

**Title**

Lessons learnt in monitoring the maintenance of essential health services during the COVID-19 pandemic

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**Key Learning Themes**

- In Kenya most services were negatively affected by the COVID -19 pandemic between 2019-2020, including utilization of general outpatient services for both adults and children, as well HIV and cancer screening services.
- Constituting a national team with a mandate to ensure continuity of essential services was key to mitigating disruption from COVID-19.
- The tracking of EHS indicators in an integrated dashboard within the Kenya HIS, facilitated the use of data for decision making.
- Providing structured feedback to facilities and Counties on a regular basis helped ensure supportive actions were rapidly undertaken.
- The use of mobile phones was a safe, cost effective and efficient method of data collection within the context of COVID-19 restrictions.
- Identifying best practices and sharing with other counties and stakeholders provided a platform for benchmarking and scaling up.
- The use of multiple approaches to assess the continuity of EHS helped triangulate data and corroborate findings.
- Having a MOH team involving different departments in the preparation and conducting of the continuity of essential health services assessments was key to adequate dissemination and use of findings.

**Background**

This brief outlines efforts by the Kenyan Ministry of Health to assess and monitor the maintenance of essential health services (EHS) during the COVID-19 pandemic.

Health systems around the world have been challenged by increasing demand for care of people with COVID-19. The disruption has been compounded by fear, stigma, misinformation and limitations on movement that hamper access to, and delivery of, health care services.

When health systems are overwhelmed, both direct mortality from an outbreak and indirect mortality from preventable and treatable conditions increase dramatically.

Lessons from the Ebola outbreak indicate that emergency response activities need to be coupled with efforts to maintain EHS in order to minimize indirect health impacts. Maintaining population trust to safely meet essential health needs is key to ensuring appropriate care-seeking behavior and adherence to public health advice. Consequently, ensuring the maintenance of EHS is important to prevent morbidity and mortality from non-COVID-19 causes.

As such, it was critical for the Ministry of Health (MOH) to track the status of EHS throughout the COVID-19 pandemic. This provided the Ministry of Health and its stakeholders with key information on where service delivery and utilization required modification and investment. In addition, coordination with the division of Monitoring and Evaluation allowed for alignment of support to specific objectives as well to avoiding duplication of efforts.

## Introduction

The COVID-19 pandemic continues to cause a strain on the fragile health system in Kenya.

Kenya reported its first case of COVID-19 on 13 March 2020, with over 205,536 cases and 3995 deaths reported as of 3rd August 2021. The Government of Kenya undertook a range of preventive and control measures to contain the COVID-19 outbreak, including enforced quarantines, lockdowns and curfews.

To mitigate the adverse consequences on EHS, the MOH established a Technical Working Group (TWG) on continuity of EHS to provide guidance to the National COVID-19 Task Force and the Ministry of Health Leadership.

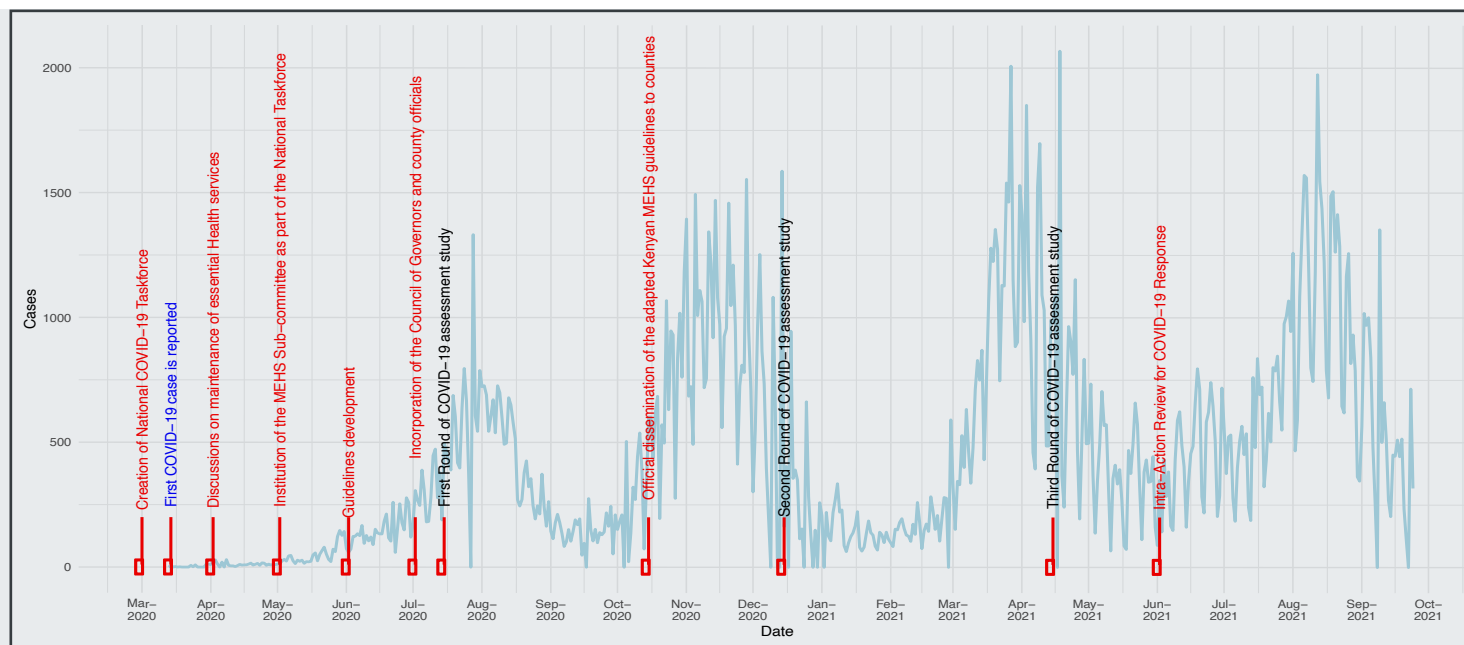
The Maintenance of Essential Health Services TWG consisted of members from the Ministry of Health including program focal points, development partner organizations, civil society, academia, the Council of governors and County representatives.

### The team was tasked with several roles:

- Define priority EHS services and outline the adaptations needed to keep people safe and maintain continuity of EHS during the response to the COVID-19 pandemic. This was especially key early in the pandemic prior to the global guidance by WHO.
- Provide guidance to advise healthcare managers on the provision of EHS during the COVID-19 pandemic in Kenya.
- Identify priority actions needed to maintain and sustain delivery of EHS during the pandemic.
- Highlight key actions necessary to strengthen the health system for the delivery of primary care services during the pandemic and recovery phase.
- Track delivery and utilization of essential services using priority indicators and identify health system bottlenecks.

The outputs of the above actions were communicated regularly to the National COVID-19 Response and Management Task Force and were also disseminated to the sub-national level.

The Technical Working group met weekly and formed 5 working sub-groups; Data and Documentation, Communication, Guidelines, Prioritization and Recovery.



Timeline of Kenya's response to the COVID-19 pandemic

## WHO Operational Guidance on Maintaining Essential Health Services

Prior to the release of the WHO MEHS guidance, the Ministry of Health had started working on local guidelines to support the continuity of essential services. This guidance was aligned to the WHO MEHS recommendations as the pandemic evolved.

## Understanding the impact of COVID-19 on EHS in Kenya

The Ministry of Health Kenya has put in place several mechanisms to monitor the impact of COVID-19 on service delivery. In this document we will focus on the three key approaches:

- Using the Kenyan Health Information System (KHIS) to monitor trends in service delivery.
- Longitudinal assessment of CEHS on sentinel sites.
- Continuity of Essential Health Services (CES) Study - Exploring Effect of COVID-19 on demand for and utilization of maternal, newborn and child health services.

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### 1. Reviewing data from KHIS to determine EHS disruption

The scope of work for the data sub-working group of the MEHS TWG were as follows:

- To select priority indicators to help monitor the status of routine health services that can quickly identify service disruptions.
- Implement analyses to visualize the indicators and identify whether disruptions are occurring.
- To provide information on where action is needed to mitigate decline in access to services.
- To develop monthly status report on essential services and compare with before COVID-19.
- Documentation and knowledge management.

To track progress of essential services, the data and M&E sub-working group identified 30 priority indicators for essential services that were to be tracked at National level while 15 were to be tracked at the sub national level using data from DHIS2 and routine data.

**These indicators are classified under the following categories:**

- Utilization of primary health care facilities - outpatient visits and bed utilization.
- Reproductive, maternal, new-born, child, and adolescent health (RMNCAH) Indicators.
- Sexual violence.
- Communicable diseases (HIV, TB, Malaria).
- Non-communicable diseases (cancer, diabetes and hypertension).

These indicators were selected on the basis of the availability of KHIS data.

Initially, data would be downloaded from the DHIS and analyzed to produce monthly reports that would then be shared with the MEHS working group and upwards with the National COVID-19 Task Force. The data mining and analysis process was at first tedious and inefficient. With assistance from one of the implementing partners, a dashboard was established in the DHIS to track trends in essential services.

The national level analysis examines the trends of selected indicators over a period of years starting 2018. Comparison is then done for similar periods of each year. The county level analysis focuses on the difference in the performance of selected interventions in the current month comparing with the same month in the previous year eliciting counties that are affected.

**A dashboard dubbed “Essential services report”** was developed in the DHIS2 to keep track of the 30 indicators.

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### 2. Longitudinal assessment of CEHS for sentinel health facilities

Every three months, the Ministry of Health (with support from WHO) collected data to assess the capacity of health facilities to maintain the provision of EHS during the pandemic, using the “Continuity of essential health services: Facility assessment tool”. This work formed part of the wider health facility assessments on Readiness for COVID-19 Response and Continuity of Essential Health Services in Health Facilities and Communities.

A structured CEHS tool is administered to primary care facilities, dispensaries and primary hospitals for each County.

The tool has several domains of interest. It focuses on service disruptions, catch up strategies and different health system bottlenecks: health workforce capacity, financial management of the facility, changes in service utilization, therapeutics and diagnostics, infection prevention and control capacities and COVID-19 primary care services and COVID-19 vaccination.

The data collection tool aimed to be safe, efficient and to provide real time data. It was administered to the health facility in charge via mobile phone surveys.

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### **3. Continuity of EHS (CES) Study - Exploring the effect of COVID-19 on demand for and utilization of MNCH services**

This study sought to undertake mixed-method research of demand and supply-side factors affecting essential MNCH service utilization during COVID-19. The overall objective was to understand the extent to which the COVID-19 pandemic had impacted people's willingness and ability to access essential MNCH services, their experiences of care and the MNCH service readiness to provide essential care during the pandemic.

A technical team was constituted to bring together the RNMCH, HIV and the HIS/ME teams. The variables for LiST tool are standard and predetermined. During these meetings the technical teams reviewed the variables and mapped them to our KHIS data. The data was then downloaded, validated and input in the model.

The themes were explored in one urban and one (remote) rural location (as part of a three countries study in the Eastern and Southern Africa Region: Kenya, Malawi and Mozambique).

#### **The specific objectives were to:**

- Understand how COVID-19 has affected pregnant and breastfeeding women's demand for, access to and uptake of maternal and newborn health services including post-partum family planning (FP) during COVID-19, and identify coping strategies they have used to overcome challenges.
  - Understand how COVID-19 has affected demand for, access to and uptake of child health services for the under-fives, and identify coping methods that parents/caretakers have used to overcome challenges.
  - Identify any specific challenges faced by vulnerable groups during COVID-19, in particular pregnant or breastfeeding women living with HIV and/or living in remote geographical areas; and adolescent women (15 to 19 years) in terms of demand for, access to and uptake of MNCH services including post-partum FP.
  - Assess MNCH including readiness during COVID-19 and changes in service delivery that may have affected access and demand for services.
  - Estimate additional indirect maternal and child mortality during COVID-19 Using the Lives Saved Tool (LiST).
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## **Findings**

### **1. Review and analysis of data from KHIS and assessing the trends for key essential health services**

- Routine data on essential services indicated that most services were negatively affected by the COVID-19 pandemic, including utilization of general outpatient services for both adults and children as well as other child health services, HIV services and cancer screening services.
- Maternal health services were more resilient and were only severely affected by a COVID-19 related health worker's strike in December 2020.
- This strike had a negative effect on almost all indicators on essential services apart from cancer screening.
- There was variation in the extent to which Counties were affected; Generally, Counties with high number of COVID-19 cases were more affected with less patients visiting health facilities compared to those with a low number of cases.
- On a positive note however, most indicators that previously showed poor performance early in the pandemic have shown good recovery as of February 2021 (KHIS, Essential services report, 2021).

## 2. Longitudinal assessment of MEHS for selected health facilities

### The assessment on effect of COVID on EHS in health facilities found that:

- Disruptions (increases or decreases) were observed across all EHS. Services for sick children and maternal health decreased the most. This was mostly due to fear of contracting COVID-19 in health facilities.
- Many facilities put in place measures to mitigate these disruptions such as changing service hours, targeting high-risk patients, promoting self-care, telemedicine and combining care for multiple conditions into a single visit.
- In communities, unmet health needs included planned elective surgery, skilled births, mental health services, non-communicable diseases care, family planning, ANC and immunization.
- Infection prevention measures were found to be sub optimal with PPEs being available in only 4 in 10 of facilities assessed.
- Gaps were observed in availability of IPC guidelines, trainings on COVID-19 response and even readiness to provide COVID-19 vaccines among the facilities assessed.

### Maintenance of Essential Health Services (CES) Study

- Children below five years (1-59 months) suffered the highest mortality with pneumonia, diarrhoea and PMTCT being the key causes. For neonates, a reduction in cesarean deliveries was a key contributor to mortality.
- Within the Antenatal service, we observed a decline in service usage from 2019 to 2020.
- Within the Child Preventive service, we observed a decline in usage in 2020 vs 2019 (April to December).
- An increase in service utilization was mainly observed in measles vaccination, syphilis detection and treatment and assisted vaginal deliveries.

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## Challenges

- Data quality on KHIS was hampered by incomplete reports and inaccurate entries.
  - Data on mortality was difficult to obtain - rapid mortality surveillance was then proposed to address this data gap.
  - A lack of resources and competing priorities impacted data quality assessments.
  - The initial approach to undertake monthly reports proved to be too tasking for program M&E officers. It was agreed that quarterly reports would work best towards the end of 2020 as recovery was also evident for most indicators.
  - The apparent reduction in service utilization, especially at County level may be affected by quality of reports in DHIS in addition to a true service reduction utilization.
  - Data from a few programs not usually in the DHIS had to be sourced and analyzed separately. This included data for TB and some Malaria data.
  - Dissemination/feedback on findings of the assessment has been suboptimal, especially to the County teams. As a result, this has hampered engagement by health facility teams.
  - Participation by the Counties was not optimal. This may have been due to late onboarding and the fact that engaged officers (County Directors of Health) were not technical data personnel.
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## Use of monitoring findings

There was no official monitoring of the implementation of the Kenyan MEHS guidelines. However, the COVID-19 assessments may serve as proxy indicators of implementation.

- Reports were routinely shared with the COVID-19 response Task Force as well as other management teams. This helped in planning for interventions such as home based care, ensuring PPE access and PHC facility training.
- Data was used to inform other committees in their decision making. For example, when it was noted that health facility utilization was low, communication materials were developed to inform citizens about available services.
- Interventions carried out by other programs, such as expanding access to immunization services.
- Commitments were made by counties to support maintenance of essential health services.

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## Next steps

- The Ministry of Health will continue to monitor EHS based on routine KHIS data on a quarterly basis. This will inform sub-national approaches to service delivery and utilisation.
- Impact assessments will be conducted periodically and as necessary to complement the routine reviews. Adaptation to the evolving needs of the pandemic will be key to the implementation of such assessments.
- Involvement of key stakeholders, especially at county level, and timely dissemination of those findings is essential to ensuring that the findings inform policy and practice.



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## Indicators prioritized for monitoring Essential Health services by programmatic area

### RMNCAH

#### A Maternal Health

- 1 Number of skilled deliveries
- 2 Antenatal client first visits
- 3 Proportion of Adolescent Pregnancy among ANC Clients
- 4 Sexual violence cases
- 5 Violence cases

#### B Child Health

- 6 Children presenting with symptoms of Pneumonia
- 7 Low birth weight rate (<2500g)
- 8 Vitamin A supplementation (12-59 months)
- 9 DPT3 doses administered
- 10 Penta 3 dropout rate
- 11 Infant feeding options
- 12 Iron & Folic acid supplementation
- 13 Counselling on Exclusive BreastFeeding - community level

#### C Communicable diseases

- 14 No. of PLWHIV accessing ART
- 15 Newly Enrolled on ART
- 16 HIV positive pregnant women on HAART
- 17 HIV tests performed
- 18 Malaria in pregnancy
- 19 Malaria patients on Artemether Lumafantrine (AL)
- 20 Number of confirmed cases of Malaria
- 21 TB -Number of the cases notified
- 22 TB Cure rate- Quarterly
- 23 TB Treatment success rate(All forms of TB)

#### D NCDs

- 24 Hypertension Cases
- 25 Women aged 25-49 screened for cervical cancer
- 26 Diabetes Cases
- 27 No. accessing palliative care
- 28 No. accessing chemotherapy Cancer care
- 29 Number accessing Dialysis services

#### E Utilization

- 30 Bed occupancy rate
- 31 Number of OPD visits
- 32 Number Of Under Five Children Who Attended Out Patient Department (U5OPD)
- 36 Availability of Commodities
- 37 Stock outs days for EPI commodities
- 38 RUTF stock out rate

#### F Stock outs days HIV commodities

- 39 ART -adults
- 40 Tenofovir, Lamivudine, Dolutegravir (TLD)
- 41 TDF, Lamivudine, Efavirenz (TLE )
- 42 ART- Paediatrics
- 43 Lamivudine (3TC)
- 44 Abacavir (ABC)
- 45 Nevirapine syrup
- 46 HIV test kit ( determine)
- 47Viral Load testing

#### G Stock outs days for Malaria commodities

- 48 Artemether Lumafantrine (AL)