Best Practices & Opportunities for COVID-19 Vaccination Data & Monitoring Systems

Learning Collective Initiative

13 December 2022

COVID-19 Vaccine
DELIVERY PARTNERSHIP

unicef | World Health Organization | Gavi

A 'Learning Collective Initiative' established under the CoVDP to provide targeted support to 34 concerted support countries

Objectives:

To **collect, consolidate and share lessons learned, best practices and challenges** with COVID-19 vaccination to provide targeted support to 34 concerted support countries.

To cultivate a community of learning for COVID-19 vaccine roll-out and **directly connect countries with one another** to maximize on peer-learning.

Learning Collective in
Covid-19 vaccine Delivery partnership (CoVDP)

Audience:

• Primarily directed at national authorities who (i.e., senior practitioners like state ministers, DGs, Coordinators of national COVID-19 Task Forces and program EPI managers, incident managers).

• Secondary target audience includes partners in the One Country Team who can provide desired technical support.

Global Compendium of Country Knowledge on COVID-19 vaccination Available at this link

COVID-19 vaccination rollout in 2020-2021 is the largest and fastest in history; no other public health intervention compares to its speed and population breadth

The Global Compendium is an organized information space that documents and indexes country COVID19 vaccination approaches and strategies. It is continually updated.

Click the link to find
- ✓ Country experiences
- ✓ Country case studies
- ✓ Reviews of country evaluation reports and publications
- ✓ Country evaluation reports

The **purpose** of the Global Compendium is to
- Provide an opportunity for cross-country learning
- Facilitate information-sharing across partners on country success and challenges in COVID19 vaccine introduction
- Maintain a knowledge base to inform actions in future health crises that require vaccination

For further information contact Alejandro Ramirez Gonzalez ramirezgonzalez@who.int

www.technet-21.org/en/topics/covid-compendium

Launched 23 September 2022

Gavi The Vaccine Alliance   unicef   World Health Organization

Dates/Time	Session Topics	Presenter	Countries
31st May 2022,	Best practices on COVID -19 strategies for identifying and vaccinating priority use groups ,e.g., older adults, health workers, adults with comorbidities etc.,	Dr Lynda Farmagrant Mr Zongo Amidou	MoH Sierra Leone, MoH Burkina Faso,
June 21, 2022	Best Practices on COVID-19 Vaccination and Strategies with Integrated Immunization Services	Dr. Firas J.H Al-Mossawi, Mr. Yohannes Lekew,	MoH Iraq, MoH Ethiopia
July 19, 2022	Best practices on COVID -19 vaccination strategies on Demand generation, RCCE	Dr Mwendwa Eunice Mwenesi Dr Edwin Mungongo Dr. Mbianke Livancliff, Dr.Ngembus Albjerk	HelpAge , Tanzania MoH Cameroon,
Sept. 20, 2022	Best practices on COVID -19 strategies for costing and financing, 'One budget plan'	Dr Ghanashyam Sethy, UNICEF Malawi Dr. Desmond Maada Kangbai,	Malawi, UNICEF Malawi MoH, Sierra Leone,
Oct. 18, 2022	Best practices on COVID -19 strategies on humanitarian and fragile settings	Hajar Samaha, Sehrish Ali	MoPH, Lebanon Sudan, UNICEF
Nov. 15, 2022	Best practices on COVID -19 strategies on Integration into PHC/essential immunization	Dr Boravy El, Chief Gladys Benavides Abella	CHAI Cambodia Colombia Ministry of Health and Social Protection
Dec 13, 2022	**Best Practices & Opportunities for COVID-19 Vaccination Data & Monitoring Systems**	**Mr Sisouveth NORASINGH Mr Albert BESIGYE**	**Ministry of Health, Lao PDR Ministry of Health, Uganda**

Final session for this series

Topic: Best Practices & Opportunities for COVID-19 Vaccination Data & Monitoring Systems

Presentation outline

- Welcome and Objectives

- House keeping

- **Overview of key COVID-19 vaccination data challenges and opportunities**
  - ➤ Donald BROOKS (WHO HQ)

- ➤ Poll questions

- Country 1 – **Lao PDR country experience with the COVID-19 Vaccination Registry on DHIS2**
  - ➤ Sisouveth NORASINGH, Ministry of Health, Lao PDR
- Q&A

- Country 2: **Smart Paper Technology (SPT) for efficient digital real time COVID-19 vaccination data**
  - ➤ Albert BESIGYE, Ministry of Health, Uganda
- Q&A
- Synthesis –Donald Brooks

- Wrap up and closing

Housekeeping

Interpretation

Interpretation in French is available by clicking the **Interpretation** button

Click on "Interpretation" and choose the language that you would like to hear. To hear the interpreted language only, click "Mute Original Audio"
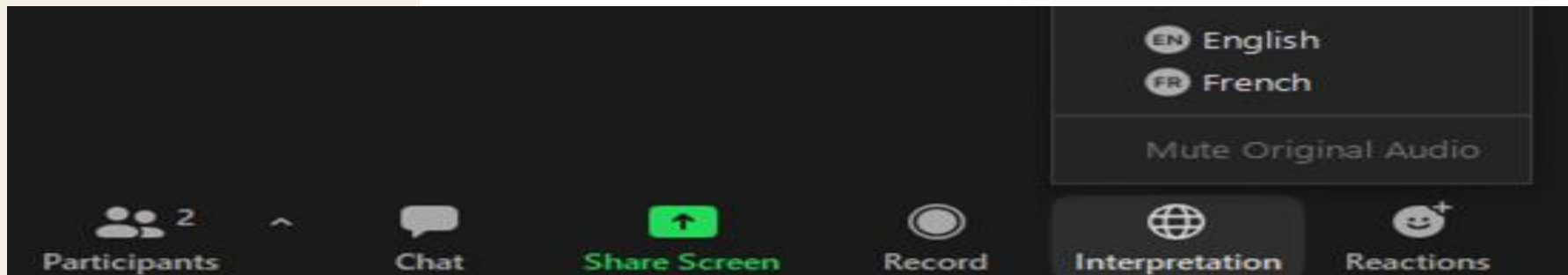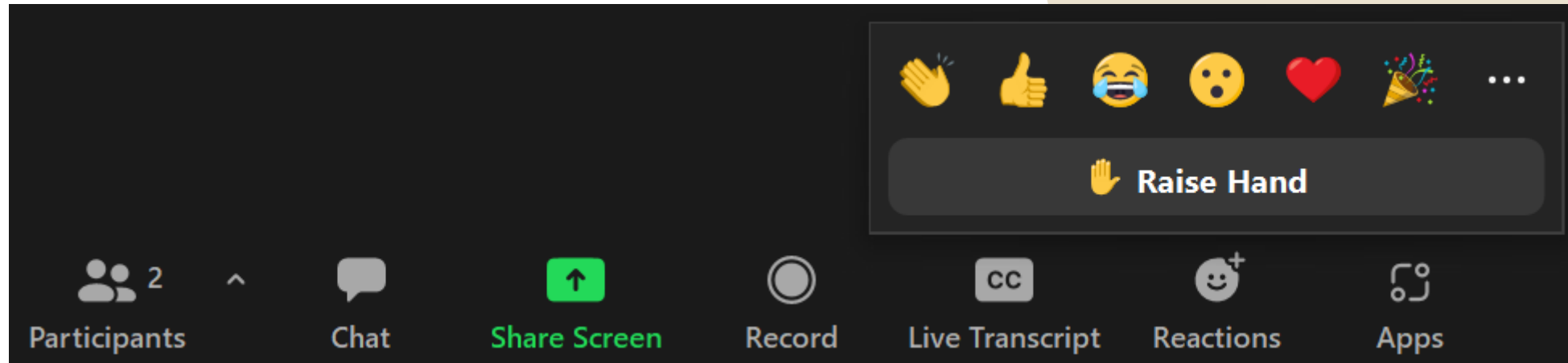
Live Transcription (ENG)

Click on "Show Captions" and caption would appear on screen. To close the caption, click "Hide Captions"
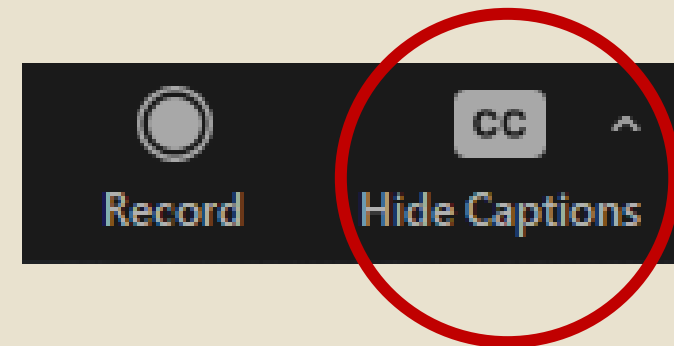
Q&A
Use the Chat or Reactions > Raise Hand features
for questions throughout the call

Recordings and Certificate

This session is being recorded and your attendance is consent to be recorded

The Recordings, PowerPoint, and all resources will be shared after the call

A Certificate of Attendance will be available through the University of New Mexico via link in the Chat at the end of the session

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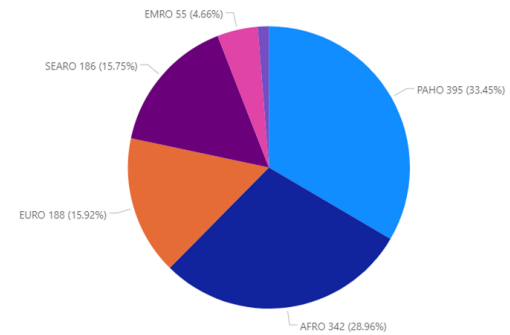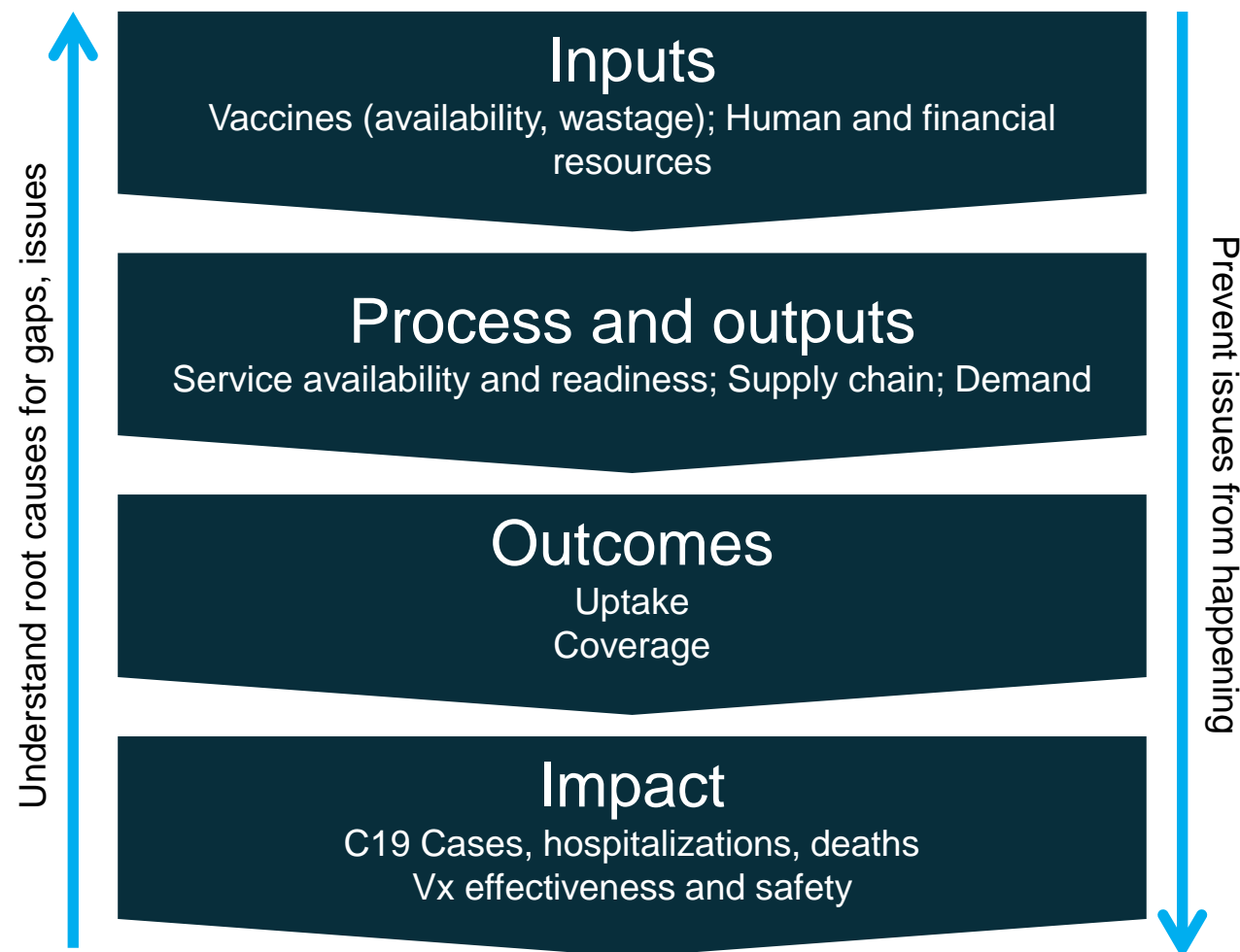
Key COVID-19 vaccination data challenges and opportunities

Donald BROOKS

COVID-19 Vaccination Data Lead, WHO HQ

COVID-19 Vaccine
DELIVERY PARTNERSHIP

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Strong monitoring systems are essential to measuring the progress and effectiveness of COVID-19 vaccination programs

- Timely and accurate data are key for appropriate and informed programmatic decision-making

- Data provided through monitoring systems enable:

  - Measurement of uptake to ensure equity and the identification of gaps as compared to targets

  - Confirmation that prioritization policies are being effectively implemented

  - Identification of root causes for poor programmatic performance to be targeted by subsequent programmatic adjustments

- Monitoring systems further provide documentation for the individual (personal history), and for public health purposes (surveys, safety monitoring, vaccine effectiveness)

Understand root causes for gaps, issues

Prevent issues from happening

Inputs
Vaccines (availability, wastage); Human and financial resources

Process and outputs
Service availability and readiness; Supply chain; Demand

Outcomes
Uptake
Coverage

Impact
C19 Cases, hospitalizations, deaths
Vx effectiveness and safety

The COVID-19 vaccine rollout has presented unique data needs and has made new demands of immunization monitoring systems

- Due to the epidemiology and urgency of COVID-19, monitoring systems have had to quickly adapt, notably to:
    - Monitor vaccine **uptake in new population groups**, including healthcare workers, older adults, and individuals with comorbidities, among others
    - **Report near real-time vaccine implementation data** to regional and global levels, requiring weekly and monthly reporting

- This breaks from routine vaccination monitoring systems which typically:
    - **Follow uptake in yearly cohorts**
    - Require **reporting of implementation data to regional and global levels on a yearly basis**

- The COVID-19 vaccine rollout represents, however, an **opportunity to strengthen immunization monitoring systems**, for routine immunization and future new vaccine introductions throughout the life course

To satisfy new data demands, many countries have had to adopt new or considerably adapt existing immunization monitoring systems

- Monitoring systems for vaccination programs typically take one of two forms:

  - **Aggregate reporting systems** - involving tallying doses administered along key dimensions, often using paper tools, shared physically or digitally with next level institutions

  - **Electronic immunization registries (EIRs)** - involving recording vaccination encounters as digital records, aggregated/shared with next level institutions digitally

- Both systems can be effective with appropriate resourcing

- During COVID-19, many countries have opted to switch from their aggregate reporting systems used for routine immunization to EIRs; others have opted to enhance their aggregate reporting systems with new technology to facilitate data flow

  - Lao PDR built on its existing DHIS2 aggregate system to include the "nominal" COVID-19 Tracker module

  - Uganda incorporated Smart Paper Technology on top of its COVID-19 EIR to facilitate data flow
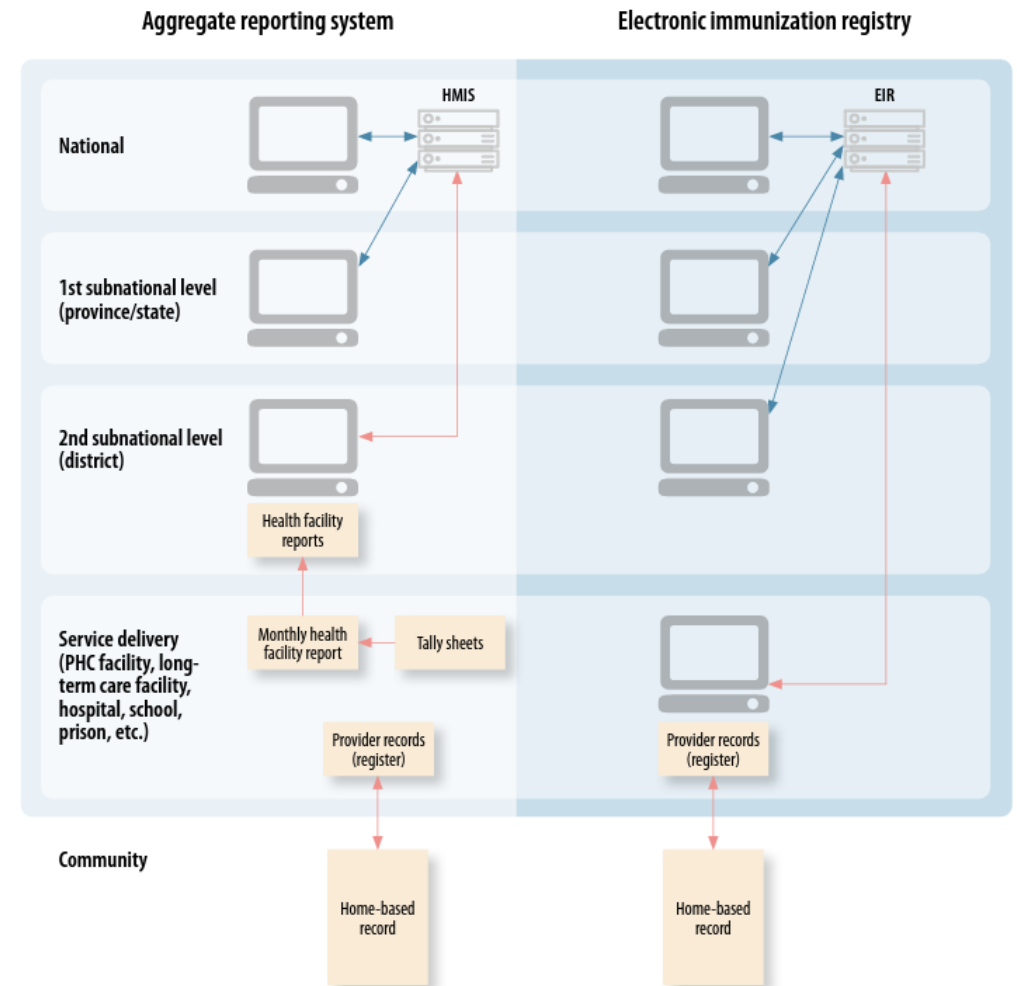
Monitoring system changes, especially during an emergency, can be difficult; many countries experienced speed bumps while making necessary shifts

- **Systems change requires time;** actors need to become accustomed to and appropriate a new system to use them fluidly

- Many countries have opted to establish electronic immunizations registries (EIRs) for COVID-19. **Due heavy financial, human, and materials resource requirements of EIRs,** backlogs of vaccination records have accumulated preventing data flow.

- To get the data needed, some countries with EIR data backlogs have **reverted to aggregate paper-based systems** to satisfy data needs, creating parallel systems. Paper-based tools do not always have fields for in-demand data, like uptake in older adults.

- **Incomplete material and financial resources to cover all vaccination sites**, whether for EIR or aggregate-based systems.

- **Insufficient healthcare worker training on new systems**, especially at lower levels of the health system.

- **Fragmented data system strengthening / digital health investments across the health sector and engaged partners**; need for continued concerted efforts and coordination.

As a result, countries have struggled to collect and report key data points, though considerable progress has been made since early 2022
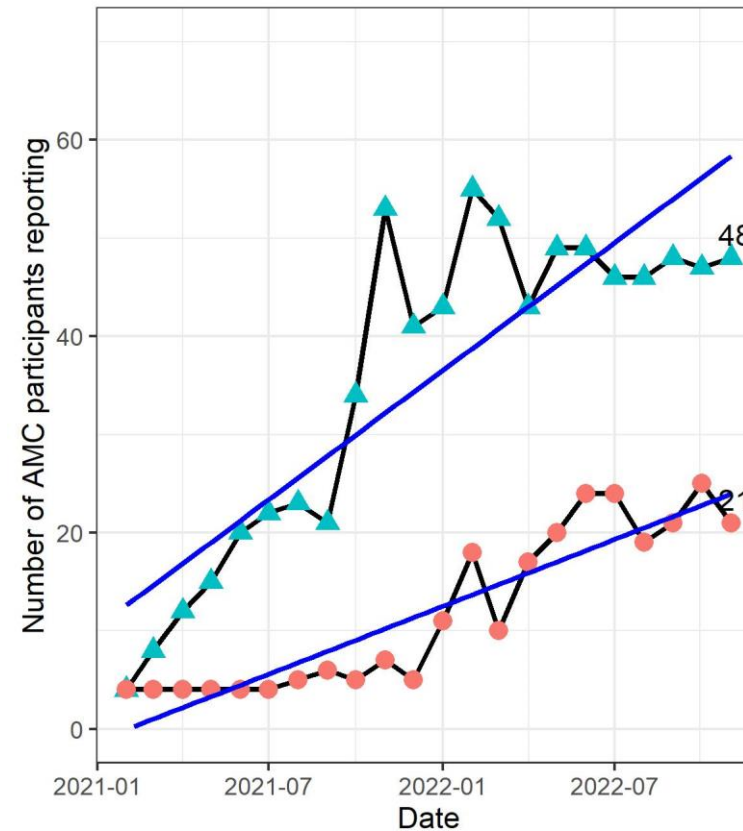
Healthcare workers
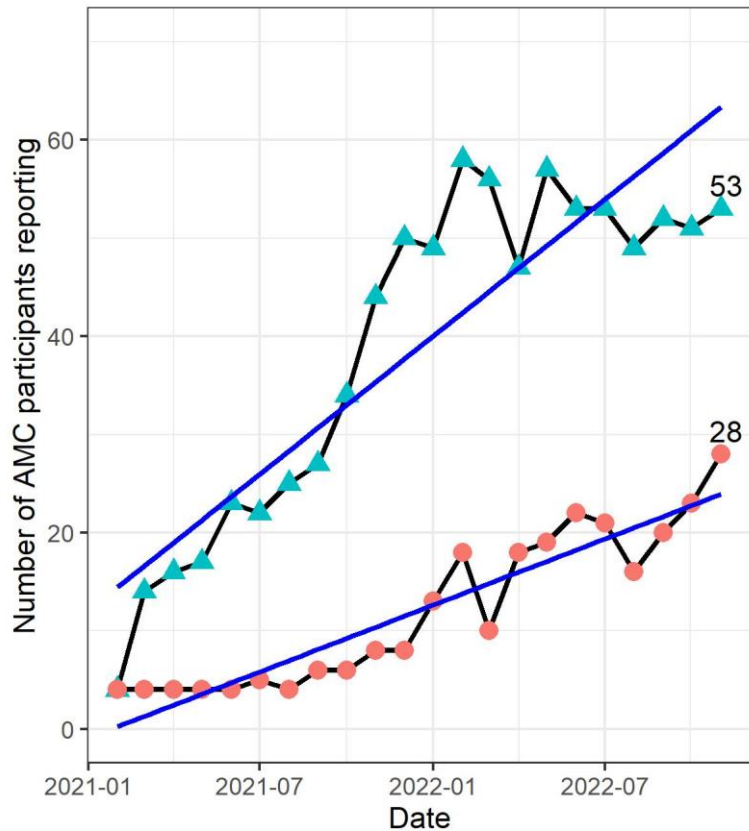
Older adults

*Increase from **4 to 53** of 90 participants reporting on HCW complete primary series coverage, as of latest reporting period*

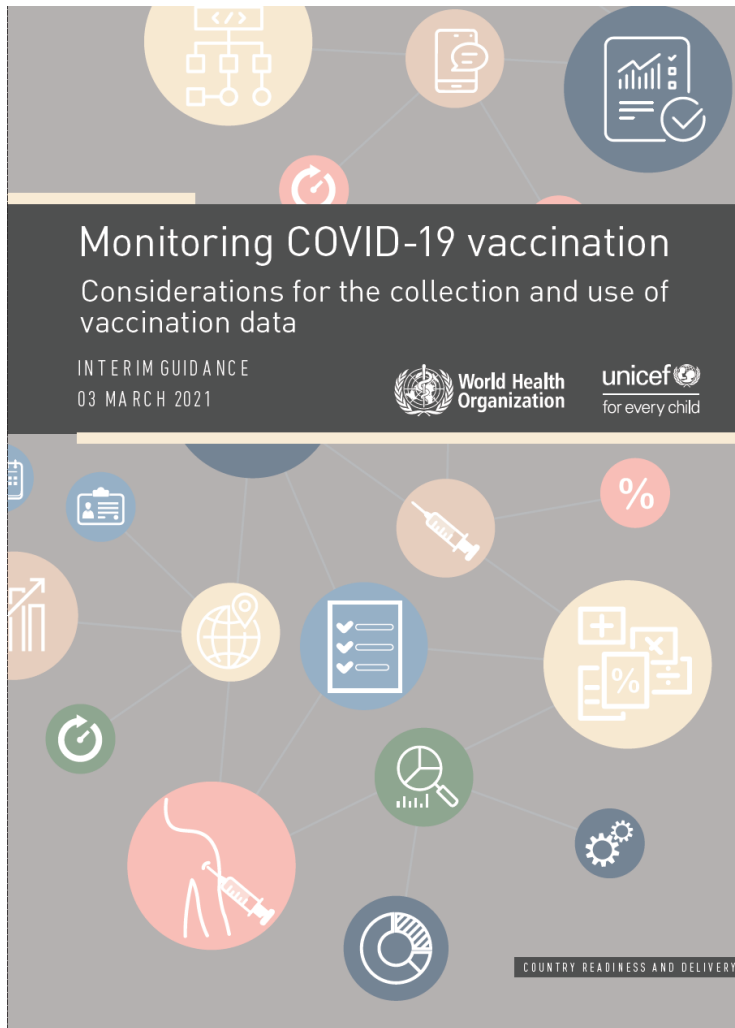*Increase from **4 to 28** of 90 participants reporting on HCW booster coverage, as of latest reporting period*

*Increase from **4 to 48** of 90 participants reporting on older adult complete primary series coverage, as of latest reporting period*

*Increase from **4 to 21** of 90 participants reporting on older adult booster coverage, as of latest reporting period*

CoVDP and its constituent agencies are working to support countries in navigating these new challenges to strengthen monitoring systems

Monitoring COVID-19 vaccination
Considerations for the collection and use of vaccination data
INTERIM GUIDANCE
03 MARCH 2021

- WHO, UNICEF, and partners published guidance in March 2021 to help countries in planning their approaches to monitoring COVID-19 vaccination

- WHO AFRO assessed COVID-19 vaccination data systems gaps in Q2 2022 and is organizing a series of **multi-level/-partner missions to craft country-specific costed operational plans** to address challenges identified
  - Remote and in-person missions to Cote d'Ivoire, Burkina Faso, Cameroon, DRCongo, The Gambia, Malawi, Niger, and Uganda have already been completed;

- In concert, CoVDP is **conducting country-by-country follow-up to understand the causes for non-reporting** via its Desk Officers

- Gavi is further complementing efforts by running reporting **diagnostics across non-CoVDP AMCs** and will do similar targeted outreach across priority countries to understand challenges and barriers

- The CoVDP Digital Health & Innovation Working Group and the UNICEF-WHO Digital Health Centre of Excellence (DICE) is **tracking and streamlining technical assistance requests** and support being provided in the data system space, while **connecting countries to appropriate, available solutions**

Moving into 2023, CoVDP and its constituent agencies will continue this direct country support, especially as countries begin to integrate COVID-19 vaccination with existing systems

- Continued support to countries in planning and funding data system strengthening activities to close key system gaps, by WHO AFRO / EMRO, CoVDP, Gavi, and other partners

- **Global Convening on COVID-19 vaccination monitoring and related system strengthening** scheduled tentatively for March, jointly convened by WHO, UNICEF, and Gavi

  - Day 1 to feature on the COVID-19 monitoring in 2023 and beyond; Day 2 to feature on COVID-19-related data system strengthening

- Update to WHO & UNICEF guidance on COVID-19 vaccination monitoring to reflect latest changes the COVID-19 vaccination landscape (booster doses, shift from supply constraint to demand constraint, new products, etc.)

- CoVDP **white paper detailing data system gaps and support needs across the 34 CCSs**, inviting partners to engage

- Joint WHO & UNICEF peer-reviewed article investigating pre-pandemic data & monitoring system strength as compared with during pandemic ability to collect, analyze, and report key COVID-19 vaccination data

Poll Questions?

Lao PDR experience with the COVID-19 Vaccination Registry on DHIS2

Sisouveth NORASINGH

EPI Data Manager, Ministry of Health, Lao PDR

COVID-19 Vaccine
DELIVERY PARTNERSHIP

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Background | Immunization monitoring systems in place prior to COVID-19

- Lao PDR started its EPI programme in 1982. All vaccination data are recorded in at least 3 forms: tally sheet, Register book and vaccination card.

  - Vaccination data has been recorded in register book for follow up, one book for one village;

  - Health center (HC) staff compile all vaccination data from tally sheet and transfer to reporting form and submit monthly to district health office (DHO). DHO compile data from tally sheet from their own catchment areas together with summary report from HCs and submit to provincial EPI office and later on, province EPI submit to national EPI office;

  - National EPI office compile and analyst by using MS excel and send out monthly report to MoH.

Facility record and report
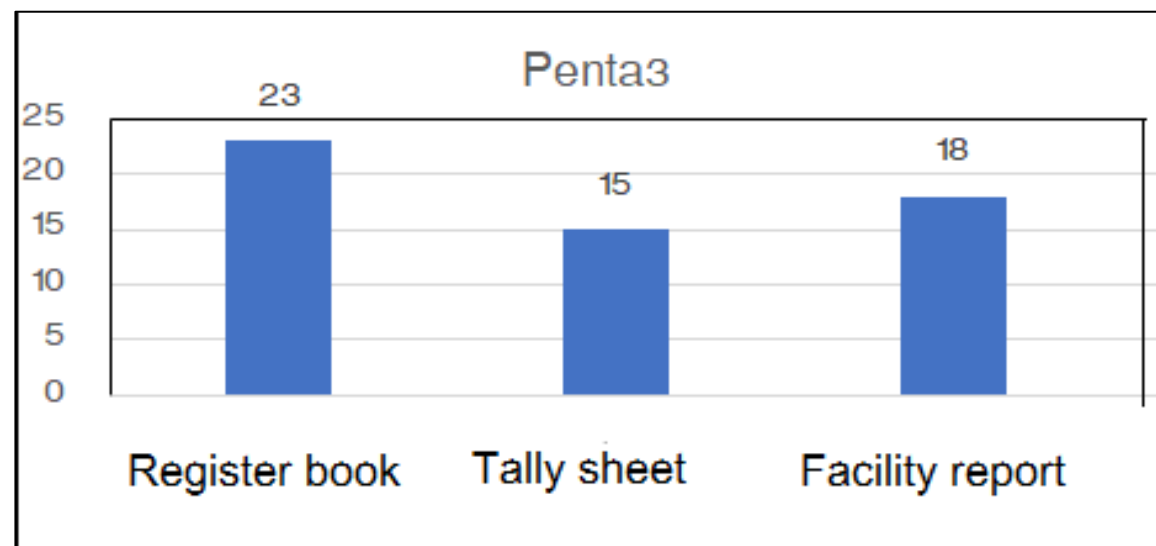
Background | Immunization monitoring systems in place prior to COVID-19

- COVID-19 outbreak started to widely spread out in Lao PDR in late Apr 2020.

  - All information about COVID-19 vaccination are recorded in many forms, to capture all doses given to people;

Enrollment form

Screening form

Register form

Vaccination card

Give to people

Tally sheet

Daily report form

Background | Immunization monitoring systems in place prior to COVID-19

- DHIS2, an electronic health information management software is the only health information system in place for both COVID-19 vaccination and routine immunization in Lao PDR;
  - DHIS2 team with IT capacity established in the Department of Planning and Cooperation, Ministry of Health supports the whole country in the DHIS2 roll-out and maintenance;
  - DHIS2 team works closely with the National Immunization Programme (NIP) to monitor routine and COVID-19 immunizations.
  - WHO country office provides technical support to DHIS2 team on the activity implementation side, for ex. System design and customization, dashboard to monitor health indicators, train national and sub-national staff and field visit;

- The current monitoring system
  - Department of Planning and Cooperation takes lead in developing and maintaining the DHIS2 system in communication with National Immunization Programme on the immunization programmes.
  - At the sub-national level, statistics units at the provincial and district level do data entry on DHIS2. Provincial and district MCH and EPI officers enter their own service data in some district hospital/office.
  - At health center level, all staff enter data together.

Approach | Pathway taken to monitor COVID-19 vaccination

- **When faced by the COVID-19 Pandemic, Lao PDR decided to utilise the existing digital platform for the COVID-19 vaccination.**

- DHIS2 was already in use since 2015 for routine immunization and customized to be the *"COVID-19 Vaccination Registry (CVR)"* in 2021 for COVID-19.

  - There are 2 reporting systems: daily aggregate system and individual tracker;

  - **Aggregate**: HCWs enter no. of doses given by vaccine in the system directly at their own facilities by end of each day, no paper report submit any more;

  - **Tracker:** HCWs enter individual data with unique ID (CVID) and vaccination information into the system.
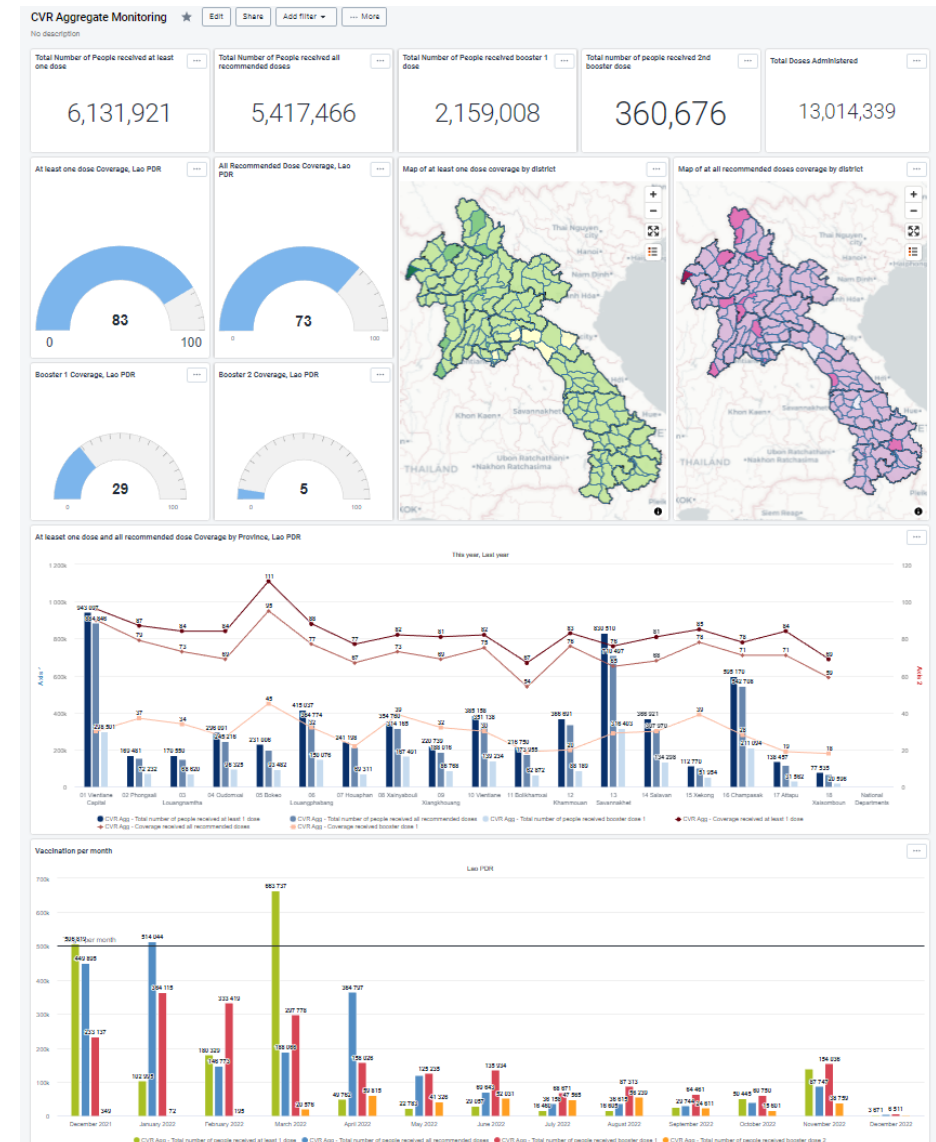
Approach | Pathway taken to monitor COVID-19 vaccination

- Pre-registration & vaccination scheduling service (*vaccinatelaos.la*) was developed on top of the CVR
  - Clients can pre-register with their personal information and schedule vaccinations in advance through the public website linked to the CVR database.
  - For those who cannot use the service, help desks were set up to help them pre-register on site.
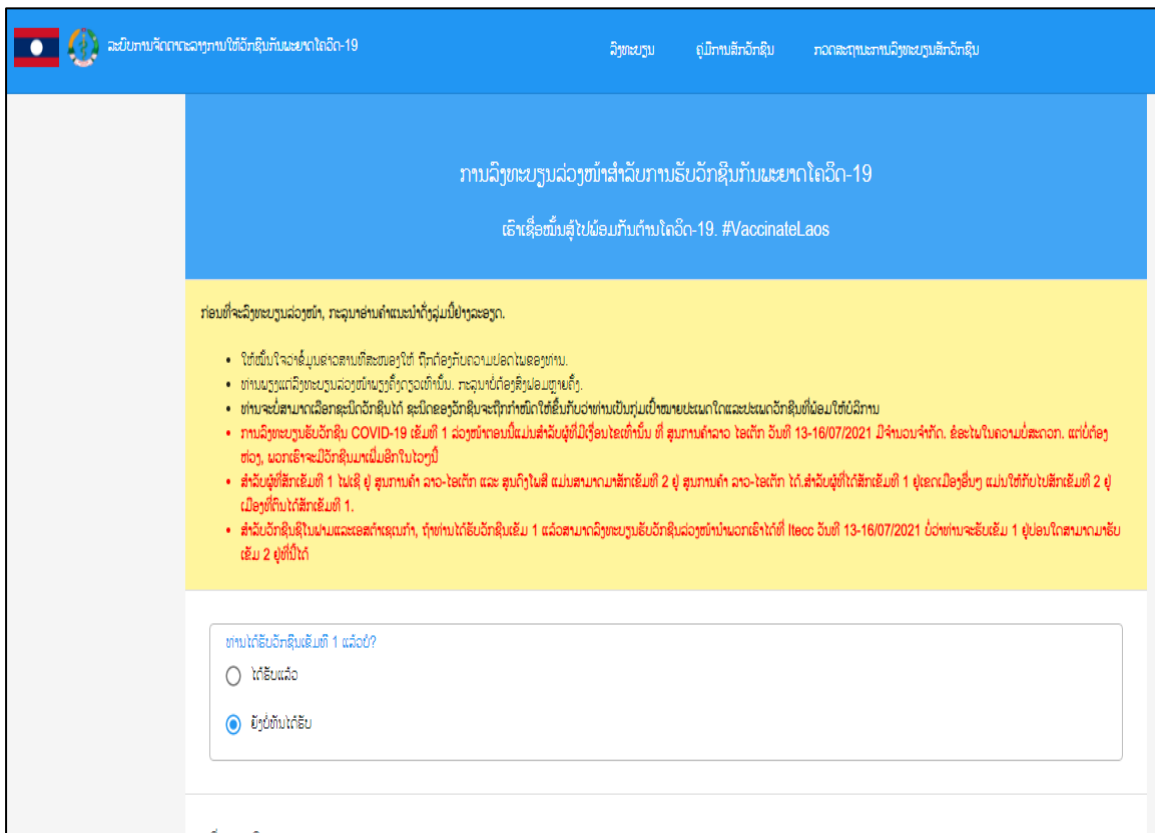
People can register themselves

- Enter personal information by client to save time
- Select date, time and facility where they are convenient
- Limit the slots to avoid crowd;
- Easy to manage resources

Self selection

Register completed

Pre-registration & data entry

Approach | Pathway taken to monitor COVID-19 vaccination

- QR code-enabled vaccination card
  - WHO supported the development of QR code that stores individual record and can be verified by the system.
  - A QR code is printed on the back of a vaccination card in selected vaccination sites.

Site arrangement

Deep-dive | Leveraging COVID-19 systems for essential immunization

- Laptops and tablets have been distributed to central hospitals, provincial hospitals and district hospitals this year, 2022, to support current COVID-19 vaccination data entry backlog and will also continue for new enrolment.

- As the COVID-19 Vaccination Registry on DHIS2 is proven successful, NIP and WHO are now rolling out the Electronic Immunization Registry (eIR) for RI, which is also developed on DHIS2 Tracker.

- A unique ID will be automatically generated for each child at the first contact with the health system. (preferably the birth dose)

- HCW creates a profile with personal information on mother and child and enters child's vaccination into eIR.

- Every record will be kept in the server and last for life.

- Reduce paper forms to record and reduce workload for HCW.

Challenges | Difficulties encountered along the way & solutions to them

- Challenges

  - In the transition, there could be more workload while learning to use the system and keeping the paper forms.

  - Vaccination team and data entry team are the same person, thus causing data backlog in many facilities.

  - Existing paper records are not accurate and difficult to digitalize due to bad handwriting.

  - The general IT capacity of staff varies, and some staff find it difficult to use digital systems.

  - Internet connection in some areas are not stable, leading to report delay sometimes.

  - Functional computers are not sufficient at the health center level.

- Current solutions

  - Develop the system as easy and simple as possible. Remove unnecessary fields if possible.

  - No duplication by completely moving to eIR without having to keep the parallel paper forms.

  - Provide in-depth training and follow up with all levels afterwards.

  - Provide laptops to province, district and HC level to support data entry.

  - Provide incentive to data entry persons at all levels to clear up the backlog. Incentive goes by DHIS2 account.

Looking ahead | Lessons learned and path forward

- Unique ID for each of the individual child will be the unique ID for health for every citizen in the absence of the national ID system.

- Records store in the database for long term.

- Data compilation, analyst and use at any time, anywhere.

- A certain dashboard once created, we can share to any person at any level. HCW can view, edit a record that entered in different places across the country.

- Reduce $$$ for printing paper recording and reporting forms.

- Complete record keeping

- **Developing and rolling out the COVID-19 Vaccination Registry for 2+ years can serve as great lessons for the digital routine immunization registry.**

- **Ministry of Health (NIP & DPC) and WHO Lao PDR are in the better position to roll out the new eIR for RI thanks to the experience of the CVR – What worked and what didn't work.**

- **Using DHIS2 software is proven successful with few issues that can be improved for the eIR.**

Lao People's Democratic Republic

Questions?

Smart Paper for efficient digital real-time COVID-19 vaccination data

Albert BESIGYE

M&E Specialist, Ministry of Health, Uganda

Approach | Pathway taken to monitor COVID-19 vaccination

- Initially, the decision of MoH Uganda was to use DHIS2 Tracker to collect Covid-19 vaccination data and generate Covid Certificates.

- Health workers collected data on Covid Register Books, and data clerks entered this data to DHIS2 Tracker at the district level.

- After 1st round of campaign in Oct-Dec 2021, the backlog for data entry became almost 6 million client records.

- MoH Uganda understood that DHIS2 Tracker will keep increasing the backlogs in the next round of campaigns and decided to adopt Smart Paper Technology to ensure there won't be future backlogs

- In March 2022, with support from Shifo SPT Solution was introduced to collect Covid data, digitise all content and automatically integrate with DHIS2 Tracker.

- Equipment (scanners, laptops, and cables) were deployed in all district headquarters which were scanning stations

- Cascade trainings to districts and health workers with support from Implementing partners

- SPT Generated data and it automatically went to DHIS2 (EPIVAC instance) from which Covid Certificates were downloaded.

- Performance monitoring using spatial analysis, pivot tables, visuals, dashboards are done in the EPIVAC which is interoperable with SPT app

COVID-19 System Before & After

Health Facility

District level

Regional / Central level
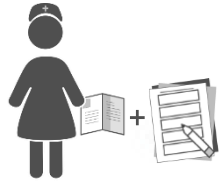
Client Card issued   SPT Forms filled in
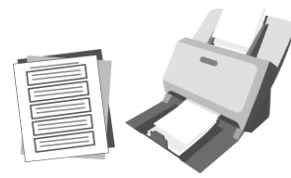
SPT Forms **scanned**   Client's data **automatically digitised** and added into DHIS2

Client's and aggregated data accessed on **all levels**   Vaccination Certificate downloaded through MoH Portal, clients **followed-up**
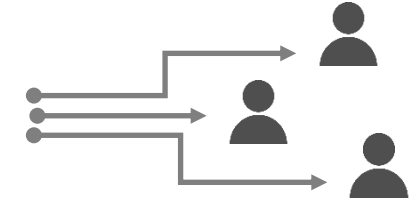
Health Facility

District level

Regional / Central level

Client Card issued   **Registry Book**, and **Tally Sheet** filled in   **Monthly report** filled in
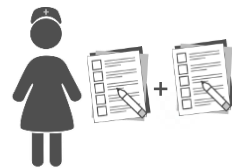
Client's data **manually added** into DHIS2

Client's and aggregated data accessed by **programmes**, at **central level** and **regional offices**   Vaccination Certificate downloaded through MoH Portal
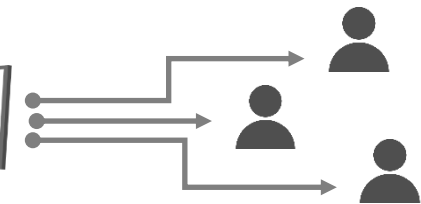
SPT Flow of COVID 19 vaccination data

Registration of new clients

Automatic integration in DHIS2

Automatic reports generation

Recording vaccines administered

Scanning at District & Automatic digitisation

Data access and use

Deep-dive | Smart Paper Technology (SPT) for efficient data capture

- SPT Solution includes 2 A4 forms: 1) Registration of Clients with Unique ID, and, 2) Capturing Covid vaccinations using Covid Records Form. They are printed locally in Uganda, by different printing companies.

- 1 scanning station was deployed per district, except Wakiso and Kampala, which received 8 and 5 scanning stations

- Shifo Team worked with MoH (EPI, DHI and ICT Team) and HISP to adjust the forms, and integrate to DHIS2 Tracker

- As SPT doesn't require gadgets at the service delivery points, it was manageable to scale to all Covid vaccination points quickly

- Filled in SPT Forms were brought for scanning at the district level

- Given that SPT Infrastructure was established, MoH decided to shift all COVID campaign data to SPT Solution

- WHO and UNICEF are supporting MoH Uganda to print SPT Forms for routine immunisation and cascaded trainings. MoH is planning to shift from Register Books to SPT Forms starting from January 2023 in all 146 districts for routine immunisation.
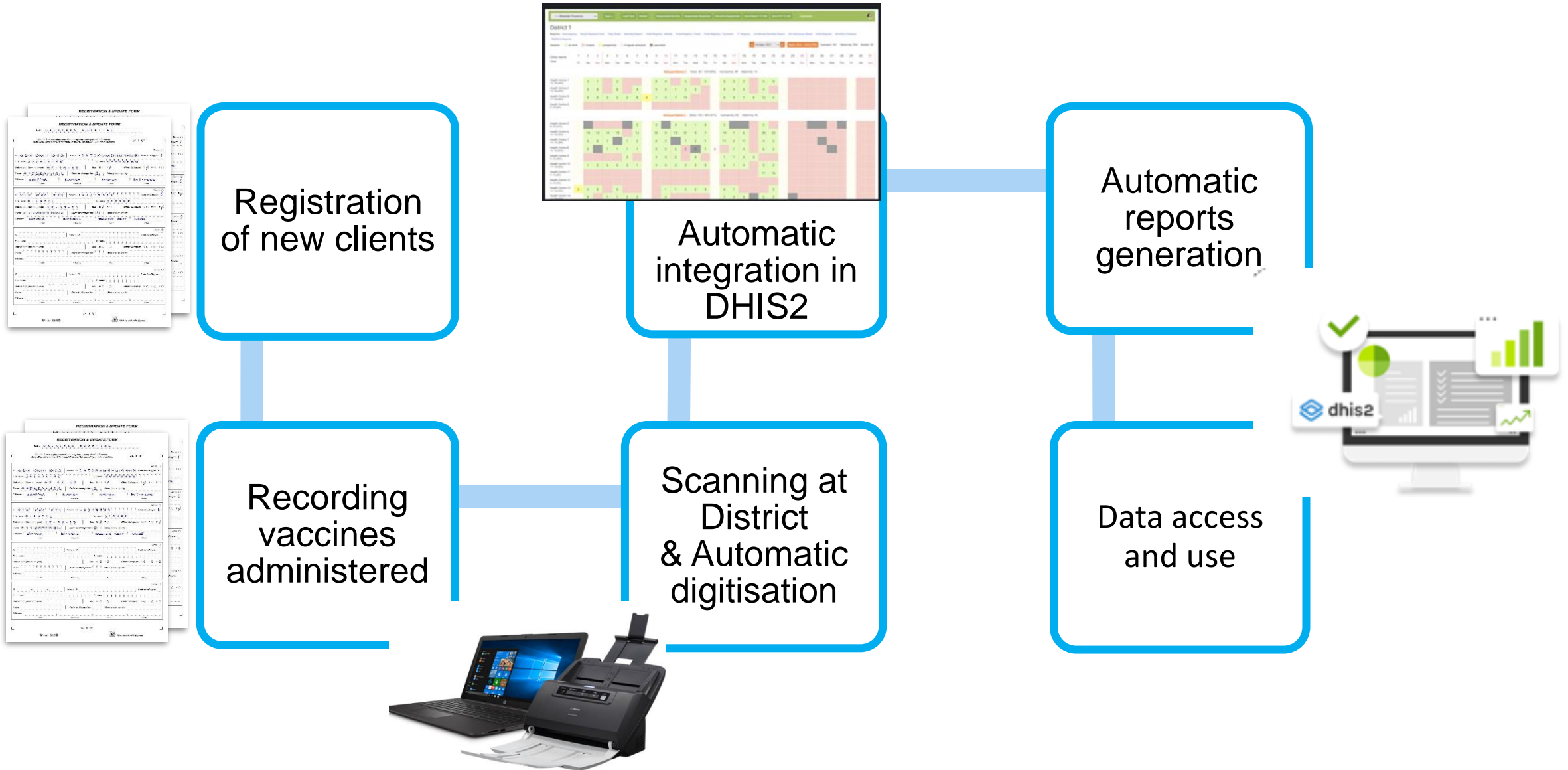
- MoH has received extensive trainings on SPT Solution and was part of co-developing some functions. All cascaded trainings of SPT Solution nationally are done by MoH Team.

- Shifo Team and ICT Unit have worked together to install SPT System in MoH Dedicated Servers in Uganda.

Phased SPT implementation plan

SPT Design, Adaptation & Capacity Strengthening

1. Local Hosting Set-up
2. Dashboard Set-up.
3. Co-design and technical meetings
4. User acceptability testing

Phase 3

Capacity Building

Phase 4

1. Master training
2. National TOTs
3. Cascade training
4. Change management

Create Enabling Environment

1. Stakeholder engagement for SPT implementation (initial).
2. Stakeholder engagement for SPT implementation (continuous)
3. Procurement and distribution

Phase 1

Phase 2

Supervision, Monitoring & Evaluation

1. Conduct performance review meetings.
2. Conduct data quality assessments
3. Support to in-country travel for supportive supervision and monitoring of immunization program
4. Support documentation development and dissemination

Challenges | Difficulties encountered along the way & solutions to them

- Challenge 1: Delays in SPT Forms synchronization from some districts with low internet connection. This issue has been resolved by synchronizing 1 page at a time.

- Challenge 2: Biostatisticians were not able to view which forms got synchronized with SPT System from scanning stations. This issue was resolved by having visibility on each form in SPT System and giving access to biostatisticians

- Challenge 3: Recognition quality of Surnames and Given names was poor due to handwritings from some districts. This issue will be gradually improved, as SPT Solution uses AI to improve hand-writing recognition of individual health workers

- Challenge 4: Biostatisticians were not able to clean the data, such as wrongly recognized Surnames and Names. This issue was resolved by having a function to easily clean the data in SPT System.

- Challenge 5: Some client's Registration Forms were missing, which created Unknown Names. This issue is resolved by pre-printing Unique IDs in Registration Forms and showing which facilities and districts have Unknown Names Issue.

Looking ahead | Lessons learned and path forward

- SPT Implementation was supported by WHO, UNICEF, Gavi, USAID, CDC, and all Implementing Partners. This is the way forward to adopt the solution at a national level.

- Going forward, MoH will utilise Smart Paper Technology solution for digitizing all routine and campaign immunisations

- EPI is leading the way for digitalizing immunization data therefore need to have mass registration of all under 1 year age children to get a more reliable denominator to base on to determine the under immunized and zero dose children

- There is need for technical support supervision majorly targeting districts with high data backlog

- To reduce costs of transporting papers, scanning should be decentralized to HSD level therefore need for more scanners and laptops

- There is need to support districts to do data cleaning to ensure quality data through validation and verification of both aggregate and individual data

- There is need to facilitate local hosting of SPT system and build capacity of MOH to own

- Adequate data tools and proper achieving is very key in implementation of SPT

Questions?

Synthesis

- The COVID-19 vaccine rollout has **presented unique data needs and has made new demands of immunization monitoring systems**

- To satisfy new data demands, many countries have **adopted new or considerably adapted existing immunization monitoring systems,** prompting unprecedented investment and innovation in monitoring systems
    - Lao PDR built on its existing DHIS2 aggregate system to include the "nominal" COVID-19 Tracker module
    - Uganda incorporated Smart Paper Technology on top of its COVID-19 EIR to facilitate data flow

- Monitoring system changes, especially during an emergency, can be difficult; many countries **experienced speed bumps while making necessary shifts**

- CoVDP, its constituent agencies, and partners are working to **support countries in navigating these new challenges to strengthen monitoring systems**; a number of resources are available

- 2023 will bring new challenges, notably those posed by integration, continue support will be needed as countries progress along the pathway of immunization monitoring system development

Available resources

- WHO & UNICEF Monitoring COVID-19 Vaccination guidance document, available here

- Monitoring Metrics Related to the Global COVID-19 Vaccination Strategy in a Changing World: July 2022 update, available here

- Guidance on the use of digital solutions to support COVID-19 national deployment and vaccination plans (NDVPs), available here

- UNICEF & WHO DICE Knowledge Base, available here

What's Next?

- Recordings from this session will be available in English, French

- **Post session survey**

  - **A Certificate of Attendance** will be available through the University of New Mexico via link in the Chat at the end of the session (5-minute survey).

  - At the end of this survey, you will be able to print a certificate of attendance or just submit your feedback.

  - English: https://redcap.link/Learning_Collective_Initiative

- **Post series Evaluation**

  - Follow up survey for participants in the second half of January 2023

  - Less than 5-minute survey with 5 questions

  - Available in English, French and Spanish

Webinar materials and Continuing the Conversation

On TechNet-21: https://www.technet-21.org/en/topics/covid-vax-learning-collective
Webinar materials will be available on this page after each session.

On Telegram in EN https://t.me/+yQ2mCZDWsmRmY2Fk
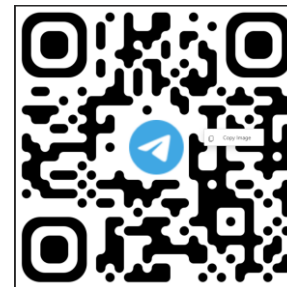
Please scan this QR to join the Telegram " COVID-19 Vaccine Introduction"
This is a messaging platform for you to:
- Receive **notification** of the next sessions
- Receive updates on **tools and resources**
- **Share ideas** with each other

Thank you

For more information and technical support on any of the material presented, please contact:

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COVID-19 Vaccine
DELIVERY PARTNERSHIP

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