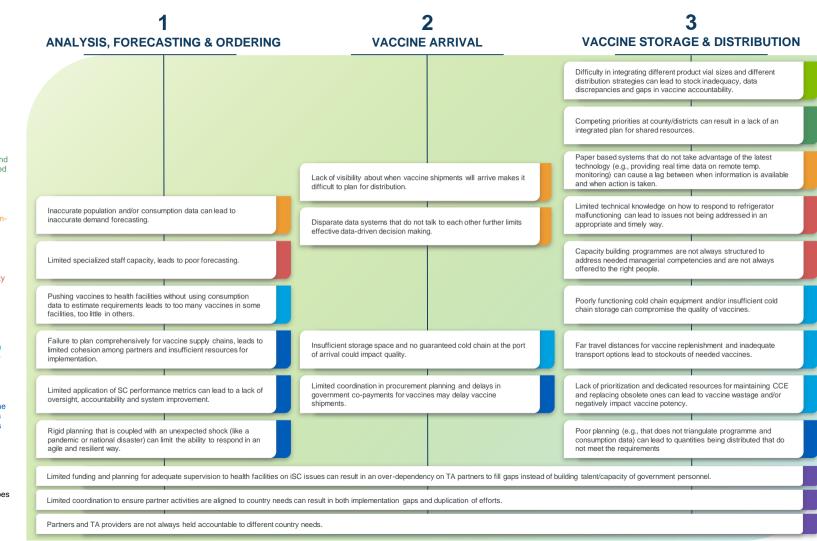
Fundamental supply chain infrastructure, including adequate CCE capacity, is not always well-maintained

Planning

National strategic plans that define priorities, allocate responsibilities and map progress are not always developed or finalized

Enablers

The existing environment, which includes alignment and accountability of stakeholders, does not enable maximisation of available and emerging opportunities for innovation and collective impact



Challenges

Optimisation

The supply chain is not always designed to be cost-effective, efficient, reduce waste and optimally respond to customer needs

Integration

People, products, programmes and functions are not always integrated in context-appropriate ways

Visibility

Data visibility and use for decisionmaking is not always supported throughout the supply chain

Capacity

Local supply chain talent, capacity and professionalization is not always invested in or prioritised

Infrastructure

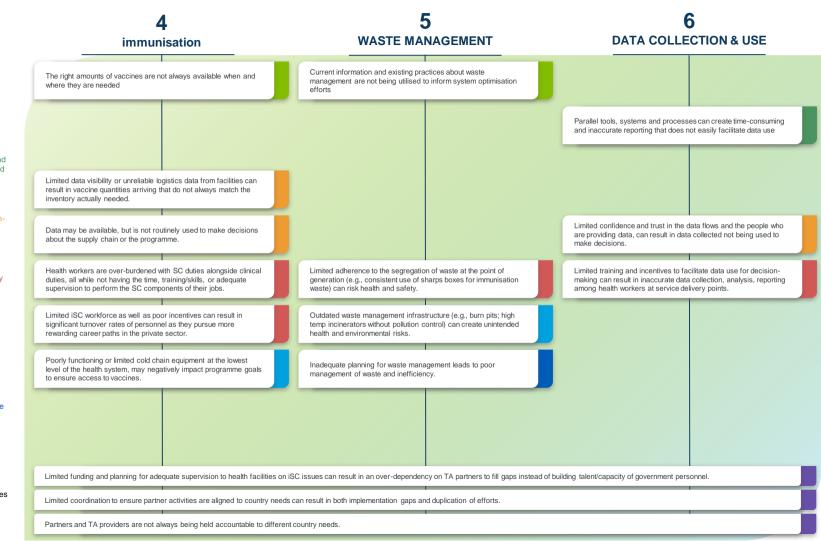
Fundamental supply chain infrastructure, including adequate CCE capacity, is not always well-maintained

Planning

National strategic plans that define priorities, allocate responsibilities and map progress are not always developed or finalized

Enablers

The existing environment, which includes alignment and accountability of stakeholders, does not enable maximisation of available and emerging opportunities for innovation and collective impact



What are some example use cases?

Programme Planning, Prioritisation, Design & Development

Use case 1: Immunisation programme planning

Context: The NLWG, comprising government and partners, is undertaking its annual programme performance review and work planning exercise ahead of the next programmatic period

Applying the iSC strategy and TOC stakeholders can:

- Collectively agree on a shared vision for the immunisation supply chain aligned with the EPI strategy
- Design and/or identify interventions for supply chain improvement and strengthening to support delivery of the jointly agreed strategic vision
- Develop an annual work plan to guide timely execution of identified interventions detailing main and sub-activities, persons responsible, desired outcomes and key performance indicators, possible risks, implementation timelines and costs
- Prioritise activities for implementation considering available time and programmatic impact

Outcome: The contextualized iSC strategy and TOC helps stakeholders identify and prioritize appropriate supply chain interventions for work planning and implementation

Programme Implementation

Use case 2: Programme implementation

Context: The regional level EPI manager and the immunisation team are tasked with coordinating the implementation of provincial supply chain improvement plans, by corresponding provincial teams, within their region

Applying the iSC strategy and TOC stakeholders can:

- Assess adequacy of existing human resources, financial and other non-financial resources, organizational structure, systems, and culture for implementation of the supply chain improvement plans across each province
- Disseminate national supply chain policies and procedures across provinces to guide the implementation process
- Review implementation plans from each province and allocate resources efficiently
- Provide leadership, implementation guidance and monitor progress with implementation of provincial plans against key performance indicators and expected outcomes by provincial technical working groups

Outcome: Improvement in immunisation supply chain performance across provinces in the region

Assessment, Monitoring & Evaluation

Use case 3: Assessment

Context: Ahead of introduction of a new vaccine the national EPI manager wants a brief on the integrity of the immunisation supply chain, from the national to district levels, and wants to understand what progress has been made with implementation of the country's supply chain transformation journey in the last 5 years

Applying the iSC strategy and TOC stakeholders within the NLWG will:

- Map out the status of implementation of supply chain improvement strategies and interventions across the country and identify inherent gaps and challenges with implementation where applicable
- Commission self-assessments of the national, regional and samples of sub-national cold stores using appropriate tools such as the EVM assessment tool for objective assessment of supply chain integrity
- Collectively evaluate the impact of the supply chain interventions on supply chain performance and make data-driven decisions about which interventions to sustain, improve upon and discontinue.

Outcome: Applying the iSC strategy and TOC to assess and evaluate implementation progress enables objective decisions about investments in supply chain

What are some example use cases?

Continuous Improvement

Use case 4: Continuous Improvement

Context: Following a partial EVM self-assessment at the national and regional levels the NLWG wants to develop a continuous improvement plan

Applying the iSC strategy and TOC stakeholders within the NLWG will:

- Identify gaps in supply chain performance and make inferences from the heat map of areas of weakness within the supply chain at national and regional levels
- Jointly design and/or identify appropriate interventions for supply chain improvement and strengthening which would deliver desired outcomes detailed in the iSC strategy and TOC
- Develop national level continuous improvement plans and coordinate development of regional-level continuous improvement plans that are aligned with the iSC strategy and TOC
- Incorporate continuous improvement plans, which have evolved from the partial assessment, into annual iSC work plan and road map as well as broader EPI plans
- Engage relevant stakeholders, within government and partners, on resource requirements for implementation
- Implement, monitor implementation progress, and periodically re-evaluate supply chain performance and execute interventions to sustain high levels of iSC performance at all levels

Outcome: Sustained improvement in iSC performance informed by an institutionalized culture of continuous improvement

Advocacy, Learning & Growth

Use case 5: Advocacy

Context: The Provincial Director, Public Health is submitting a proposal to the Commissioner for Health and development partners working in the province requesting for support for cold chain equipment maintenance as well as disposal and decommissioning of obsolete equipment

Applying the iSC strategy and TOC theProvincial DPHC will:

- Detail status of equipment performance (actual uptime versus expected uptime), gaps in equipment maintenance systems (people, process, tools, spare parts) and quantities of obsolete equipment at all supply chain levels within the province
- Convene a team from Supply Chain and Biomedical Engineering units of the Ministry of Health to jointly develop a holistic plan and costed proposal for addressing these gaps and strengthening the equipment maintenance system across the province sustainably
- Engage the Minister and partner agencies with the proposal to secure buy-in and support (resource allocation and TA support)

Outcome: Applying the iSC strategy and TOC to secure investments and deploy robust equipment maintenance system for the health programme

Resource Mobilisation

Use case 6: Resource Mobilisation

Context: The EPI manager is trying to raise the country's co-payment portion of the total budget for cold chain expansion under the CCEOP project

Applying the iSC strategy and TOC stakeholders can:

- Identify gaps in available storage capacity, to meet existing and planned introductions of new vaccines, over the agreed strategic period
- Develop a costed Cold Chain Expansion and Rehabilitation Plan required to support achievement of country coverage and equity targets
- Identify amount of funds the country is meant to contribute; available funds to fulfil this obligation and funding gaps where applicable
- Engage the Minister for Health on justification for the strategy and funds required to secure buy-in, allocation and disbursement of funds

Outcome: Applying the iSC Strategy and TOC to mobilise domestic resources and secure county's investment in supply chain strengthening

TO ADDRESS THIS...

The Challenge

Inconsistent availability of high-quality vaccines and limited reach of vaccine supply chains in underserved populations threaten access as well as immunization coverage and equity outcomes, and put vaccine investments at risk



WE FOCUS ON.

nvestment Priorities & Expected Outcomes



Data Visibility & Use

 to make real time data available at all levels of the SC and encourage data use by decision makers to improve SC performance



Strategic Planning

 to a country-led strategy informed by people's needs, that is adequately financed



System Optimization & Segmentation

 to design and optimize supply chains that reach everyone and minimize cost and waste



Cap

Capacity Development & Professionalization

 to adequately staff all levels of iSC with motivated and competent workforce



Fundamental Infrastructure

 to ensure vaccines are stored and transported in well-functioning equipment to ensure quality;



Smart Integration & Harmonization

 to intergrate and harmonize iSCs with other public health supply chains, program functions and overall health system to maximize resources



TO ACHIEVE ...

Impact Goals

- Extended Reach
- ► Vaccine Availability
- ► Efficiency
- ► Resilience
- Responsiveness
- ► Sustainability



SUPPORTED BY...

Enablers

Country Leadership, Governance & Stewardshi Domestic & International Fundin Partner Alignment & Coordination

Innovation

Private Sector Engagement

AND FULFILL...

Vision





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