Background

The first case of COVID-19 was reported in Wuhan City, China in December 2019. The pandemic spread fast around the globe, with Kenya reporting its first case in March 2020. Countries around the world put in several measures to contain the spread, for example, by closing airports and border entry points, rolling out national COVID-19 response plans, establishing isolation centers and commencing rigorous contact tracing coupled with massive social behavior change messaging. While these measures helped to block the pathways of infections coming in from international travelers, there was evidence that the growing number of cases was the result of an increase in community transmission. It was, therefore, imperative to support the Ministry of Health in its efforts to: (i) scale up disease surveillance at the community level to identify and quickly refer suspected cases for screening, (ii) rapidly expand testing and isolation of confirmed cases, and (iii) equip health workers and communities with the correct and up-to-date information about the pandemic. It is these collective efforts that contribute to slowing down infections and halting the COVID-19 pandemic.
Mastercard Foundation funded Amref Health Africa to support COVID-19 control response interventions in Kenya. The COVID-19 Recovery and Resilient Programme was a 12-month intervention that aimed at helping to flatten the COVID-19 curve in Kenya. The project objectives were:

i. To rapidly expand community level surveillance, testing and isolation of confirmed cases
ii. To equip health workers and communities with the correct and up-to-date information about the pandemic

The project was implemented in all the 47 counties in Kenya.

**Approach**

In order to achieve the above mentioned objectives, the project adopted the following four strategies:

**Strategy 1: Adopt digital solutions such as Leap to quickly train, refresh, frontline community health volunteers (CHVs) based on MOH needs and priorities to respond to the COVID-19 pandemic.**

This strategy aimed at equipping the CHVs with the knowledge to carry out disease surveillance, referral of suspected cases, contact tracing, upholding biosafety standards, and receiving updates on correct measures to prevent and manage COVID-19 infections. The project leveraged Amref Health Africa’s existing technological infrastructure, relationships with the MOH, and existing partnerships to rapidly roll out the training. This was in line with the government’s policy of providing virtual training for health workers as a precaution against COVID-19 infections. The project developed training content that was delivered through Amref’s innovative digital platform (Leap) to Community Health Volunteers (CHVs). A total of four topics, aligned to the MoH Curriculum and Guidelines for Training Community Health Volunteers on Coronavirus Disease (COVID-19) were developed. The content writing process and subsequent translation was guided by Subject Matter Experts (SMEs) from the Ministry of Health and Amref Health Africa.

**Strategy 2: Harness the capacity of the Amref Central Laboratory (ACL) to provide additional capacity based on the Ministry of Health (MoH)’s need for support in handling the surge in COVID-19 cases.**

Through this strategy, Amref provided the Ministry of Health with additional COVID-19 testing capacity in response to the surge in COVID-19 cases. Key activities included capacity building of staff at the ACL on COVID-19 testing as well as procurement of equipment and reagents for COVID-19 testing and personal protective equipment (PPEs) for use by the staff.

**Strategy 3: Health system strengthening to screen more COVID-19 cases according to WHO guidelines.**
Activities under this strategy aimed at supporting the government of Kenya to expand the number of people tested for COVID-19. They included: equipping laboratories in the country with autoclaves, biosafety cabinets and biosafety cabinets motherboards to enhance their capacity to provide additional COVID-19 testing; maintenance and certification of Biological Safety Cabinets (BSC); training of medical laboratory personnel to sensitize them on using GeneXpert machines for COVID-19 testing.

**Strategy 4: Adopt the use of Jibu platform to train, refresh, frontline health care providers based on MoH training needs and priorities to respond to COVID-19 pandemic.**

This strategy targeted health care providers in public, private and faith-based health facilities. They were trained using a digital platform on the following areas:

i. Overview of COVID-19 infection

ii. Infection prevention measures for COVID-19

iii. Rapid Response Teams and Risk Communication.

The project developed training content based on the MoH curriculum. In phase one, the training content was digitised into the three Modules and deployed to the health workers across the country. As the pandemic evolved and feedback received, the MoH reviewed the materials and requested to have them updated to enrich them by adding missing content such as mental health and psycho-social first aid and Homebased isolation and care. Seven regulatory boards/bodies (Nursing Council of Kenya, Clinical Officers Council, Association of Medical Records Officers - Kenya, Pharmacy & Poisons Board, Kenya Nutritionists and Dieticians Institute, Kenya Medical Practitioners & Dentist Council, Kenya Counseling and Psychologists Association) accredited the course and allocated it Continuing Professional Development (CPD) points. CPD points are prerequisites for renewal of health workers practice licenses. This was a measure to motivate health care workers to take and complete the course.

**Accomplishments**

A total of 30,748 (97% of the 31,820 target) CHVs were enrolled on to the Leap and 33,256 (100% of the 33,104 target) health care providers to the Jibu digital learning platforms respectively. Through the training received, the HCPs were able to:

(i) Constitute and strengthen Rapid Response and Risk Communication Teams (RRTs)

(ii) Identify emerging needs, such as mental health issues in the COVID-19 response.

The project harnessed the capacity of the Amref Central Laboratory (ACL) to provide additional testing capacity to the Ministry of Health’s (MoH) need for handling the surge in COVID-19 cases. A total of 5,849 test were conducted at ACL. We collaborated with MoH to scale-up testing beyond the conventional centralised real-time polymerase chain reaction (RT PCR) testing in a few well established facilities like Kenya Medical Research Institute (KEMRI). We
supported the government of Kenya to expand COVID-19 testing by introducing point of care testing using GeneXpert platform. The project supported revamping of existing systems in the GeneXpert facilities by installing and commissioning of 33 autoclaves, certification of 12 biosafety cabinets, procurement of two biosafety cabinets for Iten and Hola hospitals. The Turn Around Time (TAT) for results significantly reduced from several weeks to two hours.
Lessons Learned

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Description</th>
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<tbody>
<tr>
<td>Lesson 1</td>
<td>For effective CHV training, there is need to train adequate number of supervisors (CHEWS) first to cascade the training. The recommended ratio of CHV to Trainers is 10:1, as opposed to the 30:1 in some counties, which made delivery of training and learner supervision a challenge.</td>
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<td>Lesson 2</td>
<td>Competing activities from other projects within the counties that required learners and supervisors’ attention affected timely course completion.</td>
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<tr>
<td>Lesson 3</td>
<td>There are emerging issues experienced during project implementation that need to be addressed through further collaboration. These include mental health and psychosocial issues and COVID-19 Vaccination.</td>
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<td>Lesson 4</td>
<td>Constant engagement and collaboration with MoH is a critical success factor in the implementation of the programme.</td>
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<tr>
<td>Lesson 5</td>
<td>Building relations with key stakeholders in implementation of programmes yields better outcomes. We successfully partnered with MoH, Cepheid and Counties to install autoclaves and train the 33 HFs to test for covid-19 using GeneXpert platform.</td>
</tr>
<tr>
<td>Lesson 6</td>
<td>Blending online and face to face engagements with CHMTs and learners improved course uptake and completion.</td>
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</tbody>
</table>

Conclusion

The COVID-19 Resilience and Recovery programme strengthened health systems by building capacities of MoH facilities to expand COVID-19 testing, training of health care providers by leveraging technology, provision of PPEs and laboratory equipment. This significantly contributed to the country’s response to COVID-19 pandemic. Drawing from our experience, we identified potential areas for future collaboration including:

1. Mental health and psychosocial care
2. Institutionalisation of COVID-19 courses into pre-service and in-service training
3. Continue collaborating to support expansion of COVID-19 testing on GeneXpert platform from the 14% coverage (33 of the 226 existing GeneXpert sites in Kenya) to the remaining 193 sites that include private facilities.
References

https://journals.sagepub.com/doi/pdf/10.1177/2158244015621777

i) Training of CHVs in Kirinyaga County reported on local TV station
   https://youtu.be/WQ8SLIK5siY

ii) Launch of project activities in Kirinyaga County was preceded by donation of 200 cartons
    of hand sanitizers for distribution to community health workers reported by local
    newspaper and posted on Kirinyaga County Website
    https://www.the-star.co.ke/counties/central/2021-01-21-amref-to-train-1500-kirinyaga-
    community-health-volunteers

iii) Launch of the Mastercard Foundation funded COVID-19 Resilience and Recovery
     Programme posted on the Amref website
     https://newsroom.amref.org/news/2020/08/amref-health-africa-partners-with-

iv) Training of healthcare professionals through Jibu
    https://jibu.africa

v) Other project activities posted on media
    https://www.the-star.co.ke/news/2020-08-14-sh180m-amref-project-to-train-31000-
    chvs-on-covid/
    https://twitter.com/leaphealthmobi/status/1313547311298105344?s=08
    https://twitter.com/Amref_Kenya/status/1332182251157790720?s=08

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Contact Person: Anthony Karanja | Programme Manager, Kenya

antony.karanja@amref.org