MAINTAINING, RESTORING & STRENGTHENING IMMUNISATION

GAVI INNOVATION CATALOGUE

Gavi
The Vaccine Alliance

#vaccineswork
www.gavi.org

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INTRODUCTION

Dear reader,

The COVID-19 pandemic has a major impact on immunisation. While the trajectory of COVID-19 is variable across countries, the pandemic has caused widespread disruption in immunisation programmes in many Gavi-supported countries. WHO projects 80 million children under the age of one at risk of missing out on vaccinations, increasing the risks of vaccine preventable diseases and outbreaks. Existing disparities, including gender inequalities are likely to exacerbate, putting the most disadvantaged and poorest communities at greatest risk. Gavi's vision for 2021–2025 to leave no one behind with immunisation is even more relevant in the context of Covid-19.

Innovation is part of Gavi's DNA and critical to achieving its strategic objectives. The Alliance has a track record of catalysing innovation across a spectrum from products to services and practices. As Gavi-eligible countries put in place interventions to maintain, restore and strengthen their immunisation services and catch up missed children, scaling-up innovations can accelerate these efforts, and help to put in place the foundation for better immunisation services.

To support Gavi-eligible countries in this effort, the Alliance has put together an initial, non-exhaustive, tool and provider agnostic list of 21 innovations that countries could consider depending on their specific needs and context. These address COVID-19 related needs such as preparing frontline health workers for the "new normal" of immunisation and ensuring agile cold chain and logistics post pandemic. It includes innovations that have been tested before in developing country settings, have reached a certain level of maturity, and would have a reasonable timeline to be implemented in the light of the pandemic[1]. Gavi recognises that many other innovations outside the catalogue exist that could be equally well or better suited depending on the country context. The catalogue is therefore a first step towards a potential innovation marketplace that Gavi envisions as part of the 5.0 strategy. It will be updated on a regular basis.

The catalogue should serve as a discussion starter for EPI teams, Alliance partners and Gavi Senior Country Managers to reflect on the possibility of addressing COVID-19 related needs through innovation, and to discuss the feasibility and impact. As such, the catalogue presents key information such as COVID-19 related needs addressed through the innovation, intended outcomes, efficacy and demonstrated impact, potential providers, approximate timeline for implementation and associated indicative cost. Countries are invited to discuss potential funding modalities such as co-funding through Gavi with their Senior Country Managers. Additional information on the innovations is available on request.

I hope that you will find this catalogue helpful as you continue on the journey to maintain, restore and strengthen immunisation services, building back better towards leaving no child behind with immunisation.

Thabani Maphosa
Managing Director, Country Programmes

1 The mentioning of names of organisations should not be understood as Gavi's direct or indirect endorsement of these organisations.

HOW TO USE THE CATALOGUE – INFORMATION AVAILABLE

CATEGORIES	KEY QUESTIONS TACKLED
NEED ADDRESSED	How does this innovation support the "maintain, restore and strengthen" efforts?
PROGRAMMATIC AREA	What programmatic area is it linked to?
OVERVIEW OF SCOPE	What is the innovation about and what are the intended outcomes?
POTENTIAL TO ADDRESS COVID NEED	How can the innovation specifically address COVID related issues?
POTENTIAL PROVIDER	• Who are the providers of the innovation? • What is their geographical footprint, strengths and challenges?

CATEGORIES	KEY QUESTIONS TACKLED
FEASIBILITY	**Requirements to set up the innovation:** What will be required from the country to set up the innovation? **Time to implementation:** What is the approximate time to implement (Short: <3 months / Medium: ~6 Months / Long >9 Months)?
INNOVATION FOOTPRINT	Where has the innovation already been implemented?
LEVEL OF OPPORTUNITY	**Proven efficacy:** Has the innovation been proven to function as intended? **Indicative cost:** What is the approximate cost to set up the innovation? (Low: <$0.5M / Medium: $0.5M-$1M / High: >$1M (preliminary estimates) **Demonstrated outcomes:** What is the expected level of outcomes? (based on existing available information)

HOW INNOVATIONS WERE INCLUDED

NEED IDENTIFICATION

- Identification of **6 COVID-related needs** in consultation with countries:
  - **A.** Ensuring strong planning and management capabilities to restore immunisation services
  - **B.** Preparing frontline health workers for the 'new normal' of immunisation and increasing their efficiency
  - **C.** Ensuring agile cold chain and logistics post pandemic, managed with appropriate dashboards
  - **D.** Reaching missed communities and under-immunised children
  - **E.** Engage communities to rebuild demand for immunisation services (incl. addressing misconceptions and rumour on immunisation)
  - **F.** Running innovation labs for co-creation of innovations
- **Selection criteria for innovations:**

  Impact (Relevance to COVID related needs, demonstrated efficacy)

  Feasibility (Time for implementation under 1 year)

  Value for money (Reasonable cost per child)

SELECTION OF INNOVATIONS

1 Starting point: innovation mapping
~160+ innovations

- Innovations that have been piloted or scaled-up as part of Gavi 4.0
- Additional entries proposed throughout the Alliance

2 Pre-selection of innovations
~45 innovations

- Based on selection criteria highlighted above for innovations and qualitative assessment

3 Detailed catalogue
21 innovations

- List narrowed down further based on qualitative feedback

CREATION OF DETAILED PAGES

- **2-3 pages** per innovation

LIST OF INNOVATIONS

A ENSURING STRONG PLANNING AND MANAGEMENT CAPABILITIES TO RESTORE IMMUNISATION SERVICES

A1 DASHBOARD TO CONSOLIDATE AND ANALYSE DATA FOR BETTER DECISION-MAKING

KEY FEATURES

NEED ADDRESSED

Ensuring strong planning and management capabilities to restore immunisation services

PROGRAMMATIC AREA

Data

OVERVIEW OF SCOPE

- The product is an interactive dashboard on immunisation related data that government officials can use to monitor EPI performance and take programme decisions
- The data is sourced from discrete sets of information hosted across multiple government departments
- Allows improved data access, utilisation and visualisation by linking disparate sources and merging duplicate data sets

POTENTIAL TO ADDRESS COVID NEED

- Has been used to set up COVID control centers (to consolidate different data streams like number of cases, personal Protective equipment, supply chain, bed availability etc.)

POTENTIAL PROVIDER

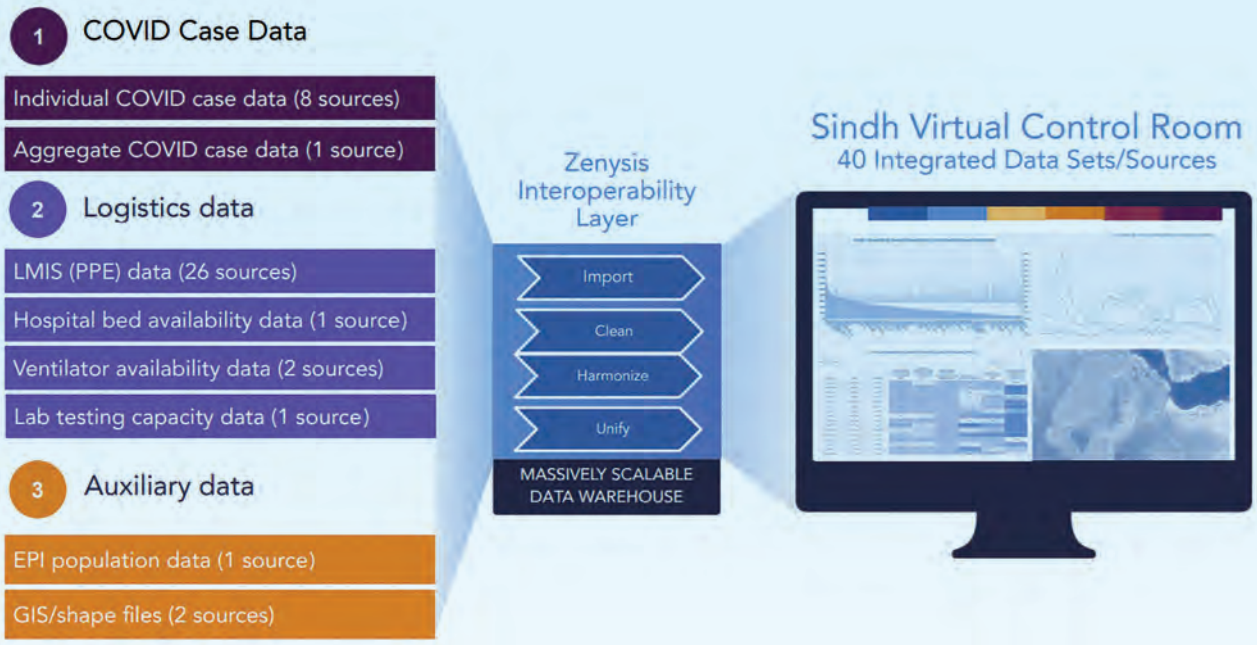
ZENYSIS

INFUSE PACESETTER

- **Existing Gavi relationship**: INFUSE pacesetter since 2018
- **Headquarters and other offices**: Headquarters in the United States, with local presence in Pakistan, South Africa, Mozambique (Possibility to establish local entities where required by regulations)
- **Advantages of provider**: Ability to work with different languages, flexibility in range of data quality and formats, while maintaining a high speed to output
- **Challenges**: Dependent on data being made available from the relevant ministries; implementation requires local capacity to interpret data insights

EXAMPLE OF USE IN PAKISTAN

OVERVIEW OF WORKING MODEL OF ZENYSIS (EXAMPLE FROM PAKISTAN)



A1 ZENYSIS

KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Requires government permissions to access the required data and share on the cloud platform (If the permission to work on cloud is not granted, a local IT set up would be required to process the information)
- Would need an analytics team in the ministry of health or an implementation partner to leverage the output

Time to implementation:

- **Short-medium (<6 months):** Software is quick to deploy, time to implementation largely dependent on time needed to partner with government to establish data sources

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** N/A
- **Asia Pacific:** Pakistan
- **Anglophone Africa:** Ethiopia, Mozambique (Discussions ongoing to set up a COVID control room)
- **Francophone Africa:** N/A
- In addition to the above, Zenysis partners with The Global Fund and USAID in ~10 countries

LEVEL OF OPPORTUNITY

Proven efficacy:

- Integrated 300 million health records previously distributed across a dozen systems, to empower health officials to have a holistic view on a single platform (Ethiopia)

Indicative cost:

- **Medium:** ~US$ 500K as one-time expenditure (for nation-wide one-time data licensing fee, initial setup), ~50K (based on country need) as recurrent annual fee for IT maintenance (indicative cost based on example of Mozambique)

Demonstrated outcomes:

- Used in Mozambique as part of a national platform to fight cholera outbreak – Helped reduce new cholera cases from 400 per day to zero in less than a month

Limited view on outcomes; Requires independent assessment

A2 DATA-DRIVEN MANAGEMENT AND LEADERSHIP SUPPORT FOR EPI
KEY FEATURES

NEED ADDRESSED

Ensuring strong planning and management capabilities to restore immunisation services

PROGRAMMATIC AREA

Leadership, management and coordination

OVERVIEW OF SCOPE

- The innovation is a management support programme to enable EPI teams to make data-driven decisions
- Development of a central dashboard for capturing relevant data (from health center to national level), and training EPI resources to use it
- External expert embedded in EPI for a fixed duration
- Includes an app for local managers to collect and feed front-line data to central dashboard (Acasus only)

POTENTIAL TO ADDRESS COVID NEED

- Existing contracts have some level of flexibility in terms of reference to adapt towards COVID-19 related priorities for EPI
- Acasus has already adapted its app to track COVID-19 related indicators in some countries

POTENTIAL PROVIDERS

Acasus

- **Existing Gavi relationship:** Since 2015
- **Headquarters and other offices:** Small company with offices in 10 countries (DRC, Ethiopia, Pakistan, Hong Kong among others)
- **Advantages of provider:** Dedicated expertise in data-driven management support
- **Challenges:** Limited resources

Dalberg

- **Existing Gavi relationship:** Since 2017
- **Headquarters and other offices:** Global company with offices across different regions
- **Advantages of provider:** Leading social impact consulting firm in the world
- **Challenges:** Doesn't have in-house talent to deploy as part of the programme; contracts individuals as required

OVERVIEW OF PROGRAMME

OVERVIEW OF ACASUS MODEL

Customised **mobile apps** are used to collect front line data

Meetings with leadership are used to drive improvement

Data packs provide managers with relevant insights

TOTAL SCORE
National
54%

COLD CHAIN FUNCTIONALITY SCORE
National
85%

SUPERVISION SCORE
Province
49%

Health Zone
55%

Embedded consultants support the Ministry of Health & regions

A2

Acasus

KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Needs stable connectivity (Android based app);
- Also requires annual surveys to validate data captured through the app at health centers

Time to implementation:

- **Short-medium (3-6 months):** Driven by time needed to (1) onboard local team; (2) adapt the app for local context

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** Afghanistan, Pakistan
- **Asia Pacific:** N/A
- **Anglophone Africa:** Ethiopia
- **Francophone Africa:** DRC, Mozambique

LEVEL OF OPPORTUNITY

Proven efficacy:

- In the pilot region in Ethiopia, the number of immunisation sessions has started to increase

Indicative cost:

- **High:** Expensive model compared to other leadership, management and coordination partners, yearly cost typically >US$1M per country; sustainability can be a challenge

Demonstrated outcomes:

- Household surveys show a strong improvement in immunisation coverage in Baluchistan (Pakistan)
- Front-line supervision reports, vaccine availability have significantly improved in the DRC

Strong consensus on improved outcomes based on experience of stakeholders and sub-national coverage surveys

KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Programme strongly dependent on candidate selected to be embedded in EPI – requires good local knowledge and understanding of issues

Time to implementation:

- **Short-medium (3-6 months):** To select and embed individual in EPI

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** Haiti, Kyrgyzstan, Tajikistan
- **Asia Pacific:** PNG
- **Anglophone Africa:** N/A
- **Francophone Africa:** Madagascar, Chad, Burundi, Cote d'Ivoire, Cameroon, Togo, Mali, Guinea, Comoros

LEVEL OF OPPORTUNITY

Proven efficacy:

- While the intervention has been well accepted in Francophone Africa, – it has seen mixed feedback in other regions (driven largely by expertise / local knowledge of embedded individual)

Indicative cost:

- **Medium-high:** As remuneration of embedded consultants can be high, overall cost is US$ 500K-1M for a country per year

Demonstrated outcomes:

- Evaluations currently ongoing but good feedback from Francophone Africa
- Seen as a gap-filling intervention in some instances – Could be more focused towards transfers of skills to EPI teams

Limited view based on initial outcomes – Awaiting results of evaluation

- Front-line supervision reports, vaccine availability have significantly improved in DRC

Strong consensus on improved outcomes based on experience of stakeholders and sub-national coverage surveys

A3 LEADERSHIP & MANAGEMENT TRAINING PROGRAMME FOR EPI MANAGERS
KEY FEATURES

NEED ADDRESSED

Ensuring strong planning and management capabilities to restore immunisation services

PROGRAMMATIC AREA

Leadership, management and coordination

OVERVIEW OF SCOPE

- The Innovation is a training programme for EPI managers in countries, inspired by trainings in private sector (focus on supply chain for STEP)
- Programme with a mix of e-learning, face-to-face trainings and mentorship, inspired by programmes in the private sector
- Also includes on-the-job training sessions

POTENTIAL TO ADDRESS COVID NEED

- **Yale / STEP:** Discussions ongoing to adapt face-to-face trainings to a virtual set-up

POTENTIAL PROVIDERS

Yale *Global Health Leadership Institute*

- **Existing Gavi relationship:** Since 2017
- **Headquarters and other offices:** Institute in the US – Partnerships with local universities of countries as needed
- **Advantages of provider:** Renowned institute providing thought leadership on content
- **Challenges:** 9-month duration of the course (though part-time) can be challenging given competing priorities of participants

STRATEGIC TRAINING EXECUTIVE PROGRAMME **(STEP)**

- **Existing Gavi relationship:** Since 2015
- **Headquarters and other offices:** (No entity as such) Programme rolled out in 20 countries in anglophone and francophone Africa
- **Advantages of provider:** Private sector experts provide best-in-class content on supply chain
- **Challenges:** Continuous engagement of mentors from private sector has been a challenge in the past

OVERVIEW OF PROGRAMME

OVERVIEW OF PROGRAMME

Ongoing coaching/mentorship support – *Including a 'breakthrough' project for each participant*

Individual planning

FACE-TO-FACE SESSION 1 week

ON-THE-JOB Practice through 'breakthrough project'

FACE-TO-FACE SESSION 1 week

ON-THE-JOB Practice through 'breakthrough project'

FACE-TO-FACE SESSION 1 week

Self-paced e-learning modules

Self-paced e-learning modules

Self-paced e-learning modules

SNAPSHOTS FROM SESSION IN RWANDA

KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Requires ministry partners to support the selection of candidates and facilitate the logistics of the training
- Need to set up partnership with a local university to support logistics, act as local content experts after the training

Time to implementation:

- **Medium-long:** 3 Months to set up, course includes ~150 hours of sessions spread over 9 months

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** N/A
- **Asia Pacific:** India, Kiribati, Myanmar etc.
- **Anglophone Africa:** Tanzania, Gambia, Ethiopia etc.
- **Francophone Africa:** DRC, Mozambique, etc.

LEVEL OF OPPORTUNITY

Proven efficacy:

- Good feedback from participants and stakeholders in terms of content

Cost:

- **Low (on per country basis):** ~700K US$ for a training with ~30 participants from 5 countries (indicative cost based on experience) – with some risk that participants can leave their current jobs after attending the training (though few instances observed so far)

Demonstrated outcomes:

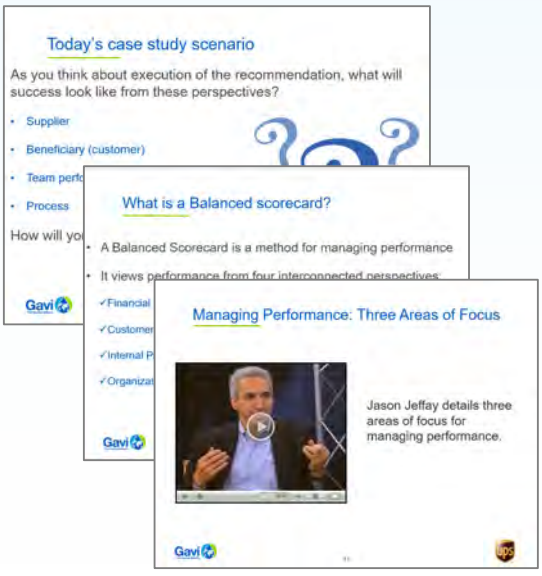
- As per Gavi Senior Country Managers, notable improvement observed in institutional capacity in countries where the programme was deployed

Positive results with strong consensus on outcomes based on experience of stakeholders in multiple countries

PROGRAMME HIGHLIGHTS

SNAPSHOTS FROM GHANA

HIGHLIGHTS FROM WORKSHOP



KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Needs digital infrastructure (laptops at individual level) for online content
- Requires ministry partners to support the selection of candidates and facilitate the logistics of the training

Time to implementation:

- **Medium (~6 Months):** 3 months to identify country needs, select candidates; the course involves 1 month of pre-work, 5 days of in-person workshops and a 3-month mentoring period

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** N/A
- **Asia Pacific:** N/A
- **Anglophone Africa:** Nigeria, Kenya etc.
- **Francophone Africa:** Chad, DRC, Burkina Faso, etc.

LEVEL OF OPPORTUNITY

Proven efficacy:

- >250 individuals trained and completed the STEP programme so far; course content, structure appreciated by stakeholders and participants

Indicative cost:

- **Low (on a per country basis):** Some risk that trained participants can leave the team (though few instances observed so far)

Demonstrated outcomes:

- As per Gavi senior country managers, notable improvement observed in institutional capacity in countries where the programme was deployed

Positive results with strong consensus on outcomes based on experience of stakeholders in multiple countries

A4 CROWD-SOURCED DATA COLLECTION
KEY FEATURES

NEED ADDRESSED

Ensuring strong planning and management capabilities to restore immunisation services

PROGRAMMATIC AREA

Data

OVERVIEW OF SCOPE

- The innovation is an app-based software that offers a global network of freelance contributors who can be mobilised for data collection
- The surveys can be designed to monitor specific input, process, and output indicators related to immunisation, e.g. vaccine availability, caregiver satisfaction
- The freelance contributors (can be anyone with a smartphone) need to download an the app on their phones, and are paid to participate in / help with data collection
- They are given relevant training on the context (e.g. immunisation metrics above), and data is checked for quality

POTENTIAL TO ADDRESS COVID NEED

- Assess and monitor impact of COVID-19 on routine immunisation (including demand, access, and availability)
- Assess and monitor COVID-19 infection prevention and risk communication activities

POTENTIAL PROVIDER

PREMISE™

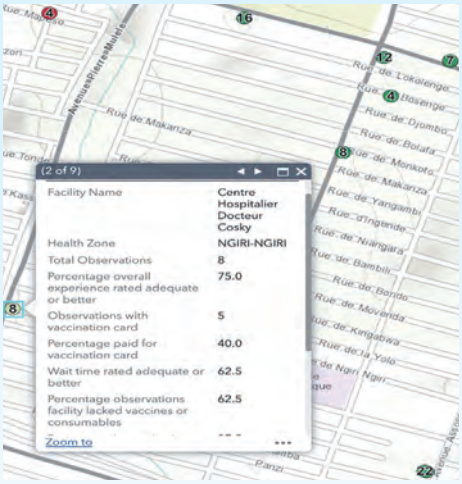
INFUSE PACESETTER

- **Existing Gavi relationship:** INFUSE pacesetter since 2019
- **Headquarters and other offices:** US-based company
- **Advantages of provider:** Network of ~2.4 million data contributors in over 100 countries across regions
- **Challenges:** Limited demonstration of use-case in global health yet (used by private entities for market intelligence, governments for public engagement)

IMMUNISATION SERVICE PERFORMANCE MONITORING

SAMPLE RESULTS OF DATA COLLECTED IN KINSHASA PROVINCE, DRC

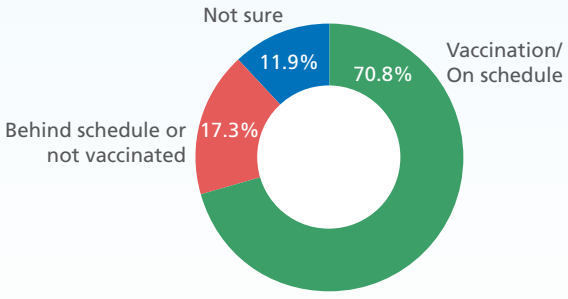
Immunisation session adherence and exit surveys – Caregiver satisfaction and health facility performance



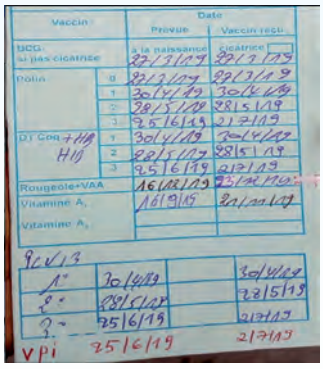
Health facility monitoring – Vaccine availability, expiration and vaccine vial monitor (VVM) tracking

Overview of Penta/DTC-3 vaccine coverage

Penta/DTC-3 vaccine coverage



Vaccine card photo



A4 PREMISE

KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Local contributors need to have smartphones – Has an offline mode that is useful when connectivity is intermittent
- Data representativeness would depend on number and spread of contributors

Time to implementation:

- **Short (<3 Months):** Software only intervention that can be deployed within 3 months (assuming sufficient presence of contributors)

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** Colombia, Brazil
- **Asia Pacific:** Bangladesh, Myanmar, Indonesia, Vietnam, etc.
- **Anglophone Africa:** Nigeria, Ghana, Kenya, Ethiopia, etc.
- **Francophone Africa:** Benin, Cameroon, Burkina Faso, etc.

  Used as a data collection tool, but not necessarily in the public health context

LEVEL OF OPPORTUNITY

Proven efficacy:

- Helped set up a citizen surveillance system to monitor sanitation during the Zika outbreak in Colombia

Indicative cost:

- **Low:** < US$$1 per child in Kinshasa province during pilot work with Bill & Melinda Gates Foundation

Demonstrated outcomes:

- Helped in assessment of vaccine coverage, caregiver sentiment paired to individual health facility performance (DRC)
- Supported targeted health facility preparedness monitoring for COVID-19 in Nigeria (signage, PPE, handwashing)

Limited view on outcomes in immunisation context – Requires independent evaluation

A5 REAL-TIME MONITORING DURING CAMPAIGNS
KEY FEATURES

NEED ADDRESSED

Ensuring strong planning and management capabilities to restore immunisation services

PROGRAMMATIC AREA

Data

OVERVIEW OF SCOPE

- The innovation is a real-time data collection and live dashboard system that helps in monitoring immunisation campaigns
- Healthworkers can send data through SMS (RapidPro), or an app (Open Data Kit or DHIS2 Android app) that allows offline functionality
- Information collected is presented on dashboards to inform management decisions in real time

POTENTIAL TO ADDRESS COVID NEED

- COVID-19 has severely impacted RI in numerous countries – many of them are planning immunisation campaigns and PIRI for the recovery phase
- Real-time monitoring of those campaigns (from the planning stage, implementation and evaluation) would help improve their efficiency to ensure no children will be left without immunisation after COVID

POTENTIAL PROVIDERS

RapidPro

- **Existing Gavi relationship:** Used in Indonesia
- **Headquarters and other offices:** (No entity as such) – Parent entity (UNICEF) has global presence
- **Advantages of provider:** Vibrant community of users (due to broad spectrum of use cases)
- **Challenges:** Information can be limited by the extent of the preset questions (e.g. It was difficult to report vaccine hesitancy issues during a campaign in Indonesia)

dhis2

- **Existing Gavi relationship:** Used in > 50 Gavi-supported countries
- **Headquarters and other offices:** Developed by University of Oslo, working with Health Information Systems Programme
- **Advantages of provider:** Open source software, experience with broader use cases, very large community of users
- **Challenges:** Setting up the system can be time-consuming due to complexity of the broader system

EXAMPLE: USE IN INDONESIA

USE OF RAPIDPRO DURING MR CAMPAIGN IN INDONESIA

Workflow for health workers to report progress

A5

RapidPro

KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Basic phones owned by the population are sufficient
- Dependent on basic mobile network coverage (for SMS)
- Cost of SMS will need to be negotiated with mobile network providers

Time to implementation:

- **Short (<3 months):** The tool is easy to deploy, few months required to integrate with existing Ministry of Health systems (based on standard platform created by UNICEF, leverages existing penetration of mobile phones)

INNOVATION FOOTPRINT

- RapidPro platform used in ~60 countries globally
- **PAHO/EURO/EMRO:** Bolivia, Brazil, etc.
- **Asia Pacific:** Laos, Indonesia (Gavi), etc.
- **Anglophone Africa:** Nigeria, Rwanda, etc.
- **Francophone Africa:** Guinea, Burkina Faso, etc.

LEVEL OF OPPORTUNITY

Proven efficacy:

- Use of RapidPro during MR campaign in Indonesia was broadly accepted as a success

Indicative cost:

- **Low-medium:** Inexpensive to set up the system, cost primarily driven by SMS charges, but can be negotiated with provider

Demonstrated outcomes:

- As per an independent evaluation, a statistically significant relationship between RapidPro use and reporting and overall immunisation coverage was noted; there was overall user satisfaction and perception that RapidPro was useful in identifying low coverage sites for further investigation and targeted corrective action

EXAMPLE: USE IN UGANDA

LIVE MONITORING DASHBOARD (MR CAMPAIGN IN UGANDA)

A5

dhis2

KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Requires health workers to have smartphones (to use Open Data Kit app or the DHIS2 Android app) or basic phone (SMS) to send data to the DHIS2 platform
- Even data collection can be done offline, syncing will require connectivity
- Smart-TVs at command centre help visualisation of data and timely decision-making

Time to implementation:

- **Short (<3 months):** The ODK or DHIS2 Android app can be loaded on to health workers' smartphones to set up this functionality, the system need to be set up and tested before the campaign

INNOVATION FOOTPRINT

- DHIS2 platform used in ~67 countries globally
- **PAHO/EURO/EMRO:** Haiti, Yemen, Sudan, etc.
- **Asia Pacific:** Laos, Indonesia, Bangladesh, etc.
- **Anglophone Africa:** Nigeria, Rwanda, Uganda, etc.
- **Francophone Africa:** Mali, Cameroon, Senegal, etc.

LEVEL OF OPPORTUNITY

Proven efficacy:

- In Uganda, decision to use DHIS2 made it easier for users at all levels to interact with the Real Time Monitoring (RTM) system because Ministry of Health staff at all levels were familiar with it; programme planners were also able to leverage the expertise of the national Health Information Systems Programme

Indicative cost:

- **Low-medium:** Inexpensive to set up the system (open source), cost primarily driven by connectivity to send data to the platform

Demonstrated outcomes:

- Independent review stated that DHIS2 RTM improved timeliness of campaigns and facilitated collection of results and feedback for corrective action; it also helped Uganda save on costs associated with transporting data and printing forms
- Evaluation to be conducted to assess improvement in immunisation outcomes

A6 COVID-19 SURVEILLANCE PACKAGE
KEY FEATURES

NEED ADDRESSED

Ensuring strong planning and management capabilities to restore immunisation services

PROGRAMMATIC AREA

Data

OVERVIEW OF SCOPE

- The Innovation is a special digital package for DHIS2 in response to COVID-19, including:
  - Case-based surveillance to enroll & track suspected cases, capture symptoms, track outcomes
  - Contact tracing
  - Port-of-entry screening and follow-up support
  - Aggregate surveillance

POTENTIAL TO ADDRESS COVID NEED

- Focus of innovation is entirely on COVID-19 surveillance

POTENTIAL PROVIDER

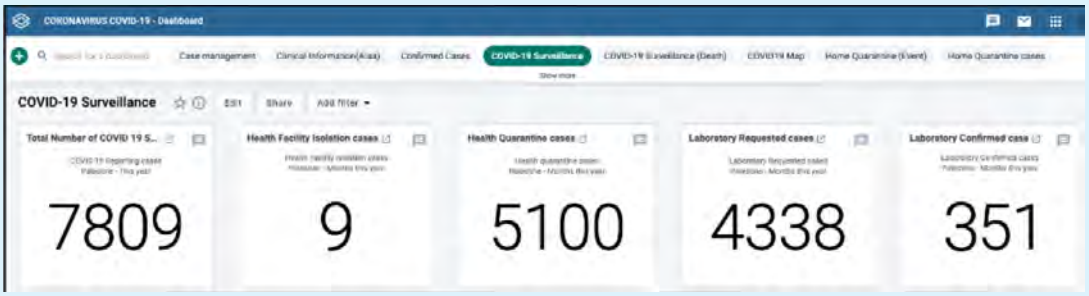
dhis2

- **Existing Gavi relationship:** Used in > 50 Gavi-supported countries
- **Headquarters and other offices:** Developed by University of Oslo, working with regional and national Health Information Systems Programmes (HISPs)
- **Advantages of provider:** Open source software, experience with broader use cases, very large community
- **Challenges:** While DHIS2 is the world's largest (HMIS) platform for aggregation of health data since 20 years, the use of the platform in other domains such as patient tracking or case-based surveillance is more recent

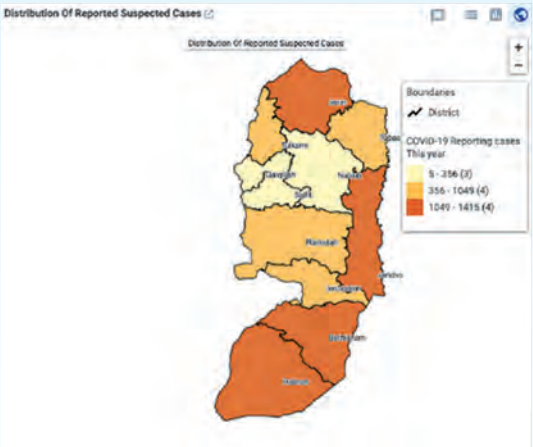
EXAMPLE OF USE CASE

USE IN UGANDA, PALESTINE

Dashboard tracking the number of COVID-19 cases and the number of cases in quarantine.



Distribution of reported cases in the country



A6

dhis2

KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Depend on the part of the package to be implemented – aggregate surveillance system will have no specific requirement, while the case-based surveillance or patient and contact tracing will require SMS or mobile data to send data to the DHIS2 platform.

Time to implementation:

- **Short (<3 months):** Existing DHIS2 package will need light adaptation to respond to specific country needs

INNOVATION FOOTPRINT

- DHIS2 platform used in ~67 countries globally
- **PAHO/EURO/EMRO:** Haiti, Yemen, Sudan, etc..
- **Asia Pacific:** Laos, Indonesia Bangladesh, etc.
- **Anglophone Africa:** Nigeria, Rwanda, Uganda, etc.
- **Francophone Africa:** Mali, Cameroon, Senegal, etc.

LEVEL OF OPPORTUNITY

Proven efficacy:

- 28 countries have operationalised the COVID-19 DHIS2 surveillance package since March 2020

Indicative cost:

- **Low-medium:** Inexpensive to set up the system (open source), cost primarily driven by connectivity to send data to the platform and train health workers

Demonstrated outcomes:

- An independent assessment of digital solutions for COVID-19 response recommended DHIS2 tracker based on its maturity, flexibility and large-scale deployment

B PREPARING FRONTLINE HEALTHCARE WORKERS FOR THE 'NEW NORMAL' OF IMMUNISATION & INCREASING THEIR EFFICIENCY

B1 APP TO EMPOWER HEALTHCARE WORKERS WITH DIGITAL TOOLS
KEY FEATURES

NEED ADDRESSED

Preparing frontline healthcare workers for the 'new normal'of immunisation and increasing their efficiency

PROGRAMMATIC AREA

Data

OVERVIEW OF SCOPE

- The innovation is a multi-purpose app for healthcare workers linked to Digital Immunisation Registry, with features such as:
  - Electronic data entry on routine immunisation sessions and campaigns on mobile
  - Training modules
  - Ability to send SMS reminders to parents
  - Digital maps
- Collected data is made available for analysis to supervisors on central dashboards

POTENTIAL TO ADDRESS COVID NEED

- IRD's Zindagi Mehfooz app adapted in view of COVID-19 with maps of high-risk areas, chatbots for inquiries, prediction of children/ parent likely to miss immunisation sessions

POTENTIAL PROVIDER

IRD Interactive Research & Development — Zindagi Mehfooz

INFUSE PACESETTER

- **Existing Gavi relationship:** INFUSE pacesetter since 2017
- **Headquarters and other offices:** Offices in Pakistan, UAE, Bangladesh, Vietnam, Singapore, Indonesia, South Africa
- **Advantages of provider:** Technology has been designed to keep in mind the key issues from vaccinators' perspective
- **Challenges:** Leads to some duplication of effort as data entries have to be made in both the online system and conventional paper-based records in countries where records are not fully digitised (as seen in Pakistan)

B1

IRD

ZINDAGI MEHFOOZ

IMMUNISATION ‘SUPER APP’ BUILT BY IRD FOR USE IN PAKISTAN

IMMUNISATION ‘SUPER APP’ – ZINDAGI MEHFOOZ

B1

IRD

ZINDAGI MEHFOOZ
KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Requires vaccinators to have a smartphone (part of fixed cost)
- App can partially operate offline, but would require a basic level of internet coverage

Time to implementation:

- **Medium:** ~6 months to set up partnership with Ministry of Health (to integrate with the existing EPI system), train healthcare workers

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** Peru, Brazil, Pakistan, UAE, Tajikistan
- **Asia Pacific:** Nepal, Bangladesh, Laos, Singapore, Vietnam, Philippines, Indonesia
- **Anglophone Africa:** Kenya, Ethiopia, Tanzania, Malawi, Zimbabwe, South Africa
- **Francophone Africa:** DRC

LEVEL OF OPPORTUNITY

Proven efficacy:

- Implemented in 28 of 29 districts in Sindh (Pakistan); over 2,500 vaccinators at 1,539 public immunisation clinics have used the system to enroll over 22.9 million children and 1 million women, and record more than 22 million immunisations

Indicative cost:

- **High:** Total cost ~US$ 4.5 M (over 4 years) for a very large base of children (~5M) as observed in Pakistan

Demonstrated outcomes:

- Helped expanding reach to previously uncovered areas, improved accountability of vaccinators (Pakistan)

Promising results based on preliminary assessment in Pakistan, further evaluation ongoing

B2 MOBILE PAYMENTS TO HEALTHCARE WORKERS
KEY FEATURES

NEED ADDRESSED

Preparing frontline healthcare workers for the 'new normal' of immunisation and increasing their efficiency

PROGRAMMATIC AREA

Healthcare workforce

OVERVIEW OF SCOPE

- The innovation allows ministry of health to reimburse healthcare workforce (salaries, per diems, reimbursements) through fast mobile based payments
- A person's mobile number functions as their Mobile Money Account (healthcare workers need to be on the provider's network)
- It can also be used for peer-to-peer money transfer as a mobile wallet
- Particularly useful in regions where coverage of retail banks is low

POTENTIAL TO ADDRESS COVID NEED

- Can be used as a digital alternative for payments during lockdowns, social distancing periods (e.g. for wages, per diem allowances during vaccination campaigns)

POTENTIAL PROVIDER

- **Existing Gavi relationship:** Global partnership with Gavi since 2018
- **Headquarters and other offices:** Offices in ~26 countries globally (all regions except Asia-Pacific)
- **Advantages of provider:** Global leader in telecommunications; good customer relations
- **Challenges:** The mobile transfer fee needs to be negotiated on a large scale (currently high due to limited scale)

KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Requires stable and wide network coverage
- Need to set up Orange money account for beneficiaries

Time to implementation:

- **Short (<3 months):** Mostly dependent on speed of setting up an agreement with the provider

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** Egypt, Jordan
- **Asia Pacific:** N/A
- **Anglophone Africa:** Sierra Leone, Liberia, Botswana
- **Francophone Africa:** 14 Countries

LEVEL OF OPPORTUNITY

Proven efficacy:

- Similar services are already deployed in different countries with equivalent partners (e.g The Global Fund)

Indicative cost:

- **High:** Mobile transfer fee is currently high on a per-transaction basis – Needs to be negotiated with the provider based on expected scale in a country

Demonstrated outcomes:

- Noted improvements in tracking of financial inclusion, subsidies distribution

Limited view on impact based on preliminary experience / anecdotal evidence – Needs detailed impact evaluation

C ENSURING AGILE COLD CHAIN AND LOGISTICS POST PANDEMIC, MANAGED WITH APPROPRIATE DASHBOARDS

C1 REMOTE TEMPERATURE MONITORING TO REDUCE STOCK WASTAGE
KEY FEATURES

NEED ADDRESSED

Ensuring agile cold chain and logistics post pandemic, managed with appropriate dashboards

PROGRAMMATIC AREA

Supply chain

OVERVIEW OF SCOPE

- In this innovation, remote temperature monitoring devices are used to feed temperature information from vaccine storage / shipments, to a central dashboard wirelessly
- EPI staff can leverage the data to generate two type of insights: (1) identifying existing source of problems in the cold chain; and (2) predicting future risk based on collected information
- The provider also trains country stakeholders to use the software and leverage the insights

POTENTIAL TO ADDRESS COVID NEED

- Can be used for transport of COVID testing kits that rely on temperature-sensitive reagents, and potentially the vaccine in the future

POTENTIAL PROVIDERS

Parsyl

INFUSE PACESETTER

- **Existing Gavi relationship:** INFUSE pacesetter since 2017, partnerships in Uganda and Senegal
- **Headquarters and other offices:** Based in the US
- **Advantages of provider:** Captures data beyond temperature (humidity, physical impacts), uses Bluetooth (reducing data charges)
- **Challenges:** Requires healthcare workers to use Bluetooth enabled phones

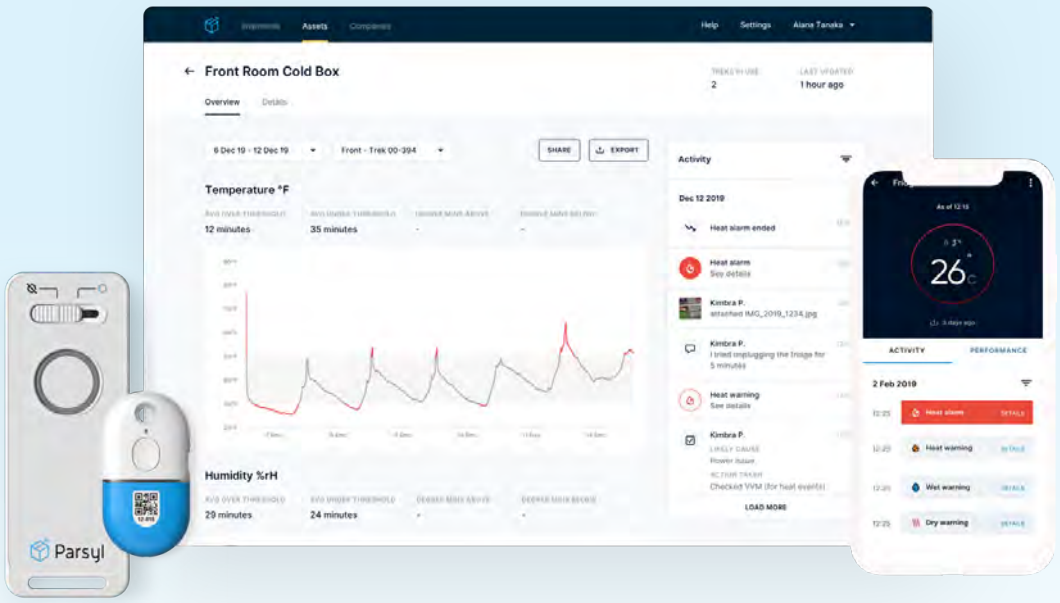
NEXLEAF ANALYTICS

INFUSE PACESETTER

- **Existing Gavi relationship:** INFUSE pacesetter since 2016, partnerships in Kenya, Mozambique, Tanzania
- **Headquarters and other offices:** Offices in the US and India
- **Advantages of provider:** Most attractive price-points
- **Challenges:** Dependent on network connectivity

OVERVIEW OF SYSTEM

REMOTE SENSING DEVICE AND CENTRAL DASHBOARD



C1

Parsyl

REMOTE TEMPERATURE MONITORING TO REDUCE STOCK WASTAGE
KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Requires Bluetooth enabled handsets
- Requires estimation report of sensors needed (for fixed sites, mobile carriers and transport logistics) before setting up
- Requires logistician and HCW training – sensor management and dashboards / predictive analytics

Time to implementation:

- **Medium-long (6-12 months):** To order and calibrate hardware, establish dashboard needs, training staff

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** N/A
- **Asia Pacific:** N/A
- **Anglophone Africa:** Uganda
- **Francophone Africa:** Senegal

LEVEL OF OPPORTUNITY

Proven efficacy:

- Good ownership from government (Senegal) – showed that 5% of refrigeration units caused 80% of alarms and freeze/heat issues

Indicative cost:

- **High:** ~US$ 1.7 million to reach 75% of Senegal's logistics network; (along with some recurrent costs in future –software management; battery replacement every 4 years); value-for-money investment that translates into less stock wastage

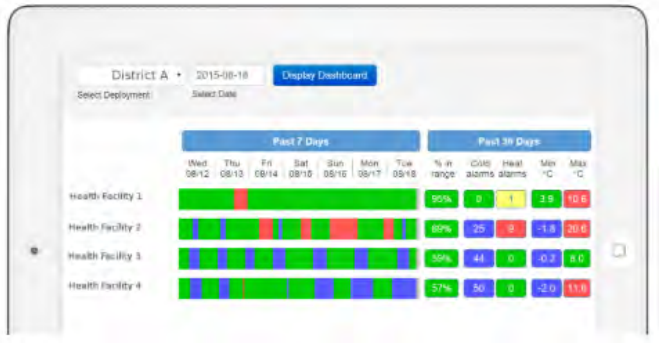
Demonstrated outcomes:

- Significant reduction in **temperature excursions (~30%)**, especially frozen episodes

Holistic view on outcomes based on experience of stakeholders, assessments

OVERVIEW OF SYSTEM

REMOTE SENSING DEVICE AND CENTRAL DASHBOARD



C1

NEXLEAF ANALYTICS

REMOTE TEMPERATURE MONITORING TO REDUCE STOCK WASTAGE
KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Dependent on network coverage for regular data
- Requires a local technical partner to install the devices

Time to implementation:

- **Medium-long (6-12 months):** To set up hardware, training staff

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** N/A
- **Asia Pacific:** India
- **Anglo AFRO:** Kenya, Tanzania
- **Francophone Africa:** Mozambique

LEVEL OF OPPORTUNITY

Proven efficacy:

- Facilities with Nexleaf devices have shown reduction in temperature excursions

Indicative cost:

- **High:** Upfront cost up to $300 per RTM device (lifespan of 4-5 years), installation of devices in cold chain equipment, training of staff; recurrent cost for operations and maintenance

Demonstrated outcomes:

- **2015 Mozambique:** facilities with RTM achieved a 76% reduction in freezing of vaccines
- **2016 Kenya:** increased uptime by 30%, and reduced heat exposure by 78% and cold exposure by 60%
- **2017 Tanzania:** overall fridge uptime increased by 14%; real-time data reduced vaccine freezing by 56%

Holistic view on outcomes based on experience of stakeholders, assessments

C2 LOGISTICS OPTIMISATION DASHBOARD WITH ANALYTICS AND FORECASTING CAPABILITIES

KEY FEATURES

NEED ADDRESSED

Ensuring agile cold chain and logistics post pandemic, managed with appropriate dashboards

PROGRAMMATIC AREA

Supply chain

OVERVIEW OF SCOPE

- Dashboard software that helps visualise vaccine stock metrics to reduce wastage, avoid stockouts, optimise supply chain
- The provider offers a mobile app for personnel who handle the stock at all stages (or local managers), to feed information to the central dashboard
- The providers also trains Ministry of Health staff to use the software

POTENTIAL TO ADDRESS COVID NEED

- The supply chain mapping can also be repurposed to track emergency supplies such as PPE or other clinical equipment

POTENTIAL PROVIDER

logistimo

- **Existing Gavi relationship:** INFUSE pacesetter since 2017, Partnership in Angola and Senegal
- **Headquarters and other offices:** Company based in India, works by contracting local IT companies for operations support in countries
- **Advantages of provider:** Rated one of the best LMIS
- **Challenges:** Limited flexibility of core staff to work in different languages, dependent on external IT companies; scale-up to facility level will be challenging

INFUSE
PACESETTER

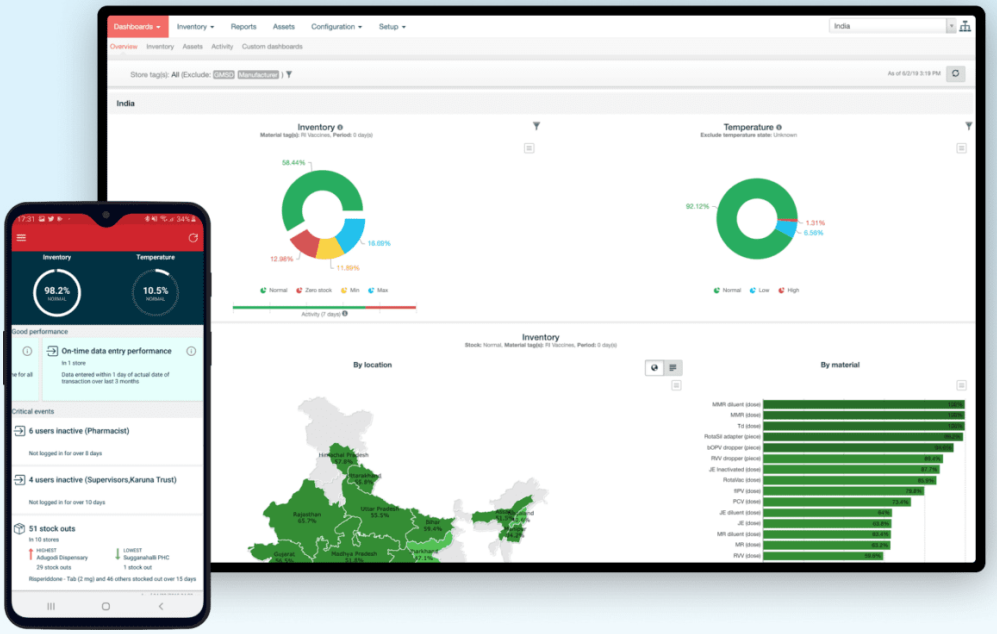
Comprehensive guidance on LMIS selection:
https://www.gavi.org/sites/default/files/document/2020/Country-Guidance-on-Selecting-LMIS.pdf

Alternate providers:

- OpenLMIS
- mSupply
- Vitalliance LMIS
- Entuition Vesta
- E-LMIS Medexis
- Field Supply

ANALYTICS DASHBOARD BUILT USING LOGISTIMO

LOGISTIMO'S SUPPLY CHAIN DASHBOARD



KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Requires smartphones for staff handling the logistics at all levels of the supply chain
- Allows offline functionality that can be synced when internet is available

Time to implementation:

- **Medium-long (6-12 months):** Onboarding an IT company (Logistimo works by contracting local partners) that provides technical support; training staff to use the app and data

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** N/A
- **Asia Pacific:** India, Myanmar, Indonesia
- **Anglophone Africa:** Uganda, Zambia, Somalia
- **Francophone Africa:** Senegal (Gavi), Angola (Gavi), DRC

LEVEL OF OPPORTUNITY

Proven efficacy:

- Has shown results in terms of better stock management, however, efficacy strongly dependent on government ownership to ensure insights generated from the innovation are actually used to take action

Indicative cost:

- **High:** ~US$ 1.2 million high upfront cost for 6 provinces in Angola (along with some recurrent cost); however, **value-for-money** investment that translates into less stock wastage and stockouts (with potential for synergy with other commodities)

Demonstrated outcomes:

- **High:** Significant **reduction in stockouts (>50%)** based on preliminary reports

Encouraging results from preliminary assessment, stakeholder experience

C3 LAST MILE DELIVERY OPTIMISATION
KEY FEATURES

NEED ADDRESSED

Ensuring agile cold chain and logistics post pandemic, managed with appropriate dashboards

PROGRAMMATIC AREA

Supply chain

OVERVIEW OF SCOPE

- The innovation is a last-mile-logistics system to reach vaccines in remote areas
- The provider helps with both strategy and actual delivery of vaccines (through specially-equipped trucks)
- Complemented with a delivery tracking app (along with temperature monitoring systems) for Ministry of Health staff

POTENTIAL TO ADDRESS COVID NEED

- Innovation can be used to address the needs of remote areas affected by COVID-19 associated lockdowns

POTENTIAL PROVIDER

- **Existing Gavi relationship:** Partner since 2018 (connected through UPS) in Uganda
- **Headquarters and other offices:** Largely focused in East Africa (offices in Ethiopia, Djibouti, Kenya, Tanzania, Uganda, Rwanda, South Sudan)
- **Advantages of provider:** Strong local expertise and relationships (in East Africa)
- **Challenges:** Doesn't have reach in other regions, use-case in vaccines only demonstrated in 3 districts of Uganda yet

UPS-FIT
OVERVIEW OF INNOVATION

SNAPSHOT OF UPS-FIT'S LAST-MILE DELIVERY TRUCK

C3

UPS-FIT
KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Partnerships with the national medical store for vaccines in the country
- Some level of training needed for staff of recipient healthcare facilities to the new delivery system (ordering, recording stock etc.)

Time to implementation:

- **Medium:** ~6 months to set up fleet and management system

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** N/A
- **Asia Pacific:** N/A
- **Anglophone Africa:** Uganda (through Gavi), Ethiopia, Djibouti, Kenya, Tanzania, Uganda, Rwanda, South Sudan
- **Francophone Africa:** N/A

LEVEL OF OPPORTUNITY

Proven efficacy:

- Increased proportion of immunising facilities receiving vaccine deliveries from the district; reduced proportion of under fulfilled orders, improved stock availability, improved cold chain equipment management and temperature monitoring

Indicative cost:

- **High:** ~US$ 1 million for pilot in 3 districts in Uganda – Sustainability can be a challenge

Demonstrated outcomes:

- **High:** Vaccine availability up by ~25%, cost/vaccine delivery reduced by ~45%, 95% on-time deliveries based on pilot experience – Yet to be scaled across the country

Based on results of pilot, with limited view on improvement in outcomes at scale

C4 USING DRONES TO REACH REMOTE AREAS
KEY FEATURES

NEED ADDRESSED

Ensuring agile cold chain and logistics post pandemic, managed with appropriate dashboards

PROGRAMMATIC AREA

Supply chain

OVERVIEW OF SCOPE

- Use of drones as the last-mile solution to deliver vaccines (as part of a broader list of emergency supplies) to hard-to reach areas

POTENTIAL TO ADDRESS COVID NEED

- Drones are also being used to supply emergency medical supplies (Oxytocin, blood, anti-venom), COVID-19 test samples, (potentially COVID-19 vaccine when it becomes available)

POTENTIAL PROVIDERS

zipline

- **Existing Gavi relationship:** Since 2016
- **Headquarters and other offices:** US (headquarters), Rwanda, Ghana, India
- **Advantages of provider:** Strong credibility in operating drone technology; own operations end-to-end (drone delivery offered as a service)
- **Challenges:** Smaller payload, 1-way delivery only

Swoop Aero

- **Existing Gavi relationship:** Since 2019
- **Headquarters and other offices:** Headquarters in Australia
- **Advantages of provider:** 2-way delivery system
- **Challenges:** Relatively new player

WINGCOPTER

- **Existing Gavi relationship:** Indirectly connected through UPS (no direct partnership yet)
- **Headquarters and other offices:** Headquarters in Germany
- **Advantages of provider:** 2-way delivery system
- **Challenges:** Limited view on challenges yet

ZIPLINE, SWOOP AERO, WINGCOPTER

SNAPSHOTS FROM USE OF DRONES

Specifications	Zipline	SwoopAero	Wingcopter
Range (Km)	80	80	120
Payload (Kg)	1.3	2.5	6
Landing Capability (At any ad-hoc location)	No	Yes	Yes
Speed (Km/h)	100	115	150
Power	Electric	Electric	Electric

C4 zipline

KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Regulatory approval from civil aviation body, Ministry of Interior (or equivalent)
- Land approvals for setting up of warehouse and distribution sites
- Availability of labour force in the country to set up and operate the physical equipment

Time to implementation:

- **Long:** ~1 year to set up physical infrastructure; establish local agreements / approvals, hire and train permanent staff (in Ghana, all Zipline staff was locally recruited)

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** US
- **Asia Pacific:** India
- **Anglophone Africa:** Ghana, Rwanda (only emergency medical supplies, not vaccines)
- **Francophone Africa:** N/A

LEVEL OF OPPORTUNITY

Proven efficacy:

- ~24K deliveries in Rwanda over 3 years (although not used for vaccines – medical supplies only)
- ~4K deliveries in Ghana in <10 months (vaccines account for ~25% units delivered)

Indicative cost:

- **High:** US$ 1-2M as capex per distribution center; ongoing service fee up to ~US$ 100K per month based on volume of distribution of all commodities (indicative based on experience in Ghana) – Economically viable **only in hard-to-reach areas**

Demonstrated outcomes:

- Delivered ~500K vials of vaccines to hard-to-reach areas in <10 months (Ghana)

Limited view on outcomes and cost efficiency – to be assessed further

C4

Swoop Aero

KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Regulatory approval from civil aviation body, Ministry of Interior (or equivalent)
- Partnerships with local warehouses and distribution sites

Time to implementation:

- **Medium:** ~6 months to set up (rents existing physical infrastructure in the country and brings its own operations team)

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** N/A
- **Asia Pacific:** Australia, Vanuatu
- **Anglophone Africa:** Malawi
- **Francophone Africa:** DRC

LEVEL OF OPPORTUNITY

Proven efficacy:

- Proven safety of drone and operations, proven ability to deliver vaccines safely (Ghana, Vanuatu)

Indicative cost:

- **High:** ~US$ 2M as cost of set-up, operations for 2 years (based on experience in the DRC)

Demonstrated outcomes:

- Pilot very well-accepted in the DRC – unanimous decision to scale-up the innovation

Encouraging results from assessment of the pilot, to be assessed at scale

C4 WINGCOPTER

KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Regulatory approval from civil aviation body, Ministry of Interior (or equivalent)
- Partnerships with local warehouses and distribution sites

Time to implementation:

- **Medium:** ~6 months to set up (Rents existing physical infrastructure in the country and brings its own operations team)

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** N/A
- **Asia Pacific:** Indonesia, Vanuatu
- **Anglophone Africa:** Malawi, Tanzania
- **Francophone Africa:** N/A

LEVEL OF OPPORTUNITY

Proven efficacy:

- Deployed to deliver vaccines to 19 villages in Vanuatu

Indicative cost:

- **High:** ~US$ 2 million set-up cost as cost of set-up, operations for 2 years (based on experience in Tanzania)

Demonstrated outcomes:

- Reduced delivery time on some complicated routes of Vanuatu from 72 hours to 20 mins

Limited view on outcomes (based on experience of UNICEF in Vanuatu)

D REACHING MISSED COMMUNITIES AND UNDER-IMMUNISED CHILDREN

D1 GEOSPATIAL TOOLS (GIS) TO ENABLE BETTER PLANNING OF IMMUNISATION

KEY FEATURES

NEED ADDRESSED

Reaching missed communities and under-immunised children

PROGRAMMATIC AREA

Data

OVERVIEW OF SCOPE

- The innovation involves the use of GIS Technology (digital maps and satellite) to be used by EPI to improve service delivery planning, e.g. by visualising missed settlements and estimating population size
- The provider sets up digital mapping system by digitising physical maps, satellite imagery and additional local knowledge
- The software allows analytics based on spatial data to identify weak areas in immunisation and plan future immunisation related investment (in HSS, outreach programmes)
- The provider also trains EPI staff to effectively use the software

POTENTIAL TO ADDRESS COVID NEED

- GIS technology is being used globally to visualise COVID-19 related cases by local governments and agencies

POTENTIAL PROVIDERS

MAHA

- **Existing Gavi relationship:** Partnership in Ghana initiated in 2019
- **Headquarters and other offices:** French company with resources experienced in projects in Anglophone Africa
- **Advantages of provider:** Deep expertise in geospatial (GIS) technology
- **Challenges:** Very small organisation (~5 people)

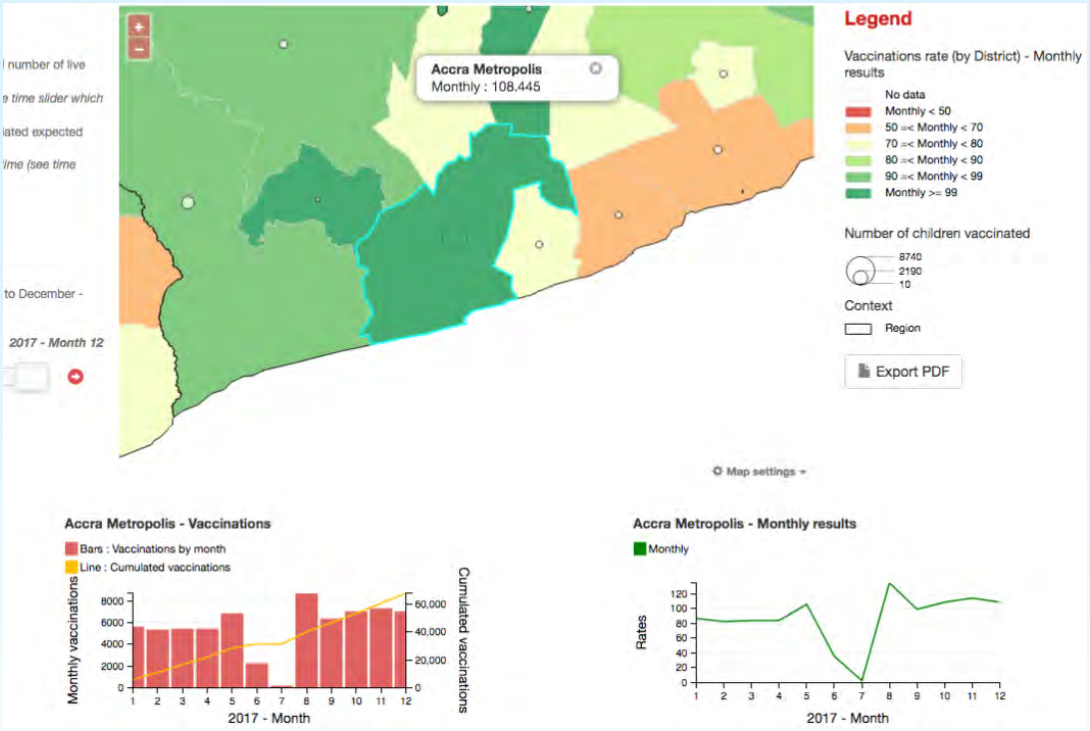
CIESIN FLOWMINDER.ORG INFUSE PACESETTER

- **Existing Gavi relationship:** INFUSE pacesetter since 2017
- **Headquarters and other offices:** CIESIN based in the US, Flowminder in Sweden
- **Advantages of provider:** Recognised expert in GIS (CIESIN) and population size estimates (Flowminder)
- **Challenges:** Population size estimates requires extended geospatial data to be processed

D1

MAHA
EXAMPLE OF WORK DONE WITH GAVI IN GHANA

SCREENSHOT FROM MAPPING AND ANALYTICS DASHBOARD



D1

MAHA
KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Requires access to data – physical maps, existing digital programmatic and geographical data
- If the country requires hosting data locally, then a local IT partner is needed
- Need capacity building to ensure the technology can be used on a day-to-day basis

Time to implementation:

- **Medium-Long (6-9 Months):** ~6 months to set up software, digitise information (depending on accessibility, quality of existing data); ~3 months to train and handover to staff

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** Kyrgyzstan (with World Bank)
- **Asia Pacific:** N/A
- **Anglophone Africa:** Ghana
- **Francophone Africa:** N/A

LEVEL OF OPPORTUNITY

Proven efficacy:

- Production of more than 1000 digital maps for all Ghanaian districts including the boundaries of the sub-districts and the respective facilities and communities

Indicative cost:

- **Low:** <US$ 500K to set up the system and train national-level EPI staff in Ghana

Demonstrated outcomes:

- Taken up by EPI staff in Ghana to feed and interpret data using the detailed maps

Limited view on outcomes based on initial experience in Ghana; requires independent assessment

CIESIN-FLOWMINDER
EXAMPLE OF MAPPING

MAPPING OF SMALL SETTLEMENTS

CIESIN-FLOWMINDER
KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Requires access to data – physical maps, existing digital programmatic and geographical data
- Need capacity building to ensure the technologies can be used on a day-to-day basis
- For the estimates of population, modeling requires micro-census data

Time to implementation:

- **Medium-long (6-9 Months):** time to set up task force to collect all existing data and digitise it, run additional data collection of GPS points, and eventually a micro census

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** N/A
- **Asia Pacific:** N/A
- **Anglophone Africa:** Nigeria, Mozambique, South Sudan, Zambia etc.
- **Francophone Africa:** DRC, Mali etc.

LEVEL OF OPPORTUNITY

Proven efficacy:

- The Geo-Referenced Infrastructure and Demographic Data for Development (GRID3) in Nigeria implemented a combination of satellite imagery, on-the-ground georeferencing of landmarks and settlements and tracking door-to-door vaccinator activity that have been shown to decrease the number of chronically missed settlements

Indicative cost:

- **High:** Operational cost are heavy to collect all needed GPS points and use satellite imageries.

Demonstrated outcomes:

- An independent review of geospatial technologies demonstrated how the visualisation of geospatial data, spatial analysis and geospatial modelling can help service delivery teams identify zero-dose children and improve service delivery to achieve equity in vaccine coverage; independent evaluation on eventual immunisation outcomes is ongoing.

D2 IDENTIFICATION SYSTEM TO IDENTIFY INDIVIDUALS AND TRACK IMMUNISATION RECORDS

KEY FEATURES

NEED ADDRESSED

Reaching missed communities and under-immunised children

PROGRAMMATIC AREA

Data

OVERVIEW OF SCOPE

- Digital identity system to help track each child and his/her immunisation record
- The provider offers a 'Wellness Pass' – Electronic Medical Record on a chip and NFC enabled card (like a credit card), to record and track multiple steps along a child's Immunisation plan
- Healthcare workers distribute the passes to parents, and are given a tablet that is used to read the Pass during immunisation sessions and feed data to a central system

POTENTIAL TO ADDRESS COVID NEED

- Wellness Pass can also be used to capture biometric data of patients and create a portable COVID-19 digital status record
- Can be further used to encourage adherence to treatment plans by linkage with SMS/Voice communication

POTENTIAL PROVIDER

mastercard

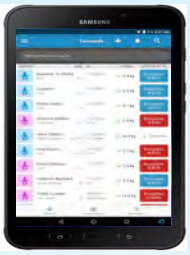
- **Existing Gavi relationship:** Gavi partner since 2018
- **Headquarters and other offices:** Global leader in financial services with regional offices all over the world (except francophone Africa)
- **Advantages of provider:** Industry leader in digital identity technology
- **Challenges:** Limited experience in global health

OVERVIEW OF INNOVATION

KEY FEATURES OF MASTERCARD'S 'WELLNESS PASS FOR COVID'

- COVID-19 care cycle monitoring and treatment adherence support
- Patient health status through tokenised biometric secure identity validation
- Clinic level stock monitoring support
- COVID-19 data analysis, reporting and decision-making support

Card



Wellness Pass Tablet & Application

Admin Portal

Reporting

Wellness Pass for immunisation	Digital identity	Wellness Pass for COVID-19	COVID status tracker	Pandemic intelligence
Electronic Medical Record on chip and NFC enabled card, to record and track multiple steps along a patient immunisation plan	Tokenised biometric identity solution for health care providers and patients	Wellness Pass adapted to COVID-19 context, to record and track multiple steps including treatments and medication collection	Electronic Portable Record to record and verify the COVID-19 health status of an individual at established check points	To visualise community and contextual data, in order to drive data decision-making and track goals

KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Collaboration with governments and partners to localise solutions
- Needs implementing partner on ground to collaborate with Ministry of Health for last-mile delivery

Time to implementation:

- **Medium:** ~6 months required to set up the system, train personnel to use the technology (however, delays observed in Mauritania)

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** N/A
- **Asia Pacific:** N/A
- **Anglophone Africa:** N/A
- **Francophone Africa:** Mauritania

LEVEL OF OPPORTUNITY

Proven efficacy:

- Relevance of technology well accepted by government stakeholders – *Awaiting further evaluation*

Indicative cost:

- **High:** As of now, the cost of the Wellness Pass is US$ 4 per unit (Projected to reduce to as low as US$ 1 at scale – provided the country is large enough); maintenance fee needs to be negotiated to a lumpsum amount as this innovation scales, as it is currently on a per child basis

Demonstrated outcomes:

- User Acceptance testing completed – *Limited view on outcomes yet, awaiting quantitative evaluation post following an 18-month pilot*

D3 OFFLINE DATA COLLECTION TOOL
KEY FEATURES

NEED ADDRESSED

Reaching missed communities and under-immunised children

PROGRAMMATIC AREA

Data

OVERVIEW OF SCOPE

- Data collection system that uses 'Smart Paper': paper-based templates for collection of immunisation data
- The Smart paper can be used for manual data entry at remote health centers without internet connectivity
- The Smart Paper can then be taken to a center that has internet, where it can be scanned using handwriting recognition software, and uploaded to a central system

POTENTIAL TO ADDRESS COVID NEED

- The smart paper system can also be used to track the coverage of a future COVID-19 vaccine

POTENTIAL PROVIDER

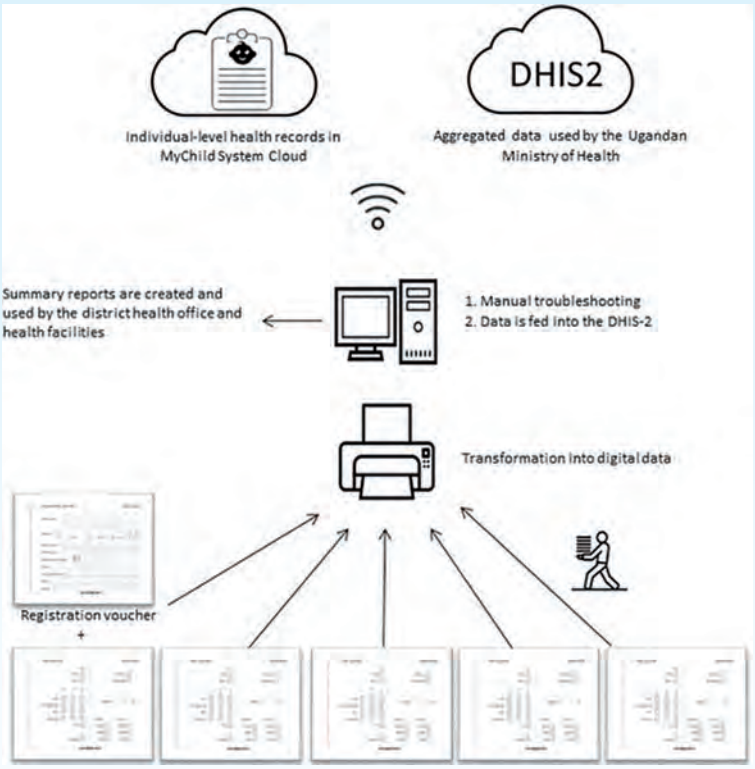
Shifo

INFUSE PACESETTER

- **Existing Gavi relationship:** INFUSE pacesetter since 2018
- **Headquarters and other offices:** Sweden based non-profit
- **Advantages of provider:** Offers a good way to replace conventional paper records that are difficult to process and manage
- **Challenges:** Once the forms are printed and configured there is little room to change data fields, in comparison to digital input based system; higher cost to print Smart Paper compared to standard forms; sustainability needs to be planned specific to country context; effectiveness of system will rely on ability to access immunisation data at lowest level which may be a challenge in certain countries

ILLUSTRATION OF SMART PAPER TECHNOLOGY

OVERVIEW OF WORKING MODEL



Smart Paper templates being scanned at a scanning station

KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Scanning stations need to be setup (with scanners and steady connectivity) where offline data can be processed
- Shifo requires an MoU with the government that they will fully adopt the solution (in line with their focus on long term sustainability)
- Before implementation, some aspects related to data need to be defined: governance, privacy, ownership, server location, interoperability with existing system (i.e. DHIS2)

Time to implementation:

- **Medium-Long:** 6-12 months to set up physical infrastructure in remote locations across a country (some delays observed over target timelines: >3 years in Gambia)

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** Haiti
- **Asia Pacific:** Pakistan
- **Anglophone Africa:** Gambia, Kenya
- **Francophone Africa:** N/A

LEVEL OF OPPORTUNITY

Proven efficacy:

- Tested for accuracy in capturing information patient level information using its offline system (based on WHO data quality review toolkit), generates all required HMIS and LMIS reports, integrates data to DHIS2 and triggers data for action interventions from community-national levels

Indicative cost:

- **High:** Shifo costs approximately US$ 2 per child to set up, with an ongoing cost of 10 cents per child per year to maintain – An external cost analysis has shown that governments can sustain the costs using existing funding.

Demonstrated outcomes:

- Reported reduction in data-entry workload for district health workers

Limited view on outcomes based on anecdotal evidence / self-reporting – requires further evaluation

E ENGAGE COMMUNITIES TO REBUILD DEMAND FOR IMMUNISATION SERVICES (INCL. ADDRESSING MISCONCEPTIONS AND RUMORS ON IMMUNISATION)

E1 SOCIAL LISTENING TO ANALYSE PUBLIC SENTIMENT AND SHARE TARGETED INFORMATION

KEY FEATURES

NEED ADDRESSED

Engage communities to rebuild demand for immunisation services (incl. addressing misconceptions and rumors on immunisation)

PROGRAMMATIC AREA

Demand

OVERVIEW OF SCOPE

- The innovation is a social media-based tool used to:
  - **Generate Insights:** Leverage tool to identify trends / concerns by analysing anonymised community interactions – Ability to analyse **wide variety of interactions** including post, likes, comments, shares
  - **Share verified information:** Leverage Facebook, Whatsapp & Instagram as channels for **targeted information** to promote pro-vaccination messaging
- The provider helps set up and train an in-country team to use **Facebook's advanced insights tool**

POTENTIAL TO ADDRESS COVID NEED

- Platform has already been used to **reduce spread of inaccurate information** related to COVID-19 and vaccination by directing individuals to WHO-approved content (could be applied to Gavi-supported countries as well)
- In the past, platform has been proved useful to actively track and counter misinformation on **Polio, Measles, Zika, Rubella** leading to pro-vaccination behavior

POTENTIAL PROVIDER

facebook

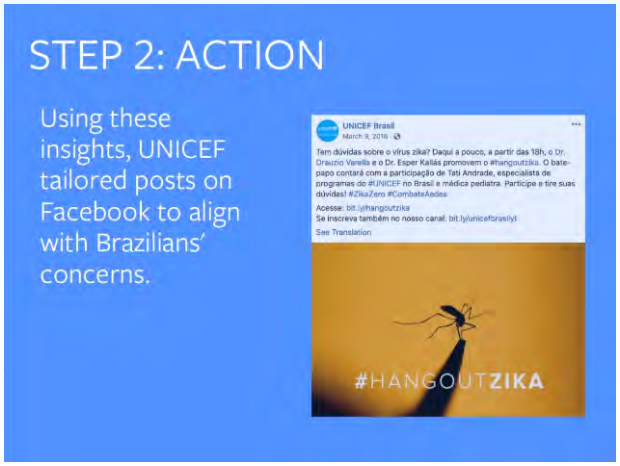
- **Existing Gavi relationship:** Based on current discussions, Facebook will offer free access to the advanced insights tool to Gavi-supported countries till end of 2020, and provide technical training
- **Headquarters and other offices:** Brand with global presence and regional offices across Gavi regions except francophone Africa
- **Advantages of provider:** Global leader in social media, 2B active users; active engagement in >95% of Gavi-supported countries
- **Challenges:** At the moment, Facebook focuses on anglophone countries with limited capacity for local languages

EXAMPLE OF WORK BETWEEN UNICEF AND FACEBOOK (NOT SUPPORTED BY GAVI)

EXAMPLE OF UNICEF'S COLLABORATION WITH FACEBOOK RELATED TO ZIKA IN BRAZIL

Understanding community perceptions about Zika

Evaluating impact



Tailored posts

facebook

KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Most effective in areas with strong penetration of Facebook / Instagram
- Requires technical team to be set up in the country to leverage tool:
  - **Analyst to contextualise** insights from data analysis; **social media specialist** to support content creation; staff to engage with facebook

Time to implementation:

- **Short (<3 Months):** Primarily **digital innovation**, no significant physical infrastructure required; 1-2 months needed to **onboard technical team** and develop the required campaign

INNOVATION FOOTPRINT

Not tested by Gavi yet, but similar engagements with UNICEF / WHO in:

- **PAHO/EURO/EMRO:** Brazil
- **Asia Pacific:** India, Pakistan, Indonesia
- **Anglophone Africa:** Nigeria, Kenya
- **Francophone Africa:** (N/A)

LEVEL OF OPPORTUNITY

Proven efficacy:

- Positive experience of UNICEF and partners in their engagements in several regions
- As of now, not tested in francophone Africa (Facebook has limited capacity from Facebook in languages other than English)

Indicative cost:

- **Low:** No cost to country to use the platform and generate insights as negotiated with Gavi
- Cost primarily **driven by human resources** (technical team of content creators, analysts) required to drive campaign

Demonstrated outcomes:

- **Brazil:** tool used to analyse **~17 million aggregated interactions** between May and Aug. 2016, allowing UNICEF Brazil to tailor their social media ads on Zika; **Pakistan:** polio drive after campaign reported **80% decrease in vaccination refusals** compared to previous drive

Promising results from experience outside Gavi scope, to be evaluated for immunisation outcomes

E2 DATA COLLECTION AND INFORMATION SHARING TOOL
KEY FEATURES

NEED ADDRESSED

Engage communities to rebuild demand for immunisation services (incl. addressing misconceptions and rumors on immunisation)

PROGRAMMATIC AREA

Data

OVERVIEW OF SCOPE

- **The innovation is an SMS linked software** that can be used as a community engagement tool with surveys, information sharing
- The software can also be used to setup **automatic 'chatbots'** that reply to queries using standard information
- Information collected from surveys is presented on **dashboards** to inform management decisions

POTENTIAL TO ADDRESS COVID NEED

- UNICEF has adapted U-report to help address queries on COVID-19 and to run polls to understand better the impact of COVID-19 on immunisation demand

POTENTIAL PROVIDER

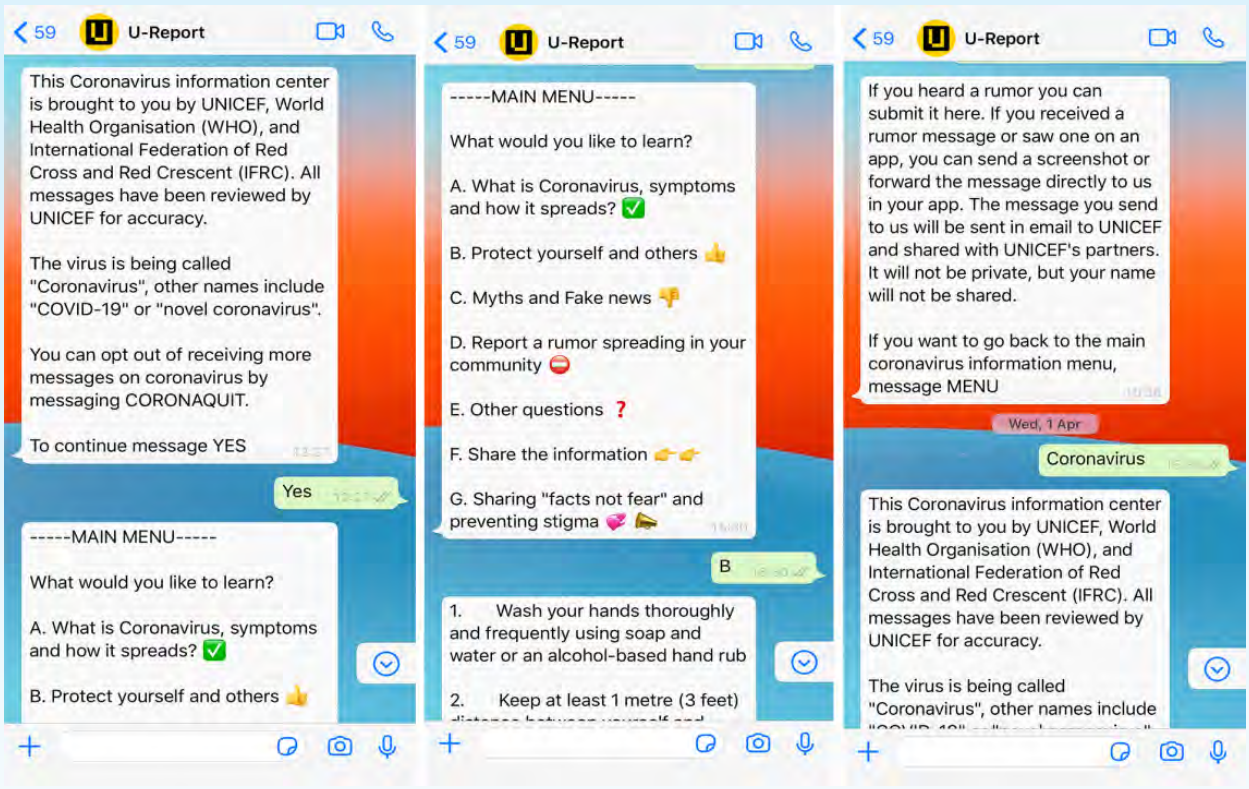
U-Report VOICE MATTERS

Based on UNICEF's RapidPro platform

- **Existing Gavi relationship:** U-Report used to survey the healthcare workers (Indonesia)
- **Headquarters and other offices:** (No entity as such) – Parent entity (UNICEF) has global presence across Gavi regions
- **Advantages of provider:** Very widely used tools with vibrant community of users (due to broad spectrum of use cases)
- **Challenges:** Information can be limited by the extent of the preset questions (e.g. it was difficult to report vaccine hesitancy issues during the campaign in Indonesia)

EXAMPLE OF USE CASE

SCREENSHOTS FROM USER INTERACTIONS WITH THE CHATBOT



KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Basic phones owned by the population are sufficient
- Dependent on basic mobile network coverage (for SMS)

Time to implementation:

- **Short (<3 Months):** The tool is easy to deploy, few months required to integrate with existing Ministry of Health systems (based on standard platform created by UNICEF, leverages existing penetration of mobile phones)

INNOVATION FOOTPRINT

- U-Report / RapidPro
  Used in ~60 countries globally
- **PAHO/EURO/EMRO:** Bolivia, Brazil, etc.
- **Asia Pacific:** Laos, Indonesia (Gavi), etc.
- **Anglophone Africa:** Nigeria, Rwanda, etc.
- **Francophone Africa:** Guinea, Burkina Faso, etc.

LEVEL OF OPPORTUNITY

Proven efficacy:

- As of May 2020, U-Report's Covid-19 bot has been accessed by over 5 million people across 50 countries
- Use of RapidPro during MR campaign was broadly accepted as a success

Indicative cost:

- **Low-medium:** Inexpensive to set up the system, cost primarily driven by SMS charges

Demonstrated outcomes:

- Based on assessment by UNICEF, 82% of audience admit to learning something new based on their interaction; 70% pass on the information with friends and family

Holistic view on outcomes based on assessment within and outside Gavi scope

E3 WHATSAPP BASED INTERACTION WITH HEALTHCARE WORKERS AND PARENTS

KEY FEATURES

NEED ADDRESSED

Engage communities to rebuild demand for immunisation services (incl. addressing misconceptions and rumors on immunisation)

PROGRAMMATIC AREA

Service delivery

OVERVIEW OF SCOPE

- Whatsapp based tool to create engaging, personal communication among EPI staff, parents and healthcare workers
- The three-way system can be used to:
  - Provide accurate information on immunisation-related issues to parents
  - Monitor outbreaks and disease surveillance with healthcare workers
  - Record feedback from parents / healthcare workers to improve service delivery

POTENTIAL TO ADDRESS COVID NEED

- Developed similar Whatsapp-based COVID-19 service "HealthConnect" for:
  - Automated multi-language information response to disseminate accurate information
  - Real-time insights in the management of cases and resources
  - Provision of psychosocial support and up-to-date information for frontline health workers

POTENTIAL PROVIDER

PRAEKELT

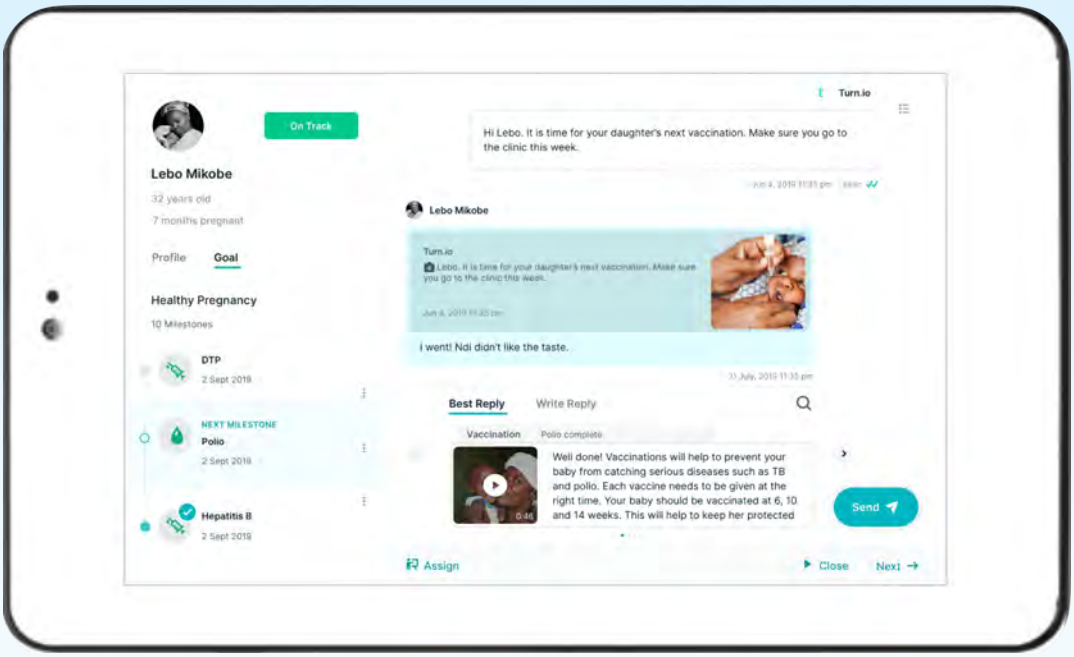
VILLAGE REACH

INFUSE PACESETTER

- **Existing Gavi relationship:** INFUSE pacesetter since 2019
- **Headquarters and other offices:** South Africa-based provider
- **Advantages of provider:** Whatsapp in the most widely used messaging platform across the world; possibility to engage parents / HWF with rich media (images/videos)
- **Challenges:** Countries with limited prior set-up of phone-based communication will require additional effort to create a network

EXAMPLE OF WHATSAPP-BASED CONVERSATION BETWEEN PARENT AND FRONTLINE HEALTHCARE WORKER

SCREENSHOT – HEALTHWORKERS INTERACTING WITH PARENTS USING PRESET PROMPTS



KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Needs local resources for curating information, FAQs, and live interactions where needed

Time to implementation:

- **Short (<3 Months):** Software is quick to adapt and deploy, primarily driven by speed of government engagement

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** Jamaica
- **Asia Pacific:** Bangladesh, Timor-Leste
- **Anglophone Africa:** South Africa, Uganda
- **Francophone Africa:** DRC, Madagascar, CAR

(Not exhaustive)

LEVEL OF OPPORTUNITY

Proven efficacy:

- HealthConnect launched in 18 languages globally – Accessed by ~1M users everyday

Indicative cost:

- **Low:** WhatsApp-based interaction is cheaper than conventional SMS (Exact cost to be discussed further)

Demonstrated outcomes:

- Registered 2.7M mothers in South Africa (60% of all births), ~900K active users at any given time

Limited view on outcomes in Gavi context (current view based on results of its similar programmes outside immunisation scope)

E4 MOBILE-BASED REMINDERS TO PARENTS
KEY FEATURES

NEED ADDRESSED

Engage communities to rebuild demand for immunisation services (incl. addressing misconceptions and rumors on immunisation)

PROGRAMMATIC AREA

Service delivery

OVERVIEW OF SCOPE

- The innovation is a mobile-based system that aims to improve immunisation coverage among under-immunised children by:
  - Using text and voice messaging to educate caregivers about immunisation and send appointment reminders in local languages
  - Improving data availability, quality and use to inform vaccination strategies (by allowing healthcare workers to feed immunisation related data through their mobiles)

POTENTIAL TO ADDRESS COVID NEED

- Supports continuation of routine immunisation by allowing healthcare workers to send reminders about immunisation visits when immunisation services are disrupted
- Offers a platform to raise awareness about COVID-19 and share information to prevent rumors impacting vaccination demand

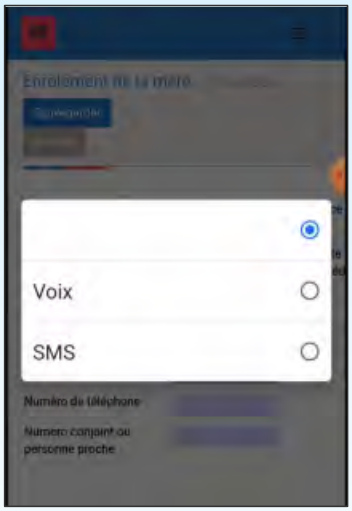
POTENTIAL PROVIDER

orange™ **M-Vaccin**

- **Existing Gavi relationship:** Global partnership with Gavi signed in 2018
- **Headquarters and other offices:** Presence in ~26 countries globally (all regions except Asia-Pacific)
- **Advantages of provider:** Global leader in telecommunications; good customer relations
- **Challenges:** Onboarding required to orient local Orange team to EPI processes

KEY FEATURES

THROUGH M-VACCIN, HEALTHCARE WORKERS CAN REGISTER CAREGIVERS TO RECEIVE INFORMATION, REMINDERS BY VOICE / TEXT



KEY CONSIDERATIONS

FEASIBILITY

Requirements to set up the innovation:

- Stable and wide network coverage
- Adaptation to align with local EPI vaccination schedules and processes
- Training and proactive outreach to ensure system is adopted by healthcare workers

Time to implementation:

- **Short-medium (3-6 Months):** Depending on speed of agreements with EPI, M-Vaccin can be deployed within 6 months (however, delays observed in Côte d'Ivoire)

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** N/A
- **Asia Pacific:** N/A
- **Anglophone Africa:** N/A
- **Francophone Africa:** Côte d'Ivoire

LEVEL OF OPPORTUNITY

Proven efficacy:

- 6,000 caregivers were registered in 6 months in the first 3 target districts (January-June 2020)
- Rollout began in three districts in early 2020; data is being routinely collected on vaccination visits and dropout rates

Indicative cost:

- **Medium-high:** Costs include hosting and adapting the app to new settings (upto US$ 400K), annual operating costs (upto US$ 400K), depending on the target population; effective cost can be low when the target population is large (e.g., < US$ 1/child when reaching ~800K children)

Demonstrated outcomes:

Limited view on outcomes – formal evaluation will be conducted two years into deployment

E5 HUMAN-CENTERED DESIGN TOOLKIT AND WORKSHOPS
KEY FEATURES

NEED ADDRESSED

Engage communities to rebuild demand for immunisation services (incl. addressing misconceptions and rumors on immunisation)

PROGRAMMATIC AREA

Demand

OVERVIEW OF SCOPE

- Human Centered Design (HCD) is an approach that helps policy makers more actively include the end users and implementors in the design of solutions
- The provider will use the standard toolkit (methodology, guidance) of best practices in HCD for healthcare developed by UNICEF to engage the community with one-on-one interviews, group dialogues, workshops with EPI staff

POTENTIAL TO ADDRESS COVID NEED

- The problem statements presented to the participants can be on any topic – therefore COVID-19 related themes can also be introduced

POTENTIAL PROVIDER

unicef **(Could potentially sub-contract an implementing partner like Nucleus for support)**

- **Existing Gavi relationship:** Core Alliance partner
- **Headquarters and other offices:** Global presence with strong network of local partners
- **Advantages of provider:** Strong existing relationship, field expertise, government contacts
- **Challenges:** Could potentially sub-contract for implementation support, in which case the implementing agency would need to be studied

E5 unicef

HUMAN-CENTERED DESIGN WORKSHOP
SNAPSHOTS FROM ZIMBABWE; CONSIDERATIONS

UNICEF TYPICALLY PARTNERS WITH A LOCAL IMPLEMENTING PARTNER (NUCLEUS IN THIS CASE)

FEASIBILITY

Requirements to set up the innovation:

- Workshop organiser (e.g. Nucleus) to be onboarded if required, presentation kits, guidance available at UNICEF website: https://www.hcd4health.org/resources#

Time to implementation:

- **Short:** Workshop can be organised within 3 months

INNOVATION FOOTPRINT

- **PAHO/EURO/EMRO:** N/A
- **Asia Pacific:** Mongolia, Myanmar, Malaysia
- **Anglophone Africa:** Malawi, Zimbabwe
- **Francophone Africa:** N/A

LEVEL OF OPPORTUNITY

Proven efficacy:

- Used to understand menstruation-related issues from communities in Mongolia, and to co-create a period tracker app using inputs from 400 adolescent girls

Indicative cost:

- Resources / IP made available for free by UNICEF, cost only for workshops organisers

Demonstrated outcomes:

Limited view on outcomes based on UNICEF reports

F RUNNING INNOVATION LABS FOR CO-CREATION OF INNOVATIONS

F1 INNOVATION HUBS
KEY FEATURES

NEED ADDRESSED

Set up Innovation hubs in countries / regions to match needs and providers

PROGRAMMATIC AREA

Demand

OVERVIEW OF SCOPE

- The innovation is to set up innovation hubs in countries / regions to match needs and providers with the goal to bring together innovators and implementors on a common platform to co-create solutions
- Organisers such as Omnicom, OpenIDEO can be used to manage the workshop design, outreach, logistics (both online and offline)

POTENTIAL TO ADDRESS COVID NEED

- The problem statements presented to the participants can be on any topic – therefore COVID-19 related themes can also be introduced
- 'COVID-19 Business Pivot Challenge' organised by OpenIDEO

POTENTIAL PROVIDERS

openIDEO

- **Existing Gavi relationship:** Supported organisation, logistics of INFUSE
- **Headquarters and other offices:** Offices in the US and Western Europe – work with local associates as required
- **Advantages of provider:** Has managed 23 health-related innovation challenges
- **Challenges:** Needs active Gavi engagement, oversight

Omnicom

- **Existing Gavi relationship:** Partner since 2017 for local implementation support
- **Headquarters and other offices:** Global media company with affiliates across regions
- **Advantages of provider:** Leverages global marketing expertise to produce top-quality content
- **Challenges:** Slightly more expensive provider

Gavi
The Vaccine Alliance

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