Integrating the COVID-19 Vaccine into Primary Health Care: Lessons from the Experience in South Africa

We will begin shortly.
Please introduce yourself in the chat.

27 July 2023 | Hosted by Knowledge SUCCESS

UPBEAT POP
BACKGROUND MUSIC

USAID
FROM THE AMERICAN PEOPLE

JOHNS HOPKINS
Center for Communication
Programs

amref
health africa

Busara

fhi360
THE SCIENCE OF IMPROVING LIVES

Zoom Interpretation *(Intépretation)*

L'interprétation française en direct est disponible ! Cliquez sur l'icône «Interprétation» au bas de votre écran pour écouter le webinaire en français.
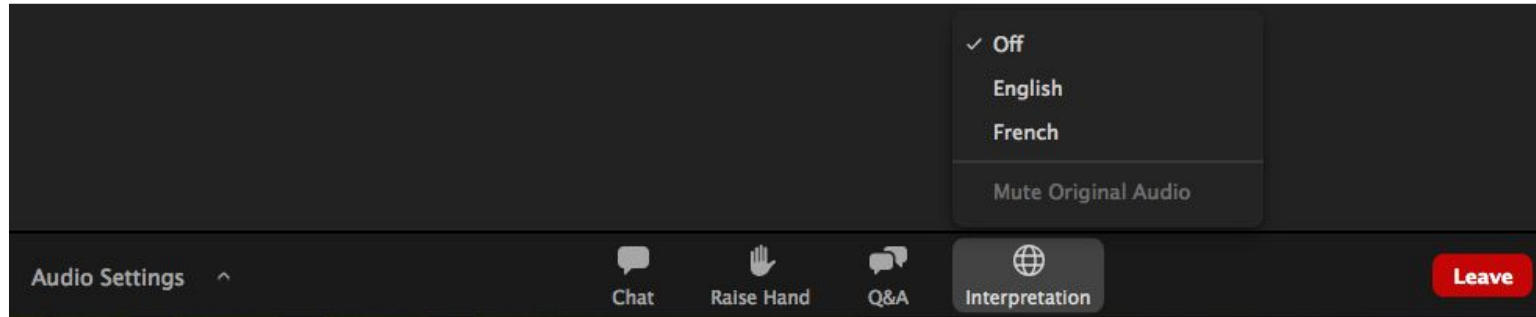
Our Speakers

Dr. Heena Brahmbhatt
Global Health Security Team Lead, USAID South African Mission
(moderator)

Kristina Yarrow
Deputy Director, USAID COVID-19 Response Team

Marione Schönfeldt
National Department of Health, South Africa

Wendy Ovens
Right to Care Health Services, South Africa

Milani Wolmarans
National Department of Health, South Africa

Agenda

Introduction to COVID-19 Integration and Guidance	Kristina Yarrow, USAID
South Africa's COVID-19 Integration Program	Heena Brahmbhatt, USAID
South Africa's Integration Plan	Marione Schönfeldt, NDoH
Integrating Vaccination into Routine Health Services in the Eastern Cape	Wendy Ovens, Right to Care
Scale Up and Implementation of the EVDS Platform	Milani Wolmarans, NDoH
Closing	Heena Brahmbhatt, USAID Anne Ballard Sara, Knowledge SUCCESS

Knowledge
SUCCESS

Introduction to COVID-19 Integration and Guidance

The Road to COVID-19 Integration

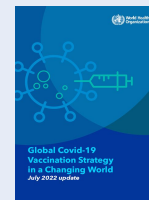|	
Dec 2021	**Launch of Global VAX**
Jan 2022	**Launch of CoVDP**
Jan 2022	**Introduction of COVID-19 Vaccination Roll-outs and Mass Campaigns**
Jul 2022	**WHO SAGE Updates 'Global COVID-19 Vaccination Strategy in a Changing World' - focus on high priority populations**
Feb 2023	**Considerations for integrating COVID-19 vaccination into immunization programmes and primary health care for 2022 and beyond**
May 2023	**End of PHEIC**
June 2022	**Sunset of CoVDP**

USAID COVID-19 Integration into Primary Health Care (PHC)

Integration: "the partial or full adoption of COVID-19 response activities - *across prevention, diagnosis, care and treatment* - into national program services, including immunization programmes, primary health care, PHC, and any other relevant health services with the overall aim of improving program efficiency and sustainability, enhancing demand and improving user satisfaction, achieving and maintaining satisfactory coverage, and addressing inequities"

Guiding Principles for Integration

- Equity
- People Centered
- Context specific
- Optimized service coverage

Review more details in the USAID Compendium for Integrating COVID-19 into Primary Health Care

Compendium of Illustrative Sub-activities for Integrating COVID-19 Response into Primary Health Care

Leadership & Governance	Health Systems Financing	Service Delivery	Health Workforce	Supply Chain Management	Demand Generation and Community Engagement	Health Information Systems (incl. utilization and surveillance)
C19 response included in the national policies and guidelines for providing integrated PHC and life course vaccination	Joint financial forecasting, planning, and management of PHC and C19 response supplies and programs	Integrated management of respiratory infections implemented at PHC sites, inclusive of T2T	C19 vax and T2T are included in JD of RI/PHC providers	Joint forecasting and planning of C19 vax, vax supplies, rapid diagnostic test kits, and antivirals	Joint communication strategy development and coordination around C19 and other vaccines	Unified data collection and entry for C19 response and PHC data
Joint planning of C19 response as part of PHC activities at national and sub-national levels	Ensure budget line items for integrated Emergency Operations Centers (e.g. polio, measles, C19)	Co-administration of C19 vax with other vaccines at fixed, mobile, outreach, or other sites	Adjusted HR needs assessment and recruitment to the increased workload due to C19 response and other disease outbreaks	Integrated co-distribution of C19 supplies with other PHC/RI vaccines	Coordinated research and assessment of Knowledge, Attitude & Practice (KAP) regarding T2T and C19 and other vaccines	Unified digital data management platforms
Joint national and sub-national coordination mechanisms of PHC and C19 response programs	Identify opportunities for resource mobilization and cost sharing across interventions	Bundling of C19 vax campaigns with other vax campaigns	Integrated training, capacity building, and job aids for C19 response and RI/PHC providers	Incorporating C19 vax and supplies into eLMIS for stock monitoring, and forecasting/ supply planning	Joint tracking and timely addressing rumors around C19 and other vaccines	Integrated dashboards at national and sub-national levels for C19 response and PHC indicators
Set up joint governing bodies to integrate accountability mechanisms	Encourage reliable and affordable access to bulk LOX through PSE and market shaping activities	Outreach services and PHC facilities have referrals for C19 vax and T2T	HWs trained on safe and effective use of oral antivirals, clinical care and triage, IPC, and referrals for O2 treatment	Leverage resources to strengthen a common cold chain and storage capacity	Integrated community engagement for supporting C19 response as part of PHC	Leverage quarterly RI meetings for reviewing and utilizing data on C19 vax rates
Develop norms and standards for the prevention of occupational risks (i.e. respiratory infections) in the health sector	Test innovative pay for performance approaches to increase vaccine uptake (and other response areas)	Schools utilized as platforms for providing RI and PHC services, and IPC sensitization	Joint supportive supervision to C19 response and PHC activities	Develop joint cold chain maintenance plans with RI	Leverage existing networks to create demand among priority populations for C19 vaccination and T2T	Integrated disease surveillance and AEFI tracking
Develop/strengthen policies that encourage task shifting and task sharing to optimize health workforce during health crises		Leverage delivery platforms to reach high priority populations, e.g. PLHIV centers, ANC, non-communicable disease clinics	HWs vaccinated against C19 and empowered to promote vaccination according to the national immunization policy	Ensure adaptive capacity of supply chains to support surge needs related to C19 waves	Joint evaluation of communication, demand generation, and innovation interventions	Joint data management training and proactive data backlog management
Develop and disseminate policy on booster shots for high risk populations		Facilities capacitated to expand access to O2 for use in treatment of C19 and beyond	Standardized and timely payment of HWs' incentives/ compensation	Joint planning and management of medical waste		Joint monitoring and evaluation of PHC and C19 response programs
Home-based care package includes access to C19 self-testing		Incorporate service delivery innovations, e.g. digital microplanning	Integrated capacity building of laboratory technicians	Incorporate digital temperature monitoring devices to sustain cold chain		

USAID investments in information and data systems have supported partner governments to:

| Capture vaccination data in national systems | Track coverage gaps in real time | Adopt digital health strategies and innovative data collection tools | Reduce data backlogs | Make data-based decisions |

COVID-19 Vaccine Scale Up and Integration:

Pivoting an emergency response for sustainable, health systems programs

Dr. Heena Brahmbhatt,
Global Health Security and COVID-19 Lead
USAID/South Africa

South Africa's vaccination priorities

1. Vaccination of Priority Populations at highest risk for COVID-19 severe illness and mortality:
   - People over 60 years of age
   - People with co-morbidities (HIV, TB, Hypertension, Diabetes, Obesity, Immunosuppression)
   - Pregnant/Postpartum Women
2. Integration of COVID-19 vaccinations into routine, primary health care

Integration starts at national level all the way to the facility level

National COVID-19 vaccine scale up program

National Department of Health

Pandemic response strategy pivoted to sustainable, integrated COVID-19 vaccines

National Vaccine Program Management Office (VPMO)
1. Health Systems Strengthening
2. Electronic Vaccination Data System
3. Supply Chain and Adverse Events Following Immunization
4. Demand Acceleration

Coordination with Provinces and Districts

National policies implemented by Provinces and Districts

- Technical Assistance provided to Provinces and Districts on Integration of COVID-19 vaccines into outreach programs and facilities
- Human resources and technical assistance provided for all streams supported by the VMPO
- Support to develop SOPs and strategies to integrate COVID-19 vaccines into routine health services
- Support and collaboration with DBE to integrate vaccines into school health program

Strengthening integration at facilities and outreach

Integration at community and facility level

- Development of SOPs and screening tools
- Stakeholder engagement to leverage community networks to integrate COVID-19 vaccines
- Development of behavioral nudge tools for "no missed opportunities"
- Grass roots level RCCE

Map labels: Bojanala, Ngaka Modiri Molema, John Taolo Gaetsewe, ZF Mgcawu, Dr Kenneth Kaunda, Frances Baard, Namakwa, Pixley ka Seme, Central Karoo, Cape Winelands, City of Cape Town, Overberg, Ehlanzeni, City of Tshwane, Nkangala, City of Johannesburg, Ekurhuleni, Sedibeng, Gert Sibande, Umkhanyakude, Amajuba, Zululand, Umzinyathi, King Cetshwayo, Uthukela, iLembe, uMgungundlovu, eThekwini, Harry Gwala, Ugu, Alfred Nzo, Joe Gqabi, OR Tambo, Chris Hani, Amathole, Buffalo City, Sarah Baartman, Nelson Mandela Bay

Reaching Priority Populations by leveraging on PEPFAR, DREAMS, OVC programs

Capricorn

Bojanala

Mopani

Ngaka Modiri Molema

Ehlanzeni

John Taolo Gaetsewe

City of Tshwane

Nkangala

ZF Mgcawu

City of Johannesburg

Ekurhuleni

Sedibeng

Dr Kenneth Kaunda

Gert Sibande

Thabo Mofutsanyana

Lejweleputswa

Umkhanyakude

Amajuba

Zululand

Umzinyathi

Frances Baard

King Cetshwayo

Uthukela

iLembe

uMgungundlovu

Namakwa

eThekwini

Harry Gwala

Ugu

Pixley ka Seme

Alfred Nzo

Joe Gqabi

OR Tambo

Central Karoo

Chris Hani

Amathole

Buffalo City

Cape Winelands

Sarah Baartman

City of Cape Town

Nelson Mandela Bay

Overberg

Legend

Green highlight: Global VAX district

Red outline: PEPFAR district supported by USAID: Reached HIV/TB priority Populations

Outreach Global VAX Program leveraged to provide other health services

Diabetes and Hypertension screening

HIV services

Male and Female Condoms

Health promotion materials
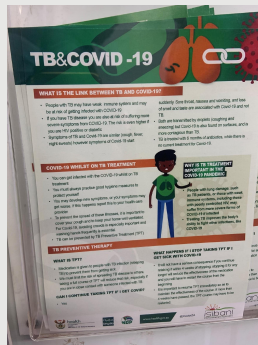
Integrated health messaging

Childhood EPI-Measles vaccines

Innovations in reaching priority populations such as Elderly for COVID-19 vaccines

<u>Schools have provided important opportunities to reach populations with inequitable access to health care</u>

>12 times more schools than health facilities in SA:

51,000 Schools

4,055 Health Facilities

69% of Elderly in Rural compared with 28% of Elderly in Urban settings vaccinated in schools

South Africa's Integration Plan

COVID-19 case load in South Africa
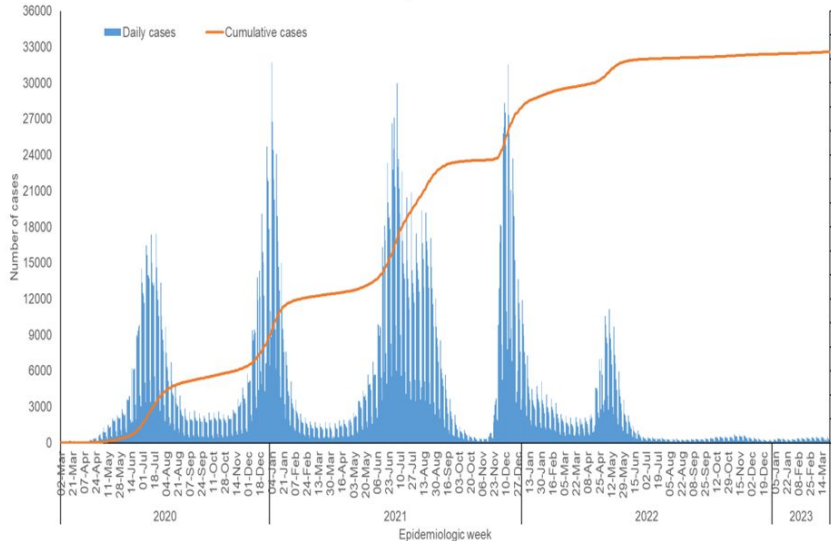

COVID-19 STATISTICS IN SOUTH AFRICA

	TESTS	POSITIVE CASES	RECOVERIES	DEATHS	NEW CASES
	21,454,339	4,055,656	3,946,943	102,595	1,358

Active Cases 6,118

01 February 2023

Deaths 0

Recovery Rate 97.3%

GAUTENG
Confirmed Cases: 1,346,712
Deaths: 21,148
Recoveries: 1,325,007
Active cases: 557

LIMPOPO
Confirmed Cases: 160,853
Deaths: 4,678
Recoveries: 155,998
Active cases: 177

NORTH WEST
Confirmed Cases: 203,844
Deaths: 5,067
Recoveries: 198,730
Active cases: 47

MPUMALANGA
Confirmed Cases: 204,367
Deaths: 4,774
Recoveries: 199,075
Active cases: 518

NORTHERN CAPE
Confirmed Cases: 115,882
Deaths: 3,249
Recoveries: 112,160
Active cases: 473

FREE STATE
Confirmed Cases: 217,666
Deaths: 7,964
Recoveries: 207,711
Active cases: 1,991

KWAZULU-NATAL
Confirmed Cases: 728,670
Deaths: 16,297
Recoveries: 711,549
Active cases: 824

WESTERN CAPE
Confirmed Cases: 710,754
Deaths: 22,478
Recoveries: 686,825
Active cases: 1,451

EASTERN CAPE
Confirmed Cases: 366,907
Deaths: 16,940
Recoveries: 349,888
Active cases: 79

Learn more to **BE READY** for #COVID19
sacoronavirus.co.za
Covid-19 Public Hotline
0800 029 999
Whatsapp 'Hi' to
0600 123 456

Vaccines Administered 38 405 045

health
Department:
Health
REPUBLIC OF SOUTH AFRICA

Weekly Updates

FindMyJab
Find Nearest
Vaccination Sites
www.FindMyJab.co.za
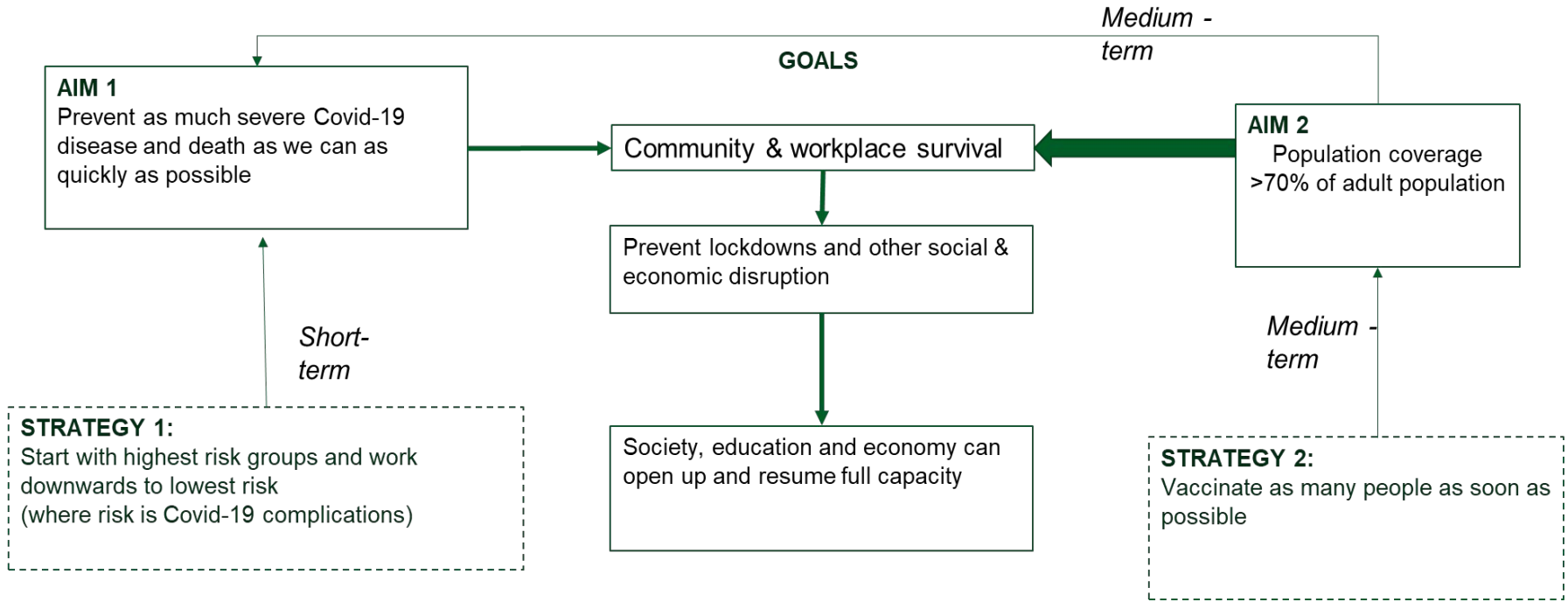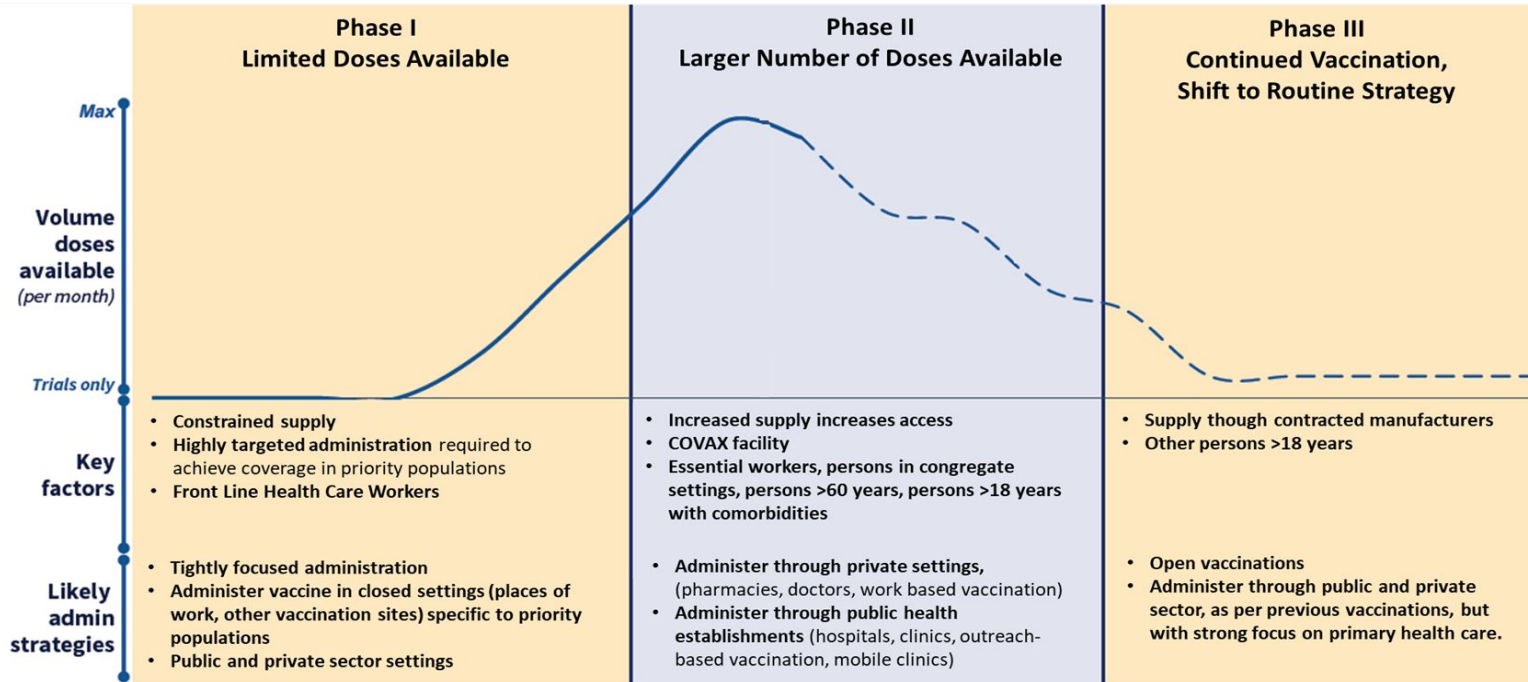
National and provincial trends of COVID-19 cases in South Africa

Knowledge SUCCESS

Overall Goals and Aims of the Covid-19 Vaccination Programme

Phased Approach: Based vaccine availability

	Phase I **Limited Doses Available**	**Phase II** **Larger Number of Doses Available**	**Phase III** **Continued Vaccination, Shift to Routine Strategy**
Volume doses available (per month)			
Key factors	• Constrained supply • Highly targeted administration required to achieve coverage in priority populations • Front Line Health Care Workers	• Increased supply increases access • COVAX facility • Essential workers, persons in congregate settings, persons >60 years, persons >18 years with comorbidities	• Supply though contracted manufacturers • Other persons >18 years
Likely admin strategies	• Tightly focused administration • Administer vaccine in closed settings (places of work, other vaccination sites) specific to priority populations • Public and private sector settings	• Administer through private settings, (pharmacies, doctors, work based vaccination) • Administer through public health establishments (hospitals, clinics, outreach-based vaccination, mobile clinics)	• Open vaccinations • Administer through public and private sector, as per previous vaccinations, but with strong focus on primary health care.

Key COVID-19 Vaccination Milestones

September 2020	Vaccine Ministerial Advisory Committee established
December 2020	Agreement with Covax signed
January 2021	Inter-ministerial Committee on Vaccines established
February 2021	Bilateral agreement with suppliers (Johnson and Johnson and Pfizer) signed Launch of Sisonke Study: Health care workers received single dose Covid Vaccine Janssen©
May 2021	Launch of Vaccine Roll-out starting with people 60 years and older, HCWs and other essential workers
July 2021	Eligibility extended to people 50 years and older
August 2021	Eligibility extended to people 35 years and older Eligibility extended to people 18 years and older
October 2021	12- to 17-year-olds became eligible for vaccination
November 2021	Booster doses for Sisonke participants
December 2021	Additional doses for immunocompromised individuals Second doses for adolescents (12 to 17 years) Introduction of homologous booster doses for Covid Vaccine Janssen© (after 2 months) and Comirnaty© (after 6 months)
January 2022	Commencement of ADAPT Support
February 2022	Establishment of National Vaccine Program Management Office
March 2022	Introduction of second booster dose after Covid Vaccine Janssen©
June 2022	Introduction of 4th doses for persons 50 years and older VMAC Advisory on Integration of COVID-19 Vaccines into Routine Health Services
January 2023	Introduction of additional boosters for persons 18 years and older
May 2023	Introduction of paediatric formulation for most at risk 5–11-year-olds

Knowledge
SUCCESS

COVID 19 Vaccines Administered per Week

Number of Vaccines Administered per week - by Province
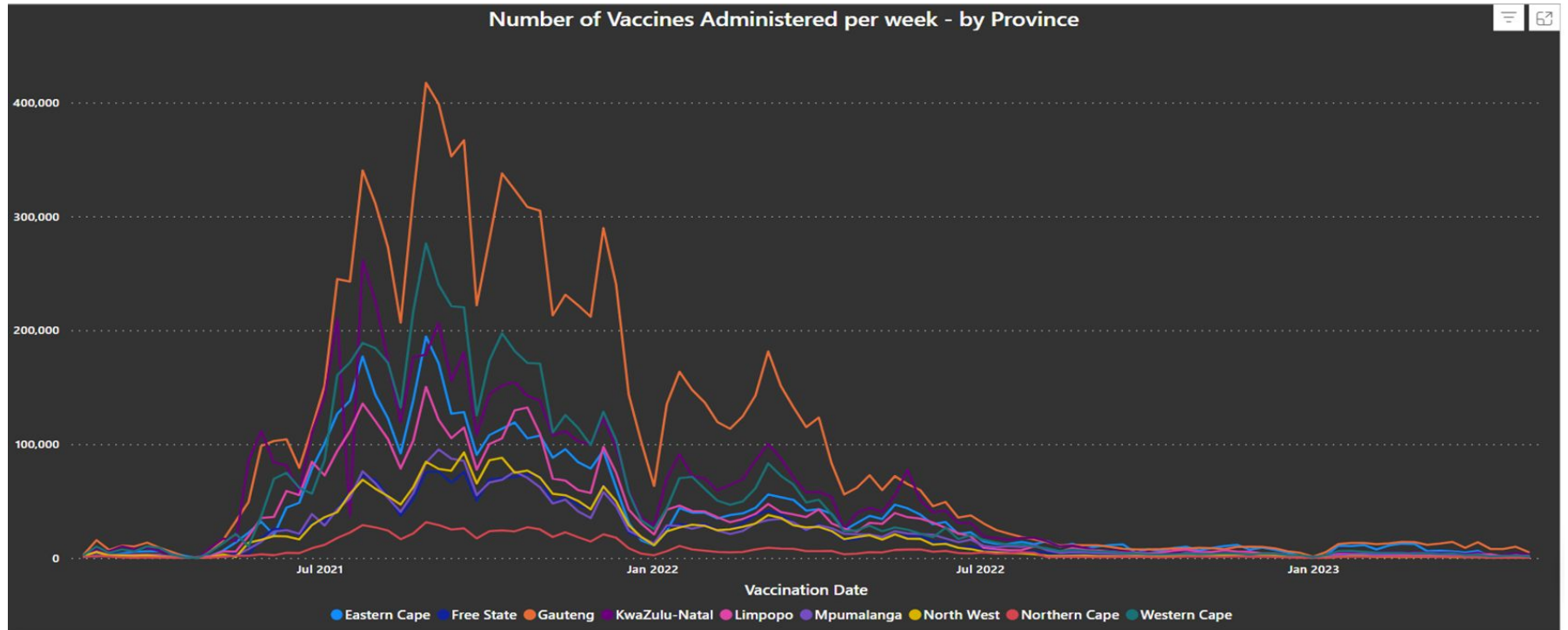
Age Group	Total Population	Total Number of Individuals Vaccinated	Individuals Vaccinated as a % of the Population
12-17	6,239,794	2,200,979	35.27%
18-34	17,785,668	7,248,633	40.76%
35-49	11,684,518	6,484,121	55.49%
50-59	4,815,992	3,171,007	65.84%
60+	5,501,299	3,677,303	66.84%
Unidentified		5,215	0.00%
Total	46,027,271	22,787,258	49.51%

COVID 19 vaccines: coverage by age groups

Achievements and Challenges

Achievements

- High level support and coordination through governance and technical structures
- Secure supply pipeline – delays in concluding contracts
- Targeted approach ensured that older people and other high-risk groups (HCWs) vaccinated early
- Single programme based on network of public sector, private sector and workplace health vaccination sites
- Electronic Vaccine Data System used in all settings - provides daily data on coverage
- Significant improvement in cold chain capacity and vaccine safety surveillance systems

Achievements and Challenges

- Considerable investment in overall vaccination programme – cold chain
- Vaccinators trained using standardised training programme (hosted on Dept's Knowledge Hub)
- <u>Sequential expansion of eligibility criteria – VMAC advisory, official circular, EVDS capability</u>
- <u>Sets foundation for providing adults vaccinations as a component of a comprehensive PHC service</u>

Challenges
- Limited demand for vaccines despite coverage of only just over 50% of adults (vaccines will be discarded and difficult to maintain momentum)

Poll

Integrating Vaccination into Routine Health Services in the Eastern Cape
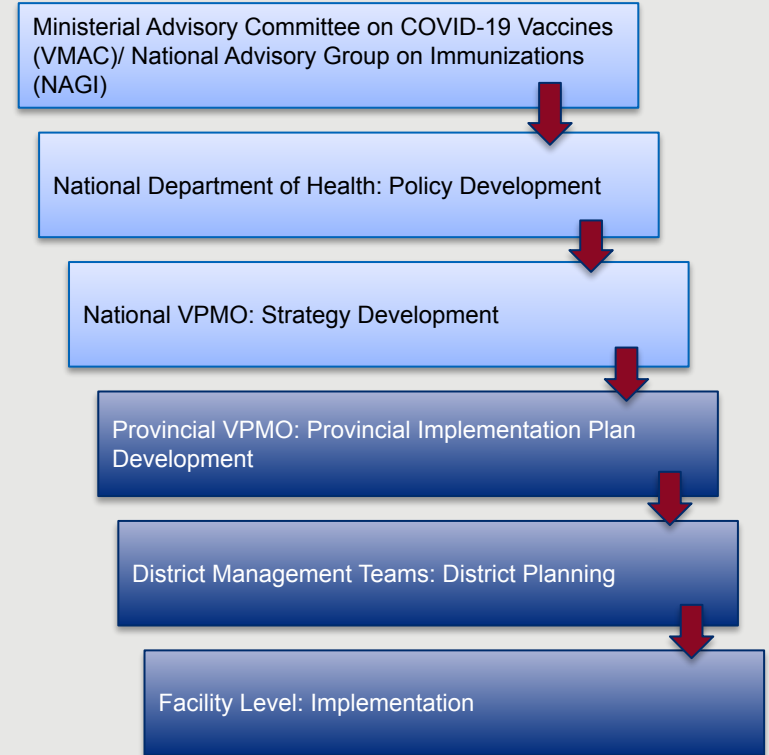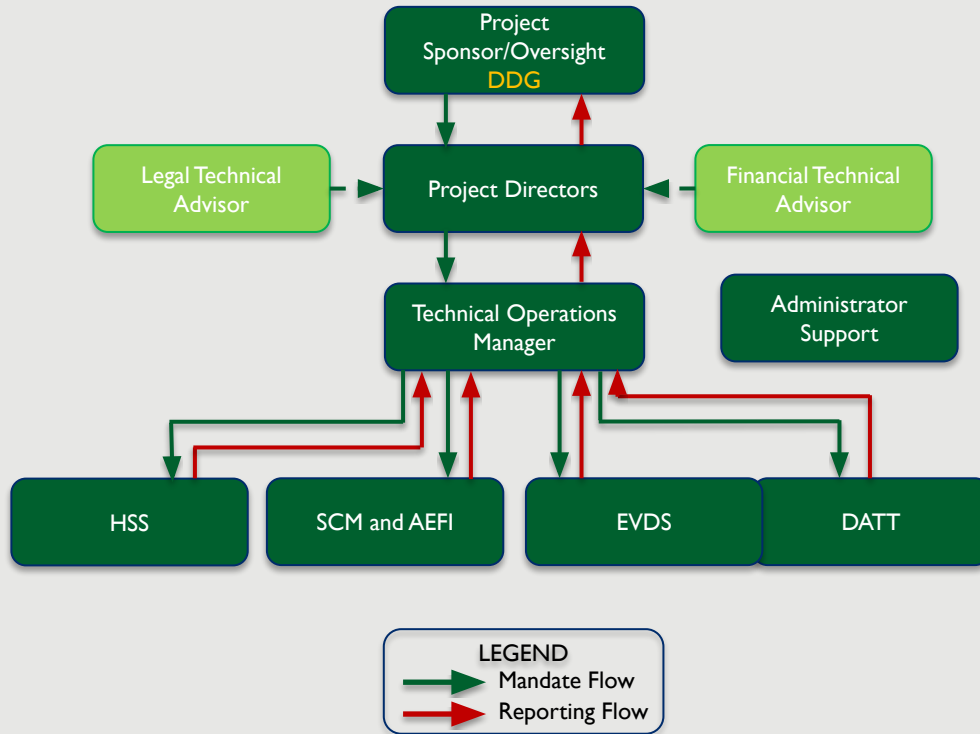
Integrating COVID-19 Vaccinations into Routine Health Care Services in the Eastern Cape, South Africa
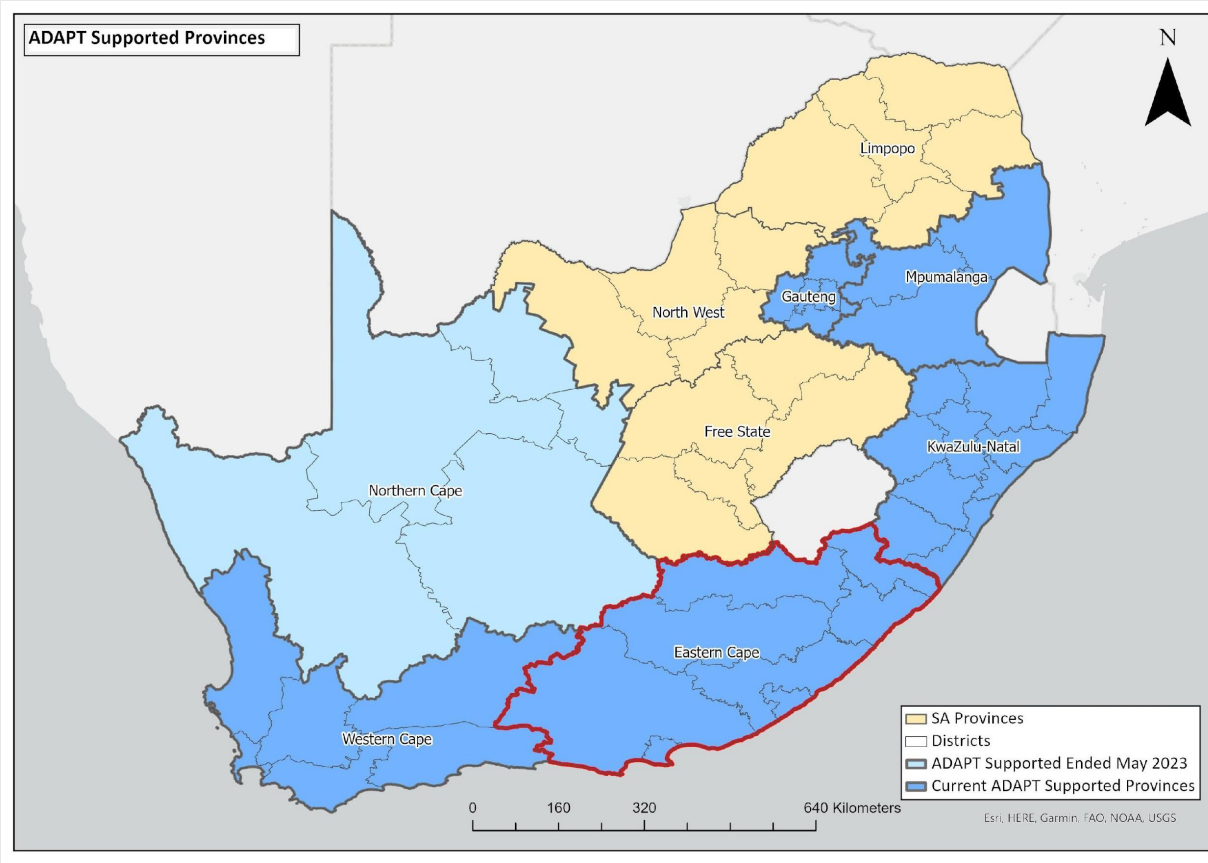
A deep-dive

27 July 2023

The National Vaccination Program Management Office provides core support to Provinces with the management of COVID-19 vaccine programs

Project Sponsor/Oversight
DDG

Legal Technical Advisor

Project Directors

Financial Technical Advisor

Technical Operations Manager

Administrator Support

HSS

SCM and AEFI

EVDS

DATT

LEGEND
Mandate Flow
Reporting Flow

Ministerial Advisory Committee on COVID-19 Vaccines (VMAC)/ National Advisory Group on Immunizations (NAGI)

National Department of Health: Policy Development

National VPMO: Strategy Development

Provincial VPMO: Provincial Implementation Plan Development

District Management Teams: District Planning

Facility Level: Implementation

ADAPT supported Provinces in South Africa

ADAPT Supported Provinces

Limpopo
Mpumalanga
Gauteng
North West
KwaZulu-Natal
Free State
Northern Cape
Eastern Cape
Western Cape

N

SA Provinces
Districts
ADAPT Supported Ended May 2023
Current ADAPT Supported Provinces

0   160   320   640 Kilometers

Esri, HERE, Garmin, FAO, NOAA, USGS

ADAPT

- Current 5 supported provinces

- Mobile outreach and technical assistance to facilities for support with the integration of the vaccine into routine health care

EASTERN CAPE

- Total population: 6,7m persons – 11% of the national population

- The eligible population for an adult COVID-19 vaccine – is 4,94m

- 78% of the elderly population reliant on old age grants

- Approximately 40% of the provincial population lives in scattered deep-rural villages

The phased rollout of the vertical COVID-19 vaccination program was resource intensive
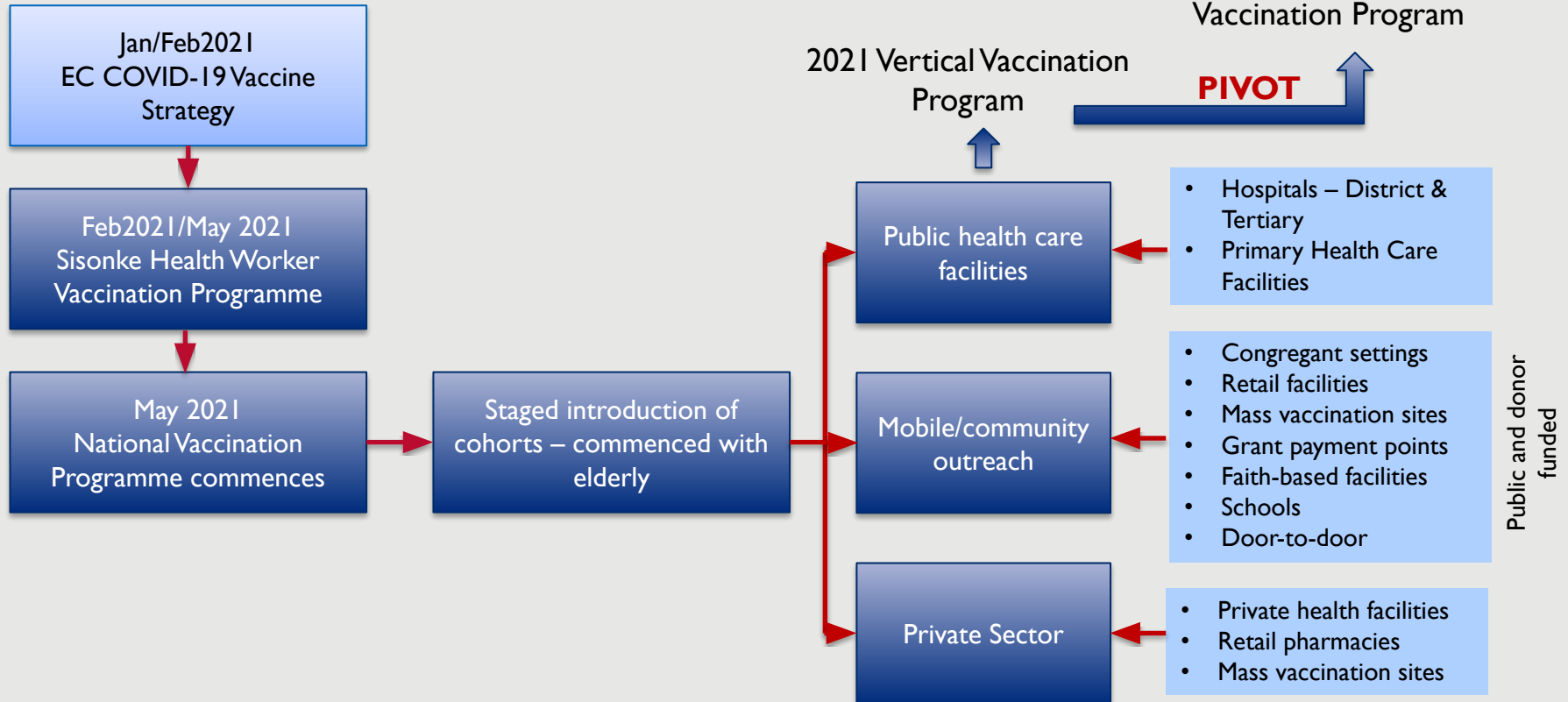
In 2022 - driving the pivot toward integration in the Eastern Cape

April 2022

Provincial-wide COVID-19 Scale-up Workshop
Establishment of the EC VPMO

May/June 2022

Preparation of an EC COVID-19 Scaleup Strategy
EC SOP for the Integration of the COVID-19 vaccine into routine care

July 2022

Identified 77 priority facilities for direct technical assistance
Commenced the development of tools
- Facility readiness assessment
- Tracking performance

October 2022

Increased the support to an additional 28
Commenced development of Survey123 Integration Tool – real-time data capturing and monitoring
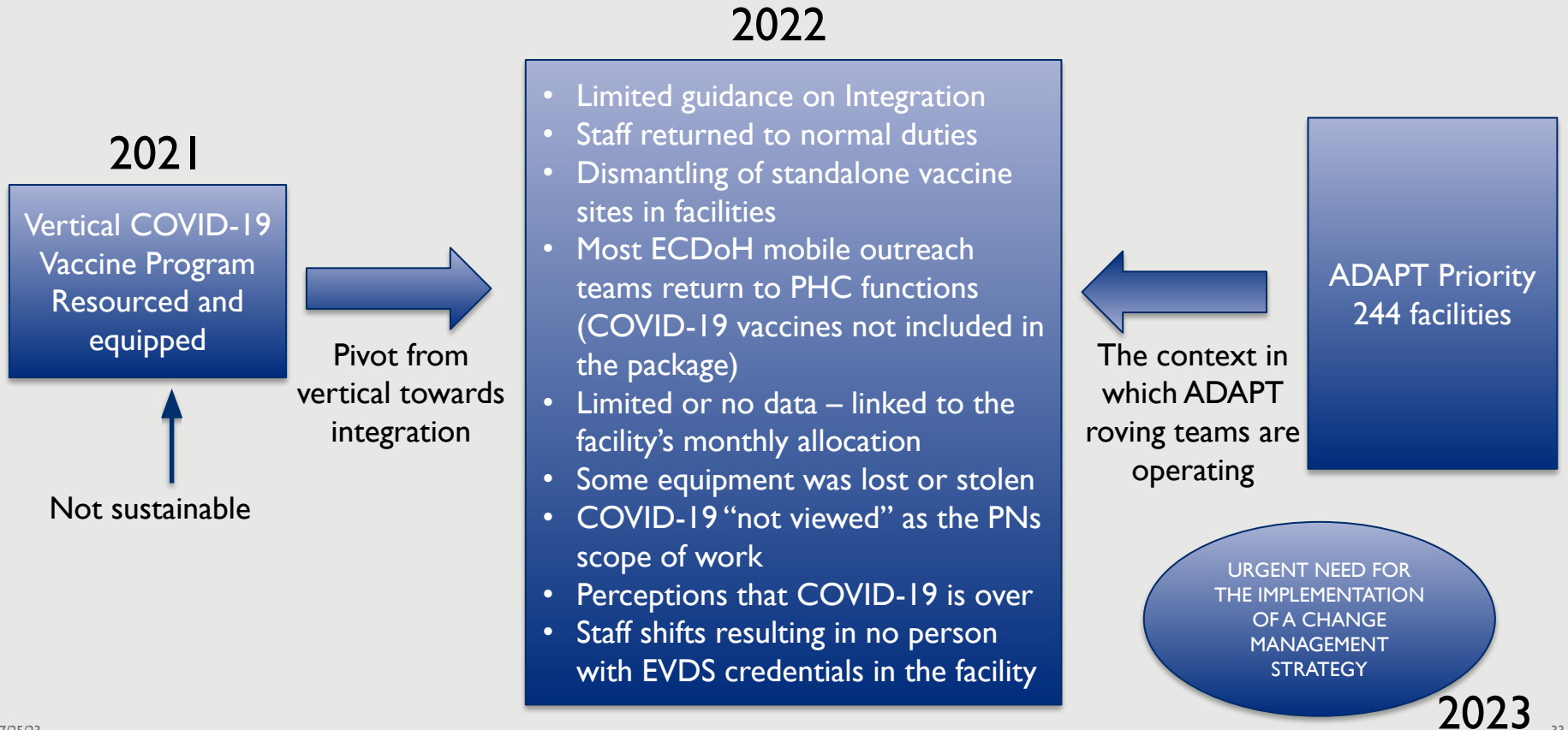
January 2023

Increased support to additional 70 facilities
Commenced the training toward introducing a Change Management Strategy

May 2023

Increased support to additional 69 facilities
Scale-up the Change Management Training
Introduction of change management workshops at the facility level
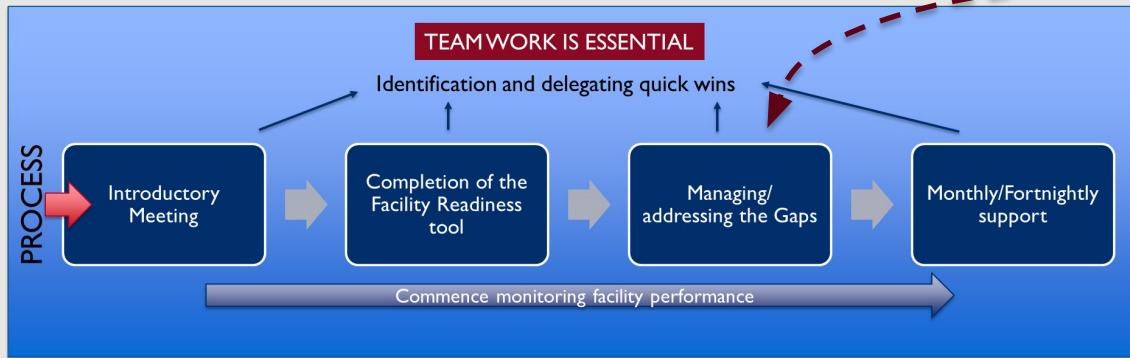
Impact of the dismantling for the Vertical COVID-19 Vaccine Program

2022

- Limited guidance on Integration
- Staff returned to normal duties
- Dismantling of standalone vaccine sites in facilities
- Most ECDoH mobile outreach teams return to PHC functions (COVID-19 vaccines not included in the package)
- Limited or no data – linked to the facility's monthly allocation
- Some equipment was lost or stolen
- COVID-19 "not viewed" as the PNs scope of work
- Perceptions that COVID-19 is over
- Staff shifts resulting in no person with EVDS credentials in the facility

2021

Vertical COVID-19 Vaccine Program Resourced and equipped

Not sustainable

Pivot from vertical towards integration

The context in which ADAPT roving teams are operating

ADAPT Priority 244 facilities

URGENT NEED FOR THE IMPLEMENTATION OF A CHANGE MANAGEMENT STRATEGY

2023

Technical Assistance for supporting the integration of the COVID-19 vaccines into routine care provided by USAID

Roving Team Composition

TEAM = [1x HSS] + [1x Pharmacist] + [% LOE - AEFI] + [1x M&E] + [1x DATT]

TEAM WORK IS ESSENTIAL

Identification and delegating quick wins

PROCESS → Introductory Meeting → Completion of the Facility Readiness tool → Managing/addressing the Gaps → Monthly/Fortnightly support

Commence monitoring facility performance

MANAGEMENT AND OVERSIGHT

(a) Demand Creation

(b) Training

(c) Facility based support

	RTC HSS	Sub D Pharmacist	District	Subdistrict	Facility	MFL code	Section 22(A) 15 permit	Getting CC eq from RFW	HSS 1st Go live visit	Supporting evidence submitted	Readiness assessment completed	Supporting evidence submitted	Already vaccinating	Reporting on Cold Chain capacity & support
									Date	Y/N	Date	Y/N	Y/N	
1	Afikile	Pamela Sotsaka	A Nzo DM	Matatiele LM	Maluti CHC	1643651	yes	yes	18 July 2022	yes			Y	
2	Afikile	Pamela Sotsaka	A Nzo DM	Matatiele LM	Taylor Bequest Hospital (N	1769960	yes	no	18 July 2022	yes			Y	
3	Afikile	Pamela Sotsaka	A Nzo DM	Matatiele LM	Matatiele Community Clin	1656903	yes	yes	18 July 2022	yes			N	28/7/1 called the Subd pharmacist Pamela will see
4	Afikile	vacant	A Nzo DM	Mbizana LM	Amadiba Clinic	1145552	yes	yes	21 July 2022	yes			Y	

Q1: ADAPT Focussed facilities

Keeping a record of sites visited per month/ monitoring return dates

SharePoint

Development of tools, database of common issues and actions taken

Databases
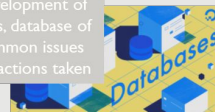
ADAPT M&E reporting

Roving Team Member High Level Responsibilities

HSS SPECIALIST	PHARMACIST	EVDS/M&E	DEMAND CREATION
Facility Level • Readiness assessment • Clinical requirements • HRH capacity • Patient flow • Change management strategies **District/Sub-district** • Collaboration and engagements	• Vaccine stock management and control • Stock Visibility System (SVS) Compliance • Expiry date management • Compliance with Good Pharmacy Practice • Cold chain management • Medsafety app - AEFI and AESI	• EVDS training • Management of EVDS credentials • Eliminating paper-based vaccinations • Back capturing if required • Undocumented citizens • Monitor daily performance	• Health workers and social mobilisers' training • Social listening • Stakeholder management • Address vaccine hesitancy • DATT material

Challenges Experienced in the Field

Supply Chain Management

- Inconsistent reporting on SVS
- Shortage of qualified staff
- Noncompliant good pharmacy practice
- Incorrect use of cold chain equipment
- Transport challenges
- Poor stock management
- Poor cold chain monitoring
- Reluctant to order vaccines

Clinical Interface

- "No" official notification
- Staff reluctant - perceived staff and equipment shortages
- Staff attitudes
- No cascading of information in the facility
- Working conditions leading to resistance
- Internal staff conflicts
- Staff are anti-vaxxers
- Task shifting
- Knowledge limitations

EVDS

- Poor EVDS credential management
- EVDS violations due to:
  - Lack of connectivity/ data
  - Poor work ethics
  - "The way it has always been done"
- Lack of training and capacity
- Expired credentials
- Clinical staff - limited computer literacy

Demand Creation

- Health promoters reluctant to include COVID-19 vaccines as part of their morning health talks
- No or limited demand creation material
- Community Health Care workers not trained
- Poor or no capacity development

Integration of the COVID-19 vaccine into routine health care services "value-chain"

The challenge cascade

New vaccine fridges

Equipment – cold boxes and continuous temperature loggers

Training undertaken

Pharmacy Compliance

Improved vaccine management

FIXED

• The negative impact of load-shedding on the technical workings of vaccine fridges

• The below standard workmanship of electrical installations in facilities

• Lack of generators and diesel

• Lack of preventative maintenance of equipment

• Lack of space

• Lack of vehicles, drivers, and fuel for inter-facility transportation

• Lack of network availability (either it is just or negative impact by load shedding) that prevents EVDS, SVS, and remote temperature monitoring devices from being real-time

• Shortage of permanently appointed sub-district pharmacists

• Shortage of qualified pharmacy staff or the incorrect placement of pharmacy staff, e.g., a CHC has no pharmacist vs. a 75-bed hospital with 57% bed occupancy with four qualified pharmacists.

BUT NOW…..

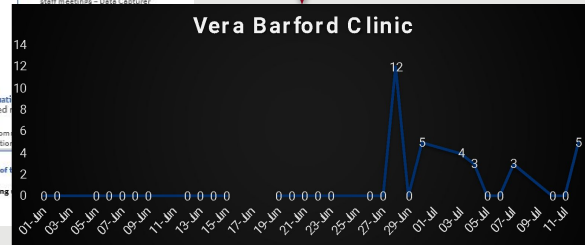# Using tools and data to support decision making

Real-time dashboards

Move to digital tools to improve data management and monitoring
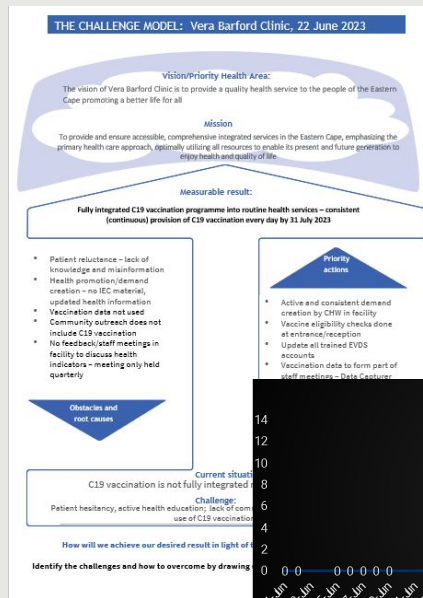
The positive impact of the change management intervention
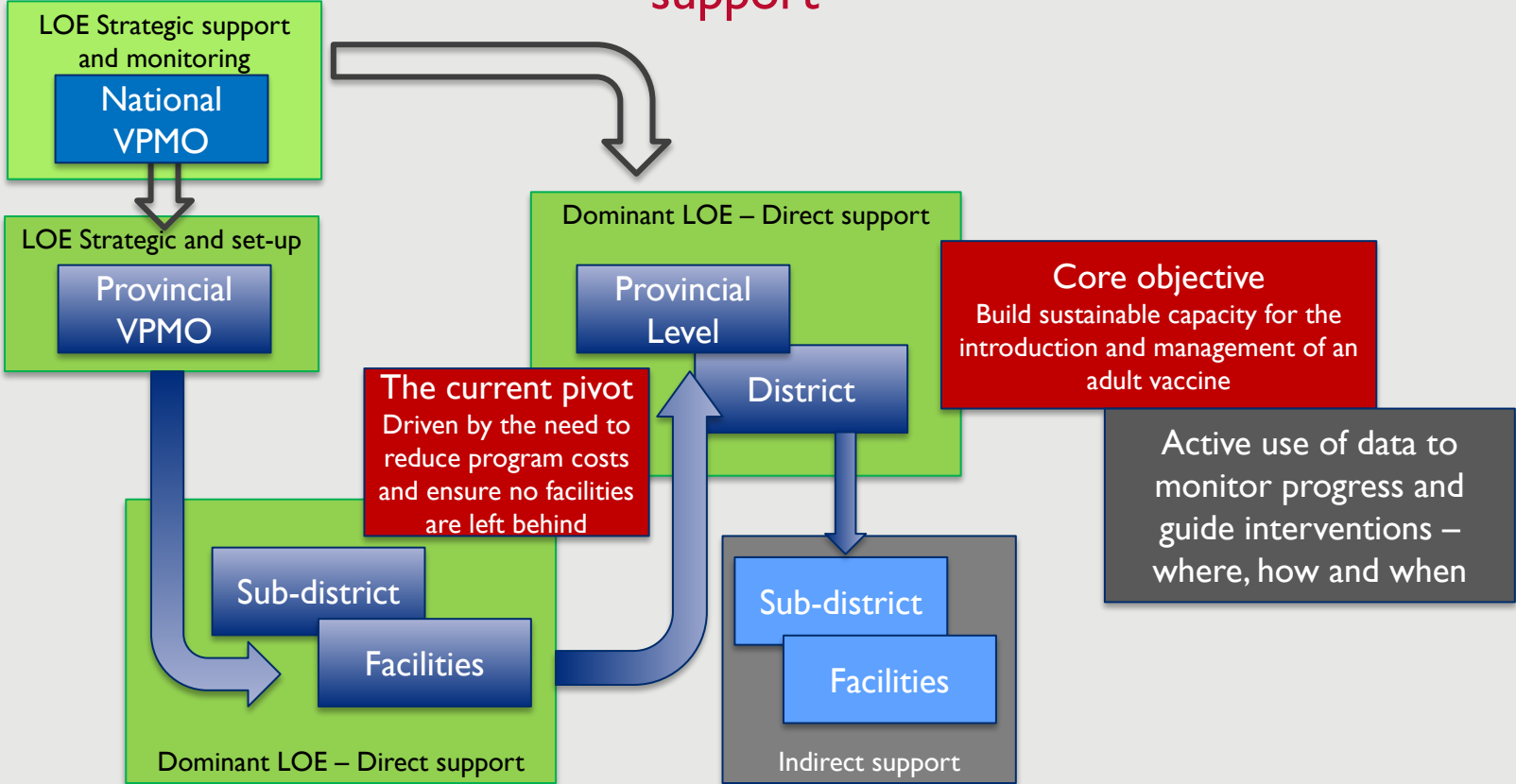
Monitoring data has informed the need to pivot

Increased reliance on the public sector and primary vaccination sites over time but declining availability of sites

Year	National & Eastern Cape	Total Vaccines administered	Outreach	Primary Vax Site	Private	Public	(n) Public Primary Vax Sites
			Percentage of vaccine sites				
2021	National	**28 118 556**	50%	50%	26%	73%	3015
	Eastern Cape	**3 168 654**	39%	61%	15%	85%	941
2022	National	**10 151 524**	44%	56%	28%	72%	3286
	Eastern Cape	**1 205 491**	29%	71%	14%	86%	849
2023	National	**799 766**	30%	70%	22%	77%	2036
	Eastern Cape	**142 891**	21%	79%	12%	88%	317

Data extracted – 23 July 2023 – National Department of Health – Health Information Centre

Monitoring data led to a further pivot required in the Technical Assistance support

LOE Strategic support and monitoring

National VPMO

LOE Strategic and set-up

Provincial VPMO

Dominant LOE – Direct support

Provincial Level

District

Sub-district

Facilities

Dominant LOE – Direct support

The current pivot
Driven by the need to reduce program costs and ensure no facilities are left behind

Core objective
Build sustainable capacity for the introduction and management of an adult vaccine

Active use of data to monitor progress and guide interventions – where, how and when

Sub-district

Facilities

Indirect support

Lessons Learnt from the Eastern Cape scaled into the National ADAPT Program

- The structure of the roving teams to provide technical assistance to the facilities with integration

- The Survey123 facility readiness assessment tool – dashboard now shows all ADAPT-supported provinces

- The need for change management – expanded to KwaZulu-Natal – training completed and has commenced with facility engagements

- The use of data to track performance and decision-making – now actively part of the National HSS stream activities

THANK YOU

Vaccines save lives

Lives save social grants

Social grants save households

Q&A / Discussion

Scale up and implementation of the EVDS (Electronic Vaccination Data System) Platform

Electronic Vaccination Data System (EVDS) for COVID 19 Vaccines

Presented by Milani Wolmarans
Chief Director : Digital Heath Systems
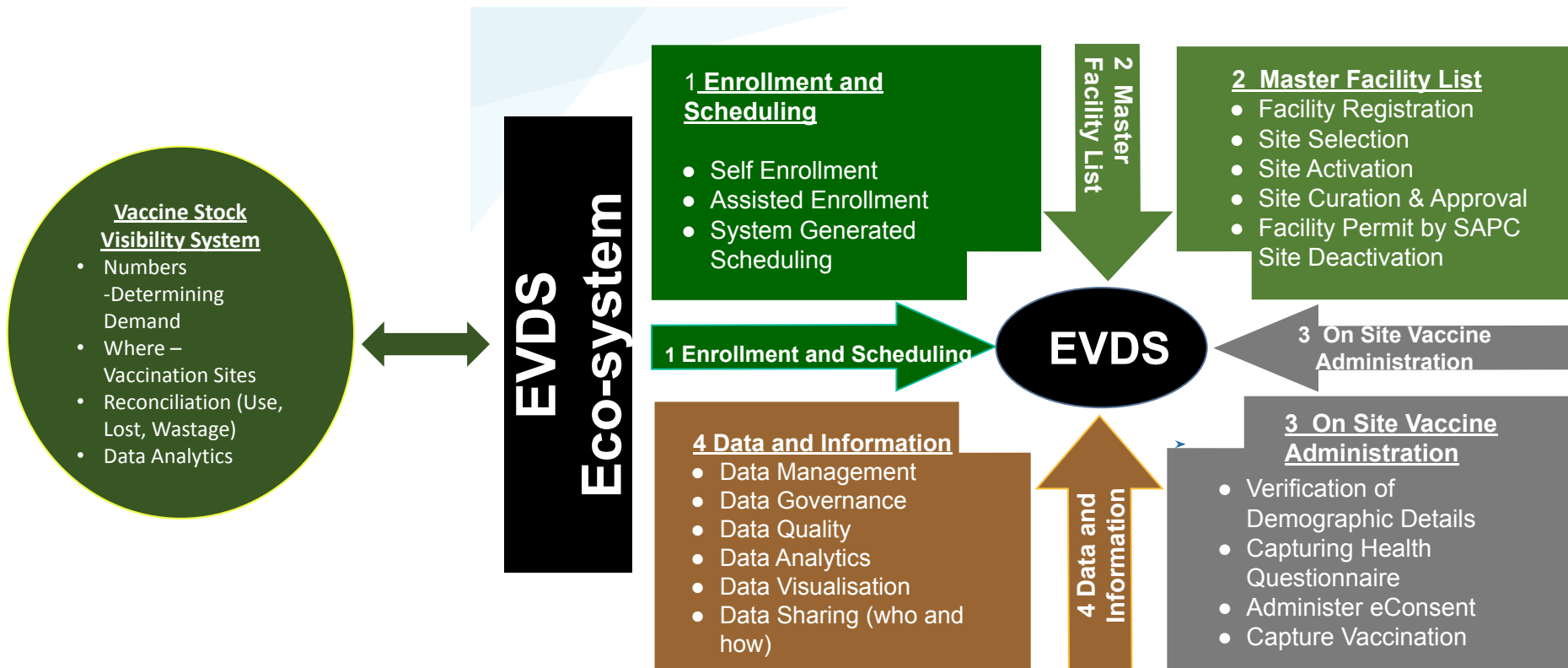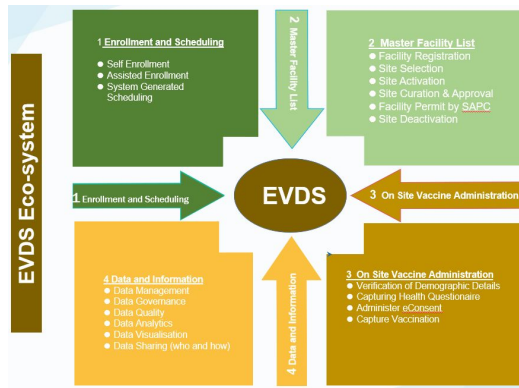
Date: 27 July 2023

Policy Context

- The EVDS has been adopted as the official system for capturing Covid19 vaccination events by all vaccination service points in South Africa.

- It is the first time in the South African history that an Information System developed by government has been embraced and adopted for implementation by both the public and private sector.

EVDS Ecosystem

EVDS Eco-system

Vaccine Stock Visibility System
- Numbers -Determining Demand
- Where – Vaccination Sites
- Reconciliation (Use, Lost, Wastage)
- Data Analytics

1 **Enrollment and Scheduling**
- Self Enrollment
- Assisted Enrollment
- System Generated Scheduling

2 **Master Facility List**
- Facility Registration
- Site Selection
- Site Activation
- Site Curation & Approval
- Facility Permit by SAPC Site Deactivation

2 Master Facility List

1 Enrollment and Scheduling

EVDS

3 On Site Vaccine Administration

3 **On Site Vaccine Administration**
- Verification of Demographic Details
- Capturing Health Questionnaire
- Administer eConsent
- Capture Vaccination

4 **Data and Information**
- Data Management
- Data Governance
- Data Quality
- Data Analytics
- Data Visualisation
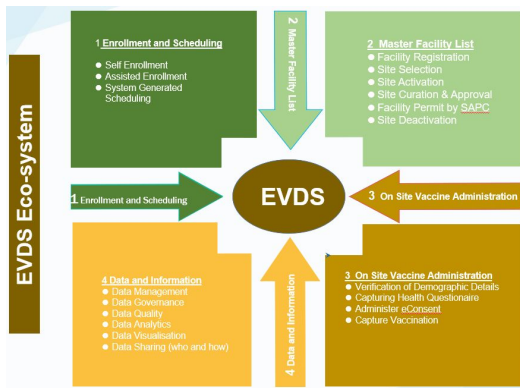- Data Sharing (who and how)

4 Data and Information

Why the EVDS, its design and architecture

- EVDS provide an **authoritative registry** to track the various Vaccination Programme Metrics. (Coverage, pharmacovigilance etc.) toward control of pandemic

- **Accountability**: EVDS data (electronic vaccinee registry) combined with vaccine procurement data can show the supply situation in real time and reduce vaccine wastage. Informs future vaccination forecast which streamline budget allocation and management.

- Fundamental purpose - **connect those who are seeking a vaccine to a registered vaccination site** with the focus on efficiency and quality and therefore is critical that foundational data flow of the EVDS is not impacted by 3rd party system workflows

- Support **uniform processes and workflo**ws across all stakeholders for **equitable access**

- EVDS fundamental to **curation** and **tracking of population receiving vaccine service.**

- EVDS provide **up-to-date vaccination coverage across all age groups and sub-populations, as well as in different geographic or healthcare-providing areas**. Essential to identify unvaccinated populations and optimal **return on investment**

- EVDS designed to ensure **compliance with regulatory requirements from South African Health Products Regulatory Authority (SAHPRA)**, and enforce best practice during vaccine administration

Why the EVDS and its design and architecture

EVDS Eco-system

1 Enrollment and Scheduling
- Self Enrollment
- Assisted Enrollment
- System Generated Scheduling

2 Master Facility List
- Facility Registration
- Site Selection
- Site Activation
- Site Curation & Approval
- Facility Permit by SAPC
- Site Deactivation

1 Enrollment and Scheduling

2 Master Facility List

EVDS

3 On Site Vaccine Administration

4 Data and Information
- Data Management
- Data Governance
- Data Quality
- Data Analytics
- Data Visualisation
- Data Sharing (who and how)

4 Data and Information

3 On Site Vaccine Administration
- Verification of Demographic Details
- Capturing Health Questionaire
- Administer eConsent
- Capture Vaccination

- **Appropriate data protection and governance policies are applied** to comply with legislative requirements and monitor legitimate, appropriate, and proportionate use and processing of data that may be routinely collected and managed in health information.

- Data collected on EVDS together with the disease-surveillance data to monitor the real-time **impact of vaccines**, both in terms of **effectiveness, safety and durability**.

- **Reduce need for paper-based records** which are often lost, impact greatly on data quality and availability of data, and can impact on quality of the vaccination process (contribute to re-vaccination of vaccinated individuals) and accountability

- **Medical Aid Data Collected** through the EVDS will link with the **reimbursement models**

- EVDS will **provide Vaccinee Information** for the **No-Fault Compensation Process**

- Design approach of the EVDS allow for **adaptation to support for future vaccination or other public health prevention strategies.** EVDS can be repurposed for routine immunisation for example, Polio, Tuberculosis, Haemophilus Influenza, hepatitis B, Pneumococcal conjugate, Measles, and Human papillomavirus vaccines.

EVDS key workflow processes
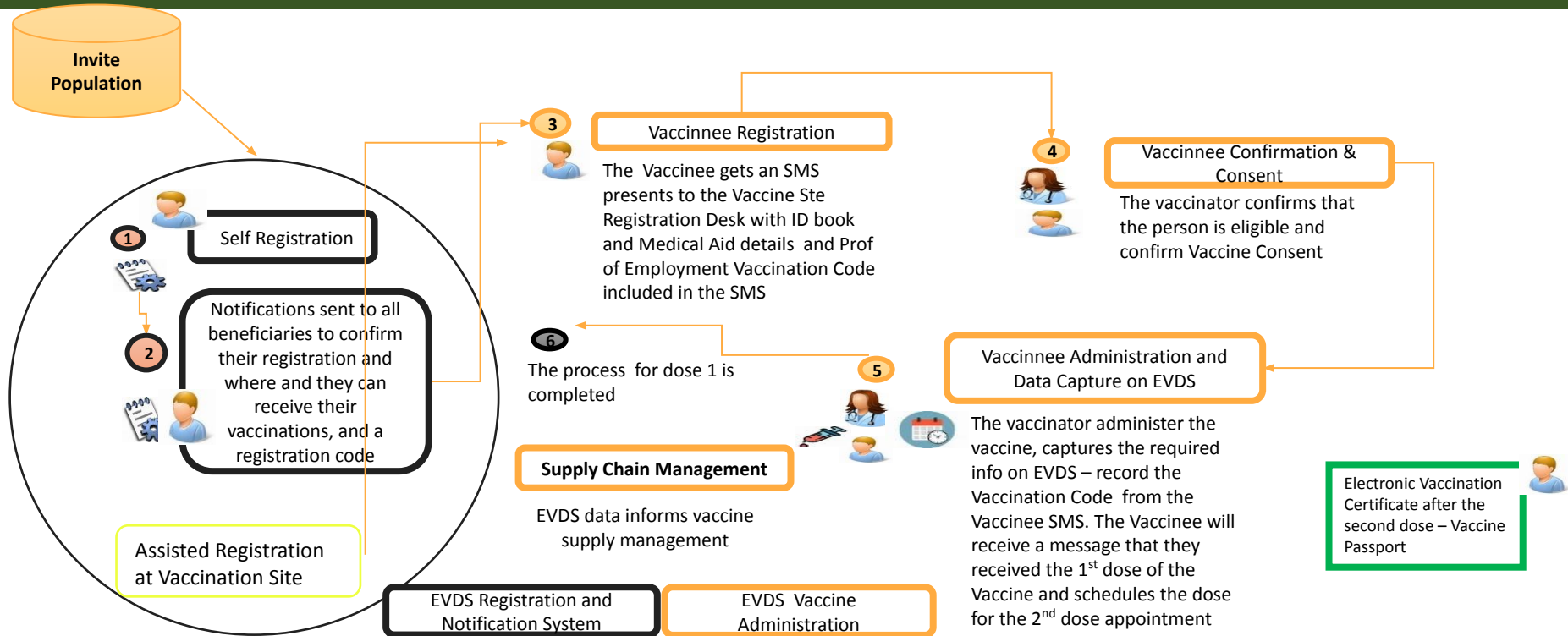
Development Snapshot: National Electronic Vaccination Data System (EVDS)
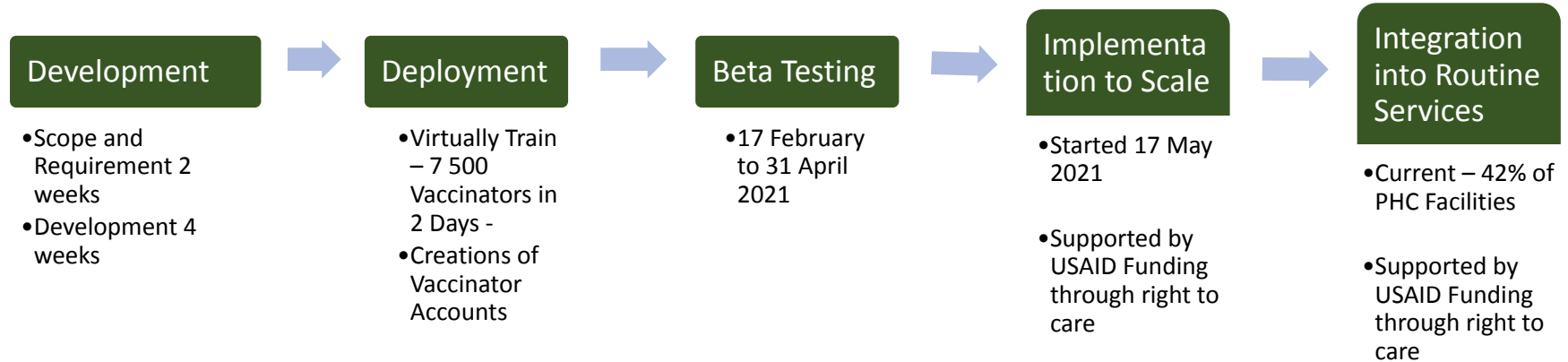
- **Key Considerations:**
  - **Evaluate the potential for digital system adoption:** deploy a system that is intuitive and caters for all levels of digital literacy within the health sector and public environments
  - **Availability of broadband infrastructure:** deploy a integrated system that enables access to all people either via mobile phones (USSD & WhatsApp) or via Web Portal
  - **Rapid deployment context:**
    - focus on simplicity
    - leveraged the work done on the National Health Insurance Data Systems,
    - Costs effective solution
    - Data needed to be available in near real-time to support the vaccination program

- **System Development Approach:** Combined an Agile and DevOP approach
- **Electronic Vaccination Data System** is a National Web-Based System on line system

Deployment Snapshot: National Electronic Vaccination Data System (EVDS)

Development
- Scope and Requirement 2 weeks
- Development 4 weeks

→

Deployment
- Virtually Train – 7 500 Vaccinators in 2 Days -
- Creations of Vaccinator Accounts

→

Beta Testing
- 17 February to 31 April 2021

→

Implementation to Scale
- Started 17 May 2021
- Supported by USAID Funding through right to care

→

Integration into Routine Services
- Current – 42% of PHC Facilities
- Supported by USAID Funding through right to care

South African COVID-19

1.1. Vaccine Sites Using EVDS

26 Jul 2023 20:01
Last Updated

Province, District, Sub-District
All

Facility, Site
All

Private/Public
All

Vaccination Week
All

2/17/2021   7/26/2023
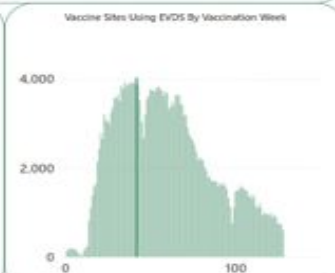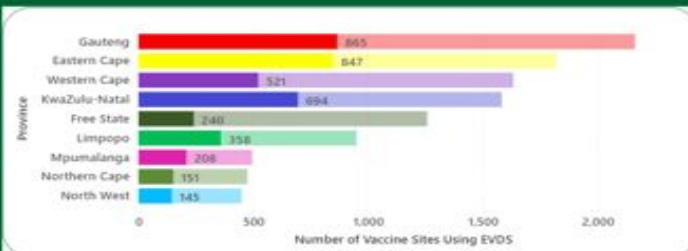
Vaccine Sites Using EVDS By Vaccination Week

Province	42	Total
Eastern Cape	847	847
Free State	240	240
Gauteng	865	865
KwaZulu-Natal	694	694
Limpopo	358	358
Mpumalanga	208	208
North West	145	145
Northern Cape	151	151
Western Cape	521	521
Total	4029	4029

Main Menu

1. Vaccine Sites	2. Vaccines Administered
3. Individuals Vaccinated	4. Additional and Booster Doses
5. Total Vaccinations Recorded in EVDS	6. Data Exports

Sub-Menu

1.1. Vaccine Sites Using EVDS

1.2. Active Vaccinators At Vaccine Sites

1.3. Vaccine Sites Using EVDS By Quarter

health
Department:
Health
REPUBLIC OF SOUTH AFRICA

NATIONAL DEVELOPMENT PLAN 2030

Phila Inspired to live

26 Jul 2023 20:01
Last Updated

2.3. Vaccines Administered Doses

South African COVID-19
Vaccine Rollout Dashboard

Province, District, Sub-District
All

Vaccine Rollout Phase
All

Year, Month
All

Facility, Site
All

Public/Private
All

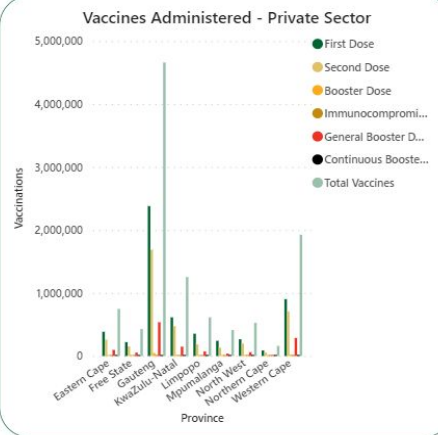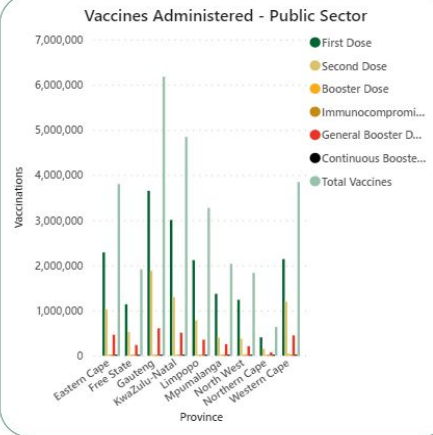| 22,800,639 First Dose [1]	11,487,958 Second Dose [2]	240,654 Sisonke Booster Dose [3]	24,202 Immunocompromised Additional Dose [4]	4,457,418 General Booster Dose [5]	71,915 Continuous Booster Dose [6]	39,082,786 Total Vaccines Administered [7]

Main Menu

1. Vaccine Sites
2. Vaccines Administered
3. Individuals Vaccinated
4. Additional and Booster Doses
5. Total Vaccinations Recorded in EVDS
6. Data Exports

Province	First Dose Vaccines Administered	Second Dose Vaccines Administered	Sisonke Booster Vaccines Administered
Eastern Cape	2,670,272	1,284,992	
A Nzo DM	316,728	134,857	
Matatiele LM	81,700	32,788	
Mbizana LM	109,783	50,941	
Ntabankulu LM	34,803	15,918	
Umzimvubu LM	90,442	35,210	
Amathole DM	320,421	157,022	
Total	22,800,639	11,487,958	

Vaccine Type
All

Age
All

Sex
All

Documented/Undocumented
All

Vaccination Week
All

2/17/2021   7/26/2023

Vaccines Administered - Public Sector

Vaccinations

7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0

Legend:
- First Dose
- Second Dose
- Booster Dose
- Immunocompromi...
- General Booster D...
- Continuous Booste...
- Total Vaccines

Province: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West, Northern Cape, Western Cape

Vaccines Administered - Private Sector

Vaccinations

5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0

Legend:
- First Dose
- Second Dose
- Booster Dose
- Immunocompromi...
- General Booster D...
- Continuous Booste...
- Total Vaccines

Province: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West, Northern Cape, Western Cape

Sub-Menu

2.1. Vaccines Administered - Primary Vaccination...
2.2. Vaccines Administered - Additional and Boost...
2.3. Vaccines Administered Doses
2.4. Vaccines Administered Per 100 000 Population
2.5. Vaccines Administered By Vaccination Week...
2.6. Vaccines Administered By Vaccination Week
2.7. Scheduled Completing Doses
2.8. First Dose Vaccines Administered By...
2.9. Vaccines Administered - 5-11 Year Old Age...

*Note 1: One dose J&J vaccines (single dose regiment) administered and first dose Pfizer vaccines (two dose regiment) administered.

*Note 2: Second dose Pfizer vaccines (two dose regiment) administered.

*Note 3: Sisonke booster dose J&J vaccines administered.

*Note 4: Immunocompromised additional dose J&J vaccines or Pfizer vaccines administered.

*Note 5: J&J booster dose vaccines administered (two months after first dose J&J vaccine or immunocompromised additional dose vaccine has been administered OR six months after second dose Pfizer vaccine has been administered).

*Note 6: J&J or Pfizer continuous booster dose vaccines administered (6 months s after last J&J or Pfizer booster dose vaccine has been administered).

*Note 7: First Dose + Second Dose + Sisonke Booster Dose + Immunocompromised Additional Dose + General Booster Dose Vaccines Administered + Continuous Booster Dose Vaccines Administered.

health
Department:
Health
REPUBLIC OF SOUTH AFRICA

NATIONAL
DEVELOPMENT
PLAN
2030

Phila
Inspired to live

01 Jul 2023 06:00
Last Updated

Province
All

District
All

Sub-District
All

Age Group
All

Sex
All

Condition
All

Last Visit Date
2/17/2021   6/30/2023

Prevalence of Conditions - Total By Condition

Prevalence of Conditions - Total By Condition

abetes	Heart Disease		HIV		Hypertension		Lung Disease		TB	
Condition Type	Count	% of Total Condition Type	Count	% of Total Condition Type	Count	% of Total Condition Type	Count	% of Total Condition Type	Count	% of Total Condition Type
14.95%	188,904	2.76%	2,148,209	31.41%	3,329,056	48.68%	61,717	0.90%	39,412	0.58%

In terms of reporting on conditions for an individual, an individual may be counted more than once if they answered 'yes' to more than one condition. For example, an individual may be counted for having Diabetes as well as Hypertension and will then be counted once for both instances. This means that the individual will also be counted for 'Diabetes Plus Any Other'.

- Disclaimer 1
- Disclaimer 2
- Disclaimer 3
- **Total By Condition**
- Total By Condition and Age Group
- Total By Condition, Age Group and Sex
- Total By Condition, Gender and Location
- Individual Having One or More Conditions
- Individuals Having One or More Conditions - by Sex...
- Individuals Having HIV/TB
- Individuals Having HIV/TB By Age Group and Sex
- Individuals Having HIV/TB By Sex and Location
- Individuals Having Diabetes
- Individuals Having Diabetes By Sex and Age Group
- Individuals Having Diabetes By Sex and Location
- Vaccinated Suspected Pregnant Females By Age...

Concluding Remarks

- **South Africa** has demonstrated that a national digital system is not only possible, but essential to responding to Public Health issues
  - The development of the 1st Module of the integrated EMR for SA focussing on HIV and TB has commenced
- **Communities of Practices** has been established and will be fundamental to eradicating the threat of Covid19 as well as preparedness for future pandemics
- The implementation **partnership** with RTC is demonstrative of implementing a fully government lead programme supported by donor funding
- **Digital data intelligence** has proven to be the most effective strategy toward prioritisation of activities
- **The EVDS –** has catalysed RSAs capabilities to digitally support the UHC agenda

Q&A / Discussion

Additional Integration Resources

Integration Blog Series

- Blogs available on Knowledge SUCCESS
- Topics include:
  - Developing a COVID-19 Vaccination Integration Strategy in Uganda
  - Integrating COVID-19 Vaccination Services into a UHC System in the Philippines
  - Integrating COVID-19 Vaccine Demand Generation Activities into Primary Health Care: Examples from Liberia and Nigeria
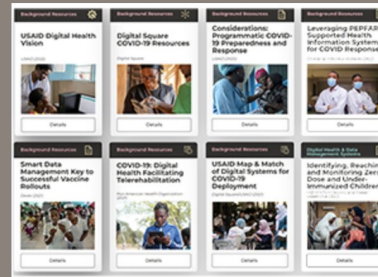 - And more to come

Photo by: EpiC Uganda

Knowledge
SUCCESS

Essential Resource Collections

Published

- Reaching High Priority Populations with the COVID-19 Vaccine
- Data Management & Digital Health

Forthcoming

- Resilient Supply Chains
- Integration
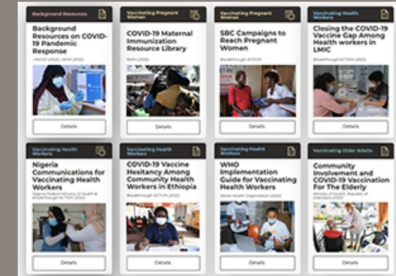

Data Management & Digital Health

July 2023

The essential resources in this collection fall into five primary categories: general background and guidance on digital development for COVID-19 response; data management systems, tools for

Reaching High Priority Populations with the COVID-19 Vaccine

April 2023

Explore this April 2023 collection of resources on vaccinating pregnant women, health workers, older adults, vulnerable populations as well as tools for health workers.

Knowledge
SUCCESS

Global Health: Science and Practice Journal Supplement

- Coming in December 2023
- **Topic**: Integration of COVID-19 into primary health care

Final Webinar in the Series

- The final webinar in the COVID-19 integration webinar series is coming soon! (September, 2023)
- Please let us know what topic you'd like discussed

Thank you!

Contact Knowledge SUCCESS with any questions:

Anne Ballard Sara
Knowledge Management Technical Advisor
anne.ballard@jhu.edu