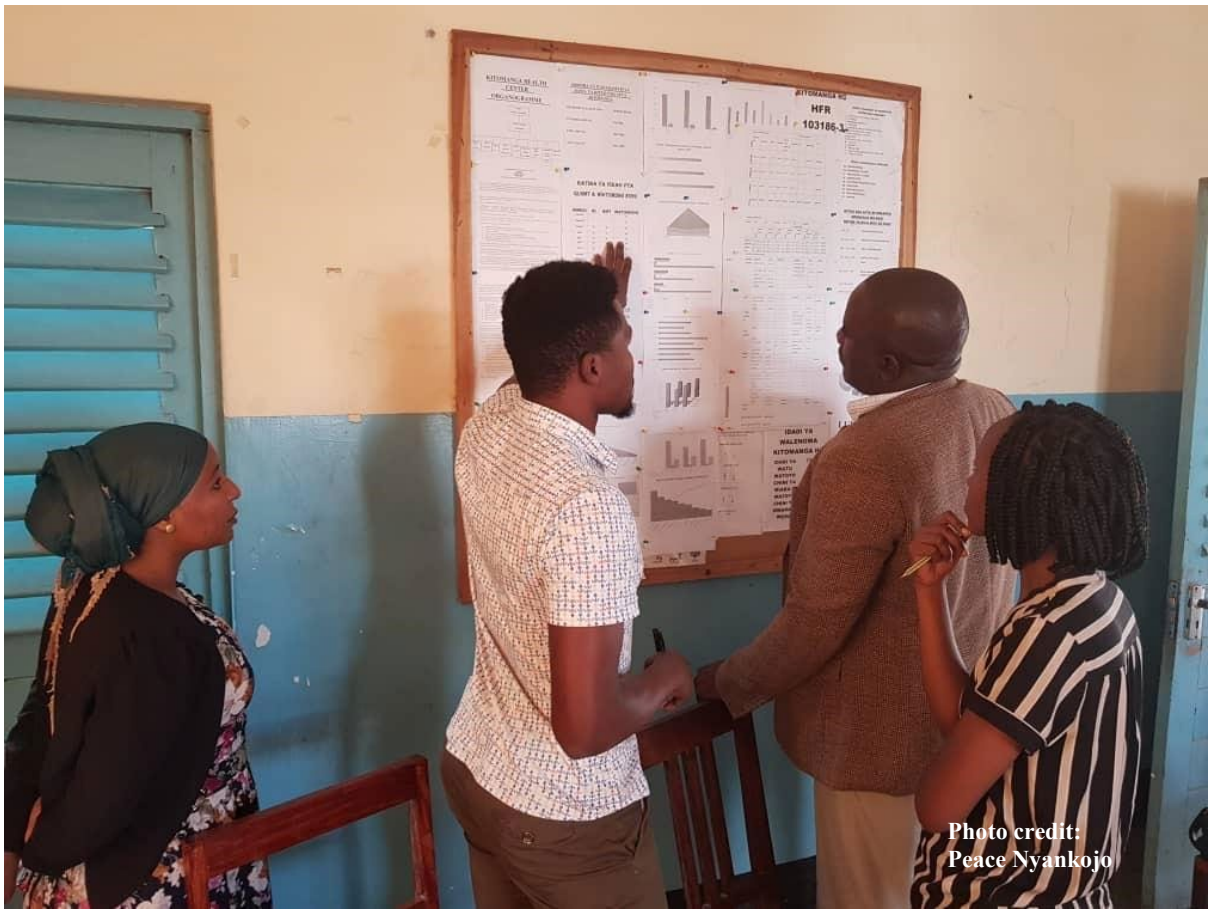

GLOBAL HEALTH SUPPLY CHAIN
PROGRAM - TECHNICAL ASSISTANCE TANZANIA

Quarterly Report: January – March 2021 (Y5, Q2)

US Agency for International Development

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ACRONYMS

ACT	Artemisinin-based Combination Therapy
ART	Antiretroviral Therapy
ARV	Antiretroviral
CHMT	Council Health Management Team
CIP	Costed Implementation Plan
CMS	Central Medical Store
CMS	Central Medical Store (Zanzibar)
COP	Country Operational Plan
CP	Chief Pharmacist
CPO	Chief Pharmacist's Office
DHIS2	District Health Information System
DMO	District Medical Officer
DPP	Directorate of Policy and Planning
DQA	Data Quality Assessment
DRF	Drug Revolving Fund
DSS	Diagnostics Services Section
EID	Early Infant Diagnosis
eLMIS	Electronic Logistics Management Information System
EM	Essential Medicines
ESP	Emergency Supply Chain
FEFO	First Expired First Out
FP	Family Planning
FY	Fiscal Year
GHSC-TA-TZ	Global Health Supply Chain Technical Assistance - Tanzania
GoT	Government of Tanzania
GoTHOMIS	Government of Tanzania Hospital Management Information System
GoZ	Government of Zanzibar
HCWs	Health Care Workers
HF	Health Facility
HIM	Health information mediator
HIS	Health Information System
HIV	Human Immunodeficiency Virus
HSCR	Holistic Supply Chain Review
HVL	HIV Viral Load
ICT	Information, Communication and Technology
ILS	Integrated Logistics System
IMPACT	Information Mobilized for Performance Analysis and Continuous Transformation
IP	Implementing Partner
KPI	Key performance indicator
LMU	Logistics Management Unit

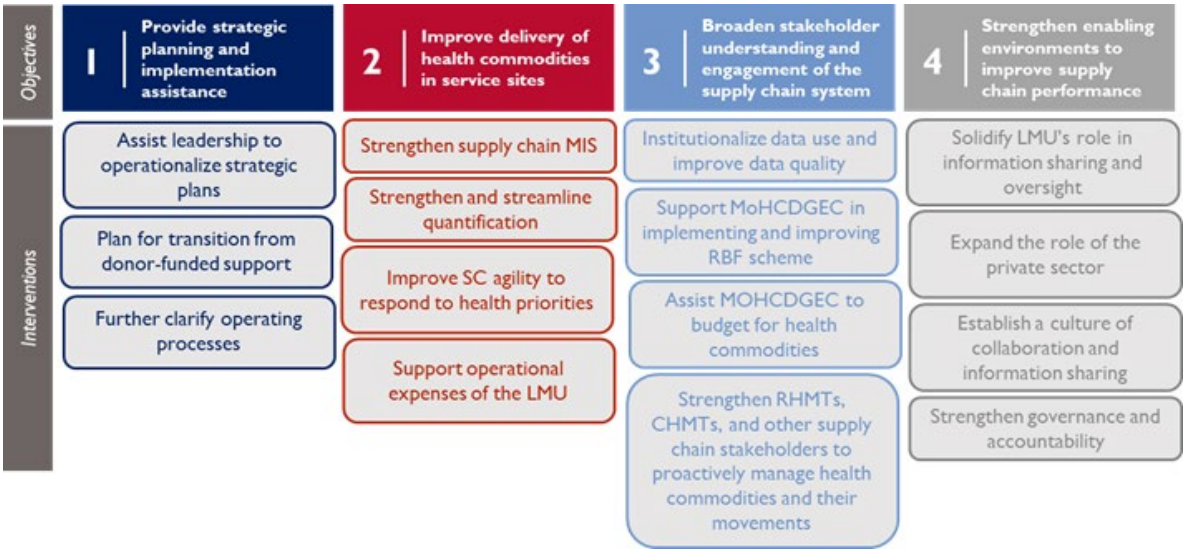
MoF	Ministry of Finance
MoH	Ministry of Health (Zanzibar)
MOHCDGEC	Ministry of Health, Community Development, Gender, Elderly and Children
MOS	Months of Stock
MRDT	Malaria Rapid Test Kits
MSD	Medical Stores Department
MTC	Medicine and Therapeutic Committee
NACP	National AIDS Control Program
NMCP	National Malaria Control Program
NPAP	National Pharmaceutical Action Plan
NTLP	National Tuberculosis and Leprosy Program
PEPFAR	President's Emergency Plan for AIDS Relief
PLHIV	People living with HIV
PO-RALG	President's Office of Regional Administration and Local Governments
PrEP	Pre-exposure prophylaxis
PS	Permanent Secretary
PSM	Procurement and Supply Management
PSU	Pharmaceutical Services Unit
QA	Quality Assessment
R&R	Report and Requisition
RHMT	Regional Health Management Team
RCHS	Reproductive and Child Health Services
RSSH	Resilient and Sustainable Systems for Health
TA	Technical Assistance
THPS	Tanzania Health Promotion Support
TOR	Terms of Reference
TOT	Training of Trainers
TWG	Technical Working Group
USAID	United States Agency for International Development
WFP	World Food Program
WFP	World Food Program
WHO	World Health Organization
ZNZ	Zanzibar
ZSCAP	Zanzibar Supply Chain
ZSCCAP	Zanzibar Supply Chain Costed Action Plan

1. INTRODUCTION

The Global Health Supply Chain - Technical Assistance - Tanzania (GHSC-TA-TZ) project provides specialized technical assistance (TA) to Tanzania to strengthen country supply chain systems across health elements, e.g., malaria, family planning (FP), HIV/AIDS, tuberculosis (TB) and reproductive, maternal, newborn and child health (RMNCH). In coordination with in-country and development partners, GHSC-TA-TZ assists the Government of Tanzania (GoT) health programs and stakeholders by providing technical assistance across four objectives. The project goal is to support the development of agile, robust, and sustainable health supply chains that will contribute towards improving medicines availability and ultimately the health status of Tanzanians.

Activities undertaken by GHSC TA-TZ are organized across objectives and interventions, as shown in Figure 1.

Figure 1. Objectives and Interventions



The project implements its work with a range of stakeholders in mainland and Zanzibar, embodying a collaborative approach, and integrates capacity building throughout its technical assistance activities. Key stakeholders (in addition to USAID and CDC) include: Ministry of Health, Community Development, Gender, Elderly and Children (MOHCDGEC) – specifically the Pharmaceutical Services Unit (PSU), Diagnostics Service Section (DSS), Information, Communication and Technology (ICT) directorate, and vertical programs – including National AIDS Control Program (NACP), National Malaria Control Program (NMCP), Reproductive and Child Health Services (RCHS) Program, and National Tuberculosis and Leprosy Program (NTLP), Medical Stores Department (MSD) - central and 10 zones; President's Office of Regional Administration and Local Governments (PO-RALG), Zanzibar Ministry of Health, Social Welfare, Elderly, Gender and Children (MOHSWEGC), Zanzibar Central Medical Stores (CMS), Zanzibar Vertical Programs, and other implementing partners.

KEY ACCOMPLISHMENTS DURING THE YEAR

Figure 2 provides a summary of all project key accomplishments under each objective during this reporting period.

Figure 2. Key Accomplishments this Quarter

Provide Strategic Planning and Implementation Assistance	The project conducted a Holistic Supply Chain Review for MOH in Zanzibar including finalizing the Terms of Reference (TOR) for all eight technical modules and gaining endorsement of the finalized TORs by the Taskforce and Oversight committee. The TORs were shared with consultants and other stakeholders to help guide the design of data collection tools. GHSC-TA-TZ also led an update of the Guidelines for medicines and medical supplies donations. This activity featured desk reviews and interviews of key stakeholders to identify gaps in the current guidelines, incorporate stakeholder input, validate and refine the content of the draft guidelines which will shape health commodity donations for Mainland Tanzania.
Improve delivery of Commodities at Service Sites	The project provided technical assistance during COP21 planning, the HIV bimonthly analysis workshop, and the HIV quantification exercise. The project also provided technical assistance in the HIV quantification that began towards the end of the second quarter.
	The project supported the malaria quantification review which covered all malaria commodities managed by NMCP. GHSC-TA-TZ also provided technical assistance in the development of a forecasting tool that allowed for an online collaborative approach during quantification.
	GHSC-TA-TZ provided technical assistance to RCHS in the reviewing of the supply plan for family planning commodities, maternal health commodities, and commodities for child health (AmoxDT, Zinc/ORS Co-pack, Copper T, Implanon, Female condom, Jadelle, ECP, Microgynon, Magnesium Sulphate injection, Male condom, Depo-Provera, Misoprostol, Oxytocin, and Microval/Microlut). The project supported NTLP in collaboration with NACP to conduct data analysis and a demand review of Isoniazid used for TB prevention in PLHIV.
	The project supported forecasting of essential health commodities through a combination of regional/council online training and reviews that began in 2020 and finalized in January 2021 during the review of the national demand forecast by the national quantification team (NQT).
	The project successfully migrated the eLMIS server from cloud hosting at Amazon to the MOHCDGEC National Internet Data Centre (NIDC) in mid - February 2021.
Strengthening Enabling Environment to Improve Supply Chain Performance	GHSC-TA-TZ provided technical assistance to MOHCDGEC following a request from the ministry to support on health commodity tracking field exercise to verify various data and information related to commodities availability, finances and performance of facilities in managing health commodities; and to establish an accurate situation to better inform 2021/2022 planning and budgeting for health commodities. The project involvement helped to understand key alignment areas the project will focus on based on the scope to address some of the identified issues from the tracking activity.

2. WORK STREAM ACCOMPLISHMENTS

OBJECTIVE I: PROVIDE STRATEGIC PLANNING AND IMPLEMENTATION ASSISTANCE

INTERVENTION 1.1 ASSIST LEADERSHIP TO OPERATIONALIZE STRATEGIC PLANS

GHSC-TA-TZ helps align national supply chain objectives, goals, and strategic documents, and holds stakeholders accountable for contributing to strategic plans. This quarter, the project kicked off an activity to conduct the holistic supply chain review for the Zanzibar health supply chain system.

During the quarter, the project facilitated development and endorsement of the TORs by the Oversight for implementation of the HSCR in eight technical modules. Also got TOR for consultants that will be deployed to support the review. Also solicited inputs to harmonize the methodology and tools for HSCR across the eight modules. These inputs were summarized by the taskforce to guide the module teams while compiling the data collection tools. The list of accomplishment below were considered:

- Finalized the TORs for all the eight technical modules
- The Taskforce and Oversight Committee endorsed the finalized TORs
- The TORs were duly shared with the consultants.
- Finally, inputs were solicited to be used by consultants to design data collection tools.

INTERVENTION 1.2 PLAN FOR TRANSITION FROM DONOR-FUNDED SUPPORT

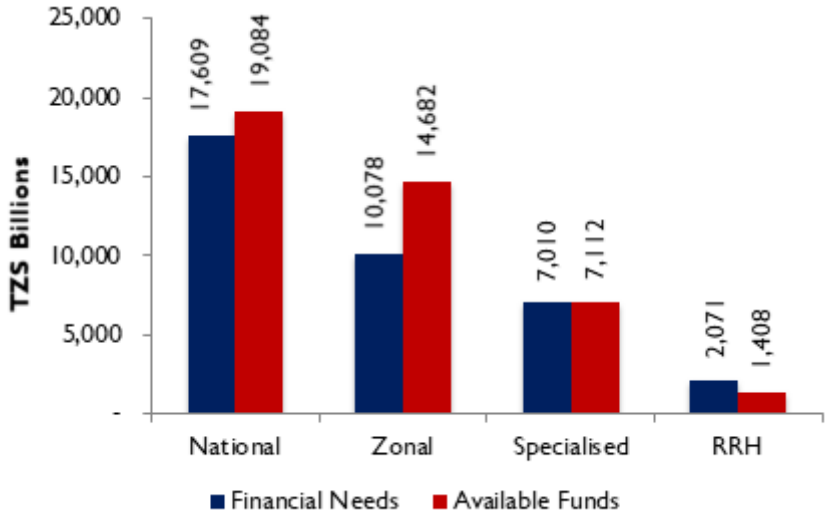
Rollout of the Health Commodities Revolving Fund guidelines

Prior to launching the health commodities Revolving Fund guidelines (HCRF), MOHCDGEC requested a Swahili version. In this quarter, the project finalized translation and refinement of the translated HCRF Swahili version. Few copies were submitted to the Chief Pharmacist's office for further review.

Total Health Commodities Financial Needs Assessment

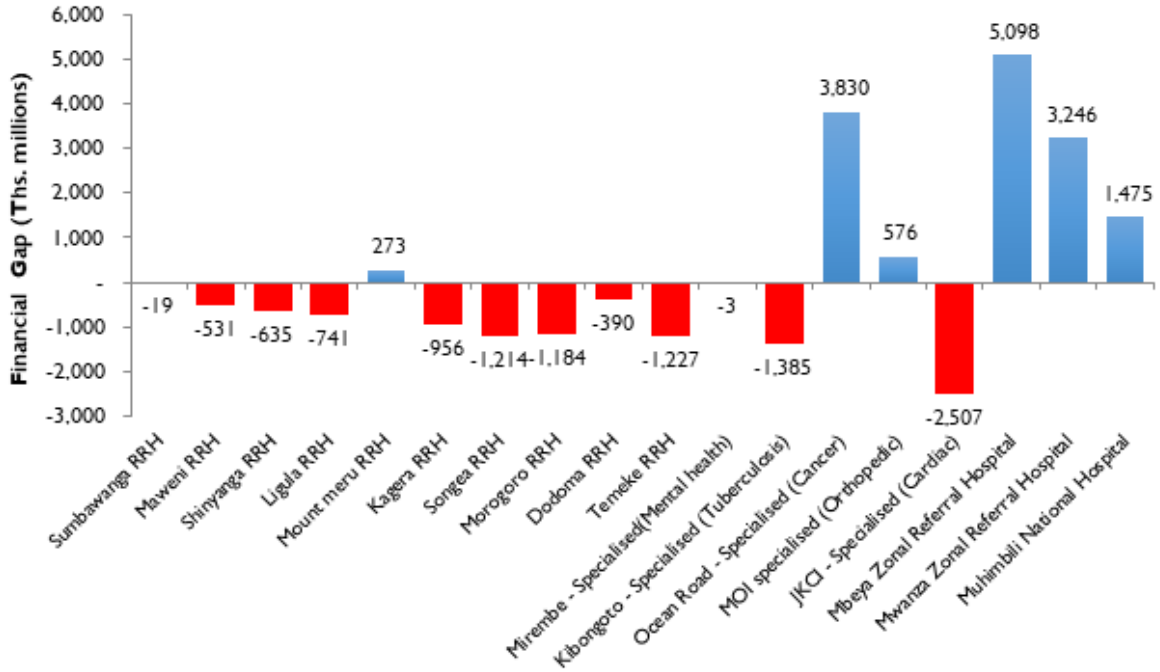
The project continued to support MOHCDGEC on the implementation of the health commodities financial needs assessment at regional referral, zonal, specialized and national. In this quarter, the project successfully finalized data analysis. Preliminary findings were presented in a meeting convened and facilitated by the Chief Pharmacist (CP) from MOHCDGEC. The preliminary findings showed that average annual (2018-2019) health commodities financial needs across all facility types assessed was TZS 17.6 Billion, 10.1 Billion, TZS 7.0 Billion and TZS 2.1 Billion for national, zonal referral, specialized and regional referral hospitals, respectively. Furthermore, available funds were assessed on various sources namely; national health insurance fund (NHIF), receipt in kind, user fees and other sources which include private insurance and donated funds. The findings showed that, on average, available funds across all facilities assessed were TZS 19 Billion, TZS 14.6 Billion, TZS 7.1 Billion, and TZS 1.4 Billion for national, zonal referral, specialized and regional referral hospitals, respectively. Figure 3 shows annual average health commodities financial needs against available funds across all facility types.

Figure 3. Health Commodity Financial Needs



From the analysis conducted, a financial gap for health commodities was considered negative whenever the average total financial needs for health commodities exceeded the average available funds for health commodities. In other words, a financial gap was present for facilities not able to meet the average total health commodity financial needs through all sources of health commodities financing such as receipt in kind, user fees, insurance and other sources distributed and/or procured within MSD or elsewhere from the supplementary supply chain channels. Figure 4 shows the financial gap at each facility assessed.

Figure 4. Financial Gaps by Facility



Key recommendations highlighted in the draft report are:

- The GoT should roll out developed health commodities revolving fund (HCRF) guidelines to ensure sustainable financing of health commodities.

- The GoT should consider enacting and implementing mandatory social insurance coupled with evidence-based benefits packages in order to reap the benefits of fund pooling and risk sharing as evidenced by the facts that complementary funds are the main sources of health commodities financing.
- The receipt in kind allocation formula moves towards output-based financing for health commodities from the current input-based financing, this will accelerate efficiency and effectiveness of health commodity funding.
- MSD to capitalize on additional market share, or MOHCDGEC to draw a plan on how to serve tertiary hospitals given the current practice of utilized commodities that are not within the MSD catalogue.

eLMIS TRANSITION

In collaboration with MOHCDGEC, the project successfully migrated the eLMIS server from cloud hosting at Amazon to the National Internet Data Centre (NIDC) in mid - February 2021. This is a big milestone for both the project and MOHCDGEC in implementing the eLMIS transition activities planned for phase one. Following this success; next is the implementation of phase two activities, which focuses on governance and supporting the ministry to plan and solicit funding to support eLMIS beyond the project.

INTERVENTION 1.3 FURTHER CLARIFY OPERATING PROCEDURES

Redesigned logistics system trainings

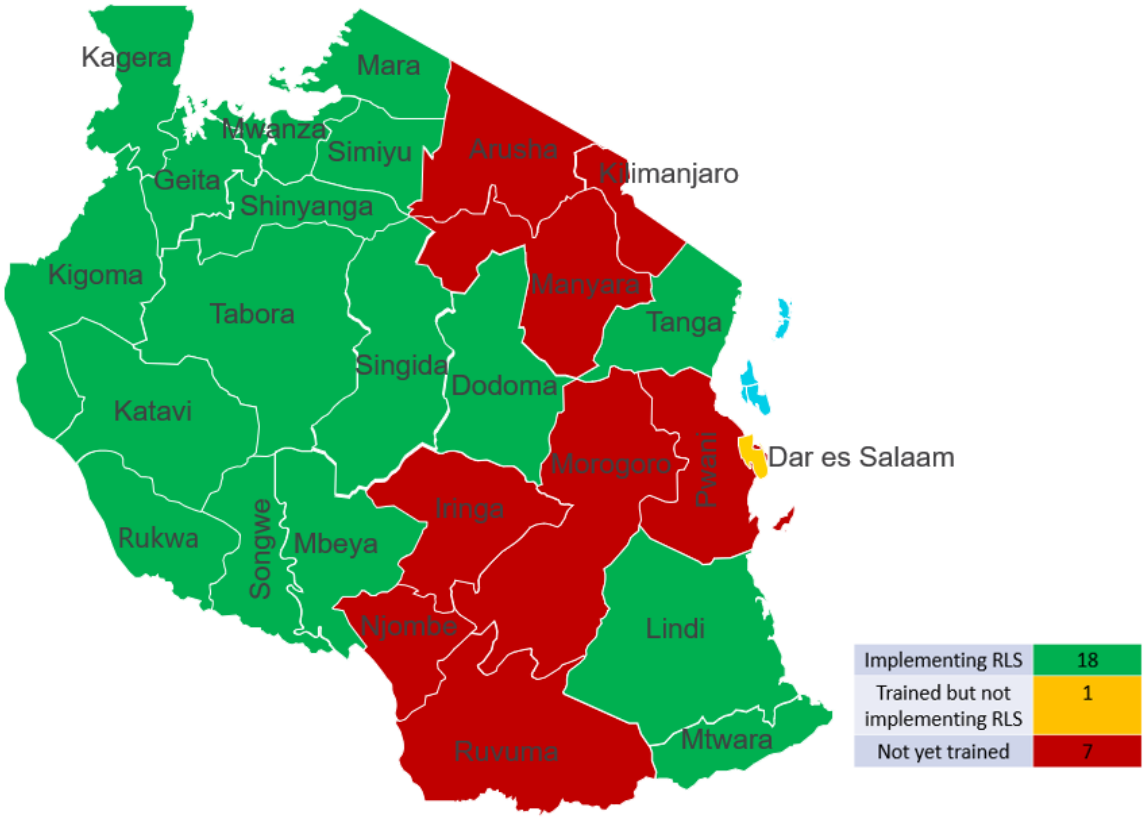
One of the prioritized recommendations from the HSCR was to change the frequency of ordering and resupply for the in-country supply chains and provide for improved visibility of facility data to facilitate timely Some districts in Manyara (Simanjiro-served by Tanga zone and Kiteto-served by Dodoma zone), Kilimanjaro (Same and Mwanga-served by Tanga zone) and Ruvuma (Tunduru- served by Mtwara zone) are implementing the redesign system

decision making. The project provided technical assistance on design decisions, plan of implementation, development of the SOP manual and a training package. Additionally the project supported the implementation monitoring and provided technical advice on challenges identified in the course of the implementation.

In this quarter, around 1,230 health facilities in the regions of Mbeya, Songwe, Rukwa, Dodoma and Singida began implementing redesign logistics systems (RLS) in the month of March, making a total of 18 regions implementing RLS. The project also provided support to set up over 3,014 eLMIS users in redesign programs from regions that started the implementation in March 2021. The MOHCDGEC together with other supply chain stakeholders have planned a rollout training for four more regions, Ruvuma, Morogoro, Njombe and Iringa between April - May 2021.

The current status of RLS is shown in Figure 5.

Figure 5. Redesigned Logistics System Status (Bimonthly System)



The project also conducted and facilitated the system redesign technical team meeting that discussed the progress of implementation of the redesigned system and related challenges through which key recommendations/action items were made and they include:

1. Implementation of the system, including roll out trainings should continue while efforts are invested to support MSD financially to meet its obligations
2. Writing of a health supply chain position paper to highlight the existing challenges including availability and distribution of health commodities and the cost implications for attaining the desired standards. The paper is to be submitted to the CMO, PS and PST for their decision/action. Members of the write up will include PSU, PO-RALG, MSD and IPs.
3. PSU to write a letter to all stakeholders to enforce adherence to health logistics systems SOP manual in the supply and acquisition of all commodities including self-test for HIV and PREP medicines
4. Introduction of new products should go hand in hand with proper communication to all key stakeholders on how to request, distribute and manage as per existing SOPs.
5. System redesigned oversight committee to resume its meetings.

With the Redesigned Logistics System technical team, the project conducted monitoring visits to health facilities implementing the redesigned logistics system in Tabora zone. MSD Tabora zone and a total of 99 facilities (Mix of Hospitals,Health centers and Dispensaries) were visited in Kigoma region (Ujiji Municipal, Kasulu DC and Kibondo DC), Tabora region (Urambo DC, Nzega DC, Igunga DC

and Tabora MC) and Katavi region (Mpanda Municipal, Nsimbo DC and Mlele DC). The visits were conducted to assess the status of implementation of the redesigned system at the facility level and the engagement of R/CHMT in supporting the system. Some of the key challenges noted in these visits include:

- Facilities not receiving commodities as scheduled
- Non-use of some eLMIS tools such as monthly forms for TB
- Incomplete or inaccurate filling out of R&R forms in the eLMIS system
- Limited data quality (reported vs documented)

Key Performance Indicators

Stock out rate and Stocked according to plan: The overall stockout rate in relation to all six monitored commodity groups irrespective of the reporting system was 28% (quarterly system 17%, Bi-monthly system 33%). Essential medicine group has continued to have the highest stockout rate at 40% across both systems while the TB commodities group has continued to have the lowest stockout rate at 4% across both systems.

Regarding stocked according to plan, the performance of the indicator across all six monitored commodity groups regardless of the ordering system was 15%. Essential medicines had the lowest performance for this indicator(14%).

- Indicator 1.3.1 Stock out rate

Figure 6. Overall Stockout Rates (Jan – Mar 2021)

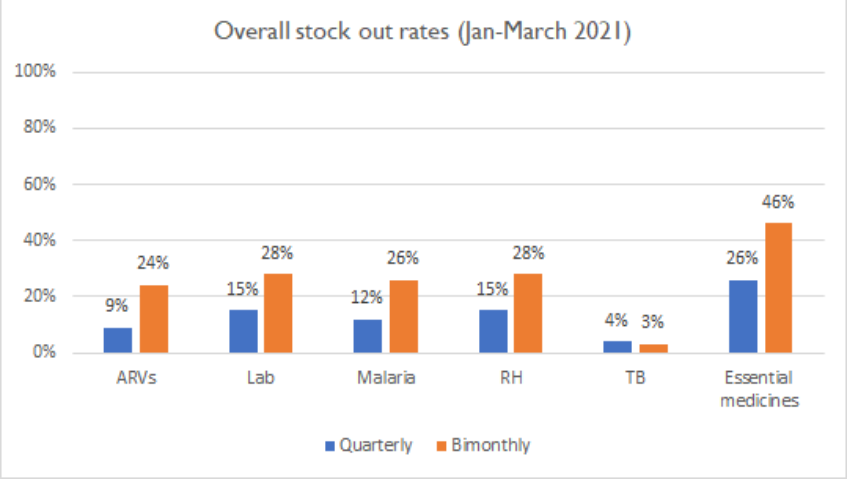
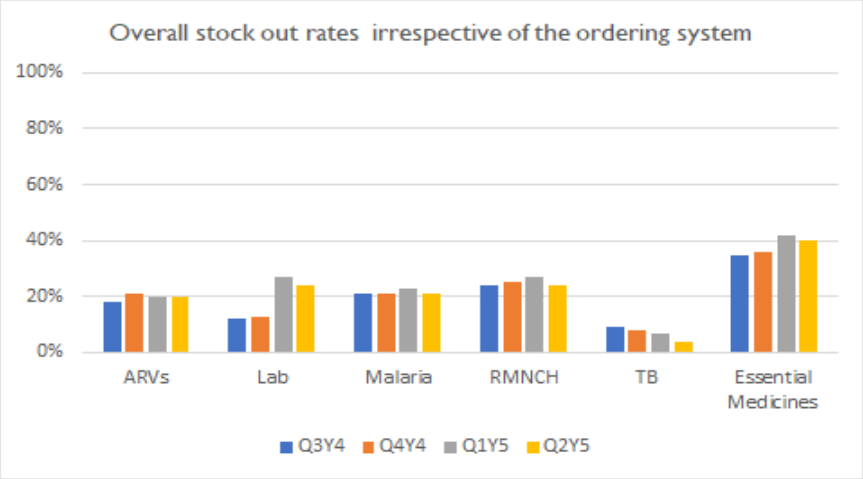


Figure 7. Overall Stockout Rate By Commodity Group (by Quarter)



- 1.3.2 Stocked according to plan:

Figure 8. Overall Stocked According to Plan (Jan - Mar 2021)

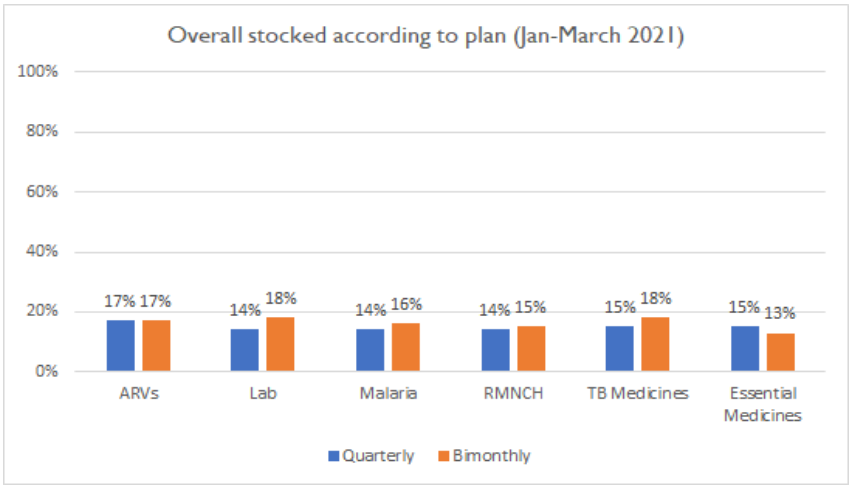
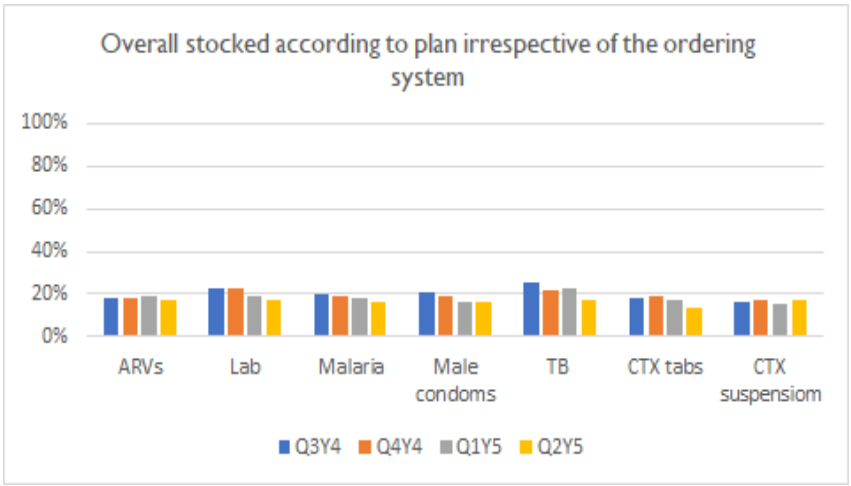


Figure 9. Overall Stocked According To Plan (by Quarter)



OBJECTIVE 2: IMPROVE DELIVERY OF HEALTH COMMODITIES IN SERVICE SITES

INTERVENTION 2.1 STRENGTHENING SUPPLY CHAIN MANAGEMENT INFORMATION SYSTEM (MIS)

ZANZIBAR DIGITAL HEALTH INVESTMENT ROADMAP

The Zanzibar Ministry of Health, Social Welfare, Gender, Elderly and Children (MOHSWGEC) has developed their Digital Health Strategy (ZDHS) 2020/21 - 2024/25 which outlines how Zanzibar will leverage digital health technologies to meet health sector goals and objectives. To reach the goals and achieve the objectives, the MOHSWGEC developed the digital health investment roadmap detailing required activities and their respective outputs.

During this quarter the project in collaboration with MOHSWGEC agreed on the project's areas of support towards the implementation of the Zanzibar Digital Health Investment roadmap. Areas of support includes:

- Together with other stakeholders support institutionalization of digital health governance and leadership. The project's area of support are:
    - Investment #1: Support establish digital health department (*Support capacity building*)
    - Investment #2: Support the National Digital Health Steering Committee (NDHSC)
    - Investment #3: Support the Digital Health Technical Working Groups (DHTWG)
- Support and institutionalize accountability on health supply chain data and decision making by supporting investment area #12 to implement a health product registry.
- The project will also continue to provide technical assistance to MOHCDGEC on enhancement of systems for management of the health supply chain like the eLMIS and mSupply. This includes working on improving the culture of data use through standardization and institutionalization of IMPACT teams and the DQA protocol

INTERVENTION 2.2 STRENGTHEN AND STREAMLINE QUANTIFICATION

The project GHSC-TA-TZ has continued to provide technical assistance to GoT in the area of demand planning for different health commodities including: HIV commodities, RCHS, Malaria, TB and essential health commodities. Below are more details.

1. HIV Commodities

The project provided technical assistance during COP21 planning, the HIV bimonthly analysis workshop and the HIV quantification exercise.

The COP21 planning began in January 2021. This is an annual process between PEPFAR, GoT and other stakeholders where status of implementation of the previous period (COP20) is reviewed, and inputs are provided on how to implement interventions prioritized for next year (COP21). GHSC-TA-TZ provided technical assistance through the development of the COP21 supply planning tool in

collaboration with NACP. The supply planning tool indicates stocks available at the period of COP21 planning, the forecasted consumptions and the supplies of HIV commodities required during the COP21 period. The inputs provided into the COP21 supply planning tool are a result of regular analyses, quantifications and reviews that GHSC-TA-TZ has been conducting with the NACP at the MOHCDGEC.

Secondly, the project provided technical assistance through the bimonthly analysis workshop that was conducted to review the stocks, consumptions and supplies of HIV commodities. This is an important activity resulting from a decision made in 2020 between NACP and PEPFAR, that NACP should be analyzing stock statuses of HIV commodities collaboratively with GSHC-TA-TZ and other selected stakeholders. The aim to align on approaches used during analysis, data used and outcomes of the analyses. The bimonthly analysis in February 2021 also resulted in a series of action items for the NACP, MSD, PO-RALG, IPs and suppliers that are expected to be done to align and ensure availability of HIV commodities.

Lastly, the project also provided technical assistance in the HIV quantification that began towards the second quarter. Further updates will be reported in the third quarter. However, some of the major expectations of this quantification are the inclusion of new products: Dolutegravir 10mg and TLE 400mg, and the review of split allocation of HVL platforms considering TX_Curr and capacity to test. This exercise is also expected to be more collaborative where stakeholders will be part of the process especially during the preparation stage of the quantification where the key foundations for forecasting and supply planning are laid out.

2. Reproductive and Child Health Commodities

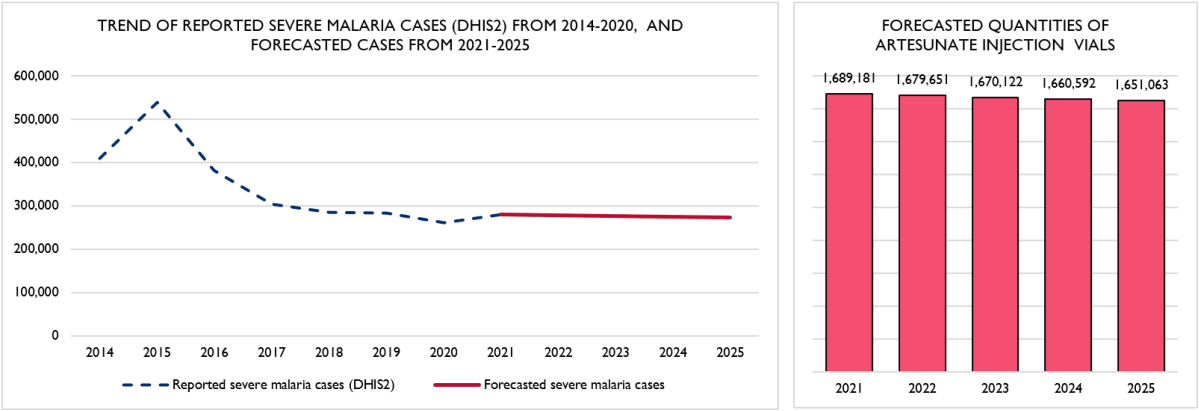
The project provided technical assistance to RCHS in the reviewing the supply plan for family planning commodities, maternal health commodities, and commodities for child health (AmoxDT, Zinc/ORS Co-pack, Copper T, Implanon, Female condom, Jadelle, ECP, Microgynon, Magnesium Sulphate injection, Male condom, Depo-Provera, Misoprostol, Oxytocin, and Microval/Microlut). The review included analysis of stocks available at MSD, including determining risks in availability in projected stocks towards next year. The health facility reported consumptions were also reviewed and analyzed with the forecasted consumptions to identify trends. This stock and consumption review, and the supply updates, informed the review of the supply plan for all RCHS commodities to ensure availability.

3. Malaria commodities

The project supported NMCP on malaria quantification review, the review covered all malaria commodities which are managed by NMCP such as Artemether Lumefantrine tabs (1 x 6), Artemether Lumefantrine tablets (2 x 6), Artemether Lumefantrine tablets (3 x 6), Artemether Lumefantrine tablets (4 x 6), Artesunate injection, Malaria Rapid Diagnostic Test (mRDT), and Sulphadoxine + Pyrimethamine tabs (SP), Quinine injection Long Lasting Insecticide Nets (LLIN), Malaria microscopy consumables and Molecular testing consumables. These commodities are used for uncomplicated malaria, complicated malaria, diagnostics, vector control, and intermittent preventive therapy (pregnant, infants, school children). The scope of this review was for five (5) years (January 2021 to December 2025). During the quantification, it was observed that there is an increase in trend of ANC attendee, this informed the review team to project an increase in the number of pregnant women requiring IPTp for the period 2021 to 2025, also the forecasted average monthly consumption for

ACTs was determined by factoring the seasonality indices for each ACT category so as to properly inform the supply plan. In addition to that, the number of severe malaria cases was also observed to decrease. Multiple forecasting scenarios were tested before the final was chosen. One of the main considerations taken in account was that high severe malaria cases were noted in 2015-2017 (as reported in DHIS2. However, consequent years show the national malaria control program (NMCP) managed to control the high number of malaria cases, and a decline is noted from 2018 onwards. The final scenario was also chosen considering the NMCP expects to maintain the current control of severe malaria cases going forward. The constant projection made for severe malaria cases, was also reflected in the forecasted quantities of Artesunate injection which is also fairly constant as shown in Figure 10.

Figure 10. Severe Malaria Case Trends



GHSC-TA-TZ also provided technical assistance in the development of a forecasting tool that allowed for an online collaborative approach during the quantification considering social distancing policy to COVID-19. Our TA ensured that forecasting techniques factored in NMCP's policy requirements, and to use forecasting algorithms during projections of expected demand. Capacity building was provided throughout the quantification exercise covering key concepts in forecasting and supply planning of malaria commodities. This activity was conducted timely and met funding and fiscal requirements for both government budgeting that required a 5-year forecast, and the MOP tables that needed the quantification data.

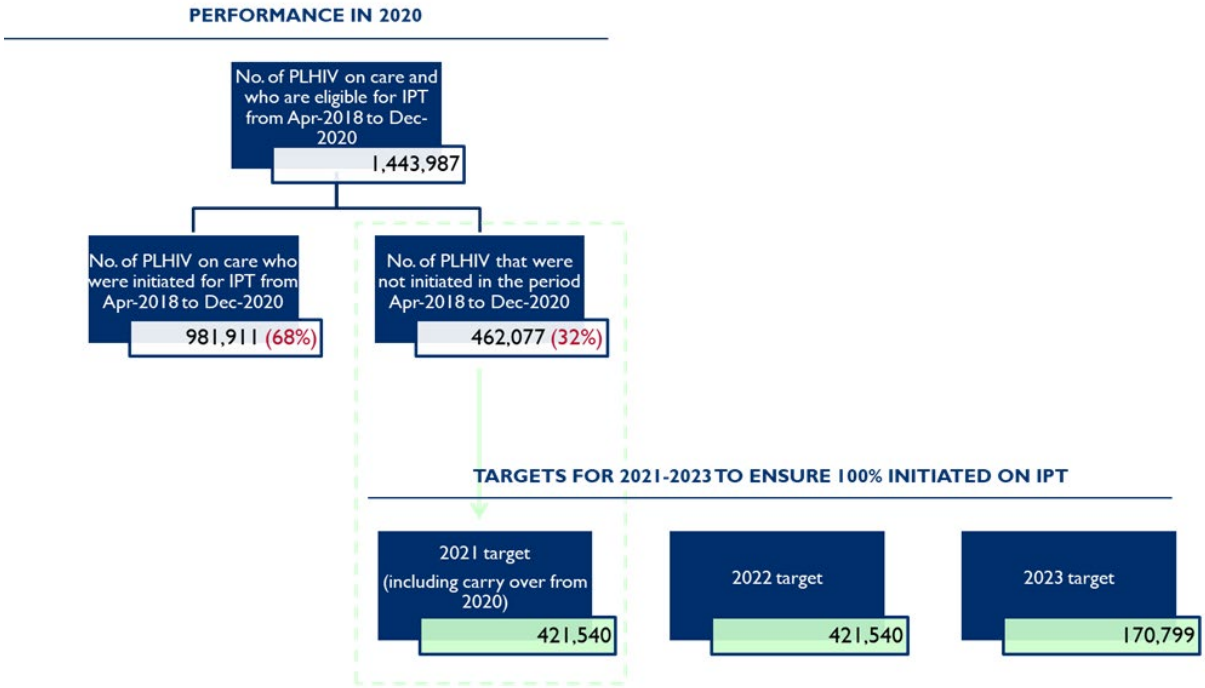
During the second quarter, the project also provided technical assistance to the ministry of health in reviewing demand and supply of malaria commodities. This is part of a series of regular support that the project provides through collaboration with NMCP to monitor the pipeline of malaria commodities and adjust in supply plans. The supply planning process also included monitoring supply risks in the projected stocks, and appropriate action plans were used to mitigate or address these risks.

4. TB commodities

The project supported NTLP in collaboration with NACP to conduct data analysis and demand review of Isoniazid used for TB prevention in PLHIV. The analysis covered both Isoniazid 300mg for adults and Isoniazid 100mg for children, whereby stock assessment risk of Isoniazid were discussed as well as performance and targets for initiating PLHIV on care on Isoniazid Preventive Therapy (IPT). The forecasting assumptions were reviewed to consider 98% of all HIV clients on care are eligible for IPT, 4% eligible PLHIV on care are children (under 15years of age) and 70% of under-fives households in

contact with bacteriologically confirmed TB cases are eligible for IPT. In addition, the project provided technical assistance reviewing the status of the IPT intervention as of December 2020, whereby 68% of PLHIV were initiated on IPT, shown in Figure 11. The national plan is to initiate 100%, whereby the remaining 32% will be initiated in 2021. The targets for 2021-2024 were also reviewed taking into account historical trends and capacity from previous years to initiate PLHIV on IPT. The updated targets were used to update the forecast consumptions which were used to update the supply plans for INH 300mg and INH 100mg. The project will continue to provide technical assistance to the MOHCDGEC to review demand for INH used for IPT.

Figure 11. PLHIV and IPT Performance Trends by Year



5. Essential health commodities (EHC)

In collaboration with the MOHCDGEC, the project supported the forecasting and supply planning of essential health commodities for all public health facilities in the country, with the following accomplishments:

- The project supported forecasting of essential health commodities through a combination of regional/council online training and reviews that began in 2020 and finalized in January 2021 during the review of the national demand forecast at the national quantification team (NQT). The final national demand forecast of all health commodities for public health facilities were submitted by the NQT to the PS MOHCDGEC, which were then submitted to the Ministry of Finance to inform funding requirements for GoT FY 2021/22. The final national demand forecast was also submitted to MSD, where GHSC-TA-TZ provided technical assistance on the second stage of quantification, supply planning.
- Through the technical assistance provided by GHSC-TA-TZ, the MOHCDGEC and MSD were able to conduct a more rigorous review of forecasts submitted by health facilities for essential health commodities.

- The supply planning this year was unique in that it was the first of its kind to include insights from zonal MSD warehouses, where more details were provided on essential health commodities that are fast moving and slow moving. These insights were of value as they were used to review the categories of essential health commodities at MSD, including the ordering strategy that MSD and health facilities will use.
- The project also supported this supply planning of essential health medicines, through the identification of priority items, review of MSD product catalogue, and developed the final supply plan for pharmaceuticals, medical supplies and diagnostic supplies. The final supply plan aggregated requirements for both mainland and Zanzibar.

Due to the cumbersome tool that health facilities have to use to quantify essential health commodities, GHSC-TA-TZ will be working with the MOHCDGEC to develop an automated bottom-up quantification tool. Since we aim at improving the supply chain of health commodities in the country, automating the quantification tool on time will make the upcoming quantification exercise to be simple and user friendly hence health care workers at facility level can forecast the appropriate quantities of the required health commodities.

Key Performance Indicators

Indicator 2.1.1: Percentage of eLMIS issues reported and resolved within 24 hours: **89.2%**

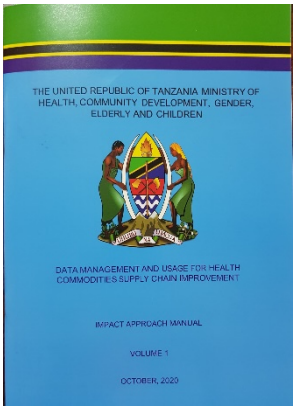
Indicator 2.1.2: Percentage of facilities submitting timely and complete eLMIS reports: **89%**

OBJECTIVE 3: BROADEN STAKEHOLDER UNDERSTANDING AND ENGAGEMENT OF THE SUPPLY CHAIN SYSTEM

INTERVENTION 3.1 INSTITUTIONALISE DATA USE

The GHSC-TA-TZ project provided technical support and in collaboration with GoT and Implementing Partners (IP), facilitated the development of IMPACT Approach manual which was approved by the MOHCDGEC in February 2021. The manual, shown in Figure 12, will act as a guide to standardise the implementation of IMPACT approach across all levels. Going forward, GHSC-TA-TZ will work to continue with IMPACT teams to stress the importance of regular IMPACT team meetings and following up on action plans developed during previous meetings.

Figure 12. IMPACT Approach Manual



Routine monitoring of LLINs at MSD zones and health facilities

The current availability of LLINs has continued to be erratic during this quarter. As of January 31 2021, the national stock status of LLINs was 0.9 MOS with 60% of MSD zones severely affected namely Dodoma, Kagera, Mbeya, Dar, Mtwara, Iringa and Kilimanjaro zones. The project continued to work with NMCP in monitoring the availability of LLINs where at the end of February 2021, 1.5 MOS of LLINs were still at the vendor's premises (A to Z factory) and hence undelivered to MSD. Upon following up, the project was informed that MSD did not have sufficient space to permit receipt and that MSD had 1.8 MOS of LLINs. Moreover, a shipment of 1.2 MOS of LLINs from Global Fund is

expected in May 2021. During this quarter, the overall stock out rate of LLINs at HF level irrespective of the ordering system was 11%.

MSD has seven MSD community Outlets (MCOs) located strategically at Muhimbili National Hospital in Dar Es Salaam, Sekou-Toure Hospital in Mwanza, adjacent to Mbeya Regional Referral Hospital, Mount Meru Hospital in Arusha, Chato District Hospital in Geita, Ruangwa District Hospital in Lindi and Mpanda District Hospital in Katavi. By mid-March 2021, all these MCOs were completely stocked out of LLINs.

INTERVENTION 3.3 ASSIST MOHCDGEC TO BUDGET FOR HEALTH COMMODITIES

The project continued to support MOHCDGEC implementation of updating the formula for allocating central government receipt in kind funds. This quarter a virtual meeting was convened to present desk review findings including some leading case practices from other countries. The desk review revealed that,use of capitation funding mechanism for updating the formula is a better option because it:

1. Aligns resources allocation with national priorities and promote efficient practices among the health facilities
2. Promotes equity as the formula funding system encourage redistribution of financial resources amongst health facilities
3. Treats the budget-setting process systematically and promote accountability

It was proposed that, in updating the current formula there is need to consider these factors; Population, OPD attendance, Number of health facilities in each district, location and poverty index. However, more input is expected from key stakeholders during the upcoming April meeting.

INTERVENTION 3.4 ELEARNING

The project continued to work with the MOHCDGEC, PO-RALG and consultant TTCIH to develop eLearning training materials. The project developed eLearning audio scripts for (eLMIS, Data Analytics, bottom-up quantification, HCRF and KPIs) modules. eLearning audio scripts are used to provide the voice over and audio for the eLearning content to be accessed by learners. Also the project conducted an eLearning training videos recording workshop for bottom-up quantification and Data analytics modules from 22nd March- 02nd April 2021 in Dar es Salaam. Training videos for bottom-up quantification sessions (council aggregation tool, extraction consumption data from eLMIS, filling out the demand forecasting tool, compilation and aggregation of demand forecasted data) and data analytics sessions (extracting reported logistics data, computing the number of health commodities reported, computing the stock status of reported health commodities) were recorded.

Key Performance Indicators

- Indicator 3.2.1: Number of people log into eLMIS (users and level type): 6593
- Indicator 3.2.1: Percentage of R&R passing data quality check in specific period: 77%

OBJECTIVE 4: STRENGTHEN ENABLING ENVIRONMENTS TO IMPROVE SUPPLY CHAIN PERFORMANCE

INTERVENTION 4.1 SOLIDIFY THE LMU'S ROLE IN INFORMATION SHARING AND OVERSIGHT

The project collaborated with the Chief Pharmacist Office (CPO) in ZnZ, in developing training materials for the transitioned LMU. The training package aims to sharpen up skills of the CPO staff in areas related to supply chain functions for sustaining the good work done by the LMU.

INTERVENTION 4.3 STRENGTHEN GOVERNANCE AND ACCOUNTABILITY

GHSC-TA-TZ provided technical assistance to MOHCDGEC following a request from the ministry to support health commodity tracking field exercise to verify various data and information related to compliance to commodities management guidelines, financial accountability and and performance of facilities in managing health commodities. The activity was aimed at an accurate situation to better inform 2021/2022 planning and budgeting for health commodities. There has been a wake of various reports highlighting serious health commodities availability issues despite the Government of Tanzania (GoT) efforts to increase the health budget.

Key issues noted included:

- Inadequate accounting of health commodities delivered to health facilities.
- Procurement of health commodities outside the Medical Stores Department (such as from Prime Vendor) without following all proper procedures.
- Limited participation of Hospital Therapeutic Committees in health commodities management decisions.
- Inability of health facilities to fulfil needs of patients through the National Health Insurance Fund (NHIF), resulting in loss of revenue.
- Penalties associated with inability to comply with agreed standards on filling the Health insurance claim forms.
- Expiration of health commodities.
- Unpaid/pending payments to health facilities from other health insurance companies.
- Budget allocated for health commodities by health facilities is not in compliance with existing guidelines.
- Lack of records on patients who were provided with waiver to enable them to access health services free of charge

The project reflected on the issues identified and determined areas of alignment in addressing some of the issues which includes; 1) strengthening governance and accountability; 2) establishing a culture of collaboration and information sharing; 3) strengthening and streamlining quantification of health commodities; and 4) institutionalization of data use and improvement on data quality.

3. IMPLEMENTATION CHALLENGES, RISKS, AND MITIGATION MEASURES

Risks, challenges, and associated mitigations are shown in Table 1.

Table 1. Risks, Challenges, and Mitigations

Risks and Challenges	Mitigation
Lack of clear information from stakeholders during quantification processes leading to lengthy assumption building process.	The project to engage key stakeholders earlier enough prior to quantification to align expectations.
Delayed implementation of project planned activities due to COVID-19 pandemic	The project continues to review its activities and factor in COVID-19 risk mitigations where possible.
Change of leadership at our government counterparts (MOHCDGEC, PO-RALG)	The project has been and will continue to engage new leadership to understand their expectations.
The IMPACT approach intervention does risk not meeting initial expectations due to COVID travel restrictions. The shift to the IMPACT Approach is a significant departure from prior practices and involves training and mentoring personnel in how to manage supply chains using data—an activity that is considerably more successful when performed in person. Though some IMPACT Approach training can take place remotely, this typically results in lesser outcomes than the pre-COVID-19 classroom facilitated training approach. In the interim, other IPs not subject to the same travel restrictions have worked to advance and support the IMPACT approach where possible.	Though the somewhat ad hoc support from other IPs received to date has been fortuitous and beneficial, we are working on a Joint Implementation Plan between GHSC-TA-TZ, GoT, and other IPs to ensure consistent messaging about IMPACT team practices and procedures.

4. PMP

Table 2. Q2Y5 PMP

Objective	Measure	Target	Reporting Frequency	Direct or Indirect	Q1 Oct – Dec 2020	Q2 Jan – Mar 2021	Q3 Apr – Jun 2021	Q4 Jul – Sep 2021
1) Strategic Planning: Provide strategic planning and Implementation Assistance	1.2.3. Percentage of eLMIS hosting / operational costs supported by GoT	Positive trend	Annual	Indirect				
	1.3.1 Stock-out rate	Below 5%	Quarterly	Indirect	30%	28%		
	1.3.2 Stocked according to plan		Quarterly	Indirect	17%	15%		
	1.3.3: Number of artemisinin-based combination therapy (ACT) treatments, SP, and mRDTs purchased in any fiscal year with USG funds that were distributed in this reported fiscal year		Annually	Indirect				
Objective 2: In-Country Logistics: Improve Delivery of Health Commodities in Service Sites	2.1.1: Percent of eLMIS issues reported and resolved within 24 hours	80%	Quarterly	Indirect	86%	89.2%		
	2.1.2: Percent of facilities sending timely and complete eLMIS reports to the central level	80%	Quarterly	Indirect	88%	89%		

	2.2.1: Level of country counterpart ownership demonstrated in quantification and supply planning		Annually	Indirect				
	2.2.2: Percent forecast accuracy (by commodity group)		Annually	Indirect				
Objective 3: Capacity Building: Broaden stakeholders' understanding and engagement of the supply chain system	3.1.1 Percent of RBF performance incentives received by MSD SBUs over a specified period	Positive trend on percentage received of the RBF performance	Quarterly	Indirect	NA	NA		
	3.2.1 Number of people logging-in into eLMIS	N/A	Quarterly	Indirect	5,224	6593		
	3.2.3: Percentage of R&R passing data quality check in specific period.	N/A	Quarterly	Indirect	88%	77%		
	3.3.2: Percent of MOHCDGEC budgeted amount which is actually disbursed	Positive trend on the percentage disbursed	Annually	Indirect				
Objective 4: Strengthening Enabling Environments to Improve Supply Chain Performance	4.1.1 Overall rating from key stakeholders on project collaboration and information sharing	N/A	Annually	Indirect				

5. ANNEX 1. ROOT CAUSE ANALYSIS FOR SELECTED INDICATORS

INDICATOR 1.3.1 STOCK OUT RATE

Performance trends and descriptions:

The Stock Out Rate indicator provides insight into the availability of health commodities within six health commodity groups namely ARVS, Lab, Malaria, RMNCH, TB, and Essential Medicines. It is one of the most important indicators as a stock out often results in a patient leaving a clinic unable to receive prescribed pharmaceuticals or other applicable health commodities. In Tanzania, stock outs have a significant impact on service delivery and consequently health outcomes. The target for this indicator is 5%

Table 4 shows the stock out rates for each of the six tracer commodity groups for both quarterly and bimonthly systems.

Table 3. Tracer Commodity Groups Stock Out Rates (Quarterly and Bimonthly Systems)

Tracer commodity Group	Overall stock out rates this quarter (Jan-March 2021)		Improvement from previous quarter (Oct-Dec 2020 (Yes/No)		Number of tracer commodities that achieved target of < or=5%	
	Quarterly System	Bimonthly system	Quarterly system	Bimonthly system	Quarterly system	Bimonthly system
ARVS	9%	24%	Yes (13%)	Yes (26%)	2 out of 14	0 out of 14
Lab	15%	28%	Yes (18%)	Yes (35%)	0 out of 7	0 out of 7
Malaria	12%	26%	Yes (15%)	Yes (30%)	0 out of 8	0 out of 8
RMNCH	15%	28%	Yes (20%)	Yes (33%)	0 out of 14	1 out of 14
TB	4%	3%	No (3%)	Yes (10%)	3 out of 4	3 out of 4
Essential Meds	26%	46%	Yes (27%)	Yes (57%)	0 out of 10	0 out of 10

Generally, there is a decline in the overall stock out rates in Quarter two (Jan-March 2021) compared to the previous Quarter (Oct-Dec 2020) across all commodity groups in both quarterly and bimonthly ordering systems except for TB medicines quarterly ordering system where there is a slight increase in stock out rate in Q2.

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1.3.1 A) STOCK OUT RATE FOR TRACER COMMODITY GROUPS (QUARTERLY SYSTEM)

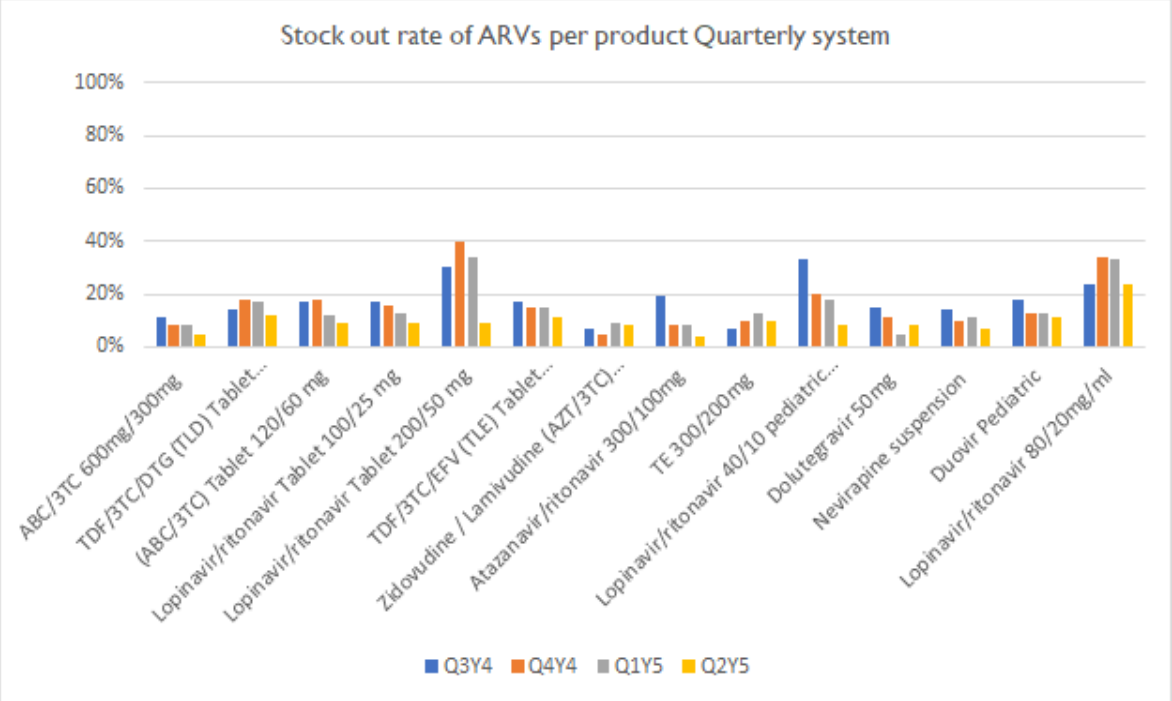
During Q2FY21 1,836 health facilities were still operating via the quarterly ordering system with 4,383of 6,219 (70%) were operating on the bimonthly system. More health facilities have transitioned to the bimonthly system of ordering during this quarter.

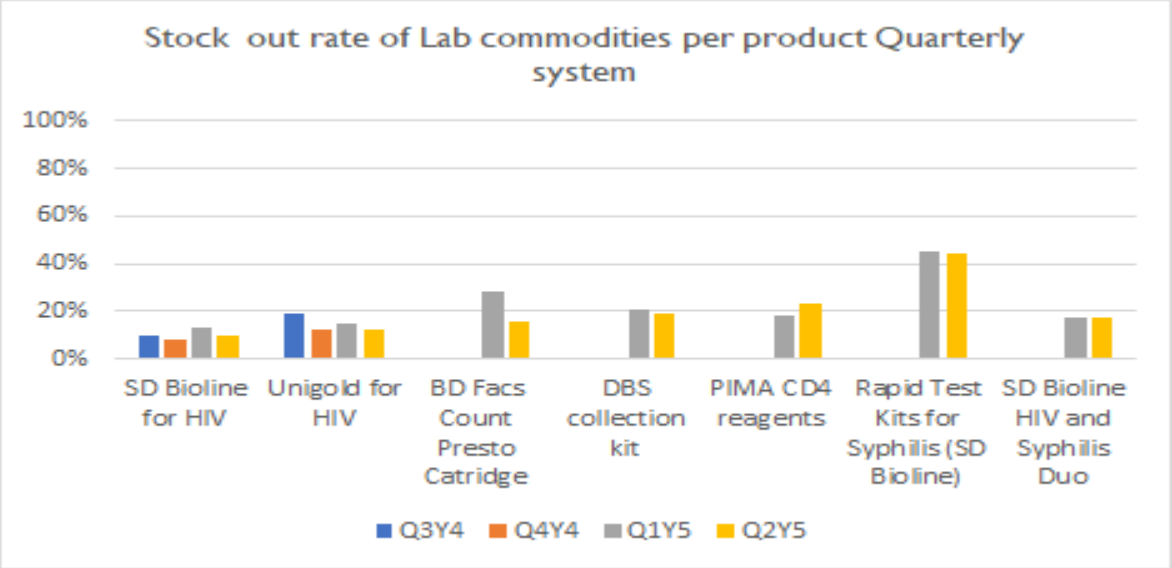
Overall overall tracer commodity group stock out rates for quarterly system health facilities are shown in Figure 13.

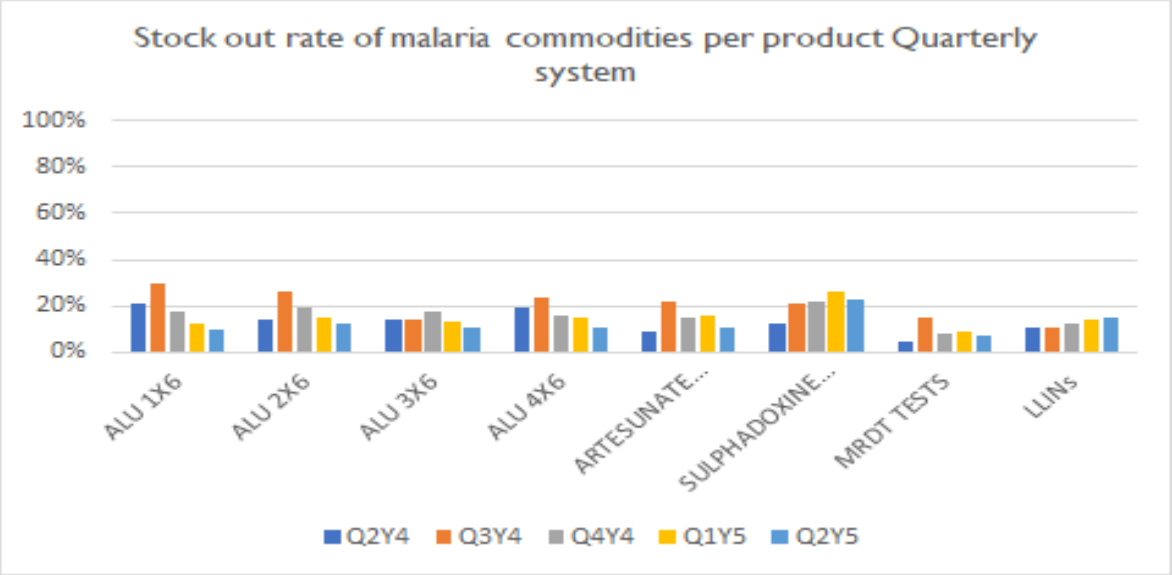
Figure 13. Overall Tracer Commodity Group Stock Out Rates (Quarterly System)

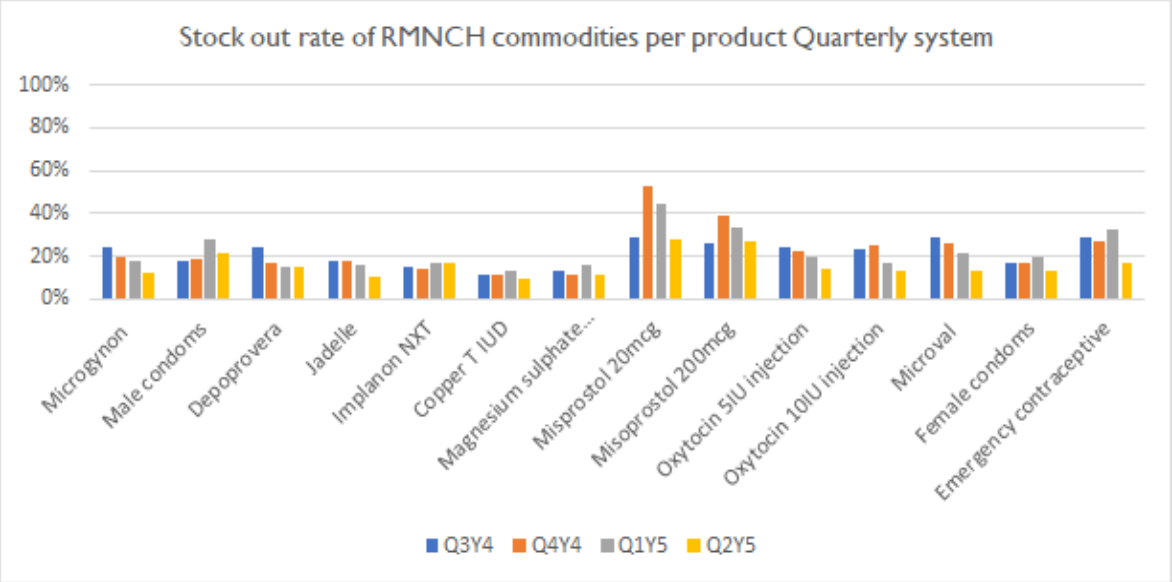
Figure 14 shows stock out rates for health commodities within each of the six tracer commodity groups at facilities using the quarterly system.

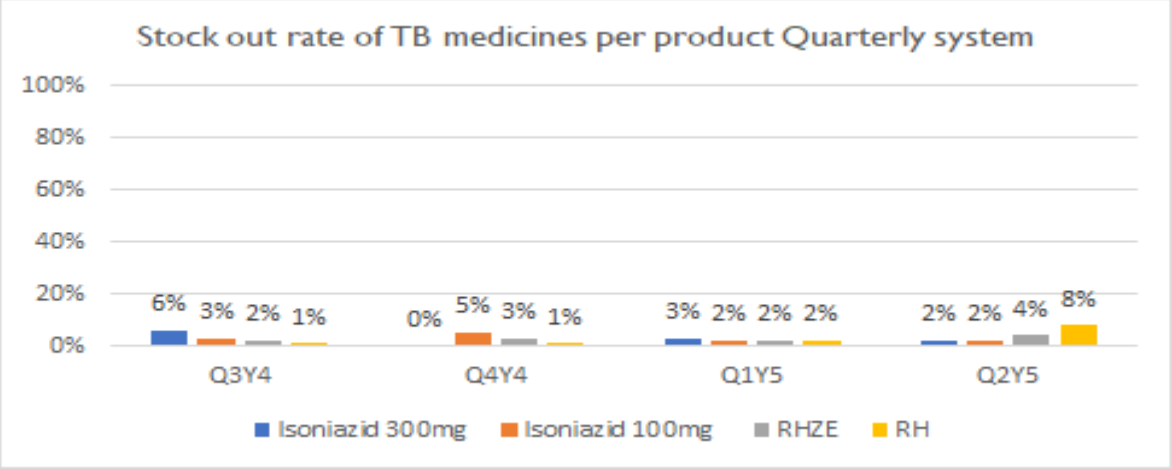
Figure 14. Tracer Commodity Stock Out Rates (Quarterly System)

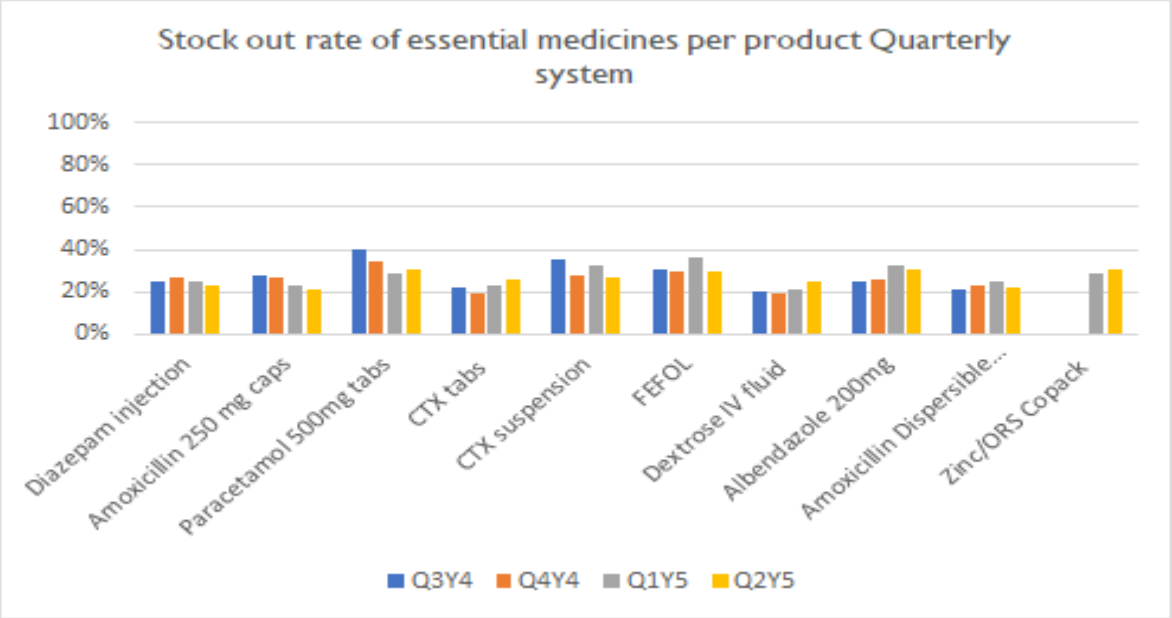





Stock out rate of malaria commodities per product Quarterly system
100%
80%
60%
40%
20%
0%
ALU 1X6
ALU 2X6
ALU 3X6
ALU 4X6
ARTESUNATE...
SULPHADOXINE...
MRDT TESTS
LLINs
Q2Y4
Q3Y4
Q4Y4
Q1Y5
Q2Y5


Stock out rate of RMNCH commodities per product Quarterly system
100%
80%
60%
40%
20%
0%
Microgynon
Male condoms
Depoprovera
Jadelle
Implanon NXT
Copper T IUD
Magnesium sulphate...
Misprostol 20mcg
Misoprostol 200mcg
Oxytocin 5IU injection
Oxytocin 10IU injection
Microval
Female condoms
Emergency contraceptive
Q3Y4
Q4Y4
Q1Y5
Q2Y5


Stock out rate of TB medicines per product Quarterly system
100%
80%
60%
40%
20%
0%
6%
3%
2%
1%
0%
5%
3%
1%
3%
2%
2%
2%
2%
2%
4%
8%
Q3Y4
Q4Y4
Q1Y5
Q2Y5
Isoniazid 300mg
Isoniazid 100mg
RHZE
RH



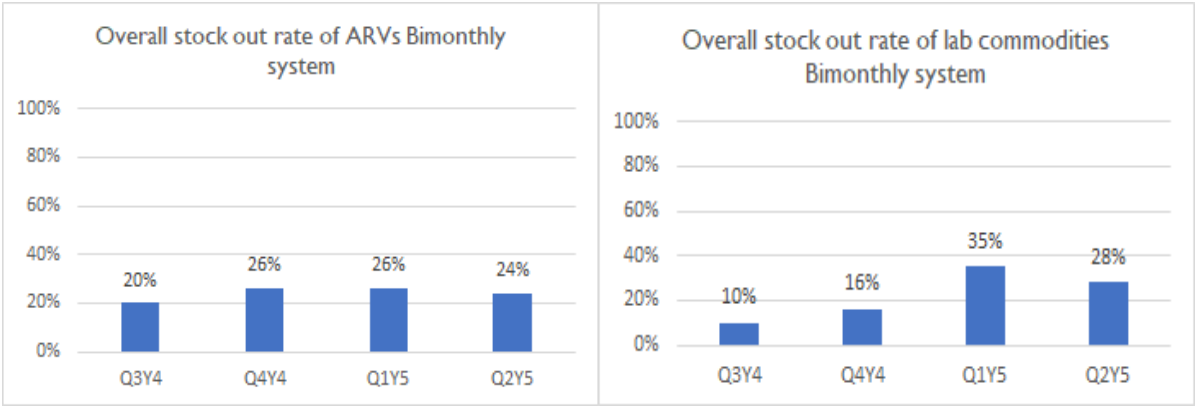
1.3.1 B) STOCK OUT RATE FOR TRACER COMMODITIES (BIMONTHLY SYSTEM)

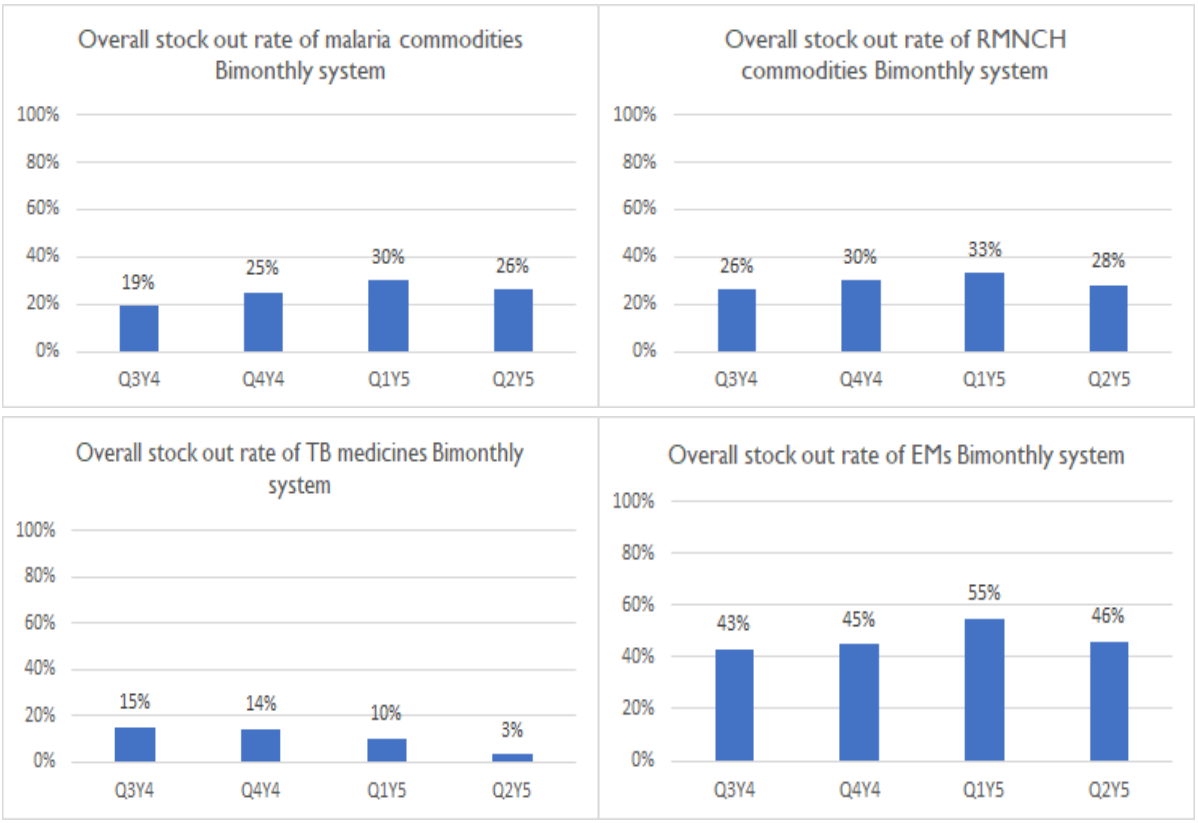
During Q2FY21 1,836 health facilities were still operating via the quarterly ordering system with 4,383of 6,219 (70%) were operating on the bimonthly system. More health facilities have transitioned to the bimonthly system of ordering during this quarter.

Performance trends and descriptions:

Figure 15 shows stock out rates for health commodities within each of the six tracer commodity groups at facilities using the bimonthly system.

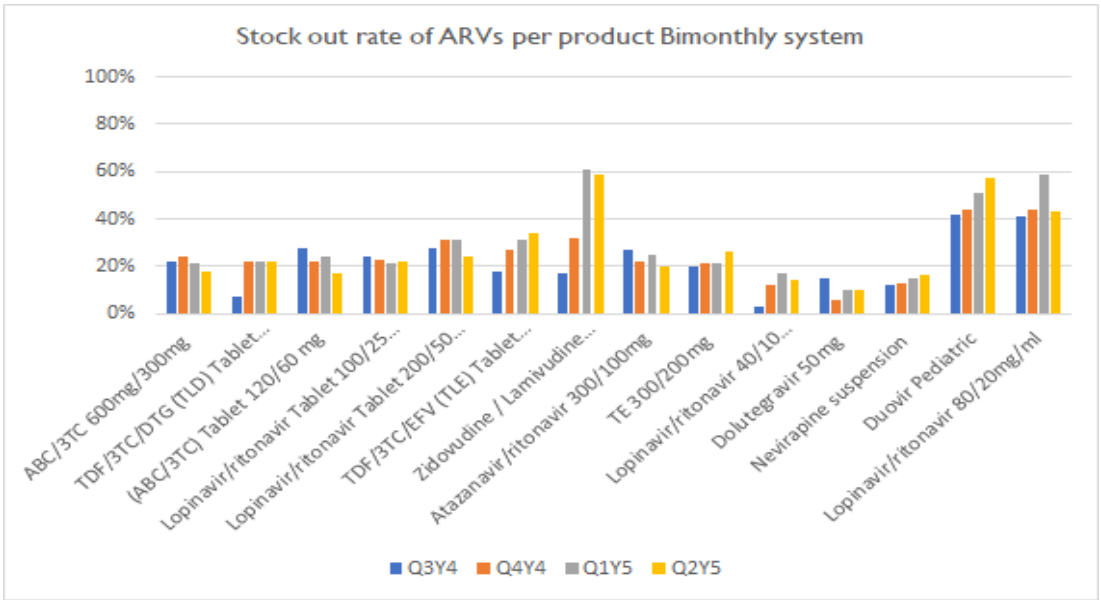
Figure 15. Overall Tracer Commodity Group Stock Out Rates (Bimonthly System)

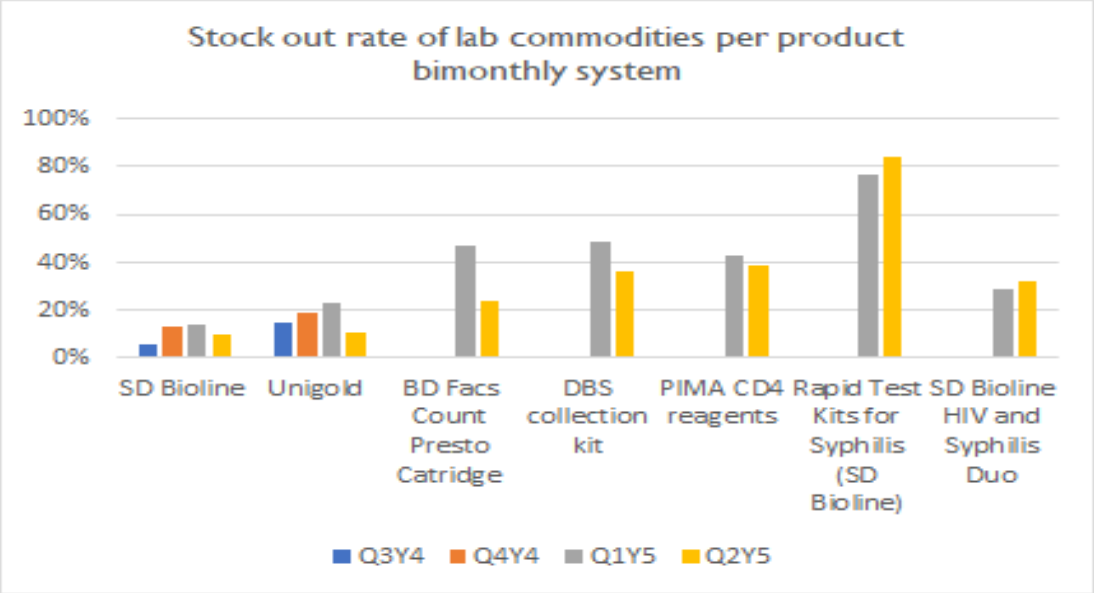


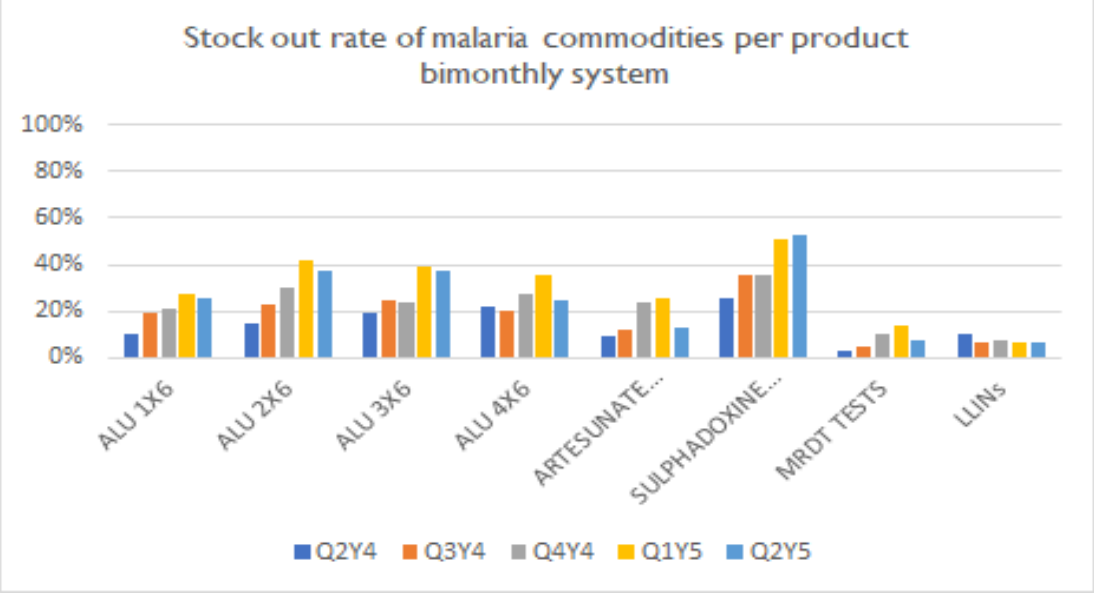


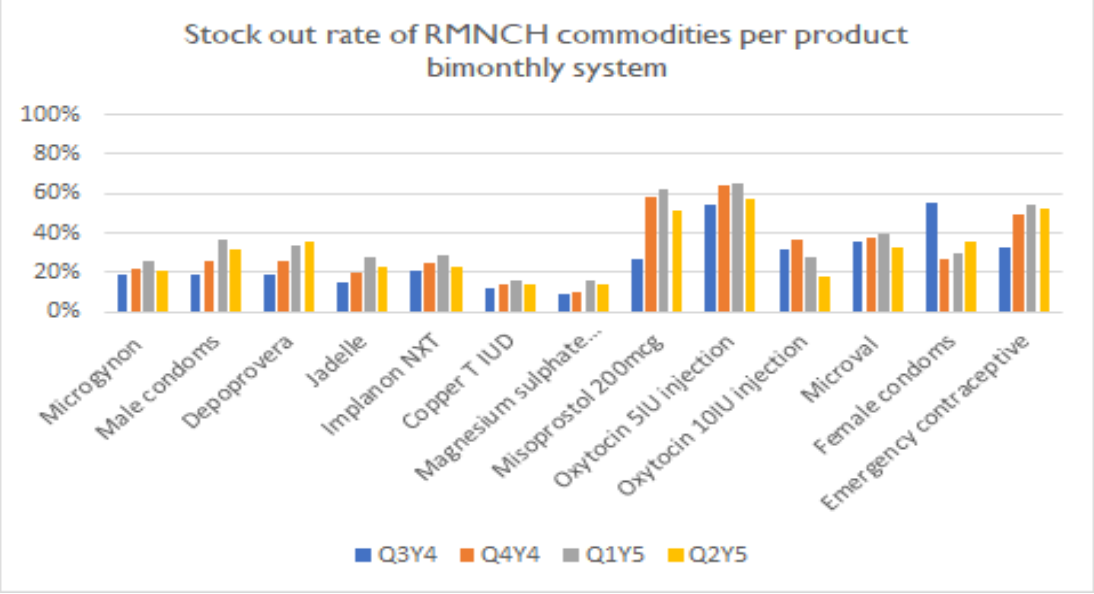
The graphs in Figure 16 show stock out rates for health commodities within each of the six tracer commodity groups for facilities using the bimonthly system.

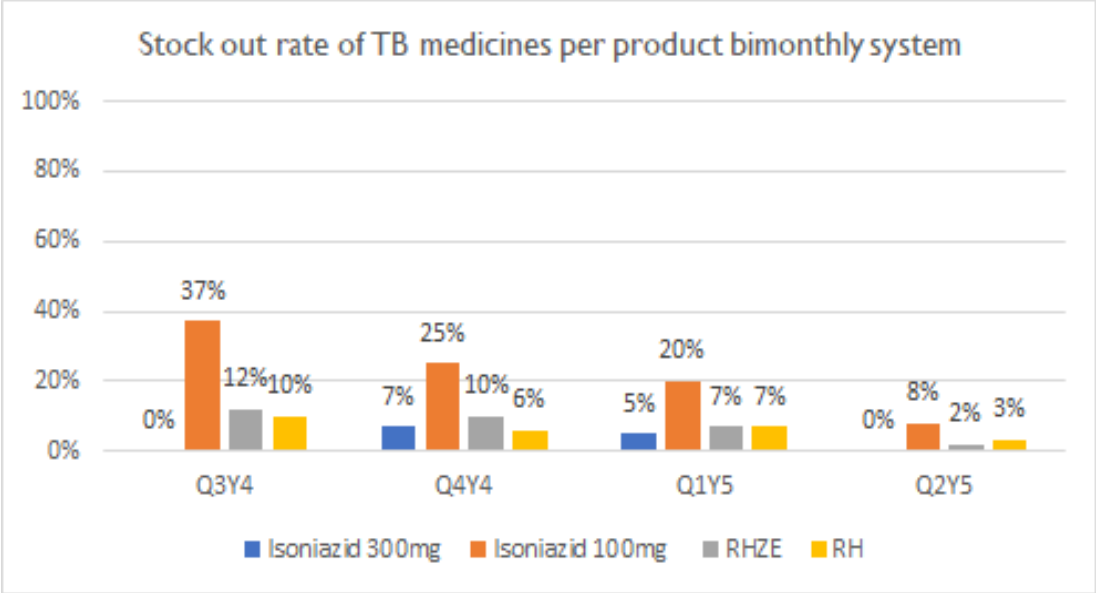
Figure 16. Tracer Commodity Stock Out Rates (Bimonthly System)

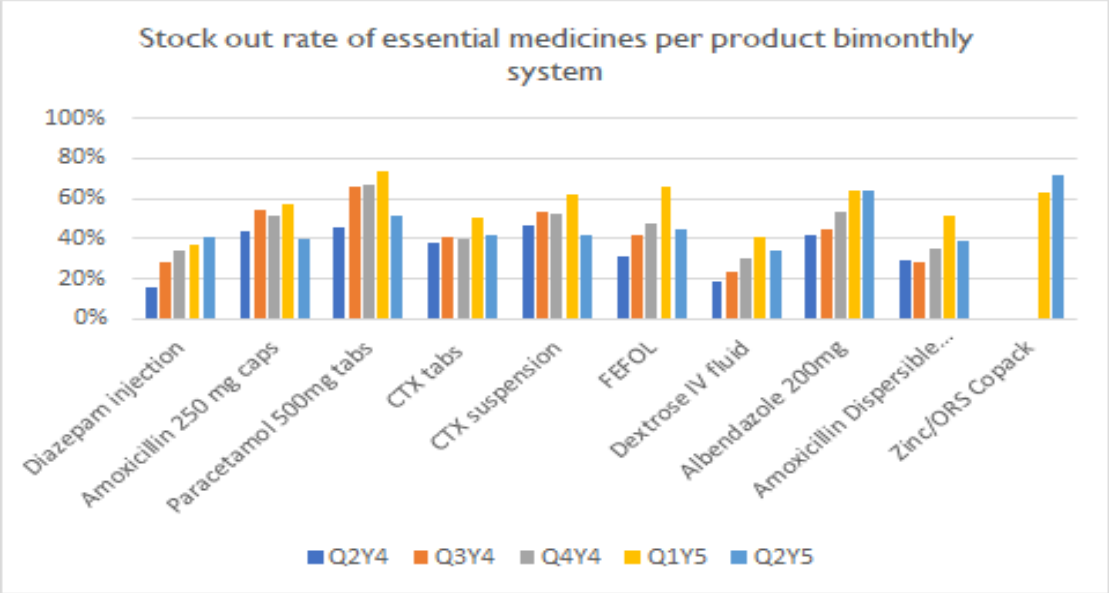



Stock out rate of lab commodities per product bimonthly system
100%
80%
60%
40%
20%
0%
SD Bioline
Unigold
BD Facs Count Presto Catridge
DBS collection kit
PIMA CD4 reagents
Rapid Test Kits for Syphilis (SD Bioline)
SD Bioline HIV and Syphilis Duo
Q3Y4
Q4Y4
Q1Y5
Q2Y5


Stock out rate of malaria commodities per product bimonthly system
100%
80%
60%
40%
20%
0%
ALU 1X6
ALU 2X6
ALU 3X6
ALU 4X6
ARTESUNATE...
SULPHADOXINE...
MRDT TESTS
LLINs
Q2Y4
Q3Y4
Q4Y4
Q1Y5
Q2Y5


Stock out rate of RMNCH commodities per product bimonthly system
100%
80%
60%
40%
20%
0%
Microgynon
Male condoms
Depoprovera
Jadelle
Implanon NXT
Copper T IUD
Magnesium sulphate...
Misoprostol 200mcg
Oxytocin 5IU injection
Oxytocin 10IU injection
Microval
Female condoms
Emergency contraceptive
Q3Y4
Q4Y4
Q1Y5
Q2Y5





INDICATOR 1.3.2 STOCKED ACCORDING TO PLAN

Performance trends and descriptions:

Table 5 lists the percentage of health commodities stocked according to plan (i.e., stocked within the established minimum and maximum stock levels which is commonly referred to as being "adequately stocked"). For the quarterly system, the min and max stock levels are 3 and 6; for the bimonthly system, the min and max stock levels are 2 and 4. However, for RMNCH commodities and essential medicines, Male condoms and Cotrimoxazole in tablets and suspension dosage forms are considered instead of all commodities in their entirety. Ideally, health commodities should be stocked according to plan as this is the status that guarantees that health facilities will not have any stock outs or waste as a result of overstocks.

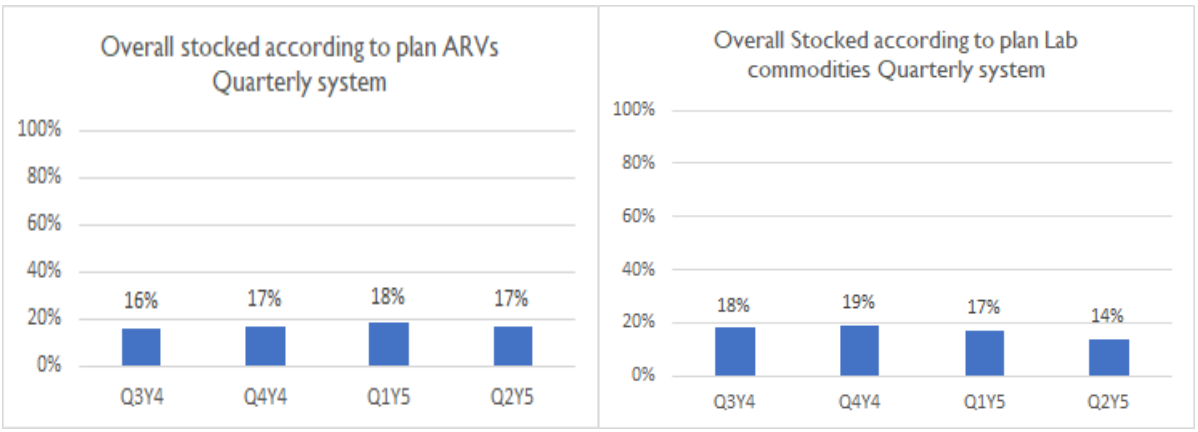
Table 4. Tracer Commodity Stocked According to Plan (Quarterly and Bimonthly Systems)

Tracer Commodity Group	Commodities stocked according to plan this Quarter Jan-March 2021		Improvement from previous quarter (Yes/No) Oct-Dec 2020	
	Quarterly System	Bimonthly system	Quarterly system	Bimonthly system
ARVS	17%	17%	No (18%)	No (20%)
Lab	14%	18%	No (17%)	No (20%)
Malaria	14%	16%	No (17%)	No (19%)
Male condoms	14%	17%	No (15%)	Same (17%)
TB	15%	18%	No (23%)	No (23%)
CTX tabs	15%	14%	No (18%)	No (15%)
CTX suspension	18%	17%	Yes (16%)	Yes (13%)

2.3.4 A) STOCKED ACCORDING TO PLAN (QUARTERLY SYSTEM)

The graphs in Figure 17 show the overall percentage of tracer commodities stocked according to plan for facilities using the quarterly system during the previous four quarters. The charts show the performance of the monitored tracer commodity groups: ARVs, Laboratory commodities, malaria commodities, male condoms as part of RMNCH commodities, TB commodities, as well as co trimoxazole tablets and suspension which are essential medicines.

Figure 17. Tracer Group Stocked According to Plan Charts (Quarterly System)



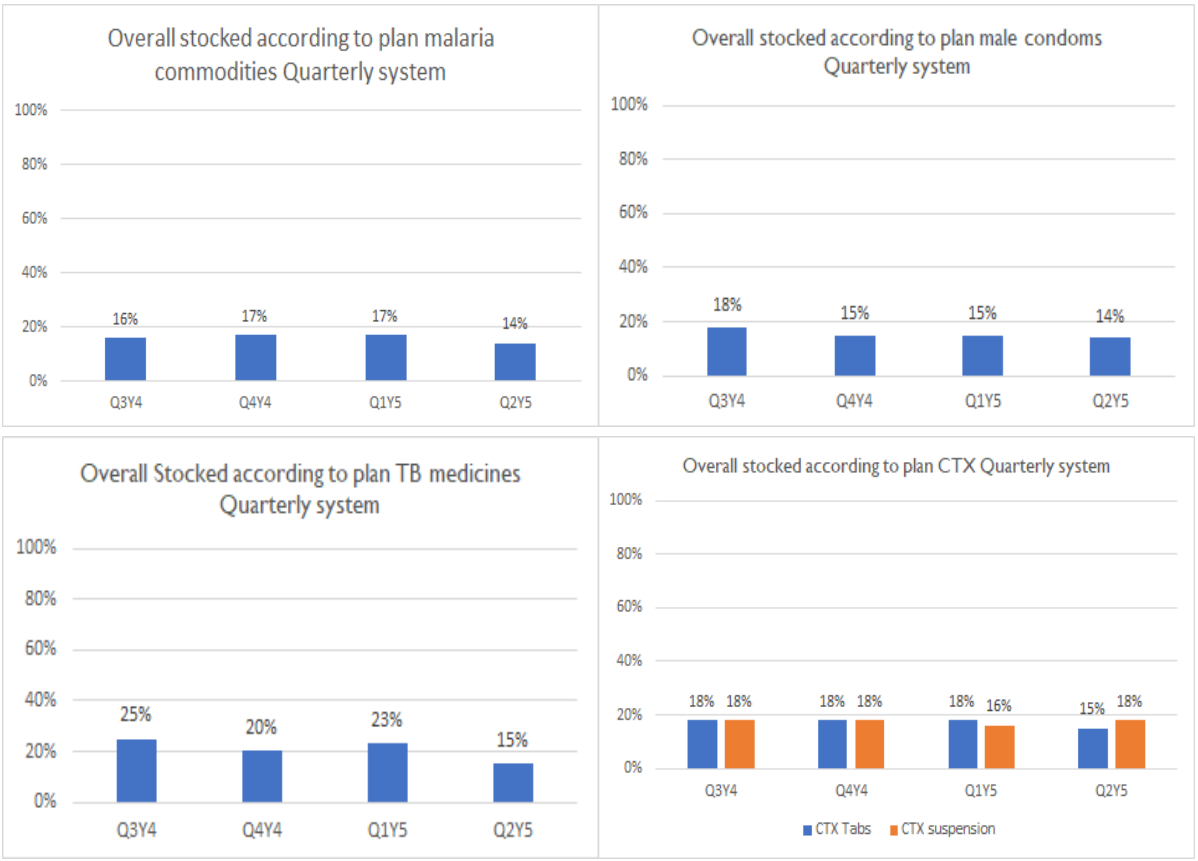
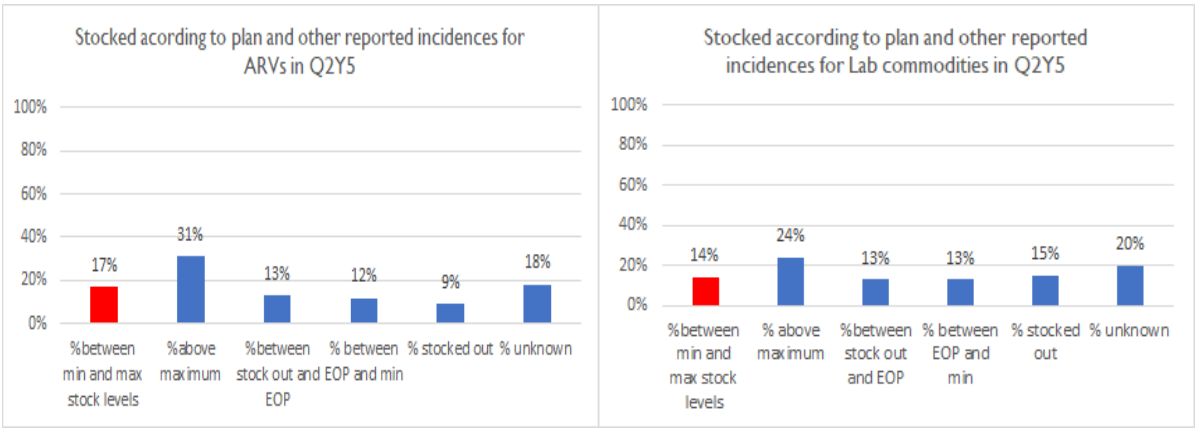
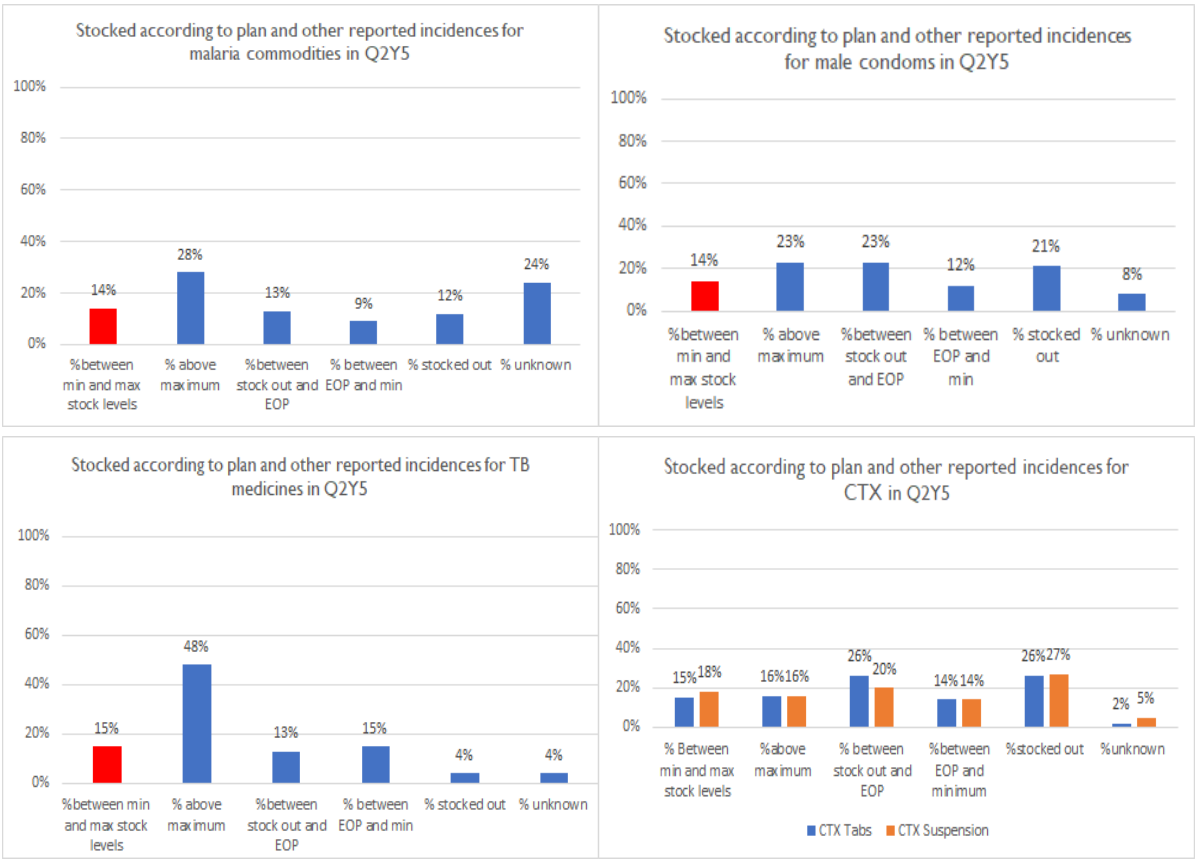


Figure 18 provides a more detailed view of Q2 FY21 quarterly system stock levels compared to plan for the six commodity groups reported via six categories:

- % overstocked excess stock with potential for wastage such as expiry
- % between minimum and maximum stock levels (3 and 6 MOS respectively)
- % understocked (below Min) split into two categories:
    - % between minimum and the emergency order point (EOP)
    - % below emergency order point (EOP) of 1.5 MOS
- % Stocked Out
- % with Unknown AMC

Figure 18. Tracer Group Stock Status (Quarterly System)

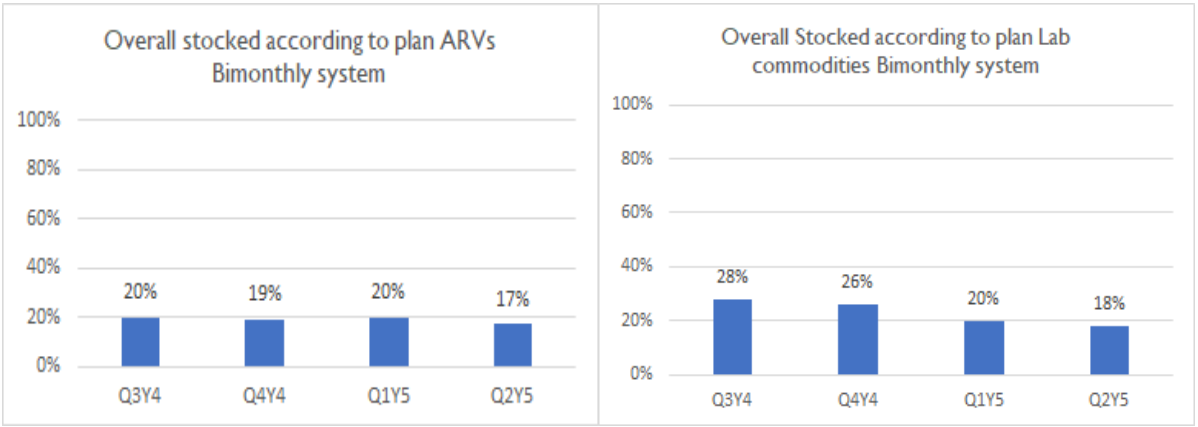


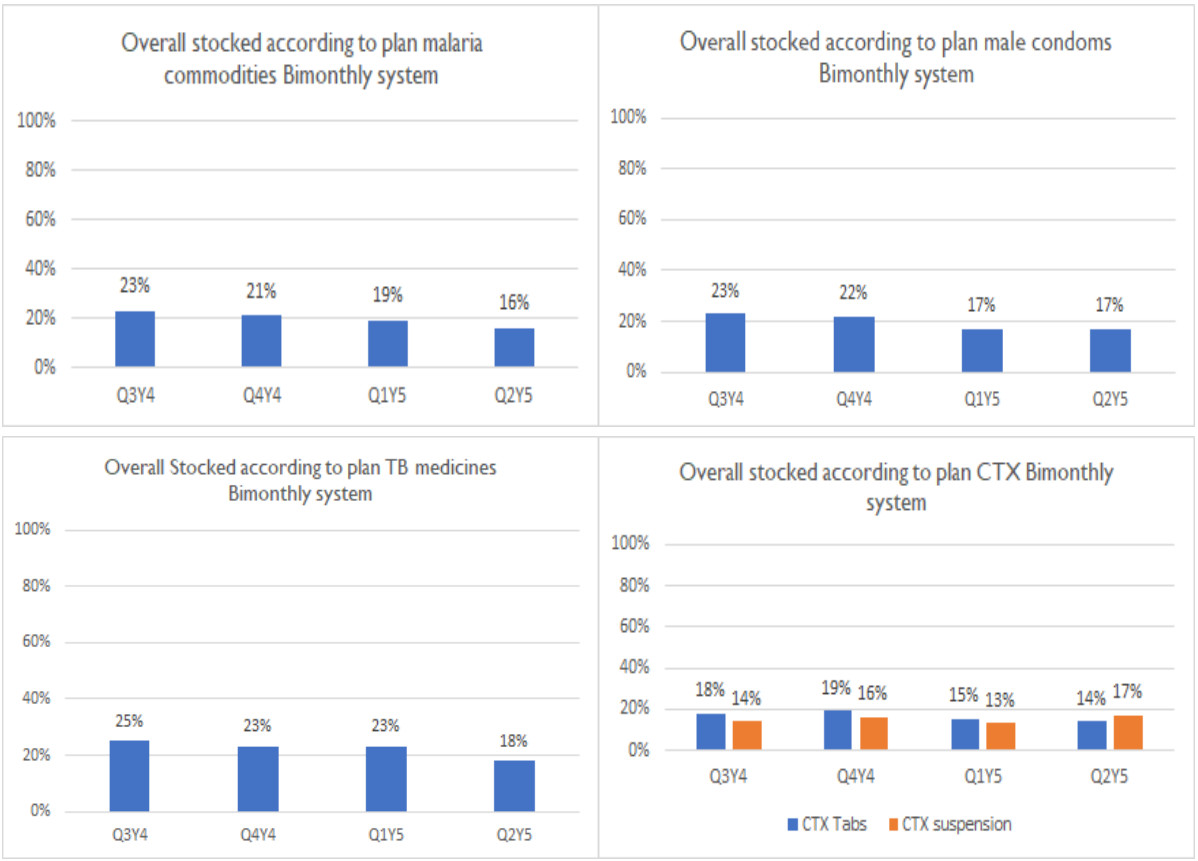


2.3.4 B) STOCKED ACCORDING TO PLAN (BIMONTHLY SYSTEM; MWANZA ZONE)

The graphs in Figure 19 show the overall percentage of tracer commodities stocked according to plan in the bimonthly system for the previous four quarters for the six tracer commodity groups

Figure 19. Tracer Group Stocked According to Plan Charts (Bimonthly System)

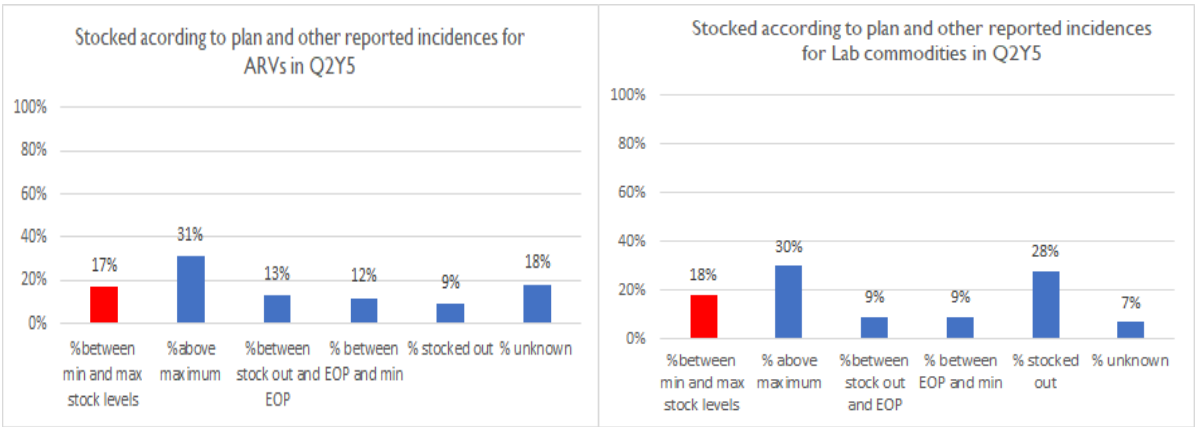


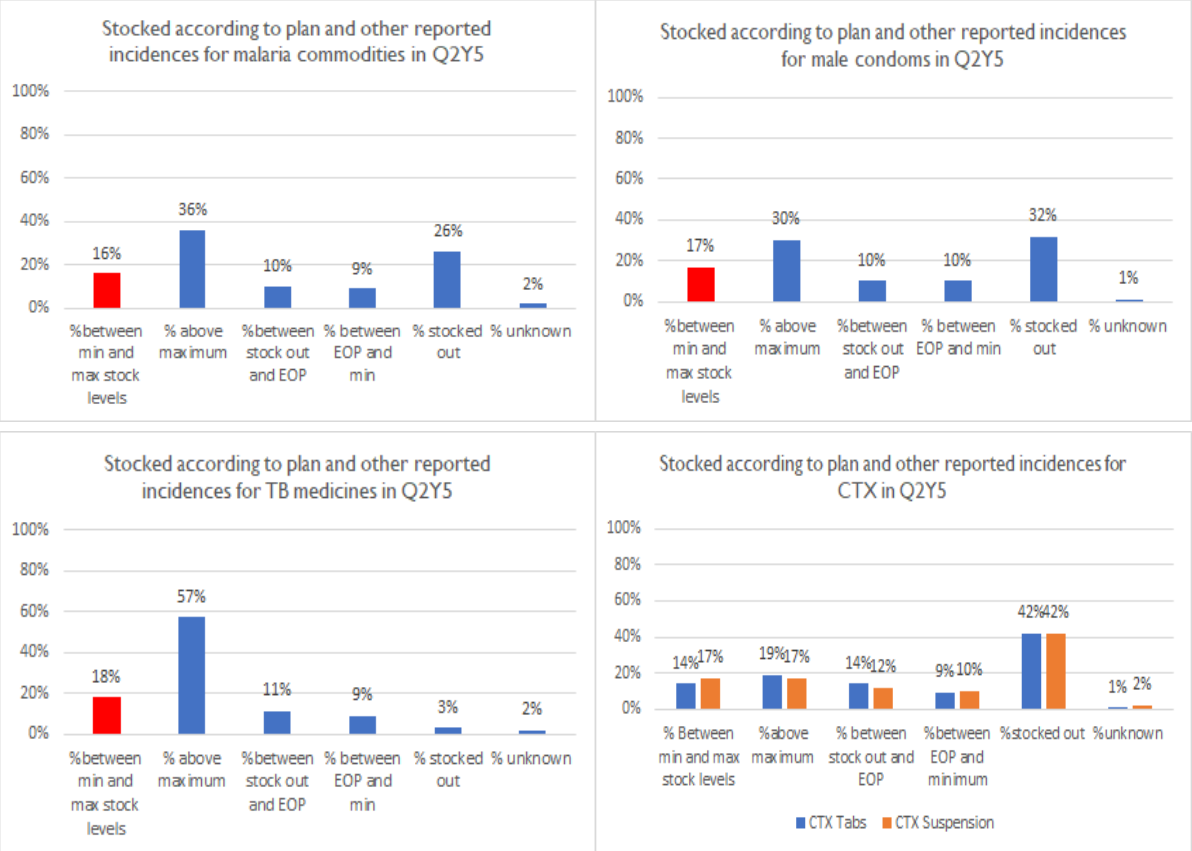


The graphs in Figure 20 provide a more detailed view of Q2FY21 bimonthly system stock levels compared to plan for the six commodity groups reported via six categories:

- % overstocked - excess stock with potential for wastage such as expiry
- % between minimum and maximum stock levels (2 and 4 MOS respectively)
- % understocked (below Min) split into two categories:
    - % between minimum and the emergency order point (EOP)
    - % below emergency order point (EOP) of 1 MOS
- % Stocked Out
- % with Unknown AMC

Figure 20. Tracer Group Stock Status (Bimonthly System)





Root cause analysis:

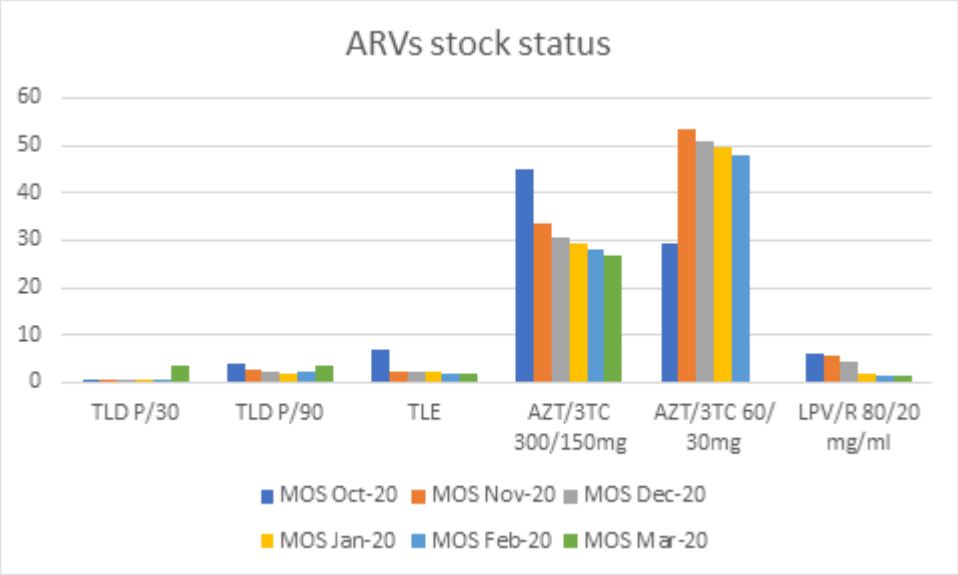
Delayed shipments across the commodity groups have affected the availability of health commodties across all tracer groups. The following interventions are being applied in an attempt to mitigate stock outs:

- GHSC-TA-TZ is supporting programs in their pipeline monitoring and supply planning, adjusting where applicable due to shipment delays
- Internal eLMIS enhancement meetings review stock out data across all commodity groups and notify stakeholders where appropriate in order to execute emergency orders or inter-facility transfers

Tracer commodity group	Root Cause Analysis
ARVs	The 20% combined overall stock out rate of ARVs in Q2FY21 has remained consistent with that of the previous quarter Q1FY21, irrespective of the ordering system. The overall stock out rates for both the quarterly and bimonthly have improved in Q2FY21 compared to Q1FY21 from 13% to 9% in the quarterly system and from 26% to 24% in the bimonthly system respectively. Bimonthly system has continued to have higher stock out rates of ARVs and during this reporting period. Of note, the top 5 regions in the country with the highest overall stock out rates of ARVs are served by Mwanza zone which are under the bimonthly system.

Overall, the most stocked out ARVs in Quarter two were; Paediatric formulations; Lopinavir/ritonavir 80/20mg/ml and Duovir paediatrics (AZT/3TC 60/30mg) and Adult formulations; TLD, TLE, Duovir adult (AZT 300/3TC 150mg)

Below is the stock status of the above mentioned ARVs for the last six months as per NACP stock status reports

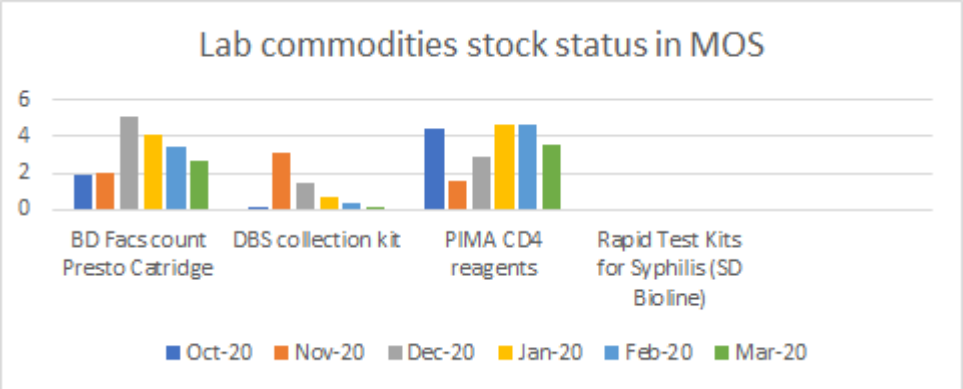


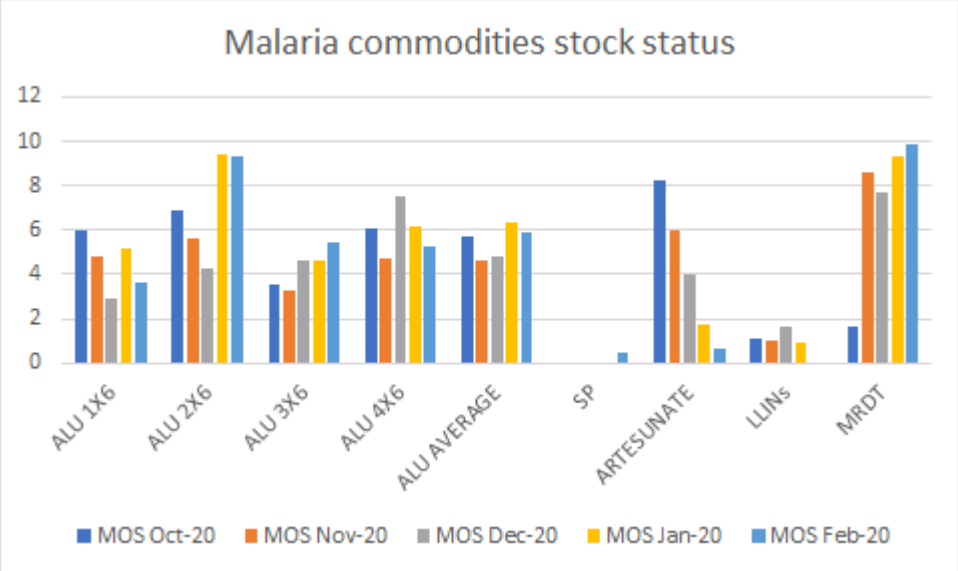
For Lopinavir /ritonavir syrup, stock status has been below minimum stock levels at National level for the past 6 months (5.9 MOS, 5.5 MOS, 4.3 MOS, 1.8 MOS, 1.4 MOS and 1.5 MOS from October 2020 through March 2021 respectively). Moreover, data quality issues have also been attributed to the formulation as follows; as of end of Jan 2021 as seen in the illustration above, MSD had 1.8 MOS of the item but at the same time the SOH data at health facilities showed overstocks. This has affected consumption which consequently impacts demand planning. The understocks at MSD were also contributed by program cancelling some of the orders due to suppliers having stocks with short shelf life. Although this formulation has been erratically available since the previous quarter, service delivery has not been disrupted as there is high likelihood that some clients were shifted to granules hence the reported stock outs.

Stock outs of TLD have also been reported during this quarter in both quarterly and bimonthly systems. This is influenced by the fact that most health facilities are moving their clients to TLD. The move to TLD has affected the consumption of other formulations such as ABC/3TC and lopinavir/ritonavir necessitating adjustments in forecasts and shipments.

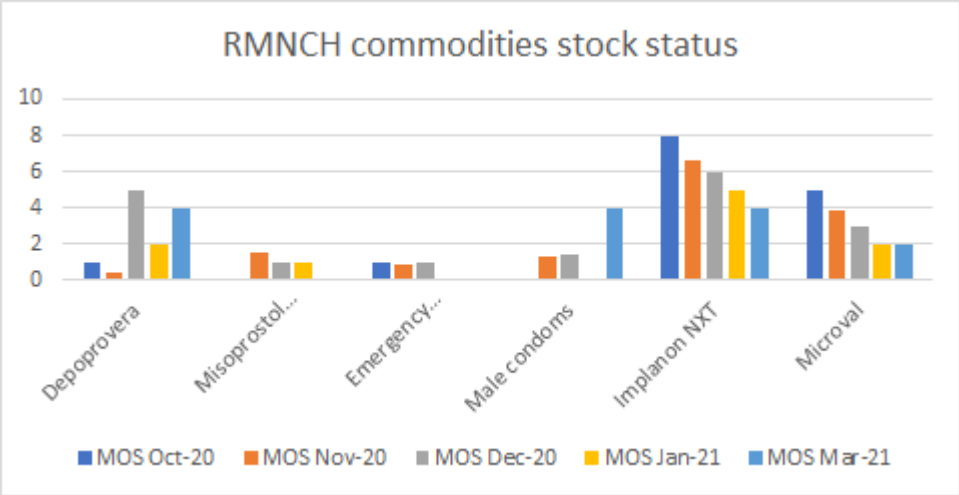
Regarding TLE, stock status has been below min from Nov 2020 through March 2020 (2.3 MOS, 2.3 MOS, 2.1 MOS, 1.9 MOS and 1.8 MOS respectively). These shortages have been influenced by the fact that most health facilities are moving towards TLD where a lot of clients have been shifted to TLD. Despite the surge in consumption, the stock status since the previous quarter has been below minimum for both TLD P/90 and TLD P/30 as illustrated above where the latter is being phased out.

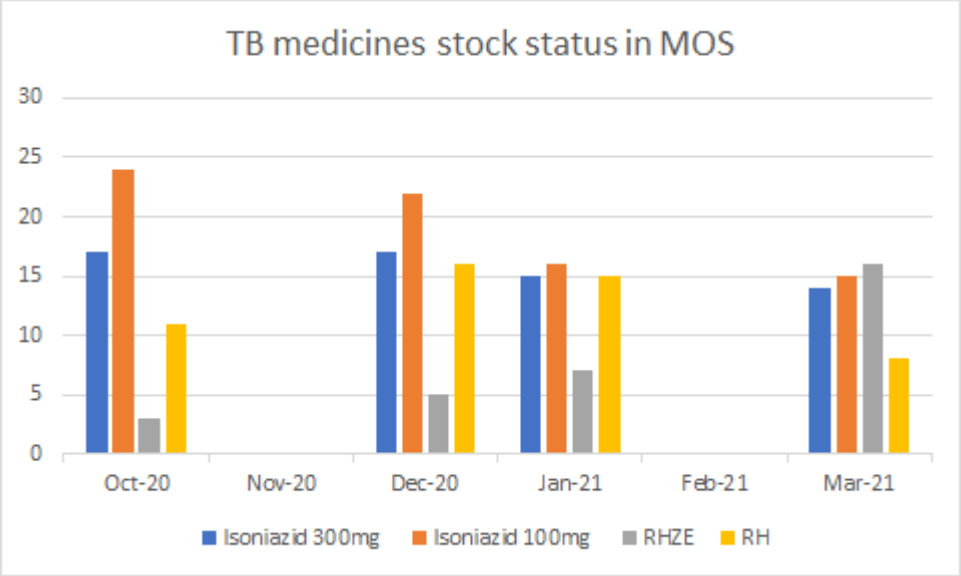
For Duovir paediatric and Duovir adults, the formulations have been overstocked and donated to other countries since the previous quarter. The reported stock outs may be related to data quality issues.

	Actions taken: • GHSC-TA-TZ project continued to support NACP technically in bimonthly analysis workshops where the ARVs pipeline was reviewed and shipments adjusted accordingly • GHSC-TA-TZ supported the NACP program technically in the ARVs quantification process
Lab	The combined overall stock out rate of laboratory commodities irrespective of the ordering system in Q2FY21 was 24%, lower than the performance of Q1FY21 which was 27%. However, the overall stock out rate of laboratory commodities under the bimonthly system was higher (35%) than the overall stock out rate under the quarterly system (28%). Detailed analysis of the laboratory commodities performance in Q2FY21 revealed that the most stocked out regions in the country were those served in the lake zone implementing the bimonthly ordering system. Similarly, across both quarterly and bimonthly ordering systems, the laboratory commodities that contributed to the high stock out rate despite the performance improvement when compared to Q1FY21 were; SD Bioline for syphilis, DBS collection kit, PIMA CD4 reagents and BD Facs count presto cartridge shown below.  SD Bioline for syphilis has been stocked out for the past six months attributing to the high stock out rate of 44% (quarterly system) and 84% (bimonthly system).The main reason for the high stock out rate of SD Bioline for syphilis is the fact that procurement has not been finalized at MSD. Regarding the DBS collection kit whose availability has been below minimum since the previous quarter, there have been delays in delivery of the commodity from the supplier which were expected to be received since last year but will be delivered in May 2021 instead. In view of this, the country is expected to be stocked out of this commodity from February through June 2021 thus affecting HIV Early infant diagnosis (HEID). Similarly, there have been delays in delivery of BD Facs count Presto cartridge from the supplier. The commodity has been factored in during the recent quantification exercise for laboratory commodities. Actions taken: • GHSC-TA-TZ has supported NACP in bimonthly analysis workshops to review the pipeline and adjust shipments accordingly

	• GHSC-TA-TZ has requested USAID to expedite the incoming shipments of DBS kit for HEID and meanwhile borrow some kits from other countries to temporarily rescue the situation • GHSC-TA-TZ has supported NACP in the entire Quantification process pertaining to laboratory commodities
Malaria	The combined overall stock out rate in Q2FY21 was 21%, an improvement from last quarter's performance(Q1FY21) which was 23%. With regards to specific ordering system performance, there was a decline in the overall stock out rate of both bimonthly and quarterly systems compared to the previous quarter. In view of this, for bimonthly system, the stock out rate dropped from 30% in Q1FY21 to 26% in Q2FY21 while that of quarterly system dropped from 15% in Q1FY21 to 12% in Q2FY21. Across both ordering systems, SP was reported to be the most stocked out malaria commodity out of all the eight monitored commodities. Other highly stocked out commodities that were reported during this quarter include ALU presentations, LLINs specifically for the quarterly system and Artesunate injection. Stock status of the malaria commodities as reported by NMCP is illustrated below  The stock outs of SP have resulted from delays in delivery of the consignment by the supplier. The consignment was expected in February 2021 and has been delivered However, it has now been delivered. Stock status at MSD as illustrated above shows complete stock outs of SP from October 2020 through January 2021. This in turn led to stock outs in MSD zones that supply to health facilities. As of the end of March 2021, nine out of ten MSD zones were stocked out of SP namely Kilimanjaro, Kagera, Mbeya, Mtwara, Mwanza, Tabora, Tanga, Iringa and Dodoma. Regarding LLINs, a consignment worth 1.5 MOS is still with the supplier and has not been delivered to MSD since last quarter. Availability of SP has also been affected by timely disbursement of funds by GF.

	However, a consignment of 1.2 MOS of LLINs is expected to be delivered in the next quarter, specifically in May 2021. As far as ALU is concerned, the main reason for the reported stock outs of ALU in some health facilities in this quarter is because of the stock out of some ALU categories in zonal medical stores, for example in January 2021 the following zones did not have some ALU categories; Dodoma - (Alu 1x6 and ALu 2x6), Iringa - (Alu 1x6, ALu 2x6 and ALu 3x6) Kagera - ALu 2x6, Mbeya - ALu 3x6, Mtwara - (Alu 1x6 and ALu 2x6) Tabora ALu 3x6, Tanga (Alu 2x6, ALu 3x6 and ALu 4x6. The same applies in March 2021 where the following MSD zones were stocked out; Iringa - (Alu 1x6, ALu 3x6 and ALu 4x6), Kilimanjaro - ALu 1x6, Kagera ALu 1x6, Mtwara ALu 4x6, Mwanza ALu 3x6, Tabora -(Alu 1x6 and ALu 2x6) and Tanga - (Alu 1x6 and ALu 3x6). Therefore this means that some health facilities located in those respective MSD zones were missing these commodities upon requisition. Also, the regions with low prevalence of malaria have low uptake of ALU formulations and at times neither report nor order the formulations Also, there are some health facilities that still do not use the correct unit (strips) for ordering and reporting ALU formulations. Advocacy for using the correct unit is ongoing especially with the introduction of the additional level for reviewing R&Rs (Regional level). National shortages of Artesunate injection have started being experienced in January 2021 and shortages are expected to be reported in the next quarter by health facilities where shipments are expected in May and July 2021. Actions taken: • GHSC-TA-TZ project technically supported NMCP in Malaria Quantification review • Bimonthly workshop to review malaria pipeline where shipments were adjusted accordingly
RMNCH (family planning)	There was a decline in the combined overall stock out rate of RMNCH commodities in Q2FY21 compared to Q1FY21. The performance of the previous quarter (Q1FY21) was 27% overall stock out rate whereas in Q2FY21 the performance was 24%. Like in the previous quarters, the overall stock out rate of RMNCH commodities was lower in the quarterly system in Q2FY21 (15%) than in the bimonthly system where the performance is almost twice that of the quarterly system (28%). During this quarter, the highly stocked out commodities that were reported include Misoprostol 200mcg, male condoms, Implanon NXT, Emergency contraceptives, Microval/microlut and Depo-provera. The stock status as per RMNCH program reports in the last six months was as follows:

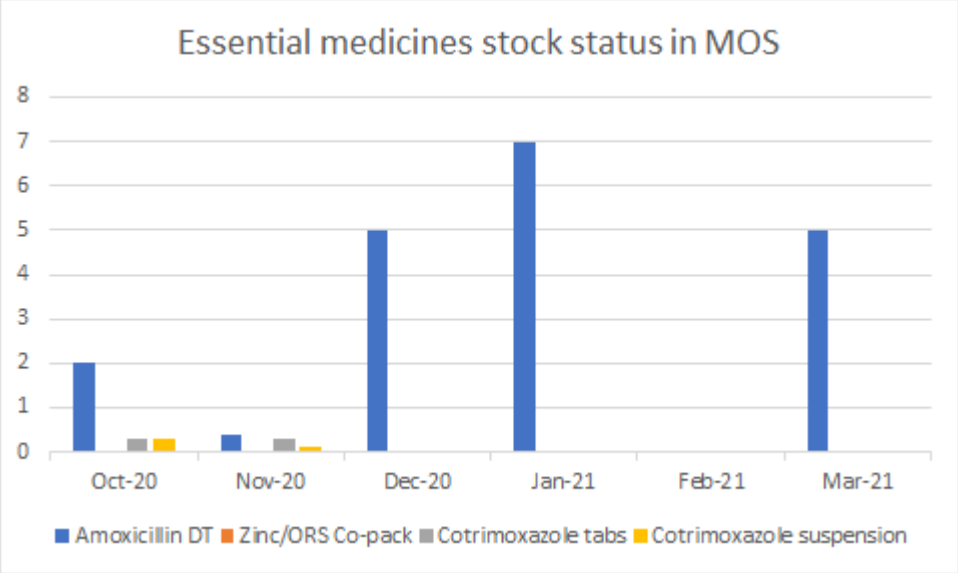
	 Misoprostol 200mg availability has been below 1 MOS for the past six months with MSD zones having stock outs which resulted in a spill over effect at the health facility level. As of the end of March 2021, Dodoma, Iringa, Mwanza, Tabora and Tanga had stock outs of the commodity. Stock outs of Misoprostol 200mcg are attributed to delays in delivery of the consignment. However, the consignment is expected to be delivered at the end of the month of April 2021. With regards to male condoms, there has been erratic availability of male condoms since the previous quarter. Shortages of male condoms in the past were attributed also to part number issues which MSD pledged to resolve upon migration to E10. Upon review of the MSD portal stock data during this reported period to determine the different part numbers available, it seems this issue has been resolved as there is one reported part number for male condoms in relation to stock status. This implies that National shortages resulted in stock out of male condoms where at the end of January 2021, Iringa, Kagera, Mtwara and Mwanza zones reported stock outs of male condoms. Stock outs of Depo-provera have been reported as of end of January 2021 in Dodoma, Kagera, Mbeya, Mtwara, Mwanza and Tanga zones where as Microval stock outs were reported in Kagera, Mbeya, Tabora and Tanga zones. During this period, stock outs of Emergency contraceptives were also reported in Kagera, Kilimanjaro, Iringa, Mbeya, Mwanza, Tabora, Tanga and shortages in Mbeya. Delayed shipments have resulted in shortages where a consignment of Emergency contraceptives is expected in May 2021. Actions taken • Supported the RCHS program to review the supply planning for family planning commodities and adjust shipments accordingly. • Participated in the orientation of the GFPVAN Basic reviewer training for Tanzania organized by RCHS program following the transition of the PPMR from GHSC-PSM to Reproductive Health Supplies Coalition (RHSC)
TB	TB medicines have over the past four quarters consistently shown the best performance in terms of lowest stock out rates when compared to other commodity categories. The overall combined stock out rate of TB medicines in Q2FY21 was 4% compared to the 7% stock out rate performance in Q1FY21. On that note, the overall stock out rate performance met the target of 5% for this indicator in Q2FY21. Also, the overall stock

	out rates were 4% for quarterly system and 3 % for bimonthly system. The performance of both systems was also within the 5% target for the indicator. The availability of TB medicines has not been a challenge since the previous quarter. The stock status as reported by NTLP program is illustrated below:  The availability of the monitored items has been good and in most cases above maximum stock levels. Although high stock outs were reported for RH and Isoniazid 100mg under the quarterly and bimonthly ordering systems respectively in Q2FY21, the stock out rates reported for these items was just 8%. Since the commodities were available at MSD for example at the end of March 2021, all zones had Isoniazid 100mg in stock while all zones had RH 150/75mg of P/672 in stock. However, there were some stock outs of RH in November through December 2020 in some zones such as Dodoma and Kilimanjaro which were tied to distribution challenges. It is likely that ordering, distribution and data quality issues may have played a role in the slight high stock out rates pertaining to these two commodities whose availability was stable at National level Actions taken: • GHSC-TA-TZ project has continued to support NTLP and during this quarter, the project supported NTLP in collaboration with NACP to conduct data analysis and demand review of Isoniazid used for TB prevention in HIV/AIDS clients.
Essential medicines	The Essential medicines commodity group has throughout the years consistently had the highest overall stock out rate. During Q2FY21, the overall stock out rate of Essential medicines was the highest compared to other commodity groups (40%) but slightly lower than the overall stock out rate of Q1FY21(42%). Additionally, the top five regions with the highest stock out rates of Essential medicines are those under the bimonthly system specifically in the lake zone. A deep dive into the specific systems shows a slight improvement in the overall performance of the quarterly system compared to last quarter (26% for Q2FY21 vs 28%

for Q1FY21). However, there is a decline in the overall performance of the bimonthly system compared to the previous quarter (46% for Q1FY21 vs 55% for Q1FY21)

Essential medicines that had high stock outs were; Zinc/ORS copack, Paracetamol 500mg, Albendazole, FeFOL, Cotrimoxazole tabs, Cotrimoxazole suspension and Amoxicillin DT

The stock status of some these stocked out commodities in the last 2 quarters was as follows:



Zinc/ORS copack has been stocked out since the previous quarter. The complete stock outs at MSD central and zones have affected availability at health facility level. The main challenge related to Zinc/ORS copack has been associated with funding commitment for the commodity. There has not been any consignment received to date. However, in January 2021(this quarter) funding commitment from UNFPA through DFID came through and with it GHSC-TA-TZ and MOHCDGEC stakeholders hope to see commodity availability improve next quarter (Q3FY21).

Regarding CTX tablets and suspension, the availability of both dosage forms has been erratic in the last six months. From October 2020 onwards MSD zones have been experiencing shortages of CTX. As of March 2021, MSD zones have been stocked out of CTX as follows; there are six-part numbers for CTX tabs where zones were stocked out of the five-part numbers but had some stocks of one part number. Similarly, for CTX suspension as per MSD portal stock status of March 2021, out of the seven-part numbers available for the commodity, one only had CTX suspension in stock.

For Amoxicillin DT, availability has also been affected by the funding commitment challenges.

Apart from the national shortages, essential medicines are saleable commodities whose availability is influenced by funding. There have been central government funding disbursement delays to enable facilities to procure health commodities since the previous quarter. Moreover, the delayed release of out-of-stock notification continues to affect timely procurement of health commodities by health facilities using complementary funding sources from prime vendors and other suppliers.

Actions taken:

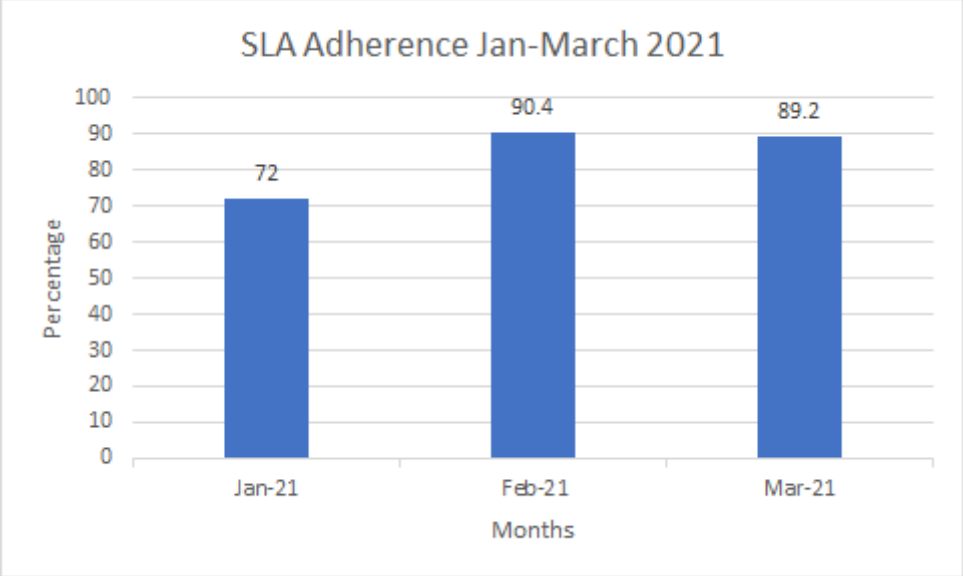
	• Supporting RCHS program in supply planning of Zinc/ORS co pack and Amoxicillin DT. Moreover, the project in the previous quarters had supported the RCHS program in ascertaining the funding gap for commodities including Zinc/ORS co pack and Amoxicillin DT. The analysis was used by the program to solicit funding which has come through for these items among others during this Quarter(Q2FY21) • GHSC-TA-TZ intensified communication with MSD (new MIS Director) to revitalize the plans for automating the out of stock notification to assist health facilities to receive the notification timely so as to able to procure from prime vendors when MSD is stocked out • Regarding Essential medicines, the project provided technical support to MOHCDGEC in forecasting and supply planning of essential health commodities for public health facilities in the country.

INDICATOR 2.1.1 PERCENTAGE OF ELMIS ISSUES REPORTED AND RESOLVED WITHIN 24 HOURS

Performance trends and descriptions:

In this quarter, the eLMIS helpdesk recorded 207 reported issues and the percentage of those resolved within 24 hours is **84%**. Compared to last quarter's performance at **86%**, this is a slight increase as shown in Figure 21.

Figure 21. SLA Adherence by Q1FY05



INDICATOR 2.3.2 PERCENTAGE OF FACILITIES SUBMITTING TIMELY AND COMPLETE ELMIS REPORTS

This indicator measures timely submission of R&R forms into the eLMIS by the health facilities which are reviewed and approved by their respective council health management teams (CHMTs) during their expected reporting periods.

Performance trends and descriptions:

Timeliness of R&R submissions by facilities operating the quarterly system averaged **90%** (Figure 22) while the timeliness of R&R submission for bimonthly reporting facilities averaged **87%** (Figure 23). This quarter's timeliness performance is relatively consistent compared to previous quarters.

Figure 22. Timely R&R Submission for Quarterly System Q2 (Jan - March 2021)

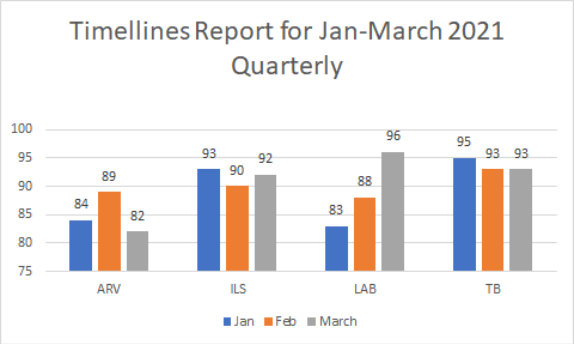
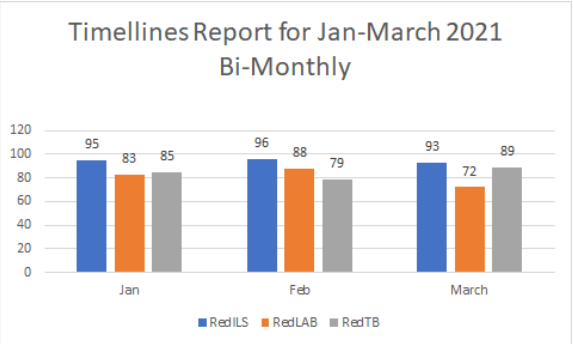


Figure 23. Timely R&R Submission for Bimonthly System Q2 (Jan - March 2021)



Root Cause Analysis:

In quarter two, a total of 21 councils in both the quarterly and bimonthly system had a timeliness reporting below 50%. This delay in submission disrupts the review and approval process done at the councils and regions due to the pileup of R&Rs at the deadline.

Nanyamba district council (DC) which reports in the bimonthly system had 16 of its health facilities reporting very late in the redesign ILS (RedILS) program during the January - February 2021 period. Similarly in the quarterly system, Ikungi District Council (DC) had 14 of its health facilities in the ARV program reporting very late for the October - December 2020 period.

INDICATOR 3.2.1 NUMBER OF PEOPLE WHO LOG INTO ELMIS (USERS AND LEVEL TYPE)

The indicator monitors the number of eLMIS registered users' interacting with the system for the period. This indicator will also account for the increased number when new users are registered as well as alert the decrease of system usage if the number of unique user logins decreases.

Performance trends and descriptions:

Figure 24. Unique User Logins by Quarter

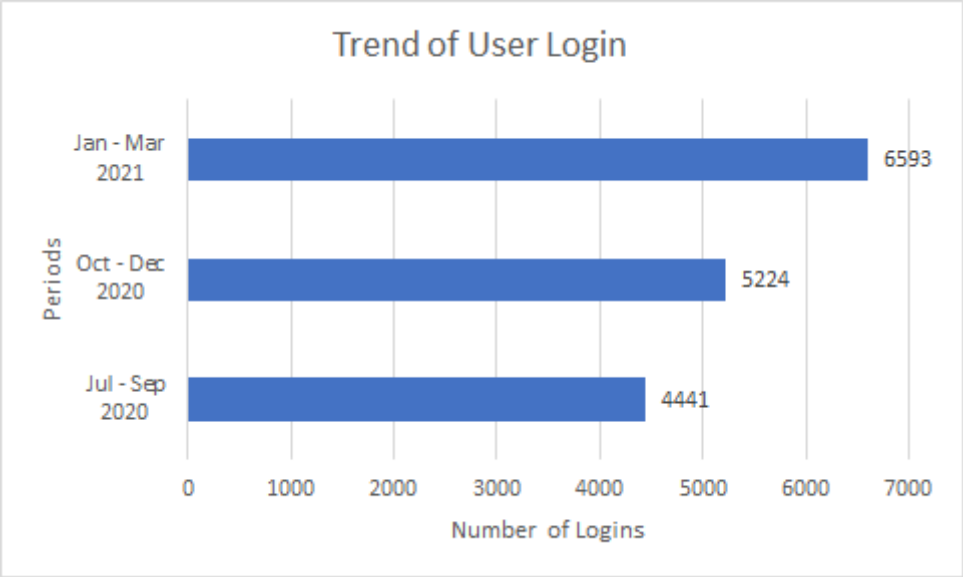
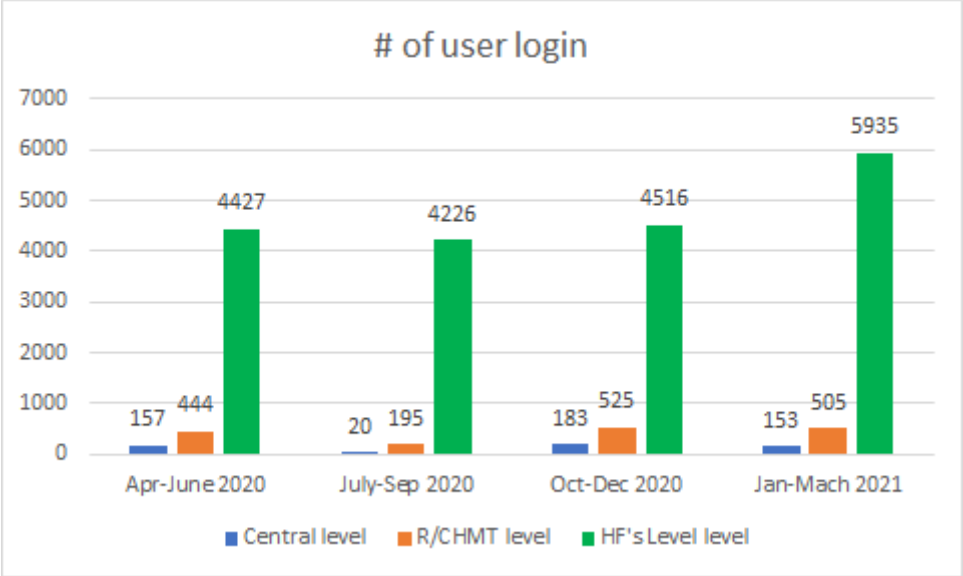


Figure 25. Number of User Logins by Level



Root Cause analysis and remedial actions:

In this quarter MOHCDGEC together with supply chain stakeholders continued with the rollout of RLS in the zones of Dodoma and Mbeya which had new eLMIS users oriented and registered into the system. This increase is mainly for new users at the health facility level. The number of active eLMIS users is 15,166.

Overall Usage for both R/CHMT has decreased compared to the previous quarter.

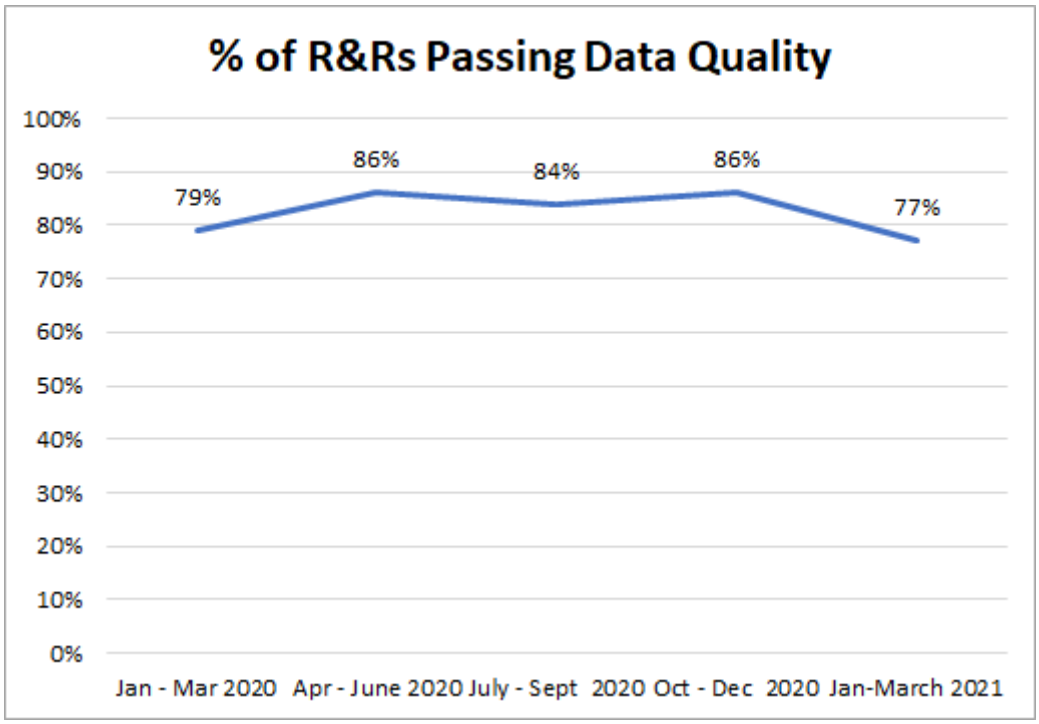
INDICATOR 3.2.2 PERCENTAGE OF R&R PASSING DATA QUALITY CHECK IN SPECIFIC PERIOD.

Reviewing health facilities Reports and Requests (R&Rs) is a critical step whereby quality of reported data is rechecked before approval and submission to MSD zones for resupplies of health commodities.

Performance trends and description:

From Jan 2021, the regional level was mandated to review health facilities R&Rs in addition to the council level. For this reporting quarter, the % of R&Rs passing data quality from all logistics systems (both quarterly and bimonthly systems) is 77% a drop compared to the last reporting quarter 86%.

Figure 26. Percentage of R&Rs Passing Data Quality



Root Cause analysis and remedial actions:

Of all the reasons for R&Rs rejection, the one namely 'reported stock out without indicating stock out days (R&Rs with zero beginning or zero ending balance and zero days of stock out)' was the highest contributor of all the rejections reasons with 907 out of 3,076 incidences making 29% of all incidences; followed by another reason for rejection namely 'Skipped managed health commodities (skipped in R&Rs)' being 16% (502 out 3,076 incidences). Remedial action(s) is to continue creating awareness to the RHMTs, CHMTs and health facilities on the factors contributing to rejection of R&Rs and this will improve quality reporting of R&Rs.

TRAINING AND TRAVELS DURING THIS QUARTER

Table 5. List of Q2Y5 Training and Travel

Date	Purpose	Responsible GHSC staff
31-Jan to 27-Feb-21	Support health commodities tracking and accountability checking exercise (All regions Tanzania Mainland)	Peter Lubambi Athanas Ntaganyamba Michel John John Francis
01-Feb to 05-Feb-21	System Redesign Technical Team Meeting in Morogoro region	Vicent Manyilizu Evance Nkya
02-Feb to 06-Feb-21	Zanzibar Holistic Supply Chain Review kick off meeting and preliminary planning meeting for modules	Michael Kishiwa Hubert Assenga Mavere Tukai Hassan Hussein Peace Nyankojo Alberto Chengula Wema Kamuzora
30-Feb to 07-Mar-21	Monitoring visits to facilities implementing redesigned logistics system in Tabora zone (Tabora region, Katavi region and Kigoma region)	Vicent Manyilizu
22-Mar to 02-Apr-21	eLearning training videos recording workshop for Bottom-up quantification and Data analytics modules	Amani Minja
08-Feb to 12-Feb-21	Malaria Quantification Review workshop	Timba Sombera Nabila Hemed
15-Feb to 18-Feb-21	Isoniazid data analysis workshop	Timba Sombera
08-Mar to 19-Mar-21	MSD Supply Plan of essential health commodities Workshop	Timba Sombera Nabila Hemed
22-Mar to 24-Mar-21	eLearning training videos recording workshop for Bottom-up quantification	Timba Sombera Nabila Hemed