



Solidarity Fund

Unity in action

SOLIDARITY FUND SUPPORT OF NATIONAL TESTING EFFORTS SUMMARY REPORT

SEPTEMBER 2020

DESCRIPTION	BENEFICIARY	FUNDING ALLOCATED	FUNDING DISBURSED
Test kits	National Health Laboratory Services (NHLS)	R250,0 million	R245,6 million
Academic laboratory testing	South African Medical Research Council (SAMRC)	R88,0 million	R56,5 million
Additional testing for healthcare workers	Independent Community Pharmacy Association (ICPA)	R25,3 million	R9,7 million
Total amount		R363,3 million	R311,8 million

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SOLIDARITY FUND'S HEALTHCARE MANDATE

The **Health Pillar** is one of the four immediate focus areas for the disbursement of funds donated by South Africans to the Solidarity Fund. The Health Pillar is further divided into two sub-pillars: Detect and Care. Under the Detect Pillar, the Fund seeks to support efforts to detect and understand the magnitude of COVID-19 through increasing the supply of testing kits and through scaling up testing capacity in support of the National Health Laboratory Service (NHLS). A critical part of fighting the COVID-19 national epidemic is conducting adequate testing to identify COVID-positive healthcare workers and patients. This effort has become increasingly important as the epidemic has progressed in the country with severe backlogs in testing in some provinces. The Fund has sought to complement national testing efforts through key projects, which are further detailed below.

PRINCIPLES THAT GUIDED THE FUND'S NATIONAL TESTING CAPACITY EFFORTS

The principles listed below are based on the Fund's Impact Framework, which have been adapted to guide the Fund's contribution within the **Detect Pillar**.



Alignment with national strategy:

The Fund works closely with relevant Government entities, in particularly the NHLS, at all times to ensure focus on the most urgent unmet needs. Only projects that complement the NHLS' existing efforts have been considered to ensure a coherent national approach to testing. The NHLS is fully supportive of all the approved projects, and the Fund ensures that implementing parties (e.g., academic laboratories, ICPA-led network) comply with all current national testing guidelines.



Additionality:

The Fund directs its resources where it can have the greatest leverage and the maximum possible impact, and where it is clear that the impact would not have happened had the Fund not intervened (i.e. the impact is genuinely "additional" to what would have otherwise have happened).



Speed:

The Fund's guiding principle is to fill critical testing needs at a speed that would not have been possible given conventional institutional processes.



Agile:

The Fund adjusts quickly to changes in the needs of the health system depending on the rapidly evolving severity and stage of the epidemic.



Price competitiveness:

The Fund has only funded projects where testing costs are in line with or below NHLS benchmarks. The vast majority of funding goes directly towards the test kits and other supplies with limited funding allocated to overhead costs.

SUPPORTING SOUTH AFRICA'S NATIONAL TESTING CAPACITY

The Fund's support to testing efforts has evolved as the epidemic has changed over time. The Fund's initial focus was to support large-scale community testing as the country approached the peak of the epidemic. 22 days after the formation of the Fund, a R250 million commitment was made to the NHLS to support them in procuring adequate testing supplies to meet anticipated testing needs. At the peak, and even with the Fund's initial contribution, testing capacity was limited relative to the deepening epidemic. Testing kits had to be prioritized for the most at-risk patients and healthcare workers. The Fund therefore sought partners to work alongside the NHLS that could provide additional testing capacity so as to meet the anticipated growing public testing needs in a targeted way. Throughout the epidemic, the Fund has sought supplement NHLS national testing strategy and capacity.

The Fund has committed **R363,3 million** to increase national testing capacity for South Africa. These grants include:

- 1. A grant of R250,0 million** to enable the NHLS to increase the number of test kits purchased during the epidemic. NHLS have used this funding to purchase further extraction and reagent kits.¹
- 2. A grant of R88,2 million** to the South Africa Medical Research Council (SAMRC) to enable them to establish and administer a consortium of academic laboratories in several of the country's universities. This grant serves to increase testing capacity in support of the NHLS, in order to reduce backlogs in testing over a 6-month period and to provide capacity for high priority tests (e.g., healthcare workers, persons under investigation in hospitals).
- 3. A grant of R25,3 million** to a consortium of pharmacies and health practitioners led by the Independent Community Pharmacy Association NPC (ICPA). ICPA's partner organizations include the Independent Practitioners Associations Foundation (IPAF), Black Pharmaceutical Industry Association NPC (BPIA) and the Medical Women Association of South Africa (MWASA). This network is providing additional testing capacity for healthcare workers across all provinces.

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SOLIDARITY FUND'S REACH AND CONTRIBUTION TO DATE

1. NHLS TESTING KITS

Funding of R250 million has been made available to the NHLS to support them in their procurement of extraction and reagent test kits. These test kits are a critical component of testing supplies, and there has been a global shortage during much of the epidemic. NHLS has conducted 1 222 347 tests, and the Fund's contribution to enabling 1,181,646 tests to be completed is summarised in the table that follows. The Solidarity Fund's contribution has enabled reagent and extraction kits to be purchased; these kits are *one part* of the requirements for a test to be conducted. The purchasing of these kits has therefore contributed towards the 1,18 million tests done by NHLS alongside other inputs funded by the NHLS itself.

Table 1: Test kits procured by the NHLS (*correct as at 28 Sep 2020*)

SUPPLIER	AMOUNT AS PER SUBMISSION (ZAR)	NUMBER OF TEST KITS	PRICE PER A TEST (ZAR)	PAYMENTS RECEIVED
Inqaba Biotech (Extraction kit)	34 702 560.00	2 515 (<i>R 13 800 per a kit</i>)	138	57 476 102
Roche (Reagent test kit)	10 615 142.00	222 (<i>R 47 914 per a kit</i>)	250	24 915 072
Cepheid (Reagent test kit)	71 401 108.00	20 033 (<i>R 4 094 per a kit</i>)	409	84 412 070
Thermofisher (Reagent test kit)	119 799 739.00	587 (<i>R 204 000 per a kit</i>)	204	78 843 167
Total	250 234 827			245 646 412

¹A complete COVID-19 test requires the mobilisation of a number of components within the pathology chain, of which extraction and reagent kits are critical.

2. SAMRC PROJECT WITH ACADEMIC LABORATORIES

35,504 tests have been conducted across seven academic laboratories to date with a positive test rate of 23.8%² within an average turnaround time of 25 hours. The academic laboratories have received spill over tests from the NHLS that needed to be processed urgently, largely for healthcare workers or for persons under investigation in hospitals.

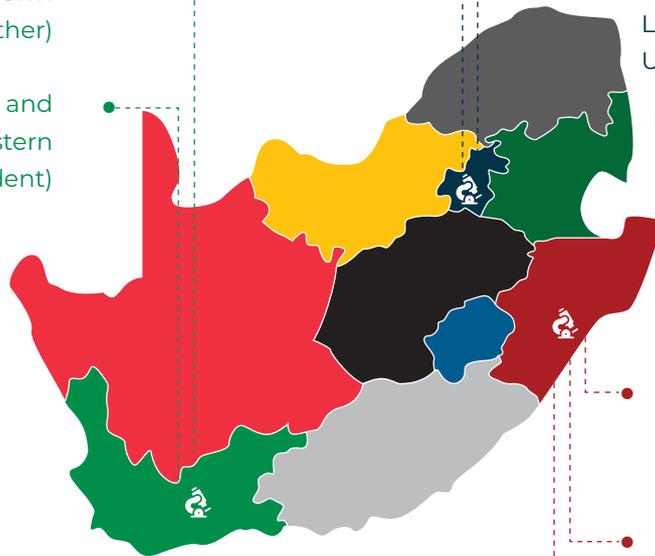
The 7 academic laboratories used to date include:

Centre for Infectious Diseases Research in Africa/ South African Tuberculosis Vaccine Initiative SATVI, University of Cape Town (contracted together)

Centre for Proteomic and Genomic Research (Western Cape) (independent)

Vaccines and Infectious Diseases Analytics Research Unit, University of Witwatersrand

iLead South African Laboratories, affiliated with University of Witwatersrand



Historically Disadvantaged Institutions (HDIs):

- Walter Sisulu University (WSU)
- Sefako Makgatho University (SMU)
- University of Venda (UniVEN)

Centre for AIDS Program of Research in South Africa, University of Kwa-Zulu Natal

Africa Health Research Institute, affiliated to University of Kwa-Zulu Natal

KwaZulu-Natal Research Innovation and Sequencing Platform, affiliated to University of Kwa-Zulu Natal

Three Historically Disadvantaged Institutions (HDIs) were also engaged to develop their laboratory testing capacity. These include the Walter Sisulu University (WSU), Sefako Makgatho University (SMU) and University of Venda (UniVEN). Approximately R5 million of the SAMRC budget allocation was set aside to purchase the necessary equipment for these labs to be operational. WSU has received its first set of equipment, including IT equipment and some consumables. These HDIs are undergoing training on equipment, with a few items of equipment still to be delivered.

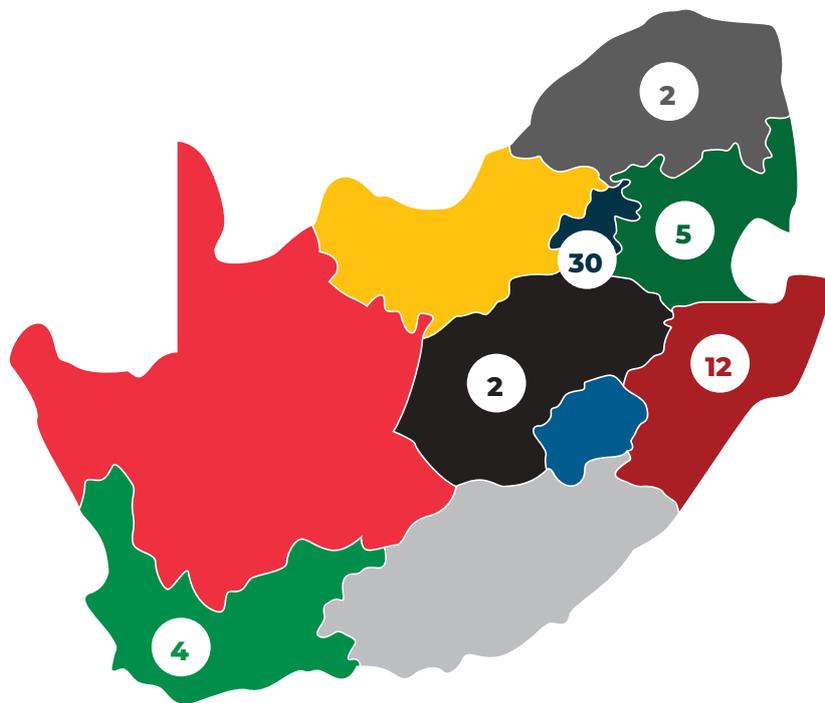
Even with the current low demand for testing, SAMRC has advised that it will recommend that the Fund continues this project beyond the end of September. SAMRC is planning to keep one laboratory available in key provinces for additional capacity in the event of future surges, and is planning to allocate funding for research to each HDI (approximately R1 million each) to ensure that improved HDI capacity extends beyond the immediate epidemic needs.

²As compared to the South African national positive test rate of 9.2% (as at 16 September 2020).

3. ICPA-LED PROGRAM FOR TESTING OF HEALTHCARE WORKERS

The network led by ICPA has focused on additional capacity for testing healthcare workers. ICPA has partnered with IPAF, BPIA and MWASA to meet the anticipated testing requirement. These partners have formed a broad network of pharmacies, GPs and healthcare practices across the country to conduct testing for at-risk healthcare workers. The healthcare workers are screened using the VULA Mobile app, and, conditional on presenting as at-risk, receive a voucher for a COVID-19 test at a nearby location. HamadiLab and Neuberg Global Laboratories are responsible for providing the lab testing infrastructure to ensure all tests are completed within a 48-hour turnaround time.

Within the ICPA-led program, 55 testing sites were established across the country: four in WC, 12 in KZN, 30 in GP, five in MP, two in Limpopo and two in FS.



KEY LESSONS LEARNT AND CHALLENGES

For future testing support, the Fund has learned the following:

- **Being agile and flexible is key.** The national testing strategy has had to evolve in a manner that keeps pace with the shifting progression of the epidemic. It has been critical to remain agile to ensure effective support to Government's testing efforts, through mutually beneficial, and sustained partnerships with the NHLS, SAMRC and ICPA.
- **A comprehensive understanding of the supply chain is required for proficient planning and execution.** In ensuring adequate testing capacity, there are a number of different requirements. These include procuring test kits (often in the context of international competition), securing adequate laboratory capacity and coordinating distribution to areas and people with the greatest need.
- **Clear prioritization of testing and KPIs** to ensure judicious use of additional testing capacity. In all partnerships, the Fund has worked alongside its partners to specify clear KPIs (such as turnaround time and positive test rates) to ensure alignment on a common goal. In addition, priority has been given to those at the greatest risk, typically healthcare workers and persons under investigation in hospital settings.

Through the process of bolstering testing capacity, the Fund has experienced a number of challenges in procuring necessary equipment:

- **Coordinating with a complex and wide-ranging set of stakeholders** has been a constant challenge, balancing the need to align to national guidelines and NHLS activities while maintaining requisite speed and agility.
- **Securing adequate laboratory testing capacity** has been a challenge for the country and for the Fund. Existing laboratories have been overwhelmed during the epidemic necessitating repurposing and certifying new laboratories. The testing capacity shortages have abated in recent weeks, but may resurge in the event of a second wave.
- **Balancing a need for speed with due process** has been difficult given the urgent need for testing capacity, but the Fund remains committed to following good governance processes (e.g. ensuring that all necessary vetting and contracting is completed).

NEXT STEPS

The epidemic in South Africa has evolved, and with a slowing COVID-19 infection rate, there is currently declining demand for testing. The increased testing capacity of the NHLS, while not currently fully used, remains valuable especially in light of future needs. The Solidarity Fund remains committed to exploring how this capacity can be fully utilised going forward, and engagements have commenced with ICPA, SAMRC and NHLS to determining ongoing and anticipated need for testing support. The SF will also ascertain the possibility of promoting testing through the fund's behavioural change campaigns.