November 2021

Solidarity Fund
Unity in action

PPE FOR FRONTLINE COMMUNITY CARE WORKERS

Final Report

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BENEFICIARY	AMOUNT ALLOCATED	AMOUNT DISBURSED
DG Murray Trust	R90 000 000.00	R87 040 970.96

01

THE SOLIDARITY FUND HEALTH CARE MANDATE

Community Care Workers (CCWs) represent an important facet of healthcare workers on the frontline of the COVID-19 pandemic. CCWs also represent a problematic healthcare worker population to reach, as a lot of their work occurs within communities that may be more difficult to reach than others.

To assist the National Department of Health (NDoH) in their efforts to provide PPE to all South African healthcare workers, the Solidarity Fund, together with the Elma Philanthropies in South Africa, co-funded a DG Murray Trust (DGMT) programme. The programme provided PPE to protect and support community care workers during the peak of the COVID-19 pandemic. A joint commitment of R120 million, with R90 million coming from the Fund, was made to meet the PPE needs of community care workers across the country.

Under the Fund's 'Care' mandate, a key objective is to support the national healthcare system to augment the safety and efficacy of the South African national medical response. This was done in many ways, and for this project specifically, the Fund's response was to rapidly assist in procuring and distributing personal protective equipment (PPE) for CCWs.

A stable supply of certified PPE aids assured limiting the spread of the virus, particularly in community settings. The protection of CCWs through PPE provision allows them to continue to provide care, assistance, and relief to our communities as we transition through the stressful and dangerous stages of the pandemic.

02

COMMUNITY HEALTHCARE WORKER SUPPORT PROGRAM

CCWs include community health workers, social and social auxiliary workers, child and youth care workers, and food and relief workers across a network of hundreds of non-government organisations (NGOs).

The program formed part of a broader intervention carried out by the DGMT. In addition to PPE support funded by the Fund, other donors have provided;

- funding for communication materials,
- supporting our NGOs local logistics costs,
- providing access to psychosocial support and food vouchers.

The following sections will break down and clarify the various aspects of the project, including the partnerships created and utilised, PPE unit amounts, PPE funds spent and allocated, provincial impacts of the project, procurement and distribution practices, and finally, a financial breakdown.

03

PROGRESS AND IMPACT

Partnerships for the PPE project

Effective partnerships were essential to the success of this programme, as there were many intricacies involved. The DGMT was responsible for fundraising, contracting, procuring and overall project management of the entire scope of work.

To deliver on the PPE programme, DGMT involved trusted partners to procure, distribute and track PPE for CCWs. These partnerships were impactful, as the companies and organisations approached represented a network of suppliers optimally positioned to aid at various project points. These partners included:

- **Coca-Cola** provided logistic services for the distribution of PPE to recipient NGOs at zero cost. It included the use of their various regional depots as warehouses.
- **REDISA NPC** were responsible for developing, implementing, and managing processes and systems to ensure that the PPE procured was distributed to the end-user in a transparent and auditable manner. For the first round of distribution and a portion of the second, distribution activities were recorded and controlled through a bespoke IT logistics system developed specifically for the project. REDISA slightly augmented the approach toward the end of the deliveries to enable quicker distribution turnaround times. They provided all their services at zero cost for all but the last three months of the project, where the Fund agreed that they bring in extra resources to help increase the speed of distribution.
- **Old Mutual** provided the DGMT with a storage facility in Bedfordview, Johannesburg, at zero cost. This materialised toward the end of 2020 and was a critical enabler of the faster turnaround times that the project experienced toward the end of the project.
- **Imperial Logistics** supported the project with customs clearing and forwarding for international procured PPE. They also provided storage of PPE at their central warehouse in Centurion.
- **Business for South Africa (B4SA)** supported DGMT in some of the procurement activities.

PPE procurement and distribution

Over 24 million units of PPE were procured, most of which was received (apart from 8 000 Type I masks being short delivered by Imperial) from the procurement done by B4SA. We also received a donation of 30 000 Type II masks from China.

The following table will break down the Quantities of PPE procurement and distribution.

Quantities of PPE procured and distributed to date

Type of PPE	PPE item	Quantity procured	Quantity received	Quantity delivered
Masks	Type I (patient)	520 000	512 000	482 000
	Type II (or above)	4 000 000	4 030 000	4 030 000
	Reusable cloth masks	600 000	600 000	411 600
	Nano-filter inserts	1 200 000	1 200 000	617 400
Gloves	Nitrile non-sterile gloves	17 500 000	17 500 000	12 890 400
Gowns	Mid-calf, water-resistant	50 000	50 000	37 360
Face-shields	Re-usable face-shields	150 000	150 000	97 000
Plastic aprons	Disposable aprons	280 800	280 800	263 600
Disinfectants	>60% alcohol-based 5l	2 400	2 400	1 924
Bottles	500ml	30 000	30 000	30 000
	Total	**24 333 200**	**24 355 200**	**18 861 284**

**Note: data is correct as of 28 February 2021*

The CCWs who received PPE through this project were engaged in different activities through their respective NGOs throughout South Africa. The major activities carried out in each province are outlined below:

- **Eastern Cape** – Many care workers are working in hospice centres and nursing homes. NGOs focused on TB/HIV treatment and other auxiliary clinics. In some parts of the Eastern Cape, Home Care Sisters provide care to vulnerable patients, including the elderly and cancer patients.
- **Free State** – The main care workers activities include tracing TB/HIV patients, delivering treatments, conducting home visits, referrals, screenings, and running awareness and education campaigns.
- **Gauteng** – Healthcare workers generally conducted health and social assessments to raise COVID-19 and HIV awareness, ensure medication adherence, conduct screenings and track social issues in the communities (which are referred to social workers as needed).
- **KwaZulu-Natal** – Healthcare workers provided basic health advice, followed up on medication adherence, collected medication for the elderly, helped the disabled and mothers with newborn babies, and supported COVID-19 screenings.
- **Limpopo** – Key activities include conducting household screenings and assisting in clinics with COVID-19 related tasks (e.g. screening, triage, information-sharing)
- **Mpumalanga** – Key activities include conducting household screenings and assisting in clinics with COVID-19 related tasks (e.g. screening, triage, information-sharing)

- **North West** – Healthcare workers are doing home visits and COVID-19 screening.
- **Northern Cape** – Healthcare workers have been assisting with community screenings and in-clinic screenings. They are also providing basic psychosocial support to people in their homes.
- **Western Cape** – Community care workers mainly performed community and home-based care, including follow-ups with previously hospitalised patients, household assessments and screening, contact tracing and medication delivery.

The project provided support to urban and rural areas. This assistance was made possible through NGOs based in small towns serving rural population towns such as Qumbu, Mthatha, Bizana, Matatiele and Mount Fletcher in the Eastern Cape (for example). Thus, the project was able to support and assist hard-to-reach rural communities.

PPE procurement and distribution process

Procurement

The aim of procurement was, above all else, to obtain the necessary and correct equipment as quickly as possible and distribute it to our CCWs. Where possible, the Fund used local suppliers to promote business and innovation.

DGMT was responsible for the procurement of all PPE. They used both the B4SA procurement channel as well as their procurement capabilities. All suppliers used are listed in the table below. The Fund chose suppliers based on competitive pricing, product quality and delivery speed. At comparable pricing and delivery times, local and black-owned suppliers were prioritised.

Suppliers contracted to date

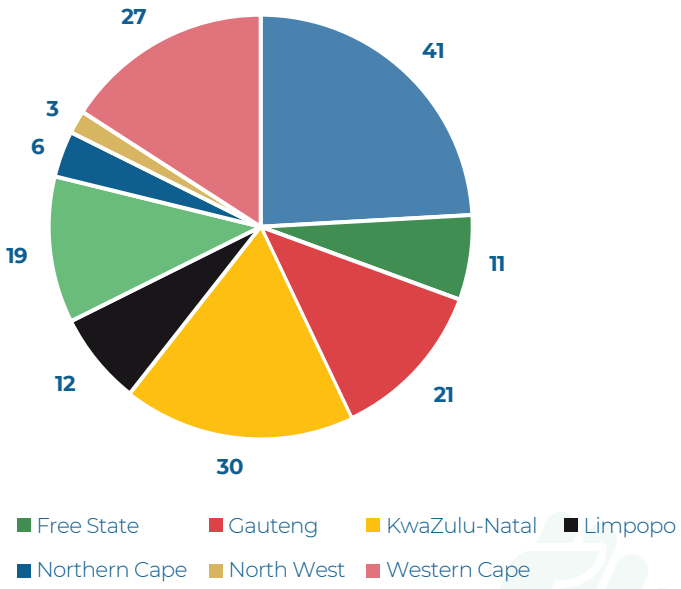
Name of supplier	Registration no.	Amount spent with supplier to date (R millions incl VAT)
A and B Movers	1988/013403/23	R4 347.83
Amka Products	1979/005849/07	R138 000.00
Atlantic Forwarding	1994/008360/07	R20 148.88
Biodelta	2002/004847/07	R475 957.60
China National Pharmaceutical Foreign Trade Corporation	Non-SA company	R11 803 440.00
Imperial Health Sciences	1963/001656/07	R4 368 615.91
Imperial Logistics		R9 818 748.06

Name of supplier	Registration no.	Amount spent with supplier to date (R millions incl VAT)
Indalwenhle Environ	2015/251184/07	R5 298 800.00
IVS Holdings	2017/383378/07	R289 314.10
Kusaga Taka	2010/017708/07	R195 000.00
Melanin Ink	2017/012474/07	R194 000.60
Redak Investments	2016/181892/07	R2 266 000.00
SA Commercial	2005/008919/07	R57 131.78
Thuni Logistics	2017/259441/07	R1 573 919.57
Unitrade 1032	1998/002665/23	R1 800.00
Yiwu Feiya Trading Co.	Non-SA company	R50 553 746.63
Total		**R 87 040 970.96**

Distribution

The project ultimately distributed PPE to 170 NGOs across the country, which helped provide the last-mile distribution to over 30 000 community care workers. However, the Fund did have a database of over 300 NGOs who signed up to be part of this programme. Not all were included in the final distribution plans for various reasons, including some failing the verification step and others not submitting care worker data.

Number of NGOs who distributed PPE by province



The first round of distribution began on 14 July 2020 and was completed on 18 August 2020. The Fund delivered PPE to 10 013 care workers linked to 49 NGOs in the four hotspot provinces during this round[1]. This distribution coincided with the first wave, which began in May 2020 and reached its peak on 19 July 2020.

[1] The hotspot provinces at the time were KZN, Eastern Cape, Western Cape and Gauteng.

The Fund provided care workers with enough PPE to last them three months. The second round of distribution began on 23 October 2020, and distribution was finalised in February 2021. During this round, the Fund delivered to over 30 000 care workers, linked to 170 NGOs. This second and final round of distribution also coincided with the second wave in South Africa.

Transparency and efficiency are essential to gain and keep the trust of stakeholders and the South African public. With that in mind, REDISA developed a distribution model to ensure that the PPE could be tracked from the time it was received from the supplier to the final distribution to care workers. The process was implemented and managed by way of a bespoke logistics management system (LMS) designed for the project, focusing on being auditable, data light and end-user friendly.

An MOU engaged each stakeholder[2] involved, or, in the case of the NGOs, the Fund implemented a take-on process to ensure the necessary details and documents required were on record. Each NGO was required to sign off on their registration details, was put through a one-hour personalised distribution planning session to ensure that the risks to the PPE and Community Care Workers (CCWs) were managed by their organisation. These sessions were recorded to support the requirements for issuing the organisation with a Certificate of Participation.

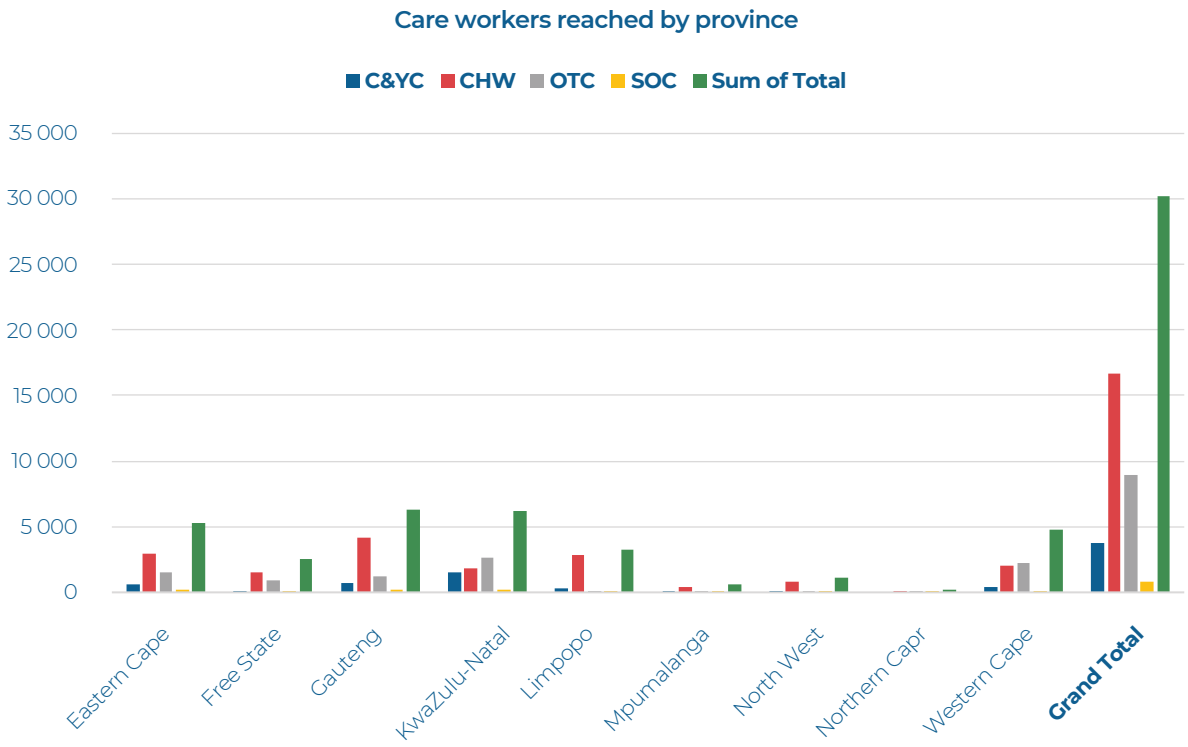
All registration and training records were maintained and stored by REDISA. Should there be a need to audit the process, or in the event of disputes relating to non-adherence to the prescribed processes, the records are available. These sessions provided us with valuable insights into the challenges faced regarding access to PPE, and the organisations appreciated the level of care and diligence given to ensure that the actual beneficiaries received the PPE.

It appears that, previously, supplies had been dropped without processes that supported accountability and transparency. Many NGOs were concerned about how they would demonstrate to their communities that they provided for their CCWs. The fear of exposure to corruption and criminality, expressed particularly by the NGOs in the Eastern Cape, was allayed when they were introduced to the processes, specifically when it came to recording all transactions for audit purposes. The system now provides them with a mechanism to prevent fraud and assists in managing PPE stock, deliveries and reporting.

REDISA registered 170 organisations into the LMS. These organisations provided 30 205 care worker records distributed across the provinces as follows[3]:

[2] Included SA commercial, who provided a call centre service, and Coca-Cola, who provided the transport to deliver PPE.

[3] Care workers were categorised by the type of care worker they were child and youth care worker (C&YC), community health workers (CHWs), social workers (SOC) and other (which included food relief volunteers and other volunteers).



For the first round of distribution and some of the second, care workers who received PPE went through a validation process. Their mobile numbers were confirmed through a validity check against mobile provider databases. The validation process was a requirement since the Fund's process was initially designed to send them a one-time pin (OTP) to confirm when their PPE would be released. However, this process slowed delivery and excluded valid care workers. A decision was made toward the latter part of the second distribution round to expedite the process.

In round two, mobile numbers were not validated and the LMS not used. The result was that CCWs were not excluded if they did not have a mobile number. To ensure some audit trail, the Fund requested the NGO node provide the mobile number on the sign-off sheet when distribution occurred. A training manual was sent to the node along ,with the sign-off sheets as one-on-one training was not conducted. Nodes were encouraged to call if they needed assistance, and some did.

Track usage

We partnered with SA-Commercial to establish a call centre for this project. In addition to responding reactively to calls, the call centre conducted surveys on the use and management provided to CCWs. Toward the end of the project, of particular interest to us was to check what PPE people would need should there be a third round of distribution. The results of these surveys differed weekly and across the different rounds of distribution. The results of the final report are summarised as follows:

- **80%** of care workers confirmed having received all their PPE,
- **91%** of care workers reported having received all their PPE in good condition,
- **2%** of care workers reported that they received all their PPE, but some were damaged/unusable,
- **7%** of care workers reported that they had received some of their PPE, but some items were missing.

As much as possible, the distribution team worked to fill shortfalls in delivery and investigate matters. The team is still working on closing matters out, but it is dependent on the nodes' responsiveness, care workers, and CCBSA.

04 KEY CHALLENGES

There were two main challenges that the project faced. The first was a delay in the procurement of PPE at the start of the project. The second was a delay in distributing PPE.

In terms of the first challenge, procurement lead times were longer than anticipated due to delays in testing, a COVID-19 outbreak at SABS, the rejection of some of the orders by SABS, and sourcing in-demand PPE items (such as gloves and masks). As a result, the project was delayed by a month due to purchase orders not being delivered.

The second challenge had many contributing factors which resided at all stages of the logistics chain. It is important to note them to highlight the logistical complexity of managing a project of this kind and scale. Some of these are stated below, categorised based on various stages of the logistics process.

Community care worker data

- The distribution approach was demand-driven. The Fund collected community care worker data from the NGOs in the database. The data had to be in a particular format, which was provided to each NGO in a template form and requested that each NGO ensure the data was complete. Despite providing NGOs with a template, the Fund still received incomplete data in the wrong format. It was an onerous task to get the data cleaned, which required much back-and-forth with NGOs. The first round of data cleaning resulted in approximately 20 000 approved care worker data items. This was significantly less than what was the planned distribution amount. The Fund had to reach out to NGOs and convert some files. The Fund got 30 000 care workers into the database, causing delays in finalising the distribution list, which delayed getting distribution started.

Inventory management

- ***Missing PPE:*** The Fund received PPE by sea and air freight, with the latter coming in first. The consignment of masks, gloves and gowns were sent to Imperial Health Solutions for storage on 22 July 2020. In early September, after the first round of distribution was complete and the distribution plan for the second round finalised, the Fund planned to move more stock than Imperial confirmed having. Imperial investigated the matter, and it took over a week to get confirmation of the stock count. Half of the order of gowns were still unaccounted for, and a month later, Imperial confirmed that the gowns were mistakenly allocated to the National Department of Health (NDOH). This issue delayed the second round of distribution by a little over a month.
- ***Inaccurate stock counts:*** The Fund relied on Coca-Cola to collect PPE from central warehouses, deliver it to their regional depots and then deliver from regions to NGOs. The Fund planned to deliver to each area exactly enough PPE to meet the demand for that region. The Fund supplied Coca-Cola with the delivery notes to guide stock movements, and the Fund kept a record of what was expected to remain at the different sites. Coca-Cola did the physical stock counts, which ultimately guided the distribution plans. Often the stock counts took weeks to complete and delayed the process. The stock account sometimes revealed less stock than what was recorded, only for those additional pallets to be found months after adjusted distribution plans. All the back-and-forth required to get an accurate sense of how much stock is available to deliver, set delivery back weeks.

Storage

- PPE was stored in various places, based on where the supply was received. The Fund had PPE in the Western Cape, KwaZulu-Natal, Imperial's warehouse in Centurion and CCBSA in Bedfordview. Unfortunately, no one storage facility could receive the entire consignment. Distributing straight from a supplier to Coca-Cola's provincial depots was impossible because the Fund did not know the demand and delivery times upfront. All of this had an impact on distribution. It meant the Fund had to wait to have enough of most PPE items, leave them in central warehouses across the provinces, and design the distribution to have four handovers before PPE could get to a care worker – making the lead time to care work longer.

Packaging

- The Fund experienced delays due to the way suppliers packaged the PPE. For example, an order of 280 000 aprons was put in plastic bales – despite the request to be provided in boxes. Coca-Cola could not move these as they would be difficult to load, transport and distribute. The Fund decided to start distributing the second round of PPE without aprons to try and mitigate some delays.
- PPE arrived palletised by a supplier. It caused a challenge in the last leg of distribution because each NGO received a mix of PPE. It meant that Coca-Cola's regional depots would need to re-palletise PPE to enable delivery to an NGO.

Distribution

- Due to how storage worked and the different territories Coca-Cola operates in, distribution had to be planned in the following four legs:

1. First, the Fund needed to get a supplier to deliver PPE to one of the three central warehouses. One was in the Western Cape and the other two in Gauteng. A decision on where suppliers need to deliver was based on the availability of space and their proximity to a warehouse.
2. Once at a central warehouse, the Fund would arrange for the PPE handover between the various central warehouses and Coca-Cola's main depots in the Western Cape and Gauteng. This leg was necessary because all the reusable masks, for example, were in the Western Cape, and none of the other stock was there. Thus, the Western Cape needed to receive other PPE items, and Gauteng needed reusable masks. Coca-Cola Bottlers South African (CCBSA) was responsible for the whole of South Africa apart from the Western Cape, and Coca-Cola Peninsula Beverages (CCPB) operated in the Western Cape. The Fund had to hand over stock between the two distributors. Coordinating this second leg of distribution was time-consuming for various reasons. One of the most significant challenges ended up being with Imperial's storage facility. Imperial had several internal operational steps to take before they could release and deliver stock. Imperial delayed these steps because they were also handling storage and distribution processes for the NDOH.
3. The third leg was a handover from central warehouses/CCBSA to various provincial depots. CCBSA and CCPB were primarily responsible for this. The Fund experienced delays because loads sometimes needed to make sense within Coca-Cola's commercial route plans. Truck strikes, which shut down national routes for days, also caused delays.
4. Once PPE was in each province, distribution to NGOs would take place. The Fund would coordinate for NGOs to deliver to CCWs. The final leg of the process ran relatively quicker. There were issues, but the NGOs were generally extremely helpful in raising them and following the guidance in dealing with them.

In a perfect world, this four-step distribution process should have taken three/four weeks to complete. But with issues like the ones highlighted above, it took far longer.

05

KEY LEARNINGS

The following lessons are worth highlighting for future projects:

- **Being agile and flexible is vital.** Between the time this grant was awarded (April 2020) and implemented (July 2020 onwards), the pandemic shifted immensely. Being dynamic within the changing courses of the pandemic to meet the immediate needs of CCWs has ensured that this support had the desired impact.

- **Coordination by an experienced, well-connected partner**, in the form of DGMT, has enabled the Fund to manage the complexity of navigating multiple NGOs simultaneously. This approach allowed for a broad reach, but with administration and coordination being centrally located.

- **Local solutions are possible with careful and creative planning.** A highlight of the project was the development of local manufacturing opportunities. Understanding which PPE items South Africa can produce locally and investing in this production is essential for job creation and creating genuine empowerment opportunities while serving the needs of our healthcare workers.

- **Budgeting for commercial transportation and storage is key.** The support received from Coca-Cola was immense and invaluable. The team was a pleasure to work with and very responsive. This was the case with all the pro-bono support provided to this project. However, it had its limitations when the project needed full-time commitment and the main priority.. The Fund eventually brought in a commercial transporter to supplement Coca-Cola's efforts, which helped speed up delivery. The Fund also paid to add a storage facility and capacity to the distribution management team, which in hindsight should have had a dedicated person from the team overseeing it full-time. These efforts to supplement volunteer time and effort with full-time dedication sufficiently incentivised efforts and helped speed up the distribution process.

- **Detailed lessons from distribution**
  - Most nodes experienced issues when distributing different quantities of PPE to different types of CCWs – future distribution plans should treat CCWs equally. It creates unhappiness on the ground but also complexity in the distribution process.
  - The supplier of face shields packed the shields with parts A (shield) and B (headbands and fasteners), which resulted in boxes mixed up despite colour coding. Many nodes received mismatched parts, rendering them useless.
  - The gloves, gowns and disposable masks were ordered from China. The supplier labelled the boxes in Mandarin with only some English translations. Identifying PPE written in Mandarin created multiple issues as transporters did not consistently deliver the correct boxes.
  - Nodes often only realised their delivery's actual quantities/content once they opened boxes to distribute, and inaccurate deliveries were virtually impossible to rectify.
  - CCBSA did not prioritise round two due to their priorities. In future, the transporter must be contracted to avoid reprioritisation in distribution.

- Given that there is no actual ability to validate a CCW, the gathering of CCW data should be reconsidered. It may make more sense for a node to provide names/ contact numbers when they distribute via a signed register. When they register to be part of the program, they can provide the total number of CCWs for allocation purposes. The call centre can then be used to make follow-up calls to confirm receipt of PPE.
- Although the OTP allows for several controls, many nodes battled with processing the pin. This was due to several factors, including CCWs working in remote areas, lack of access to mobile data, individuals being technologically unable to cope with the system/pins. Also, many CCWs could not get the pin code: their numbers changed too frequently, they were not the primary owner of the mobile, or they did not bring their phone to work.
- The Fund struggled to deliver sanitisers as it was considered a hazardous good, which required a particular certificate to deliver, which many transporters did not have. In future, the Fund should avoid the distribution of hazardous substances due to the complexity it introduces to the logistics planning. The Fund can overcome this if a reliable/authorised/contracted provider is available.

- **In any continuing PPE procurement role**, the Fund should consider the following:
  - Distinguishing between PPE products that are manufactured locally and those that are required to be imported, to optimally support innovation and local manufacturing capacity while expediting the import of critical PPE that cannot be locally produced;
  - Shifting processes of quality assurance to the manufacturing country by engaging with official industry bodies there, thereby preventing situations where inferior products are imported and ultimately rejected by SABS; and
    Ensuring that the requisition and payment system for PPE within the Fund can respond rapidly, particularly in a global shortage where delays can make one lose one's place in the queue.

06 CONCLUSION

The project was a success, despite delays and challenges within the process of procurement and distribution. The Fund, along with DGMT and other partners, continuously adapted to the changing landscape, with the end goal of PPE distribution remaining the top priority. It was imperative to provide this essential PPE to the CCWs. They make up an invaluable section of the national healthcare efforts by delivering care to hard-to-reach and vulnerable communities.

The Fund must give thanks to all those involved. Large organisations that provided extensive logistical support and to individuals that volunteered their time. The nature of the project aligned with the fundamental aspects of Solidarity in Action. Many came together to ensure that the CCWs were adequately protected during these dangerous and unprecedented times.