

GAUTENG DEPARTMENT OF HEALTH

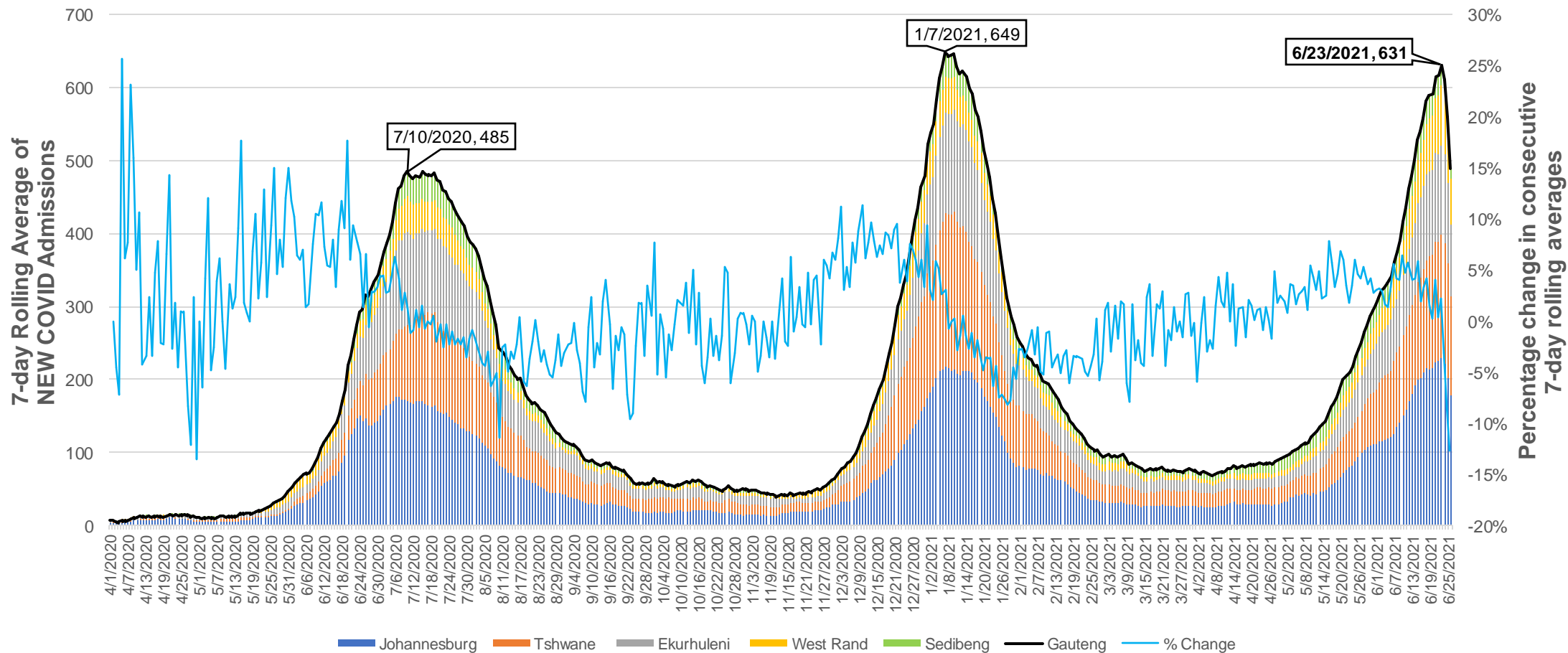
CLINICAL CARE THIRD WAVE READINESS RESPONSE

02 JULY 2021



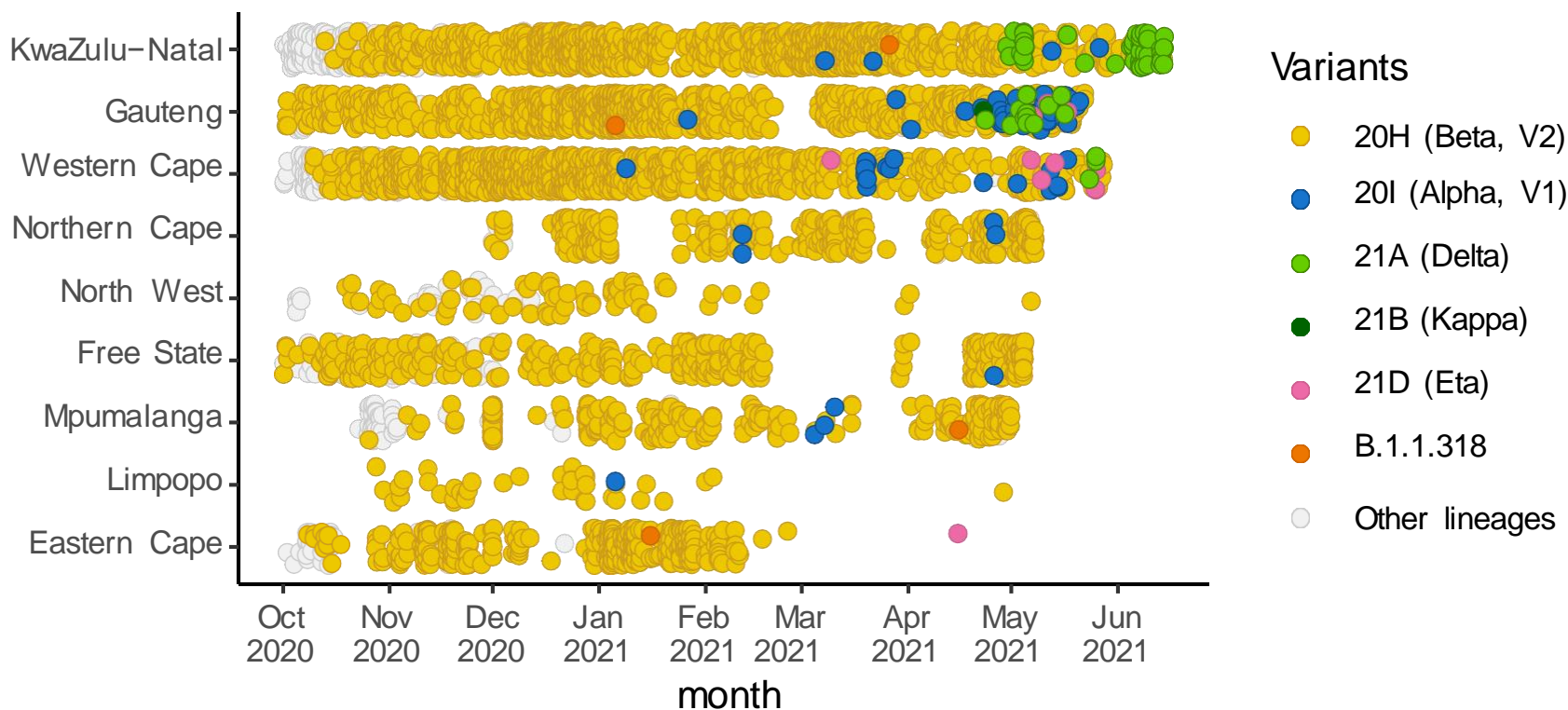
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INTRODUCTION



- 7-day rolling average of new admissions was 631 on 23 June, average number of new admissions is approaching the peak number in the second wave, however we have not reached the peak of the 3rd wave

SOUTH AFRICAN VARIANTS BY PROVINCE



• **Source: Prof, Tulio de Oliveira and Dr. Richard Lessells, KRISP. Update on Delta and other Variants in South Africa. 26 June 2021.**

Key Points about the delta variant

- Experiencing a high number of Delta variant infections during this wave, it's been noted that the Delta may be 40 to 60 percent more transmissible than the Alpha variant.
- WHO warns that the Delta variant will soon become the most dominant variant in the World and drive rapid outbreaks in unvaccinated populations
- There is limited research regarding disease severity: In the UK the Delta variant was associated with a 2.61 times higher risk of hospitalization

Health Infrastructure and Health Technology Response



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COVID-19 HEALTH INFRASTRUCTURE PLAN

Key principles of the March 2020 Gauteng Executive Council approved plan included:

1. Creating permanent long-term additional capacity to support improved access to quality care;
2. General improvement of facilities by focussing on critical maintenance and upgrades; and
3. Use of modern equipment and healthcare technology to support good patient outcomes through an improved patient experience of care.



STRATEGY FOR THE DELIVERY OF ADDITIONAL COVID-19 BEDS

GDOH clusters	Central hospitals	Tertiary Hospitals	Regional Hospitals	District Hospitals	Specialised Hospitals	Total beds per cluster
CMJAH	1066	616	1956	268	1086	4992
CHBAH	2888	N/A	2440	1546	N/A	6874
DGMAH	1550	N/A	N/A	838	N/A	2388
SBAH	832	1692	322	357	888	4091
Total	6336	2308	4718	3009	1974	18344

1. Decanting of wards in existing facilities for upgrading in line with WHO standards for COVID-19 care
2. Repurposing of additional unused or underutilised spaces in facilities, including undertaking major refurbishments and renovations to create additional beds
3. Creating permanent Alternative Building Technology (ABT) facilities to increase healthcare system capacity
4. Finally considering field hospitals should the need arise



PUBLIC SECTOR BED CAPACITY THROUGH THE WAVES

COVID-19	NUMBER OF FUNCTIONAL BEDS	COMMENTS
1 st Wave	3260	From an initial 1925 beds
2 nd Wave	4150	Including: <ul style="list-style-type: none">• 593 Nasrec Beds• 235 CMJAH Beds
3 rd Wave	4050	An additional: <ul style="list-style-type: none">• 1322 Institutional functional beds have been repurposed by institutions to respond to increased 3rd wave bed demand

Bronkhorstspuit Hospital – Tshwane



Inside the facility

Premier David Makhura, together with Gauteng Health Department MEC Dr Nomathemba Mokgethi on Thursday, 06 May 2021 opened the **newly built 150 bedded ward at Bronkhorstspuit Hospital** in partnership with BMW South Africa and the German Government. Since the start of the partnership in June 2020, BMW has delivered a fully equipped ambulance vehicle to the Dr George Mukhari Academic Hospital and three first responder vehicles that will service the Ga-Rankuwa, Mabopane and Soshanguve areas.

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Jubilee Hospital – Tshwane



Jubilee Hospital ABT was handed over to the Gauteng Department of Health by the Gauteng Department of Infrastructure Development and Infrastructure Development on 03 December 2021.



Jubilee Hospital – Tshwane





Anglo Gold Ashanti Hospital – West Rand

The Gauteng Provincial Government, led by Premier David Makhura On Friday, 14 May 2021, opened the newly renovated and refurbished AngloGold Ashanti Hospital in Carletonville, West Rand.

The facility was donated to the provincial government by the AngloGold Ashanti mining company as part of the response to COVID-19 and forms part of the long-term investment for the Gauteng health system and the West Rand community. The facility is a 175 bedded hospital and will assist in addressing the dire shortage of critical care beds in the West Rand district and relieve pressure from both Leratong and Carletonville hospitals.





Anglo Gold Ashanti Hospital – West Rand



Inside the well-equipped Anglo Gold Ashanti Hospital .

Chris Hani Baragwanath Academic Hospital-COJ



Entrance



Reception area



ROAD MAP TO ACTIVATING BEDS FOR THE THIRD WAVE

- Risk adjusted approach to adding dedicated Covid-19 beds

STAGE 1 INSTITUTIONAL BED RE-PURPOSING	<p>Initial increase of 1322 functional Covid-19 beds by repurposing beds within institutions has increased the dedicated functional Covid-19 baseline beds from 2728 dedicated Covid-19 functional beds to 4050 dedicated Covid-19 functional beds.</p> <p>Oxygen security through daily engagements with AFROX that provides daily bulk oxygen demand reports.</p> <p>Daily institutional pressure reports are submitted to Hospital Services to monitor bed pressures in the A&E, maternity and ICU/HC; PPE availability, trauma statistics and oxygen availability.</p>
STAGE 2 ABT AND NEW FACILITY HR CAPACITATION	<p>Activate the 407 ABT beds (171 Anglo Gold Ashanti, 16 Bronkhorstspuit, 115 CHBAH, 35 Jubilee, 70 DGMAH) with the required Human Resources:</p> <ul style="list-style-type: none">- GDOH submission to Provincial Treasury on the reallocation of budget to ensure that appointment of necessary clinical staff especially ICU/HC nursing staff- SANDF HR Assistance
STAGE 3 ADDITIONAL BED ACTIVATION	<p>Additional bed activation through service delivery re-orientation such as delay elective surgical cases.</p> <p>Activate the remaining ABT Capacity</p>



FUNCTIONAL COVID-19 DEDICATED BASELINE BEDS

	ICU	HC	GENERAL WARD	ABT	TOTAL
COJ	26	450	674	155	1305
Ekurhuleni	17	34	899	0	950
Sedibeng	5	8	211	0	224
Tshwane	65	95	642	254	1056
West Rand	5	0	470	40	515
	118	587	2936	409	4050



PRIVATE SECTOR BED CAPACITY THROUGH THE WAVES

COVID-19	NUMBER OF DEDICATED COVID BEDS	COMMENTS
1 st Wave	6000	749 ICU/HC beds 5251 General ward beds
2 nd Wave	4120	2066 ICU/HC beds 2054 General ward beds
3 rd Wave	5635	1749 ICU/HC beds 3886 General ward beds

Health Information Response

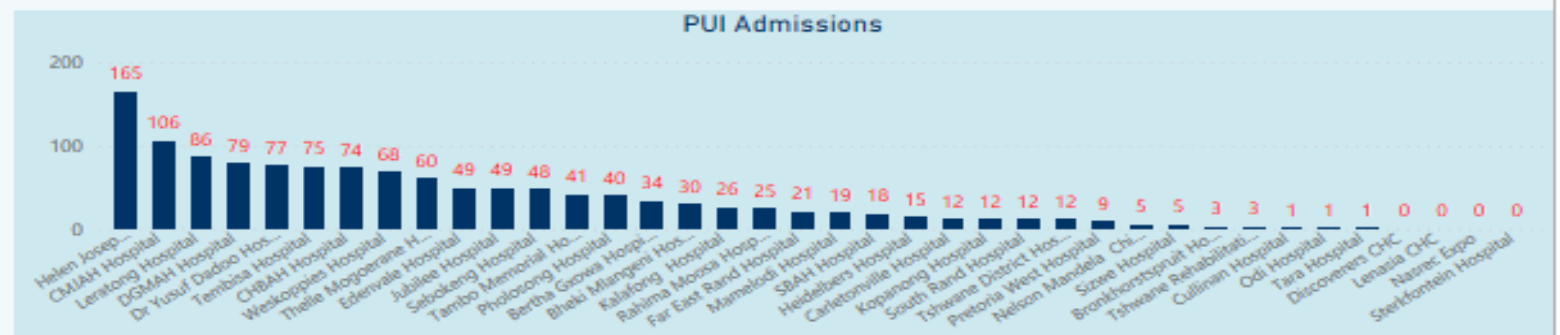
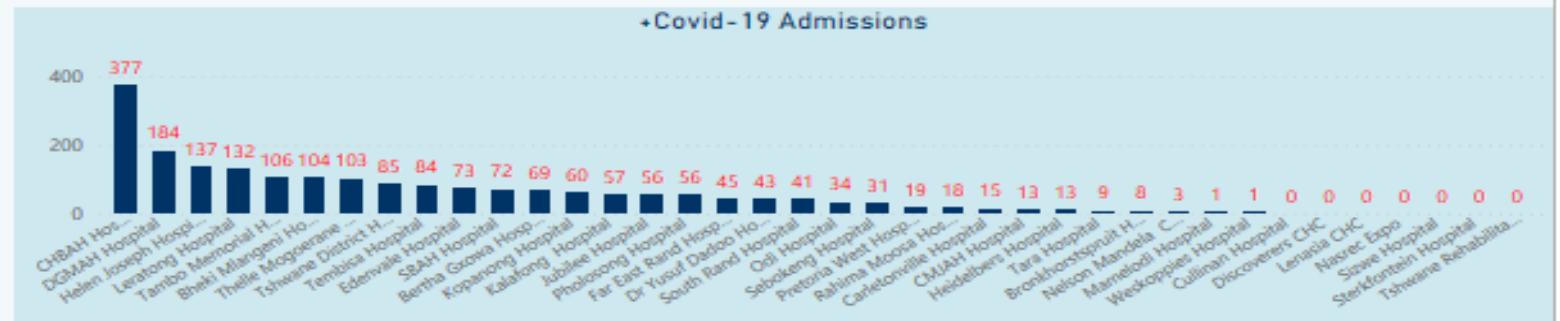
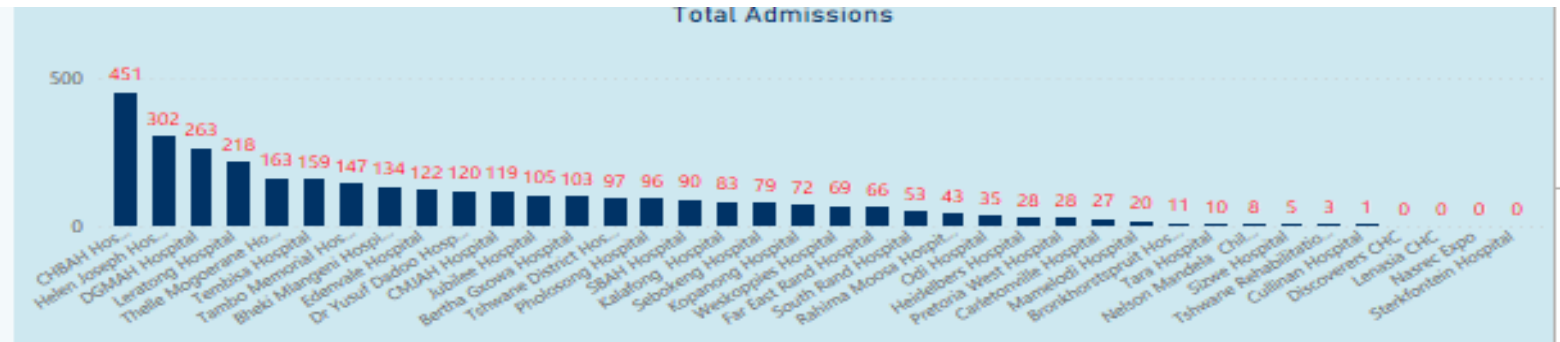
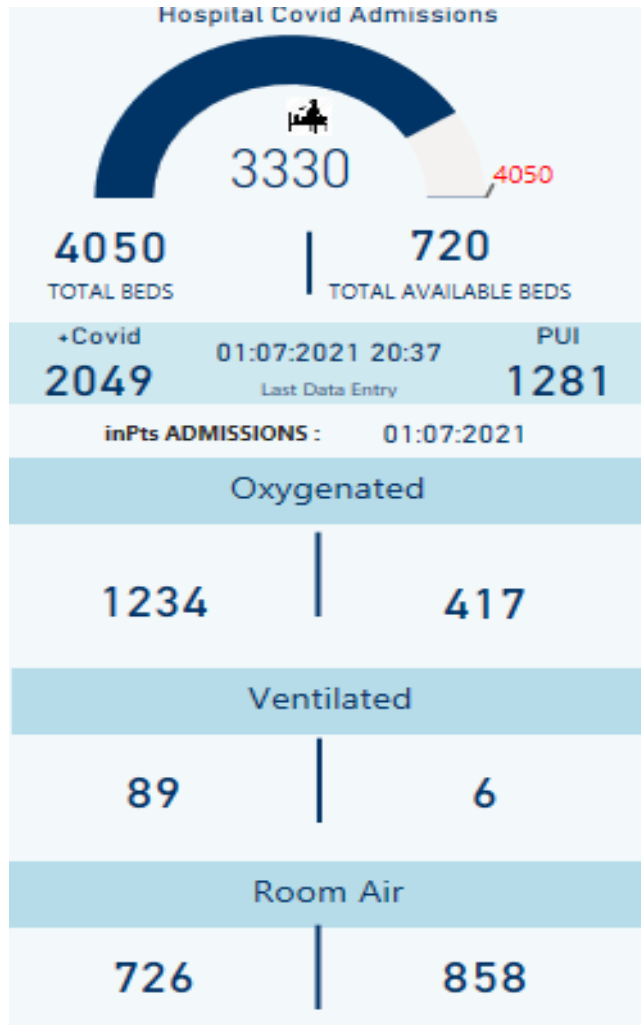


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BED MANAGEMENT DASHBOARD PUBLIC SECTOR



Current Hospitalisation



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MANAGEMENT OF COVID-19 ADMISSIONS AS AT 01 JULY 2021

FACILITY	ADMITTED	INTENSIVE CARE UNIT & HIGH CARE UNIT			GENERAL WARD			ISOLATION	TOTAL TRANSFER OUT	TOTAL IN-PATIENT DISCHARGES
		VENTILATED	OXYGEN	ROOM AIR	VENTILATED	OXYGEN	ROOM AIR			
01-Jul-21										
PUBLIC	2410	83	139	72	13	736	1367	0	1400	24886
PRIVATE	5105	573	88	819	59	404	3162	0	232	39115
TOTAL	7515	656	227	891	72	1140	4529	0	1632	64001

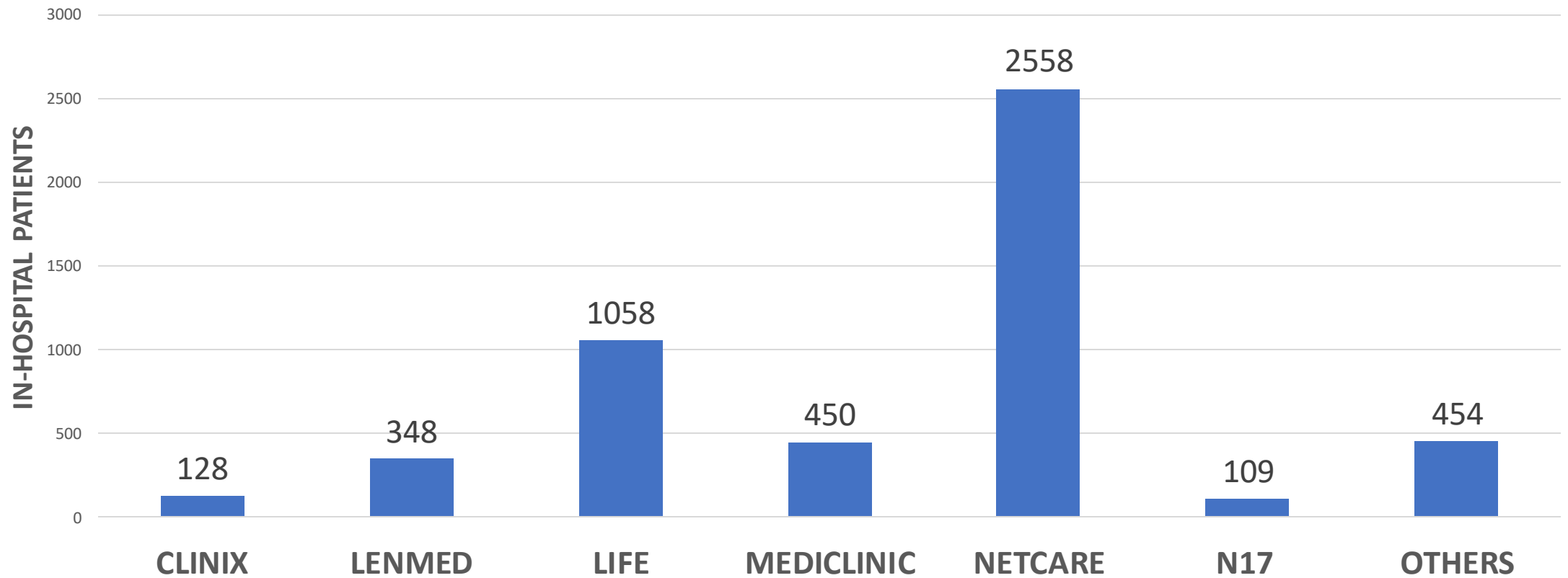
DATA SOURCE: DATCOV

- The in-hospital patients admitted on the 01st of July 2021 are **7 515**:
 - 2 410 for the Public Sector; and
 - 5 105 for the Private Sector.
- The public and private sector 24 hour in-hospital admissions were **7 243** on the 30th of June 2021 and **increased** by 272:
 - Public sector in-hospital patient numbers **increased** by 100; and
 - Private sector in-hospital patient numbers **increased** by 172.
- In-hospital patients in:
 - ICU/HC **increased by 37** (from 1 737 to 1 774); and
 - General wards **increased by 235** (from 5 506 to 5 741)



01 JULY COVID-19 ADMISSIONS IN THE PRIVATE SECTOR

Number of in-hospital patients by Private Healthcare Group, n=5105



Private Sector bed occupancy: 5 105/5635 (91%). Majority of the in-hospital patients are admitted in General Wards.



Baseline beds prior to purposing additional 1322 beds Provincially
District repurposed beds outlined on individual slides
As bed need increases, facilities re-purpose beds for Covid-19

01 JULY 2021 PUBLIC SECTOR COVID-19 BED OCCUPANCY RATES

	% when functional baseline beds are 2728	% when functional baseline beds are 4050
Public Sector bed occupancy when only Covid-19 positive patients are considered	$2410/2728 \times 100 =$ 88%	$2410/4050 \times 100 =$ 60%
Public Sector bed occupancy when both Covid-19 positive and PUI patients are considered	$2410+1281/2728 \times 100 =$ 135%	$2410+1281/4050 \times 100 =$ 91%

Modelling predictions only use Covid-19 positive patients. Separation of Covid-19 positive and PUI important as all these patients are occupying a bed



01 JULY 2021 COJ COVID-19 BED OCCUPANCY RATES

	% when functional baseline beds are 846	% when functional baseline beds are 1305
Public Sector bed occupancy when only Covid-19 positive patients are considered	$1020/846 \times 100 =$ 121%	$1020/1305 \times 100 =$ 78%
Public Sector bed occupancy when both Covid-19 positive and PUI patients are considered	$1020+472/846 \times 100 =$ 176%	$1020+472/1305 \times 100 =$ 114%

Additional beds at the CHBAH ABT are being functionalised through HR to ease bed pressures in this District



01 JULY 2021 EKURHULENI COVID-19 BED OCCUPANCY RATES

	% when functional baseline beds are 668	% when functional baseline beds are 950
Public Sector bed occupancy when only Covid-19 positive patients are considered	$402/668 \times 100 =$ 60%	$402/950 \times 100 =$ 42% <div style="border: 1px solid red; padding: 5px; color: red; font-size: small;">Majority of the Covid-19 positive patients are admitted at Tembisa, n=88 and Tambo, n=114</div>
Public Sector bed occupancy when both Covid-19 positive and PUI patients are considered	$402+271/668 \times 100 =$ 101%	$402+271/950 \times 100 =$ 71%



01 JULY 2021 SEDIBENG COVID-19 BED OCCUPANCY RATES

	% when functional baseline beds are 239	% when functional baseline beds are 224
Public Sector bed occupancy when only Covid-19 positive patients are considered	$109/239 \times 100 =$ 46%	$109/224 \times 100 =$ 49%
Public Sector bed occupancy when both Covid-19 positive and PUI patients are considered	$109+76/239 \times 100 =$ 77%	$109+76/224 \times 100 =$ 83%

GDOH/WHO team has been assisting the District in the management of its Covid-19 patients since the month of May 2021



01 JULY 2021 TSHWANE COVID-19 BED OCCUPANCY RATES

	% when functional baseline beds are 799	% when functional baseline beds are 1056
Public Sector bed occupancy when only Covid-19 positive patients are considered	$584/799 \times 100 =$ 73%	$584/1056 \times 100 =$ 55%
Public Sector bed occupancy when both Covid-19 positive and PUI patients are considered	$584+288/799 \times 100 =$ 109%	$584+288/1056 \times 100 =$ 83%

Tshwane 3 health sub-district experienced multiple outbreaks in the past few weeks and subsequently the hospitalisations in this district have also increased: COVID-19 +ve- 310/584 (53%); and PUI- 133/288 (46%)

The majority of Covid-19 positive patients are admitted at Leratong, n=214/308 (69%)

01 JULY 2021 WEST RAND COVID-19 BED OCCUPANCY RATES

	% when functional baseline beds are 218	% when functional baseline beds are 515
Public Sector bed occupancy when only Covid-19 positive patients are considered	$308/218 \times 100 =$ 141%	$308/515 \times 100 =$ 60%
Public Sector bed occupancy when both Covid-19 positive and PUI patients are considered	$308+175/218 \times 100 =$ 221%	$308+175/515 \times 100 =$ 94%

West Rand is experiencing high volume influx of patients who used to access CMJAH.
Additional 20 bedded ward is being manned by CMJAH staff.

Human Resource Response



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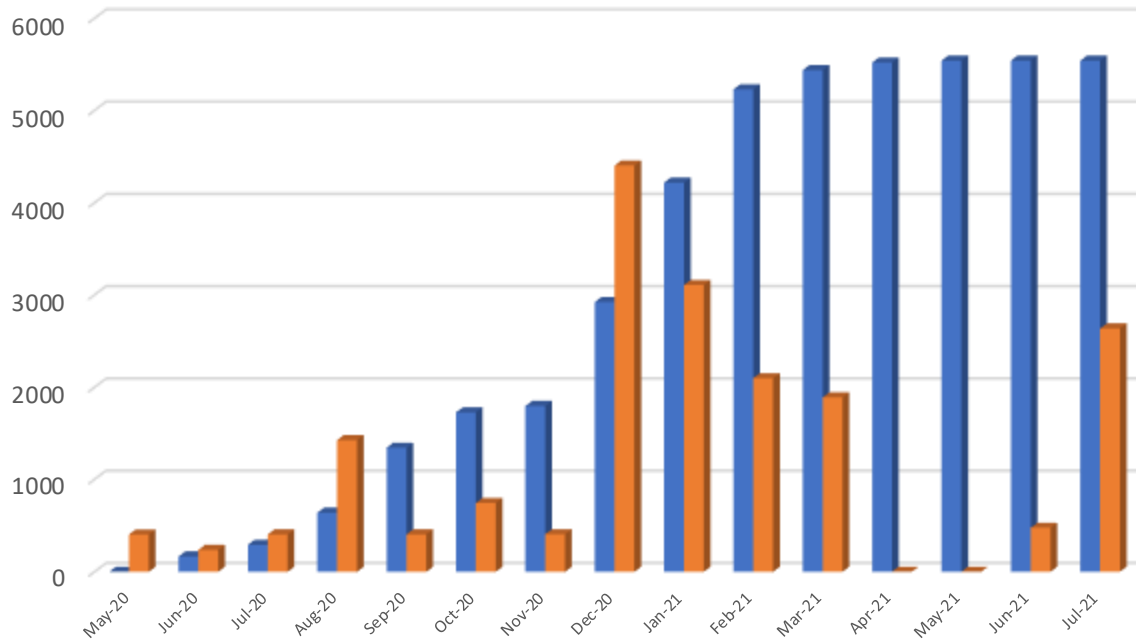
PUBLIC SECTOR HR CAPACITATION THROUGH THE WAVES

COVID-19	NUMBER OF FUNCTIONAL BEDS	HR CAPACITATION	COMMENTS
1 st Wave	3260	404 personnel	From an initial 1925 beds
2 nd Wave	4150	4219 personnel	Including: <ul style="list-style-type: none">• 593 Nasrec Beds• 235 CMJAH Beds
3 rd Wave	4050	5541 personnel	An additional: <ul style="list-style-type: none">• 1322 Institutional functional beds have been repurposed by institutions to respond to increased 3rd wave bed demand



COVID-19 HR CAPACITY 2020-21

COVID 19 CREATED & FILLED & VACANT POSTS 2020-21



	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21
■ Filled Posts	0	167	292	642	1345	1728	1798	2924	4219	5230	5438	5521	5541	5541	5541
■ Vacant Posts	404	237	405	1428	406	746	407	4404	3109	2098	1890	0	0	477	2638

■ Filled Posts ■ Vacant Posts

Covid -19 HR posts were temporary posts which were created for the 2020/21 financial year:

- The PBC have approved funds to resuscitate the “disappeared posts”
- They will be on the system by the end of the week.

- Health Care Worker Covid-19 infections placing strain on the staffing challenges;
- CMJAH beds activated in other facilities require HR that will replace it as it resumes its operations.



ABT AND NEW FACILITY HR ACTIVATION UPDATE

NAME OF ABT	CURRENT NUMBER OF FUNCTIONAL BEDS	BEDS ACTIVATED BY HR ACTIVATION	NO OF BEDS GIVEN HR FUNDING	FULL CAPACITY OF ABT
CHBAH ABT	155 beds	86 beds	115 beds	400 beds
Jubilee ABT	130 beds	25 beds	35 beds	300 beds
Anglo Gold Ashanti	10 beds	10 beds	171 beds	175 beds
DGMAH	0 beds	62 beds	70 beds	150 beds
Bronkhorspruit	134 beds	0 beds	16 beds	150 beds

Oxygen and PPE Response

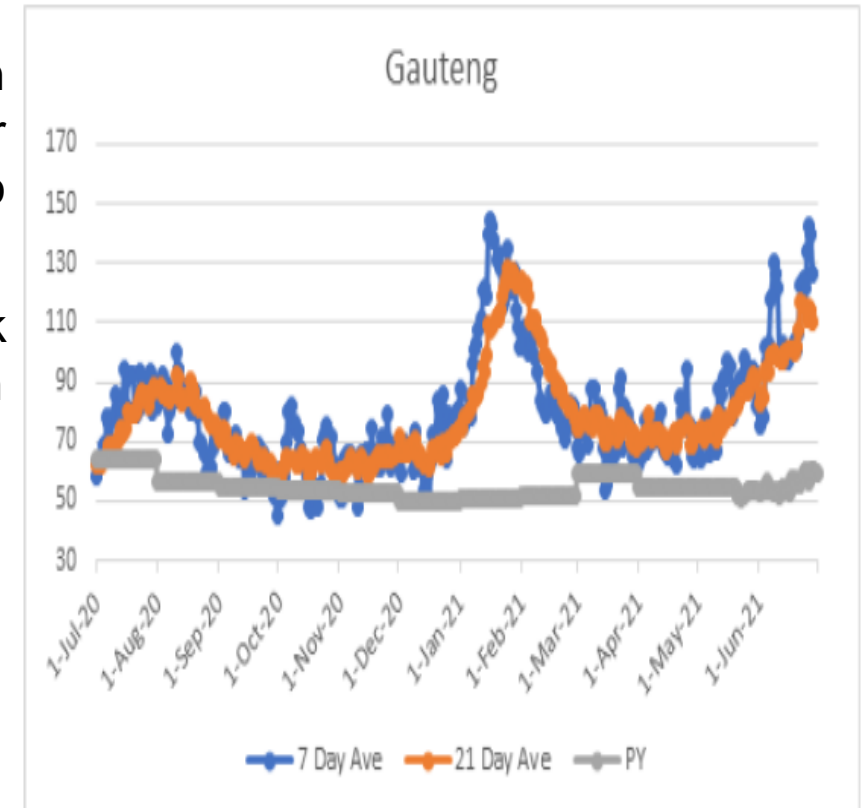


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OXYGEN SECURITY

- **Daily AFROX engagements continue for troubleshooting institutional oxygen security challenges:**
 - Due to the current high demand on IVR2000 Medical Oxygen cylinders, there has been a supply shortage on this specific cylinder size. AFROX has request that all new hospitals wanting to convert to IVR cylinders place orders with Afrox for IVR1000;
 - AFROX has committed to assuring that the Bronkhorspruit bulk tank is connected, currently Bronkhorspruit is only using mobile oxygen tanks;
 - Hospitals experiencing low pressure, Afrox will send out their Engineers to increase the pressure from the tanks; and
 - Anglo Gold Ashanti to have a walk about from DID on Friday to solve their oxygen challenges amongst the other snag list challenges.



PPE AVAILABILITY

- Quality of the PPE provided remains a challenge
- Availability of certain PPE items that are deemed non-essential (e.g coveralls)
- Central depot stock levels at times not adequate
- ACFO requested to be at the next bilateral with the institutional heads to respond to PPE challenges

Emergency Medical Services Response



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EMERGENCY MEDICAL SERVICES SUPPORT

- EMS 3rd Plan is developed in light of:
 1. Increased interfacility transfers, including to and from Quarantine and Isolation sites
 2. Increased ambulance transport cases in patients contracting Covid-19
 3. Increased mission times in COJ, Ekurhuleni and Sedibeng with the change of referral pathways due to the closure of CMJAH
 4. Increased mission times due to the number of hospitals on diversion due to pressures of bed availability in COJ and West Rand.

CONCLUSION

The National Department of Health recommends that:

Everyone should wear
CLOTH face masks
when in public.



Members of the public should not
use N-95 and surgical masks;
medical masks remain reserved
only for healthcare workers.

Handwashing and
social distancing still remain
the most important prevention
strategies for COVID-19

