

SIEMENS MEDICAL DONATION TO THE EASTERN CAPE

Final Report

BENEFICIARY	AMOUNT ALLOCATED	AMOUNT SPENT
Siemens	R 10 730 994	R 10 465 696

**Solidarity Fund contribution to the project*

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SOLIDARITY FUND HEALTHCARE MANDATE

The Solidarity Fund has identified various opportunities to augment and assist the South African National Department of Health (NDoH) in the fight against the COVID-19 pandemic. Through the Fund's Health Pillar, the Fund is helping to address critical shortages in the healthcare system, particularly in local healthcare facilities in underdeveloped areas, that are struggling under the strain of the COVID-19 pandemic. This support is not only helping to ensure sufficient healthcare resources are available to provide urgent care and treatment for COVID-19 patients, but it will also assist the NDoH to manage future medical situations and emergencies effectively.

In support of this aim, the Fund has partnered with Siemens and the German government to build an innovative modular hospital as an extension to the Cecilia Makiwane Hospital in the Eastern Cape Province (EC). The 100-bed capacity extension will provide the hospital with much-needed additional capacity, including ten new intensive care beds, 90 ward beds, diagnostic services and a pharmacy store. This will help to ease the burden on the hospital and enable them to better provide quality healthcare services.

Construction of the modular hospital was funded by Siemens, a global player in the healthcare technology industry, who also provided key medical equipment. The donation was routed through the Solidarity Fund, with the Fund, Siemens Healthineers, Siemens Caring Hands, and Aspen Pharmacare also providing additional donations to the project.

The Eastern Cape Department of Health (ECDoH) affirmed the need for the extension, both for the management of the pandemic and the provision of further healthcare services post COVID-19. Once constructed and handed over to the province, the ECDoH staff will operationalise the hospital for public use.

PRINCIPLES THAT GUIDED THE FUND'S SUPPORT OF THE SIEMENS EASTERN CAPE MEDICAL DONATION PROJECT

Alignment with national strategy

The Fund works closely with the ECDoH and Siemens to ensure that the modular hospital provides high levels of essential care to patients while maintaining access to necessary treatment options.

Impact additionality

The Fund deploys its resources for maximum impact, with the aim of demonstrably “adding” to existing efforts around health system strengthening. The presence of the new modular field hospital provides an increase in the number of patients that can be treated in the area, both for the COVID-19 virus and beyond the life of the pandemic.

Speed

One of the Fund's guiding principles is to address critical medical equipment needs at speed. By working closely with the ECDoH, Siemens and other partners, the Fund could assist with providing medical care quickly to those in need.

Agility

The Fund adjusts quickly to the changing needs of the health system as it grapples with the pandemic. This project provides the ECDoH with the opportunity to adapt rapidly to the spread of the pandemic by delivering much needed hospital beds and essential equipment.

Reach

The Eastern Cape is one of the most severely impacted by COVID-19. This addition to Cecilia Makiwane Hospital will improve access to medical care for residents in the area for years to come, extending the hospital's reach to more patients in need.

In addition, the following factors guided the implementation of this project:

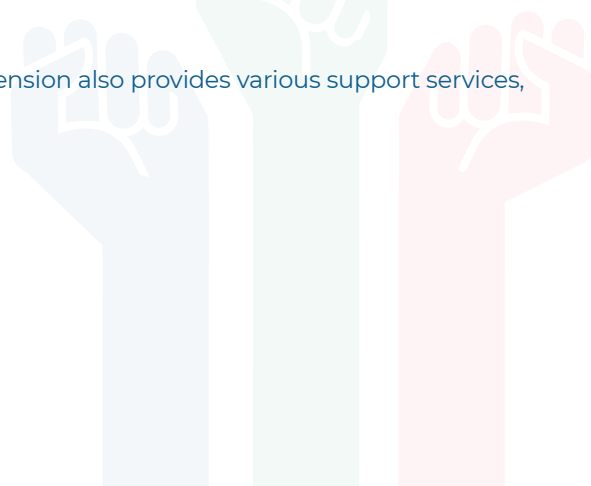
- Provision of mobile and safe infrastructure
- Flexibility and rapid deployment
- Provision of state-of-the-art technology and equipment
- Sustainability to continue to provide medical care and interventions to patients
- The transformation of care delivery

IMPACT

The modular hospital was launched and handed over to the Eastern Cape Province on Friday, May 14th, 2021. Construction is completed, and all the equipment has been delivered. The ECDoH has recruited staff who are currently undergoing training on the new equipment and hospital protocols.

In addition to the additional 100 beds, the new extension also provides various support services, including:

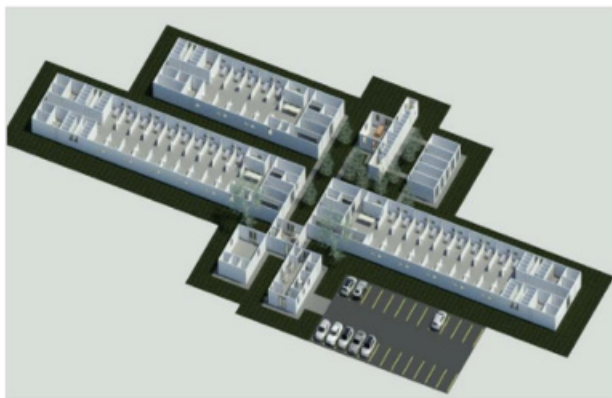
- A waiting/sorting area
- A screening area
- A pharmacy



- The hospital also includes a range of innovative Siemens' medical technology, including ultrasound units, X-Ray machines and blood gas machines. It also includes state of the art technology to help control contamination in high contact areas of the modular hospital. It will be powered by a solar modular configuration that provides a reliable, continuous and clean power supply.

"The partnership helps us to improve our agility, our capability, as government, to offer a quality service. We are receiving the hospital with warm hearts, and surely it will help to save more lives in this area."

Figure 1: 3D model of hospital layout



The floor plan shows a large central area labeled "90 Bed Ward" with a central corridor and multiple rooms. To the top left is the "ICU/HC" (Intensive Care Unit/High Care) area. To the top right is the "Canteen/Staff Change Area" and "Support Services". At the bottom is the "Admissions Screening Lab". Dimensions are provided for various sections: 18000, 36000, 6000, 7200, 6000, 6000, 34800, 6000, 12000, 6000, 12000, 6000, 12000, 48000, 6000, 6000, 6000, 48000, 2400, 9600, 48000, 12000, 12000, 48000.

SUPPLIERS

A host of suppliers were engaged in providing state of the art equipment, logistical support, and construction materials and assembly. When purchasing medical equipment, the maintenance and running costs and consumables were considered and secured where possible. All equipment provided by Siemens came with 12-month warranties.

The table below breaks down the cost of the project:

Table 1: Project Budget Breakdown

(Totals are not indicative of the Fund's contribution - which is shown on the table above - but rather the value of the project itself.)

Supplier	Registration No.	Item	Qty	Amount (excl. VAT)
WBHO Construction	1983/011953/07	Construction of beds for Cecilia Makiwane Hospital	100	R 985 297,11
Siemens Healthcare	2015/038347/07	Ultrasound – Acuson P500	1	R 930 000,00
		Mobile X-Ray – Mobilett Elara Max	1	R 1 649 000,00
		Advia Centaur ¹	1	R 584 279,32
		Blood Gas Machine ²	1	R 256 000,00
		Consumables/Reagents/ Standard Controls ³	Various	R 1 870 490,80
Violet Defence	1996/013289/07	S.A.G.E. UV (UV Disinfection System)		R 90 918,31
Sustainable Solar Systems	2020/179561/08	Insulated, pre-installed 40" freight container & 20" freight container	1	R 528 071,91
		Power Electronics & Protection	1	R 2 759 837,50
		PV Modules and Mounting Structure	1	R 506 626,24
		Diesel Generators – With Silent Canopies	1	R 465 520,00
		Microgrid controller	1	R 482 030,00
		Transportation Costs	-	R 30 000,00
Imperial Logistics	1993/003465/07	Procurement Support	-	R 49 000,00
Total				R 10 658 981,28

¹ Includes the central processing unit as well as controls.

² Includes a 12-month service contract.

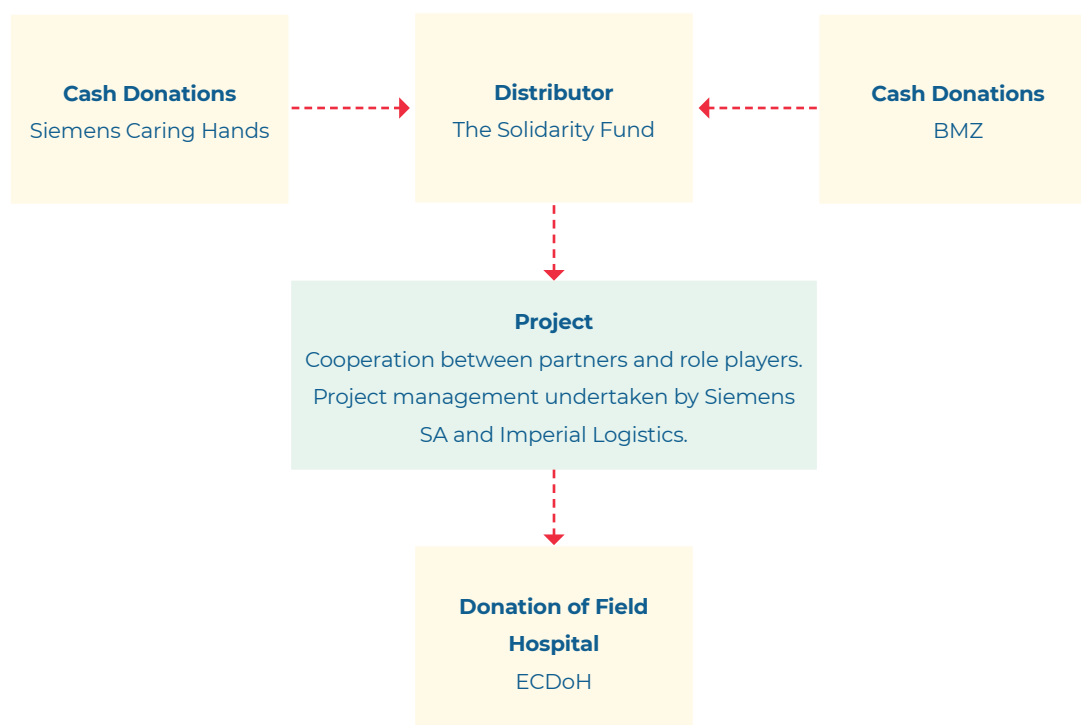
³ Various pieces of equipment require consumables, reagents, and std. controls to operate, and were included in the procurement.

GOVERNANCE

For the successful facilitation of these kinds of projects, it is imperative to establish clear and effective partnerships with individuals and organisations in optimal positions to oversee and provide the necessary governance.

The active role players in the project included the Solidarity Fund, Siemens Caring Hands, and the Federal Ministry for Economic Cooperation and Development (BMZ) in Germany. Imperial Logistics provided extended logistical support and facilitation. The project structure is shown in figure 3 below:

Figure 3: Project structure



KEY LESSONS LEARNED AND CHALLENGES

As with any project, key learnings were identified alongside project-specific challenges. Contractual delays were the primary challenge that significantly impacted the project. Unfortunately, due to these delays, the hospital's opening has been delayed, and, as of the publication of this report, it is not yet open to the public.

The lesson learned is that it is pertinent to provide clear contracts that define and govern the agency and responsibilities of all parties involved concerning a project of this nature. These delays were unforeseen; however, the Fund has dedicated people working on finalising all contracts and outliers to facilitate the hospital's opening.

CONCLUSION

The opening and utilisation of this hospital will positively impact the ability of the Eastern Cape Health Department to provide extended health services to additional patients. It will also provide patients with access to high-level and specialised medical care to treat the COVID-19 pandemic, and other health care needs well into the future.