

COVID-19 Vaccine Roll-out Site Readiness Monitoring Visits: A Country Report

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National Technical Planning Forum

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PURPOSE OF PRESENTATION

The purpose of the presentation is to inform the National Technical Planning Forum (NTPF) on the findings of the Vaccine Roll of the monitoring visits (19th to 26th February 2021) conducted by the Department of Planning, Monitoring and Evaluation (DPME) to assess site readiness of the distribution and vaccination facilities, across the country.

MONITORING APPROACH

- A frontline monitoring exercise was conducted by DPME in line with the Draft Monitoring Framework for the National COVID -19 Vaccination.
- Emphasis was placed on obtaining timely information from the ground so that quick corrective actions can be taken.
- Frontline monitoring visits to all fourteen (14) primary distribution sites and the seventeen (17) secondary vaccination sites were conducted based on the roll-out plans of the Department of Health (DOH).
- DPME has developed an electronic Vaccine Rollout Site Inspection Tool and database to capture the information and support analysis over the entire vaccine roll out.
- The tool used followed the normal DPME frontline monitoring approach of collecting data through the following sources:
 - a) Staff Interviews (formal interviews with the facility management where questions were asked and evidence requested);
 - b) Citizen or Health Care Workers (HCW) Engagements (informal engagements with HCW to determine their views on the vaccination process); and
 - c) Monitor Observations (the monitors taking a walk about around the facility to collect necessary photographic evidence and make own observations).

SITES MONITORED FOR THE VACCINE ROLLOUT

Province	Distribution Site	Vaccination Site	Date of monitoring	#Doses (Public & Private)	#Vials	#Vaccination (25 Feb 2021)	#Doses Wasted	#Vaccinators & (Trained)
EC	PHOENIX Pharma (Pty) Ltd (Port Elizabeth)	Livingstone Hospital (Port Elizabeth)	2021-02-26	3 200	1 600	2 603	0	08 (0)
	Nelson Mandela Academic Research Unit (Umtata)	Nelson Mandela Academic Hospital (Umtata)	2021-02-26	4 920	2 460 (1500)*		17	10 (21)
FS	Josha Research CRS (Bloemfontein)	Universitas Hospital (Bloemfontein)	2021-02-22	3 800	1 900	2 749	0	10 (30)
		Pelonomi Hospital (Bloemfontein)	2021-02-22	3 080	1 540		0	16 (0)
GP	Soweto HVTN CRS (Soweto)	Chris Hani Baragwanath Hospital (Johannesburg)	2021-02-19	11 080	5 540	9 314	02	20 (40)
	Synexus SA – Watermeyer (Pretoria)	Steve Biko Academic Hospital (Pretoria)	2021-02-19	5 720	2 860		0	27 (27)
KZN	CIPRA CRS (Durban)	Nkosi Albert Luthuli Hospital (Durban)	2021-02-23	5 760	2 880	5 500	02	10 (40)
	Chatsworth CRS (Durban)	Prince Mshiyeni Memorial Hospital (Umlazi)	2021-02-24	5 040	2 520		07	11 (72)
LP	Elandsdoorn CRS (Elandsdoorn)	Pietersburg Hospital (Polokwane)	2021-02-26	4 080	2 040	4 011	01	08 (17)
		Mankweng Hospital (Polokwane)	2021-02-26	3 080	1 540		01	0 (0)
MP	Mzansi Ethical Research Centre (Middelburg)	Witbank Hospital (Emalahleni)	2021-02-25	2 000	1 000	3 580	08	10 (20)
		Rob Ferreira Hospital (Mbombela)	2021-02-25	1 640	820		07	15 (30)
NC	Clinical HIV Research Unit – Robert Sobukwe Hospital (Kimberley)	Robert Sobukwe Hospital (Kimberley)	2021-02-24	3 920	1 960	1 815	08	09 (09)
NW	Aurum Institute Klerksdorp CRS (Klerksdorp)	Tshepong Tertiary Hospital (Klerksdorp)	2021-02-23	5 760	2 880	4 999	28	10 (150)
	Aurum Institute Rustenburg CRS (Rustenburg)	Job Shimankana Tabane Hospital (Rustenburg)	2021-02-22	2 640	1 320			7 (50)
WC	Groote Schuur HIV CRS (Cape Town)	Groote Schuur Hospital (Cape Town)	2021-02-24	5 760	2 880	5 831	0	10 (150)
	FAM-CRU (Family Clinical Research Unit) (Cape Town)	Tygerberg Hospital (Cape Town)	2021-02-24	7 400	3 700		04	15 (600)

Total number of doses, vials distributed, doses wasted and vaccinators were confirmed on the day of the visit, * with 1500 dose allocated for Nelson Mandela Academic Hospital's been re-directed to Steve Biko Academic Hospital.

This confirms the number of persons vaccinated as reported by the DOH on the 25th Feb 2021

Source: Vaccination sites administration data

78 880 39 440 40 402 85 196 (1 256)

SUMMARY OF KEY FINDINGS: DISTRIBUTION SITES

Storage management

- 13 of the 14 primary facilities have sufficient storage capacity except Phoenix Pharma in Gqeberha (Port Elizabeth, EC)
- Vaccines are stored at the pharmacies with strict access control and freezers that can store vaccines at the required temperature.
- There are strict adherence to time recording protocols in the pharmacies as time is vital for the efficacy of the vaccine.
- Backup systems are available in the form of generators for electricity and JoJo tanks for water.

Security Measures

- Distribution sites (except in Phoenix Pharma) were found to have 24-hour physical and electronic surveillance system: CCTV cameras, alarm system and strict access control.
- During transportation of vials all sites are supported by police and or armed response escort services, except for Phoenix Pharma in Gqeberha (Port Elizabeth, EC).

Equipment

- The facilities use both manual and electronic inventory system.
- The empty vials are safely stored as evidence (that the vaccines are currently registered as Schedule 6 medication)

SUMMARY OF KEY FINDINGS: DISTRIBUTION SITES

Information Communication Technology (ICT)

- There are multiple and reliable means of communication at the facilities, including stable internet connectivity (Wi-Fi).

Distribution Plans

- The sites are using varying distribution methods, with some distributing vials and providing support at the secondary sites whilst others are preparing the doses at their facilities.
- There is extensive morning and afternoon preparation and coordination at the distribution sites – with constant communication being maintained with the secondary vaccination sites in cases of shortages.
- The distribution sites have ensured that the vaccines are stored in line with the required protocols at the secondary sites (by providing necessary equipment where necessary, fridges and cooler boxes).

General Observations

- Phoenix Pharma in Gqeberha (Port Elizabeth, EC) had unique challenges: inappropriate infrastructure; limited capacity and resources; inadequate COVID-19 compliance measures.

CONCERNS RAISED: DISTRIBUTION SITES

The researchers / staff at the distribution sites were concerned about capacity to roll out vaccines on a larger scale:

Capacity constraints

- In some of the provinces, it will be a challenge to roll-out to other districts due to capacity constraints of medical researchers - this was raised by Robert Mangaliso Sobukwe Hospital (NC) that there is limited capacity within the distribution site to cater for the whole province.
- Some of the primary facilities will not be able to accommodate additional secondary vaccination services (e.g. Mmabatho and Upington) due to capacity challenges.

Cold-chain logistics and storage management challenges

- Infrastructure challenges in vaccination sites, in relation to vaccine preparation areas (temperature controls and space for future roll out).
- Staff were of the view that proper courier system needs to be planned for as the volumes increase (consider distances and temperature controls) as this is not yet catered for

SUMMARY OF KEY FINDINGS: VACCINATION SITES

Administration

- Total number of doses and vials distributed per facility were confirmed to have been received by all facilities during the monitoring.
- 1500 doses for Nelson Mandela Academic Hospital's (EC) were re-allocated to Steve Biko Academic Hospital (GP).
- All facilities were found to have dedicated managers in different vaccination areas.
- Facilities have been clearly demarcated to ensure seamless vaccination processes.
- It was observed that there were sufficient vaccinators across all visited sites for the current phase of the roll-out.

COVID-19 Regulation Compliance

- All facilities have measures and protocols in place to contain the spread of COVID-19.
- Facilities are either redirecting individuals with symptoms to the main hospital's dedicated COVID-19 ward for full examination and testing or a separate room is provided to deal with suspected cases.
- Social distancing at times was found to be a challenge due to volumes of HCW that arrive at the facility in a given period.

SUMMARY OF KEY FINDINGS: VACCINATION SITES

OPERATIONS MANAGEMENT

Entrance Area

- Pre-vaccination processes of screening and registration are followed.
- There is a register or forms for recording details and temperatures of all staff members and people visiting.
- Everyone wore masks appropriately.

Vaccination Area

- The vaccination process is managed by a professional nurses who were found to be adequate across all facilities visited
- There is queue management system, with runners directing clients to the appropriate waiting areas, except in Livingstone Hospital (EC).
- All facilities were found to have back-up electricity systems however, back-up system for water was only observed in some.
- Average waiting times varies per facility: monitors observed a minimum period of 30 minutes from beginning to end and a maximum of 3 hours.
- The 15-minute post vaccination waiting period is observed across all visited facilities.

Medicine / Pharmacy Room

- The initial preparation takes place at the primary sites (batches of vials or pre-prepared syringes)
- The injections are delivered to various vaccination cubicles / points in safety boxes, plastic receivers or kidney bowls.
- All facilities had appropriate fridges which were constantly monitored.

SUMMARY OF KEY FINDINGS: VACCINATION SITES

Citizen (HCW) Engagement

- Despite the long waiting times in some of the hospitals, most of the HCW were happy to be vaccinated and satisfied with how the vaccination processes unfolded.

General Observations

- Klerksdorp Tertiary Hospital admitted to having the highest record of adverse effects in the country (7) – associated with severe tiredness and headache and Rob Ferreira Hospital (MP) having three (3) - adverse reaction and one developing dizziness that led to being admitted at Mediclinic overnight for observation.
- A concern was raised by staff that there is no guideline/protocols to manage person(s) who experiences side effects.
- At Robert Mangaliso Sobukwe Hospital (NC) staff were concerned that there were no clear plans on transportation of health care workers from other areas within the Francis Baard district who had appointments the following day.
- Lack of clear / proper planning with the primary site at Livingstone Hospital resulted in 63 and 7 doses being returned on different days.
- There are serious infrastructural challenges at the Job Shimankane Tabane (NW) and Klerksdorp Hospitals (NW) in terms of space: the waiting areas, administration areas and observation rooms are all not appropriate.

KEY CHALLENGES: DISTRIBUTION SITES

IT & System Challenges

- There are communication challenges with some vaccination sites using one contact point (Pharmacist) and this led to delays in delivery of more vials
- Pre-registration on the Electronic Vaccination Data System (EVDS) before arrival to vaccination points was not adhered to by HCW in many instances resulting in long-queues as registration needed to take place and vouchers generated before the vaccine is administered.
- There are multiple registrations systems: many people are aware of the EVDS system but not the Sisonke system.
- There are community members who are in possession of vouchers and expect to be vaccinated even though they are not covered in Phase 1 as per information from Groote Schuur (WC) & Klerksdorp (NW) Hospitals.
- There was a concern that failure to ensure that recipients attend their appointments will not only prevent individual immunity, it could also lead to product wastage, since all vaccine must be administered within a prescribed time period (between 2 to 6 hours) after preparation or removal from the fridge.

Infrastructural challenges

- There are serious infrastructural challenges at the Job Shimankane Tabane (NW) and Klerksdorp (NW) Hospitals in terms of space: the waiting areas, administration areas and observation rooms are all not appropriate / fit for purpose.

Wastage at point of care

- At Tshepong Tertiary Hospital (NW) a total of 28 doses have been recorded as wastage due to either having expired since opening or not having enough left to draw the required 0.25ml. The ongoing service delivery strikes in the area of the Tshepong Tertiary Hospital (NW) has resulted in wastage as the bus transporting HCW could not access the area.

CONCLUSION & RECOMMENDATIONS

- The collaboration and operations on the ground between the primary / distribution sites and vaccination sites did yield a total of 40 402 HCWs being vaccinated up until the 25th February 2021. The model of this private - public partnership in delivery should be further investigated for effectiveness, efficiency and economy.
- The concerns raised by the frontline workers on the capacity and resources on the ground to implement the mass roll programme must be proactively factored into the planning processes. This report was conducted at the very beginning of the roll out involving a very limited number of vaccination sites which were all hospitals.
- Relevant corrective action needed at the identified facilities in this report should be acted upon.
- Community ownership of the roll out is imperative as service delivery protests could derail the vaccination process as happened at the Tshepong Tertiary Hospital resulting in wastages.
- The importance of rapid frontline monitoring and incorporating the views of citizens / recipients of services and frontline workers into the decision making processes and speedy corrective action of the IMC should be strengthened and support be given to 'learning by doing' and to continuously improve the monitoring practices.

RECOMMENDATIONS

Specific issues to be addressed based on the findings of the monitoring visits:

Optimizing Cold-chain logistics and storage management

- Proper planning and coordination between primary and secondary sites critical to avoid wastage.
- Assessment of the current infrastructure and resource needs ahead of the phase 2 and 3 roll out.

Addressing Capacity Constraints

- Full capacitation and training ahead of the future roll-out (secondary sites which will be preparing vaccines and the full value chain).
- Phased in approach to be considered for opening of more secondary vaccination sites as the primary sites will need time to prepare for distribution support.

Improve EVDS Functionality

- Strengthen the EVDS booking system.
- Encourage pre-registration (voucher system) as this alleviates pressure on the entire vaccination process / system.
- Provide / avail registration support at various sites and not only at vaccination centres (to ease the pressure from centres and enable less waiting times).
- Invest in awareness campaign and communication – better understanding of the vaccination process (including registration) and its benefits to improve public trust. Publicise the registration process, while also ensuring access.

Enhance Security & Operations

- Phoenix Pharma (Distribution site) in Gqeberha.

RECOMMENDATIONS

- The NTPF note the findings & implement the recommendations where applicable.
- The Vaccine Roll Out involves the whole of government and society.

NGIYATHOKOZA

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LIVHUHA**

Thank You