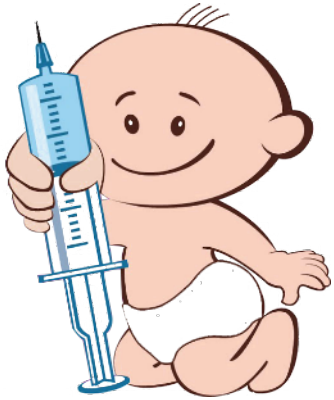




TechNet-21



**TECHNET WEBINAR SERIES ON TEMPERATURE
MONITORING:
KEEPING A COLD CHAIN COLD**

Connecting the dots: Using CCE temperature monitoring data to improve cold chain systems and maintenance practices

Karan Sagar, Gavi

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15:00 CET, December 09, 2021

WELCOME!



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What to expect



5mins	Introduction
10mins	Systematic data use and interoperability of RTM platforms with existing systems
10mins	Actions & activities required to strengthen overall temperature/performance monitoring systems
10mins	Gavi 5.0 priorities, funding levers and healthy market goals
20mins	Q&A
5mins	Follow up: Technet resources on RTMs & webinar report



KARAN SAGAR, GAVI

INTRODUCTION

Previous sessions have looked at temperature and CCE performance monitoring tools and their utilization



30 DTRs [existing devices]

- **Use:**
 - Continuous monitoring of temperatures in vaccine refrigerators
- **Functionality:**
 - Electronic device records and displays current temp., alarm status & history of temps. and alarms during the past 30 days

RTMDs [existing devices]

- **Use:**
 - Continuous monitoring of temperatures in WICRs, refrigerators and refrigerated vehicles
- **Functionality:**
 - Records temp. readings every few minutes & transmits data to a cloud data storage via cellular networks

EMS [future devices]

- **Use:**
 - Effectively generating, recording, communicating and turning CCE performance data into actionable insights for end users
- **Functionality:**
 - Future logging of data and admin. information to improve diagnostics
 - Modular interface for local data access and plug and play upgradeability; remote data transmission capabilities (optional)
 - Data standardization for interoperability

This session pulls together all information from previous sessions focusing on three areas



1

The different ways that the data can be used by countries to identify underperforming CCE and inform maintenance planning, procurement, and product improvements

2

System strengthening actions that need to take place to use the data consistently at country level for decision making

3

Gavi 5.0 priorities, funding levers and healthy market goals

Overarching goal of TMS: Systematic use of data and strong monitoring systems for CCE regardless the technology (RTMD, 30-DTR or eventually EMS) used by programmes



MICHELLE SEIDEL, UNICEF PD

SYSTEMATIC DATA USE AND INTEROPERABILITY OF RTM PLATFORMS WITH EXISTING SYSTEMS

The focus in Gavi 5.0 will be intensified on systematic data use for planning and decision making, specifically on



01

CCE performance

Identifying underperforming CCEs that may have grade A compliance issues

02

Maintenance

Informing maintenance planning, practices and budgets for targeted interventions

03

Procurement

Informing future CCE procurement decisions (planning efforts, product selection)

04

CCE deployment

Informing optimal deployment (CCE location/placement) decisions

Using RTMDs to validate installations e.g. in country-led deployments in place of commissioning

05

Warranties

Warranty utilization in systematic manner, with country using data as evidence on performance issues and failures of CCE that needs repair

06

Product improvements

Informing product improvements (share data to PQS, UNICEF SD)

With EMS looking promising in coming years, we are looking at interlinkages with other tools / platforms that must happen to enable triangulation and use of data



30 DTRs [current]

- Varo App can be leveraged to unlock CCE insights; allows for capturing and transmission of temp. reports from CCE using phone / tablet
- PogoDV: Consolidates CCE data sources for visualization (e.g FT2E & Aucma fridges, RTMDs)

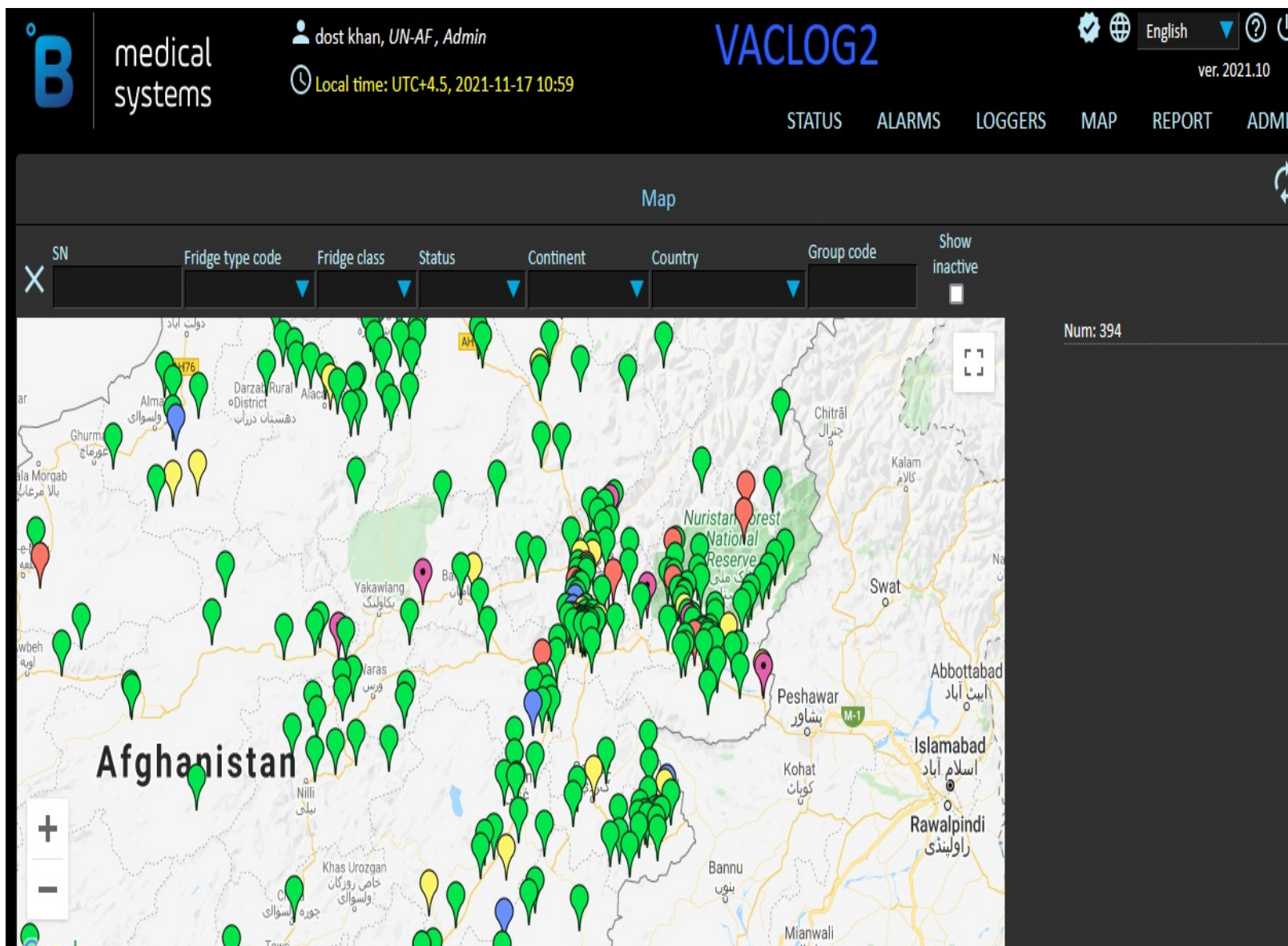
RTMDs [current]

- Data can be integrated in eLMIS systems for comprehensive view of performance
- Data can also be integrated into the Intelligent Maintenance & Planning tool (assesses CCE performance irrespective of brand) + PogoDV app

EMS [future]

- Data and software will be fully compatible with eLMIS
- Data will support Post Market Monitoring
- Data can also be leveraged by the Intelligent Maintenance & Planning tool to assess CCE performance

Example: Afghanistan has successfully leveraged RTMDs despite the challenging country context



Country use cases for RTMDs:

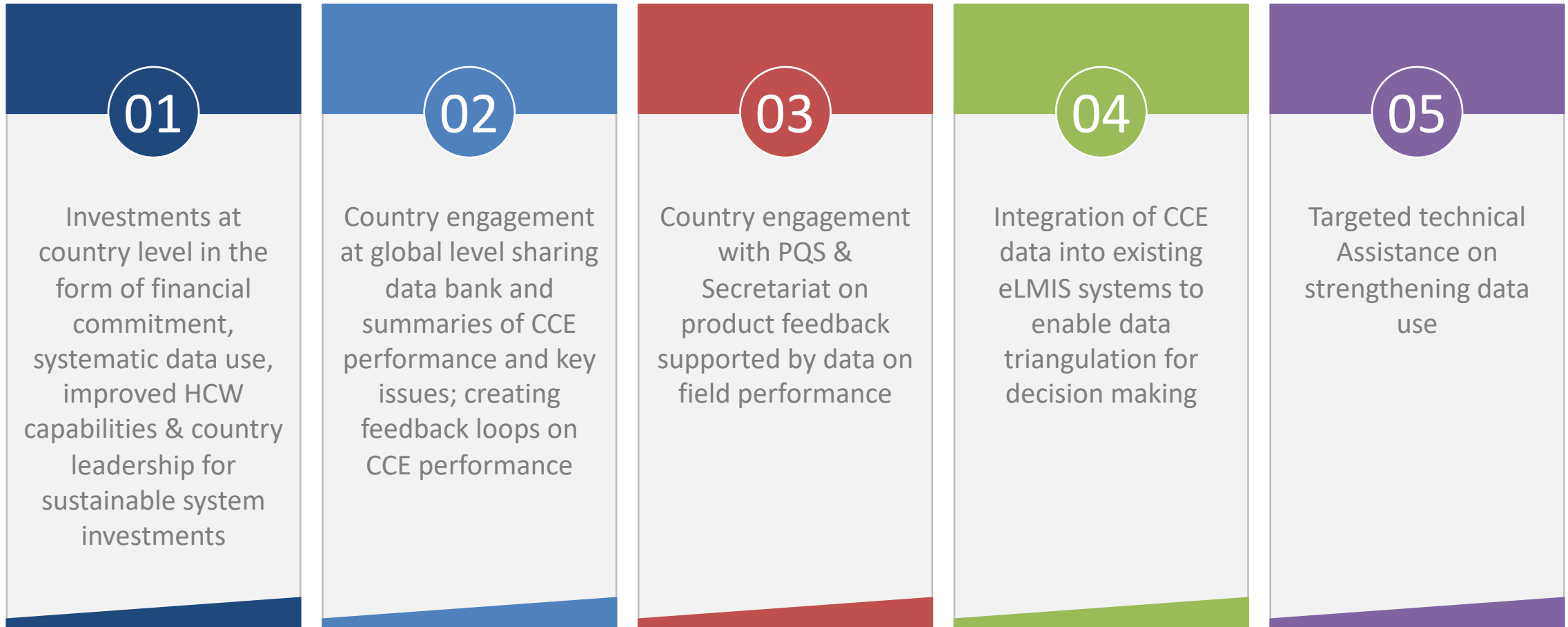
- Evidence based commissioning of ODP
 - RTMs are being used to track commissioning of SDDs under the CCEOP country led deployment mechanism (delinking)
- Documented recording of temperature for EVM compliance
- Targeted interventions to save vaccine and fridge by timely monitoring and curative actions
- Feedback to manufacturers and PQS secretariat on performance of fridges and models



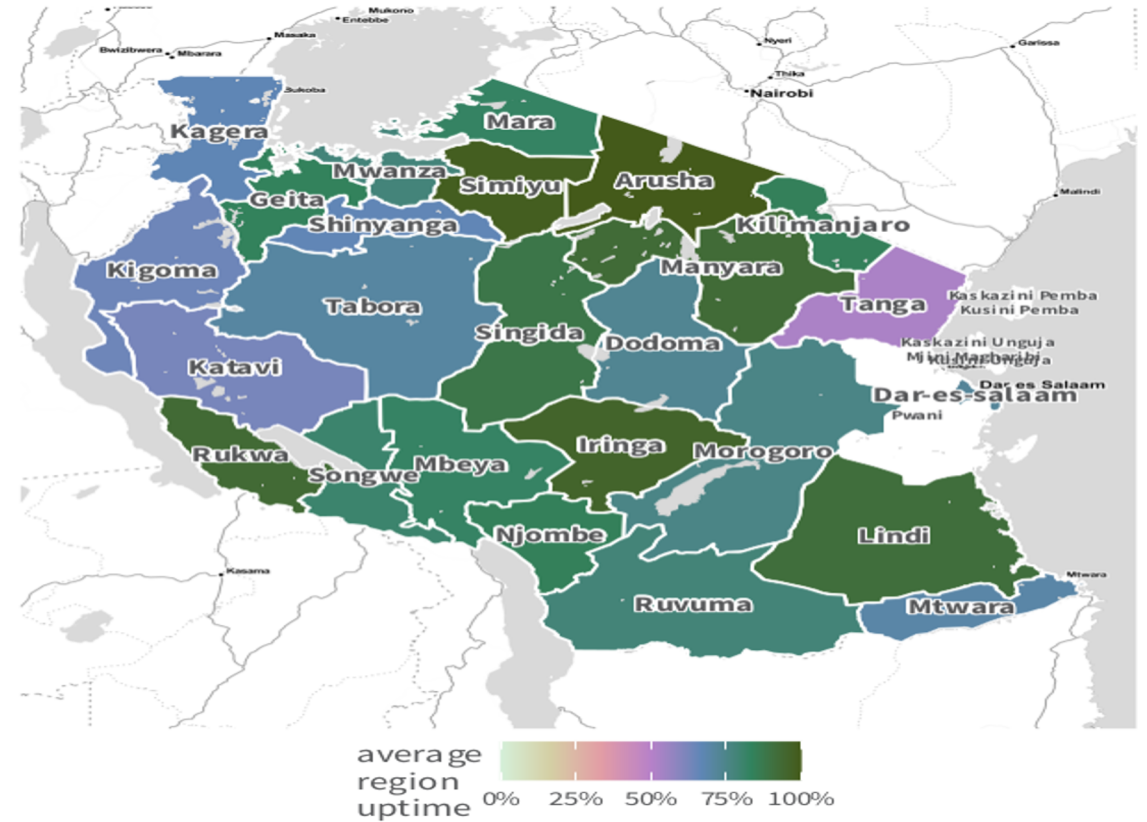
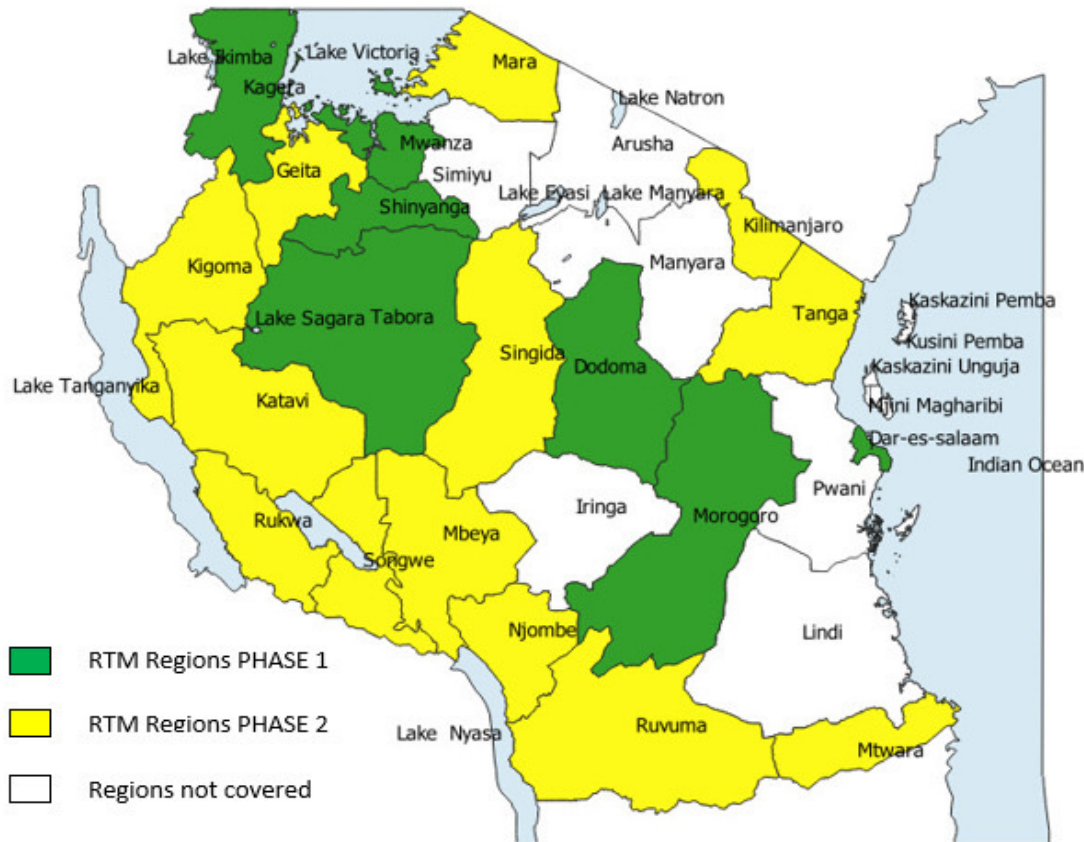
SOULEYMANE KONE, WHO

ACTIONS & ACTIVITIES REQUIRED TO STRENGTHEN OVERALL TEMPERATURE/PERFORMANCE MONITORING SYSTEMS

Several actions and activities are needed to strengthen the overall temperature/performance monitoring system and make use of available data for decision making



Example 1/2: Tanzania has made significant investments in deploying ~5000 Cold Trace5 devices (RTMDs) across the country



RTM data already:

- Improves national cold chain visibility
- Drives immediate action at the facility level or CCE location to resolve temperature excursions
- Aids in planning for longer term maintenance needs at the country level
- Globally, contributes to global data sets to evaluate performance and guide procurement and maintenance decisions

Example 2/2: RTMD webinar highlighted existing & planned supporting systems to enhance visibility, data use and accountability



Existing support systems

CCE data integrated into VIMS to enable data triangulation for decision making

Training conducted for Regional and District Immunization and Vaccine Officers (RIVOS and DIVOs)

Definition of roles and responsibilities done for RIVOS and DIVOs in regards to installation and follow up of alarms

Data costs for RTMDs included in health facility budgets to achieve sustainability

Vs

Areas for additional emphasis

Engagement of telecom providers to remove barriers to yearly payments by facilities

Institutionalizing ongoing costs at facility level

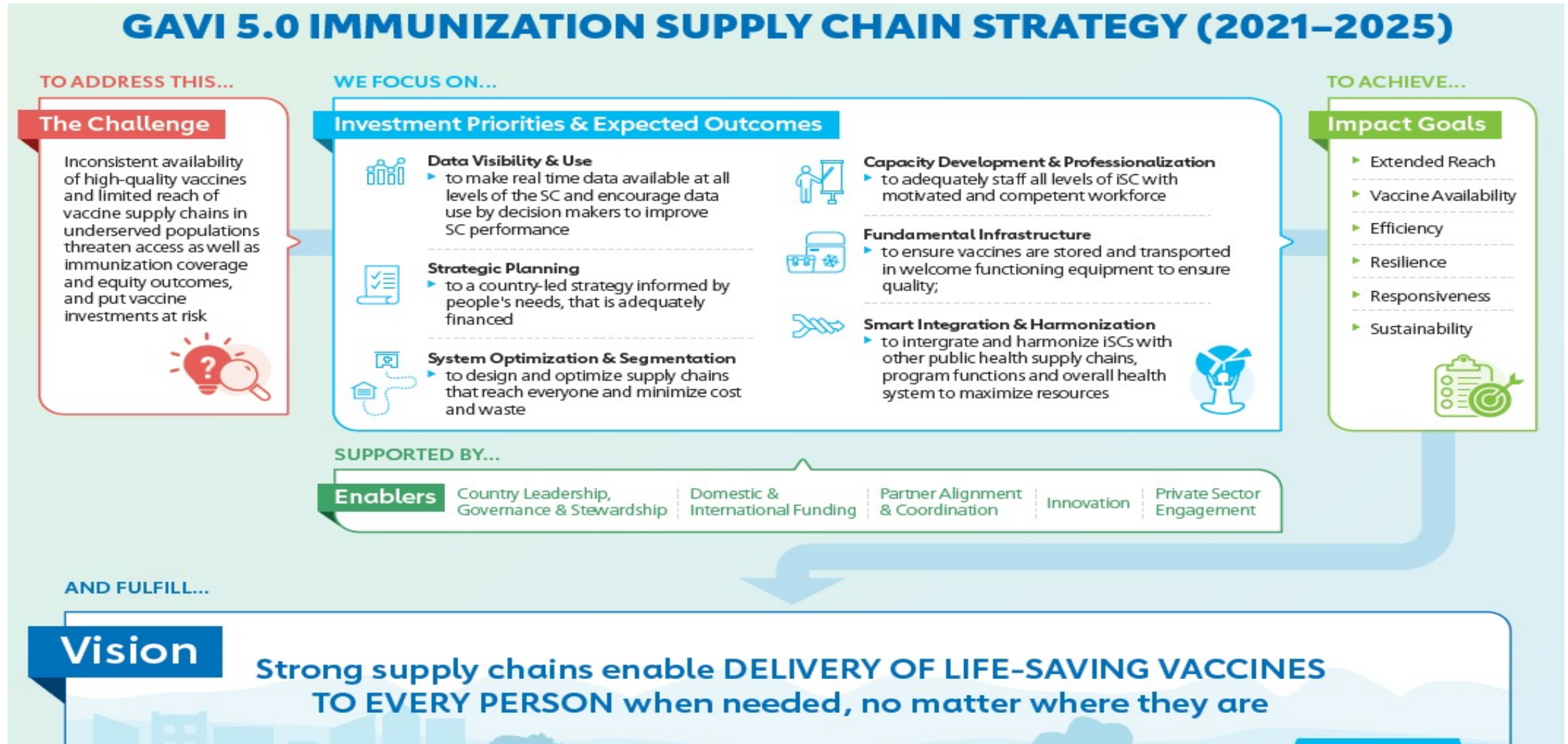
Ensuring those tasked with payment are benefiting from the data



KARAN SAGAR, GAVI

GAVI PRIORITIES FOR CCE TEMPERATURE MONITORING IN 2021-2025 (GAVI 5.0)

Gavi's new Immunisation Supply Chain Strategy for 2021–2025 (*Gavi 5.0*) includes avenues to strengthen CCE temperature monitoring systems and use of data



The Gavi Alliance Theory of Action: supporting for impact

Governing principle: 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 and countries, has convening power, influences for advocacy.



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

And other partner



Major funder for organizations and countries, convening power, important synergy potential.



... the Gavi Alliance will conduct

ENHANCE CAPACITY

Lead development and revision of tools and guidance; support a country-driven 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.

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)

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

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

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 strengthening countries' programme, and feed into the strategy's Theory of Change enablers



Strengthening temperature monitoring systems, CCE temperature monitoring and maintenance are key priorities for Gavi's Cold Chain Equipment Optimisation Platform (CCEOP) in 5.0



- The CCEOP in 5.0 – and leveraging (and eventually integrating) COVAX / CDS investments – aims to help countries continue to improve their cold chains within the context of broader immunisation supply chain strengthening efforts, with specific focus in the following areas:
 - Strengthening temperature / performance monitoring systems in countries
 - Understanding CCE performance (global and country levels)
 - Improved CCE maintenance planning and implementation, informed by CCE temperature/performance monitoring data
 - EVM improvements (and focus on development and implementation of quality EVM cIPs)
- New guidance from the Alliance (soon to be released) will provide investment priorities to guide country investments in these areas.
- Countries' CCEOP investments (equipment, TMS tools) should be aligned to and support the countries overall iSC strategies

Resources and funding to strengthen TMS and use of data



Multiple funding streams exist that countries can utilize to invest in strengthening TMS and use of data

Gavi CCEOP

- Procurement, distribution, installation and training on temperature monitoring equipment (30-DTRs, RTMDs, EMS/EMD *(in the future)*) and related data/subscription costs as well as CCE maintenance

Gavi HSS grants

- Funds can be used for activities part of countries' Effective Vaccine Management (EVM) continuous improvement plans (cIPs); countries must demonstrate clear linkages of activities to their situational analysis through EVM assessments and country's own iSC strategies

Gavi CDS (and COVAX) support

- Procurement, distribution, installation and training of RTMDs and 30-DTRs and related data/subscription costs

Other donor funds

- Any aspect of TMS, subject to donor's guidelines or requirements

Domestic resources

- These are key to sustaining interventions in the longer term, particularly opex and maintenance aspects of CCE and TMS technologies

Market shaping and CCE performance monitoring



The Alliance aims to shape a healthy market for temperature or performance monitoring products in Gavi 5.0

- The Alliance's strategy and vision for a healthy temperature or performance monitoring product market will be developed and communicated in 2022

Strengthened TMS will also contribute to the following healthy market objective as defined in the 2021 ILR/SDD Market Shaping Roadmap

- 'Incentivize & scale up innovations' through systemizing field performance data collection and country-supplier-Alliance feedback loops that drive product improvements, catalyse necessary innovations, and inform procurement decisions



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Q&A