

## Summary of Results of 2021 Completed Projects

### Internet Society Foundation - Building the COVID-19 Health Workforce in Africa through online learning

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### PROJECT BRIEF

Project Period: 2020 – 2021

Project Budget: \$275,000

Partner: Internet Society Foundation

Target group: Healthcare Professionals

Region: Kenya, Malawi, Zambia, Uganda, Senegal

### Background

This project supported the implementation of the 'Building the COVID-19 Health Workforce in Africa through online learning'. The 12-month intervention aimed at expanding COVID-19 training for health workers in Sub-Saharan Africa through digital learning funded by the Internet Society Foundation through Amref Health Africa. The project leveraged internet-based platforms (Jibu and the eCampus) to increase enrolment by 10,000 health workers in five (5) African countries – Kenya, Uganda, Zambia, Malawi and Senegal. The training also involved updating content and creating new modules to cover more COVID-19 topics, and redesigning the learners' experience.

### Approach

This intervention sought to expand COVID-19 training for health workers through the following interventions:

1. Project Startup: Stakeholder engagements
2. Content Development: Curriculum review and updates (existing course); content development (new courses); and translation to local languages (French).
3. Training Delivery and Learner Support: Virtual training of trainers for digital learning; course roll-out; visibility and learner recruitment efforts; platform advancement (front-end and back-end).
4. Monitoring and Evaluation and Visibility: Quality assurance; performance management and tracking

updates; ongoing IT updates as needed; and documentation.

## Accomplishments

There are major successes to report in the project. Firstly, we accomplished and surpassed our target of enrolling 10,000 healthcare professionals in the COVID-19 courses through support and endorsement from key stakeholders and institutions. At the end of the project, we reached a total of 10,485 learners – 105% of our initial goal. The course completion rate was at 40% at the close of the project. Secondly, the training platform enhancement was also successful. This final phase included:

- An SMS broadcast service and pop-up notifications: This focuses on the ability to send messages from an integrated dashboard within the Learning Management System (LMS) to enable one to communicate with a targeted audience based on learning behavior and cohort. This functionality was developed and deployed on the platform and is currently undergoing final enhancements for user acceptance testing (UAT).
- A user support mechanism with a support bot and issue escalation: A learner support bot has been integrated with the learning platform through a third-party software application called Kommunicate, and is already in use. UATs and further enhancements will continue on needs basis.
- Performance monitoring and application logging: This is a function that tracks the application and server performance. It then generates live dashboards to illustrate performance over a given period of time against active number of users, tracking things like server memory, central processing unit (CPU) which is the “brain” of the system, the database, error logs, and support services. It allows the support team to track any system errors and downtime, therefore enabling prompt response and anticipation of where further enhancements are required. This monitoring function has been deployed using Grafana, which is an open-source software that integrates analytics on server behavior and other databases and has been tested to ascertain that it is working as required.
- A survey and feedback mechanism: This functionality enables better user interaction through a feedback collection mechanism with capability for analysis generation. Survey Monkey was selected as the tool of choice due to its vast capabilities in survey deployment. We are now able to engage users to understand their experiences with various courses and track their responses for continuous improvements.

## Lessons Learned

- i. There is a need to allocate more resources to support the following project components:
  - Roll-out online courses and training of healthcare workers in light of the various contexts in which they work. 1:1 learner engagement (face to face), in some cases, could help address various technical issues and keep up learner motivation.
  - Offer financial incentives for data and internet bundles and provision of hotspots to greatly enhance effective and faster training and learning.
  - Secure continuous professional development points from key regulatory bodies that require high accreditation fees, which is a big motivating factor for course completion.
- ii. Incentive plans can be helpful to motivate health workers to take courses, especially as it may cover expensive data/internet costs in certain regions. The project highlighted the need for more research into non-monetary incentives to motivate healthcare professionals to take up and complete digital learning.
- iii. What works in one country may not work the same way in another. There is no one-size-fits-all solution, hence, adaptation to context is critical.
- iv. At 40%, course completion rates were not to the level we had hoped for. This is not unique to this project and could be due to a number of factors:
  - As the number of COVID-19 cases continued to rise in the region, there was increased workload for the health workers and many of them did not have sufficient time to complete the courses.
  - Learners' low computer literacy levels further delayed progress and completion. This presents an opportunity for future collaboration.
  - Access to internet and the expense of data bundles could be a deterrent for users to continue the courses. We will continue to push for enhanced completion rates and incorporate these learnings into future projects.
- v. Endorsement of the course by health regulatory bodies is very key for learner motivation and uptake. Their engagement, involvement, and buy-in from the start made a huge difference. Additionally, the adoption of the modular approach to learning by the regulators was highly attractive to the already overstretched health workers. This meant that they could focus on specific aspects of the COVID-19 courses that were most relevant to them and quickly get the knowledge they needed to care for COVID-19 patients and save lives.

## Conclusion

- Human resources for health are a key health system building block. There is no health without a workforce. With an enhanced training platform, strengthened stakeholder appreciation of the opportunities that online learning offers, and creation and expansion of accredited online content, we have reduced barriers to accessing quality health training and education.
- With the COVID-19 related courses, we met our goal by training more than 10,000 health workers on responding to COVID-19. More broadly, we have increased our users across all courses from about 17,000+ to >49,000. The inclusion of a support bot feature will enable us to track and ensure we attain an 80% user satisfaction level.

- There is also increased appreciation of the power of online learning by a wide range of stakeholders, especially in public health emergency situations. The project has further demonstrated how barriers to accessing timely, quality training can be overcome by leveraging technology. This is evidenced by the acceptance from Ministries of Health, regulators, and health workers themselves. For instance, some of the healthcare workers who were managing the pandemic at the facility level reported how comprehensive the course content was, and how it would help reduce COVID-19 deaths and further spread of the disease through practical application of the knowledge acquired. They also shared this experience with their colleagues, leading to increased demand for training through a domino effect.
- The successful enhancement of our online learning platform and migration of our 49,000+ users was completed as planned and will continue to benefit health workers beyond the project life, as Amref continues to develop and deploy additional relevant courses in response to evolving needs and lessons from this project.
- There has been a notable cultural shift from key stakeholders in their acceptance and use of online platforms for training and engagement. This effect will continue to be felt beyond the pandemic and presents a great opportunity to create additional, relevant, accredited courses in areas of emerging need.
- Partners need to work together to continue expanding internet access in remote regions, where online training has the potential for significant impact.
- Investment in digital literacy. Training healthcare professionals on basic internet skills and basic learning management systems would further empower users to enroll and register in courses and address technical challenges with more ease.
- Advocacy and resourcing for better internet and tech infrastructure for more equitable access: In some areas, internet access and reach is very poor, which puts further burden on healthcare workers who have to pay for data in order to take the courses. The situation was worsened during the pandemic, thus affecting completion rates. This is a much broader challenge but working toward enhancing internet access in the places we work will have tremendous benefits, and we can explore how Amref can play a supportive role.

## References

- Project reports

## Acknowledgement

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