Mid-Term Review (MTR) of the Health Sector Strategic Plan V (HSSP V)

HSSP Impact Indicators Report

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Dodoma – Tanzania

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Table of Contents

List of Tables

List of Figures

Acronyms/Glossary

AARR	Annual Average Rage of Reduction
ACTs	Artemisinin-based combination therapy
Afya e-HMS	Afya Electronic Hospital Management System
AfyaSS	Afya Supportive Supervision
AfyaSS	Afya Supportive Supervision
AHSPR	Annual Health Sector Performance Review
AL	Artemether Lumefantrine
ANC	ART
API	Application Programming Interface
APR	Artemisinin Partial Resistance
ARV	Antiretroviral
ASAQ	Artesunate Amodiaquine
CDH	Centre for Digital Health
CHMT	Council Health Management Teams
CHW	Community Health Workers
CSO	Civil Society Organization
CTC	Care and Treatment Clinics
CTX	Cotrimoxazole
DHIS2	District Health Information System Version 2
DHS	Demographic Health Survey
DQA	Data Quality Assessment

EMR	Electronic Medical Records
EMR	Electronic Medical Record
ETL	Electronic TB and Leprosy Register
FFARS	Facility Accounting and Financial Management
GOTHOMIS	Government of Tanzania Health Operation Management Information System
HIS	Health Information System
HISP	Health Information System Program
HIV	Human Immunodeficiency Syndrome
HMIS	Health Management Information System
HMS	Hospital Management System
HRH	Human Resources for Health
HSHSP	Health Sector HIV and AIDS Strategic Plan
HSSP V	Health Sector Strategic Plan V
ICT	Information and Communication Technology
IGME	United Nations Inter-Agency Group for Child Mortality Estimation
IRS	Indoor Residual Spray
ITN	Insecticide Treated Nets
M&E	Monitoring and Evaluation
MESF	Monitoring and Evaluation Strategic Framework
MIS	Malaria Indicator Survey
MMEIG	United Nations Maternal Mortality Estimation Inter-Agency Group
MOH	Ministry of Health
MTR	Mid-term Review
MTUHA	Mfumo Taarifa ya Uendeshaji Huduma za Afya
NASHCoP	National AIDS, STIs, and Hepatitis Control Program
NBS	National Bureau of Statistics
NCD	Non-communicable Diseases
NGO	Non-governmental Organization
NMCP	National Malaria Control Program
NSP	National Strategic Plan
NTLP	National Tuberculosis and Leprosy Program
PFM	Public financial management
PMI	The United States President's Malaria Initiative
PMO	Prime Minister's Office
PMTCT	Prevention of Mother to Child Transmission
PORALG	President's Office-Regional Administration and Local Government
RMNCAH	Reproductive Maternal Newborn Child Adolescent Health
RRH	Regional Referral Hospital
SaaS	Software as a Service
SBC	Social and Behavior Change
SDG	Sustainable Development Goal
SMART	Specific, Measurable, Achievable, Realistic, and Timely

SOURCE	Strengthening Oxygen Utilization and Respiratory Care Ecosystems
SS	Supportive Supervision
STEPS	STEPwise approach to NCD risk factor Surveillance
SWAP	Sector Wide Approach
TB	Tuberculosis
TDHS	Tanzania Demographic Health Survey
TES	Therapeutic Efficacy Studies
THIS	Tanzania HIV Impact Survey
TMIS	Tanzania Malaria Indicator Survey
TWG	Technical Working Group
UCS	Unified Community Systems
UHC	Universal Health Care
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
VIMS	Vaccine Information Management System
WHO	World Health Organization

Executive Summary

This report presents an extensive analysis of the Mid-term Review (MTR) of HSSP V performance results for impact indicators for 2021-2024. The health sector has made significant progress in reducing maternal mortality. It is on track to achieving under-five mortality, teenage pregnancy, and TB goals. There has been minimal progress in reducing neonatal mortality and total fertility rate. Limited evidence was documented on the Prevention of mother-to-child transmission (PMTCT) of HIV; however, this indicator is monitored with mathematical-based models, which may not reflect the actual situation. No progress has been achieved in reducing malaria prevalence in children under five and HIV incidence in young girls. The health sector has made limited progress in neonatal mortality, HIV incidence in youth, PMTCT, total fertility, and malaria.

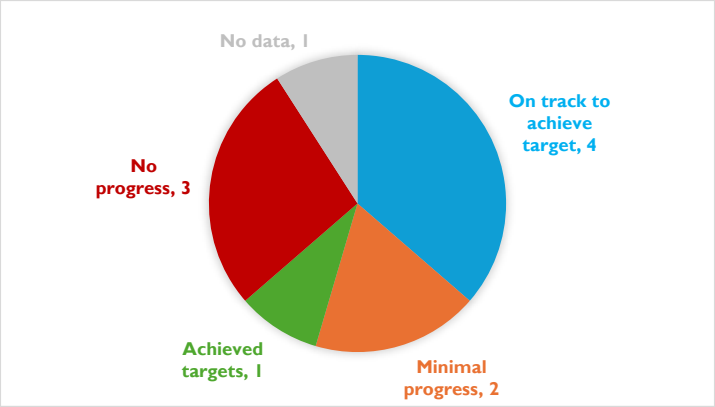


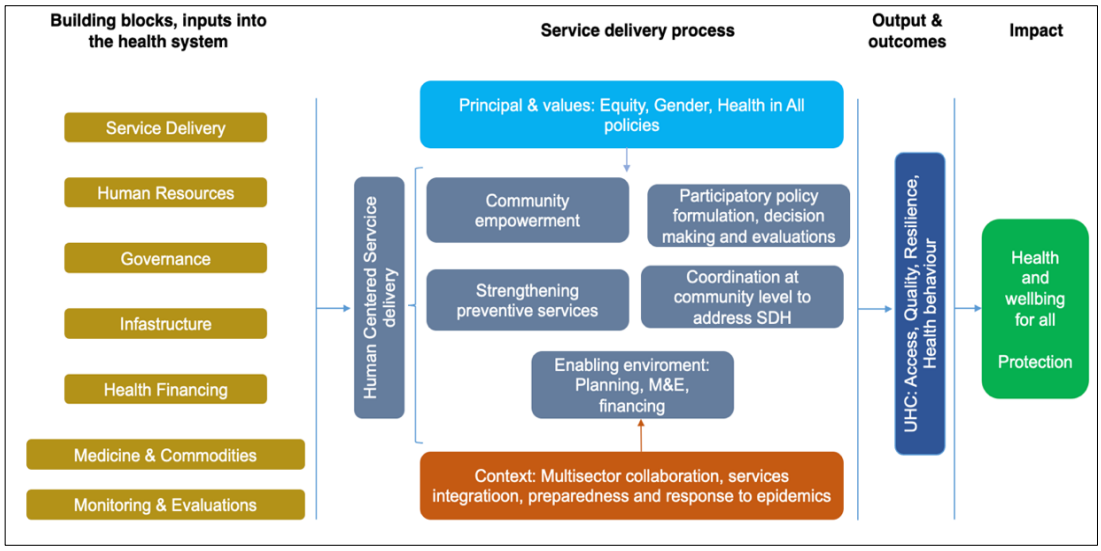
Figure 1: Summary progress for HSSP V impact indicators
Table 1: Summary of Health Sector Impact Indicators

Indicator	Baseline	Current	Target 2025	Progress
Impact				
1. Life expectancy at birth (years)	66.0	66.8	68.0	On track
2. Under-5 mortality per 1,000 live births	50	43	38	On track
3. Neonatal mortality per 1,000 live births	25	24	15	Minimal progress.
4. Maternal mortality per 100,000 live births	556	104	232	Achieved targets.
5. Total fertility rate	4.9	4.8	4.2	Minimal progress
6. Teenage pregnant or childbirth	27%	22	<20%	On track
7. HIV incidence (%) in young people (15-24)	0.14 F	0.33 F	0.07 F	No progress
8. PMTCT: % of newborns with HIV	7.9%	8%	3%	No progress.
9.Malaria prevalence in children 6-59 months	7.5%	7.9%	<3.5%	No progress
10. TB incidence per 100,000 population	273	208	162	On track
11. Mortality due to NCD (cardiovascular, cancer, chronic respiratory disease and diabetes) at 30-70 years	18%		16.2%	No data

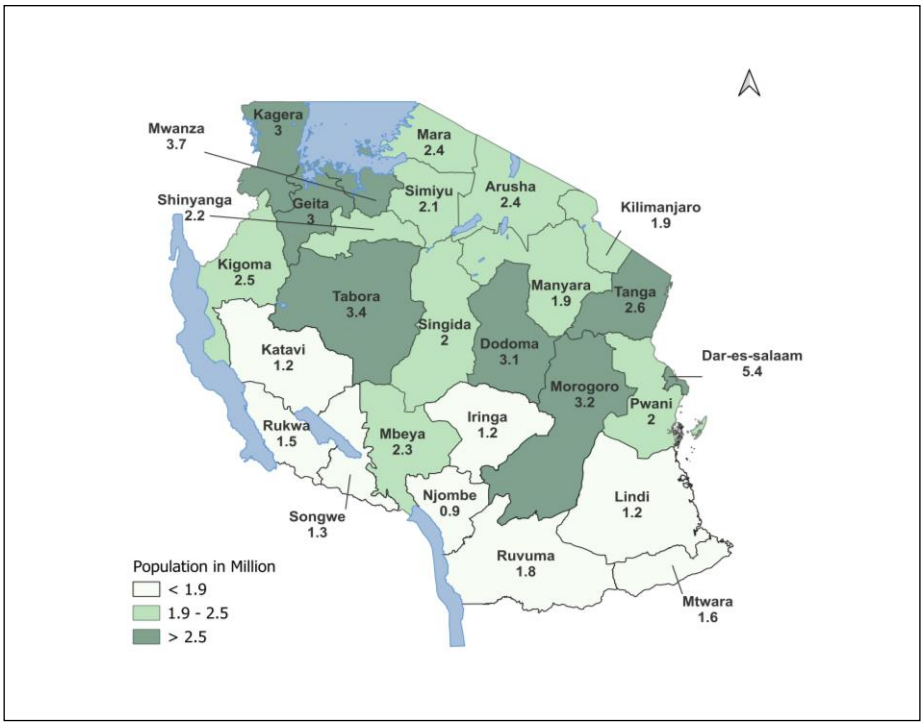
1. Background and Introduction

This section presents a comprehensive analysis of the MTR of HSSP V performance results for impact indicators for 2021-2024. Furthermore, the section presents a comprehensive analysis of HSSP V indicators. The section compiles a comprehensive lesson learned during implementation and provides recommendations for decisions about current and future programs.

1.1 Conceptual framework for HSSP V strategic plan



1.2 Distribution of Population by Region(x1,000,000), Tanzania Mainland 2023



Source: NBS-PHC 2022

2. Progress toward HSSP V targets

Table 2 summarized the performance and progress towards achieving HSSP V impact indicators.

Table 2: Performance and progress of HSSP V impact indicators

	Indicator	Baseline & source	Current	Target 2025	Progress
	Impact				
1	Life expectancy at birth (years)	NBS projections 2020 66.0 Overall 63.6 Males 68.3 Females	WHO estimates in 2021 66.8 Overall 65.2 Males 68.4 Females	68.0 years (both sexes)	On track to achieve target.
2	Under-5 mortality per 1,000 live births	TDHS 2016 67 UN estimate (2019.5) 50	DHS 2022 43	38 per 1,000 live births (to reach SDG target 2030)	On track to achieve target
3	Neonatal mortality per 1,000 live births	TDHS 2021 25 UN IGME Projection 2019 20	DHS 2022 24	15 per 1,000 live births (to reach SDG target 2030)	Minimal progress.
4	Maternal mortality per 100,000 live births	TDHS 2016 556	DHS 2022 104	232/100,000 (to reach SDG target 2030 - <140 (70))	Achieved targets.
		UN MMEIG 2017 524			
5	Total fertility rate	TMIS 2018 4.9	DHS 2022 4.8	4.2 (based on AARR 2.3% / year)	Minimal progress
6	Teenage girls (15-19) who are pregnant or have born a child	TDHS 2015/16 27%	DHS 2022 22	<20%	On track to achieve target

11	Mortality due to NCD (cardiovascular, cancer, chronic respiratory disease and diabetes) at 30-70 years (%)	WHO estimate 2016 18%		Reduction by 10%	No data

1.3 Under 5 mortalities

Over the past five years, under-five mortality has declined by 36% (from 67 to 43 deaths per 1000 live births). The significant decline occurred in children survived neonatal period (> 28 days). The decline is attributed to improvements in commodities and childhood vaccination specifically against diarrhea and pneumonia (coverage over 93%), increase in early initiation of breastfeeding from 54% to 92%, and improved household access of safe drinking water from 60% to 72%.

1.4 Neonatal mortality

The health sector has made limited progress in neonatal compared to overall under-five mortality. Most deaths occurred within the first 48 hours due to prematurity, birth asphyxia and birth trauma (Figure 2). Progress in reducing neonatal deaths has been stalled by limited access to high-quality postnatal care for the newborn, particularly right after birth or within the first 48 hours. The percent of newborn who received postnatal check within 48 hours of delivery decreased from 55% in 2015 to 41% in 2022. High neonatal deaths are also attributable to poor antenatal care. Early initiation of antenatal care (< 12 weeks) has increased from 42% to 60% and the number of four or more antenatal visits has increased from 61% to 80%. The improvements made in access has not resulted in reduction in neonatal mortality perhaps due to limited human resources and medical equipment to handle premature births and neonatal emergencies.

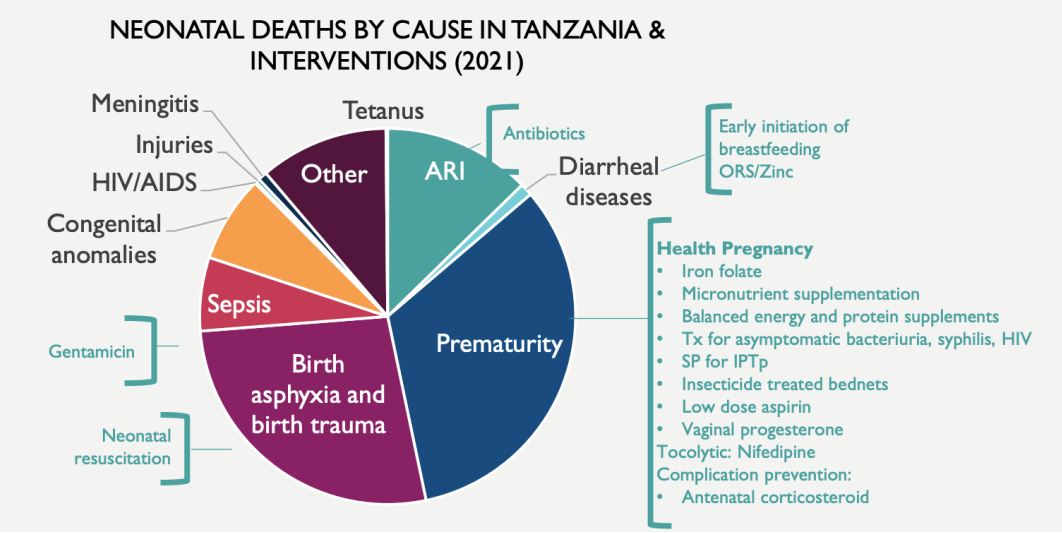


Figure 2: Causes of neonatal deaths in Tanzania

Source: WHO Global Health Observatory. Estimated deaths by cause, sex, and WHO member state. 2019; Lancet: Small Vulnerable Newborns May 2023

1.5 Maternal mortality

Tanzania has made notable progress in reducing maternal mortality rates surpassing the HSSP V target of 262 deaths per 100,000 by 2025. These achievements are a testament to the ongoing improvements in healthcare infrastructure, access, and quality of services, as well as policy in Tanzania. Reducing the pregnancy related deaths to 104 per 100,000 live births demonstrates the country's commitment to improving maternal health. The success is attributed to multiple efforts, including increased investment in improving or expanding facilities infrastructure through renovations and construction of maternity wards, which led to increased institutional deliveries to 85%. Regional variations exist with regions such as Tabora, Manyara, Katavi, Tanga, Singida, and Geita demonstrate limited improvements. Improvements in maternal mortality is also associated with increased proportion of pregnant women with early initiation of antenatal care (< 12 weeks) from 42% to 60% and the proportion with four or more antenatal visits from 61% to 80%. Close monitoring of maternal deaths should be continuously monitored as some maternal health proxy indicators such prevalence of anemia in women of reproductive age and postnatal care or mothers has remained relatively low.

DHS 2015/2016	DHS 2015/2016

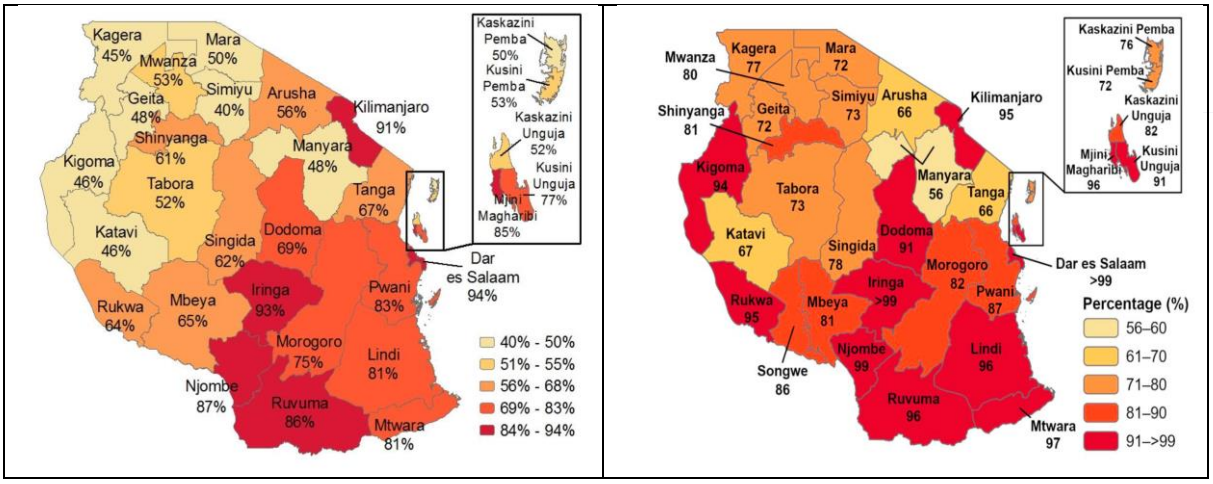


Figure 3: Regional institutional deliverie

1.6 Fertility and family planning

The total fertility rate has reduced from 4.9 to 4.8, representing minimum progress over the past three years. Limited progress may be associated with low coverage of modern contraceptives. Modern contraceptive use by currently married women has stayed relative unchanged at 32% over the period 2015-2022. Among adolescents, the prevalence has also remained relatively low at 14% since 2021.

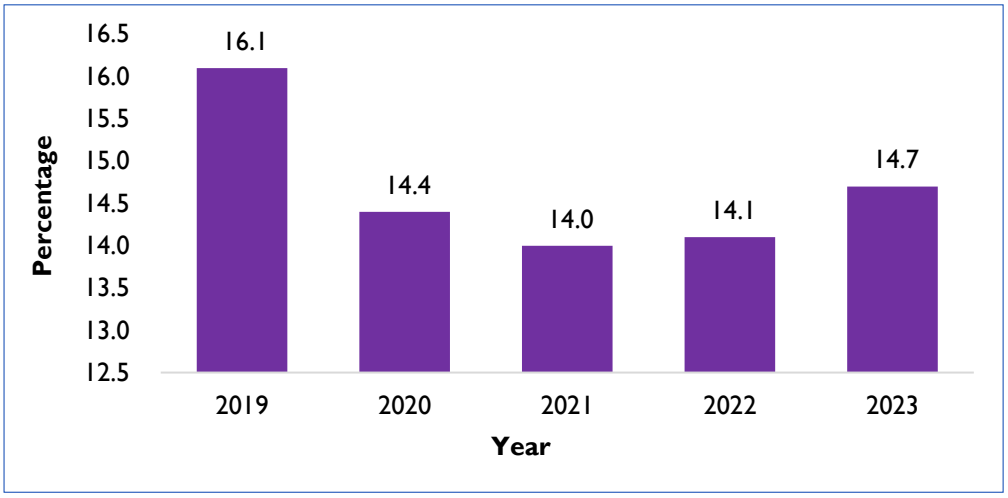


Figure 4: Adolescents received family planning methods Tanzania mainland 2019 to 2023

Source: DHIS2 2023

In 2023, demand satisfied with modern methods among currently married women 15-49 was 53%, which is similar to baseline estimates reported in 2015/2016. The coverage of family planning new acceptors has increased from 36% in 2021 to 41% in 2023 (Figure 5).

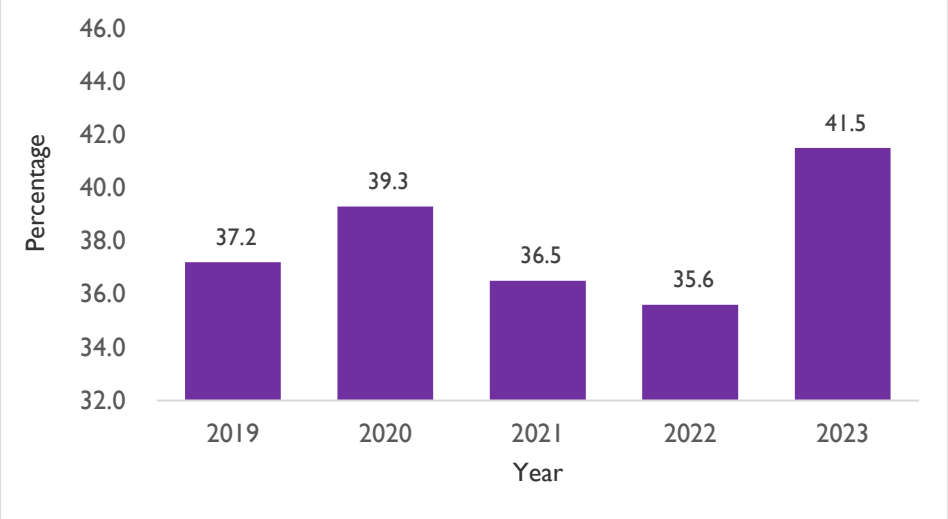


Figure 5: Coverage of family planning new acceptors Tanzania Mainland 2019 to 2023

1.7 HIV

HIV incidence in young people

The health sector has not achieved its target for HIV incidence in young people (15-24). Incidence in young girls increased from 0.14% in 2017 to 0.33% in 2022. Gender inequalities and norms, poverty, sexual violence, and forced marriages are the main contributors to the increased burden on youth. Limited access to adolescent sexual and reproductive-friendly services is compounding the challenge.

PMTCT: % of newborns with HIV infection

UNAIDS model estimates show the country has made no progress towards reducing HIV infections in newborns, with prevalence remaining at 8% over the past 5 years. In contrast, program data between 2020 and 2023 show an increase in the proportion of exposed children tested at 6 – 8 weeks from 68% to 80%, a high proportion of HIV exposed infant receiving Antiretroviral (ARV) prophylaxis (90% - 95%), and HIV exposed infant receiving Cotrimoxazole (CTX) (95%) (AHSPR, 2023). ARV treatment coverage in women, including those who are pregnant, has consistently remained high at 98%. The proportion of women 15+ with viral load suppression is at 94.9%, just a point away from the UNAIDS target of 95% (THIS, 2022-2023). In order to achieve the HSSP V target, the program must increase the proportion of HIV-positive individuals knowing their HIV status, which has remained relatively low at 85% in women and 78% in men. Scaling up modern contraceptives in women living with HIV must be prioritized to prevent high rates of HIV exposure in infants associated with unwanted pregnancy. Modern contraceptive prevalence in HIV-positive women is currently below 50% in women of reproductive age living with HIV.

1.8 TB

The health sector is on track to achieve the target of reducing TB incidence. The Latest estimates show that TB incidence in 2019 was 273 cases per 100,000 population. By 2023, TB incidence had decreased to 208, a positive direction towards the 2026 target of 162 cases per 100,000 population. The success may be associated with improved access to TB prevention and diagnosis at a community level, contributing to increased TB notification. TB notification in children is at 16%, slightly surpassing the national target of 15%.

1.9 Malaria

The health sector has made no progress and is unlikely to achieve its target of reducing malaria prevalence in children under five to less than 3.5% by 2025. The prevalence declined from 9% in 2012 to 7.5% in 2017, then slightly increased to 7.9% in 2022. Malaria prevalence varies across regions, with regions around Lake, Northwest, and Southern zones revealing the highest prevalence ranging from 11-23% (**Error! Reference source not found.**). The prevalence is also disproportionately higher in rural (10.4%) than urban (0.7%). Social, economic, environmental, and transmission risks predominantly explain the difference in malaria prevalence.

Coverage of key malaria vector control remains relatively below the National Malaria Control Program (NMCP) targets for household access to Insecticide Treated Nets (ITN), which is at 58% (80% target) and ITN use in infants at 69.2% (100% target). Malaria is the leading cause of death and hospital admission and among the top three causes of hospital visits in children in Tanzania. The health sector must invest more in scaling up ITN use and complementary vector control approaches such as larviciding and Indoor Residual Spray (IRS). Furthermore, efforts to empower communities through Social and Behavior Change (SBC) interventions to take preventive actions such as proper and consistent use of ITN and reducing mosquito breeding sites may enhance progress toward malaria burden reduction.

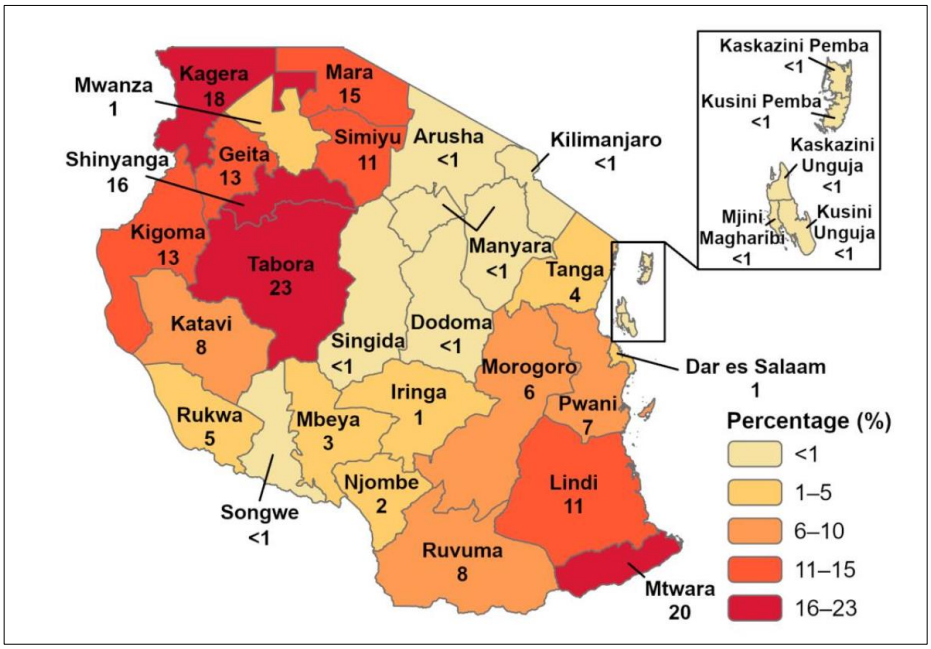


Figure 6: Malaria prevalence in children 6-59 months of age

1.10 Non-communicable diseases

Global burden of disease data shows that the mortality rates of the leading causes of NCD deaths have declined over the past 20 years (**Error! Reference source not found.**). The last STEPS survey conducted nearly 10 years ago showed the prevalence of the leading risk factors for NCD (overweight and obese) was at 26%, raised cholesterol at 26%, and raised triglycerides at 33.8%. The prevalence of diabetes was found to be 9.1%, and 25.9% for hypertension. Recently completed STEPs survey will provide a comprehensive status of the trends of NCD in Tanzania.

3. Interventions that contributed to the progress

1.10.1 Improved quality of care supportive supervision monitoring systems

The Ministry has developed and launched Afya supportive supervision tool (AfyaSS), used by Council Health Management Teams (CHMT) and other health managers to monitor the quality of services at different levels of facilities, including services provided in the community. The tool collects data on various parameters, including training for CHWs and the availability of tools essential tools (**Error! Reference source not found.**). Integrated Community Case Management (iCCM) is among the interventions benefiting from UCS. In addition, it tracks the quality and compliance of implementation of SBC activities, including CHW interpersonal communication activities, radio, and community theater.

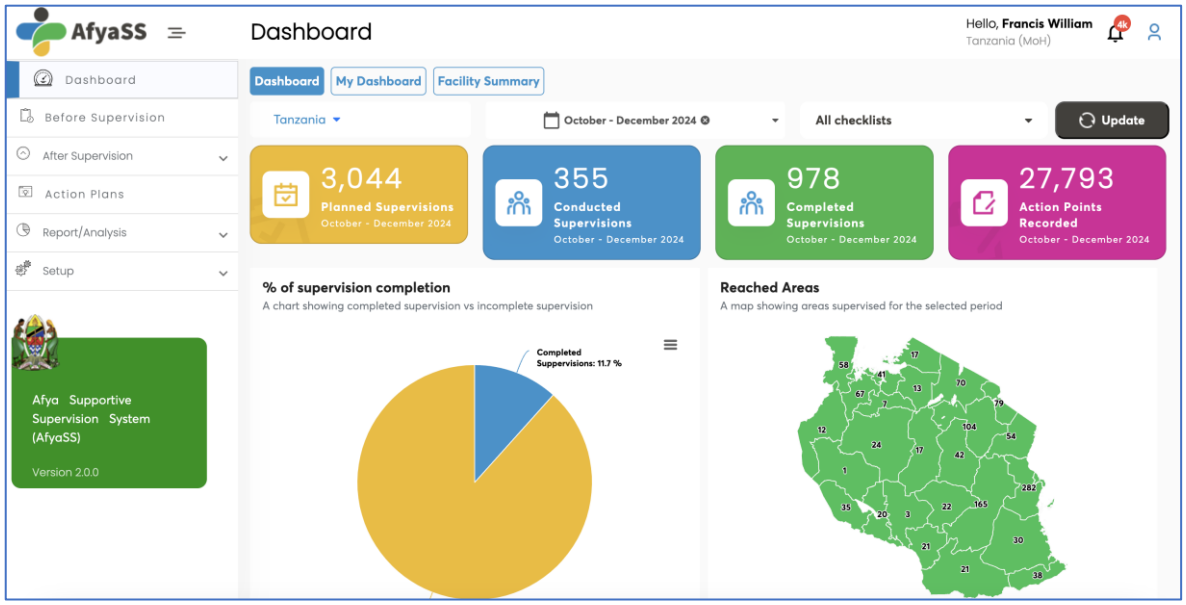


Figure 7: AfyaSS dashboard

1.10.2 Supported innovations in M&E and ICT

m-mama is Software as a Service (SaaS) innovation that provides emergency transportation services for pregnant women and newborns. Individuals can access services by dialing the number 115. The system uses community taxis and ambulances as the main means of transportation. The primary goal of the m-mama system is to strengthen maternal and child healthcare services, ultimately saving the lives of mothers and newborns. The system is implemented closely with the PORALG and other stakeholders. Since 2022, the system has successfully facilitated 95,957 emergency referral cases. m-mama system is integrated with DHIS2 and captures key indicators of antenatal complications, neonatal emergencies, postpartum emergencies, and labor complications.

1.10.3 e-learning and telemedicine

Centre for Digital Health (CDH) was developed by the Ministry of Health and development partners to become a vibrant hub for innovation, collaboration, and excellence, fostering seamless integration of digital health solutions into the health sector.[1] CDH has faced implementation delays and inefficiencies; hence, dedicated efforts are needed to ensure CDH delivers on its intended objectives. Implementation of telemedicine services has started. However, challenges such as limited resources

and infrastructure constraints, including limited internet connectivity, unreliable electricity, outdated hardware, and insufficient digital infrastructure, persists.

4. Change in the context

1.11 Services utilization

HSSP V was developed during COVID 19 pandemic which resulted in the disruption of the health system globally. There was a modest reduction in the utilization of preventive services particularly for childhood vaccination (PENTA 3), IPTp2, upper respiratory infections (URI) at OPD, and timely ANC utilization (Figure 8). Public facilities experience significant decline in early ANC visits (11%) compared to private facilities (3%), and faith-based and parastatal institution's owned facilities (1%)

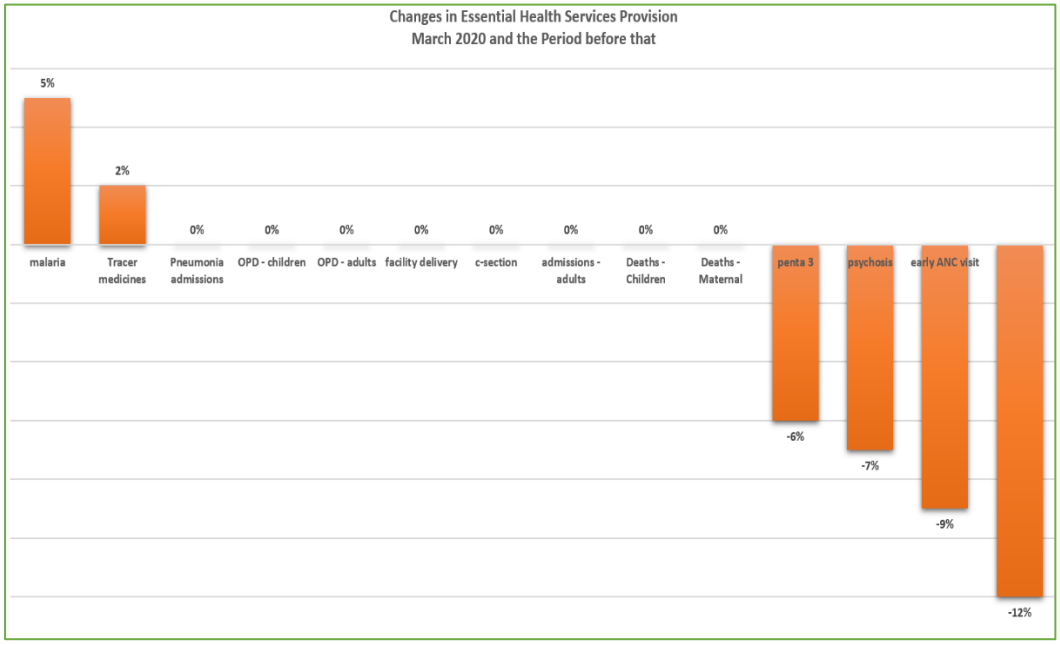


Figure 8: Changes in health services utilization before and after COVID 19 pandemic

1.12 Life expectancy

On the other hand, life expectancy wasn't influenced by COVID 19 Pandemic. There has been substantial increase in life expectancy post COVID 19 pandemics.

Indicators	2019	2020	2021	2022
Male Life Expectancy	63.1	63.6	64.7	65.2
Female Life Expectancy	67.7	68.3	68.9	70.2
Total Life Expectancy	65.4	66.0	66.9	67.8

Figure 9: Life expectancy during the period before and after COVID 19

1.13 Admissions due to pneumonia and upper respiratory infections in adults with IPD

There were spikes of adult's admissions due to pneumonia between Feb 2021 and Jul-Aug 2021 (**Error! Reference source not found.**). These spikes seem to be contributed by the faith-based

health facilities which have doubled (102%) the number of pneumonia cases in the period from March 2020. Nevertheless, there was a change in the utilization of services during the pandemic.
The number of people diagnosed with Upper Respiratory Infection (URI) at the OPD changed to very low values from May 2020 to Dec 2020 (Figure 10). Prediction of the number of URI, based on the previous data, shows that there was an average decrease of at least 21% in URI cases.

Changes in adult's hospitalization due to pneumonia

Changes in adult's hospitalization due to

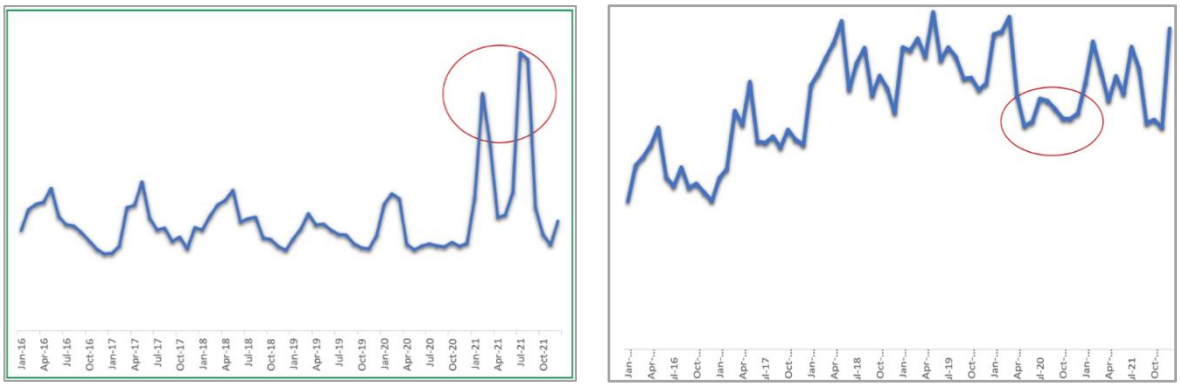


Figure 10: Changes in hospitalization due to pneumonia and URI before and after COVID pandemic

1.14 Inpatients Attendances (IPDs)

In the year 2023, the number of patients who were hospitalized modestly increased by 151,744 (9%) compared to 31,606 (2%) from 2021 to 2022 shown Table 3. The changes may be associated with improved access to health services and may have contributed to increased life expectancy.

Table 3: Number of new patients who were hospitalized in year 2021- 2023

Age	**2021**	**2022**	**2023**
Under 1 month	67,438	74,992	89,683
1 month - less than 1year	120,475	123,536	152,209
1 year - Less than 5 years	256,279	248,752	287,109
5 years - Less than 60 years	991,892	974,280	1,046,356
60 years and above	226,244	209,162	207,109
Total	**1,662,328**	**1,630,722**	**1,782,466**

Challenges and unfinished agenda

The country has made significant progress in improving key sector performance indicators. The health sector should develop strategic intervention towards improving low performing areas, specifically in neonatal mortality, prevention, and treatment of malaria in children and pregnant women, HIV in youth

and prevention of mother to child transmission, family planning in general population and adolescent, and prevention and control of non-communicable diseases.

Appendix: Updated Result framework for impact indictors

Target 2026	Milestone 2025	Source of data	Precondition	Responsible
Health information and information systems for health are strengthened, including at the subnational level,				
Life expectancy at birth (years)	68.0	NBS projections	Improved health care utilization per capita	Sectorwide
Under-5 mortality per 1,000 live births	38	DHS	Improved prevention and treatment of malaria, pneumonia, and diahea	MoH RMNCAH
Neonatal mortality per 1,000 live births	15	DHS	Improved quaity of care a birth and for sick newborns	MoH RMNCAH
Maternal mortality per 100,000 live births	232	DHS	Improved quality of care during pregnancy and post delivery period	MoH RMNCAH
Total fertility rate	4.2	DHS	Improved coverage of modern contraceptives	MoH RMNCAH
Teenage pregnant or childbirth	<20%	DHS	Improved coverage of modern contraceptives and sexual violence among adolescent girls	MoH RMNCAH
HIV incidence (%) in young people (15-24)	0.07 F	UNAIDS estimates	Improved sexual and reproductive health among adolescent	NASHCoP
Malaria prevalence in children 6-59 months	<3.5%	MIS	Improved coverage ITN among children	NMCP
PMTCT: % of newborns with HIV	3%	UNAIDS estimates	Improved coverage of ART among pregnant women and modern contraceptive among women living with HIV	NASHCoP
TB incidence per 100,000 population	162	NTLP projections	Improved community TB notification	NTLP
Mortality due to NCD (cardiovascular, cancer, chronic respiratory disease and diabetes) at 30-70 years	16.2%	DHIS2	Improved prevention and treatment of NCD	MoH NCD