

case study

Utilizing digital tools to deliver COVID-19 rapid response

Utilizing digital tools to deliver COVID-19 rapid response

case study

At a glance

Which services:

- Application Build & Support
- Application Training & Deployment

Which technologies:

- Vantage
- Microsoft Azure

Which Partners?

- Microsoft

The Challenge

The key challenge for Departments of Health across South Africa:

- Respond rapidly in resource-constrained environments to contain the virus.
- Identify potential hotspots and allocate resources accordingly.
- Moving from paper-based data capture to digital capture with real-time data analysis and insights.
- Large numbers of community healthcare workers with limited or no access to smartphone devices for data capture.
- Remote locations and timing constraints for training and support.

Two provincial Departments of Health partnered with BroadReach and utilized Vantage, the cloud-based population health management solution – a small task group strategized on supporting healthcare providers with the COVID-19 response.

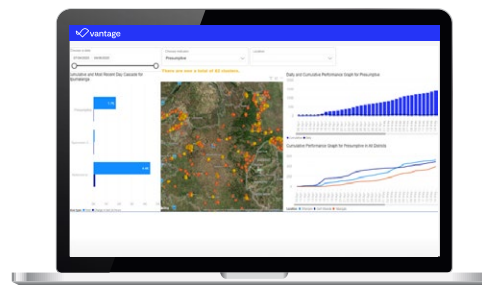
The group set out to rapidly iterate and develop high-impact COVID-19 solutions.

[Read more](#)

The Solution

From the inception of the COVID-19 response in March 2020 to the launch of the mobile screenings on 09 April 2020, BroadReach supported the Department of Health to train 7000 community healthcare workers virtually to conduct mass community screenings.

- The Vantage platform enables door-to-door capturing of screening data on mobile devices and uploading this data into the cloud in real-time.
- The Vantage algorithm identifies potential early outbreaks within a radius of two kilometers. This presumptive data enables the Department of Health to quickly mobilise contact tracing teams to those areas and educate people to practice physical distancing and other prevention protocols.
- Presumptive data gives the leadership insights to predict where people will most likely be infected and proactively deploy resources to potential hotspots.



[Read more](#)

The Result

The result was a remarkable story – with the team achieving various feats:

- Within **four days** of receiving the questions for a **readiness assessment** – the team built a **digital survey**, loaded the users, trained the responders, conducted the surveys across **316 facilities**, and issued the report to our funders USAID and shared the results with the DoH (Department of Health).
- Vantage has been used to capture over **2 million screenings** across 2 provinces, robust enough to handle areas without network access and smart enough to provide pinpoint location of where hotspots are developing, and feedback data in real-time. **No data was lost.**
- The solution was ramped up in minimal time, BroadReach supported the Department of Health to **train over 7000 community healthcare workers**, with support in isiZulu.
- Integrates with the National Command Centre to share screening data in real-time.

As at Nov 2020	Screenings	Presumptives	Referred to Health Facility
Province 1	1,857,996	7,014	6,928
Province 2	360,124	5,284	1,724
TOTAL	2,218,120	12,298	8,652

[Read more](#)

‘The data-led insights have helped us guide resource allocation, prepare our health facilities and protect our communities. As the virus evolves, so must we...’

case study

CLIENT, DEPARTMENT OF HEALTH

Critical Success Enablers

- **Capitalize on what is already in place** – leverage and adapt off existing systems in order to achieve rapid turnaround times.
- **Collaborate** – know your strengths and weaknesses and acknowledge those timeously – keep the team success always paramount.
- **Keep focused** – mobile data continues to be a major hurdle. Despite the excitement of the Department of Health receiving 5100 smartphones, the attempt to have the application zero-rated was rejected. Don't allow the failure to divert your energy and focus.

Learning Outcomes

From the inception of the COVID-19 response in March 2020 to the launch of the mobile screenings on 09 April 2020, BroadReach supported the Department of Health to train 7000 community healthcare workers virtually to conduct mass community screenings.

- How to rapidly scale up and roll out innovative digital health solutions.
- How to train when time and social distancing don't allow for conventional face-to-face learning – online learning, training videos small enough to send through whatsapp, multi-language support.
- Capitalize on existing infrastructure and 'in the field' implementers to shorten the implementation time and reduce barriers to adoption.
- Successful implementation of technology driven solutions with non-tech savvy community workers.

Key Factors in the Digital Health Landscape

- Data which is current (real-time), complete (no lost records) and accurate (pinpoint location of hotspots) – all of which were achieved.
- Propagating of the value of the data: The data is not restricted to a single portal – but rather cascaded to other entities – to maximize the value thereof.
- Being relevant and reachable: Reach more people by enabling the app to be widely accessible in rural applications and by providing multi-language support.
- Proving that digital health tools can be quickly adapted in emergencies to serve the immediate need.



Helpful Links

<https://digitalhealthatlas.org/en/-/projects/1287/published>
<https://brhc.wistia.com/medias/5sy22qwmrm>

Authors

Ashley Holling, Senior Client Success Manager, BroadReach
With Support from: The Department of Health



A part of the

