

Life Sciences case study

Working with GSK and Amref to improve health outcomes

Robust, open source and easy-to-use reporting dashboards are enabling more effective healthcare interventions across eight African countries.



The challenge

Many communities in sub-Saharan Africa lack access to quality healthcare, leading to poorer health outcomes. The ratio of healthcare workers to citizens is lower in some countries than the World Health Organization's recommended minimum and this gap is widening as Africa's population of 1.4 billion is set to double by 2040. Distance and lack of infrastructure make healthcare facilities hard to reach, and diseases can be difficult to manage and prevent.

Amref Health Africa has been tackling these issues for over 65 years with more than 30 years in partnership with the biopharma company GSK, which shares Amref's goal of strengthening health systems in lower-income countries. As part of its mission, Amref has pioneered community-based health care in 35 countries, training health workers and working with governments at the highest levels to ensure those workers are deployed as effectively as possible.

A digital partner to turn data into insight

The data Amref collects could be invaluable for improving public health interventions, but it was siloed across three different digital tools, making insights hard to get. Amref wanted to aggregate the data and produce meaningful reports to help it deliver public health initiatives more effectively. A hackathon organized by GSK provided the solution: the winning team, from Cognizant, offered to work with Amref to build a sustainable reporting solution.

At a glance

Industry

Life Sciences

Location

United Kingdom

Challenge

Improve health outcomes in sub-Saharan Africa by collating, analyzing and acting on data collected and generated by Amref's on-the-ground health workers.

Success Highlights

- Healthcare reporting system rolled out to two countries in sub-Saharan Africa
- 100% of users agree that the information displayed is useful for their work
- Potential to expand reporting capabilities to more countries across the region

The approach

Before suggesting a solution, the Cognizant team spent time working with GSK and Amref to understand the problem fully. While the charity's most pressing aim was to use data to help contain the spread of COVID-19, some deeper issues and opportunities came to the fore during these discussions about three digital solutions Amref was using.

To deliver training and guidance remotely to health workers, Amref leveraged Africa's widespread mobile connectivity using two different solutions: Jibu, for use on smartphones, and Leap, a voice and text-based solution for use with feature phones.

Amref also used a third app, M-Jali, to support health workers to gather household-level data, potentially providing granular insights into everything from treatment outcomes to localized disease outbreaks and public health trends.

The charity wanted to integrate and analyze the data from these three apps to allow it to:

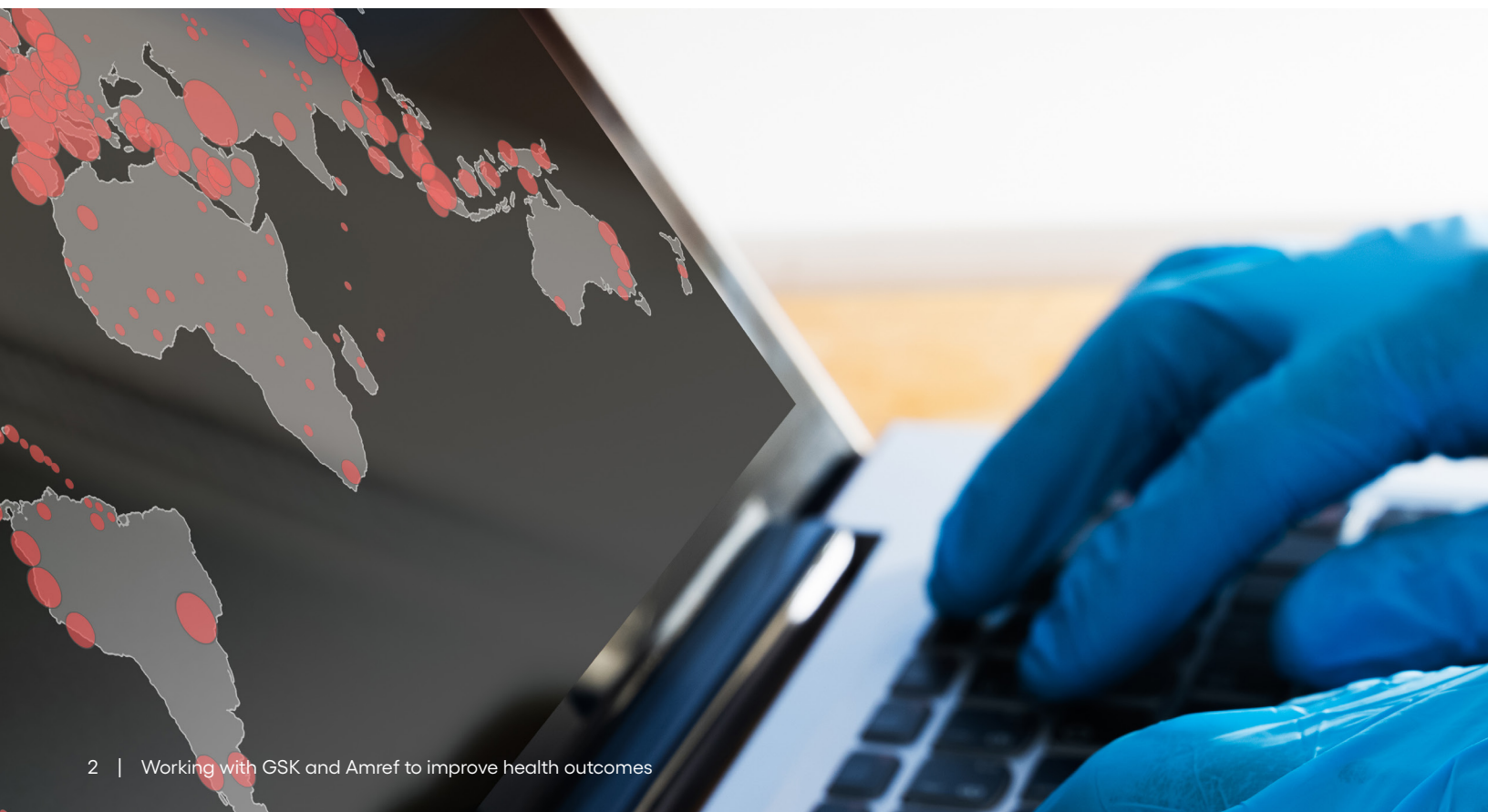
- Monitor the performance of health care workers to better understand the link between training and health outcomes
- Spot disease outbreaks faster and deploy appropriately-trained workers to help

- Support health ministries to gather insights to plan health spending and service delivery more effectively
- Support health workers to spend more time delivering care and less time inputting and manually analyzing data

A robust, low-cost and sustainable solution

With these goals outlined, Cognizant consultants and digital engineers worked with Amref and GSK towards building a "single pane of glass" reporting platform that would be easy to use and manage, that could produce meaningful and actionable insights and that would be affordable to run.

Cognizant integrated data from the tools, using Grafana as the open-source data analysis and visualization platform to deliver the required reports and insights. The result was a secure, scalable and extendable reporting environment capable of being adapted to all 35 countries where Amref operates. Insights gathered during the exercise have also shown where Amref can improve its data collection processes, and therefore generate more insights in the future.



“This partnership is about more than training health workers and collecting data. It is about the services that these health workers will provide to millions of people across the region towards our vision of lasting health change in Africa.”

Diana Mukami, Digital Learning Director, Amref Health Africa

“We’ve partnered with Amref Health Africa for many years and saw an opportunity to bring Cognizant into the partnership to leverage its digital engineering know-how to help Amref better support health workers.”

Fiona Smith-Laittan, Head of Global Health Strategy and Operations, GSK

“It was just a beautiful marriage I think – when the three organizations came together to do something pretty special.”

Fiona Smith-Laittan, Head of Global Health Strategy and Operations, GSK

Business outcomes

Today, the dashboards are supporting Amref's goals to support ministries of health to:

- Identify the communities that need targeted interventions and ensure that health workers with the appropriate training and skills are deployed to those areas
- Understand the effectiveness of training materials by showing how well they are used in practice at both the individual and the national scale. These insights will allow for adaptation of training content, processes and systems to optimize service delivery
- Provide real-time insights at different degrees of granularity—from national trends down to the level of an individual health worker or household—to help governments to drive more targeted training, service delivery and public health initiatives

Enthusiastic adoption speeds better healthcare delivery

Since the dashboards were rolled out within Amref projects, the new reporting capabilities have been enthusiastically received by its partners and the health ministries it works with. A survey of users revealed that:

- 89% would recommend the dashboards to other colleagues
- 100% of Jibu and M-Jali users rate their experience with the dashboards as good or very good
- 100% of users agree or strongly agree that the information displayed is useful for their work
- 100% of users agree or strongly agree that the dashboards improve the way they work

Government agencies and health champions report that they're able to identify gaps where healthcare workers are needed quickly and more easily, while data collected at the community level is helping to guide national-level decision-making around the type of healthcare interventions needed now and in the future.

Better access to better healthcare

As African countries strive to improve the quality and accessibility of healthcare—particularly for the most rural, impoverished and marginalized communities—the insights provided by Amref's reporting dashboards will be an invaluable aid to national-level planning, budgeting and delivery.

On the ground, the data is helping to make certain that health workers are equipped to ensure the best possible health outcomes for individuals and communities across the continent. That brings Amref another step closer to achieving its vision of lasting health change in Africa.

About Amref Health Africa

Amref Health Africa is the African continent's leading health charity, with a particular focus on working with women and girls to secure the right to health and break the cycle of poverty. For more information visit www.amref.org

About GSK

GSK is a global biopharma company with a purpose to unite science, technology, and talent to get ahead of disease together. Find out more at gsk.com/company.



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