Ministry of Health Republic of South Sudan

5th ANNUAL REPORT

2015 HEALTH MANAGEMENT INFORMATION SYSTEM (HMIS)

ACKNOWLEDGEMENTS

On behalf of the Ministry of Health of the Republic of South Sudan, I would like to extend our appreciation to all institutions and individuals who contributed to the preparation of the Health Management Information System (HMIS) Annual Report 2015, and in particular to the State Ministries of Health and County Health Department M&E Teams who sent the data and the reports to Juba for processing and analysis. Without their work and contribution this report would have never been possible.

While it would be impossible to list each contributor by name, the Ministry of Health appreciates the support and contribution of all health partners who have provided funds and contributed efforts to continue to operationalize the HMIS of South Sudan.

I would like to extend my sincere appreciation to the Ministry of Health team in the department of Policy, Planning, Budging and Research for their initiative to write this report. Appreciation goes particularly to Victor Misaka- data manager MOH, Temesgen Birara-M&E Specialist UNDP, Francis Yatta- Ag Director for M&E, Susan Ayen-M&E Specialist RRHP/MoH and M&E officers from malaria, TB, HIV and Nutrition departments. The contents of this document are the responsibility of the Ministry of Health and do not necessarily reflect the views of the writers.

Finally, many thanks to the health officers in each and every one of the health facilities of our country who work every day to improve health services and the health of the people of South Sudan.

Dr. Richard Lino Lako, MD, MSC.
Director General of Policy, Planning, Budgeting & Research
Ministry of Health- Juba
Republic of South Sudan

ACRONYMS

ANC	Antenatal Care
ARI	Acute Respiratory Infection
ART	Anti-retroviral Therapy
CES	Central Equatoria State
CHD	County Health Department
CHW	Community Health Worker
C-section	Caesarean Section
DHIS	District Health Information System
DPT	Diphtheria, Pertussis and Tetanus
EES	Eastern Equatoria State
EPI	Extended Programme of Immunization
HF	Health Facility
HFS	Health Facility Survey
HMIS	Health Management Information System
HSDP	Health Sector Development Plan 2012-2016
IDSR	Integrated Disease Surveillance and Response
ITN	Insecticide Treated Net
IPT	Intermittent Preventive Treatment (Malaria)
IT	Information Technology
LATH	Liverpool Associates in Tropical Health
LQAS	Lot Quality Assurance Sampling
M&E	Monitoring & Evaluation
MDG	Millennium Development Goal
MOH	Ministry of Health
MUAC	Mid-Upper Arm Circumference
NBG	Northern Bahr el-Ghazal State
NGO	Non-Governmental Organisation
OPV	Oral Polio Vaccine
ORS	Oral Rehydration Solution
PHCC	Primary Health Care Centre
PHCU	Primary Health Care Unit
PLHIV	People Living with HIV
PMTCT	Prevention of Mother to Child Transmission
QSC	Quantitative Supervisory Checklist
RSS	Republic of South Sudan
SBA	Skilled Birth Attendant
SMOH	State Ministry of Health
SS	South Sudan
TT	Tetanus Toxoid
TWG	Technical Working Group
VCT	Voluntary Counselling and Testing
WBG	Western Bahr el-Ghazal State
WES	Western Equatoria State

TABLE OF CONTENTS

ACKNOWLEDGEMENTS i

ACRONYMS ii

TABLE OF CONTENTS iii

LIST OF TABLES AND FIGURES v

EXECUTIVE SUMMARY vii

SUMMARY OF INDICATORS: 2011 – 2015 ix

INTRODUCTION 1

OVERVIEW OF THE SOUTH SUDAN HEALTH CARE SYSTEM 2

HEALTH SECTOR ORGANISATION AND MANAGEMENT 4

OVERVIEW OF THE ROUTINE HEALTH MANAGEMENT INFORMATION SYSTEM 5

DATA SOURCES AND DATA FLOW 6

DATA FLOW, DATABANK AND REPORTS 7

2015 HMIS DATA PREPARATION FOR THE ANNUAL REPORT 9

ROUTINE HEALTH MANAGEMENT INFORMATION SYSTEM RESULTS FOR 2015 9

OPERATIONAL HEALTH FACILITIES IN 2015 9

CONSISTENCY OF REPORTING 10

HEALTH SERVICES INDICATORS OF THE HMIS 2015 11

UTILISATION OF HEALTH SERVICES 11

CHILD HEALTH 21

DEATHS IN HEALTH FACILITIES 27

TUBERCULOSIS CONTROL 28

HIV/AIDS 30

M&E AND HMIS ACTIVITIES IN 2015 33

ANNEXES 36

ANNEX 1: SUMMARY OF PERFOMANCE BASED ON CORE INDICATORS 2015 37

ANNEX 2: COUNTIES PRIORITY HEALTH SERVICES INDICATORS 2015 38

ANNEX 2 - PRIORITY INDICATORS FOR the ROUTINE MONTHLY REPORT 59

INDICATORS for THE EXPANDED PROGRAMME OF IMMUNIZATION 61

Indicators for Infectious Diseases Surveillance and Response (IDSR) 62

ANNEX 3: ROUTINE REPORT HMIS 2015 64

Part 1 Key Routine HMIS Monthly Report form 64

PART 2: EXPANDED PROGRAMME OF IMMUNIsATION 65

PART 3: INPATIENTS 66

Part 3A: Maternity and Surgical Section 67

Part 4: Therapeutic Feeding Centre/Stabilisaton Centre 67

Part 5: FAMILY PLANNING 68

PART 6A: HIV HCT 68

Part 6B: HIV SERVICES AT ANC 69

Part 6c: HIV SERVICES AT Maternity 69

Part 6d: HIV Exposed infants 69

LIST OF TABLES AND FIGURES

List of Tables

Table 1 2015 POPULATION ESTIMATES ---- 2
Table 2 ORGANISATIONAL CHART OF THE MINISTRY OF HEALTH, REPUBLIC OF SOUTH SUDAN ---- 4
Table 3 DATA SOURCES, DATA ELEMENTS AND COLLECTION METHODS OF THE ROUTINE HMIS ---- 6
Table 4 MONTHLY ROUTINE REPORTING BY STATE IN 2015 ---- 10
Table 5 UTILISATION OF HEALTH SERVICES IN SOUTH SUDAN STATES, HMIS 2015 ---- 11
Table 6 UTILISATION OF CURATIVE HEALTH SERVICES IN SOUTH SUDAN STATES, HMIS 2015 ---- 12
Table 7 ANC COVERAGE RATES IN SOUTH SUDAN IN 2015 ---- 14
Table 8 DELIVERIES IN HEALTH FACILITIES IN 2015 ---- **Error! Bookmark not defined.**
Table 9 CAESAREAN SECTIONS CONDUCTED IN SOUTH SUDAN IN 2015 ---- 18
Table 10 VACCINATION COVERAGE RATES FOR CHILDREN UNDER 1 YEAR 2015 ---- 21
Table 11 Number of medical conditions reported in 2015 ---- 27
Table 12 DEATHS IN HEALTH FACILITIES IN 2014 ---- 27
Table 13 HCT CLIENTS TESTED AND FOUND POSITIVE FOR HIV IN 2015 ---- 30
Table 14 PERFORMANCE OF PMTCT SERVICES IN 2015 ---- 32

List of Figures

Figure 1 MAP OF SOUTH SUDAN STATES AND COUNTIES ---- 2
Figure 2 Monthly Routine Reporting Rates by State 2015 ---- 10
Figure 3 ANC1 VS ANC4 COVERAGE RATES IN SOUTH SUDAN IN 2015 ---- 14
Figure 4 Trend in ANC4+ COVERAGE RATES IN SOUTH SUDAN IN 2015 ---- 15
Figure 5 Rates for ITN, IPT2 and TT2 During ANC in South Sudan in 2015 ---- 15
Figure 6 Deliveries in Health Facility by Skilled birth Attendant 2015 ---- 18
Figure 7 Trend in Postnatal Care coverage in South Sudan in 2015 ---- 19
Figure 8 Family planning coverage new users in South Sudan in 2015 ---- 20
Figure 9 VACCINATION COVERAGE RATES FOR CHILDREN UNDER 1 YEAR 2015 ---- 22
Figure 10 DEFAULTER RATES AGAINST DPT/Penta-1 and DPT/Penta-3 2015 ---- 23

Figure 12 : POLIO VACCINATION COVERAGE 2015---------- 23

Figure 13 VITAMIN A COVERAGE 6-59 MONTHS CHILDREN IN 2015 ---------- 24

Figure 14 ACUTE AND SEVERE MALNUTRITION SCREENING IN HF 2015---------- 25

Figure 15 Consultation Curative Rates for Major Diseases in Children Under 5 in 2015 ---------- 25

Figure 16 Malaria Diagnostic Rates in Under 5 Children in 2015 ---------- 26

Figure 17 Dirarrhoea cases treated with ORS Rate in children 2015---------- 26

Figure 18 Trends in the number of smear positive and all forms of TB patients in 2015---------- 28

Figure 19 Trends in treatment success rate in 2015---------- 29

Figure 20 Percentage of HTC Clients Tested Positive in 2015---------- 31

Figure 21 Number of PLHIVs Currently on ART as of December in 2015 ---------- 32

Figure 22 Percentage of Antenatal client tested positive for HIV in 2015---------- 33

EXECUTIVE SUMMARY

The Ministry of Health's fourth annual Health Management Information System (HMIS) report has been published to provide details on curative and preventive services provided to the population of South Sudan by primary health care facilities in all ten states and eighty counties of the country, throughout 2015. The report documents progress towards targets set out in the Ministry's Health Sector Development Plan (HSDP) 2012-2016 which is the basis for the selection of indicators reported by the health facilities of South Sudan.

The HMIS is an essential component of the Ministry's Monitoring & Evaluation (M&E) programme for the whole health sector and is designed to routinely assess health service performance and progress in terms of the Country's health priorities. The routine HMIS of South Sudan consists of a monthly report about a set of 47 priority indicators and data elements collected by health facilities from the community, health care services and the health care system. It was first rolled out in two states in 2010 but didn't start collecting regular data from the whole Country until 2011. As well as information provided by the routine HMIS, the MOH also organises health surveys and other assessments as part of the non-routine HMIS. During 2015 it conducted a Rapid Health Facility Survey (HFS) in all ten States to evaluate the quality of health delivery services in South Sudan and to strengthen the capacity of the MOH to perform rapid health assessments. The data collected from the HFS complements, and should be used in conjunction with, the results set out in this report of the routine HMIS.

The information in this report was compiled from 14,214 monthly HMIS reports submitted from a total of 1,399 fully or partially operating health facilities over 2015. This resulted in an average reporting rate of 85% for the year; a substantial increase from the 47% reporting rate for 2012, 76% for 2013 and 74% for 2014. Following the cascade system designed by the MOH in 2010, the reports compiled by the health facilities were first sent to their respective county health departments (CHD) where data was captured for each facility in the District Health Information System (DHIS) and then exported to the State MOH where it was, along with the other counties, sent to the M&E directorate in the MOH in Juba. About half (56%) of the health facilities managed to submit a whole annual complement of twelve monthly reports throughout the year. This is a great improvement from 2013 which was 35% but lower than the 2014 of 67%. The consistency of submission for the country was affected by the outbreak of unrest on December 15th 2013 which greatly disrupted routine report submission through the DHIS. Most opposition controlled areas submit their report through the NGOs in an Excel or Word format which often either reaches the MOH late or does not arrive at all.

The use of health services for preventive and curative care further increased to 13,252,631 as compared to 2014 (8,224,869). This gave a curative utilisation rate of about 0.9 visits per person per year in 2015 compared with 0.6 for 2014; and quite on the way to the HSDP target of 1 in 2016. About 38% of all services were provided to children under five years of age, which resulted in a utilisation rate of 1.7 which is better than 1.3 as compared to 2014. Malaria was by far the most common cause for consultation among children under five, followed by diarrhoea and pneumonia.

During 2015 the coverage for ANC1 and ANC4+ visits was 38.6% and 17.7%, respectively, using the estimated pregnant population as the denominator. When compared with 2014, ANC 1st visit coverage decreased by 14.4% and ANC 4+ visits by 6.3%. Nationally, 41.8% of mothers who attended

an ANC clinic walked out with an insecticide-treated net (ITN) compared with 42% in 2014. However, for IPT2 there was a great improvement of 45.2% from 32% in 2014. The national coverage for TT2 for women attending ANC in 2015 is 32.8%, a slight increase from 2014 which was 31% but still way below the HSDP target of 80%.

The total number of deliveries in health facilities continued to moderately increase since 2011, but this still represents only 13% of expected deliveries in the country. However, of that increase a slightly higher proportion was delivered by a skilled birth attendant (SBA) than non-skilled personnel. The overall rate for delivery by SBA is still only about 8% (7% in 2014), which is substantially below the HSDP target of 30%. The rate of Caesarean sections also remains very low, with no increase from the 2014 score of 0.3%.

Although postnatal care coverage has shown steady increase since 2011, it remained stagnant at only 11% in 2013 and 2014, it further dropped to 8.3% in 2015 – the HSDP target is 40%. New user of family planning services has gradually increased from 11,366 in 2011 to 26,840 in 2014 and decreased to 17,924 in 2015 which represents about 0.7% coverage - the HSDP target is 20%.

The expanded programme of immunisation (EPI) saw mixed results for vaccine indicator coverage rates in 2015, with the rates for DPT1 and 2 dropping; OPV3 and DPT3 remained stagnant in 2015 39% and 37% respectively. BCG and measles coverage stands at 45% (40% in 2014) and 49% (62% in 2014) respectively. Vitamin A supplements to children 6-59 months also slightly decreased from 9% to 8.4%. However, this indicator still has a substantial way to go to reach the HSDP target of 80%. The average DPT1 to DPT3 defaulter rate is at 18.4% nationally with a decline from the 24% score of 2014.

The report also includes information and data from the HIV/AIDS and TB programmes in the country, both of which showed some expansion in 2015, with an increase in the number of facilities offering TB services increasing from 72 to 87 and facilities offering HIV treatment from 22 to 27 in 2014 and 2015 respectively. The TB detection rate increased from 72 (68 in 2014) per 100,000 head of population (the HSDP target is 79) with the TB treatment success rate from 2014 to 2015 increased from 76% to 78% overall for those under DOTS; 85% is the HSDP target. The proportion of VCT clients tested for HIV dropped slightly since 2013, whereas the proportion of HIV positive pregnant women receiving ANC provided with ARV therapy for PMTCT increased moderately.

By 2015, the routine HMIS is fully up and running and the quantity of reports increased from all states and counties. To this end the MOH has annually organised a series of workshops throughout the country since 2012 to 2014. This year's annual report writing changed the tradition of conducting review meeting to clean data with participation of States and Counties. After four years of doing the exercise the Ministry opted to write it in order to reduce the cost of conducting the workshops as well as that of hiring the consultants. However, the draft report as well as methodology used to write this report will be shared with State Ministries and partners so that their views are included before printing. In the reporting period supportive supervision, training on M&E/HMIS/DHIS and two major surveys were conducted (Lot Quality Assurance Sampling (LQAS) and Health Facility Assessment (HFA)) in collaboration with different health partners. The quality of reporting is still a challenge which needed to be seriously addressed by partners and MOH at all levels.

SUMMARY OF INDICATORS: 2011 – 2015 [PERFOMANCE BASED ON HSDP TARGETS]

Indicators in the Routine Report*	HSDP Targets	2011	2012	2013	2014	2015	Performance against NSDP 2012-2016	Remark
Utilization rate (all ages)	1	0.2	0.5	0.6	0.6	0.9	Not attained	x
Utilization rate (under 5 years)		0.6	1	1.2	1.3	1.7	**Significant progress**	√
Antenatal care coverage 1st visit		20%	34%	45%	53%	61%	**Significant progress**	√
Antenatal care coverage 4th or more visits	40%	13%	19%	23%	24%	27%	Sub Optimal Utilization	√
Antenatal care rate		68%	56%	51%	47%	46%	**Significant progress**	√
IPT2 coverage of pregnant women receiving ANC		60%	53%	50%	47%	53%	**Significant progress**	√
IPT2 coverage of all pregnant women	40%	12%	18%	23%	25%	32%	Not attained	X
Coverage of bed nets for pregnant women		12.0 %	14.0 %	15.0%	22.0%	45.0%	**Increasing trends**	√
TT2 coverage of all pregnant women	80%	10.0 %	8.0%	16.0%	16.0%	21.0%	Not attained	X
TT2 coverage of pregnant woman attending ANC		51.0 %	23.0 %	34.0%	31.0%	34.0%	**Increased trend**	√
Proportion of births attended in a health facility	25%	8%	10%	11%	12%	14%	Not attained	X
Rate of deliveries by skilled birth attendants in a HF	30%	4.0%	5.0%	6.0%	7.0%	8.0%	Not attained	X
Proportion of deliveries referred to higher levels from a health facility		9.0%	10.0 %	10.0%	9.0%	5.0%	Decline in 2015	X
Delivery referral rate – all pregnant women		1.0%	1.0%	1.0%	1.0%	1.0%	Static performance	X
Rate of births by Caesarean section	5%	0.1%	0.1%	0.0%	0.3%	0.3%	Not attained	X
Vitamin A supplement to new mothers	20%	6.0%	11.0 %	13.0%	15.0%	10.0%	Decline in 2015	X
Postnatal care coverage	40%	4%	8%	11%	11%	8%	Decline in 2015	X
New contraceptive acceptance rate	20%	0.9%	1.0%	1.0%	1.0%	1.0%	Not attained static performance	X
DPT1 coverage children under 1 year		45.0 %	37.0 %	47.0%	30.0%	15.0%	Decline in 2015	X
DPT3/Penta3 coverage children under 1 year	80%	34.0 %	30.0 %	38.0%	38.0%	11.0%	Not attained	x
OPV3 coverage children under 1 year		29.0 %	31.0 %	39.0%	39.0%	45.0%	**Increased trend**	√
Measles coverage children under 1 year		48.0 %	49.0 %	54.0%	62.0%	57.0%	**Increased trend**	√
Vitamin A supplement to children 6-59 months	80%	3.0%	6.0%	9.0%	8.0%	4.0%	Not attained	√
Proportion of children with severe acute malnutrition (middle arm circumference <115 mm)		2.5%	2.8%	3.0%	3.0%	6.0%	**Increased trend**	√
Proportion of children with moderate acute malnutrition (middle arm circumference <125 mm)		3.1%	4.5%	6.0%	5.0%	11.0%	**Increased trend**	√
Coverage of bed nets amongst		3.0%	4.0%	5.0%	4.0%	5.0%	**Increased**	√

children under 5							**trend**	
Proportion of clinically diagnosed uncomplicated malaria in children under 5 years		53.0 %	53.0 %	57.0%	60.0%	54.0%	**Increased trend**	√
Proportion of confirmed uncomplicated malaria in children under 5 years		34.0 %	35.0 %	33.0%	31.0%	37.0%	**Increased trend**	√
Proportion of severe malaria in children under 5 years		13.0 %	12.0 %	11.0%	9.0%	9.0%	**Static performance**	X
Proportion of children under 5 years with diarrhoea treated with ORS	80%	82.0 %	76.0 %	79.0%	81.0%	85.0%	**Significant progress**	√
Pneumonia curative consultation rate in children under 5 years		12.0 %	11.0 %	11.0%	11.0%	16.0%	**Increased trend**	√
TB detection rate all forms (per 100,000 population)	79	26	30	37	68	72	**Increased trend**	√
TB treatment success rate	85%	69.0 %	74.0 %	76.0%	76.0%	78.0%	**Increased trend**	√
Proportion of VCT clients tested HIV+		7.0%	11.0 %	9.0%	6.0%	19.0%	**Increased trend**	√
Proportion of ANC clients tested HIV+		8.0%	13.0 %	12.0%	9.0%	11.0%	**Increased trend**	√
Proportion of HIV+ pregnant women receiving ANC provided with ARV therapy for PMTCT		36.0 %	45.0 %	35.0%	38.0%	18.0%	**Increased trend**	√

**Definitions of indicators and data elements are included in Annex 2.*

INTRODUCTION

South Sudan gained its independence on 9th July 2011. Since then, the Government of South Sudan has developed the South Sudan Development Plan (SSDP), which covers the period from independence in 2011 to the end of 2016. The SSDP is the nation's response to core development and state-building challenges during the initial years of independence and identifies key development objectives, of which health is one of the four priority areas. The Ministry of Health (MOH) then started the process of establishing a health care system capable of providing the services needed for the population to improve their health and well-being, including the development of the first five-year Health Sector Development Plan 2012-2016 (HSDP), which was the result of broad consultations with numerous stakeholders, and outlines the approach and priorities for the health care system in line with the national development plan and the health policy of the country.

South Sudan is based on a decentralised system of governance at various levels, including national, state and local. At present, the country has been divided into 28 States, originating from formally 10 states. These are further subdivided into counties, including the incorporation of Abyei, which is still disputed by Khartoum. In addition, a new administrative area was created from Jonglei state in 2014. All the counties in the country are divided into smaller administrative units called payams. The health care system of the country follows this decentralised approach. However, the creation of new states has seriously affected the flow of HMIS data to the national level resulting in delay and missing reports.

South Sudan is one of the poorest countries in the world, with an estimated population of 10,981,028in 2015[1]. More than 90% of the population lives on less than one dollar a day, and the absolute poverty rate is estimated to be between 40% and 50% of the total population of the country. Literacy is lower than 20% and school enrolment was 31% in 2010[2]. These figures provide a snapshot of the challenges ahead in terms of development, literacy, and the health status of the South Sudanese.

[1] *Population estimates based on projections from the 2008 Census.*

[2] *National Bureau of Statistics: South Sudan Multiple Indicators Cluster Survey report, 2010.*

Figure 1 MAP OF SOUTH SUDAN STATES AND COUNTIES

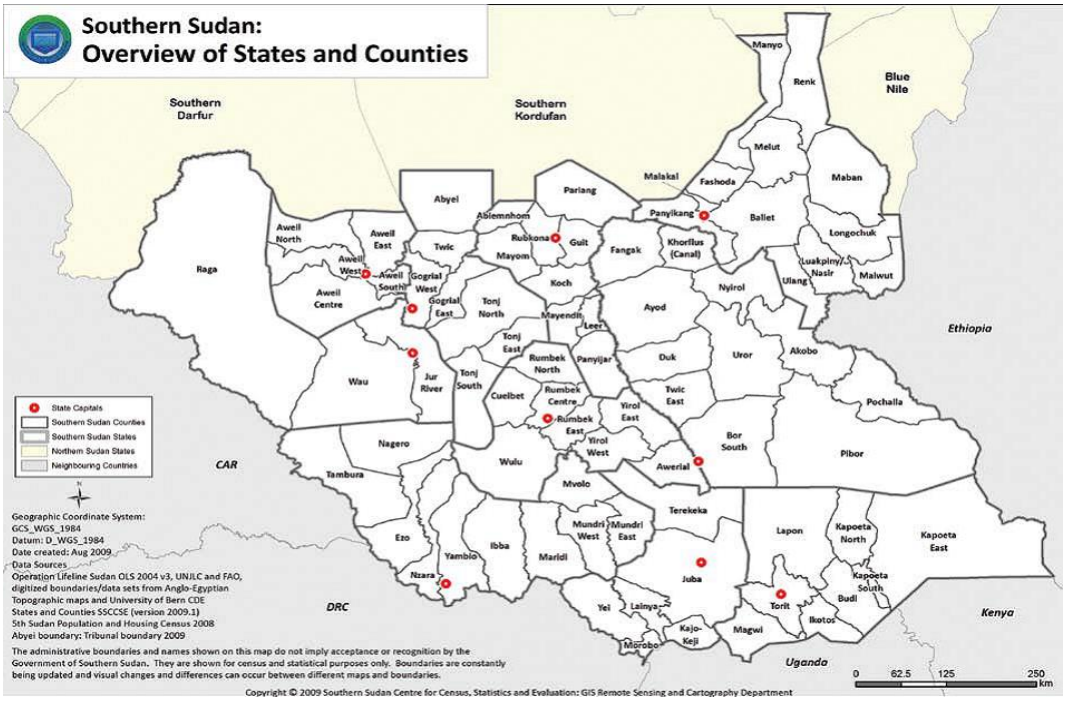


Table 1 2015 POPULATION ESTIMATES

State	Estimated pregnant population (4%)	Estimated expected births	Estimated population under 1 year (4%)	Estimated population total	Estimated population under 5 years (19%)	Estimated female population 15-49 years	Estimated male population 15-49 years
Central Equatoria	76,131	67,975	72,559	1,464,066	313,430	334,909	370,478
Eastern Equatoria	75,207	73,864	71,788	1,274,684	306,866	287,530	292,069
Jonglei	77,144	76,178	67,250	1,753,274	336,828	395,404	434,707
Lakes	55,886	54,498	53,144	963,541	237,278	206,742	222,903
Northern Bahr	51,588	50,196	48,879	955,346	201,953	211,585	180,278
Unity	42,651	41,604	39,851	804,703	39,851	170,517	172,376
Upper Nile	67,942	66,677	64,859	1,281,897	287,685	269,898	311,566
Warrap	69,316	68,514	66,330	1,283,621	276,978	305,757	264,423
Western Bahr	22,441	21,834	21,076	440,010	92,954	95,923	108,668
Western Equatoria	31,914	31,434	30,704	759,886	137,660	190,938	194,332
South Sudan	**570,220**	**552,774**	**536,440**	**10,981,028**	**2,231,483**	**2,469,203**	**2,551,800**

OVERVIEW OF THE SOUTH SUDAN HEALTH CARE SYSTEM

The national Health Policy 2007-2012 was developed by the Ministry of Health through extensive consultations with key stakeholders within the health sector in South Sudan and was endorsed by the Government of South Sudan in 2006. The policy sets out the principles of the health care system of the country and the priority areas that need to be strengthened in order to achieve the overall vision of health for all. These principles and priorities were the basis for setting health targets and consequently developing strategies and actions which were all part of the Health Sector Development Plan (HSDP) 2012-2016. The HSDP presents a general framework that is designed to guide all strategies and interventions to be implemented by government and stakeholders at the four levels of the health system in South Sudan over the five-year period 2012 to 2016.

The new National Health Policy 2015-2024 and the National Health Sector Strategic Plan 2015-2019, which seek to establish community health system as a formal structure of the national health system by creating the structure and positions for Community Health Workers to be on government salary pay roll[3].

Some cultural practices are known to promote and hurt health. Negative practices around sexual and reproductive health, child health, communicable and non-communicable diseases constitute a formidable barrier to accessing health services manifesting into poor utilisation of available services. Local and specific community action is required to overcome these barriers. In this context, a community health structure – the Boma Health Initiative (BHI) is critical to increasing access to health promotion, disease prevention and community case management interventions.

In line with the health policy and various health system definitions, the South Sudan National Health System comprises all resources, institutions, structures, and actors, both public and private, whose actions have the primary purpose of achieving and sustaining the good health of the South Sudanese. The public sector includes all government health institutions under the national and state ministries of health, and health facilities and health activities managed by other ministries such as defence. The private health care system consists mainly of non-governmental organisations (NGO) but also private not-for-profit and for-profit practitioners, particularly in the larger towns.

The Ministry of Health has the primary responsibility to oversee the system, coordinating agencies and stakeholders, providing guidance, establishing management and financial tools for good governance, and monitoring achievements. In addition, the MOH receives budget allocations for health and the budget calculations from the States; allocates and distributes financial resources; trains, assigns and manages human resources; and provides medical supplies and pharmaceuticals. Providing actual health services is the responsibility of the State Ministries of Health (SMOH), County Health Departments (CHD), and, in some areas, payam health services and the communities. The MOH provides clinical guidance and protocols to the health services, particularly in the priority areas of maternal and child health.

The health status of the population of South Sudan is relatively poor as a result of years of conflict, low access to health care services, insecurity and challenging living conditions. The country's

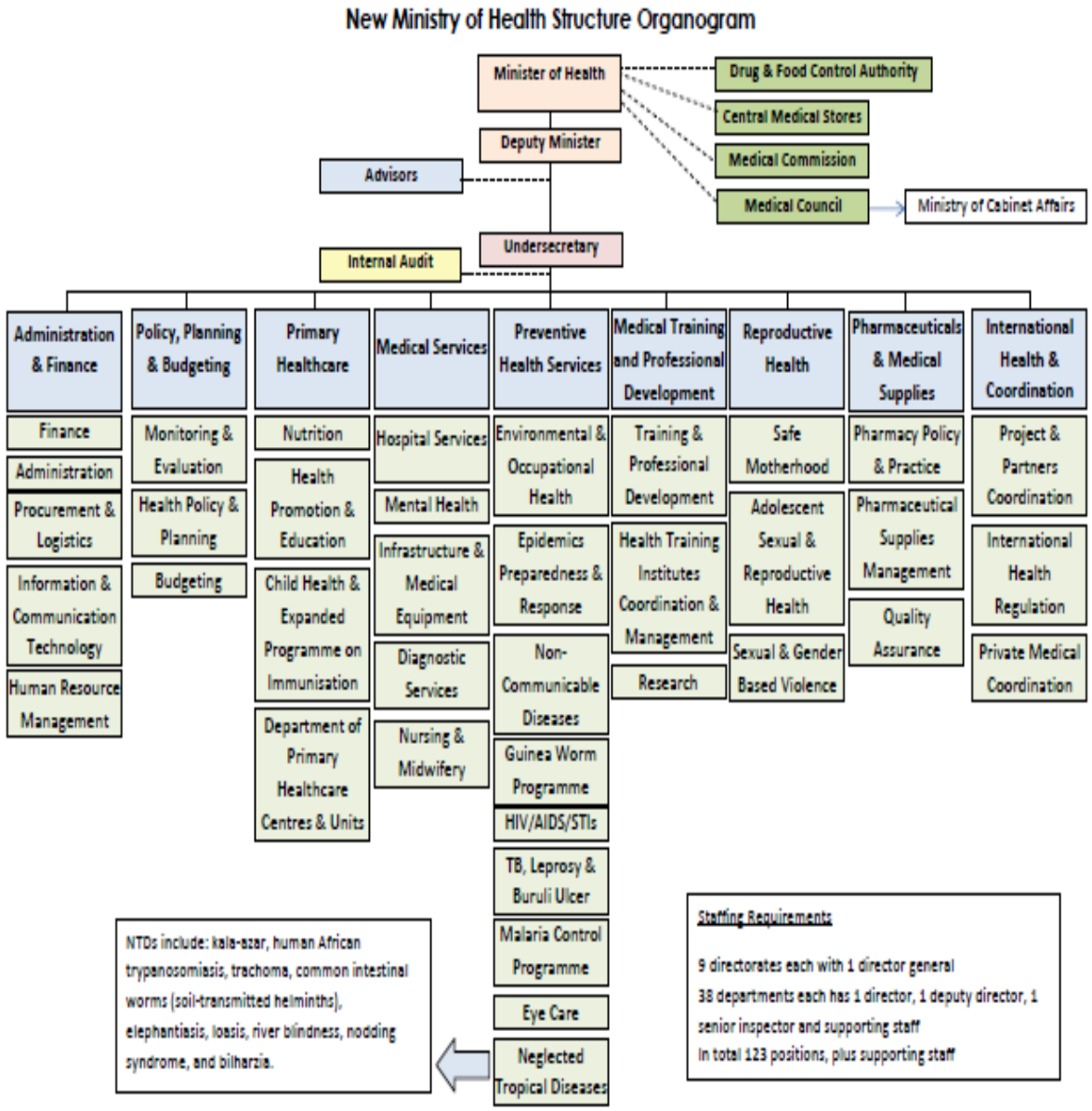
[3] Health Policy of Republic of South Sudan

estimated maternal and infant mortality rates are among the highest in the world, although recent surveys indicate improvements in child and maternal survival in the last few years. However, maternal mortality is expected to remain too high until deliveries by skilled birth attendants (SBA) increases from the current low level, and until more facilities are able to provide comprehensive obstetric care.

HEALTH SECTOR ORGANISATION AND MANAGEMENT

The health care system in South Sudan is decentralised through four levels, three of which relate to structures in the Ministry of Health while the fourth level is associated with the local government health structure. The MOH's role is to organise and manage the health system overall, as well as provide policy, planning, budgeting and guidance to the State Ministries of Health (SMOH) and County Health Departments (CHD), which includes monitoring progress towards targets of the health sector development plan. The SMOH and CHD are responsible for organising and providing health services in their respective states and counties. This structure reflects the decentralised policy of the Government of South Sudan. The MOH organisational chart is presented in Figure 2 below.

Table 2 ORGANISATIONAL CHART OF THE MINISTRY OF HEALTH, REPUBLIC OF SOUTH SUDAN



OVERVIEW OF THE ROUTINE HEALTH MANAGEMENT INFORMATION SYSTEM

The Ministry of Health recognises the importance of monitoring and evaluation (M&E) in providing information for the decision-making process at each level of the health system. The M&E Directorate, through the health management information system (HMIS), regularly monitors health activities and programmes and tracks progress towards goals, objectives and targets outlined in the health policy and the health sector development plan. The HMIS includes routine and non-routine data collection procedures which measure the activities of the health care services (outputs) and the effect of these services on the health of the population served in terms of coverage (outcomes), and morbidity and mortality (impact). The routine HMIS measures inputs and outputs, while other surveys conducted regularly in the country measure outcomes and the impact of these services and other actions on the population. The HMIS manual, endorsed by the Government of the Republic of South Sudan (GOSS) in 2011, describes the indicators, data flow, levels of responsibility and reports

expected from every level of the health care sector to measure its performance and progress towards the objectives of the health sector development plan 2012-2016.

The goal of the routine HMIS is to monitor progress and facilitate activities of the health services (preventive and curative) and of routine epidemiological surveillance to assess progress in the prevention, treatment and control of infectious and non-infectious diseases. The HMIS provides information to support evidence-based decision-making, revision of strategies and actions, and assess overall implementation of the HSDP. Hence, the HMIS is a comprehensive and integrated structure that collects, collates, analyses, evaluates, stores and disseminates health and health-related data and information for use by all stakeholders.

This report is intended to provide an objective account of health service achievements in 2015 compared to the targets established by the HSDP. Like previous HMIS annual reports it is divided into four sections. The first section describes the health care system of the country; the second section describes the health management information system; the third section outlines results of the routine HMIS analysis of performance indicators; and the last section describes activities to improve the HMIS, including next steps. Analysis of the routine reports sent to the MOH is organised as per the following groups:

1. Utilisation of health services
2. Maternal health, including ANC, deliveries and postnatal care
3. Child health, including immunisation
4. Morbidity and mortality
5. Tuberculosis
6. HIV-AIDS

Indicators and data elements are mainly presented in terms of coverage rates for each state, with an average coverage for the whole country, which allows for comparison of state performance. Comparison is also made with rates achieved in 2012, 2013 and 2014. For some indicators the actual numbers are shown in tables as well. However, all the raw data from all states and counties is set out in Annex 1. Indicator definitions, data elements, sources of information and the format of the routine report can be found in Annexes 2 and 3.

DATA SOURCES AND DATA FLOW

The routine HMIS aggregates and analyses information sent by health facilities in their monthly reports which include the priority indicators and data elements selected by the MOH during piloting and roll out in 2010 and 2011. At present the report also includes indicators of responses to any outbreaks, which are also reported in the epidemiological surveillance bulletin. The routine HMIS also includes a quantified supervisory checklist (QSC). All the HMIS data is stored in the national database using the District Health Information System (DHIS) software, housed in the MOH data centre of the Directorate of Policy, Planning, Budgeting & Research in Juba.

Table 3 DATA SOURCES, DATA ELEMENTS AND COLLECTION METHODS OF THE ROUTINE HMIS

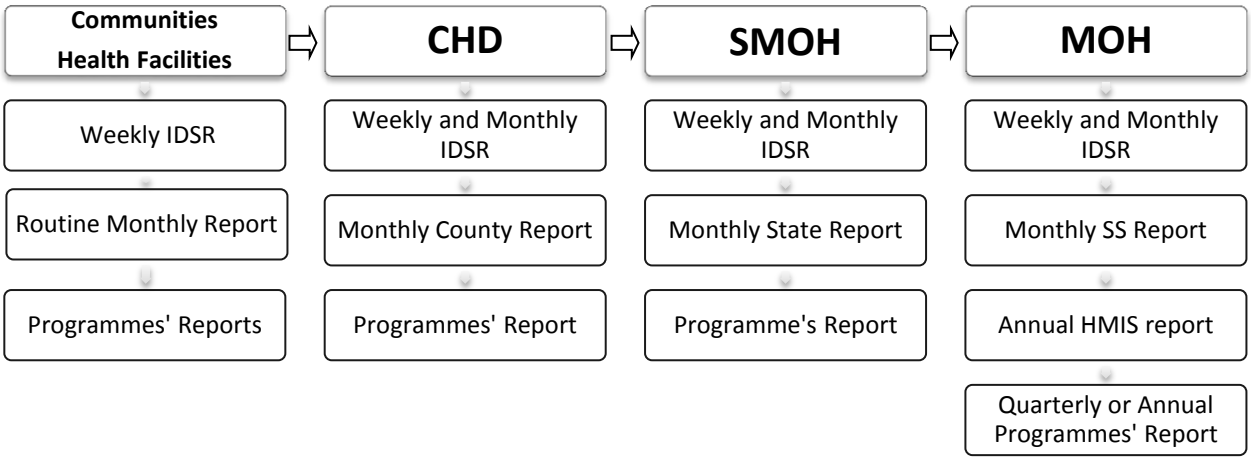
Level	*Data Elements*	*Routine HMIS*
Community	- Deliveries in the community - Payam outbreaks and response - Payam outreach services	Included in Part 1 of the monthly routine report from health facilities to CHD, SMOH and national MOH
Payams and villages	Epidemiological surveillance	Epidemiological surveillance or IDSR (infectious diseases surveillance and response) weekly report Epidemiological surveillance monthly report included as Part 1 of the monthly routine report from health facilities
Health facilities (HF)	OUTPUTS Health service data elements collected by the HFs	Routine monthly report Parts 1 and 2 Programme reports
CHD	OUTPUTS - Health service indicators - Health system and management indicators	County routine monthly report: CHD aggregates and sends raw county data used to calculate county indicators based on population figures for the county included in the DHIS[4]. CHD enters data into the DHIS and transmits: - Report of supervision visits completed in the county - County health programmes report - County IDSR (weekly and monthly)
SMOH	OUTPUTS Monthly routine reports	State M&E officers aggregate data from counties to develop and send: - Monthly state routine reports - Monthly or quarterly state programmes reports - State monthly IDSR consolidated report
MOH	OUTPUTS Raw national data and health services indicators based on current population figures	MOH M&E officers compile data from the states to develop: - South Sudan monthly report - Annual HMIS report, including assessment of progress towards HSDP targets.

DATA FLOW, DATABANK AND REPORTS

The DHIS database includes information received from all the States as well as information relevant to the MOH's vertical programmes. Data is captured in health facilities in the MOH registers and sent in the paper-based routine report to the County Health Departments. The CHD M&E officers enter the raw data into the DHIS database and export the county report to the SMOH M&E departments using the internet or an external flash drive. The State MOH M&E department aggregates county information to produce the state monthly report, which is sent to the MOH in Juba. There, M&E officers compile and distribute the monthly HMIS report, which is sent to stakeholders and SMOH officers. The report includes feedback to the States, though feedback is more frequently provided during regular coordination and data meetings in counties and states. The MOH is planning to move to DHIS II in 2016.

Levels of reporting of the routine HMIS and reports generated are as follows:

[4] Current population figures in DHIS based on census 2008. Absence of up to date census data and population movements mean only county indicators can be calculated and coverage should be used with caution until a new census takes place.



The county and State M&E officers are expected to examine the information received, ensure completeness and correctness of the report and seek clarifications if deemed necessary before reports are sent to the national level. However, their capacity to ensure the quality of the data in the reports was identified as a weakness in the September 2013 HMIS review meeting which prompted the organisation of data quality workshops for all ten State MOHs and county M&E officers to discuss and clarify data elements and indicator definitions, identify errors in the database of the HMIS 2012, and correct them with the support of facilitators. The exercise improved the capacity of the county and state M&E officers to question and query data and to use tools in the DHIS to identify and correct errors, outliers and impossible values. The exercise was repeated in 2014 with the 2013 HMIS dataset and in 2015 with the 2014 dataset. In June 2016 the HMIS data for 2015 has been cleaned with the help of M&E staff from MOH and members of the M&E TWGs. The final result was the updated dataset of the routine HMIS 2015 after the data cleaning exercise and the production of the 2015 HMIS report.

At the time of finalising this report the routine HMIS and the data warehouse in DHIS 1.4 are fully functional. Also eight state MOHs and some counties of the two states of Unity and Upper Nile were functional. With its split from Jonglei, the GPAA will be reporting routine HMIS directly to MOH through the Health Administration. All state MOH officers and most county officers have received training in HMIS and DHIS. Most also have email addresses, and all states (except Unity and Upper Nile at present) and at least 50% of counties have internet connection and IT equipment. These achievements are the result of joint and consistent efforts by the MOH, the SMOH and health partners supporting the system.

However, the routine HMIS still has a number of challenges, one of the biggest of which is consistency of reporting. The reporting rate now stands at a relatively healthy 85% (up from 47% in 2012). At least 56% (67% for 2014) of facilities managed to send in the full complement of twelve reports for the whole year, a lower than the past indicating that there is inconsistency of reporting by health facilities. The outbreak of unrest in December 2013 probably affected a lot of the reports, especially in Upper Nile, Jonglei and Unity. Other challenges include: maintaining an integrated system to minimise parallel data collection systems; establishing a culture of information generation and use; facilitating health officers' better knowledge and skills in HMIS; and developing and disseminating guidelines, training manuals and protocols. All of these challenges are being pursued

to ensure completeness and accuracy of the reports and guarantee the quality of the data obtained, which is to be used for planning and management at each level of the health care system.

2015 HMIS DATA PREPARATION FOR THE ANNUAL REPORT

In preparation for writing this report, a series of data quality meetings were organised by the MOH to "clean" and improve the quality of the 2015 database so that it could be used to assemble the annual report. The workshop was also organised with the following objectives in mind:

- Update and clean the 2015 routine database, including clarifying data quality concepts, routine report indicators and data elements, and HMIS procedures and data flow;
- Familiarise National MOH officers with the principle of data for action, and the use of data for planning and management;
- Strengthen knowledge and skills of National MOH officers about HMIS and the DHIS database;
- Reinforce the mentoring and leadership skills of the National MOH M&E coordinators;
- Thoroughly review the organisational hierarchy of the 2015 DHIS database so that corrections to payam and health facility names, location and category are made, as well as correction of errors, impossible data or missing values; and

The ultimate goal of the exercise, apart from cleaning the HMIS database, was for M&E staff from the National MoH to fully understand the concept of information for action and have the same, updated database of the 2015 HMIS. The rationale for conducting the meeting with National MOH M&E officers and implementing partners together was so that information collected by the health facilities could be jointly reviewed to determine if values were really the result of activities in the health facilities or errors made while reporting or entering data. Following that, the next step was to determine if, based on their knowledge of their respective programmes the data should be deleted, maintained or corrected. The final step was to complete the cleaning, export the data, delete the previous database, and install the updated one in their laptops.

ROUTINE HEALTH MANAGEMENT INFORMATION SYSTEM RESULTS FOR 2015

OPERATIONAL HEALTH FACILITIES IN 2015

Health services in South Sudan are delivered through hospitals (county, state and teaching), primary health care centres (PHCC), and primary health care units (PHCU). At the peripheral level, there are also village health committees and other community-based networks which are yet to be incorporated into the HMIS. Health service delivery is carried out by the public and private sectors, plus NGOs.

The routine health management information system uses reports of curative and preventive services provided by the operational health centres in the country and transmitted to the CHDs, State MOHs and finally to the MOH in Juba. Coverage is calculated at the county, state and national levels based on the information provided. Therefore, the accuracy of the indicators relies on the completeness and accuracy of the reports sent up through the system.

CONSISTENCY OF REPORTING

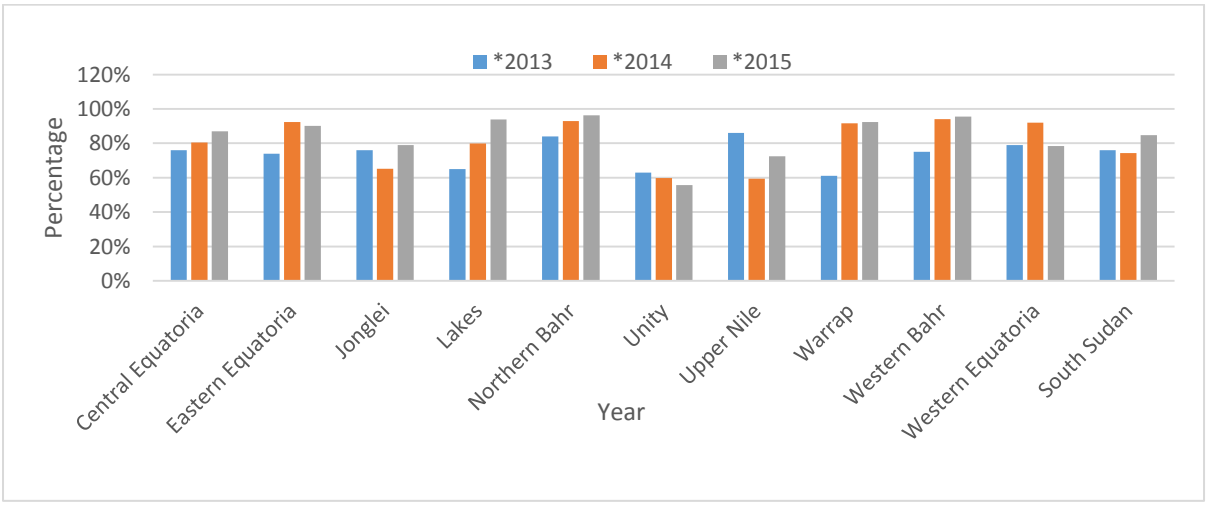
During 2015, a total of 1,399 facilities were fully or partially functional, an average of 85% reported monthly throughout the year, with a total of 14,214 reports received at the MOH (see Table 4). This has significantly increased from 74% in 2014 and 47% 2012.

Table 4 MONTHLY ROUTINE REPORTING BY STATE IN 2015

State	Operational Health Facilities in 2015	Expected Reports	Reports Submitted	Health Facilities Monthly Reporting Rate	Facilities Submitting all 12 Reports	% of Facilities Submitting all 12 Reports
Central Equatoria	230	2,760	2,402	87%	134	58%
Eastern Equatoria	194	2,328	2,097	90%	115	59%
Jonglei	120	1,440	1,136	79%	50	42%
Lakes	109	1,308	1,229	94%	86	79%
Northern Bahr	121	1,452	1,398	96%	107	88%
Unity	73	876	487	56%	17	23%
Upper Nile	136	1,632	1,183	72%	45	33%
Warrap	109	1,308	1,208	92%	73	67%
Western Bahr	90	1,080	1,031	95%	68	76%
Western Equatoria	217	2,604	2,043	78%	82	38%
South Sudan	**1,399**	**16,788**	**14,214**	**85%**	**777**	**56%**

The country's average reporting rate has increased by 11% as compared to 2014. The highest reporting rate was reported in Northern Bharl El Ghazal (96%) and the lowest in Unity (56%). In terms of consistency in reporting Northern Bharl El Ghazal was the most consistent State with 88% of facilities submitting 12 monthly reports and the lowest was Unity state 23%. Regarding the trend in the completeness of HMIS routine reporting see the graph below.

Figure 2 Monthly Routine Reporting Rates by State 2015



HEALTH SERVICES INDICATORS OF THE HMIS 2015

The report includes the interpretation and analysis of the 47 priority indicators included in the monthly routine report of the MOH. The routine report summarises the main preventive and curative health services provided by primary health facilities and tracks progress towards targets of the Health Sector Development Plan (HSDP) 2012 to 2015. Overall, and as compared to 2013, the 2014 data shows mixed results with most coverage indicators slightly increasing while others dropped and others remain constant. Although there are still challenges and information is less than complete, the effort and the progress have been significant. It is hoped that this trend will improve in the future to achieve full, timely reporting and eventually to incorporate programmes and services (hospitals and community services).

UTILISATION OF HEALTH SERVICES

Thirteen million people visited a health facility for preventive and/or curative care in 2015. This was a large increase of five million over 2014 and six million over 2013. The utilisation rate for curative care for all age groups increase to 0.9 visits per person per year in 2015 compared with 0.6 for both 2013 and 2014. The performance of this indicator almost achieved the HSDP target of 1 which is encouraging. Similarly, there was an increase observed in the 2015 curative consultation for children where health services were provided to over 3.7 million compared with 1.9 in 2014. The consultations for children under five, resulted in a utilisation rate of 1.7 for this age group for all states combined, and again a slight increase from the reported 1.3 in 2014, 1.2 in 2013 and 1.0 in 2012. The utilisation rate of children was very high (8.4) in Unity State, the highest among all states and surpasses 2014 and 2013 figure of 0.7 and 1.3 respectively. This is followed by NBG, Warrap and WBG which range from 2.9, 2.4, 2.3 respectively while the rest range from 0.8 to 1.8. Details on utilization of curative consultations and curative and preventive utilisation rates for adults and children under five are included in Table 5.

Table 5 UTILISATION OF HEALTH SERVICES IN SOUTH SUDAN STATES, HMIS 2015

State	Utilisation rate of curative consultations for children under 5	Utilisation rate for curative consultations for all age groups	Utilisation rate of preventive and curative care for children under 5	Utilisation rate of preventive and curative care for all age groups
Central Equatoria	0.9	0.5	2.9	0.6
Eastern Equatoria	1.3	0.7	4.2	1.0
Jonglei	0.8	0.4	4.9	0.9
Lakes	1.8	1.2	4.4	1.1
NBG	2.9	1.5	7.5	1.6
Unity	8.4	1.2	24.5	1.2
Upper Nile	1.4	0.8	7.0	1.6
Warrap	2.4	1.4	7.9	1.7

WBG	2.3	1.4	6.6	1.4
Western Equatoria	1.6	0.8	7.6	1.4
South Sudan	**1.7**	**0.9**	**5.9**	**1.2**

Table 6 also provides details on the number of consultations and preventive health services in all the States. When considering both preventive and curative services, Warrap State health facilities provided the highest number of services: a total of 2,177,529 people visited the health facilities in the State, most of them for curative care and Upper Nile, Jonglei and NBG followed 2,024,614, 1,661,082, 1,504,567 respectively. Warrap maintained the leading position from previous year while WBG has the lowest which has 616,645 people visiting health facilities. Two probable reasons for increase in the number of people that visited the health facilities for curative and preventive health services could be either improved reporting or increase access.

Table 6 UTILISATION OF CURATIVE HEALTH SERVICES IN SOUTH SUDAN STATES, HMIS 2015

State	Consultation curative under 5 years	Consultation curative 5 years and older	Consultation curative all	Headcount under 5 years (estimated)	Headcount all (estimated)
Central Equatoria	279,210	484,161	763,371	673,228	918,610
Eastern Equatoria	392,424	487,696	880,120	762,067	1,281,981
Jonglei	265,063	472,383	737,446	474,003	1,661,082
Lakes	434,091	735,628	1,169,719	773,826	1,047,614
NBG	575,601	858,058	1,433,659	884,326	1,504,567
Unity	333,870	643,743	977,613	426,824	975,796
Upper Nile	403,979	608,360	1,012,339	440,432	2,024,614
Warrap	670,543	1,083,493	1,754,036	1,198,011	2,177,529
WBG	216,647	398,437	615,084	342,487	616,645
Western Equatoria	222,718	361,941	584,659	444,538	1,044,193
South Sudan	**3,794,146**	**6,133,900**	**9,928,046**	**6,419,742**	**13,252,631**

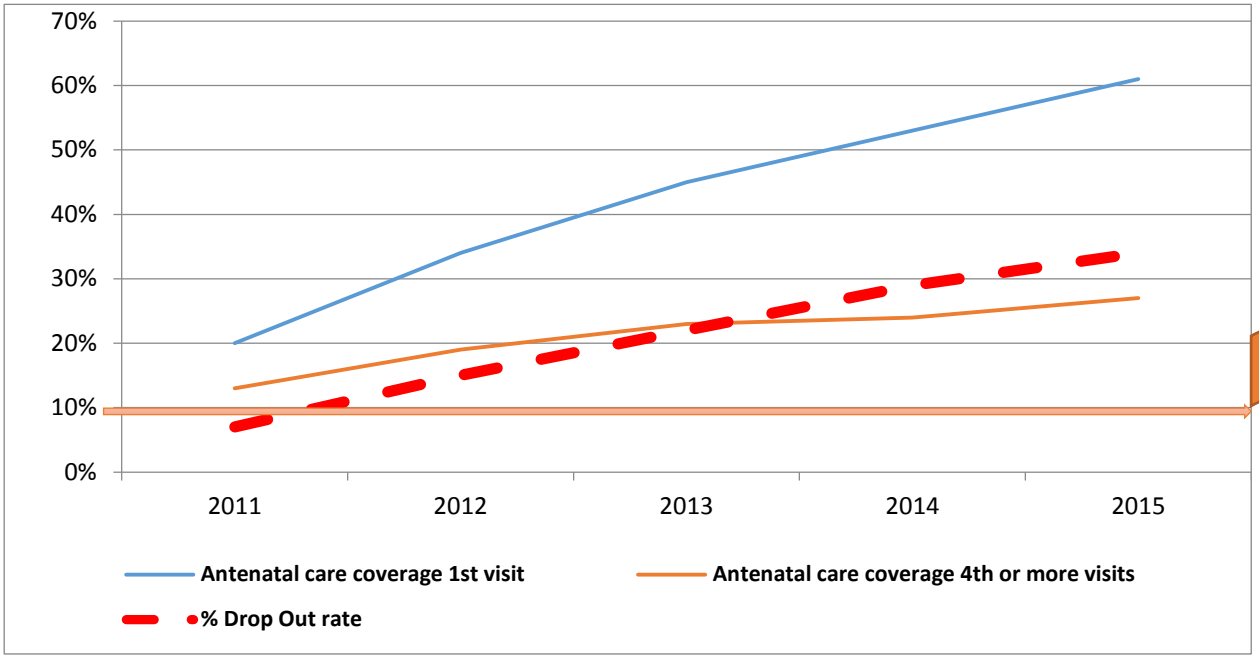
MATERNAL HEALTH

The routine report includes 10 indicators selected to assess the performance of maternal health, including: antenatal 1st (ANC1) and 4th (ANC4) visits; provision of intermittent preventive treatment for malaria (IPT), tetanus toxoid (TT) and insecticide-treated nets (ITN) to pregnant women; deliveries

in health facilities and attendance by skilled birth attendants (SBA); use of postnatal care; and mothers provided with vitamin A supplements.

ANTENATAL CARE

TRENDS OF ANTE NATAL CARE 2011-2015



The trends of access for ANC care shows an upward trend from a coverage of 20% in 2011 to a high of 60% in 2015. Despite this gain there is a notable gap in retaining women to complete the fourth ANC schedule and the gap is increasing as indicating by the drop out rates, a pointer to challenges in utilization of services.

For women who accessed ANC1, the ANC care rate was 45.9%, which is a decrease since 2014 (47%). This means about over 46% of the women who attended the ANC clinic once continued to complete the protocol of at least four antenatal visits. ANC first visit coverage continues to be the highest in Western Bahr el-Ghazal with 71.1% in 2015 and 93% in 2014 respectively, followed by NBG (63.6%) and Lakes (51%).

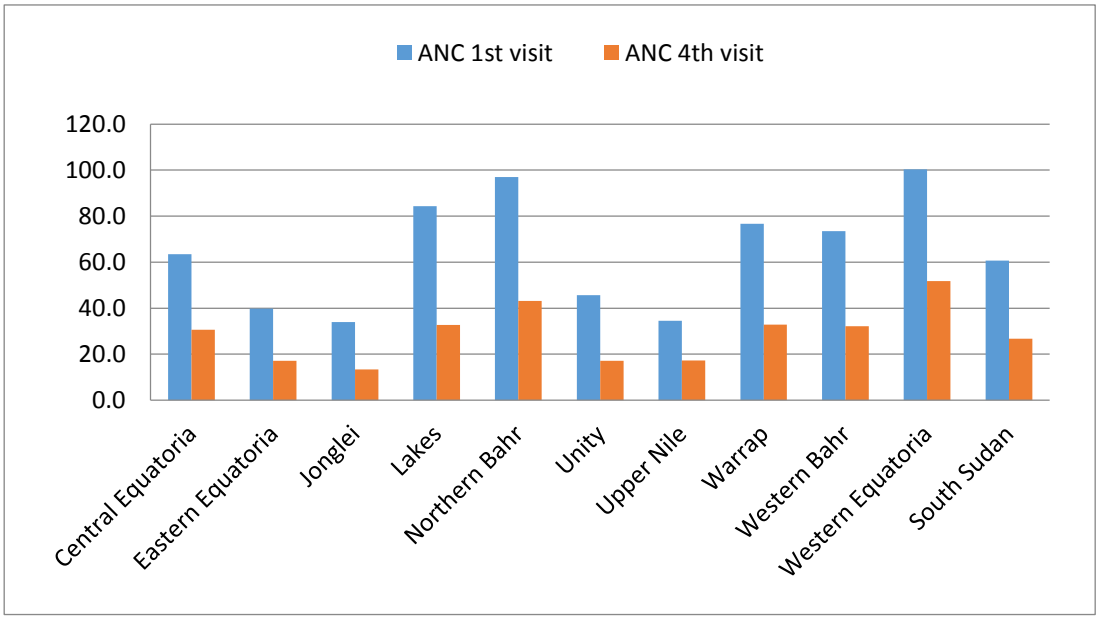
The lowest proportion was reported in Jonglei, where only 15.1% of pregnant women attended an ANC clinic for the first visit in 2015 and 22% in 2014 which is a continuous decline from 2013 where it was 28%. When it comes to ANC4+ coverage, Western Equatoria reported the highest proportion of all the states (44.2 %), followed again by NBG (29.3 %) and WBG (24.9 %) which has changed the trend for CES and WES. Western Equatoria was the only state to reach the HSDP target for ANC4+ visits of 44.2% in 2015, and has surpassed the target by 4.2% (Figure 3). Eastern Equatoria, Upper Nile, Jonglei and Unity, reported the lowest coverage with 12.2%, 9.3%, 6.1% and 9.3% of pregnant women completing the protocol for ANC. For the ANC care indicator, highest score is in Western Equatoria where 62.1% of pregnant women who came for the first ANC visit continued attending the clinic until completing all four visits. Details are shown below in Table 7 and illustrated in Figures 3 & 4.

Table 7 ANC COVERAGE RATES IN SOUTH SUDAN IN 2015

State	ANC1	ANC4	% ANC Drop Out Rate	ANC Care	ANC ITN	ANC IPT2	ANC TT2
Central Equatoria	45.5	20.8	24.7	45.7	55.9	47.3	30.5
Eastern Equatoria	30.5	12.2	18.3	40.2	34.0	45.2	46.3
Jonglei	15.1	6.1	9	40.1	56.7	37.1	20.9
Lakes	51.0	20.2	30.8	39.6	31.0	39.0	40.4
Northern Bahr	63.6	29.3	34.3	46.1	24.4	40.9	35.3
Unity	23.9	8.4	15.5	35.1	8.5	39.8	9.8
Upper Nile	18.0	9.3	8.7	51.4	80.6	47.8	12.6
Warrap	49.4	22.3	27.1	45.2	39.2	49.0	42.7
Western Bahr	46.3	24.9	21.4	53.8	29.9	55.0	27.9
Western Equatoria	71.1	44.2	26.9	62.1	62.3	51.4	24.5
South Sudan	38.6	17.7	20.9	45.9	41.8	45.2	32.8

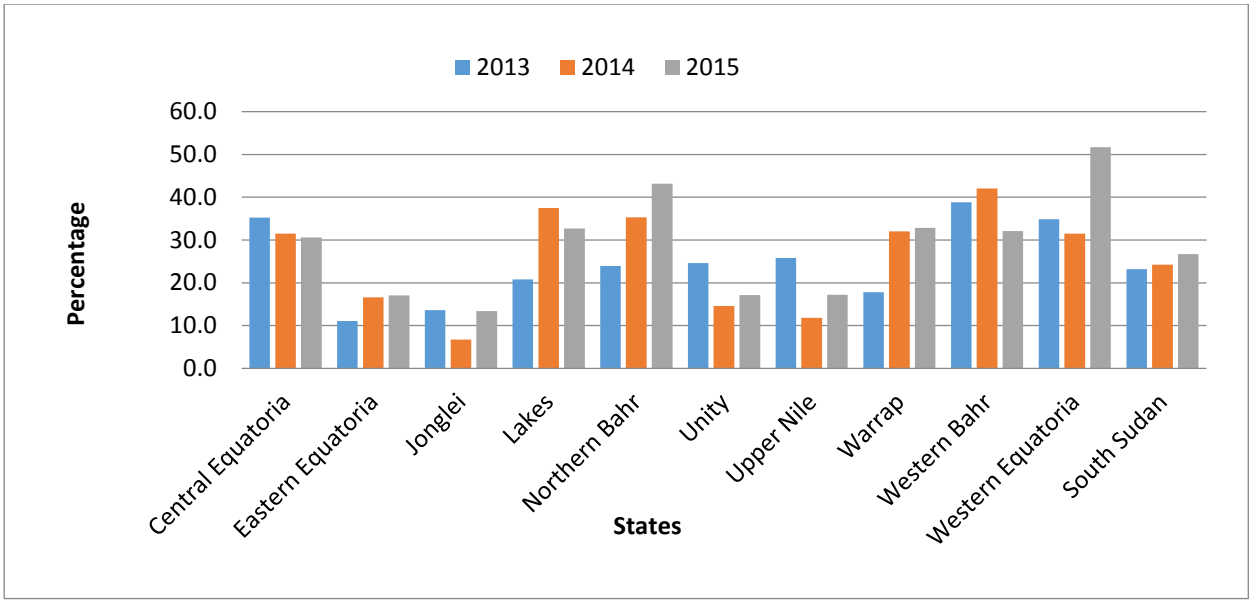
As presented in the below figure there is a significant drop out of pregnant mothers who completed the ANC4+ (ANC1 and ANC4+ visits 38.6% and 17.7% respectively). There was high dropout rates in virtually all the states safe for Upper Nile and jonglei states. North Bahr Ghazal, Lakes and Warrap were the top three states with high ANC dropout rates. The apparent low rates in Upper Nile and Jongeli states may be attributed to the static population which are now confined to the camps and able to receive ANC services at a near proximity.

Figure 3 ANC1 VS ANC4 COVERAGE RATES IN SOUTH SUDAN IN 2015



The trend in ANC4+ for 2013, 2014 and 2015 showed an increased trend for most of the states as depicted in the below table.

Figure 4 Trend in ANC4+ COVERAGE RATES IN SOUTH SUDAN IN 2015

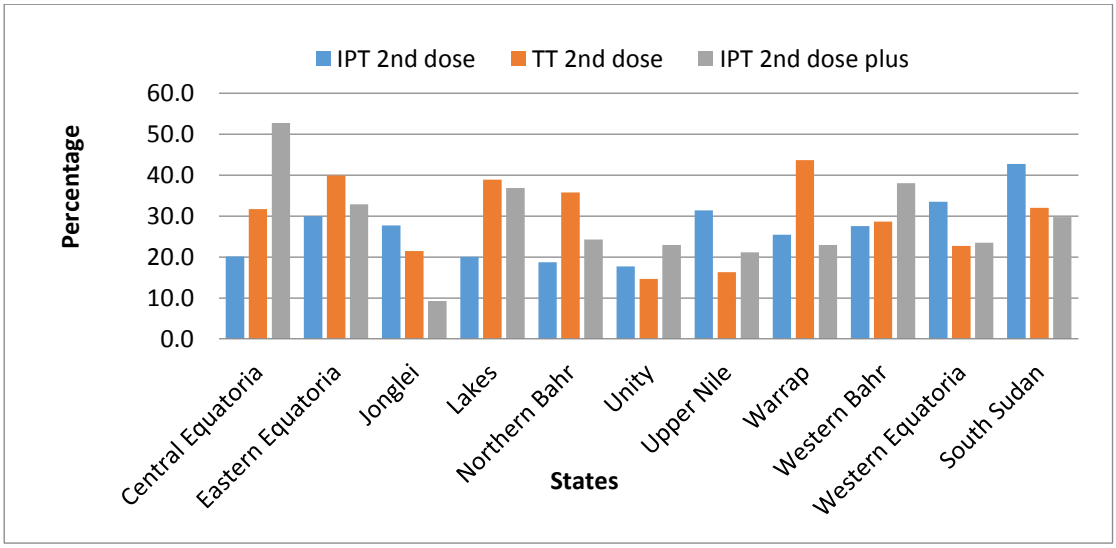


There are three other indicators associated with health in pregnancy and which women should receive during antenatal visits: insecticide treated nets (ITN); two doses of the antimalarial drug sulphadoxine/pyrimethamine (SP), as part of intermittent preventive treatment for malaria (IPT2); and two doses of tetanus toxoid (TT2). The coverage of these indicators during ANC in 2015 is shown in Figure 5.

The completion of the protocol for prevention of malaria in pregnancy during ANC showed varying results in 2015. Nationally, 41.8% of mothers who attended an ANC clinic walked out with an insecticide-treated net (ITN) which is similar to 2014 achievement. Unity scored the lowest with 8.5% and Upper Nile score highest 80% for women attending ANC receiving ITN, and Western Equatoria with 62% for ITN. However, for IPT2 there was a great improvement of 45.2% from 32% in 2014. Jonglei scored the lowest with 37% and Western Bahr al Ghazal score highest 55% for women attending ANC receiving IPT2 followed by Western Equatoria with 51% for ITN. Despite WBG, Lakes and NBG having the greatest number of women going to ANC, the IPT2 and ITN distribution rate was below that of Upper Nile and Warrap, indicating the possibility of high numbers of women exposed to malaria in pregnancy.

Tetanus toxoid injection (TT+) is the third preventative treatment given during pregnancy. The immunisation for tetanus is an important part of antenatal care, and every pregnant woman should receive at least two doses in order to be protected. Tetanus is still a relatively common cause of death among newborns in South Sudan, indicating a need for more efforts to increase vaccination coverage in mothers and safer delivery practices. The national coverage for TT2 for women attending ANC in 2015 is 32.8%, a slight increase from 2014 which was 31% but still way below the HSDP target of 80%. Eastern Equatoria performed best with 46.3% in 2015 but a decrease from the 53% in 2014.

Figure 5 Rates for ITN, IPT2 and TT2 During ANC in South Sudan in 2015



ATTENDANCE AT DELIVERIES

In 2015, attendance at deliveries is still very low – only about 13% of expected deliveries took place in a health facility, which is a modest increase from 10% in 2012, 11% in 2013 and 12% in 2014 but still only halfway to the 2012-2016 HSDP target of 25% for all births to be attended in a health facility. Of those women attending a health facility, about more than half delivered in the presence of a skilled birth attendant[5] (66,654), higher than the 2013 performance (30,265) and 2014 (36,302) but still too low (see Table 8). In fact, these numbers represent only 12% coverage by skilled birth attendants overall. All other pregnant women are either attended by other categories of staff in the health care facilities (roughly 50% of the deliveries in health facilities), or deliver at home unaided. Western Equatoria is the only state that provides some hope in this rather depressing state of affairs, with the proportion of deliveries attended by a skilled birth attendant in this state over three times (31%) the national average of 13% followed by WBG 29%, with all other states falling below, the average of 13%. These percentages should be interpreted with caution as the population (denominator) varies in these States.

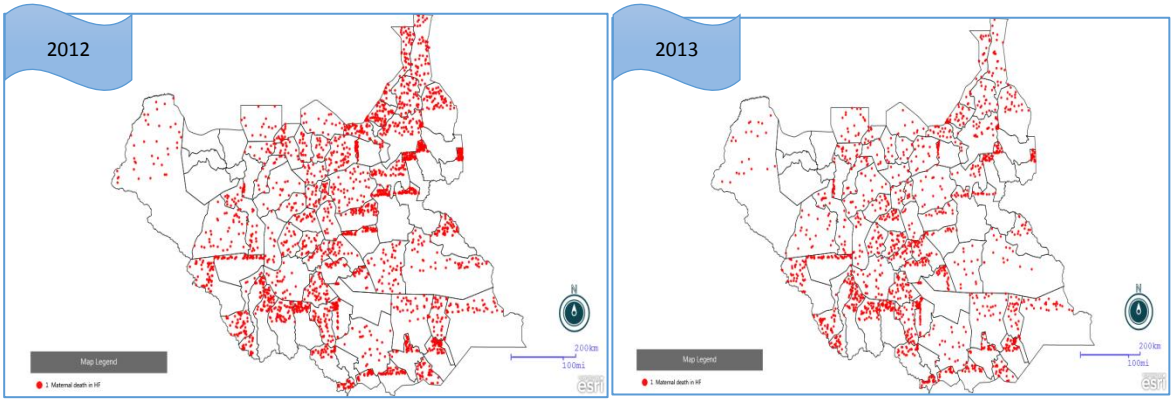
Table 8. DELIVERIES IN HEALTH FACILITIES BY STATE 2015

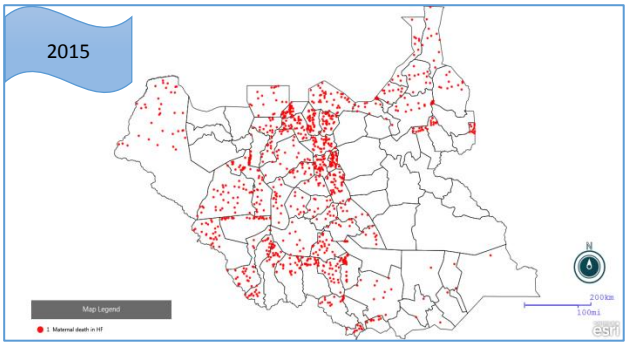
State	Delivery in facility by SBA	Delivery in facility by un SBA	% Delivery in HF	Live birth in HF	Delivery referred	Maternal deaths in facilities
Central Equatoria	12,806	6,301	12	16,377	421	10
Eastern Equatoria	7,741	3,433	11	10,353	483	1
Jonglei	3,475	3,946	7	6,467	277	0
Lakes	7,702	6,610	20	13,607	265	9
Northern Bahr	10,672	3,515	21	14,219	572	17
Unity	3,409	2,112	10	5,161	391	37
Upper Nile	2,415	3,436	7	5,231	100	11

State	Delivery in facility by SBA	Delivery in facility by un SBA	% Delivery in HF	Live birth in HF	Delivery referred	Maternal deaths in facilities
Warrap	5,086	5,951	12	10,570	449	17
Western Bahr	6,255	2,112	29	8,065	330	35
Western Equatoria	7,093	6,089	31	12,000	1,117	24
South Sudan	**66,654**	**43,505**	**13**	**102,050**	**4,405**	**161**

The low proportion of skilled staff in primary health facilities reported by the rapid health facility surveys in 2011 and 2013, and the EmONC assessment concluded in 2013, are two compelling reasons to refer the deliveries to a higher level, which happened to 13% of mothers who sought to deliver in a primary health facility. Referrals, though needed, often result in further attention delays, transportation challenges, and additional costs to patients and families. Details of deliveries, referrals and maternal deaths are provided in Table 8 above.

Fig. Spot Map of Maternal Deaths by State 2013-2015

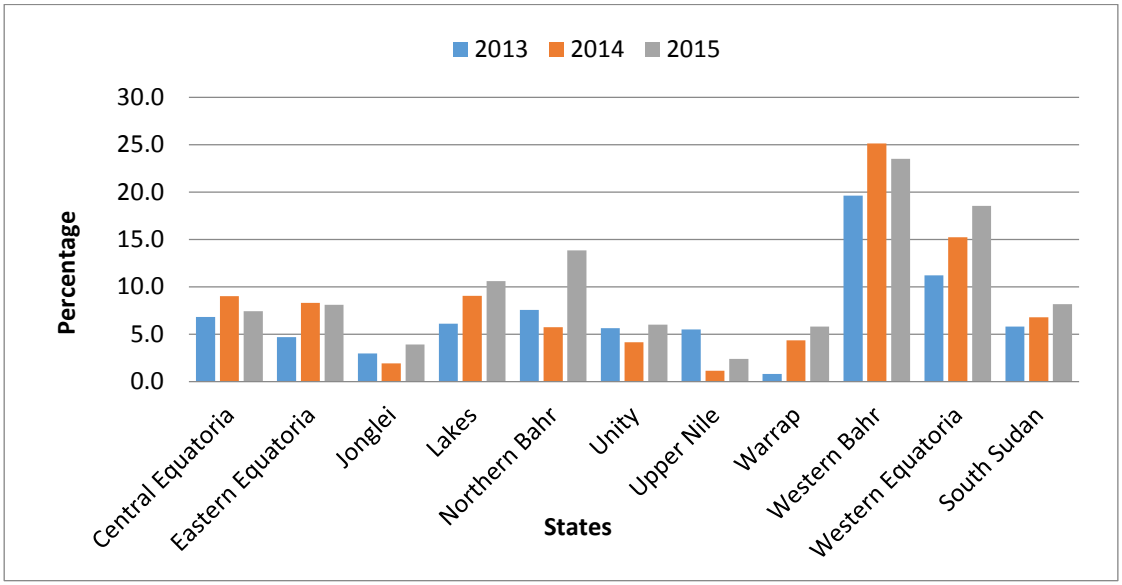




There is a notable decline in the number of maternal deaths in the country over the last three years especially in Jonglei and Central Equatoria.

[Source: MOH DHIS, 2015 accessed 7/12/2016]

Figure 6 Deliveries in Health Facility by Skilled birth Attendant 2015



Deliveries resulted in the birth of 102,050 live babies in health facilities which is an improvement over 2014 (66,271). Alongside the relatively low percentage of deliveries attended by skilled personnel, the number of C-sections reported in 2015 (see Table 9) was equally low with no increase from the 2014 score of 0.3%. However, this figure is not indicative of the activity of obstetric units in South Sudan because state and teaching hospitals are only partially reporting, and not all information from hospitals is currently included in the DHIS database[5]. Western Bahr el-Ghazal performed the most C-sections both in 2014 and 2015 with (333) and (478) respectively. Upper Nile, Jonglei and Warrap performed the least C-sections. This could be attributed to effect of war which led to closure of major hospitals.

Table 9 CAESAREAN SECTIONS CONDUCTED IN SOUTH SUDAN IN 2015

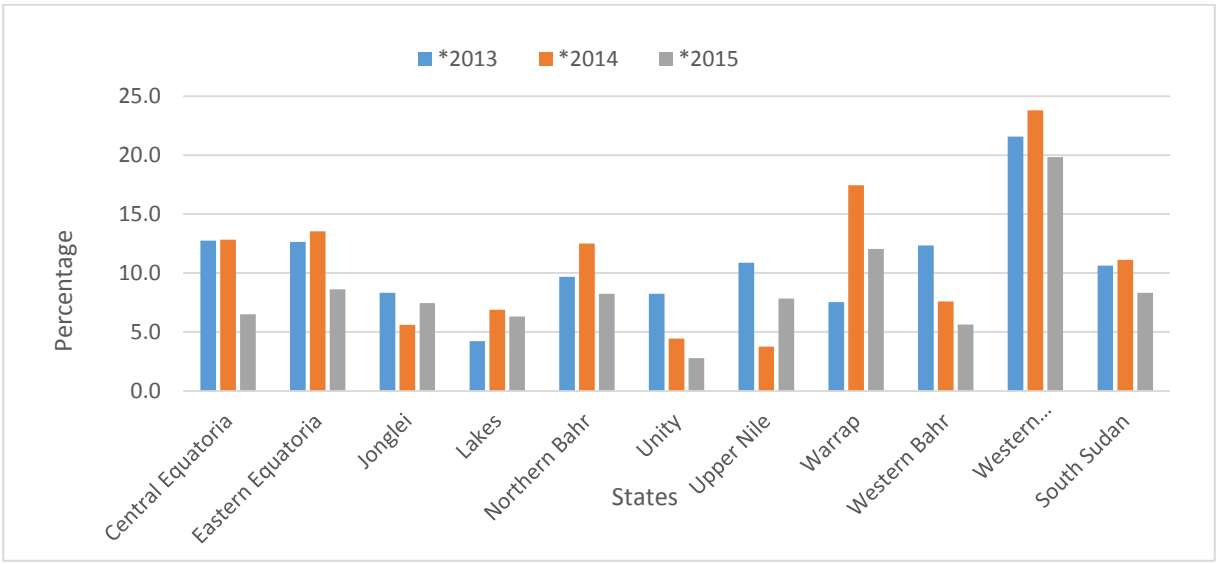
[5] *The MOH plans to incorporate hospitals into the routine HMIS in 2015.*

State	Caesarean section	2015 Caesarean Section rate (annualised)
Central Equatoria	913	0.6
Eastern Equatoria	388	0.4
Jonglei	54	0.1
Lakes	203	0.3
Northern Bahr	125	0.2
Unity	125	0.2
Upper Nile	15	0.0
Warrap	123	0.1
Western Bahr	478	1.6
Western Equatoria	220	0.5
South Sudan	**2,644**	**0.3**

POSTNATAL CARE

Although postnatal care coverage over the past three years has shown steady increase, moving from 8% in 2012, to 11% in 2013 and 11% in 2014, it further dropped to 8.3% in 2015. Western Equatoria recorded the highest score of 19.8% in 2015. It is halfway to achieving the HSDP target of 40% coverage. Unity State reported the lowest coverage at 2.8% in 2015 (see Figure 11).

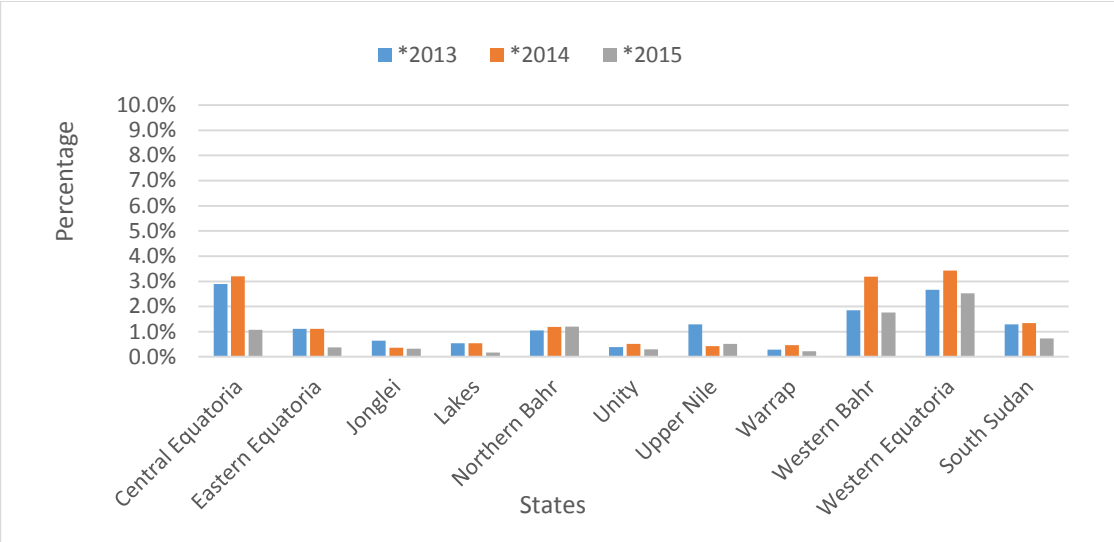
Figure 7 Trend in Postnatal Care coverage in South Sudan in 2015



FAMILY PLANNING

New user of family planning services has gradually increased from 11,366 in 2011, 22,531 in 2012, 24,988 in 2013 to 26,840 in 2014 and decreased to 17,924 in 2015 which represents about 0.7% coverage of new users among women 15-49 years of age (down from 1.3% in 2015) - the HSDP target is 20%. CES, WES, NBG and WBG continued to take the lead in recording the highest proportion of new acceptors of modern contraceptive use, with just 0.7% of women aged 15-49 accessing contraception for the first time. Warrap and Lakes States has the lowest number of new users and/or the least availability of this service to potential users, closely followed by Jonglei and Unity. As presented in the below figure the coverage for family planning has decreased to 0.7% (2015) as compared to 1.3% (2014) with variations among the states.

Figure 8 Family planning coverage new users in South Sudan in 2015



CHILD HEALTH

IMMUNISATION

Immunization is a proven strategy to reduce the number of cases of vaccine-preventable diseases and child mortality. Indicators in this group measure the reported number of children younger than one year who received appropriate doses of vaccines according to the South Sudan expanded programme of immunisation (EPI) calendar before their first birthday. In South Sudan immunisation program operation including the SIAs is funded by different partners. Support includes procurement of cold chain equipment, vaccines and transportation. Only in 2014, government under GAVI request has co-financed the introduction of Pentavalent and will continue since program expected more underused vaccines to be introduced in future. It is being the precondition to countries under Global Alliance for Vaccines on Immunization (GAVI) to bridge government financial shortfall.

Vaccination coverage of children under one year old saw mixed results in 2015 with coverage ranging from 2-87% compared with 25-62% in 2014 depending on the antigen. However, EPI maintains a database of vaccines provided but not included in the DHIS. Secondly the introduction of Pentavalent vaccine in which some counties are yet to phase out DPT3 contributes to under reporting. Hence, these figures may not represent all the vaccines provided or the coverage of the target population. Coverage rates for South Sudan in 2015 are presented in Table 10. Starting in July there was a phase in of Pentavalent and a phase out of DPT. In the states where there was a shift, the DPT doses and Penta doses need to be added together to show the true coverage of DPT containing vaccine.

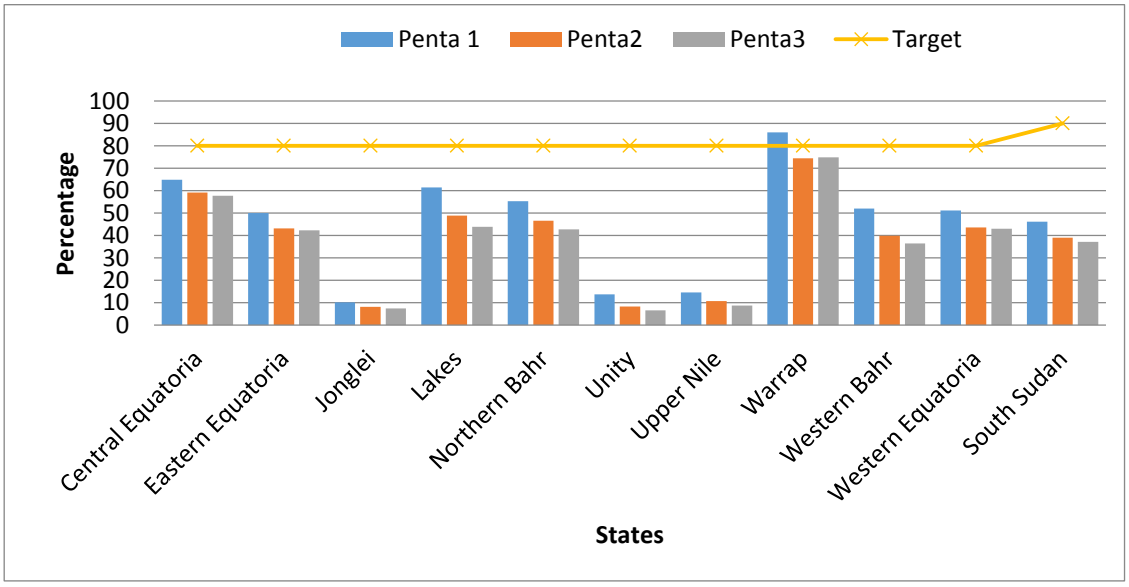
Table 10 VACCINATION COVERAGE RATES FOR CHILDREN UNDER 1 YEAR 2015

State	BCG (%)	DPT1 (%)	DPT2 (%)	DPT3 (%)	Penta1 %	Penta2 %	Penta3 %	Measles (%)	OPV1 (%)	OPV2 (%)	OPV3 (%)
Central Equatoria	55	9	9	9	65	59	58	60	67	61	59
Eastern Equatoria	50	3	2	2	50	43	42	55	50	44	43
Jonglei	20	12	9	8	10	8	7	50	46	14	13
Lakes	57	11	10	8	61	49	44	56	62	49	45
Northern Bahr	54	29	25	23	55	47	43	42	62	55	47
Unity	20	5	4	3	14	8	7	14	19	13	10
Upper Nile	18	7	5	4	15	11	9	17	22	15	12
Warrap	76	3	3	3	86	74	75	87	85	74	73
Western Bahr	51	20	17	16	52	40	36	40	53	41	37
Western Equatoria	60	30	27	26	51	44	43	49	63	54	54
South Sudan	**45**	**11**	**9**	**8**	**46**	**39**	**37**	**49**	**54**	**42**	**40**

Although there was an improved coverage since 2011, mainly due to increased coverage in Northern Bahr el-Ghazal, Western Bahr el-Ghazal and Lakes, which had very low figures in 2011 and 2012 but improved consecutively in 2014, 2015 saw mixed result in performance of the EPI programme. While OPV3 and DPT3 remained stagnant between 2014 and 2015 39% and 37% respectively, OPV1 &2 as well as measles increased, and DPT1 & 2 declined in 2014. When it comes to vaccination coverage

per state, Central Equatoria, Western Equatoria and Lakes reported the highest coverages overall for all antigens. While Warrap, WBG and NBG were average, Jonglei, Upper Nile and Unity performed poorlyon vaccine coverage (as shown in Figure 9). This was partly attributed to the civil war which has destroyed the availability of cold chain. Global set Standard which has been the determination way forward for new and underused vaccines weren't being achieved in most of East and South Africa countries. South Sudan is among low performance facing a lot of challenges due to many barriers and could not meet the targets since vaccination records. Each level has at least to cross the threshold of above 80% to ensure many vulnerable children and women are reached with vaccination to alleviate mortality and morbidity as the primary goal of the program.

Figure 9 VACCINATION COVERAGE RATES FOR CHILDREN UNDER 1 YEAR 2015



Defaulter rates against DPT/Penta-1 and DPT/Penta-3

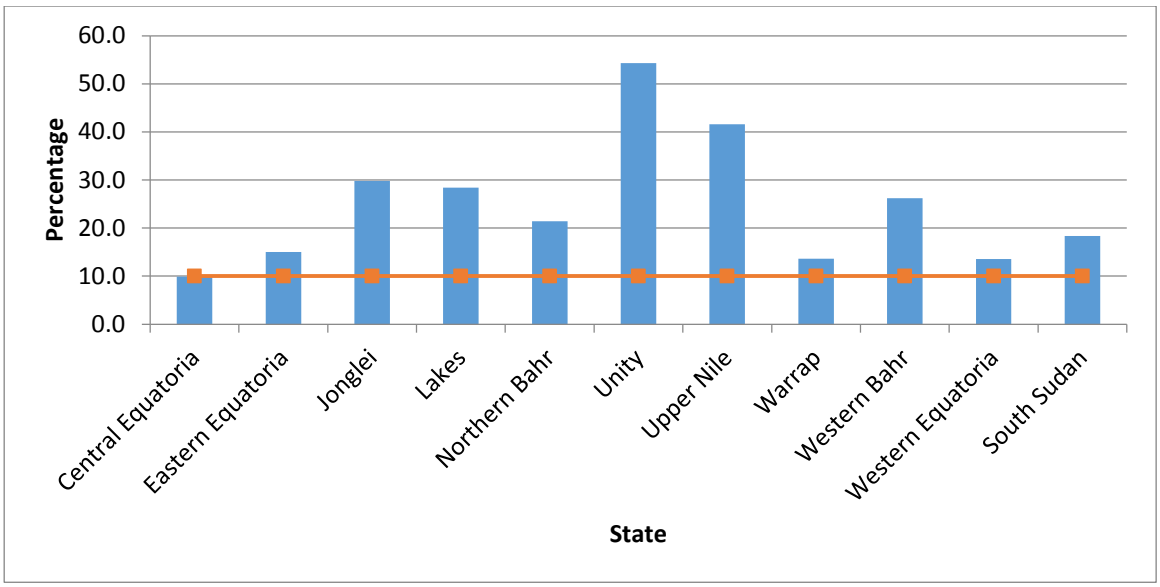
This indicator defines the utilization of the services at delivery point base on proper micro-plan implementation, capacity building on immunization in practice and communication. The relative comprehensive tools documenting detail of the child could easily pick up basic decision on program calendar to mitigate the gap. South Sudan in collaboration with WHO have often tracking strategy, "vaccination week/ accelerated defaulter" covering three months defending on states preparation context which open chances capturing missed and dropout children. Government and Partners had solicited funds from GAVI HSS which is currently in country handle by WHO/UNICEF.

- WHO continuously send additional funds to states to implement such activity under their overall accountability and UNICEF runs communication package.
- CHD and partners on the ground prepare comprehensive micro-plan and design in phases the implementation mechanism to include hard reaching areas.

The average DPT1 to DPT3 defaulter rate is at 18.4% nationally with Unity, Jonglei, NBG, Lakes and Warrap showing the highest rates. Details are presented in Figure 10 below. In 2016 the EPI data will

be synchronized into DHIS and there will be no parallel report. The absence of cold chain in war affected counties has partly attributed to high defaulter rates.

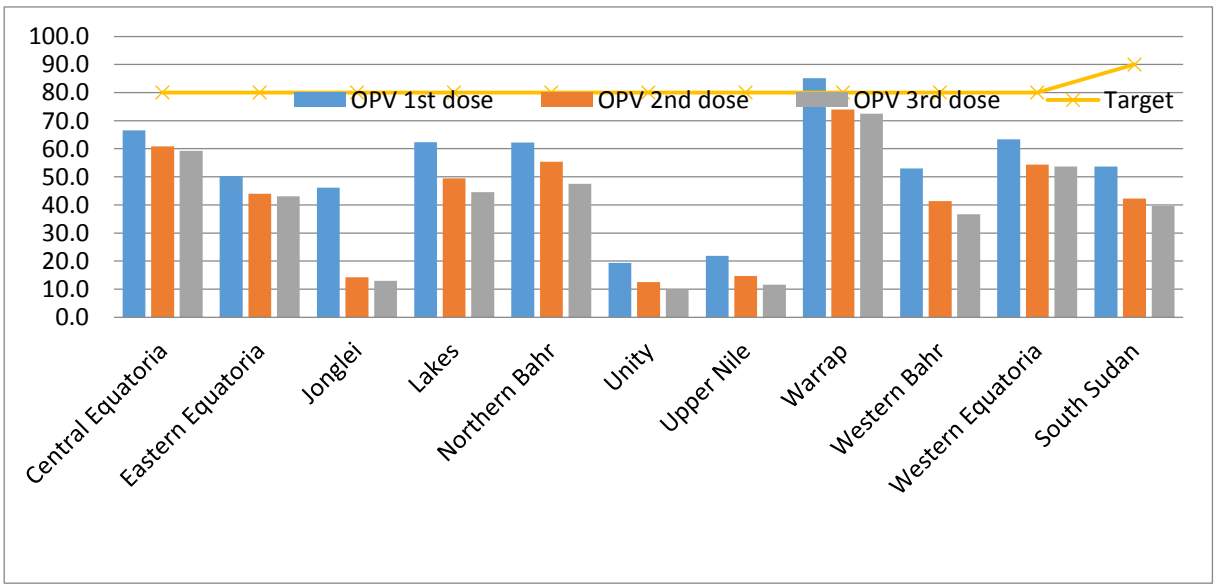
Figure 10 DEFAULTER RATES AGAINST DPT/Penta-1 and DPT/Penta-3 2015



Polio Coverage

Polio routine vaccination in the country is being intensified during Wild Polio Virus (WPV) outbreak that occurred in 2008 and 2009 reported 64 confirmed cases in nine states excluding Western Barh El Ghazal. Country then initiated supplementary immunization for four rounds to contain the circulation. However, currently South Sudan has been polio free for the last six years, but in 2014 two confirmed type 2 circulated vaccine drive polio Virus (cVDPV) cases were detected in Unity State. Investigation findings shown that both children were zero dose. Today, many African countries had switch from tOPV to bOPV to contain vaccine drive by removing type 2 component and use bOPV and additional one dose of Inactivated Polio Vaccine (IPV).

Figure 11 : POLIO VACCINATION COVERAGE 2015



Coverage of poliomyelitis vaccine is similar to the reported penta coverage: Central Equatoria, Western Equatoria, Eastern Equatoria and Warrap reported a higher coverage of 59%, 43%, 53% and 72% for OPV3, respectively. This is a slight improvement over 2014 where the performance was 65%, 62%, 52% and 46%, respectively. Jonglei and Unity reported coverages lower than 14% for OPV3. Jonglei slightly increase from 9% in 2014 to 13% in 2015 while Unity remained with poor performance since 2012. OPV1 and OPV2 were also up for these three states in 2015 compared with 2013 and 2014. Figure 16 presents the OPV vaccination coverage reported in the HMIS in 2015.

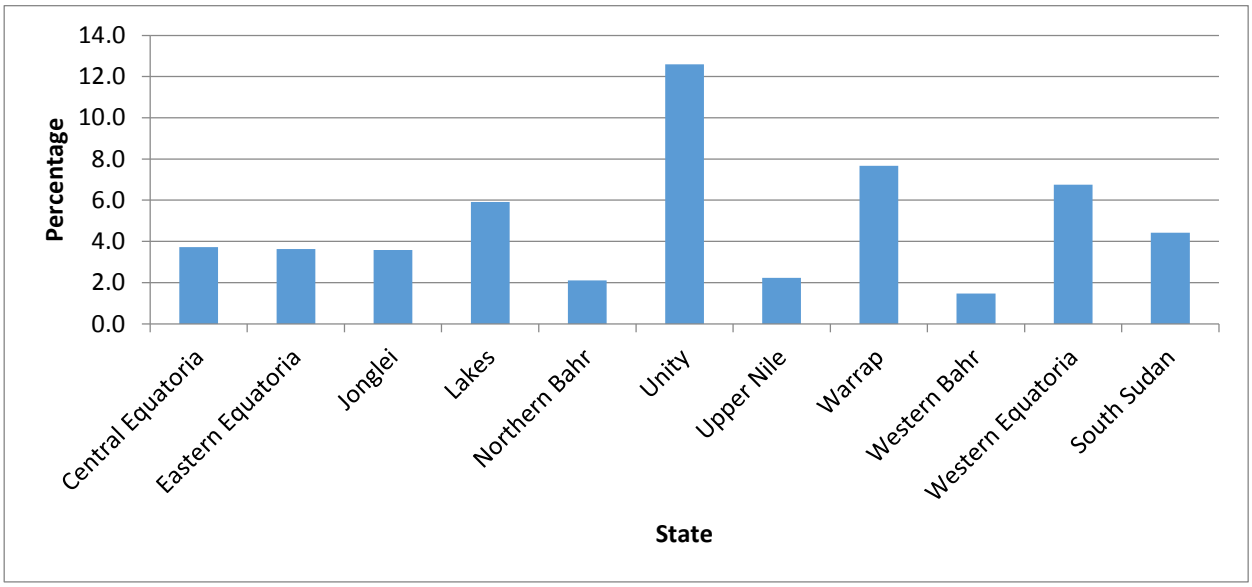
NUTRITION

Vitamin A is essential for reducing susceptibility to infectious diseases and improving the survival rate of children. The current protocol is to administer vitamin A to all children aged 6-59 months, with one dose of 100,000 units to children 6-11 months, and two doses of 200,000 units to children 12-59 months, each year.

The proportion of children 6-59 Months receiving Vitamin A supplements dropped from 9% in 2013 and 8.4% in 2014 to 4.4% in 2015. This is far below the 80% HSDP target which translates to two million doses. This drop correlates to the indicator for number of children suffering from severe malnutrition.

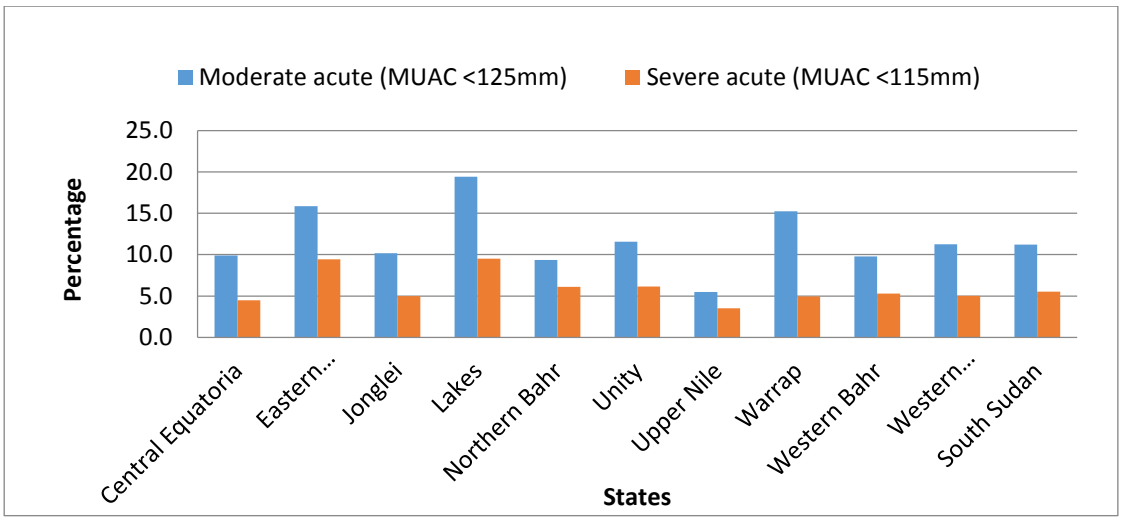
Unity State performed better than all the others, with doses reaching 29.4% of children, while Warrap, Western Equatoria and Lakes followed with 7.7%, 6.8% and 5.8% respectively. However, there have been significant drops in comparison to 2014 results. Western Bahr el-Ghazal declined from 3.5% in 2014 to 1.5% 2015 which is a rather poor performance, reasons advanced being vitamin A supplement supplies to Health Facilities. The number of new mothers receiving Vitamin A supplements in 2015 was 41,396, representing 7.2% of the total population.

Figure 12 VITAMIN A COVERAGE 6-59 MONTHS CHILDREN IN 2015



Using population estimates, the percentage of children suffering from moderate malnutrition was 11.2% and for severe acute malnutrition, although screening for malnutrition during curative and preventive consultations does not reflect population malnutrition prevalence. Lakes and Eastern Equatoria States seemed to have a relatively large proportion of moderately malnourished children identified in health facilities, with Central Equatoria and Upper Nile registering the lowest. Details are provided in Figure 14.

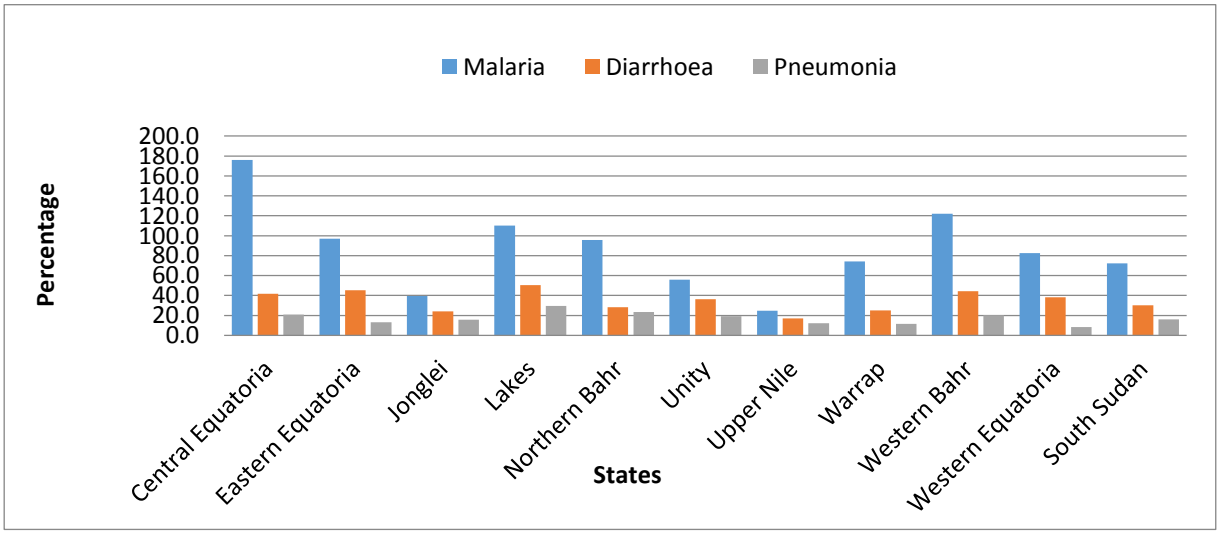
Figure 13 ACUTE AND SEVERE MALNUTRITION SCREENING IN HF 2015



MORBIDITY IN HEALTH FACILITIES

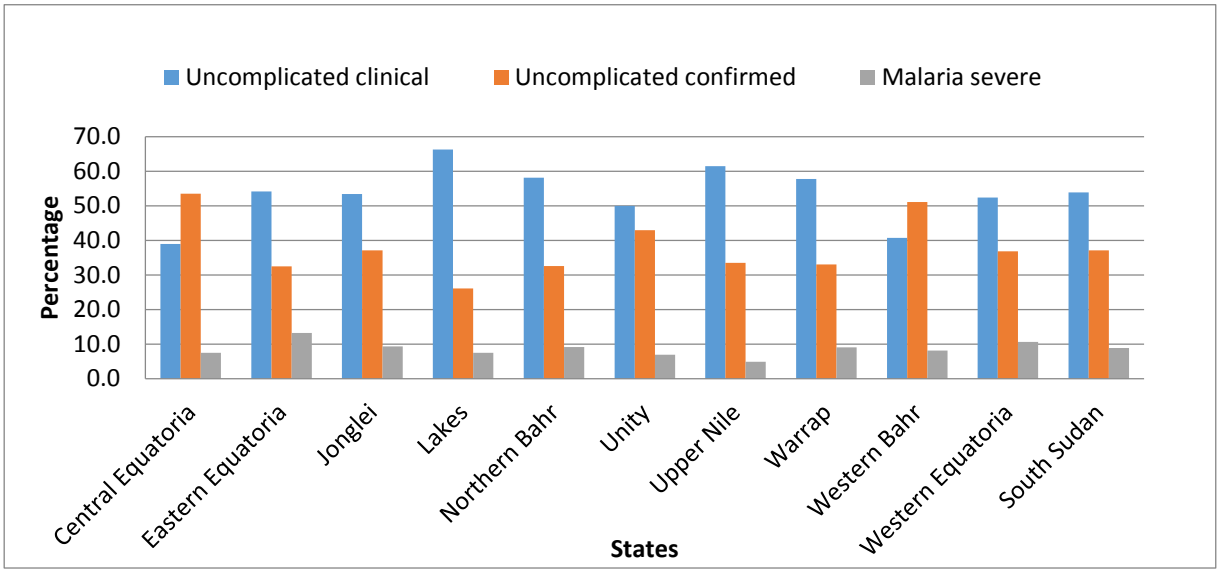
The main reason for seeking a consultation among children under five was malaria, which was diagnosed in 44.6% of children who were brought for curative consultations. Diarrhoea and pneumonia each accounted for 17% and 11% of cases respectively, seen in the health facilities.

Figure 14 Consultation Curative Rates for Major Diseases in Children Under 5 in 2015



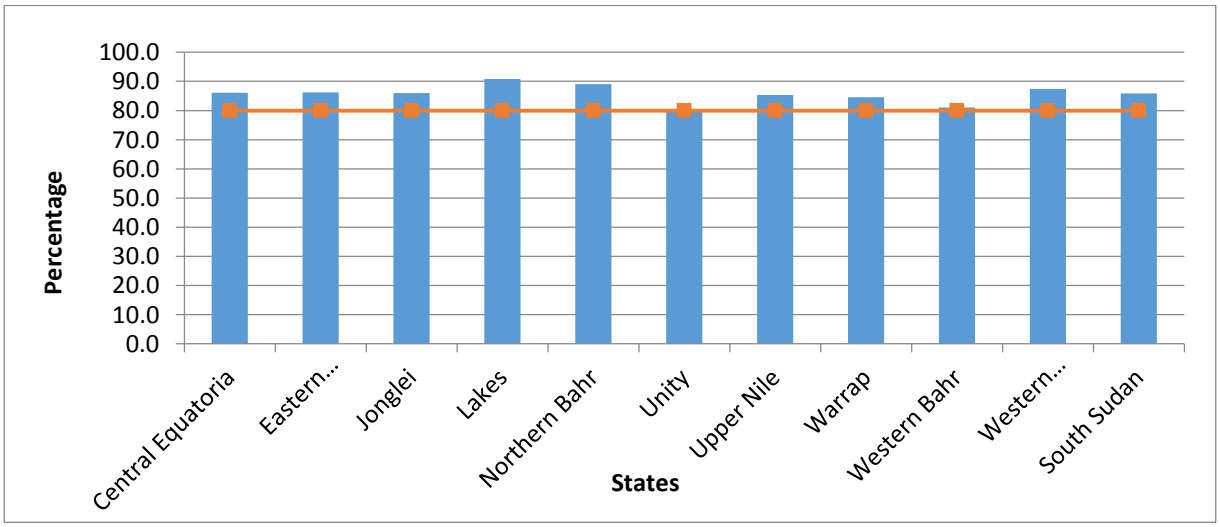
From all malaria consultations for children, uncomplicated malaria was diagnosed in 60% of cases, over half of them using clinical criteria while 31% were diagnosed using rapid tests or stained blood smear. Severe malaria was diagnosed in 9% of children taken to the health facilities for curative care. Together with the diagnosis and treatment of malaria, and as part of the curative consultation care, only about 5% of children younger than five were given an insecticide-treated net.

Figure 15 Malaria Diagnostic Rates in Under 5 Children in 2015



For children diagnosed with diarrhoea 81% were treated with ORS, which represents a slight increase over 79% in 2014 and a slightly higher figure than that found during the 2013 rapid health facility assessment (HFA), which means that about 1 in 4 children (19%) were not provided with, or mothers not advised about, ORS for diarrhoea. However, a number of states still reached or surpassed the HSDP target of 80%, which should probably be raised to around 95% in the next HSDP (see Figure 17).

Figure 16 Dirarrhoea cases treated with ORS Rate in children 2015



With regard to infectious diseases the main reason for visiting a health facility was malaria, followed by diarrhoea, pneumonia and suspected cases of STI and typhoid. Brucellosis, kala–azar, schistosomiasis, rabies, leprosy, lymphatic filariasis, trypanosomiasis and plague were also diagnosed, though it is unclear how accurate were some of these diagnoses. Since the national public health laboratory was opened in 2014 it is hoped that definitive lab confirmation will now be possible for these infectious diseases.

Table 11 Number of medical conditions reported in 2015

Medical Conditions	# of cases in 2015
Malaria all Age group	3,789,475
Diarrhoea under 5 years	49,820
Pneumonia presumed under 5 years	10,800
STI suspect cases	2,709
Typhoid fever suspect cases	2,559
Onchocerciasis suspect cases	1,449
Brucellosis suspect cases	91
Kala-azar suspect cases	99
Schistosomiasis suspect cases	
Rabies suspect cases	219
Leprosy suspect cases	81
Lymphatic filariasis suspect cases	137
Trypanosomiasis suspect cases	105
Plague suspect cases	-

DEATHS IN HEALTH FACILITIES

In 2015 there were 3,160 deaths reported in the health facilities, representing a decrease over 2014 (5,557). Of these 43% were children younger than five and about 8% were maternal deaths (Table 12). However, the number of deaths does not necessarily reflect the quality of care received in the facilities, since they may receive patients once there is only a low chance of survival. The variation is also affected by the rates of use for health facilities, which is generally lower in the northern states and highest in the Greater Equatoria region.

Table 12 DEATHS IN HEALTH FACILITIES IN 2014

State	Death in facility all	Death in facility maternal	Death in facility under 5 years
Central Equatoria	195	10	126
Eastern Equatoria	424	17	182

State	Death in facility all	Death in facility maternal	Death in facility under 5 years
Jonglei	583	38	164
Lakes	233	9	104
Northern Bahr	375	46	156
Unity	206	11	76
Upper Nile	183	43	62
Warrap	246	17	151
Western Bahr	299	35	162
Western Equatoria	416	24	165
South Sudan	**3160**	**250**	**1348**

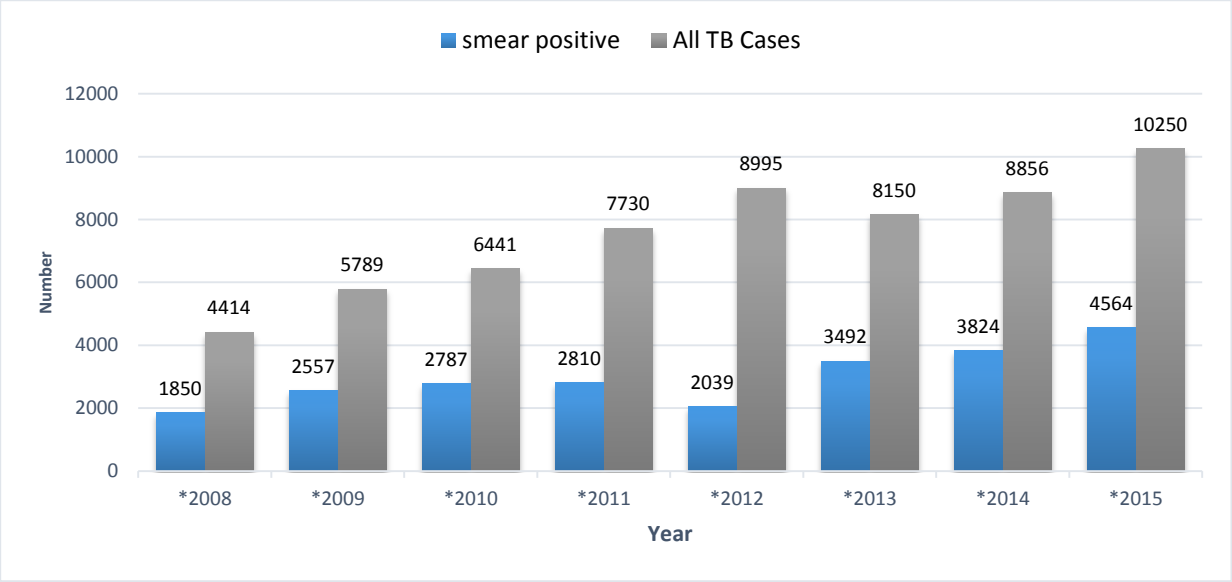
TUBERCULOSIS CONTROL

TB is a significant public health problem in South Sudan. According to the WHO estimates for 2014: 1) The prevalence of TB was 319 cases per 100,000 population, 2) 17,000 people were newly diagnosed with TB, indicating an incidence of 146 new TB cases per 100,000 population and 3) 3,400 people died of TB which resulted in a mortality rate of 29 deaths from TB per 100,000 population.

The national TB control programme provided TB services in 87 health facilities in 2015 which is about 6% of the health facilities in South Sudan. In the reporting period the number of TB cases notified through NTP networking increased from 8,856 in 2014 to 10,250 in 2015 that shows a significant increase of 19%. It reflects that there are many TB cases in the population that needs to be diagnosed and treated. Treatment success rate for new smear-positive TB patients including relapses (cured plus completed) among the new smear-positive TB patients registered in the 2015 cohort was 78%.

The National TB Program (NTP) information system indicates that TB notification has increased from 4,414 in 2008 to 10,250 in 2015. The most reliable data collected on a routine basis from 2015, show that among the new smear-positive pulmonary TB cases detected through NTP services show that about 80% are males and approximately one third of the cases notified among 25-34 age group. And 74% of all TB patient where tested for HIV of which 12% have been diagnosed HIV positive and 70% of TB/HIV patient are put on treatment ARV and 93% on CPT. The TB programme has made progress in achieving a consistent increase case notification in 2015 to achieve the set targets.

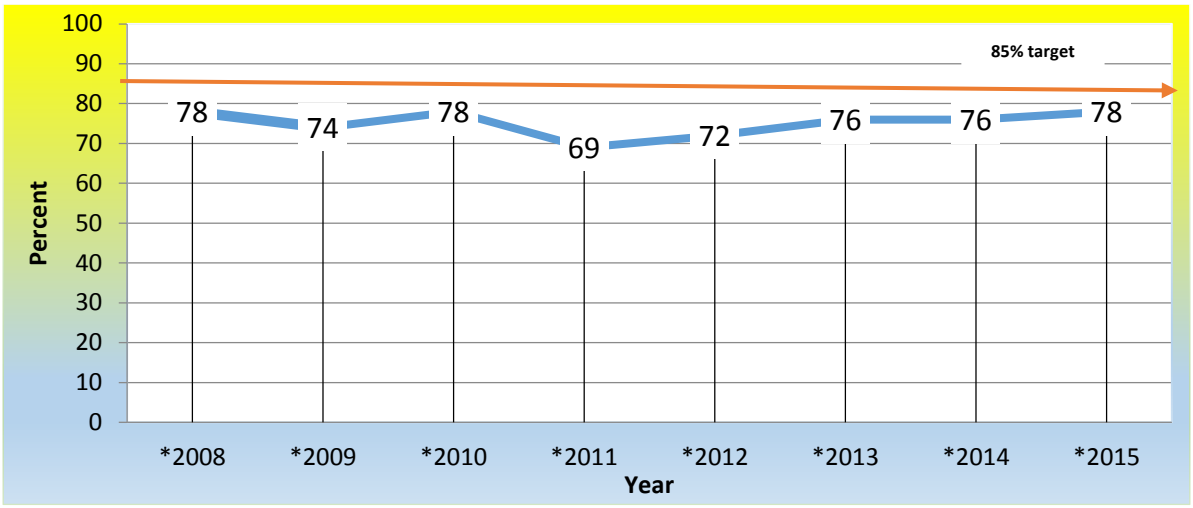
Figure 17 Trends in the number of smear positive and all forms of TB patients in 2015



For the last 8 years, there has been a consistent increase in the detection of new smear positive cases and all forms of TB. However, detection of smear- positive cases as a proportion of all cases has improved from 43% in 2013 to 45%. This is closer to the expected detection rate of around 70-80% in countries with high prevalence such as South Sudan. The case notification rate for all forms of TB cases is at 72 (68 in 2012) and for bacteriologically confirmed TB cases including relapses is at 41 (29 in 2012) per 100,000 population. For detection WHO estimates that 4-10% of patients with cough of at least two weeks duration and suspected of TB are expected to be smear-positive. In 2015 the proportion of smear-positives among TB suspects was 15%, which is above the WHO estimate. Despite the improvement in the TB cases reported, more than 50% of the TBMUs in Great Upper Nile States are not functional since the crises.

The treatment success rate (TSR) is one of the key indicator used to measure the status of the interventions at outcome level, for the last 8 years the treatment success rate has been ranging between (69-78) percent, as compared to previous year TSR has slightly increased from 76% to 78% respectively.

Figure 18 Trends in treatment success rate in 2015



Multidrug-resistant TB (MDR-TB) cases detected

With the support of USAID through WHO, the programmatic management of drug-resistant TB (PMDT) guidelines are under review. The training material and SOPs will be developed, a section of the TB ward in Juba Teaching hospital will be renovated, and staff will be sent for hand-on training. Cumulatively starting from 2010, confirmed MRD –TB cases has reached 40 in 2015

Out of 20 MDR-TB cases detected in 2015, 17 (RR-TB) were detected through GeneXpert testing at the National Reference Lab (NRL). Other Samples are transported to Nairobi for culture and DST. The CTRL section of the Public Health Laboratory (PHL) has been redesigned to serve as a level II laboratory. Negative pressure has been installed, pending testing. It is anticipated that culture and DST will be available in Country by August 2016.

The National Tuberculosis Programme in collaboration with National AIDS programme has been implementing TB/HIV collaborative activities with a goal to reduce the burden of the dual HIV and TB epidemic. The routine HIV testing data among TB patients in 2015 indicates that 12% (878) were TB/HIV co-infected, of which 4% (338) were bacteriologically confirmed TB, and 806 of them were put on CPT whilst 616 were put on ART.

HIV/AIDS

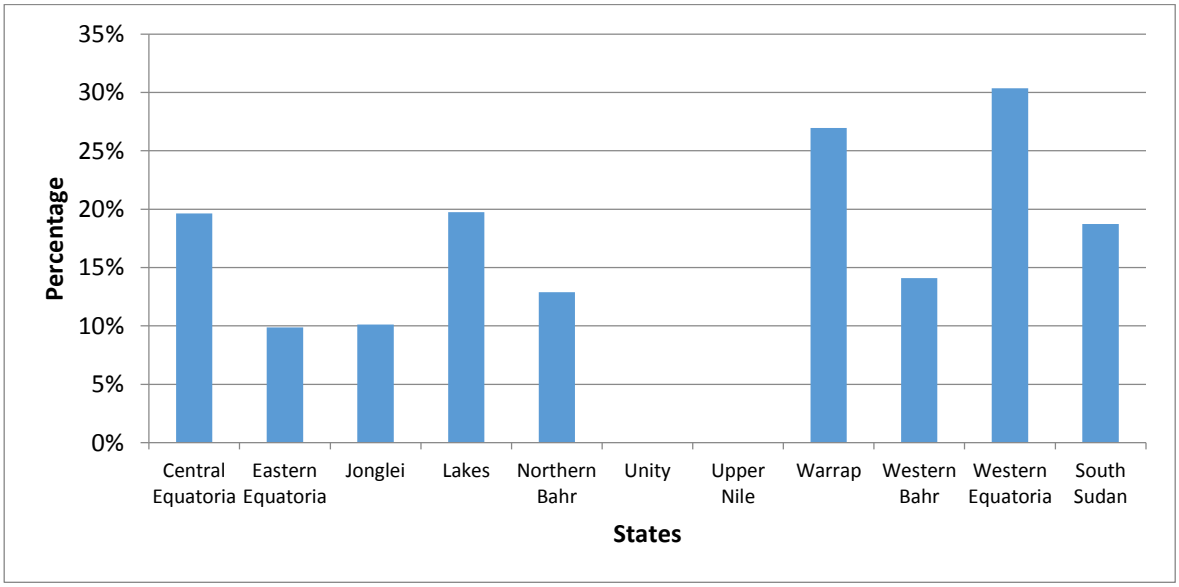
In 2015, 40,524 people were tested for HIV in the voluntary counselling and testing (VCT) clinics/PITC in the country and 7,587 (19%) were found positive. This is significantly lower than the data collected by HIV program 28,253 for the same year. The data reported though the DHIS may not reflect the full picture of HIV testing since a lot of HIV data is captured in parallel systems. The highest number of those that were tested reported from Central Equatoria (15,238), Western Equatoria (6,852) and Eastern Equatoria (6,133). Lower numbers were reported from Upper Nile (84) and Unity (0) as depicted in Table 13.

Table 13 HCT CLIENTS TESTED AND FOUND POSITIVE FOR HIV IN 2015

State	VCT client tested for HIV - new	VCT client tested HIV positive - new	% of Clients Tested Positive
Central Equatoria	15,238	2,990	20%
Eastern Equatoria	6,133	605	10%
Jonglei	3,114	315	10%
Lakes	2,503	494	20%
Northern Bahr	1,179	152	13%
Unity	-	-	0%
Upper Nile	82	-	0%
Warrap	1,451	391	27%
Western Bahr	3,972	560	14%
Western Equatoria	6,852	2,080	30%
South Sudan	**40,524**	**7,587**	**19%**

HIV positivity rate is higher in WES (30%) follow by Warrap (27%). However, Warrap positivity rate can be further investigated or check for data quality issues simply because it was rated lowest (0.4%) during 2012 ANC survey. The chart below also demonstrated that Eastern Equatoria and Jonglei states have the lowest positivity rate of about 10% each.

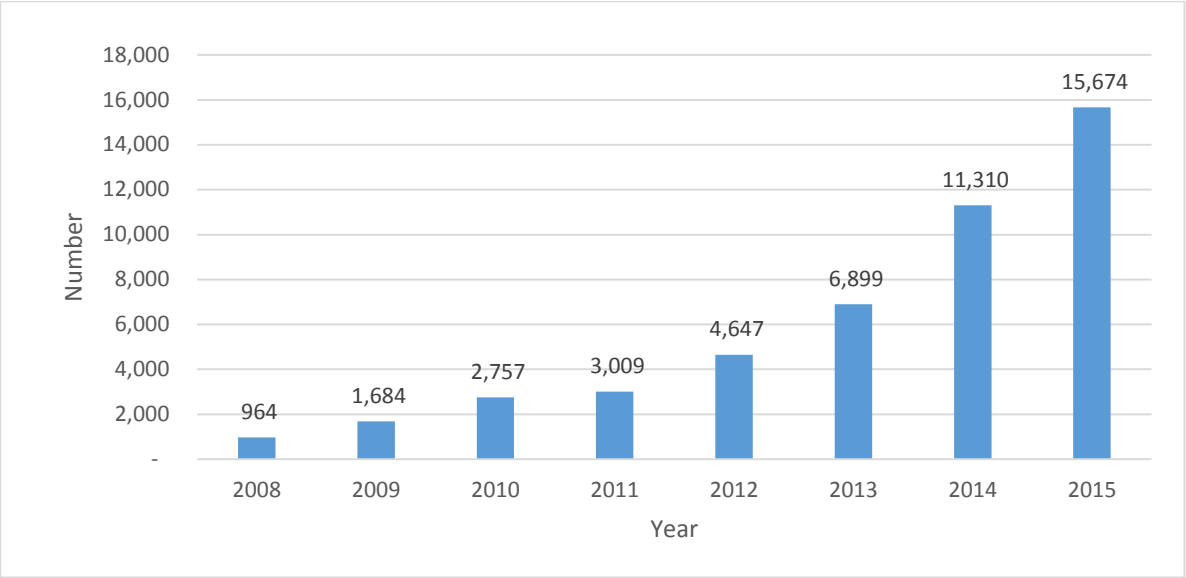
Figure 19 Percentage of HTC Clients Tested Positive in 2015



HIV Care and treatment

From the 27 ART sites, 24 facilities provided the services in 2015 including Bor which resumed the services in June 2014 after crisis. There was increase in the number of people living with HIV who are on ART from 11,310 (2014) to 15,674 (2015).

Figure 20 Number of PLHIVs Currently on ART as of December in 2015



The number of health facilities providing anti-retroviral therapy has increased from 22 sites in 2014 to 27 sites in 2015 and there was expansion of facilities starting in October 2015 as it proposed in the Global Fund grant supporting these centres. The new funding Mechanism (NFM) is supporting scaling up plan of ART sites from the current 27-67 by end of 2017.

In regard to the prevention of mother to child transmission (PMTCT) of HIV, of the pregnant women who attended ANC for their first visit 44,959 were tested for HIV, and 4,953 (11%) were found HIV positive. This DHIS data is lower than what was collected by HIV program in the same period tested (93,996) and positive (4405). Of those found positive, only 905 (18%) received ARVs prophylaxis as per the DHIS report. However, from HIV program data, 3897 out of 4405 HIV positive pregnant mothers were given ARVs option B+ representing 88.5% on prophylaxis. This is slightly lower than 2014 where (36%) received ARVs for prophylaxis. (see Table 14).

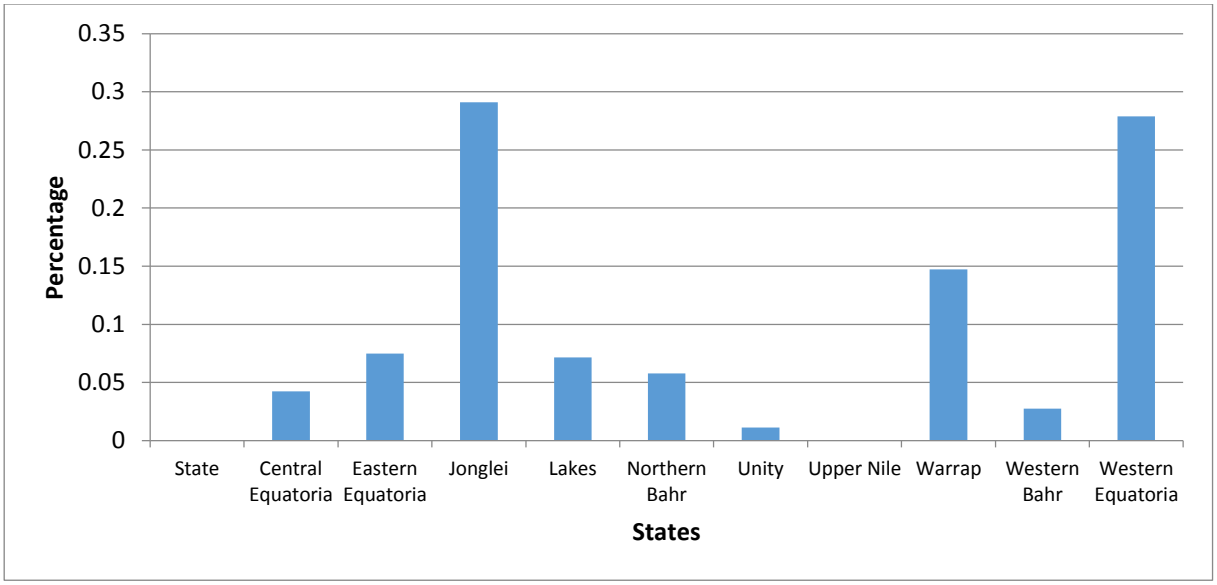
Table 14 PERFORMANCE OF PMTCT SERVICES IN 2015

State	Antenatal client tested for HIV	Antenatal client tested HIV positive - new	Antenatal client HIV positive given PMTCT	% of Antenatal client tested HIV positive
Central Equatoria	10,593	450	134	4.2%
Eastern Equatoria	9,426	705	143	7.5%
Jonglei	4,346	1,265	42	29.1%
Lakes	6,350	454	123	7.1%
Northern Bahr	554	32	0	5.8%
Unity	714	8	7	1.1%
Upper Nile	0	0	0	0.0%
Warrap	1,568	231	2	14.7%

Western Bahr	5,463	150	41	2.7%
Western Equatoria	5,945	1,658	413	27.9%
South Sudan	**44,959**	**4,953**	**905**	**11.0%**

Western Equatoria had better performance where about (413) of mothers found positive (Table 14) were provided with treatment to prevent transmission of the HIV virus to their babies, a drop from 36% in 2014 to 18% in 2015 is due to change of indicators in the DHIS from July to December when counties started using new DHIS template for reporting. In this regards, HIV program might have better data than what was reported through the DHIS. Access to treatment needs to increase in order to keep up with the increase in women being tested.

Figure 21 Percentage of Antenatal client tested positive for HIV in 2015



M&E AND HMIS ACTIVITIES IN 2015

Strengthening of the M&E system in South Sudan has continued during 2015 ensuring availability of data for planning and management at all levels of the health care system. However, 2015 was a year when HMIS was recovering from the stalemate of war which affected some States particularly Unity, Jonglei and Upper Nile. Although the monthly bulletin continues to be produced and shared with the MOH, SMOH as well as with various partners, the creation of 28 States has disrupted the consistency and timely flow of reports and this delayed monthly bulletin for several months. Besides the monthly bulletin the Annual HMIS reports continues to be produced although with delay due to technical problems, some of which mentioned above. This year's annual report writing changed the tradition of conducting review meeting to clean data with participation of States and Counties. After four years of doing the exercise the Ministry opted to write it in order to reduce the cost of conducting the workshops as well as that of hiring the consultants. However, the draft report as well as methodology

used to write this report will be shared with State Ministries and partners so that their views are included before printing.

At the national level the M&E Technical Working Group (TWG) continues to meet every month to oversee all aspects of M&E in the country and ensure the system remains effective. Its mandate includes providing technical assistance to the MOH, coordination and harmonization of national M&E System, monitoring progress towards M&E targets/plans, contribute capacity building of M&E system and communicate learning or updates on M&E. This forum is also used for sharing best practices and promoting cooperation between health sector partners. Other technical working group continue to carry out similar activities. For example EPI TWG weekly and quarterly meetings continue to be carried out involving immunization stakeholder to discuss program external and internal issues and make recommendations. Nutrition department also has been coordinating and charing the nutrition information working group.

Throughout the course of HMIS development hospital HMIS was one of the areas that has lagged behind as the system initially targeted primary health care. In 2014 tools were developed and three hospitals selected for piloting i.e. Numile, El Sabah and Wau Teaching Hospitals. Then in 2015 the piloted hospitals together with non-piloted hospitals which tested the tools (i.e. Rumble State, Raja and Kapoeta Civil Hospitals) were assessed in a workshop to understand challenges for non reporting and learn from success of other hospitals. After the workshop, about 20 hospital that participated were equipped with tools to continue rolling out the data collection for hospitals. By December 2015 36 hospitals submitted their reports. Some submitted reports consistently 11 and 12 reports and these are: Kajokeji, Yei, Kapoeta Mission, Numile, Kiir Mayardit Women, Rumbek, Mapourdit, Yirol, Awiel, Koch, Marial Lou, Mother Teresa, Raja, Daniel Comboni and Wau Teaching Hospitals (Please see the annex). The rest reported submitted 3 to 9 reports. There is progress but more work needs to be done in completeness of reporting.

After realisation that enormous amount of health information was generated from the community and not being captured in the HMIS and following the development of Boma Health Initiative in 2014/2015, the Department of Policy, Planning, Budgeting and Research took a proactive decision to assess the existing infrastructure for community health information system. This included assessment of existing tools and staffing needs among others. Following the need assessment conducted with support of M&E firm, community health information system data collection tools were developed in line with the Boma Health Initiative (BHI) Strategy. The tools will be rolled out as soon as the strategy is executed in the piloted States. Other departments such as national malaria control programme have developed a training package for BHI; EPI updated program protocols, guidelines and data collections tools according to country context. HMIS guidelines, quantified supervisory checklist and research policy were also updated. HIV department in collaboration with partners printed and distributed more than 1000 tools including 590 HCT registers, 151 HCT monthly summary, 200 ANC registers, 50 maternity registers,100 ANC maternity register, 46 maternity PMTCT among others.

Other M & E activities were conducted some with support of partners and the M & E firm hired by the Ministry. At the national level the national surveys were conducted. Two major surveys conducted were Lot Quality Assurance Sampling (LQAS) and Health Facility Assessment (HFA). The

LQAS report was produced but the results of HFA are yet to be shared. As part of the maternal mortality survey an update of sampling frame started in 7 States except Unity, Upper Nile and part of Jonglei. Also birth registration assessments was conducted in intervention States i.e., NBG (5 counties), CES (Morobo and Juba). Furthermore, the Ministry with technical support from the M and E firm will produce draft publications from the LQAS 2015 results and experience in developing HMIS in South Sudan. These two publications once approved by the Ministry and successful will be published in a reputable journal. Malaria Indicator survey plan and budget was developed and implementation shall be in August 2016. Nutrition department participated in Food Security Management System and Integrated Food Insecurity phase classification data collection, analysis and reporting. They also reviewed and approved nutrition assessment reports such as SMART and SLEAC Surveys.

After the introduction of pentavalent and IPV in 2014/2015 refresher trainings with support of fund managers were conducted to most of the health facility personals on vaccination techniques. It was a great achievement into the program, currently about 90% of facilities are offering pentavalent vaccine. Despite progress made in vaccination and in harmonisation of tools there are still challenges of parallel reporting and most EPI officers do not have access to DHIS. It will be important to increase participation of EPI officers in HMIS/DHIS trainings.

With regards to supportive supervision, the following visits were conducted; visit to NBG, EES and CES. The visit was conducted by Malaria in conjunction with PSI. 25 health facilities were visited. HIV department visited selected health facilities in all the States except Unity and Upper Nile due to insecurity and nutrition department in collaboration with partners visited three health facilities in Yambio county and supported the campaigns for EPI and Nutrition. Also a joint visit between MoH and Rapid Results Health Project staff was conducted in Melut county of Upper Nile in January 2015. Three PHCC and one PHCU was visited. Among the issues identified were improper filling of registers, poor waste disposable and lack of basic equipment. Finding were shared with stakeholders. Under training different departments conducted various workshops. For example, HIV department in collaboration with intra health conducted two M&E trainings in Juba and one in Nimule. In the three trainings, 50 participants were trained followed by sites mentorship for data quality improvement. Onsite training was also conducted and it has yielded improved performances. Nutrition department attended Regional level SMART review workshop in Nairobi.

UNDP in collaboration with MoH policy, planning and budgeting directorate trained 27 state and County M&E officers (5 female) on HMIS tools use and 19 M&E officers (4 female) on DHIS 2 in Juba. The construction of three M&E offices (Juba, Torit and Kuajok) have been completed, furnished with the necessary equipment. The three M&E offices were handed over to State Ministry of Health and all are functional. UNDP in collaboration with Directorate of Policy, Planning and Budgeting Department in MoH conducted a comprehensive and systemic annual review meeting in Juba from 28-30th September 2015. In total 50 participants (7 female and 43 males) were drawn from SRs, MoH-RSS, partners and state MoH (DGs, M&E coordinators, HIV directors and TB coordinators). The meeting assessed the achievement of TB, HIV, TB/HIV and HSS grants at Principal Recipient and SRs levels. Additionally, the meeting also contributed to the development of operational plan for TB, HIV and HMIS/M&E for state MoH. UNDP M&E participated in TB and TB/HIV training for Health Workers in states namely CES (Juba), EES (Torit and Nimule), and NBGS (Aweil).

ANNEXES

Annex 1: Counties priority health services activity report and indicators, HMIS 2015

Annex 2: Definitions of priority indicators for the HMIS 2015.

Annex 3: 2015 routine report format.

ANNEX 1: SUMMARY OF PERFOMANCE BASED ON CORE INDICATORS 2015

Indicators in the Routine Report*	HSDP Targets	2011	2012	2013	2014	2015
Utilization rate (all ages)	1	0.2	0.5	0.6	0.6	0.9
Utilization rate (under 5 years)		0.6	1	1.2	1.3	1.7
Antenatal care coverage 1st visit		20%	34%	45%	53%	61%
Antenatal care coverage 4th or more visits	40%	13%	19%	23%	24%	27%
Antenatal care rate		68%	56%	51%	47%	46%
IPT2 coverage of pregnant women receiving ANC		60%	53%	50%	47%	53%
IPT2 coverage of all pregnant women	40%	12%	18%	23%	25%	32%
Coverage of bed nets for pregnant women		12%	14%	15%	22%	45%
TT2 coverage of all pregnant women	80%	10%	8%	16%	16%	21%
TT2 coverage of pregnant woman attending ANC		51%	23%	34%	31%	34%
Proportion of births attended in a health facility	25%	8%	10%	11%	12%	14%
Rate of deliveries by skilled birth attendants in a HF	30%	4%	5%	6%	7%	8%
Proportion of deliveries referred to higher levels from a health facility		9%	10%	10%	9%	5%
Delivery referral rate – all pregnant women		1%	1%	1%	1%	1%
Rate of births by Caesarean section	5%	0.1%	0.1%	0%	0.3%	0.3%
Vitamin A supplement to new mothers	20%	6%	11%	13%	15%	10%
Postnatal care coverage	40%	4%	8%	11%	11%	8%
New contraceptive acceptance rate	20%	<1%	1%	1%	1%	1%
DPT1 coverage children under 1 year		45%	37%	47%	30%	15%
DPT3/Penta3 coverage children under 1 year		34%	30%	38%	38%	11%
OPV3 coverage children under 1 year		29%	31%	39%	39%	45%
Measles coverage children under 1 year		48%	49%	54%	62%	57%
Vitamin A supplement to children 6-59 months	80%	3%	6%	9%	8%	4%
Proportion of children with severe acute malnutrition (middle arm circumference <115 mm)		2.50%	2.80%	3%	3%	6%
Proportion of children with moderate acute malnutrition (middle arm circumference <125		3.10%	4.50%	6%	5%	11%

mm)						
Coverage of bed nets amongst children under 5		3%	4%	5%	4%	5%
Proportion of clinically diagnosed uncomplicated malaria in children under 5 years		53%	53%	57%	60%	54%
Proportion of confirmed uncomplicated malaria in children under 5 years		34%	35%	33%	31%	37%
Proportion of severe malaria in children under 5 years		13%	12%	11%	9%	9%
Proportion of children under 5 years with diarrhoea treated with ORS	80%	82%	76%	79%	81%	85%
Pneumonia curative consultation rate in children under 5 years		12%	11%	11%	11%	16%
TB detection rate all forms (per 100,000 population)	79	26	30	37	68	72
TB treatment success rate	85%	69%	74%	76%	76%	78%
Proportion of VCT clients tested HIV+		7%	11%	9%	6%	19%
Proportion of ANC clients tested HIV+		8%	13%	12%	9%	11%
Proportion of HIV+ pregnant women receiving ANC provided with ARV therapy for PMTCT		36%	45%	35%	38%	18%

ANNEX 2: COUNTIES PRIORITY HEALTH SERVICES INDICATORS 2015

CENTRAL EQUATORIA STATE

Data Element	Juba County	Kajo Keji County	Lainya County	Morobo County	Terekeka County	Yei County	Total
Consultation curative under 5 years male	9,391	10,745	3,417	3,616	6,949	7,680	41,798
Consultation curative under 5 years female	9,588	11,309	3,529	3,743	7,048	7,124	42,341
Consultation curative 5 years and older male	79,366	59,918	24,650	24,848	34,892	38,460	262,134
Consultation curative 5 years and older female	13,128	13,277	4,659	4,239	7,858	9,642	52,803

Consultation curative all	22,342	25,339	7,365	7,668	10,338	15,286	88,338
Headcount under 5 years (estimated)	167,863	105,619	38,858	36,896	50,050	57,890	457,176
Headcount estimated RPIL	18,979	22,054	6,946	7,359	13,997	14,804	84,139
Antenatal client 1st visit	54,449	60,670	18,970	19,266	32,193	39,732	225,280
Antenatal client 4th or more visit	54,449	60,670	18,970	19,266	32,193	39,732	225,280
Antenatal client IPT 2nd dose	247,229	165,537	63,508	61,744	84,942	96,350	719,310
Family planning new user	178,693	108,334	38,339	59,144	79,156	84,267	547,933
Delivery in facility by skilled birth attendant	71,158	38,177	14,043	25,603	34,369	39,630	222,980
Delivery in facility by TBA MCHW CHW CM or Village Midwife	206,885	123,189	41,744	67,336	83,727	112,320	635,201
Delivery in facility total	27,220	7,490	2,804	5,287	6,407	12,697	61,905
Delivery in community	12,948	4,575	946	2,296	2,852	6,310	29,927
Delivery referred	3,947	1,932	833	1,452	1,137	3,144	12,445
Live birth in facility	11,185	5,810	2,433	5,036	2,022	6,156	32,642
Postnatal client 1st visit	745	987	294	203	369	993	3,591
Malaria uncomplicated clinically diagnosed under 5 years	4,333	2,287	563	1,617	562	3,444	12,806
Malaria uncomplicated confirmed under 5 years	3,047	1,625	301	548	287	493	6,301
Malaria severe under 5 years	7,380	3,912	864	2,165	849	3,937	19,107
Malaria uncomplicated 5 years and older	268	326	154	221	823	775	2,567
Malaria severe 5 years and older	114	127	23	42	27	88	421
Pneumonia presumed under 5 years	4,661	3,846	839	2,057	845	4,129	16,377
Diarrhoea treated with ORS under 5 years	1,508	886	258	598	550	1,159	4,959
Diarrhoea under 5 years	21,972	14,747	7,171	3,301	13,829	12,048	73,068
Vitamin A supplementation 6-59 months	26,477	26,014	8,642	10,121	8,598	20,432	100,284
Vitamin A supplementation new mother	2,653	2,174	1,562	1,643	1,004	5,027	14,063
Insecticide treated net to under 5 years	58,598	36,255	12,537	6,756	20,745	24,731	159,622
Insecticide treated net to antenatal client	38,009	29,354	4,679	7,365	8,440	11,615	99,462
MUAC less than 115 mm under 5 years	4,000	2,712	1,060	1,104	1,315	3,055	13,246
MUAC less than 125 mm under 5 years	5,528	4,177	1,645	2,617	2,965	4,637	21,569
Death in facility all	8,487	7,252	3,484	3,876	8,979	7,191	39,269
Death in facility under 5 years	11,326	7,479	4,469	4,043	9,356	8,949	45,622
Death in facility maternal	3,289	3,516	1,464	6,579	3,212	2,585	20,645
TB suspected	1,132	857	74	444	1,670	640	4,817
TB suspect referred to TB Unit	8,829	8,481	2,334	5,849	2,549	5,115	33,157
VCT client seen	14,771	5,995	2,334	5,087	3,571	5,457	37,215
VCT client tested for HIV – new	3,940	374	258	345	960	423	6,300
VCT client tested HIV positive – new	6,911	609	1,063	1,268	1,702	1,359	12,912
Antenatal client tested for HIV	13,071	3,450	6,534	502	35	222	23,814
Antenatal client tested HIV positive – new	12	64	13	19	12	75	195

Antenatal client HIV positive given PMTCT	9	38	6	10	8	55	126
BCG dose under 1 year total		3	2	2		3	10
OPV 3rd dose under 1 year total	7,315	289	193	125	75	363	8,360
DPT 3rd dose under 1 year total	2,513	114	97	33	76	193	3,026
Pentavalent 3rd dose under 1 year		2					2
Measles dose under 1 year total	297,222	100,664	10,129	17,082	1,727	23,855	450,679
MAIN INDICATORS							
Consultation curative under 5 years utilization rate	0.5	0.8	0.8	0.7	0.6	0.4	0.6
Consultation curative utilization rate	0.4	0.5	0.4	0.4	0.3	0.2	0.4
Antenatal coverage 4th visit	47.6	61.6	33.6	41.4	45.9	49.2	48.3
Diarrhoea treated with ORS rate in children	18.7	32.9	36.3	34.6	21.6	32.8	25.8
DPT 3rd dose coverage	75.0	96.1	78.5	94.8	94.9	80.0	85.8
Pentavalent/DPT 3rd dose coverage	12.8	10.7	-0.7	13.1	6.4	7.3	9.9
IPT 2nd dose coverage to antenatal client	71.9	46.9	40.1	59.3	64.6	52.6	59.2
Tetanus Toxoid 2nd dose coverage to ANC	32.3	37.7	43.5	38.4	41.2	24.0	33.3

EASTERN EQUATORIA STATE

Data Element	Budi County	Ikotos County	Kapoeta East	Kapoeta North County	Kapoeta South County	Lopa/Lafon County	Magwi County	Torit County	Total
Consultation curative under 5 years male	6,774	8,449	6,260	7,589	5,386	8,272	13,572	12,079	68,381
Consultation curative under 5 years female	7,418	8,417	6,791	8,154	5,423	8,498	13,830	12,533	71,064
Consultation curative 5 years and older male	37,492	46,325	27,924	24,677	30,333	38,767	62,760	66,283	334,561

Consultation curative 5 years and older female	10,565	11,546	14,709	12,830	7,685	10,695	17,944	13,987	99,961
Consultation curative all calc	12,711	13,227	16,904	14,023	11,394	13,406	35,339	16,828	133,832
Headcount under 5 years (estimated)	41,544	48,375	39,846	39,265	44,369	36,217	70,033	56,353	376,002
Headcount estimated RPIL	14,192	16,866	13,051	15,743	10,809	16,770	27,402	24,612	139,445
Antenatal client 1st visit	37,468	41,639	44,664	42,596	29,888	40,871	80,685	55,427	373,238
Antenatal client 4th or more visit	37,468	41,639	44,664	42,596	29,888	40,871	80,685	55,427	373,238
Antenatal client IPT 2nd dose	79,036	94,700	67,770	63,942	74,702	74,984	132,793	122,636	710,563
Family planning new user	64,909	59,873	73,624	40,924	54,234	65,174	110,913	109,741	579,392
Delivery in facility by skilled birth attendant	29,446	25,900	40,026	27,149	24,130	36,657	45,429	46,347	275,084
Delivery in facility by TBA MCHW CHW CM or Village Midwife	67,540	62,692	100,694	67,246	61,253	79,733	138,794	104,512	682,464
Delivery in facility total	5,244	3,166	5,727	4,299	3,837	2,250	7,094	6,089	37,706
Delivery in community	2,568	1,014	1,413	897	1,581	1,255	3,735	3,598	16,061
Delivery referred	959	863	748	1,251	666	376	2,229	1,954	9,046
Live birth in facility	1,764	1,523	1,564	301	1,633	588	2,844	1,873	12,090
Postnatal client 1st visit	14	58	0	11	6	210	243	543	1,085
Malaria uncomplicated clinically diagnosed U5	628	492	333	200	611	472	3,576	1,425	7,737
Malaria uncomplicated confirmed under 5 years	320	501	72	32	158	497	990	863	3,433
Malaria severe under 5 years	948	993	405	232	769	969	4,566	2,288	11,170
Malaria uncomplicated 5 years and older	670	654	1,003	681	179	367	734	822	5,110
Malaria severe 5 years and older	16	31	37	26	7	30	132	204	483
Pneumonia presumed under 5 years	848	873	398	218	737	952	4,460	1,867	10,353
Diarrhoea treated with ORS under 5 years	527	158	727	884	416	386	1,863	1,520	6,481
Diarrhoea under 5 years	13,996	13,910	7,780	3,297	9,905	7,694	18,545	20,961	96,088
Vitamin A supplementation 6-59 months	6,072	5,820	2,845	2,171	1,526	5,110	15,064	19,112	57,720
Vitamin A supplementation new mother	1,604	3,013	1,141	860	1,066	1,583	4,098	10,101	23,466
Insecticide treated net to under 5 years	21,641	16,556	16,925	5,355	13,878	12,761	36,637	29,223	152,976
Insecticide treated net to antenatal client	2,211	4,155	1,806	441	1,324	3,062	9,438	12,003	34,440
MUAC less than 115 mm under 5 years	1,437	2,811	1,200	576	959	2,122	3,494	13,959	26,558
MUAC less than 125 mm under 5 years	3,244	2,951	1,176	1,987	1,087	3,200	1,840	9,219	24,704
Death in facility all	6,837	12,502	7,565	4,684	6,049	7,830	10,677	17,534	73,678
Death in facility under 5 years	7,854	15,803	8,396	4,852	5,882	9,652	13,060	20,005	85,504
Death in facility maternal	1,044	951	3,375	4,044	599	526	7,036	2,550	20,125
TB suspected	577	172	1,216	1,165	370	220	2,194	1,950	7,864
TB suspect referred to TB Unit	50	88	1,259	1,451	702	441	2,598	2,012	8,601
VCT client seen	719	1,186	1,730	1,570	2,757	560	4,105	2,299	14,926
VCT client tested for HIV - new	3,098	1,832	1,960	1,084	1,329	4,275	1,803	4,725	20,106
VCT client tested HIV positive - new	3,464	3,194	3,923	1,692	4,131	7,729	3,886	5,774	33,793

Antenatal client tested for HIV	2,610	5,314	8,209	264	2,074	403	7,262	1,292	27,428
Antenatal client tested HIV positive - new	42	29	28	15	39	13	145	113	424
Antenatal client HIV positive given PMTCT	27	17	7	7	17	10	46	51	182
BCG dose under 1 year total	0	1	3	5	0	2	3	3	17
OPV 3rd dose under 1 year total	342	242	217	59	534	13	733	597	2,737
DPT 3rd dose under 1 year total	138	131	141	41	338	4	339	320	1,452
Pentavalent 3rd dose under 1 year	0	0	0	0	0	0	0	0	0
Measles dose under 1 year total	0	0	0	0	0	0	0	0	0
MAIN INDICATORS									
Consultation curativeU5 utilisation rate	0.9	1.2	0.4	0.5	0.8	0.8	0.8	1.5	0.8
Consultation curative utilisation rate all	0.4	0.6	0.2	0.3	0.5	0.3	0.4	0.6	0.4
IPT 2nd dose coverage to ANC client	45.7	31.8	26.4	18.6	44.8	52.8	51.9	63.2	42.9
Antenatal coverage 4th visit	26.7	38.5	18.1	34.7	22.5	23.4	49.5	1666.5	308.2
Diarrhoea treated with ORS rate in children	87.8	77.3	87.3	95.8	109.2	79.4	83.1	92.6	87.1
DPT 3rd dose coverage	2.1	42.8	4.9	54.2	18.1	26.3	-0.6	12.2	15.0
Pentavalent/DPT 3rd dose coverage	95.8	40.5	55.0	28.0	65.8	40.3	45.7	90.4	56.4
Tetanus Toxoid 2nd dose coverage to ANC	33.0	45.1	47.7	15.0	47.7	83.5	47.6	51.6	44.2

JONGLEI STATE

Data Element	Akobo County	Ayod County	Bor County	Duk County	Fangak County	Nyirol County	Pibor County	Pigi County	Pochalla County	Twic East County	Uror County	Grand Total
Consultation curative under 5 years male	18,468	7,065	12,319	2,744	31,058	19,158	11,839	4,608	8,704	5,469	1,717	123,149

Consultation curative under 5 years female	18,350	7,561	13,248	2,821	34,102	20,512	9,629	4,806	8,435	5,433	1,841	126,738
Consultation curative 5 years and older male	11,362	6,062	20,421	3,590		15,021	844	4,058	5,191	3,059	13,097	82,705
Consultation curative 5 years and older female	34,060	9,233	17,993	4,450	53,714	35,147	18,338	6,444	10,815	9,850	1,921	201,965
Consultation curative all calc	40,248	11,371	32,503	7,704	60,116	40,811	17,390	7,545	15,562	13,443	2,380	249,073
Headcount under 5 years (estimated)	20,787	8,373	36,150	5,846		29,102	1,091	6,954	8,398	5,902	16,613	139,216
Headcount estimated RPIL	36,818	14,626	25,567	5,565	65,160	39,670	21,468	9,414	17,139	10,902	3,558	249,887
Antenatal client 1st visit	111,126	35,230	76,063	17,719	178,990	115,628	57,196	23,403	43,516	34,195	7,859	700,925
Antenatal client 4th or more visit	111,126	35,230	76,063	17,719	178,990	115,628	57,196	23,403	43,516	34,195	7,859	700,925
Antenatal client IPT 2nd dose	32,149	14,435	56,571	9,436	0	44,123	1,935	11,012	13,589	8,961	29,710	221,921
Family planning new user	20,839	8,451	46,107	4,617	9,021	83,865	7,349	5,711	8,084	6,016	1,955	202,015
Delivery in facility by skilled birth attendant	39,946	14,948	47,610	6,720	57,592	75,950	27,696	10,756	19,688	13,337	4,398	318,641
Delivery in facility by TBA MCHW CHW CM or Village Midwife	116,936	31,959	114,847	19,531	139,399	154,370	71,208	26,910	41,289	37,536	9,552	763,537
Delivery in facility total	4,674	2,217	7,750	2,019	2,824	7,366	2,851	986	917	1,468	653	33,725
Delivery in community	2,262	652	4,301	1,103	1,667	574	254	583	533	701	206	12,836
Delivery referred	1,820	274	1,310	50	2,101	1,722	549	509	495	480	37	9,347
Live birth in facility	428	240	1,677	48		335	2	33	119	157	83	3,122
Postnatal client 1st visit	435	3	177	311	8	79	64	5	127	72	0	1,281
Malaria uncomplicated clinically diagnosed under 5 years	716	65	709	31	405	785	544	48	34	105	33	3,475
Malaria uncomplicated confirmed under 5 years	961	206	1,014	71	332	315	173	74	344	237	219	3,946
Malaria severe under 5 years	1,677	271	1,723	102	737	1,100	717	122	378	342	252	7,421
Malaria uncomplicated 5 years and older	1,691	1,051	839	82	898	879	75	598	54	334	27	6,528
Malaria severe 5 years and older	30	34	53	17	80	25	3	0	19	7	9	277
Pneumonia presumed under 5 years	1,329	126	1,981	24	439	997	577	127	377	337	153	6,467
Diarrhoea treated with ORS under 5 years	1,046	111	353	6	560	2,883	212	115	275	259	47	5,867
Diarrhoea under 5 years	7,817	5,531	12,583	1,946	14,023	426	5,025	4,047	6,152	4,295	2,743	64,588
Vitamin A supplementation 6-59 months	9,981	4,397	3,733	1,234	5,498	10,207	4,854	1,772	2,006	319	883	44,884
Vitamin A supplementation new mother	2,799	2,081	1,737	1,416	1,625	180	410	335	338	208	267	11,396
Insecticide treated net to under 5 years	26,286	7,000	22,333	3,481	23,719	16,524	11,247	6,298	10,411	9,871	3,214	140,384
Insecticide treated net to antenatal client	570	477	2,402	548		452	163	257	0	53	85	5,007
MUAC less than 115 mm under 5 years	4,639	2,870	3,892	835	2,777	129	275	408	415	350	267	16,857
MUAC less than 125 mm under 5 years	4,507	2,608	12,079	431	5,613	7,978	3,168	1,518	3,501	1,264	1,358	44,025
Death in facility all	10,566	4,330	7,693	2,368	9,355	12,212	4,773	2,237	2,430	2,388	4,801	63,153
Death in facility under 5 years	11,920	5,859	10,228	2,567	8,881	12,888	6,102	2,391	4,580	3,197	4,842	73,455
Death in facility maternal	3,616	1,624	2,604	286	6,378	2,991	577	1,653	1,604	1,128	259	22,720
TB suspected	1,718	836	1,404	60	2,151	1,639	183	435	184	486	270	9,366
TB suspect referred to TB Unit	2,011	1,067	2,818	406	887	1,376	2,536	0	43	391	22	11,557

VCT client tested for HIV - new	1,993	1,091	3,217	177	1,165	4,412	2,994	0	334	1,331	74	16,788
VCT client tested HIV positive - new	710	2,720	4,853	622	2,469	2,611	687	546	215	37	59	15,529
Antenatal client tested for HIV	1,614	3,607	7,440	1,392	4,531	2,623	2,598	910	5,275	655	136	30,781
Antenatal client tested HIV positive - new	0	10	494	213		0		0	0		0	717
Antenatal client HIV positive given PMTCT	60	37	75	107	114	112	49	1	11	14	3	583
BCG dose under 1 year total	25	11	24	2	39	27	24	1	5	3	3	164
OPV 3rd dose under 1 year total	0	24	5	2	1	1	2	0	2	1	0	38
DPT 3rd dose under 1 year total	171	767	41	115	431	700	93	56	27	6	39	2,446
Pentavalent 3rd dose under 1 year	59	397	46	103	232	382	21	56	0	4	19	1,319
Measles dose under 1 year total	0	0	1	0	0	0	2	0	0	1	0	4
MAIN INDICATORS												
Consultation curative U5 years utilization rate	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.1
Consultation curative utilization rate	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
IPT 2nd dose coverage to antenatal client	49.7	20.1	60.4	57.1	61.4	7.8	8.0	62.3	60.6	51.6	34.9	39.3
Antenatal coverage 4th visit	48.2	18.7	23.8	2.7	72.1	32.5	19.4	58.1	67.5	44.4	6.5	33.9
Diarrhoea treated with ORS rate in children	83.3	67.5	73.8	99.8	111.2	93.2	80.5	93.9	53.8	73.7	99.0	85.4
DPT 3rd dose coverage		69.5	19.0	75.8	21.1	50.6	85.8		39.1			29.8
Pentavalent/DPT 3rd dose coverage	21.4	1.0	46.9	6.3	17.0	73.1	13.7	0.0	23.1	20.1	1.5	21.5
Tetanus Toxoid 2nd dose coverage to ANC	16.5	4.8	41.4	0.9	8.2	26.7	21.3	0.0	38.2	45.0	17.3	23.1

LAKES STATE

Data Element	Awerial County	Cueibet County	Rumbek Central County	Rumbek East County	Rumbek North County	Wulu County	Yirol East County	Yirol West County	Total
Consultation curative under 5 years male	12,732	10,593	6,562	4,586	1,779	5,533	6,731	8,060	56,576
Consultation curative under 5 years female	13,780	11,982	6,506	4,835	2,011	6,400	6,193	8,584	60,291
Consultation curative 5 years and older male	67,998	55,203	79,293	44,943	28,477	16,435	33,724	71,994	398,067
Consultation curative 5 years and older female	16,044	13,668	14,395	6,327	2,775	7,030	5,507	11,019	76,765
Consultation curative all calc	29,785	24,516	17,183	9,984	4,296	10,319	8,315	19,497	123,895
Headcount under 5 years (estimated)	107,640	80,283	175,700	88,509	39,657	24,690	32,975	119,189	668,643
Headcount estimated RPIL	26,512	22,575	13,068	9,421	3,790	11,933	12,924	16,644	116,867
Antenatal client 1st visit	72,341	60,759	44,646	25,732	10,861	29,282	26,746	47,160	317,527
Antenatal client 4th or more visit	72,341	60,759	44,646	25,732	10,861	29,282	26,746	47,160	317,527
Antenatal client IPT 2nd dose	175,638	135,486	254,993	133,452	68,134	41,125	66,699	191,183	1,066,710
Family planning new user	111,159	85,340	121,159	93,307	45,798	24,755	61,960	99,521	642,999
Delivery in facility by skilled birth attendant	53,343	51,094	29,880	27,119	9,225	17,801	37,417	28,337	254,216
Delivery in facility by TBA MCHW CHW CM or Village Midwife	127,308	119,503	103,877	76,767	27,334	42,979	76,107	89,687	663,562
Delivery in facility total	8,037	7,498	17,799	5,437	3,524	1,826	5,481	11,484	61,086
Delivery in community	1,799	3,974	5,879	3,429	1,633	948	2,838	3,954	24,454
Delivery referred	1,598	1,863	3,620	725	449	1,042	1,306	1,648	12,251
Live birth in facility	1,630	1,899	8,755	3,396	1,064	245	2,736	2,802	22,527
Postnatal client 1st visit	26	0	24	24	0	249	0	19	342
Malaria uncomplicated clinically diagnosed under 5 years	778	1,218	2,241	137	307	151	568	2,302	7,702
Malaria uncomplicated confirmed under 5 years	41	735	877	2,415	445	159	168	1,770	6,610
Malaria severe under 5 years	819	1,953	3,118	2,552	752	310	736	4,072	14,312
Malaria uncomplicated 5 years and older	283	1,598	323	378	95	372	165	1,239	4,453
Malaria severe 5 years and older	18	73	21	22	6	25	39	61	265
Pneumonia presumed under 5 years	811	1,826	3,044	2,447	759	290	704	3,726	13,607
Diarrhoea treated with ORS under 5 years	709	942	15	140	12	330	308	1,076	3,532
Diarrhoea under 5 years	10,190	20,187	25,891	14,028	3,613	5,356	8,673	15,995	103,933
Vitamin A supplementation 6-59 months	3,090	8,330	7,910	3,453	1,911	2,578	1,709	12,003	40,984
Vitamin A supplementation new mother	808	2,313	1,807	1,849	675	816	289	3,254	11,811
Insecticide treated net to under 5 years	28,790	20,727	53,662	23,950	8,296	8,571	13,495	24,017	181,508
Insecticide treated net to antenatal client	4,536	4,970	8,558	3,706	2,908	524	1,799	11,826	38,827
MUAC less than 115 mm under 5 years	1,604	2,714	2,719	2,755	1,053	927	494	1,871	14,137
MUAC less than 125 mm under 5 years	2,591	4,443	9,221	5,501	4,994	2,030	4,042	10,609	43,431
Death in facility all	18,270	10,989	12,228	6,373	5,349	3,881	6,820	8,119	72,029
Death in facility under 5 years	18,386	11,612	14,204	7,680	6,179	4,601	7,800	8,888	79,350
Death in facility maternal	17,684	1,283	666	463	427	1,691	1,933	794	24,941

TB suspected	956	777	455	340	150	544	326	899	4,447
TB suspect referred to TB Unit	4,815	208	739	406	808	188	303	636	8,103
VCT client seen	7,001	546	2,232	386	2,748	212	1,416	3,201	17,742
VCT client tested for HIV - new	2,578	4,528	1,067	1,111	645	92	2,838	1,215	14,074
VCT client tested HIV positive - new	7,215	5,633	1,164	1,905	1,662	403	8,391	2,727	29,100
Antenatal client tested for HIV	33,030	1,264	4	1,417	66	1	4,424	9,522	49,728
Antenatal client tested HIV positive - new	37	58	55	2	3	15	3	60	233
Antenatal client HIV positive given PMTCT	17	29	21	2	2	9	2	22	104
BCG dose under 1 year total	1	3	2	0	0	1	0	2	9
OPV 3rd dose under 1 year total	358	663	871	92	75	128	30	395	2,612
DPT 3rd dose under 1 year total	184	273	155	55	3	37	18	366	1,091
Measles dose under 1 year total	1	0	0	0	0	0	0	0	1
MAIN INDICATORS									
Consultation curative U5 utilization rate	3.4	1.2	1.2	0.8	1.5	0.9	1.2	1.7	1.3
Consultation curative utilization rate all	2.2	0.7	0.9	0.6	0.9	0.6	0.6	1.1	0.9
IPT 2nd dose coverage to ANC Clients	22.0	54.8	33.5	59.0	42.9	51.8	46.3	32.7	38.8
Antenatal coverage 4th visit	23.1	29.2	26.7	15.2	17.9	63.0	33.0	14.7	24.3
Diarrhoea treated with ORS rate in children	99.2	94.3	86.0	80.5	86.2	82.8	84.9	88.7	89.9
DPT 3rd dose coverage	20.6	51.3	48.7	1.8	22.1	-20.5	17.4	49.5	28.4
Tetanus Toxoid 2nd dose coverage to ANC	118.2	55.3	67.4	44.8	46.1	18.7	73.2	50.9	58.8

NORTHERN BAHR EL GHAZAL STATE

Data Element	Aweil Centre County	Aweil East County	Aweil North County	Aweil South County	Aweil West County	Total
Consultation curative under 5 years male	20,270	29,183	18,091	12,934	21,287	101,765
Consultation curative under 5 years female	16,663	29,583	19,063	12,466	21,920	99,695
Consultation curative 5 years and older male	47,966	123,185	106,542	25,285	176,882	479,860
Consultation curative 5 years and older female	16,787	44,796	18,867	13,751	27,046	121,247
Consultation curative all calc	16,774	69,938	30,170	26,518	36,630	180,030
Headcount under 5 years (estimated)	39,340	246,720	162,182	40,574	206,233	695,049
Headcount estimated RPIL	36,933	58,766	37,154	25,400	43,207	201,460
Antenatal client 1st visit	70,494	173,500	86,191	65,669	106,883	502,737
Antenatal client 4th or more visit	70,494	173,500	86,191	65,669	106,883	502,737
Antenatal client IPT 2nd dose	87,306	369,905	268,724	65,859	383,115	1,174,909
Family planning new user	56,796	174,895	147,241	45,635	208,228	632,795
Delivery in facility by skilled birth attendant	46,783	104,680	69,110	38,766	87,799	347,138
Delivery in facility by TBA MCHW CHW CM or Village Midwife	87,319	285,346	169,575	94,433	224,108	860,781
Delivery in facility total	2,249	16,039	17,260	4,755	24,331	64,634
Delivery in community	1,405	11,254	4,907	1,044	11,539	30,149
Delivery referred	1,293	3,285	2,918	1,623	2,968	12,087
Live birth in facility	226	6,292	3,658	0	5,530	15,706
Postnatal client 1st visit	164	663	567	214	956	2,564
Malaria uncomplicated clinically diagnosed under 5 years	94	1,414	1,266	192	7,706	10,672
Malaria uncomplicated confirmed under 5 years	190	876	556	357	1,536	3,515
Malaria severe under 5 years	284	2,290	1,822	549	9,242	14,187
Malaria uncomplicated 5 years and older	206	475	1,393	346	557	2,977
Malaria severe 5 years and older	24	230	103	98	117	572
Pneumonia presumed under 5 years	178	2,649	1,853	493	9,046	14,219
Diarrhoea treated with ORS under 5 years	276	999	1,348	640	1,074	4,337
Diarrhoea under 5 years	12,666	37,871	30,679	8,439	41,930	131,585
Vitamin A supplementation 6-59 months	8,746	16,504	10,073	2,653	35,693	73,669
Vitamin A supplementation new mother	3,710	5,857	4,136	525	6,623	20,851
Insecticide treated net to under 5 years	11,634	90,897	58,000	20,602	82,997	264,130
Insecticide treated net to antenatal client	1,373	13,853	396	0	15,219	30,841
MUAC less than 115 mm under 5 years	3,445	12,415	4,633	343	6,859	27,695
MUAC less than 125 mm under 5 years	9,913	21,721	8,019	2,057	15,530	57,240

Death in facility all	8,352	17,471	13,951	4,033	19,369	63,176
Death in facility under 5 years	8,945	19,110	15,775	4,040	23,072	70,942
Death in facility maternal	552	2,198	2,729	1,310	756	7,545
TB suspected	267	413	955	503	580	2,718
TB suspect referred to TB Unit	1,030	1,440	2,294	672	1,426	6,862
VCT client seen	941	981	9,463	563	7,754	19,702
VCT client tested for HIV - new	1,940	3,274	4,070	862	7,338	17,484
VCT client tested HIV positive - new	1,907	1,329	7,364	1,617	11,493	23,710
Antenatal client tested for HIV	0	1,415		0	75	1,490
Antenatal client tested HIV positive - new		108	73	54	140	375
Antenatal client HIV positive given PMTCT		42	39	39	36	156
BCG dose under 1 year total		13	3	0	30	46
OPV 3rd dose under 1 year total	427	2,723	121	33	483	3,787
DPT 3rd dose under 1 year total	127	612	63	17	273	1,092
Pentavalent 3rd dose under 1 year		0	0	0	0	0
Measles dose under 1 year total		0	0	0	0	0
MAIN INDICATORS						
Consultation curative U5 utilization rate	3.4	1.3	1.0	2.6	2.4	1.9
Consultation curative utilization rate all	1.3	0.8	0.5	1.2	1.3	1.0
IPT 2nd dose coverage to ANC Clients	65.6	61.9	24.0	45.3	30.3	44.5
Antenatal coverage 4th visit	70.6	26.5	32.6	16.1	21.5	23.4
Diarrhoea treated with ORS rate in children	93.4	90.6	99.7	82.6	85.7	88.0
DPT 3rd dose coverage	7.0	21.1	20.0	31.9	17.8	21.4
Pentavalent/DPT 3rd dose coverage	35.6	51.7	79.1	87.9	74.4	66.0
Tetanus Toxoid 2nd dose coverage to ANC	91.8	41.8	46.7	30.7	44.7	40.7

UNITY STATE

Data Element	Abiemnhom County	Guit County	Koch County	Leer County	Mayendit County	Mayom County	Pariang County	Payinjiar County	Rubkona County	Total
Consultation curative under 5 years male	3,005	1,925	3,693	4,158	10,847	16,276	9,499	6,359	8,553	64,315
Consultation curative under 5 years female	3,764	2,265	4,028	4,189	11,630	19,811	9,386	7,148	8,279	70,500
Consultation curative 5 years and older male	13,652	8,393	12,189	10,961	32,120	67,621	17,216	33,260	73,270	268,682
Consultation curative 5 years and older female	8,030	3,588	5,892	5,455	12,223	26,588	16,845	9,744	14,151	102,516
Consultation curative all calc	8,129	4,306	7,133	6,025	16,807	43,731	27,984	14,591	19,221	147,927
Headcount under 5 years (estimated)	37,613	15,780	23,109	18,470	40,887	132,637	37,936	56,922	154,744	518,098
Headcount estimated RPIL	6,769	4,190	7,721	8,347	22,477	36,087	18,885	13,507	16,832	134,815
Antenatal client 1st visit	22,928	12,084	20,746	19,827	51,507	106,406	63,714	37,842	50,204	385,258
Antenatal client 4th or more visit	22,928	12,084	20,746	19,827	51,507	106,406	63,714	37,842	50,204	385,258
Antenatal client IPT 2nd dose	51,265	24,173	35,298	29,431	73,007	200,258	55,152	90,182	228,014	786,780
Family planning new user	4,642	8,560	14,191	11,091	28,829	27,957	22,911	43,321	86,226	247,728
Delivery in facility by skilled birth attendant	9,175	4,953	14,610	9,172	28,883	47,540	27,243	18,162	27,575	187,313
Delivery in facility by TBA MCHW CHW CM or Village Midwife	28,013	13,796	28,521	22,416	60,238	135,688	79,971	50,612	80,159	499,414
Delivery in facility total	1,188	420	824	737	1,163	10,707	1,254	2,380	7,701	26,374
Delivery in community	593	278	177	287	547	4,318	644	642	2,219	9,705
Delivery referred	125	189	170	210	407	2,050	589	530	396	4,666
Live birth in facility	534	0	23	28	153	2,433	96	656	2,119	6,042
Postnatal client 1st visit	125	69	0	233	10	29	19	3	33	521
Malaria uncomplicated clinically diagnosed under 5 years	152	10	17	58	82	191	445	375	2,079	3,409
Malaria uncomplicated confirmed under 5 years	254	18	137	148	279	1,040	43	6	187	2,112
Malaria severe under 5 years	406	28	154	206	361	1,231	488	381	2,266	5,521
Malaria uncomplicated 5 years and older	57	76	57	280	220	521	70	168	10	1,459
Malaria severe 5 years and older	5	0	3	10	15	19	12	55	272	391
Pneumonia presumed under 5 years	418	33	157	207	211	1,071	483	391	2,190	5,161
Diarrhoea treated with ORS under 5 years	44	52	67	91	101	241	123	323	156	1,198
Diarrhoea under 5 years	4,504	1,389	1,437	1,213	5,429	12,057	5,690	7,163	6,621	45,503
Vitamin A supplementation 6-59 months	648	865	1,694	1,638	2,441	11,044	834	2,033	17,957	39,154
Vitamin A supplementation new mother	270	185	306	438	284	2,918	347	828	771	6,347
Insecticide treated net to under 5 years	16,615	3,105	3,904	1,756	6,628	22,480	19,174	13,426	44,501	131,589
Insecticide treated net to antenatal client	1,270	439	1,915	259	265	16,757	227	5,311	33,888	60,331
MUAC less than 115 mm under 5 years	1,372	259	442	469	278	5,034	812	1,062	2,216	11,944
MUAC less than 125 mm under 5 years	4,998	1,443	360	1,961	4,071	8,149	1,950	1,091	5,753	29,776
Death in facility all	1,629	1,528	2,459	2,266	10,851	9,843	2,682	8,883	10,566	50,707
Death in facility under 5 years	2,126	1,831	2,976	2,892	13,739	13,596	4,492	9,341	12,228	63,221
Death in facility maternal	46	47	1,165	121	572	1,726	514	962	38	5,191
TB suspected	133	66	123	69	109	2,060	673	345	276	3,854
TB suspect referred to TB Unit	204	0	588	9	7	340	103	1,951	2,839	6,041
VCT client seen	171	0	451	80	76	1,617	189	1,238	6,861	10,683

VCT client tested for HIV - new	1,261	228	2,444	454	2,357	4,224	508	437	272	12,185
VCT client tested HIV positive - new	973	464	4,510	371	4,505	8,207	1,543	583	701	21,857
Antenatal client tested for HIV	1,668	0	265	3	181	100	0	0	1,537	3,754
Antenatal client tested HIV positive - new	5	5	15	0	5	109	49	18	0	206
Antenatal client HIV positive given PMTCT	3	2	5	0	4	27	21	14	0	76
BCG dose under 1 year total	0	3	0	0	0	3	2	3	0	11
OPV 3rd dose under 1 year total	40	51	32	41	47	203	93	27	146	680
DPT 3rd dose under 1 year total	40	31	23	36	45	193	71	20	64	523
Measles dose under 1 year total	0	12	2	0	0	0	0	0	0	14
MAIN INDICATORS										
Consultation curative U5 utilization rate	10.9	2.3	1.8	2.1	5.3	6.2	2.9	9.0	7.1	5.0
Consultation curative utilization rate all	2.1	0.3	0.2	0.2	0.6	0.9	0.5	1.2	1.1	0.7
IPT 2nd dose coverage to pregnant women	54.1	68.8	24.9	50.5	48.4	41.8	49.2	23.5	26.6	37.6
Antenatal coverage 4th	12.3	46.8	24.7	43.7	59.9	24.8	42.1	24.1	8.6	23.3
Diarrhoea treated with ORS rate in children	74.4	86.3	77.6	74.2	75.7	71.3	57.9	94.8	89.3	79.3
DPT 3rd dose coverage	98.0		-30.0			97.5	29.9	43.5	45.4	54.3
Tetanus Toxoid 2nd dose coverage to ANC	17.6	0.0	0.9	0.0	0.7	7.8	26.1	41.4	53.5	18.7

UPPER NILE STATE

Data Element	Akoka County	Baliet County	Fashoda County	Longechuk County	Luakpiny/ Nasir County	Maban County	Maiwut County	Makal County	Manyo County	Melut County	Panyikang County	Renk County	Ulang County	Total
Consultation curative under 5 years male	2,819	395	12,978	22,747	3,609	106,850	12,107	6,455	1,616	11,183	486	2,409	3,064	186,718
Consultation curative under 5 years female	2,766	457	14,140	23,693	3,688	88,222	12,215	7,050	1,762	12,167	473	2,559	3,182	172,374
Consultation curative 5 years and older male	1,054	202	8,057	17,314	156	29,829	21,557	2,832	2,556	8,442	829	30,745	9,457	133,030
Consultation curative 5 years and older female	5,950	2,312	28,263	30,424	3,504	83,585	22,842	15,830	4,806	20,685	1,327	5,487	6,346	231,361
Consultation curative all calc	7,329	1,283	39,685	33,460	4,872	77,645	28,776	24,989	5,822	33,888	1,364	5,472	9,308	273,893
Headcount under 5 years (estimated)	2,626	815	17,408	20,502	388	30,677	51,238	7,646	6,998	18,257	2,463	66,078	22,613	247,709
Headcount estimated RPIL	5,585	852	27,118	46,440	7,297	195,072	24,322	13,505	3,378	23,350	959	4,968	6,246	359,092
Antenatal client 1st visit	18,864	4,447	95,066	110,324	15,673	356,302	75,940	54,324	14,006	77,923	3,650	15,927	21,900	864,346
Antenatal client 4th or more visit	18,864	4,447	95,066	110,324	15,673	356,302	75,940	54,324	14,006	77,923	3,650	15,927	21,900	864,346
Antenatal client IPT 2nd dose	3,680	1,017	25,465	37,816	544	60,506	72,795	10,478	9,554	26,699	3,292	96,823	32,070	380,739

Family planning new user	3,274	641	9,854	17,968	1,621	37,448	25,662	4,139	4,251	19,270	11	18,868	9,463	152,470
Delivery in facility by skilled birth attendant	6,471	1,234	28,209	45,866	7,766	180,596	24,958	13,713	3,859	28,390	959	8,897	4,199	355,117
Delivery in facility by TBA MCHW CHW CM or Village Midwife	20,033	4,916	89,366	112,212	17,816	328,881	55,435	49,153	14,532	75,986	3,406	18,098	11,342	801,176
Delivery in facility total	932	7	2,872	1,484	263	7,430	3,407	1,994	360	3,792	0	4,820	2,033	29,394
Delivery in community	344		2,029	553	130	3,530	930	2,525	261	1,024	0	2,834	626	14,786
Delivery referred	337		924	496	77	3,665	779	411	105	2,004	9	52	368	9,227
Live birth in facility	56		184	361	10	1,166	1,169	86	94	849	0	1,766	482	6,223
Postnatal client 1st visit	3		117	21	274	173	113	39	0	578	0	57	0	1,375
Malaria uncomplicated clinically diagnosed under 5 years	112		187	74	48	469	338	5	25	551	0	596	10	2,415
Malaria uncomplicated confirmed under 5 years	38		291	386	85	834	411	505	95	308	0	252	231	3,436
Malaria severe under 5 years	150		478	460	133	1,303	749	510	120	859	0	848	241	5,851
Malaria uncomplicated 5 years and older	271	3	457	744	129	0	644	97	60	381	0	96	395	3,277
Malaria severe 5 years and older	2		5	2	3	0	5	9	0	52	0	22	0	100
Pneumonia presumed under 5 years	135		341	408	126	1,296	740	504	86	784	0	576	235	5,231
Diarrhoea treated with ORS under 5 years	120		288	278	24	1,473	661	266	15	1,750	0	84	374	5,333
Diarrhoea under 5 years	1,295	63	6,319	12,944	903	18,392	12,632	5,572	574	1,877	797	4,606	2,501	68,475
Vitamin A supplementation 6-59 months	513	174	2,101	9,792	708	6,580	5,083	831	390	4,594	191	4,413	1,995	37,365
Vitamin A supplementation new mother	106	20	617	1,931	218	257	713	116	141	549	44	624	148	5,484
Insecticide treated net to under 5 years	5,139	657	17,921	21,055	1,487	38,980	25,673	20,686	2,378	9,564	1,446	15,670	6,551	167,207
Insecticide treated net to antenatal client	138		52	2,509	141	2,957	7,305	0	216	1,201	0	1,342	3,368	19,229
MUAC less than 115 mm under 5 years	193	41	1,101	2,101	480	354	1,344	157	453	582	233	757	241	8,037
MUAC less than 125 mm under 5 years	1,465	111	11,725	7,055	482	10,843	2,837	6,483	1,767	6,242	451	4,909	765	55,135
Death in facility all	1,098	174	6,045	7,078	531	17,851	11,611	4,724	1,315	3,736	445	7,283	3,290	65,181
Death in facility under 5 years	1,278	174	7,427	10,173	1,423	21,040	11,776	5,137	1,458	4,184	628	8,159	3,554	76,411
Death in facility maternal	1,605	39	1,622	1,037	337	575	1,279	9	138	4,361	11	352	7	11,372
TB suspected	306		400	678	153	425	552	3	58	1,612	0	42	391	4,620
TB suspect referred to TB Unit	141	7	757	15	0	311	667	278	125	2,100	0	418	14	4,833
VCT client seen	338	7	1,860	73	0	5,263	1,664	1,044	170	2,866	0	1,161	803	15,249
VCT client tested for HIV - new	15	23	799	2,291	3	5,914	2,935	0	181	2,523	0	727	325	15,736
VCT client tested HIV positive - new	141	20	2,280	2,710	28	5,093	6,754	0	589	3,047	0	2,675	1,268	24,605
Antenatal client tested for HIV	0		0		0	858	18,678	0	0	4,132	0	276	9,925	33,869

Antenatal client tested HIV positive - new	2	9	24	41	1	24	22	2	5	6	0	47	0	183
Antenatal client HIV positive given PMTCT	0		6	18	1	14	12	2	0	6	0	3	0	62
BCG dose under 1 year total	0		1	2	0	37	0	0	0	0	0	3	0	43
OPV 3rd dose under 1 year total	8	2	31	44	0	25	152	6	23	114	0	47	33	485
DPT 3rd dose under 1 year total	6	2	12	27	0	15	139	5	22	92	0	101	23	444
Measles dose under 1 year total	0		0	4	0		0	0	0	0	0		0	4
MAIN INDICATORS														
Consultation curative U5 utilization rate	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.0	0.1	0.0	0.0	0.5	0.3	0.2
Consultation curative utilization rate	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.1	0.0	0.0	0.3	0.2	0.1
IPT 2nd dose coverage to ANC Clients	36.5	0.0	65.9	28.5	51.0	46.5	23.9	124.8	76.6	31.5		61.0	29.0	49.9
Antenatal coverage 4th visit	42.8	0.0	38.4	42.7	32.2	60.8	29.1	24.1	47.3	72.6		1.4	21.0	39.4
Diarrhoea treated with ORS rate in children	86.5	100.0	72.4	72.0	34.2	84.5	98.4	91.3	87.4	92.0	73.1	90.7	91.7	84.5
DPT 3rd dose coverage	43.0		13.0			76.0	54.1	49.1	53.4	46.9		25.5	100.0	41.6
Pentavalent/DPT 3rd dose coverage	16.5	3.8	71.9	5.6	0.5	70.0	17.2	14.1	4.1	35.2	0.0	13.7	0.0	14.0
Tetanus Toxoid 2nd dose coverage to ANC	15.4	228.6	19.2	0.0	18.0	4.8	16.0	14.4	55.0	44.8		7.2	0.0	13.8

WARRAP STATE

Data Element	Abyei County	Gogrial East County	Gogrial West County	Tonj East County	Tonj North County	Tonj South County	Twic County	Total
Consultation curative under 5 years male	10,446	14,012	75,008	8,160	11,510	10,877	21,853	151,866
Consultation curative under 5 years female	11,862	14,220	75,155	8,524	11,894	9,848	24,831	156,334
Consultation curative 5 years and older male	29,679	26,153	78,149	62,446	56,638	62,871	121,315	437,251
Consultation curative 5 years and older female	22,144	18,281	89,279	7,365	15,227	10,212	32,923	195,431
Consultation curative all calc	31,583	22,354	113,899	13,716	23,688	15,945	50,011	271,196
Headcount under 5 years (estimated)	75,433	37,852	108,567	80,628	89,188	97,661	251,643	740,972
Headcount estimated RPIL	22,308	28,232	150,163	16,684	23,404	20,725	46,684	308,200
Antenatal client 1st visit	76,035	68,867	353,341	37,765	62,319	46,882	129,618	774,827
Antenatal client 4th or more visit	76,035	68,867	353,341	37,765	62,319	46,882	129,618	774,827
Antenatal client IPT 2nd dose	105,112	64,005	186,716	143,074	145,826	160,532	372,958	1,178,223

Family planning new user	39,435	76,949	240,401	93,418	127,362	88,631	176,761	842,957
Delivery in facility by skilled birth attendant	29,500	35,257	167,029	47,064	50,453	41,567	95,797	466,667
Delivery in facility by TBA MCHW CHW CM or Village Midwife	91,862	87,255	411,647	102,564	124,616	100,509	235,142	1,153,595
Delivery in facility total	1,366	7,116	18,263	9,124	7,338	8,873	12,660	64,740
Delivery in community	1,078	3,749	7,508	2,623	2,038	3,861	5,512	26,369
Delivery referred	752	2,133	5,723	1,998	1,077	1,560	3,246	16,489
Live birth in facility	288	895	1,882	2,899	1,452	2,171	5,269	14,856
Postnatal client 1st visit	142	8	142	0	30	229	146	697
Malaria uncomplicated clinically diagnosed under 5 years	69	246	1,393	473	360	1,053	1,492	5,086
Malaria uncomplicated confirmed under 5 years	206	612	944	1,420	225	723	1,821	5,951
Malaria severe under 5 years	275	858	2,337	1,893	585	1,776	3,313	11,037
Malaria uncomplicated 5 years and older	67	692	3,419	277	510	685	595	6,245
Malaria severe 5 years and older	13	44	241	18	24	23	86	449
Pneumonia presumed under 5 years	276	840	2,168	1,862	519	1,607	3,298	10,570
Diarrhoea treated with ORS under 5 years	270	315	4,443	713	162	1,005	1,436	8,344
Diarrhoea under 5 years	4,643	17,557	41,554	16,374	21,308	19,232	32,347	153,015
Vitamin A supplementation 6-59 months	4,625	7,213	22,150	6,699	6,471	11,291	29,084	87,533
Vitamin A supplementation new mother	342	2,311	11,716	825	3,370	2,054	3,484	24,102
Insecticide treated net to under 5 years	21,311	25,672	88,829	29,816	40,693	34,441	90,640	331,402
Insecticide treated net to antenatal client	3,482	3,507	747	6,272	6,831	10,327	44,805	75,971
MUAC less than 115 mm under 5 years	675	5,032	19,496	1,205	4,811	4,313	9,338	44,870
MUAC less than 125 mm under 5 years	672	3,258	10,668	1,715	4,995	5,210	14,788	41,306
Death in facility all	2,833	5,368	16,595	17,271	8,885	11,553	17,069	79,574
Death in facility under 5 years	3,832	5,399	23,744	19,346	11,023	13,139	17,634	94,117
Death in facility maternal	452	4,006	18,057	4,334	3,940	2,072	4,523	37,384
TB suspected	266	1,329	8,151	641	1,389	439	1,627	13,842
TB suspect referred to TB Unit	2,303	2,669	5,006	2,635	3,511	1,107	2,737	19,968
VCT client seen	1,793	1,979	8,731	5,294	2,016	1,752	6,759	28,324
VCT client tested for HIV - new	1,216	1,465	4,065	4,498	2,781	2,479	3,658	20,162
VCT client tested HIV positive - new	3,747	734	6,047	16,382	4,760	7,348	23,237	62,255
Antenatal client tested for HIV	5,507	53	0	42,619	3,338	956	35,995	88,468
Antenatal client tested HIV positive - new	1	31	90	2	25	36	61	246
Antenatal client HIV positive given PMTCT	0	23	60	2	14	17	35	151
BCG dose under 1 year total	0	2	8	0	3	3	1	17
OPV 3rd dose under 1 year total	42	1,691	1,006	159	607	1,038	188	4,731
DPT 3rd dose under 1 year total	40	361	408	129	235	246	189	1,608
Pentavalent 3rd dose under 1 year	0	0	32		0	0	0	32

Measles dose under 1 year total	0	0	2		0	0	0	2
MAIN INDICATORS								
Consultation curative U5 utilization rate	0.7	0.9	1.5	1.0	2.0	1.8	2.0	1.3
Consultation curative utilization rate all	0.4	0.5	0.8	0.6	1.1	1.2	1.5	0.8
IPT 2nd dose coverage to ANC	56.4	41.6	28.9	30.8	49.6	45.0	79.3	42.8
Antenatal coverage 4th visit	36.2	34.8	27.0	14.5	24.6	32.5	55.3	30.6
Diarrhoea treated with ORS rate in children	99.4	67.3	88.8	79.6	89.8	96.0	73.9	83.3
DPT 3rd dose coverage	15.1	12.9	23.3	16.5	6.7	7.8	15.4	13.6
Pentavalent/DPT 3rd dose coverage	124.4	134.0	51.0	74.4	56.9	66.3	28.5	86.1
Tetanus Toxoid 2nd dose coverage to ANC	41.7	52.0	29.9	74.7	46.7	30.3	24.0	44.8

WESTERN BAHR EL GHAZAL STATE

Data Element	7,027	5,629	24,130	36,786
Consultation curative under 5 years male	7,077	5,152	22,657	34,886
Consultation curative under 5 years female	43,631	33,600	105,243	182,474
Consultation curative 5 years and older male	10,518	9,704	36,668	56,890
Consultation curative 5 years and older female	12,974	11,954	52,752	77,680
Consultation curative all calc	68,076	70,762	201,310	340,148
Headcount under 5 years (estimated)	14,104	10,781	46,787	71,672
Headcount estimated RPIL	37,596	32,439	136,207	206,242
Antenatal client 1st visit	37,596	32,439	136,207	206,242
Antenatal client 4th or more visit	111,707	104,362	306,553	522,622
Antenatal client IPT 2nd dose	80,862	44,214	106,986	232,062
Family planning new user	37,727	18,930	76,403	133,060
Delivery in facility by skilled birth attendant	78,551	50,304	226,998	355,853
Delivery in facility by TBA MCHW CHW CM or Village Midwife	2,226	2,675	15,255	20,156
Delivery in facility total	766	1,052	7,024	8,842
Delivery in community	497	518	4,537	5,552
Delivery referred	873	1,073	5,715	7,661
Live birth in facility	47	130	1,514	1,691

Postnatal client 1st visit	212	1,212	4,831	6,255
Malaria uncomplicated clinically diagnosed under 5 years	823	601	688	2,112
Malaria uncomplicated confirmed under 5 years	1,035	1,813	5,519	8,367
Malaria severe under 5 years	483	33	272	788
Malaria uncomplicated 5 years and older	30	24	276	330
Malaria severe 5 years and older	1,024	1,730	5,311	8,065
Pneumonia presumed under 5 years	32	410	823	1,265
Diarrhoea treated with ORS under 5 years	18,457	7,852	16,769	43,078
Diarrhoea under 5 years	10,219	7,010	36,647	53,876
Vitamin A supplementation 6-59 months	3,092	900	4,234	8,226
Vitamin A supplementation new mother	30,023	18,348	41,103	89,474
Insecticide treated net to under 5 years	8,351	7,533	43,471	59,355
Insecticide treated net to antenatal client	3,893	1,077	4,694	9,664
MUAC less than 115 mm under 5 years	6,221	4,336	5,982	16,539
MUAC less than 125 mm under 5 years	11,735	8,212	13,949	33,896
Death in facility all	13,282	9,722	18,817	41,821
Death in facility under 5 years	718	136	1,571	2,425
Death in facility maternal	323	546	2,754	3,623
TB suspected	288	423	1,107	1,818
TB suspect referred to TB Unit	997	704	4,274	5,975
VCT client seen	2,710	789	885	4,384
VCT client tested for HIV - new	4,656	2,669	1,922	9,247
VCT client tested HIV positive - new	2,254	1,906	349	4,509
Antenatal client tested for HIV	11	66	222	299
Antenatal client tested HIV positive - new	4	45	113	162
Antenatal client HIV positive given PMTCT	3	4	28	35
BCG dose under 1 year total	250	49	1,581	1,880
OPV 3rd dose under 1 year total	146	10	588	744
DPT 3rd dose under 1 year total	0		71	71
Pentavalent 3rd dose under 1 year	0		25	25
Measles dose under 1 year total	4,660	258	41,620	46,538
MAIN INDICATORS				
Consultation curative U5 years utilization rate	1.0	1.8	2.0	1.6
Consultation curative utilization rate all	0.5	1.2	1.2	0.9
IPT 2nd dose coverage to ANC	38.1	38.7	45.4	43.7
Antenatal coverage 4th visit	26.4	23.5	36.6	33.7
Diarrhoea treated with ORS rate in children	85.5	81.5	73.0	79.0
DPT 3rd dose coverage	12.9	32.9	33.9	26.2
Pentavalent/DPT 3rd dose coverage	40.7	46.8	76.1	57.8
Tetanus Toxoid 2nd dose coverage to ANC	86.3	25.2	21.7	29.5

WESTERN EQUATORIA STATE

Data Element	Ezo County	Ibba County	Maridi County	Mundri East County	Mundri West County	Mvolo County	Nagero County	Nzara County	Tambura County	Yambio County	Total
Consultation curative under 5 years male	6,729	3,744	8,728	6,030	3,702	7,297	1,521	15,337	4,413	8,054	65,555
Consultation curative under 5 years female	7,157	3,981	9,169	6,486	3,911	7,014	1,356	14,710	4,211	7,820	65,815
Consultation curative 5 years and older male	12,660	434	7,529	21,729		2,708	4,738	6,843	25,675	47,237	129,553
Consultation curative 5 years and older female	12,020	5,827	14,095	9,259	6,201	8,102	2,734	17,708	5,693	10,911	92,550
Consultation curative all calc	15,235	7,148	18,796	13,924	10,485	13,572	3,338	25,097	7,383	15,583	130,561
Headcount under 5 years (estimated)	24,993	1,389	12,384	42,071		4,023	8,942	11,169	31,686	61,956	198,613
Headcount estimated RPIL	13,886	7,725	17,897	12,516	7,613	14,311	2,877	30,047	8,624	15,874	131,370
Antenatal client 1st visit	41,141	20,700	50,788	35,699	24,299	35,985	8,949	72,852	21,700	42,368	354,481
Antenatal client 4th or more visit	41,141	20,700	50,788	35,699	24,299	35,985	8,949	72,852	21,700	42,368	354,481
Antenatal client IPT 2nd dose	37,653	1,823	19,913	63,800	0	6,731	13,680	18,012	57,361	109,193	328,166
Family planning new user	27,813	8,978	33,625	33,145	7,021	10,737	7,753	24,705	37,413	70,947	262,137
Delivery in facility by skilled birth attendant	22,667	15,130	35,021	17,460	11,162	20,597	4,225	39,924	18,430	27,364	211,980
Delivery in facility by TBA MCHW CHW CM or Village Midwife	61,102	35,192	87,133	48,280	33,165	48,210	12,970	96,484	45,448	86,504	554,488
Delivery in facility total	2,842	769	3,767	3,761	1,055	1,228	447	3,043	5,065	11,908	33,885
Delivery in community	2,083	307	2,579	1,596	441	496	191	1,694	1,493	7,754	18,634
Delivery referred	1,035	442	1,898	945	644	1,314	246	1,389	2,279	2,442	12,634
Live birth in facility	1,223		1,151	1,498			106	158	1,954	2,780	8,870
Postnatal client 1st visit	837	319	594	377	181	158	15	1,356	446	560	4,843
Malaria uncomplicated clinically diagnosed under 5 years	806	317	810	733	136	200	101	707	875	2,408	7,093
Malaria uncomplicated confirmed under 5 years	980	55	531	452	156	27	105	967	1,401	1,415	6,089
Malaria severe under 5 years	1,786	372	1,341	1,185	292	227	206	1,674	2,276	3,823	13,182
Malaria uncomplicated 5 years and older	424	97	595	412	152	253	55	377	226	430	3,021
Malaria severe 5 years and older	182	40	341	29	28	45	33	227	22	170	1,117
Pneumonia presumed under 5 years	1,704	384	1,426	895	284	225	177	1,589	2,371	2,945	12,000
Diarrhoea treated with ORS under 5 years	809	294	1,412	470	301	264	81	1,287	811	659	6,388
Diarrhoea under 5 years	8,235	1,355	6,575	14,948	2,277	3,945	1,851	5,017	7,793	15,299	67,295

Vitamin A supplementation 6-59 months	4,759	2,210	5,778	3,351	1,054	3,026	1,615	6,928	6,281	12,373	47,375
Vitamin A supplementation new mother	918	379	1,609	1,134	181	944	321	4,117	1,160	2,934	13,697
Insecticide treated net to under 5 years	11,218	3,224	9,237	24,500	6,597	7,349	2,616	9,475	9,953	17,232	101,401
Insecticide treated net to antenatal client	2,029		1,752	1,219			1,058	678	3,016	6,455	16,207
MUAC less than 115 mm under 5 years	1,609	150	2,478	1,153	203	509	333	1,519	728	2,304	10,986
MUAC less than 125 mm under 5 years	1,472	595	1,598	1,427	217	1,135	546	1,656	1,208	2,520	12,374
Death in facility all	5,937	1,707	3,827	6,090	1,249	3,194	1,981	4,418	9,382	15,448	53,233
Death in facility under 5 years	6,910	2,024	4,469	7,193	1,482	3,323	2,127	5,665	10,586	17,105	60,884
Death in facility maternal	2,486	886	2,242	1,553	767	995	384	3,260	1,679	2,297	16,549
TB suspected	662	237	1,080	660	246	112	36	1,527	448	658	5,666
TB suspect referred to TB Unit	2,038	599	3,953	2,622	2,381	1,911	632	2,924	1,927	4,253	23,240
VCT client seen	1,751	601	2,075	3,221	991	1,154	495	2,481	2,779	7,906	23,454
VCT client tested for HIV - new	946	261	1,268	1,009	15	557	145	714	456	2,213	7,584
VCT client tested HIV positive - new	2,458	630	1,075	1,408	74	900	157	1,479	5,488	4,026	17,695
Antenatal client tested for HIV	2,330		880	898			1,742	76	1,193	1,283	8,402
Antenatal client tested HIV positive - new	53	11	93	38	4	30	2	92	42	51	416
Antenatal client HIV positive given PMTCT	16	7	17	16	3	20	0	41	24	21	165
BCG dose under 1 year total	6	1	2	1	1	0	0	6	1	6	24
OPV 3rd dose under 1 year total	160	15	26	224	3	7	86	631	69	516	1,737
DPT 3rd dose under 1 year total	71	8	21	109	2	3	19	204	40	145	622
Pentavalent 3rd dose under 1 year	0	0	3	84	0	0	0	24		0	111
Measles dose under 1 year total	0	0	0	62	0			0		0	62

MAIN INDICATORS											
Consultation curative U5 years utilization rate	0.6	0.0	0.1	1.5	0.0	0.3	1.5	0.3	1.5	1.0	0.7
Consultation curative utilization rate all	0.3	0.0	0.1	0.8	0.0	0.1	0.8	0.2	0.6	0.4	0.3
IPT 2nd dose coverage to ANC	72.7	39.9	64.4	41.6	40.1	38.5	46.5	58.9	30.2	54.6	51.5
Antenatal coverage 4th visit	40.8	57.5	62.4	30.7	58.5	107.3	69.7	51.4	50.6	16.9	37.6
Diarrhoea treated with ORS rate in children	84.5	84.3	81.9	85.2	84.3	96.0	91.5	78.0	88.7	89.4	86.6
DPT 3rd dose coverage	13.6	1.4	6.3	13.8	5.5	35.0	-4.9	5.7	25.4	15.6	13.6
Pentavalent/DPT 3rd dose coverage	46.5	41.4	109.5	98.4	48.3	46.7	68.7	69.2	87.4	62.8	69.1
Tetanus Toxoid 2nd dose coverage to ANC	30.9	69.2	35.2	10.5	29.6	5.4	39.7	30.3	17.7	20.9	23.6

Footnotes

[1] ANC 4th visit is more than 1st visit in some counties: Comments from County M&E staff is that women may have come from out of town for ANC , in the case of Juba, and that staff may have counted 2 & 3 visits together with 4th visit. It was not possible to correct this data.

[2] DPT Coverage: Likely vaccine campaign data included in the numerator with HMIS data gives coverage >100%.

[3]Measles Coverage: Doses may be higher than DTP3 due to reporting children over the age of 1 year as under 1 year. Some immunisation data may be missing as there is a separate parallel programme for EPI reporting. And possible vaccine campaign data may be mixed in with the HMIS data producing a coverage >100%

ANNEX 2 - PRIORITY INDICATORS FOR THE ROUTINE MONTHLY REPORT

INDICATOR	INDICATOR DEFINITION	DATA ELEMENT Numerator (Health Facilities)	DATA ELEMENT Denominator (Target population)	DATA SOURCES
1. Utilization rate	Curative consultations by the eligible population per time period.	Curative consultation U5 Curative consultation 5 years and older	Total population (U5 21%: five years and older 79%)	OPD and U5 Register The target is one consultation per person per year.
2. Utilization rate under 5 years	Curative consultations by the under 5 per time period	Curative care under 5 years (male and female)	Population Under 5	U5 Register
3. Antenatal coverage-1st visit	Proportion of pregnant women attending the antenatal clinic for the first visit	Antenatal client 1st visit	Estimated pregnant women (5.6% of the population)	ANC Register
4. Antenatal coverage – 4th visit	Proportion of pregnant women attending the antenatal clinic for the fourth time or more	Antenatal client 4th or more visit	Estimated pregnant women (5.6% of the population)	ANC Register
Antenatal Care	*Proportion of pregnant women attending the antenatal clinic for the first visit who completed the protocol of four visits or more*	*Antenatal client 4th visit or more*	*Antenatal client 1st visit*	*Calculated in DHIS*
5. IPT 2nd dose coverage	Percentage of pregnant women who receive IPT2 as part of the ANC visits	Antenatal client IPT 2nd dose	Antenatal client 1st visit	ANC Register
6. New contraceptive acceptance rate	Proportion of women 15-45 years of age who start any modern contraceptive method	Family planning acceptor (new)	Estimated female population 15-45 years of age	ANC and OPD Registers
7. Delivery by skilled birth attendant in facility (rate)	Proportion of women who deliver in health facilities with skilled birth attendants (doctors, registered midwives, nurse-midwife, Medical Assistant or Clinical Officer)	Delivery in health facility with skilled health personnel	Estimated pregnant women (5.6% of population)	Delivery Register
8. Delivery by unskilled birth attendant in facility (rate)	Proportion of women who deliver in health facilities with TBA, CHW, MCHW, community midwife, village midwife.	Delivery in health facility with unskilled birth attendants (specified-see left)	Estimated pregnant women (5.6% of population)	Delivery Register
9. Delivery referral rate	Proportion of deliveries referred	Delivery referred	Delivery in HF (7+8)	Delivery Register
10. Delivery by C-section rate	Proportion of deliveries by C-Section	Caesarean Section	5.6% of the population OR Delivery in health facility	Delivery Register
11. Live births in health facilities	Babies born alive in the health facilities irrespective of status at discharge (dead, alive,	Live birth in health facility		Delivery Register

	referred or admitted)			
12. Postnatal coverage	Percentage of women who come at least once for postnatal care	Postnatal visit 1st visit	5.6% of the population	ANC Register
13. Malaria clinically diagnosed uncomplicated U5 rate	Proportion of clinically diagnosed uncomplicated malaria in children under 5 years	Malaria clinically diagnosed uncomplicated U5	All malaria cases U5	U5 Register
14. Malaria confirmed uncomplicated U5 rate	Proportion of RDT or blood smear confirmed uncomplicated malaria in children under 5 years	Malaria confirmed uncomplicated U5	All malaria cases U5	U5 Register
15. Malaria severe in children U5 rate	Proportion of severe malaria in children under 5 years	Malaria severe U5	All malaria cases U5	U5 Register
16. Malaria uncomplicated 5 years and older rate	Proportion of uncomplicated malaria in patients 5 years and over	Malaria uncomplicated 5 years and older	All malaria cases 5 years and older	OPD Register
17. Malaria severe 5 years and older rate	Proportion of severe malaria in patients 5 years and over	Malaria severe 5 years and older	All malaria cases 5 years and older	OPD Register
18. Pneumonia presumed children under 5 years	Presumed pneumonia in children under 5	Pneumonia presumed under 5 years		U5 Register
19. Diarrhoea U5 treated with ORS rate	Proportion of cases of diarrhoea in children U5 treated with ORS	Diarrhoea treated with ORS under 5 years	Diarrhoea (all) under 5 years	U5 Register
20. Vitamin A supplement 6-59 months rate	Vitamin A supplements provided to children aged 6-59 months of age	Vitamin A supplement 6-59 months		U5 Register and EPI Register
21. Vitamin A supplement to new mothers rate	Proportion of mothers who receive a dose of vitamin A after delivery	Vitamin A supplement to new mother	5.6% of population	Delivery Register
22. Bednet coverage U5	Proportion of children U5 provided with insecticide- treated nets	Insecticide-treated net to child under 5 years	U5 population	U5 Register/calculated at national level to account x campaigns.
23. Bednet coverage pregnant women	Proportion of pregnant women provided with insecticide-treated nets	Insecticide-treated net to antenatal client	5.6% of population	ANC Register/calculated at national level to account x campaigns.
24. Severe malnutrition prevalence	Proportion of children U5 attending HF with MUAC<115 mm	MUAC under 115 mm under 5 years	U5 population	U5 Register
25. Moderate malnutrition	Proportion of children U5 attending HF with MUAC<125 mm	MUAC under 125 mm under 5 years	U5 population	U5 Register

prevalence				
26. Death in facility	Deaths in health facility irrespective of age and cause.	Death in health facility		U5, OPD, Inpatients, Delivery Registers
27. Death U5 in facility	Deaths in children U5 in health facilities	Death under 5 years in health facility		U5, Inpatients Register
28. Death maternal in facility	Women who died in health facilities due to pregnancy related causes	Death maternal in health facility		Delivery Register
29. TB suspected rate	Suspected TB detected in health facilities	TB patient suspected	Curative consultation 5 years and older	OPD Register
30. TB referral rate	Proportion of cases of suspected TB referred to TB management unit	TB patient referred	TB patient suspected	OPD Register
31. Condom distribution rate	Condoms distributed by the health facility, county or state (free)	Condoms distributed	Male population 15-45 years	Stock card
32. VCT uptake rate	Proportion of VCT clients who accept being tested for HIV	VCT client tested for HIV	VCT client counselled	VCT Register
33. VCT result rate	Proportion of VCT clients who received test result	VCT client collecting results	VCT client tested for HIV	VCT Register
34. HIV prevalence VCT	1. Proportion of VCT clients found HIV+	VCT client HIV positive - new	VCT client tested for HIV	VCT Register
35. PMTCT uptake	2. Proportion of ANC clients who accept being tested for HIV	ANC client tested for HIV	Antenatal client 1st visit	PMTCT Register/ANC Register
36. PMTCT result (rate)	3. Proportion of ANC clients counselled and tested who received test result and post-test counselling	ANC client collecting results	ANC client tested	PMTCT Register/ANC Register
37. HIV prevalence ANC	4. Proportion of ANC clients found HIV+	ANC found HIV+ (new)	ANC client 1st visit	PMTCT Register/ANC Register
38. ANC clients receiving ART prophylaxis	5. Proportion of ANC clients found HIV+ who receive ARV prophylaxis for PMTCT	ANC client who receive ARV prophylaxis for PMTCT	ANC client HIV+	PMTCT/ANC Register
39. Advanced HIV+ treatment start rate	6. Proportion of advanced HIV+ patients eligible for treatment who start ARV	HIV+ patients receiving ARV (new\0)	HIV+ eligible for treatment (CD4<350 or clinical stages 3 and 4)	ARV Register

INDICATORS FOR THE EXPANDED PROGRAMME OF IMMUNIZATION

INDICATOR	INDICATOR DEFINITION	Data Element: Numerator (Health Facilities)	Data Element: Denominator	Data Sources
1. BCG Coverage	Proportion of children under 1 who received one dose of BCG vaccine	BCG in children U1	5% of population	EPI Register

2. OPV0 Coverage	Proportion of children under 1 who received OPV 0 vaccine	OPV0 in children U1	5% of population	EPI Register
3. OPV1 Coverage	Proportion of children under 1 who received OPV1 vaccine	OPV1 in children U1	5% of population	EPI Register
4. OPV2 Coverage	Proportion of children under 1 who received OPV2 vaccine	OPV2 in children U1	5% of population	EPI Register
5. OPV3 Coverage	Proportion of children under 1 who received OPV3 vaccine	OPV3 in children U1	5% of population	EPI Register
6. DPT1 Coverage	Proportion of children under 1 who received their first dose of DPT or DPT containing vaccine	DPT1 in children U1	5% of population	EPI Register
7. DPT2 Coverage	Proportion of children under 1 who received their second dose of DPT or DPT containing vaccine	DPT2 in children U1	5% of population	EPI Register
8. DPT3 Coverage	Proportion of children under 1 who received their third dose of DPT or DPT containing vaccine	DPT3 in children U1	5% of population	EPI Register
9. Measles Coverage	Proportion of children under 1 who received one dose of measles vaccine	Measles in children U1	5% of population	EPI Register
10. Yellow Fever Coverage	Proportion of children under 1 who received one dose of yellow fever vaccine	Yellow Fever in children U1	5% of population	EPI Register
11. TT1 Coverage in pregnant women	Proportion of pregnant women who received a first dose of tetanus toxoid vaccine	TT1 antenatal client	5.6% of population	EPI and ANC Register
12. TT2 Coverage in pregnant women	Proportion of pregnant women who received a second dose of tetanus toxoid vaccine	TT2 antenatal client	5.6 % population	EPI and ANC Register
13. TT3+ Coverage in pregnant women	Proportion of pregnant women who received a third or more doses of tetanus toxoid vaccine	TT3+ antenatal client	5.6% population	EPI and ANC Register
14. TT1 Coverage in women 15-45 years	Proportion of women 15-45 who received a first dose of tetanus toxoid vaccine	TT1 women 15-45	Women 15-45	EPI Register
15. TT2 Coverage in women 15-45 years	Proportion of women 15-45 who received a second dose of tetanus toxoid vaccine	TT2 women 15-45	Women 15-45	EPI Register
16. TT3+ Coverage in women 15-45 years	Proportion of women 15-45 who received a third or more doses of tetanus toxoid vaccine	TT3+ women 15-45	Women 15-45	EPI Register

INDICATORS FOR INFECTIOUS DISEASES SURVEILLANCE AND RESPONSE (IDSR)

1. Public health importance diseases rate	Number of suspected cases of diseases of public health importance in health facilities during the reported period included in the IDSR list	All suspected cases of IDSR diseases	At risk population	OPD, U5 Register
2. Outbreaks investigated within 48 hours rate	Proportion of outbreaks investigated 48h after suspected outbreak detected	All outbreaks investigated in 48h	All outbreaks suspected	IDSR Payam Form

ANNEX 3: ROUTINE REPORT HMIS 2015

PART 1 KEY ROUTINE HMIS MONTHLY REPORT FORM

The data collection tools in my view is not key for the bulletin .This can be put in the nomenclature of data colletion tools currently being worked through WHO support

2015 Routine Monthly Report Health Facility:_____County_____

Report Month/Year: _____By_____

Part 1: opd	NUMBER	COMMENTS
1. Curative consultation under 5 years		
2. Curative consultation 5 years and older		
3. Antenatal client 1st visit		
4. Antenatal client 4th or more visit		
5. Antenatal client IPT 2 or more dose		
6. Delivery in facility by Skilled Birth Attendant		
7. Delivery in facility by TBA, MCHW, CHW, Community or Village Midwife		
8. Direct obstetric complication referred		
9. Live birth in facility		
10. Malaria RDT done under 5 years		
11. Malaria uncomplicated clinically diagnosed under 5 years		
12. Malaria uncomplicated confirmed positive under 5 years		
13. Malaria severe under 5 years		
14. Pneumonia presumed under 5 years		
15. Diarrhoea treated with ORS under 5 years		
16. Diarrhoea under 5 years		
17. MUAC <115 mm under 5 years (curative care)		
18. MUAC <125 mm under 5 years (curative care)		
19. Child growth monitoring and promotion under 5 years		
20. Malaria RDT done 5 years and older		
21. Malaria uncomplicated clinically diagnosed 5 years and older		
22. Malaria uncomplicated confirmed positive 5 years and older		
23. Malaria severe 5 years and older		
24. Insecticide treated net under 5 years		
25. Insecticide treated net antenatal client		
26. TB suspect		
27. TB suspect referred to the TB Unit		

28. STI case treated		
29. Condom male distributed		
30. ACT-Amodiaquine doses for infant and toddler		
31. ACT-Amodiaquine doses for children and adults		
32. Stock out ASAQ infant/toddler pack (record 1 if stock out occurred)		
33. Stock out ASAQ adult pack (record 1 if stock out occurred)		
Outpatient Nutritional service provided		
34. Nutrition OTP admission		
35. Nutrition OTP discharge cured		
36. Nutrition OTP discharge died		
37. Nutrition OTP discharge defaulted		
38. Nutrition OTP discharge other		

PART 2: EXPANDED PROGRAMME OF IMMUNISATION

Vaccines	0-11 Months			12-23 months					
	Static	Outreach	Total	Static	Outreach	Total		Male	Female
BCG									
OPV-0									
OPV-1									
OPV-2									
OPV-3									
DPT-HepB-Hib									
DPT-HepB-Hib									
DPT-HepB-Hib									
IPV									
Measles									
Vitamin A									

Tetanus Toxoid Vaccination *

Vaccine	Pregnant Woman	Non Pregnant
TT-1		
TT-2		
TT-3		
TT-4		
TT-5		

Month end stock of AD syringes	
Type	Number
5 ml	
2 ml	
0.5 ml	
0.1ml	

Vaccine Utilisation Summary

	Vaccine doses received		Vaccine doses used			
Vaccine	Stock month	Stock received	Distributed to other	Doses used	Doses discarded	Balance in cold storage at the month
BCG						
OPV						
Penta						

IPV						
Measles						
T/Toxoid						
Vitamin A						

Planning and management of Routine Immunisation Services

Fixed Immunisation Functioning	
Fixed Session Planned	
Fixed session Conducted	
Outreaches Immunisation Functioning	
Outreach Immunisation Session Planned	
Outreach Immunisation session Conducted	
Support supervision visit received from CHD	
Support supervision visit received from SMOH	
Supervision received from MOH-RSS (Including Partners)	
Community Linkages	
Community meeting planned	
Community meeting held	

Campaign data is reported on a separate page aggregated at County level

PART 3: INPATIENTS

	Number	Comment
1. Inpatient day under 5 years		
2. Inpatient discharge under 5 years		
3. Inpatient death under 5 years		
4. Inpatient death malaria under 5 years		
5. Inpatient transfer out under 5 years		
6. Inpatient day 5 years and older		
7. Inpatient discharge 5 years and older		
8. Inpatient death 5 years and older		
9. Inpatient death malaria 5 years and older		
10. Inpatient transfer out 5 years and older		
11. Inpatient day maternal		
12. Inpatient discharge maternal		

13. Inpatient death maternal		
14. Inpatient transfer out maternal		
PART 3A: MATERNITY AND SURGICAL SECTION		
15. Caesarean section		
16. Delivery assisted (forceps, vacuum)		
17. Delivery with use of Oxytocin		
18. Delivery with use of Misoprostol		
19. Direct obstetric complication treated		
20. Still birth in facility (ante-partum and intra-partum)		
21. Live birth in facility under 2.5kg		
22. Neonatal death within 24 hours (live birth in facility)		
23. Early neonatal death 0-7 days (live birth in facility)		
24. Surgery procedure major		
25. Surgery procedure minor		
26. Circumcision male		

PART 4: THERAPEUTIC FEEDING CENTRE/STABILISATON CENTRE

(captured in Inpatients section in DHIS)	Number	Comment
27. Inpatient day TFC under 5 years		
28. Inpatient death TFC under 5 years		
29. Inpatient discharge TFC under 5 years		
30. Inpatient transfer out TFC under 5 years		
31. Nutrition Inpatient admission		
32. Nutrition Inpatient discharged cured		
33. Nutrition Inpatient discharged died		
34. Nutrition Inpatient discharged defaulted		

35. Nutrition Inpatient discharged transferred out or other		

PART 5: FAMILY PLANNING

36. Oral contraceptive pill cycle packet dispensed		
37. Medroxyprogesterone (Depo Provera) injection given		
38. Condom female distributed		
39. Implant sub-dermal inserted 3 year protection		
40. Implant sub-dermal inserted 5 year protection		
41. IUCD inserted		
42. Sterilisation female		
43. Sterilisation male		

PART 6A: HIV HCT

Age	**Test**		**Male**				**Female**				Couples Tested	Client Referred for HIV Care
	1st test	Repeat test	CICT Tested	CICT pos	PITC Tested	PITC pos	CICT Tested	CICT pos	PITC Tested	PITC pos		
<5												
5-14												
15-19												
20-24												
25-49												

50>												

PART 6B: HIV SERVICES AT ANC

	Number	Comment
44. HIV Antenatal client known HIV positive 1st ANC visit		
45. HIV Antenatal client HIV positive on lifelong ART at pregnancy start		
46. HIV Antenatal client tested for HIV status unknown		
47. HIV Antenatal client tested HIV positive		
48. HIV Antenatal client HIV positive on AZT (Option A)		
49. HIV Antenatal client HIV positive on triple ARV (Option B)		
50. HIV Antenatal client HIV positive on lifelong ART (Option B+)		

PART 6C: HIV SERVICES AT MATERNITY

51. HIV Maternity woman known HIV positive prior to pregnancy on admission		
52. HIV Maternity known HIV positive prior to pregnancy on lifelong ART		
53. HIV Maternity HIV positive during current pregnancy		
54. HIV Maternity HIV positive on ARV		
55. HIV Maternity status unknown tested for HIV		
56. HIV Maternity status unknown HIV positive		
57. HIV Maternity HIV positive on Option A – new		
58. HIV Maternity HIV positive on Maternal triple ARV (Option B) – new		
59. HIV Maternity HIV positive on lifelong ART (Option B+) – new		
60. Woman tested for HIV within 72 hours of delivery		
61. Woman tested HIV positive within 72 hours of delivery		
62. Woman HIV positive started lifelong ART (option B+) within 72 hours of delivery		

PART 6D: HIV EXPOSED INFANTS

63. HIV exposed infant enrolled – new		

64. HIV exposed infant seen – all		
65. HIV exposed infant up to 2 months seen		
66. HIV exposed infant PCR done within 2 months		
67. HIV exposed infant reference laboratory result received		
68. HIV exposed infant reference laboratory result test positive		
69. HIV exposed infant within 2 months CTX start		
70. HIV exposed infant ART prophylaxis within 6 weeks – new		
71. HIV exposed infant feeding practise assessed at Pentavalent 3		
72. HIV exposed infant 12 month old		
73. HIV exposed infant 12 month old who had PCR between 3-12 months		
74. HIV exposed infant 12 month old rapid HIV antibody test before 12 months		
75. HIV exposed infant 18 month old		
76. HIV exposed infant 18 month old rapid HIV antibody test before 18 months		
77. HIV exposed infant 18 months HIV positive		

MONTHLY IDSR: Please indicate all suspected cases of any of the diseases quoted below.		
Data Element	Number	Comments
1. Onchocerciasis; 2. STI; 3. Bilharzia; 4. Kala – Azar; 5. Lymphatic Filariasis; 6. Trypanosomiasis; 7. Rabies; 8. Plague; 9. Leprosy; 10. Brucellosis; 11. Typhoid Fever.		

PART 2: EXPANDED PROGRAM OF IMMUNIZATION and PHARMACEUTICALS

Children Under 1 Vaccination Report	Fixed	Outreach	Total
1. BCG			
2. OPV0			
3. OPV1			
4. OPV2			
5. OPV3			
6. DPT1			
7. DPT2			
8. DPT3			
9. Measles			
10. Yellow Fever			

Please note the EPI report refers to children less than one year of age.

Tetanus Toxoid Vaccination		
	Pregnant Women	Women 15-45
TT1		
TT2		
TT3+		

VACCINES/PHARMACEUTICALS	Opening balance	Received	issued/ discarded/ sent to other centres	Balance (= left)
BCG				
OPV				
DPT				
Measles				
Tetanus Toxoid (TT)				
Albendazole 200mg tabs				
Amoxicillin 250mg caps/tabs				
Artesunate +Amodiaquine (Adult: 6 tabs)				
Artesunate +Amodiaquine (Child: 3 tabs)				
Artesunate +Amodiaquine (Infant: 3 tabs)				
Artesunate +Amodiaquine (Toddler: 3 tabs)				
Ciprofloxacin 500mg tabs				
Cotrimoxazole 480mg tabs				
Ferrous Sulphate Folic Ac 200mg/0.25mg tabs				
Metronidazole 200mg tabs				
ORS				
Paracetamol 500 mg				

NOTE: Please write 0 (ZERO) if the health facility provides services but nobody came for this particular service during this month period; if the health facility does not provide services please leave the space blank.

Date the report is sent: Signature: