A COVID Action Plan Fit For An Incapable State

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Summary

- South Africa's prevention and treatment capacity has completely collapsed. Government has therefore resorted to ongoing lockdown as its Covid response. Yet lockdown has been ineffective in suppressing transmission while at the same time being socially and economically devastating.
    - Infection has been allowed to run rampant. On our current trajectory, 5 out of every 6 citizens requiring critical care hospital beds may be turned away.
- South Africa has taken this ineffective, high cost path because of a corrupt and incapable state unable to follow an effective, low cost path.
    - The public sector is only conducting 13 000 tests per day, well below its 36 000 target and well below the private sector's rate of 37-38 000 tests per day.
- To take the effective, low-cost path, South Africa needs parallel decision-making structures enabling rapid decision-making and effective public-private collaboration.
    - Public and private testing need to be brought into a unified strategy.
    - Tracing should be provincialized and outsourced to the private sector, with service level agreements.
- An effective health response replicating the Western Cape model would cost in the region of around R50-60 billion nationally for 2020/21. This must be compared to the cost of lockdown, which is R304 billion in lost tax revenue alone, quite apart from the other costs.
- In funding South Africa's emergency health response to Covid, money should be of no concern. South Africa has the money to fund the health response, what it does not have is political will to redirect spending from failing SOEs. The root cause of the crisis is the ANC's years of cadre deployment under the false guise of empowerment.
    - SA will borrow R700 billion this year, yet Department of Health will receive just R2.9 billion in additional 'new' money to fund Covid response. SAA will receive R16.4 billion, Land Bank R3 billion, e-tolls R2.53 billion, SANDF deployment R5 billion.
- We cannot afford a continued lockdown, the 10 steps to success we can afford are:
    - Efficient decision-making structures
    - A coordinated testing programme
    - Contact tracing
    - Q&I facilities
    - Communications campaign
    - Evidence-based protocols and regulations for NPIs
    - Field hospitals
    - Oxygen
    - Staffing
    - Reprioritise funding

Introduction – a gathering crisis

In his address to the nation on 12 July, President Ramaphosa warned "the storm is upon us". Yet that storm was never inevitable. It is the product of a failed prevention and treatment strategy.

Despite an early, severe, ongoing, and economically devastating lockdown to buy time to build prevention and treatment capacity, it is now clear that neither is remotely where it should be. The epidemic is spreading uncontrolled with infections starting to surge, particularly in Gauteng and the Eastern Cape, while there are nowhere near enough staffed and equipped hospital beds to

accommodate those requiring treatment. Nor can we be certain of any significant progress in the coming months unless we radically change our approach.

In the Eastern Cape, services are crumbling under the strain, and there are confirmed reports of patients "fighting for oxygen" supplies. This may soon be happening across the country, the deadly consequences of cadre deployment and corruption.

South Africa has some 500 000 critical care hospital bed days for the second half of 2020 (July to December), but may require as many as 2 900 000 on the current trajectory. This means up to 5 out of every 6 citizens requiring hospital treatment may be turned away. If treatment is to be provided to all those needing it, we need to rapidly close this gap by effectively suppressing the epidemic while at the same time rapidly building additional treatment capacity.

This document provides the rationale and framework for a Marshall Plan approach to making the necessary funds available and taking rapid action to build the necessary prevention and treatment capacity. That this style of approach is named after an individual rather than an action is ironic since what we now need is precisely to marshal our available resources for the common good.

PREVENTION

We need a continuous strategy to suppress the epidemic. We are not in a position to use lockdowns for this purpose, since we can neither implement nor afford them. Our prevention strategy must be consistent with an open economy.

A unified, coordinated testing strategy that combines our total testing capacity

At the outbreak of the epidemic in SA, a unified, offensive testing strategy was envisaged to identify and contain "hotspots", as presented by government's Chief medical advisor Professor Karim on 14 April 2020. The NHLS committed to ramping SA's testing rate up to 36 000 tests per day by end April 2020, for the purposes of running such an offensive strategy. However, this rate never materialized, and public testing is now still only at 13 000 tests per day three months later, with these tests largely used defensively to confirm infections in high-risk, symptomatic, or close-contact individuals. There is no overarching strategy in place to effectively suppress the epidemic.

The result is that infection is widespread in communities and soaring out of control. There is no better solution on the prevention side than to go back to testing, contact tracing, and quarantining. SA's test, trace, quarantine strategy must be structured into a more coherent and transparent approach where analysts are able to monitor and evaluate its success. An effective programme would cost just R10-20 billion per year, enabling us to suppress the virus and therefore open our economy and society safely, while saving lives.

Global best practice as per South Korea and Germany indicates that for SA's population of 60 million, a **testing** rate of 20 000 to 60 000 tests per day yielding results within 24-48 hours will enable us to map the spread of the virus and effectively suppress it (through quarantining the infected, to break chains of transmission).

In SA, the private sector is testing at significant levels of around 37 000 to 38 000 tests per day, while the public sector is at approximately 13 000 tests per day. In addition, we also have the university laboratories. Thus, our total capacity is over 50 000 tests per day nationally, which is potentially sufficient scale to suppress the epidemic if we are tactical. But it requires us to combine these testing capabilities into a unified strategy. To achieve this at speed will require a public private partnership. A

national platform of decision-making and control is required, that harnessed available technology and feeds information and resources to provincial platforms.

We still need to drive continuous improvements in numbers and turnaround times of tests (currently around 40 hours). The National Health Laboratory Service (NHLS) is bottlenecking badly, with both test quantity and turnaround times not where they could or should be. That the private sector has managed to increase scale significantly and decrease turnaround times is proof that it can be done.

It is also important to ramp up **contact tracing and quarantining.** This is the best way to separate infected from uninfected people. The process of contact tracing and quarantining on a national platform was delegated to the CSIR. However, it is unclear what progress the CSIR has achieved so far, if any. The process should be provincialized and outsourced to the private sector, with strict service level agreements set in place by the national testing platform.

The Western Cape has a provincial platform for testing and quarantining that is working reasonably well. The strategy is to actively search for people who are infected. This involves screening a defined population in specific hotspot areas, testing those who screen positive, contact tracing those who have been in contact with positive cases and quarantining positive cases.

Quarantine and Isolation facilities to separate the infected from the uninfected

Those who are not able to quarantine/isolate at home should be accommodated in serviced Q&I facilities. This is still far cheaper than the cost of treatment. Every province must offer facilities to enable infected people to isolate. The Western Cape province has brought 41 public and privately-owned Q&I facilities online providing 4766 beds. The provision of Q&I facilities by the province, including transport services will cost just short of R0.5B for the 2020/21 year.

An effective public communication campaign to optimise non-pharmaceutical interventions (NPIs)

In terms of optimising NPI interventions (managing distance, dose and dispersal through social distancing protocols, masks, ventilation etc), the focus must be on managing risk in an open economy.

Super-spreading is the biggest risk feeding into the R0 (the reproduction number, that measures the rate of transmission). We need to better manage the high-risk spaces in communities, attacking every point that super-spreading can occur. Regulations need to be designed accordingly. Any activity that is not essential for the economy but presents a risk of super-spreading should be curtailed.

Up till now, government has underestimated the airborne risk that causes superspreading and therefore underplayed the importance of ventilation. Only this week, government has finally instructed open windows for taxis. Workplace protocols must reflect the need for adequate ventilation and the implications of air conditioning systems (those that circulate air will be higher risk than those that extract and replace air, such as in airplanes and many restaurants). Public messaging must be coherent and tailored to workspaces etc.

Regulations are currently motivated by a mix of political and scientific considerations. The focus must be reducing transmission risks. Any gathering of people not essential for opening the economy should be minimised. For example, it is does not make sense to allow indoor gatherings for funeral or church services. These are high-risk events yet have little economic value.

Managing communal spaces is key to managing the epidemic. We need to focus on hotspots, and on how we address these with different strategies. The Western Cape has done this well. The response must be coherent and tailored to the nature of the community affected.

Cloth face masks and soap should be provided free of charge in vulnerable communities. At R10 per mask, 3 masks per citizen to 20 million people would cost in the region of R600 million.

TREATMENT

Where are we now? A gathering crisis and 3 wasted months

Other than the Western Cape, provinces are responding very late in the day to a surge in infections. There has been an attempt to replicate the Western Cape's response model elsewhere, but the process has been chaotic and slow. There is a distinct lack of transparency, so it is difficult to verify, monitor or evaluate actual progress so far. But we do know that tenders are only now being put out for establishing field hospitals. Agreements and contracts for private sector assistance took months rather than days to come together. Existing operational platforms are poorly structured and lack the capability to deal with this crisis.

A senior doctor in the Eastern Cape has described the situation there as "an epic failure of a deeply corrupt system" while another spoke of "institutional burn-out…a sense of chronic exploitation, the department of health essentially bankrupt, and a system on its knees with no strategy management".

Even the private sector is under severe pressure and heading to full capacity.

The 28 000 beds referred to by President Ramaphosa in his address to the nation on Sunday 12 July is not additional capacity, but rather that portion of existing bed capacity, aggregated across hospitals, that has been designated for Covid patients, including agreements with private sector hospitals. What Ramaphosa disingenuously refers to as "fully functional field hospitals across the country" is simply these designated sections within existing hospitals, as well as the Western Cape field hospitals.

There has been almost no expansion of capacity since March, during lockdown other than in the Western Cape, where a total of 1482 intermediate care beds have been added in temporary field hospitals (CTICC Hospital of Hope, Khayelitsha Thusong, Brackengate and Sonstraal, and some smaller rural field hospitals). Even during the current peak in the Western Cape, these have over 50% spare capacity, meaning that treatment is available for all who need it, and there is buffer in the system should infections rise in future. This network of field hospitals provides intermediary care, substantially relieving pressure on acute hospitals in the province.

The only non-Western Cape field hospital (partly) up and running is that built by Volkswagen in Nelson Mandela Bay with 1200 beds (the Chabula-Nxiweni Field Hospital). However, this is just beds, with no piped oxygen and few staff. The Eastern Cape has only now put out tenders for field hospitals to be ready at the end of October. Nasrec in Gauteng started out as a quarantine facility. The private sector is now assisting in installing oxygen points and staffing the place, to convert 500 beds into a field hospital. There is not a single functioning field hospital in Free State, Limpopo, Mpumalanga, North West, Northern Cape.

The 1700 additional ventilators reported by Ramaphosa are useless unless there is an adequate oxygen supply and adequately trained staff to administer it, which there are not.

The difference between the Western Cape and other provinces has been the ability of decision-makers to get things done at speed and with flexibility. This must be replicated.

Turn-around Plan

There is no time to lose. Parallel decision-making structures must be set up in each province as public-private collaborations with the flexibility to make rapid decisions and to bring in the required skills,

technology and expertise where necessary. We need decision-making structures for continuous, rapid, urgent responses that are separate from those that are long-term and programmatic in nature.

Leadership: A national operational centre feeding information to provincial operation centres must be established to identify shortages, and manage procurement, disbursement, and referrals. These could be managed on a centralised, medical platform.

Funding: See section on finances below.

Field hospitals: The setting up of field hospitals is an urgent priority and must be achieved through public-private collaboration, or through outright outsourcing to the private sector. Existing facilities must be repurposed. There is no time to break new ground to erect temporary hospitals from scratch, and tents are generally ill-suited to the purpose, as it takes too long to connect services.

The Hospital of Hope at the Cape Town International Convention Centre provides an idea of what is involved in setting up a field hospital. An existing building was repurposed in 4 weeks by a 40-member project team including engineers, IT workers and medical experts. It has 862 beds and staff capacity of 92 doctors and 486 nurses. The facility itself was provided rent-free, but the infrastructure, operational and catering costs for the temporary hospital are R47 million.

Oxygen: Hospital beds need oxygen equipment and staff able to use it, and a continuous supply of oxygen. The Western Cape experience shows that a secure oxygen supply is crucial at the peak. The province is using around 29 tons of oxygen daily, which is approximately 60% of its available supply. In other provinces, oxygen banks must be properly procured for all services and facilities. Every bed must have an oxygen supply, in the form of an oxygen concentrator, piping and mask. No expense must be spared in achieving this outcome. It is unclear whether there is current strategic oversight of oxygen procurement, but there appears to be no coherent strategy to ensure oxygen is available at all the service sites treating Covid. Procurement and supply of oxygen and oxygen infrastructure should be urgently centralised.

Staffing: Treatment is largely palliative and so nursing staff are in high demand and short supply. Additional nursing capacity should be enlisted from private staffing agencies, paramedics, retirement, and if necessary, even grounded cabin crew. This “nursing army” could be tasked with lower-skilled activities, to free up highly trained nurses for higher-skilled activities. The necessary financial arrangements should be made to bring in private sector doctors, many of whom have spare capacity. A holistic approach is needed to ensure public and private sectors are interacting to solve this problem.

The Western Cape has recruited over 400 temporary healthcare workers to help meet the need in the province and has created a database of over 2000 volunteers. The province has also implemented a training course for nurses to upskill them in intensive care management. This can be replicated in other provinces.

Systems:

The Western Cape has developed systems to expedite processes. These should be replicated by other provinces. There is no time or need to reinvent the wheel. Examples of systems which can be transferred:

- A bed bureau system which enables the monitoring and tracking of available beds through the system
- Service level agreements with private sector for critical care

- Protocols for the use of steroids in line with international recommendations
- Sharing of daily data via a public dashboard to keep citizens informed on progress

LEADERSHIP

At the root of the problem is a lack of strong leadership. Plainly put, the degree to which SA can close the gap between demand and supply of functional hospital beds depends entirely on how decision-making structures are organized and the degree to which the private sector is brought on board. Even with adequate resources and funding, if decision-making structures are poorly aligned, lives and livelihoods will be lost unnecessarily.

Teams: Even at this late stage having wasted three months, there are no insurmountable barriers to rapidly building effective prevention and treatment capacity. The expertise, resources and technology exist in SA. We need a team in place nationally and in each province with the competence and flexibility to solve problems and take effective, rapid decisions. This is key to unlocking the enormous latent potential in the country. We need to be able to think creatively and act swiftly. There are solutions to each of the problems and bottlenecks we face, but we must be able to implement them.

Public-private collaboration: Realistically, the private sector will need to play a far bigger and more central role. Success will only be achieved through public-private collaboration. The private sector must be enlisted within a coherent decision-making structure geared to urgent, rapid decision-making. There is currently only very selective use of the private sector, even though it has responded more rapidly and effectively than has the public sector – whether in building test capacity and field hospitals, or in providing food relief and PPE.

Oversight: The DA has tabled a proposal to the Minister of Finance, Tito Mboweni, for the creation of a Special Inspector-General to prevent corruption relating to Covid-19 expenditure. The Special I-G would have the power to summon information from any entity tasked with any aspect of the Covid response, including government department and businesses. There must be the ability to take pre-emptive action to prevent corruption.

Monitoring and evaluation: All processes must be transparent with open reporting and sharing of data and outcomes, to enable external monitoring and evaluation for the purposes of feedback and improvement.

FINANCES

Every South African should be outraged at scenes of desperate Covid-19 patients physically fighting one another for access to a simple oxygen bottle in public hospitals in the Eastern Cape. How does this happen in a middle-income country? The answer is NOT that there isn't enough money. That is a lie told by a government that has presided over the near-total collapse of every basic service on which the poor depend. Of course, there is enough money to fund as many oxygen bottles as may be needed. Of course, there is enough money to fund field hospitals. To suggest otherwise is shameful.

Let's look at the salient facts:

South Africa is a middle-income country facing a significant financial crisis, most notably an unsustainably high debt level.

This context means that South Africa was never going to be able to respond to the economic devastation of lockdown by, say, paying every worker's full salary for as long as required. That scale of financial response is simply not available to South Africa because of years of poor public finance

management and low economic growth. This is why extended lockdown was never a suitable or sustainable strategy for our context.

That said, South Africa is by no means a poor country. We are so much better off than many countries in our continent and around the world. The state raises R1.4 trillion in taxes every year. We have a large developed economy, a local skills pool, and a significant manufacturing base. These are all of the ingredients necessary to mobilise a massive effort to respond to the Covid-19 crisis - to run 24-hour equipment manufacture, and to pay for all material needed.

The Western Cape provincial government has conservatively budgeted to spend about R5 billion this financial year on its health response, which has overprovided, as we have seen by its spare field hospital and oxygen capacity. If the Western Cape's response is rolled out to all other provinces, it would therefore cost in the region of around R50-60 billion nationally. This is small change when compared to the cost of government's current de facto strategy which is ongoing lockdown, costing SA R304 billion in lost tax revenue alone. (Level 5 lockdown was estimated to cost South Africa R13 billion per day.)

Consider that this year the government will borrow R700 billion, but the Department of Health will receive just R2.9 billion in additional 'new' money to fund Covid response. All other additional health expenses are covered by "reprioritisations", which is Treasury spin for cuts to other spending programmes, and by cuts to conditional grants. The R20 billion promised by the President for the healthcare response has simply never materialised. It was, in effect, a deception.

Compare this R2.9 billion for the healthcare response to some of the other spending priorities the government has chosen: Like multi-billion rand bail outs for SAA (R16,4 billion), the Land Bank (R3 billion), and e-tolls (R2,53 billion); or R5 billion spent on the SANDF deployment which has been of very questionable benefit or purpose.

Consider finally that South Africa has raised money from international lenders specifically to fund Covid expenses. The $1 billion already confirmed from the New Development Bank is explicitly intended to fund "urgent health needs in South Africa, and...the Loan will assist the South African Government in rolling out its healthcare response to the Novel Coronavirus Disease-19." Had the full amount of this loan been allocated to funding the health response, we may not now be witnessing the tragedy and horror of needless deaths in our public health system.

CONCLUSION: Funding cannot be the limiting factor

In funding South Africa's emergency health response to Covid, money should be of no concern. South Africa has enough money, and can raise enough money, to spend whatever is required to get the equipment, bed space, and staff necessary. And we should spend whatever is required.

The simple fact is that lack of financial resources is not the cause of the criminal under-preparedness of the Eastern Cape and Gauteng health departments. The root cause is governance collapse following years of mismanagement, incompetent leadership, corruption, and cadre deployment. That is why we said, and feel no hesitation in repeating, that the government tabled its emergency Covid budget with blood on its hands.

It is now time for President Ramaphosa to make good on his promise to "pull out all stops to save lives".