COUNTRY COVID-19 INTRA-ACTION REVIEW (IAR) REPORT

REPUBLIC OF SOUTH SUDAN

MINISTRY OF HEALTH

[South Sudan]
[Juba, 10/Nov/2020]

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1. RATIONALE AND METHODOLOGY OF THE REVIEW

On 30 January 2020, the World Health Organisation (WHO) declared the Coronavirus disease 2019 (COVID-19) a public health emergency of international concern (PHEIC). The initial cluster of pneumonia cases were reported from Wuhan, China, in late December 2020. The cases were eventually confirmed to be due to Coronavirus disease 2019 (COVID-19) caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-COV2).

At the time of declaring COVID-19 a PHEIC, most of the cases were confined to China and 18 countries outside China and no cases confirmed in Africa including South Sudan. Given the risk of further internal spread, WHO recommended that countries enhance preparedness for containment, including active surveillance, early detection, isolation, and case management, contact tracing and prevention of onward spread of COVID-19. South Sudan activated the PHEOC on 3 February 2020 and established the incident management team to institute preparedness measures.

Following the confirmation of the initial COVID-19 case on 5 April 2020, subsequent cases were identified and a fully-fledged coordination framework that included the COVID-19 National Taskforce, Chaired by the Vice President, Service cluster for overall policy and strategic guidance; the National Steering Committee and its eight Technical Working Groups, Chaired by the COVID-19 Incident Manager for providing strategic and operational guidance; and the COVID-19 state Taskforce committees for coordinating the frontline implementation of recommended COVID-19 interventions.

The intent of the intra-action review (IAR) is to assess the functional capacity of the public health and emergency response systems and to identify practical areas for immediate remediation or continued improvement of the current response to the COVID-19 outbreak. The IAR entailed a qualitative review of actions taken so far to respond to the current COVID-19 pandemic to identify best practices, gaps, and lessons learnt.

1.1. Objectives

The overall objective of this activity is to review the ongoing COVID-19 pandemic response in South Sudan across different pillars and document the best practices and lessons learned to improve the ongoing response.

a. Specific Objectives

1. To share experiences and collectively analyse the ongoing in-country response to COVID-19 by identifying challenges and best practices.
2. To facilitate consensus building and the compiling of lessons learned by various stakeholders during the response to improve the current response by sustaining best practices that have demonstrated success and by preventing recurrent errors.
3. To document and apply lessons learned from the response efforts to date to enable health systems strengthening.
4. To provide a basis for updating the COVID-19 National Response Plan and other strategic plans accordingly.

1.2. Methods and Scope

The IAR reviewed the COVID-19 preparedness and response from January to October 2020. The activity conducted in a period of two (2) days from 26th to 27th October 2020 using the Working Group IAR methodology. The participants of this COVID-19 IAR were drawn from partners and government agencies currently responding to COVID-19 pandemic in South Sudan. All the eight (8) pillars will be assessed namely (Country-level Coordination, Planning & Monitoring; Risk Communication and Community Engagement; Surveillance, Rapid Response Teams, Case Investigation, and data management; Points of Entry; Laboratories network; Infection Prevention & Control; Case Management; and Operational Support and Logistics.)

Response activities for COVID-19 at the states with active transmission were reviewed as well. Other participants included experts from technical agencies such as WHO, UNICEF, CDC, HPF, WFP, MSF, NTF, COVID-19 Secretariat (UNOCHA), and the Medical Advisory Panel (MAP). In order to comply with the COVID-19 social distancing requirements, at least 40 participants attended the review in-person at Juba Regency Hotel where a spacious hall was reserved with additional rooms for breakout group sessions. The rest of the participants attended the discussions virtually. The online participants included other responders from the national and state level in South Sudan, as well as facilitators from WHO hub and regional offices in Nairobi, Kenya and Brazzaville, Congo.

The IAR itself started with an introductory presentation by the Ministry of Health that outlined the response timeline and the capacities developed as part of the response as well as the response strategy and plan. In the subsequent session, each pillar analysed actions undertaken during the COVID-19 response to identify the best practices and challenges encountered, their impact on the response and why they occurred (the enabling/limiting factors). The third sessions entailed identifying and developing activities to address the causes of the challenges identified in the current COVID-19 response, as well as activities to institutionalize best practices. As part of the way forward, the technical working groups were tasked to finalize and disseminate the report to the COVID-19 National Steering Committee (NSC) and taskforce and to integrate the recommendations into the COVID-19 National Response plan (NRP).

2. FINDINGS

For each of the eight pillars reviewed as part of the South Sudan, IAR, we present the best practices and challenges along with the corresponding recommended actions in the immediate and mid to long term implementation for institutionalizing and maintaining best practices, as well as for addressing the challenges to improve response to the ongoing COVID-19 outbreak.

2.1 Country-level coordination, planning and monitoring	
Observations	
Best practices	- COVID-19 National Response plan developed to facilitate resource mobilisation and to guide the response. - National coordination structure in place and includes the COVID-19 National Taskforce; the National Steering Committee (NSC) including the eight TWGs and state level taskforce committees. - Government was clear with initial leadership with guidance on public health measures and hard lockdown communication. - EVD preparedness resources including Public Health Experts, Guidelines; and resources were immediately available to support COVID-19 preparedness and response. - The presence of a functional Public Health Operations Center with its infrastructure; human resources; and guidelines that were used to support the implementation of the COVID-19 NRP. - Multisectoral whole of society composition for the COVID-19 National Taskforce (NTF) (Health, Finance, Trade, Security forces, Foreign Affairs, Interior, Civil Aviation, Academia) - New committee added to the NSC to cater for vaccine readiness planning and establishment of national capacities for deployment of COVID-19 vaccines with priority to high risk groups.
Challenges	- National Response Plan not deliverable given the limited funding and leadership deficit thus the activities funded were reduced and implemented late. - Coordination at state level was sub-optimal due to lack of infrastructure, human resources, funds, and partners thus leading to reduced quality of operations and frustration at state level - Intra & Inter-pillar coordination bottlenecks due to lack of coordination and leadership clarity leading to inadequate communication and failure to optimise of synergies between and within pillars - Lack of clarity following initial lockdown that affected the non-COVID-19 response and the presence of multiple coordination structures (HLTF and NSC) that resulted in unclear coordination and inadequate adherence to recommended public health measures. - Scenario planning did not match evolution of the pandemic thus there was prioritisation away from other non-COVID-19 essential services and overinvestment in COVID-19 thus leading to response planning mismatch.

	- Enforcement of public health measures and orders for COVID-19 control from government was lacking and yet was needed to support the ongoing risk communication and community engagement to effect behavioural change, adherence, and compliance to recommended public health measures for COVID-19 prevention and control. - The National Steering Committee (NSC) was predominantly composed of public health and humanitarian agencies and was deficient on multisectoral composition required for a whole of society pandemic response.

Recommended actions

a. For immediate implementation:
    a. Transition strategy & plan: coordination and pillar activities from NRP to mid-term (NRP, HRP) and long-term (NAPHS) plans
    b. Clarification of roles/responsibilities and ToRs for TWGs, NSC and MAP.
    c. Future guidelines and SoPs to be developed through TWGs and MAP, endorsed by NSC and NTF
    d. Enforcement of public health measures and orders for COVID-19 control from government
    e. Update the current composition of the NSC to include other relevant sectors
b. For mid to long-term implementation to improve the response to the ongoing COVID-19 outbreak:
    a. State level coordination (emergency response) capacity building
    b. Contingency planning for potential COVID second wave and other infectious disease outbreaks
    c. Implementation of the NAPHS for Public Health systems strengthening.

RECOMMENDED ACTIONS	DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
a. For immediate implementation				

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
1.	Transition strategy & plan: coordination and pillar activities from NRP to mid-term (NRP, HRP) and long-term (NAPHS) plans Clarification of roles/responsibilities and ToRs for TWGs, NSC and MAP.	31 December 2020 - 30 March 2021	MoH (Dr Richard), WHO (Incident Manager)	Political support from MoH and HCT.	IMS stood down for COVID response
				Engagement of non-humanitarian actors	Workshop on transition
				Workshop on transition	
2.	Transition strategy & plan: coordination and pillar activities from NRP to mid-term (NRP, HRP) and long-term (NAPHS) plans Clarification of roles/responsibilities and ToRs for TWGs, NSC and MAP. Transition strategy & plan: coordination and pillar activities from NRP to mid-term (NRP, HRP) and long-term (NAPHS) plans	15 November 2020	MoH (Dr Richard), Under Secretary	Political support from strong leadership from MoH.	Clear roles/responsibilities and ToRs developed
3.	Clarification of roles/responsibilities and ToRs for TWGs, NSC and MAP.	30 November 2020	MoH (Dr Richard)	TWGs & MAP to revise SoPs for NSC & NTF to endorse	# of revised SoPs # of SoPs endorsed
3	Enforcement PHSM like ensuring universal access	Dec 2020	COVID-19 Taskforce	Advocacy to council	Order issued mandating hand washing facilities in front of all

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	to hand hygiene facilities in front of all public buildings and transport hubs (e.g., markets, shops, places of worship, schools or bus/taxi stations).			and cabinet	public buildings, markets, shops, places of worship, schools, taxi/bus stations.
	Institutionalise the new committee of the NSC to cater for vaccine readiness planning and establishment of national capacities for deployment of COVID-19 vaccines with priority to high-risk groups.	November 2020	NSC for COVID-19	Expertise on vaccine readiness assessment; planning; and deployment of vaccines to vulnerable groups	COVID-19 vaccine working group established COVID-19 national readiness assessment completed Vaccine deployment plan finalized, and resources mobilized
	The NTF should continue providing policy guidance to the COVID-19 response in the country tailored to transmission trends and guided by evidence	Ongoing	NTF for COVID-19	Technical guidance from the NSC	Regular meetings convened by the NTF COVID-19 control orders issued by the NTF
b. For mid to long term to improve response to next waves of COVID-19 outbreak:					
1	State level coordination (emergency response) capacity building	December 2021	State MoH (DGs), WHO (state coordinator)	Support to infrastructure and operations (funding)	

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				Capacity building, training, support supervision and results-based management.	Monitoring of state level emergency response reporting
				Implement a reporting system to centralize reporting.	Central shared drive
2	Contingency planning for potential COVID second wave and other infectious disease outbreaks	December 2021	MoH, PHEOC, WHO	Partner technical support	# of contingency plans developed
3	Implementation of the NAPHS for Public Health systems strengthening.	December 2024	MoH, WHO	Donor, institutional support and political support	Monitoring of NAPHS indicators

2.2 Risk communication and community engagement	
Observations	
Best practices	- Coordination and Establishment of TWG was achieved quickly given existing EVD preparedness structures, the partner mapping; effective leadership from the MoH and trainings undertaken thus leading to effective coordination and harmonisation of risk communication approaches and messages. - Robust mobilization of partners to support RCCE facilitated by presence of humanitarian partners countrywide. - Engagement of community leaders /influencers including CSO, CBOs, FBOs, etc. that participated by raising awareness at the grassroots and mitigated social stigma and other negative perceptions. - Use of mix communication channels (radios, TVs, hotline 6666, social media platforms, Public miking/street announcements, traditional media, Telecom caller-tunes/sms, community influencers/stakeholders, etc that allowed adequate and appropriate information to be disseminated to raise awareness. - Evidence base, best practice attitude and knowledge – KAP study that allowed targeted messaging to address emerging issues in relation to adherence to recommended public health social measures.
Challenges	- limited systematic community engagement due to physical /social distancing requirements during the initial phase of response and hence fewer people were reached with information thus leading to sub-optimal behaviour change - Several sentiments and stigma on race, religion, tribe and communities that were fuelled by inadequate knowledge on COVID-19 resulting in hate speeches, stigma, lack of adherence to public health social measures. - Progressive decrease of risk perception due to government relaxing lockdown measures and hence limited adherence to recommended public health social measures. Consequently, the use of masks in public places like markets is low and crowding occurs frequently in these settings. - Limited enforcement of the recommended PHSM to support risk communication messages - Demand versus services imbalance due to weak coordination and suboptimal response leading to loss of trust from the communities.
Recommended actions	

a. For immediate implementation:
   - Assess and revise the current RCCE TWG plan to address the current behavioral change and risk communication needs.
   - Integrate COVID-19 messaging into the response to other ongoing emergencies like – Floods; polio; measles and other public health threats
   - Targeted messaging to combat mis-information, dis-information, stigma and negative social norms through mix channels
   - Coordinate with Case Management/Surveillance to develop referral pathway for MHPSS
   - Identification and engagement of community leaders/influencers including religious and traditional leaders, Chiefs
   - Continue rumour management and community feedback
   - Advocacy and law enforcement by authorities/stakeholders
   - Transition the COVID-19 risk communication and community engagement (RCCE) TWG activities into the Behavioral Change Communication (BCC) Technical Working Group

b. For mid to long-term implementation to improve the response to the ongoing COVID-19 outbreak:
   - Conduct rapid Behaviour Change and risk perception assessment on COVID-19 community perceptions that include social anthropological study to understand the community perception on COVID -19
   - Develop MoH-RCCE database for information storage
   - Capacity development of MoH-Health Education Depart.
   - Conduct supportive supervision, mentorship and M&E
   - Support to Emergency Hotline Operation: Strengthening the operational & response capacity of the national public health emergency call center during COVID-19 response

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a. For immediate implementation				

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
1	Assess and revise the RCCE TWG plan to address the current communication and behavioral change needs (low risk perception; low adherence to recommended public health social measures; reach and protect the most vulnerable) and support behavioral change	Dec 2021	MoH-Director for Health Education and Promotion, Mary Obat supported by Unicef and other BCC TWG partners	Technical support	Updated RCCE plan to address current behavioral change needs
2	Integrate COVID-19 messaging into the response to other ongoing emergencies like – Floods; polio; measles and other public health threats	Dec 2020	MoH-Director for Health Education and Promotion, Mary Obat supported by Unicef and other BCC TWG partners	Technical support	COVID-19 messages integrated into ongoing response to floods; polio; and other public health emergencies
3.	Conduct targeted messages to combat mis-information, Dis-information, stigma and negative social norms through mix channels such as radios, community influencers. Coordinate with Case Management/Surveillance to develop referral pathway for MHPSS	March 2021	MoH-Director for Health Education and Promotion, Mary Obat	Partners support on radio messaging, talk show, Support development materials and Capacity building	

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	Targeted messaging to protect the most vulnerable by encouraging the use of medical mask by vulnerable populations (people aged >60 years and/or with comorbid conditions); use of fabric mask for the general public where physical distancing cannot be achieved.			Technical support to develop messages targeting the most vulnerable	Messages developed to enhance awareness in the most vulnerable
4.	Identification and engagement of community leaders/influencers including religious and traditional leaders, Chiefs to support community engagement for community ownership and behavioral change towards adopting the recommended public health measures (hand washing; consistent and proper use of masks; and social distancing)	February-2021	MoH-Director for Health Education and Promotion, Mary Obat	Partners support in mapping and engagement of community influencers. Capacity building of influencers	
5.	Management of rumors and misinformation should continue through provision of trustworthy information and facts through	May-2021	MoH-Director for Health Education and Promotion, Mary Obat	Partners support in term of technical support and resources	

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	trusted channels and sources to build confidence in the COVID-19 response and the overall health system			Training of community mobilizers on rumor tracking and community feedbacks mechanism	
6.	Advocacy and law enforcement by authorities/stakeholders to reinforce communities adherence to COVID-19 preventive measures	March-2021	NTF/MAP/NSC-All authorities/stakeholders		
7.	Transition the COVID-19 risk communication and community engagement (RCCE) TWG activities into the Behavioral Change Communication (BCC) Technical Working Group	Dec 2020	MoH-Director for Health Education and Promotion, Mary Obat	Technical support from Unicef and other BCC partners	COVID-19 RCCE TWG activities transitioned into the BCC TWG
b. For mid to long term to improve response to next waves of COVID-19 outbreak:					
1	Conduct rapid Behavior Change and risk perception assessment on COVID-19 community perceptions that include social anthropological study to understand the community perception on COVID - 19	May - 2021	MoH-Director for Health Education and Promotion, Mary Obat		

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
2	Develop MoH-RCCE database for information storage	Dec - 2021	MoH-Director for Health Education and Promotion, Mary Obat	Partners to support with resources	
3	Capacity development of MoH-Health Education Department	Dec - 2021		Partners to support with resources	
4	Conduct supportive supervision, mentorship, and M&E	Dec - 2021	MoH-Director for Health Education and Promotion, Mary Obat	Partners to support with resources	
5	Support to Emergency Hotline Operation: Strengthening the operational & response capacity of the national public health emergency call center during COVID-19 response in South Sudan.	Dec - 2020	MoH-Director for Health Education and Promotion, Mary Obat		

2.3. 2.3 Surveillance, case investigation and contact tracing	
Observations	
Best practices	- Daily debrief meetings were undertaken by the surveillance technical working group, facilitated by the PHEOC facilities and the presence of the MoH leadership to chair the meetings and make operational decisions - TWG collaborations with other leads and co-leads helped get perspectives from spectrum of partners and helped coordinate unified response engaging the HLTF/NTF/MAP thus leading to improved surveillance and response capacities, and improved input into technical guidelines, e.g., surveillance and testing prioritization. - Data & Alerts management support through the establishment of a stand-alone call center with additional HR and facilities; and support towards internet; telephones; and pre-fab building to improve alerts management, surveillance, and response capacities. - Reformatted RRTs with clear leadership and smaller teams supported by revised SOPs, and trainings thus allowing more efficient response to alerts, capacity to respond to more alerts and efficient use of existing resources. - Contact tracing was instituted following case confirmation and with flexibility and additional trainings, multidisciplinary teams were recruited to support the expanding outbreak including the use of University students. - Sentinel Sites for influenza under IDSR existed in Juba and were expanded from two sites to 45 to determine if there was community transmission in Juba. The expansion of the sentinel sites was possible given the cooperation from the public, private, and PoC health facilities and this provided epidemiologic information on community transmission of COVID-19. - State/local liaisons: with the assignment of a dedicated PHEOC staff to coordinate reporting from the states thus leading to improved reporting and communications between the states and the PHEOC and improved engagement with the states. - Mortality surveillance: With the establishment of community transmission in Juba and anecdotal reports of deaths in the community, mortality surveillance guidelines were developed, and two dedicated mortality surveillance and dead body management teams were trained and deployed to investigate deaths in health facilities and communities around Juba. This resulted in improved reporting and investigation and testing of community deaths.
Challenges	- Inconsistent attendance by decision makers affected communication between the implementers and decision

	makers leading to expanded workdays and thus requiring additional time to be spent in follow up meetings. - Communications across pillars especially the laboratory with late or missing test results, challenges in using unique identifiers and the limited testing capacities in the country at the peak of the outbreak. - HR/incentives and non-alert demands on RRTs due to non-adherence to SOPs thus leading to long turnaround time. - Community-based contact tracing took long to establish - Security of contact tracers as incidents of contact tracers being locked in homes and assault to teams were commonly reported given limited community engagement on the response. - Non-compliance of cases/contacts thus leading to hesitancy to declare contacts and to adhere to recommended isolation and quarantine requirements. - Expansion to the states; POCs was limited by resources hence there was inadequate testing outside the capital even when GeneXpert testing sites were rolled out to the state level. - Did not leverage the IDSR state resources enough to support the COVID-19 surveillance and response needs including data management and reporting of alerts and suspect cases. - Cross-cutting challenges of HR, late test results, submission of incomplete CIFs, and lab results going missing for several weeks - Limited number of cases detected through the existing health system, health care facilities, surveillance system, and community surveillance system - Transition the Epi-Surveillance TWG into existing routine surveillance coordination platforms like the EPR committee
Recommended actions	
a. For immediate implementation: - Build DHIS2 and complete the COVID-19 component for full data capture - Enrolment of states hospitals into the SS sites for COVID - Activate community surveillance via Boma Health Initiative - Cross-border surveillance planning	

- Train the frontline health workers and community health workers on early detection, reporting, quarantine of suspect COVID-19 cases
- Deploy IDSR and EWARS resources including surveillance focal points at health facility; county; state; and national level (HF SFP; CSOs, SSOs, EPR department), RRTs, and EWARS electronic platform for the detection, reporting, investigation, and responding to COVID-19 suspect and confirmed cases
- Continue implementation of community-based contact tracing as a model for engaging communities and improving compliance to contact listing and follow up
- Maintain and reinforce surveillance for IDSR priority diseases; vaccine preventable diseases like malaria; polio, and measles and deliver routine immunization and other cost effective public health interventions using existing health system resources
- Rollout training on the third edition IDSR Technical Guidelines to the counties to strengthen capacities for surveillance and response to IDSR priority diseases, and other public health emergencies including COVID-19.

b. For mid to long-term implementation to improve the response to the ongoing COVID-19 outbreak:

- Establish good communication system for COVID data flow
- Verifying and cleaning data for COVID
- Leverage existing electronic system nationwide for collecting data
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RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
a. For immediate implementation					
1.	Build DHIS2 and complete the COVID component for full data	November 15, 2020	-Acaga -Wilfred	-credentials for people to access system	# of people who have credentials to input data into DHIS2

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	capture		-Poballo		# people have been trained to use the data capturing system for COVID
2.	Enrollment of states hospitals into the SS sites for COVID sentinel surveillance	June 1, 2021	Rumunu Wamala Abraham Abenago	ID/training of focal person	# of new SS enrolled
				Weekly reporting module	# of SS properly reporting COVID cases
3.	Activate community surveillance via Boma Health Initiative	1st phase greater Equatoria March 31, 2021 2nd phase Greater Bahr el Ghazal June 1, 2021	Core group and World Vision (Greater Equatoria) World Vision (Greater Bahr el Ghazal)	Ongoing training, monitoring and assessment of Boma Health Promoters	# promoters trained
					# of COVID alerts reported from the promoters on various reporting systems
4	Training of frontline health workers on detection, reporting and early containment of COVID-19 cases	Jan 2021	State; and County Surveillance Focal Points	COVID-19 case definitions; logistics for training teams	Number of frontline HCW trained on detection of COVID-19 and other epidemic prone diseases

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
5	Cross-border surveillance planning	June 1, 2021	Bilateral parties MOH State border colleagues IOM Security Immigration/customs	Platform/TOR amongst coordinating parties	# POE sites with established coordination committees
6	Deploy IDSR and EWARS resources including surveillance focal points at health facility; county; state; and national level (HF SFP; CSOs, SSOs, EPR department), RRTs, and EWARS electronic platform for the detection, reporting, investigation, and responding to COVID-19 suspect and confirmed cases	Dec 2020	MoH EPR Director and PHEOC manager	Ongoing funding for the IDSR program in South Sudan	Number of COVID-19 suspect cases reported through IDSR/EWARS

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
7	Continue implementation of community-based contact tracing as a model for engaging communities and improving compliance to contact listing and follow up	Dec 2020	EPI-Surveillance TWG	Funding for community based contact tracing	Number of counties using the community based contact tracing model Case to contact ratio by affected location
8	Transition the Epi-Surveillance TWG into existing routine surveillance coordination platforms like the EPR committee	Dec 2020	EPR Director and PHEOC manager	Technical support from WHO and partners like CDC	Epi-surveillance TWG integrated into existing routine surveillance coordination platforms.
9	Maintain and reinforce surveillance for IDSR priority diseases; vaccine preventable diseases like malaria; polio, and measles and deliver routine immunization and other cost effective public health interventions using existing health system resources	Dec 2020	EPR Director and PHEOC manager	Technical support from WHO and partners like CDC	Number of alerts of IDSR priority diseases and VPDs detected and responded to within 48hrs

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
10	Rollout training on the third edition IDSR Technical Guidelines to the counties to strengthen capacities for surveillance and response to IDSR priority diseases, and other public health emergencies including COVID-19.	From January 2021	MoH EPR Directorate	Technical and financial support for the trainings	Number of counties reached with training on the 3rd Edition IDSR Technical Guidelines Number of health care workers trained on the 3rd Edition IDSR Technical Guidelines
b. For mid to long term to improve response to next waves of COVID-19 outbreak:					
1.	Establish good communication system for COVID data flow	-December 31, 2020	MOH and partners -ICAP -WHO -States -MOH -MSF -Samaritan's Purse	-Implementation of data flow SOPs and response measures in place	# individuals entering data into DHIS2 # of RRT teams inputting COVID data into DHIS2 # of IDSR registered facilities to inputting COVID data into DHIS2
2.	Verifying and cleaning data for COVID	November 30, 2020	Data Mgmt TWG -Wilfred	-Data clerk assistance from different pillars if they exist	# of original databases imported into DHIS2

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			-EOC Epidemiologist	-Epidemiologist supervise and assess data entry for quality and consistency	
3	Create electronic system nationwide for collecting data	Feb 1, 2021 (Juba), rolling launch for states to be completed by June 1, 2021	Data TWG State liaisons Pillar data liaisons State surveillance officers WHO state coordinators DHIS2 IT consultant	Tablet launching	# of tablets distributed
				Clear SOPs for data entry and flow	Completed SOP (Y/N)
4	Revise surveillance & testing scheme to include use of rapid diagnostic test (RDT) kits	15th December 2020 field testing of RDTs 15th January 2021 begin training sessions on implementation of RDTs at priority locations 15th February 2021 begin full implementation and use of RDTs across all states and	Lab TWG Epi-Surveillance TWG Sentinel sites RRTs POCs HFs that deliver services to refugee camps and host communities Key POE sites that	Functional decision-support algorithms and job aids for health screeners, RRTs, sentinel sites, and others who will use RDTs Clear SOPs Consistent and stable HR screening and lab capacity to accommodate	Numbers of RDT algorithms and job aids distributed Number of RDT-related trainings conducted across the country Development of SOPs and other guidance documents Development of data sets and other data capture tools to document daily administration of RDTs at all

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		administrative areas	process large numbers of persons returning from congregate settings in border countries	verification testing for symptomatic persons who test negative with an RDT	uptake sites
5	Participation in WHO COVAX process to prepare for use of COVID-19 vaccine	1st November to participate in COVAX weekly meetings 15th November to identify MoH and WHO focal persons to lead and coordinate in-country planning processes to meet COVAX participation requirements	Dr Anthony Laku, MoH EPI focal person WHO focal person to liaise with Dr Anthony Laku	National COVAX plan Communications to states and administrative areas to prepare for COVAX implementation	Number of COVAX meetings held and # with MoH and WHO-SSD participating Number of meetings with state EPI managers to update on COVAX and begin state preparedness efforts State COVAX plans completed by WHO-required dates

2.4 Points of entry	
Observations	
Best practices	- Integrated approach to screening, risk communication and IPC/WASH at the PoE Locations, POCs and Refugee camps - Coordination of various stakeholders at the national level and points of entry including immigration, security organs, CHD and implementing partners at the points of entry - Cross border collaboration especially when it came to developing a cross border strategy for truck drivers - Rapid integration of COVID-19 activities into existing programs activities such as EVD/livelihood/protection/Nutrition - Innovative approaches e.g. thermal screening system, the footmarks for physical distancing at JIA - Support to health facilities by setting-up triage, improving WASH infrastructure and Risk Communications - International Travellers follow-up and monitoring for 14-days upon arrival into the country during quarantine
Challenges	- Limited capacity to conduct PoE assessment at various PoE locations due to the travel restrictions imposed during the pandemic - Limited resource allocation to the PoE pillar thus partners could not implement PoE activities at many of the border crossing points - Multiple unofficial border crossing that could not all be manned to screen travellers for COVID-19 and mitigate the risk of cross border spread. - Lack of quarantine facilities at PoEs affected the management of travellers that were under investigation for potential COVID-19 exposure. - Limited space at the PoEs thus limiting the availability of holding areas for suspect cases reported among travelers. - Wrong numbers and physical address of travelers affected the follow up of international travelers during the 14-days they were required to be in quarantine and follow up by a public health officer. - Limited testing capacity at PoE thus affecting the quality of screening at most PoE.
Recommended actions	

a. For immediate implementation:
   - Advocacy for PoE pillar funding prioritization
   - Procure supplies to support PoEs screening
   - Expand holding areas/ designate new ones at the POEs
   - Training basic IPC awareness at the PoEs staff
   - Strategy for sustainable COVID-19 testing at PoEs

b. For mid to long-term implementation to improve the response to the ongoing COVID-19 outbreak:
   - Roll out Integrated approach to screening, risk communication and IPC/WASH at all PoE Locations
   - Leverage existing cross border platforms for coordination of various stakeholders at the points of entry including immigration, security organs, CHD and implementing partners at the points of entry through regular meetings
   - Develop a cross-border policy aligned to the IHR and rollout its implementation
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RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
A. For immediate implementation					
1.	Advocacy for PoE pillar funding prioritization	December 2020	Directorate of international coordination, MoH	Identify PoEs required support	PoEs that needs support identified
				Conduct assessment and develop budget for the PoEs	Assessment conducted and budget developed
				Hold meeting with MoH and donors for	Number of Meeting conducted

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
				resource mobilization **(MoH and Partners)**	
2.	Procure supplies to support PoEs screening	December 2020	MoH, WHO, IOM and IPs	Identify PPEs and other supplies (quantities, specification etc.)	Quantity of the PPEs and supplies identified
				Request PPEs and supplies through logistic TWG	Quantity of PPEs and supplies requested
				Transport and dispatch the supplies to the PoEs **(Coordination and logistics)**	Quantity of PPEs and supplies transported
3.	Expand holding areas/ designate new ones at the POEs	December 2020	MoH, WHO and IPs	Identify available space at the PoEs	Number of available space identified
				Install additional prefab	Number of additional prefabs installed
				Additional equipment and human resource at the holding area **(Partners technical support)**	Number of equipment and human resources identified

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
4	Training basic IPC awareness at the PoEs staff	December 2020	MoH and IPs	Use of basic IPC at the PoEs e.g. wearing, hand-washing and physical distancing **(IPC/WASH and Roscommon)**	Quantity of basic IPC and IEC materials supplies to the PoEs
5	Develop a strategy for sustainable COVID-19 testing at PoEs	December 2020	MoH and IPs	Training of local HCW on COVID-19 testing ; recommended testing platforms	- PoE staff trained in COVID-19 testing - Number of PoEs that can test for COVID-19
c. For mid to long term to improve response to next waves of COVID-19 outbreak:					
1	Roll out Integrated approach to screening, risk communication and IPC/WASH at all PoE Locations	March 2021	MoH, WHO, IOM, CORE Group and other partners	Additional funding for integration of border Health into routine migration management at various PoEs **(Coordination)**	# of official border crossings with integrated border health activities including designated focal points for border health

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
2	Leverage existing cross border platforms for coordination of various stakeholders at the points of entry including immigration, security organs, CHD and implementing partners at the points of entry through regular meetings	March 2021	MoH, WHO, IOM and CORE Group	Additional funding and technical expertise for capacity building of County Health officers within PoE counties **(Coordination)**	# county Health Officers at the PoE counties trained on border health and migration management
3	Develop a cross-border policy aligned to the IHR and rollout its implementation	March 2021	MoH, IOM, WHO and other partners	National strategy on cross border disease surveillance	Availability of a National strategy on cross border disease surveillance
				Establishment of cross border committees in counties along South Sudan's borders **(Coordination)**	# Functional cross border committees
				Establishment of routine cross border meetings ,South Sudan initiated.	# meetings and intervals

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
				Budget allocation for cross border committees activities	# Availability of fund for cross border committees activities
4…	Re-opening of closed POEs	March 2021	MOH	Partners to work together with MoH to conduct assessment	Identify # of POEs opened
				Allocation of resources	Availability of resources
5	One Health Approach and upgraded Port Health	March-2021	MOH, WHO, FAO, IOM, other Gov't and stakeholders	Physical infrastructure development	Availability of space for Port Health
				Resources allocation for port Health activities including supply of equipment, Vaccines and so on	Availability of resources and supplies for Port Health

2.5 The national laboratory system	
Observations	
Best practices	- Initial cases tested in duplicate & validated on different target genes this was possible given the availability of kits targeting different target genes and this helped to build confidence in the initial test results. - Results confidentiality was assured by removing of personal identifiers on the printed individual test slips. - Prepositioned triple packing materials to all the states to facilitate sample collections countrywide and in line with the surveillance strategy and supported by the existing IDSR sample referral network. - SOPs and dedicated flights: Guidelines were quickly developed from the existing influenza laboratory sample collection and testing SoPs to accommodate COVID-19. UNHAS with support from USAID had dedicated flights for prompt sample transportation to Juba for PCR testing. - Feedback on rejected samples to improve practice at the local level. - Repurposed Equipment (PCR machines, biosafety cabinets (BSC), human resource & supplies (pipette tips, ethanol, tubes, and extraction reagents) from other ministries & NPHL departments to support COVID-19 testing. - Lab testing expansion plan initiated and is now into the second phase of expanding GeneXpert testing to all the states, PoCs and refugee health facilities. - International Technical Assistance – that facilitated the development of initial testing protocols; training of staff on COVID-19 testing; supported the initial testing; and continued providing remote support to the team to ensure effective testing. - Mobilization of partners to support the provision of technical and logistical support to expand country laboratory capacities for sample collection, transportation, registration, inactivation, extraction, and testing, and sharing of results as well as setting up LMIS. - Testing strategy to suit outbreak phase: The testing strategy was reviewed in a timely fashion to suit the outbreak transmission phase and to address the surveillance needs. - Mobile laboratory was effectively deployed to support screening of international travelers and truck drives at Nimule border crossing.

	- The National Public Health Laboratories (NPHL) molecular laboratory was enrolled into WHO's COVID-19 GLOBAL EQA testing scheme and participated in the regular testing and reporting of panels. South Sudan performed exceptionally well thus instilling confidence in the test results from the laboratory. - EVD preparedness capacities helped the laboratory to spring into full readiness mode when the COVID-19 pandemic started. - The establishment of influenza testing capacities in 2018 with trained staff; testing protocols; and PCR machine for testing greatly helped the country to rapidly initiate COVID-19 testing in the NPHL molecular laboratory.
Challenges	- Poor laboratory networking (peripheral; private; & International) in terms of inter laboratory comparisons and information sharing with regional laboratories and information flow from the peripheral laboratories to the NPHL. There was also limited involvement of the international reference laboratories in the confirmation of the initial cases. - Low testing capacities at NPHL (leading to sample backlog), and inadequate peripheral testing thus overall, the current per capita testing rate for the country remains below the optimal level of 10 tests per 10,000 population per week. The major limiting factors being inadequate utilization of the peripheral laboratories despite expansion of testing; manual sample extraction before PCR testing, nascent laboratory network with no private laboratory accredited to conduct molecular testing (GeneXpert or PCR). - As test kits we provided by different donors, the target gene for detecting SARS-COV2 varied from time to time thus affecting comparability of test results. - Data management remains (manual; with no LIMS linking to other pillars like surveillance, case management, and PoE) thus affecting the transmission of test results to the PHEOC and other pillars and at times delaying the release of test results from the laboratory to the PHEOC. - Sample achieving remains weak with reports of sample loss or duplicate and conflicting test results for the same patient sample are rampant. - Funding remains a limitation for expanding the national laboratory network and testing capacities at national and sub-national level. - Long or absent expected time of arrival (ETA) for laboratory test kits and supplies affected planning and hence laboratory operations were frequently restricted or disrupted by stockouts of essential laboratory kits and supplies.

	- Inventory management is still weak with need to recruit appropriately trained human resource, additional storage space; and software to manage laboratory test kits and other commodities for efficient and uninterrupted laboratory operations. - No regular operations meetings are held thus affecting the timely identification and response to emerging operational challenges and bottlenecks. - There was limited IPC compliance in the NPHL molecular laboratories as there was no IPC enforcement policy. - Standardize COVID-19 molecular testing kit target genes for consistency and to ease comparability of test results and interpretation of test result trends.

Recommended actions

a. For immediate implementation:

- Automated extractions – operationalisation to increase the current testing capacities
- Expedite the Ag-RDT verification and rollout to optimise the current country COVID-19 testing capacities
- Procure a high temperature incinerator to support the inactivation of used GeneXpert cartridges.
- Optimise testing at GeneXpert sites as many remain underutilised after they were operationalised.
- Procure sample storage freezers to optimise sample cataloguing and biobanking
- Conduct regular laboratory operations meetings to promptly address emerging operational challenges.
- Expand laboratory networking – to include peripheral laboratories and the private sector laboratory capacities to optimise country testing capacities.
- Develop laboratory IPC compliance protocols and enforce their consistent use in the NPHL molecular laboratory.

b. For mid to long-term implementation to improve the response to the ongoing COVID-19 outbreak:

- Establish a third regional PCR laboratory in Malakal (Greater Upper Nile).
- Establish NPHL owned LIMS to improve management of laboratory information and sharing with other programs and pillars including the PHEOC.
- Expand the NPHL space for sample and supplies storage, stock management.
- ….

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
d. For immediate implementation					
1.	Completing procurement automatic extraction machines, installation and training	30/Nov/2020	DG, NPHL	Funds for the unpaid balance of procurement agreement of automatic machine	% samples extracted in the using the automatic machines
2.	Finalizing the Ag RDT field verification protocol to give way for their wide use.	30/Nov/2020	MAP lab lead-Sankal LAB TWG - Abe		Protocol for validating the AgRDTs
3.	Fast track procurement high temperature incinerator to manage waste	30/Nov/2020	DG, PHL	NA	
4	• Sensitization of clinician GX COVID19 testing • Map HF and set a sample referral network	31/Dec/2020	GX TWG		#sensitization done
					#pencentage increase in GX testing
					#GX site with 100% performance

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
	to GX sites • Establish and EQA for GX sites • Review the GX testing strategy				Percentage increase in GX testing
5	• Procurement of sample management freezes • Installation of EAC BSC		DG, PHL Lasuba	MAP	#freezers procured and installed
				Partner support	Decrease in #samples lost
6	• Hold regular laboratory operations meetings to streamline laboratory operations challenges • Installation of EAC BSC	30/Oct/2020	Lab Manger at NPHL	NA	#
7	• Expand the laboratory network with additional peripheral public and private molecular laboratories accredited for COVID-19 testing	24 Dec 2020	COVID-19 lab tech working group	Technical support to develop COVID-19 laboratory accreditation protocol Establish a COVID-19 molecular laboratory accreditation team	COVID-19 laboratory accreditation protocol developed Number of peripheral molecular laboratories accredited Number of private molecular

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
					laboratories accredited
8	• Develop laboratory IPC compliance protocols	24 Dec 2020	COVID-19 lab tech working group	Technical support	Lab IPC compliance protocol developed
9	• Streamline procurements to ensure the kits procured target similar genes for ease of interpreting test results trends.	20 Dec 2020	COVID-19 lab tech working group	Technical support	COVID-19 test results with similar target genes
e. For mid to long term to improve response to next waves of COVID-19 outbreak:					
1	Establishing a third regional PCR laboratory in Malakal	31/March/2021	LAB TWG		
2	Technical assistance to establish a tailored NPHL owned LIMS that is expandable to manage large emergencies of different diseases	31/March/2021	Lab Manager- James	Technical Assistance / consultancy Fund	A robust lab LIMS
3	Repurpose a room at NPHL to create room for material storage space by transferring administrative offices out of the	31/March/2021	Supplies focal point- Lasuba	Partner support to create extract space	Availability of dedicated store for laboratory supplies.

RECOMMENDED ACTIONS	DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
laboratory building				

2.6 Case management and knowledge sharing about innovations and the latest research; & Infection prevention and control	
Observations	
Best practices	- Application of Case Mgt &IPC SOPs and guidelines supported by the availability of technical experts in case management and IPC as well as IPC and case management supplies that facilitated efficient IPC measures and patient management. - Efficient TWGs and partners collaboration with regular meetings, information sharing, feedback, needs identification, and decision making for timely guidance and technical support to implementing partners. - Capacity building of frontline health care workers supported by endorsed training materials and a combination of face-to-face and online sessions; supported by the availability of training experts in country. This therefore allowed the training of health care workers manning isolation facilities on IPC and case management. - Preposition and distribution of PPE/IPC & WASH commodities supported by the in-country stock of PPEs and IPC supplies, a centralised supplies request portal. This allowed the health facilities to be equipped with supplies, health workers protected from infection and improved hygiene practices in targeted communities. - Rapid assessments, KAP and research for evidence-based response - Presence of EVD isolation facilities allowed these to be used or expanded to support COVID-19 case management.
Challenges	- Nonadherence to recommended preventive measures (quarantine, home based isolation, IPC) given the lack of enforcement of public health measures and no compliance from the public resulting in continued community transmission. - Delayed decision making on case management strategy thus leading to lack of clarity on effective patient management. - Limited coordination between case management arms and other pillars due to non-adherence to SOPs and limited

	coordination with other pillars thus leading to increased number of cases lost to follow up and reducing compliance from the cases under follow up. - Inadequate listing of cases to COVID-19 database thus compromising the completeness for the case management database and ultimately denying some patients the much needed follow up and care from the case management team. - Suboptimal psychosocial support care that affected the compliance of cases and contacts to the recommended public health measures and frustration thus affecting the ability to attain timely containment of the outbreak. - Limited field monitoring and supportive supervision at the subnational level due to travel restrictions and this therefore affected the quality-of-service delivery. - Delayed PPE release due to global supplies bottlenecks thus potentially exposing the health workers to nosocomial infections. - Poor Data management and analysis of Case admitted in COVID-19 facilities. Less compliance of partner to share data; multiples data collection tools form EOC, TWG and WHO state coordination caused a lot of confusion in collecting case management data. - Confirmed COVID-19 cases with asymptomatic, mild to moderate illness and under homebased care were many for the homebased care team and hence most of them were followed up by phone with only a few being visited for the initial assessment and follow up visits if there were reports of deteriorating clinical condition. - There was no livelihood support (e.g. food rations) for confirmed cases under home isolation and contacts under quarantine and as such compliance to isolation and quarantine was very poor thus compromising containment and increasing the risk of transmission within households and communities. - Inadequate compliance to IPC measures in hospitals and health facilities as seen from the lack of COVID-19 triage tents in some of the health facilities; lack of crowd management; and inconsistent use of masks by patients and healthcare workers.
Recommended actions	
a. For immediate implementation: - Preposition essential medical and IPC supplies to underserved locations - Refresher trainings on IPC/CM for FLHCWs as per TWG approved modules - Enforcement of home base isolation of confirmed cases	

- Each HF to have team of HCWs dedicated to home-based isolation
- Optimize IPC measures in the health facilities to ensure COVID-19 screening and triage in all health facilities and implementing guidance on mask use for health facilities in areas with community transmission
- Integrate DIHS for case management data collection and analysis will enable a centralized and coordinated way of managing data.

b. For mid to long-term implementation to improve the response to the ongoing COVID-19 outbreak:

- Increase field monitoring & supervision
- Strengthen sub national coordination
- Establishment of permanent infectious disease units/wards in the state and county hospitals
- Capacity building at national and subnational level - simulation
- Introduce training on into medical school curriculum & PH institutes
- Establish critical care capacities at major referral and state hospitals
- Integrating COVID-19 into mainstream medical practice at national and sub-national level

	RECOMMENDED ACTIONS	DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
f. For immediate implementation					
1.	Preposition of essential supplies and commodities to all underserved locations and replenishments	Nov-Dec 2020	MoH – Incident Manager WHO – Incident Manager	Provision of Logistics support (considering supplies procured and in-country)	- Number of health facilities and isolation facilities equipped with adequate IPC/CM supplies

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
	based on needs				
2.	Refresher trainings on IPC/CM for frontline HCWs as per TWG approved modules	Dec 2020 - 2021	MoH – CM/IPC TWG Chair WHO – CM/IPC TWG co-chair IMC – CM/IPC TWG co-chair	MoH – training approval WHO – facilitating and supporting the training IMC - facilitating and supporting the training	Number of health care workers trained.
3.	Enforcement of Public Health measures and home base isolation of confirmed cases	Nov - Dec 2020	National Task Force MoH senior leadership (Minister of Health, Undersecretary and Incident Manager)	Enforcement of public health measures (law enforcement agencies support) - Mandatory use of face masks - Strict observation of social distancing - Hand washing facilities and ABHR at public inlets and outlets	Number of confirmed cases complying with home isolation protocols Number of people complying with IPC measures Number of public places with hand washing stations
4	Each health facility to have team of HCWs	Nov-Dec 2020	MoH- PHS	MoH	Number of patients at subnational

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
	dedicated to home based isolation		Implementing partners	TWG IPs	level calling 6666
5	Enforce compliance with COVID-19 measures in all health facilities including – COVID-19 screening & triage at the entrance; use of masks in hospital premises; and crowd control	Nov-Dec 2020	MoH- PHS Implementing partners	MoH TWG IPs	Number of HF complying with IPC measures for COVID-19 control
6	Integrate DIHS for case management data collection and analysis will enable a centralized and coordinated way of managing data.	Dec 2020	MoH- DHIS team Implementing partners	Technical support	DHIS module for COVID-19 case management data reporting operationalized
g. For mid to long term to improve response to next waves of COVID-19 outbreak:					
2	Increase field monitoring and supportive supervision	Nov 2020 – Mar 2021	TWG Implementing partners	Logistics and checklist	Number of joint field monitoring

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
3	Strengthen sub national coordination	Nov-Dec 2020	MoH Clusters	MoH Partners Cluster	Gaps in national and subnational data on COVID-19
4	Establishment of permanent infectious disease units/wards in the state and county hospitals	June 2021	MoH-Preventive Health Services	MoH – Medical services Technical guidance from the partners	Number of state and county facilities with infectious disease units
6	Continue strengthening capacity building at national and subnational level including conduction of simulation exercises and TTX	Nov 2020 - 2021	MoH – Preventive Health Services, Directorate of Training	Funding Technical expertise (WHO, partners within TWG)	Number of trainings Number of FLWs trained Number of exercises conducted
7	Training on COVID-19 to be introduced in the medical school curriculum and Public Health institutes	Sept 2021-2022	MoH- Directorate of Training MoHE (Higher Education)	Funding Technical expertise from relevant partners (through MoH Directorates of Training and preventive health services)	Existing Curricula Number of institutions rolling out trainings

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
8	Establish critical care capacities at major referral and state hospitals (and presence of Biomedical engineering and maintenance capacity)	2021-2024	MoH- Medical Services	Technical Support from relevant partners Logistics (including funding)	Number of facilities with critical care units
9	Integrating COVID-19 into mainstream medical practice at national and sub-national level	March - June 2021	MoH – MAP MoH – Dr. Richard	Technical guidance from MoH & MAP and other technical partners to guide integration process	Number of health facilities with integrated approach

2.7 Operational support and logistics in the management of supply chains and the workforce	
Observations	
Best practices	- Common PPE allocation platform was established as an expansion of the EVD preparedness and supported by the availability of resources to procure PPEs, and other supplies, the existence of other supplies chain infrastructure; and the availability of an allocation committee. This facilitated the availability of PPEs to support the response and protect the frontline health workers and RRTs from nosocomial infections. - Common storage & expanded temperature control warehouse were established using the existing warehousing capacities, supported by effective coordination and collaboration, and availability of funds to scale up warehousing, and the existing inventory management system. This allowed real time inventory reporting and reduced stocks consolidation cycle time. - Roll-out and implementation of the UN COVID-19 Supply Chain System to address the demand and supply dynamics in the context of COVID-19 and was supported by the availability of essential COVID-19 supplies forecasting tools. This allowed consolidation of requests at country level; improved visibility of commodity pipeline requested through he supplies portal; coordinated purchasing; streamlined logistics distribution at the global level; allowed coordination; collaboration and procurement of commodities on behalf of partners. - Prioritization of COVID-19 cargo via road, air & river transport taking advantage of existing infrastructure; the funds secured from donors for additional transportation; and an effective coordination mechanism. This allowed prompt deployment of goods, and passengers to the field as well as easy access to hard to reach locations and efficient sample transportation from the field to Juba level. - Expanded and improved vertical infrastructure in Juba IDU and Nadapal border crossing harnessing the guidelines for establishing SARI treatment facilities; the existing stocks of tents; and repurposed assets. This allowed the expansion of case management capacity in Juba from 24 beds to 81 beds and provided a safe working environment for frontline healthcare workers. - Support on inventory management & warehousing training supported by existing tools and effective coordination and collaboration thus allowing staff capacity to be enhanced on inventory management.
Challenges	- Lack of information on procurement and pipeline due to lack of sustainable Lack of sustainable information sharing

	mechanisms; partners not participating in logistics meetings; use of alternative procurement channels; and security stocks phenomenon (withholding supplies for emergency purposes). - Long and uncertain lead times for PPE and other supplies due to market bottlenecks; reduced production; travel restrictions (Access issues and border delays); growing demands for essential commodities; and limited feedback from the UN Supply Portal. This resulted in delayed allocation of commodities; PPE stockouts; and failure to optimise containment; with potential HCW exposures. - Lack of clarity on Q14 and visa issues/approval lead time due to lack of prompt decision making capacity and there were no policies in place. This resulted in prolonged decision making process; delayed delievery and deployment of resources to the field; and affected intra-country deployment of passengers and goods. - Access issues border delays due to COVID-19 travel restrictions leading to delayed deliveries and allocation and amplified demand for essential commodities. - Market constraints due to acute and devastic shortage of essential commodities and Lack of production capacity leading escalation of commodity prices and delayed allocation of PPEs and Other essential commodities and stock outs of PPEs -

Recommended actions

a. For immediate implementation:
   - Introduce a common platform (tool) to enable timely transmission of information on stock level by key partners.
   - Advocate widely through multiple forums on adherence of rationale use of PPE.
   - Provide training on inventory management to key staff (lab, RRT) in Juba to boost their capacity in stocks management.

b. For mid to long-term implementation to improve the response to the ongoing COVID-19 outbreak:
   - Strengthen the common PPE platform by ensuring that key partners pool their stocks for allocation through PPE request platform
   - Design COVID-19 PPE core pipeline and compose sets of PPEs for various interventions
   - Decentralize stockpile of fast-moving commodities (PPE) by ensuring improved or expanded warehousing capacity.
   - Provide training on inventory management to key staff across the country to boost their capacity in stocks management.

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
a. For immediate implementation-Operation Support and Logistics					
1.	Sustain the established common platform (tool) by ensuring that key partners transmit information on stocks and inventory in a timely and consistent manner.	December 2020	LTWG	Advocacy across various platforms (pillars and clusters).	Tool developed and implemented widely.
				Inter-pillar coordination and collaboration	80% of key partners sharing information on stocks level.
				Mass awareness through multifarious forums.	Inventory dashboard improved and updated regularly to capture inventory and allocations.
2	Facilitate mass subscription into the common stocks pool	December 2020	LTWG Allocation committee	Mass awareness through multifarious forums.	80% of key partners sharing information on stocks level and pooling stocks into the

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
	and inventory information sharing through benchmarking and popularizing success stories.				common request system..
				Advocacy across various platforms (pillars and clusters).	No of partners invited to witness part of, or the whole process of PPE prioritization and allocation.
				Inter-pillar coordination and collaboration	No of visits at the common warehouse for benchmarking.
3	Advocate widely through multiple forums on adherence of rationale use of PPE SoP.	December 2020	All pillars and Clusters	Cluster coordination Inter-pillar coordination	Rational use of PPE SoP disseminated and used across all pillars and clusters.
					90% of requests aligning well with rational use of PPE.
4.	Provide training on inventory management to key staff (lab and	Dec 2020	LTWG	Financial	No of staff trained

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
	RRT Stock Managers, CMS staff and other selected persons) in Juba to boost their capacity in stocks management.			Coordination and collaboration	C19 tailored training designed and adopted.
				Inter-pillar coordination	Training materials disseminated to participants Training needs established
b. For mid to long term to improve response to next waves of COVID-19 outbreak: Operation Support and Logistics					
1	Strengthen common request system by ensuring that key partners pool their stocks for allocation through PPE request platform.	Feb 2021	LTWG, IPC, Coordination	Advocacy	No. partners allocating their stocks through the common pool.
				Coordination	Expanded committee for prioritization and allocation.
					No. of PPE requests transmitted through the PPE platform.
					80% key partners pool stocks into the common PPE platform for allocation.
2	Design COVID-19 PPE core pipeline and compose sets of PPEs for various	December 2021	All pillars and cluster	Advocacy	PPE needs are defined per intervention (malaria, Yellow Fever; measles, EPI, EVD, etc.) defined and

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
	interventions; malaria, Yellow Fever; measles, EPI, EVD etc.				documented.
				Coordination	PPE list embodied into implementation strategy of other common interventions.
				Financial	List of core pipeline developed and implemented.
3	Decentralize stockpile of fast moving commodities (PPE) by ensuring improved or expanded warehousing capacity.	December 2021	LTWG	Financial Coordination	No of States with sufficient storage capacity Cascade the common commodities request platform.
4	Where possible, provide online trainings on inventory management to key staff to boost their capacity in stocks management.	December 2021	LTWG	Financial	No of staff trained
				Inter-pillar coordination	Training materials disseminated to participants
				Coordination and	Training needs established

RECOMMENDED ACTIONS		DATE OF DESIRED ACHIEVEMENT	RESPONSIBLE AND FOCAL POINT	REQUIRED SUPPORT	INDICATORS
				collaboration	C19 tailored training designed and adopted.
					No of States covered.

3. THE WAY FORWARD

1. The COVID-19 Technical Working Groups (TWG) leads, and co-leads will continue working with the National Steering Committee (NSC) secretariat to finalize the best practices; challenges and the prioritized activities in the immediate and medium to long term to improve the response
2. The TWGs leads and co leads supported by the NSC secretariat will prepare and finalize the meeting report within two weeks of completing the IAR.
3. The finalized report will be presented to the National Steering Committee and eventually to the National Taskforce for COVID-19 for endorsement to facilitate the implementation of the recommended actions to improve the current national COVID-19 response.
4. The IAR findings will be used to inform discussions on COVID-19 transition and to update the current COVID-19 NRP to ensure immediate and medium to long term sustainability of national COVID-19 response actions.

4. ANNEXES

- *Annex 1: List of participants and Intra-Action Review (IAR) team*

REPUBLIC OF SOUTH SUDAN

DAY (1)

MINISTRY OF HEALTH

ATTENDENCE SHEET FOR PHEOC

Email:outbreak_ss_2007@yahoo.com

Call Centre Number:6666

MEETING: IAR	DATE: 26/10/2020
CHAIRED BY:	MINUTES TAKEN BY:

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			Call Centre Number:6666			
MEETING:			DATE:			
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13	John Rumunu	MOH	DG PHS			

Call Centre Number:6666

MEETING: IAR (Intra Action Review) | DATE: 26 OCT 2020

CHAIRED BY: DR. RICHARD LAKO | MINUTES TAKEN BY: ANGELO MATAK / WAMALA JOSEPH

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REPUBLIC OF SOUTH SUDAN

DAY (1)

MINISTRY OF HEALTH

ATTENDENCE SHEET FOR PHEOC

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Call Centre Number:6666

MEETING:			*DATE:*			
CHAIRED BY:			*MINUTES TAKEN BY:*			

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Day (2)

FORM 4

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Annex 2: Agenda of the review

Day 1

Date: 26/October/2020 Location: Regency hotel, Juba

TIME	SESSION	LEAD
08:30-09:00	Registration of participants	Admin
09:00-09.15	Introductions	Lead Facilitator
09:15-10:00	Introduction to the AAR process	Lead Facilitator
10:00-10:30	Presentation of the health response overview	MOH Representative
10:30-11:00	Coffee break	
11:30-12:30	**Session 1.1 -** What was in place before the response? *Group work*	Group Facilitators
12:30-13 :30	**Session 1.2 -** What was in place before the response? *Plenary*	Lead Facilitator
13:30-14:30	Lunch	
14:30-15:30	**Session 2.1&2.2** - What happened during the response? *Build a timeline - individual and group work*	Group Facilitators
15:30-16:30	**Session 2.3:** What happened during the response? *Build a timeline - plenary*	Lead Facilitator
16:30-16:45	Wrap-up Day 1	Lead Facilitator

Day: 2

Date: 27/October/2020 Location: Regency hotel, Juba

TIME	SESSION	RESPONSIBLE
09:00-10:30	**Session 3.1 -** What worked well? What worked less well? And why? *In working group: identification of best practices, challenges, impacts on responses and limiting and enabling factors*	Group Facilitators
10:30-11:00	Coffee break	
11:00-12:30	**Session 3.1 -** What worked well? What worked less well? And why?	Group Facilitators
12:30-13 :30	**Session 3.2**- What worked well? What worked less well? And why? *World café: sharing findings with groups*	Lead Facilitator
13:30-14:30	Lunch	
14:30-15:30	**Session 3.3:** Objective-based evaluation *Group work and Plenary*	Group Facilitators & Lead Facilitator
15:30-17:30	**Session 4.1:** What can we do to improve for next time? *In working groups identification of priority activities*	Group Facilitators
16:30 – 17 :00	**Session 4.2:** What can we do to improve for next time? *In working group: assess the level of impact and difficulty of the activities*	Lead facilitator
17:00 – 17 :15	Wrap-up Day 2	Lead Facilitator

Location: Regency hotel, Juba

TIME	SESSION	RESPONSABLE
09:00-10:00	**Session 4.3:** What can we do to improve for next time? *World café: sharing of activities between groups*	

10:00-10:30	**Session 5.1:** Way Forward *Prioritization of activities (plenary)*	Lead Facilitator
10:30-11:00	Coffee break	Facilitators
11:00-11:30	**Session 5.2:** Way Forward Next steps and closing remarks (group work)	Group facilitators
11:30-12:30	**Session 5.2:** Way Forward Next steps and closing remarks (plenary)	MoH Representative
12:30-13:10	**Individual workshop evaluation and closing of the AAR**	
13:00-14:00	Lunch	Administration