



Republic Of Sierra Leone
Ministry Of Health and Sanitation
Reproductive and Child Health Directorate

Facilities Improvement Team (FIT)
Assessment Report



Acknowledgement

On behalf of the Ministry of Health and Sanitation (MoHS), I wish to recognise the contribution of our partners who have stood with the Reproductive and Child Health Directorate (RCHD) towards reversing the negative trend of maternal and child health in Sierra Leone. As an ongoing effort and recently in response to the presidential post Ebola recovery priorities which include saving the lives of 600 women and 5,000 children by 2018, the RCHD undertook the facility improvement team (FIT) Assessment in June 2016. FIT seeks to make health facilities safe for the provision of emergency obstetric and newborn care (EmONC) services through regular monitoring to determine the availability of seven standards called enablers and nine signal functions required for the provision of quality EmONC. Results of the assessment are used for planning, advocacy and decision making.

The Ministry of Health and Sanitation recognises the financial support of Options Consultancy Services and UNICEF for jointly funding the June 2016 FIT assessment. The participation of the district health management teams (DHMTs) in the FIT assessment and above all, the cooperation of health facility staff are greatly valued; and I thank them on behalf of the MoHS.

I also wish to thank the experienced MoHS personnel who went throughout the country to ensure the status of the sampled facilities is appraised.

As a ministry, we expect our partners, local councils and line ministries to partner with us in addressing the gaps identified in all the facilities towards our combined effort in providing health facilities that are safe for providing quality services to the vulnerable women and children in Sierra Leone.

It is my hope that, this report will be vital in informing the planning and decision making by partners, District Councils, DHMTs and other stakeholders on making our health facilities safe.



Dr. Santigie Sesay
Director-Reproductive & Child Health
MoHS

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Acronyms

ANC	Antenatal Care
BEmONC	Basic Emergency Obstetric and Neonatal Care
BPEHS	Basic Package of Essential Health Services
CEmONC	Comprehensive Emergency Obstetric and Neonatal Care
CHA	Community Health Assistant
CHC	Community Health Centre
CHO	Community Health Officer
C/S	Caesarean Section
DHMT	District Health Management Team
DMO	District Medical Officer
EmONC	Emergency Obstetric and Neonatal Care
EVD	Ebola Viral Disease
FIT	Facility Improvement Team
IPC	Infection Prevention and Control
MCHA	Maternal and Child Health Aide
MDSR	Maternal Death Surveillance and Response
MoHS	Ministry of Health and Sanitation
NGO	Non-Governmental Organization
PCMH	Princess Christian Maternity Hospital
PHC	Primary Health Care
PHU	Peripheral Health Units
PMEL	Partnership Management, Evaluation & Learning
RCH	Reproductive and Child Health
SECHN	State Enrolled Community Health Nurse

Executive Summary

The Facility Improvement Team (FIT) assessment was undertaken in June 2016 by the Ministry of Health & Sanitation (MOHS), with co-funding support from Options Consultancy Services and UNICEF. The aim of the assessment was to determine the availability of seven standards called enablers and nine signal functions required for the provision of quality Emergency Obstetrics and Newborn Care (EmONC) services. The seven enablers are: - Water and Sanitation (WATSAN), Electricity, Referral, Equipment for special procedures, Blood storage and Laboratory, Staffing and Drugs. A total of seventy-eight (78) health facilities were assessed including 13 public hospitals providing Comprehensive Emergency Obstetric and Newborn Care (CEmONC) and 65 community health centres (CHCs) providing Basic Emergency Obstetric and Newborn Care (BEmONC). A health facility is considered EmONC compliant when it meets all the criteria set on each of the seven enablers.

Results of the assessment conducted, showed improvement towards the attainment of EmONC compliance as compared to the December 2015 assessment. Four out of seven enablers in both CEmONCs and BEmONCs showed a positive trend from December 2015 to June 2016. Unlike in December 2015 when only one health facility attained EmONC compliance, two CEmONCs - Pujehun and Kabala Government Hospitals satisfied all the criteria required for providing safe EmONC services. Similar to the findings in December, no BEmONC in the country met all criteria to provide EmONC services.

Referral was the best performing enabler in the June 2016 assessment with more facilities satisfying the requirements for a good ambulance service. All CEmONCs (100%)

and up to 53(82%) out of 65 BEmONCs satisfied the referral requirements; in contrast to December 2015 where 92% of the CEmONCs and 63% of the BEmONCs fulfilled the criteria for Referral. Challenges identified with referral relates to delays in ambulance response to calls from BEmONCs with a lag time exceeding three (3) hours, and the non-availability of a dedicated ambulance service to respond to emergencies in few BEmONCs.

Equipment and Drug supplies improved even though these enablers still rank among the worst performing with less than half of the facilities satisfying the requirements. Only nine (14%) and 25 (38%) BEmONCs; and 6 (46%) and 3 (23%) CEmONCs satisfied the criteria for Drugs and Equipment respectively.

Compliance to WATSAN also improved in the BEmONCs only. Whereas about one-quarter (17 out of 65) of BEmONCs were compliant for this enabler in December 2015, over one-third of the BEmONCs (29 out of 65) attained compliance in June 2016. CEmONCs on the other hand experienced a drop from 7 (54%) to 5 (38%).

Electricity generally experienced a downward trend with overall number of compliant health facilities dropping from 12 (92%) to 11 (85%) among CEmONCs and from 41 (63%) to 29 (45%) among BEmONCs. Twelve BEmONCs either had no source of power supply in the facility or no electricity in the labour ward and therefore rated **red**.

Blood storage and laboratory services showed a decline in performance from 7 (54%) to 6 (46%) in CEmONCs and from 20

(30%) to 19 (29%) in BEmONCs from December 2015 to June 2016. The main gaps identified with this enabler are related to the lack of trained laboratory technicians and reagents to perform simple laboratory tests. Whereas the number of CEmONCs with improved staffing requirements increased from 5 (38%) to 9 (69%) between December 2015 to June 2016, the BEmONCs experienced further decline from 18 (28%) to 10 (15%). The worst affected district was Bonthe.

Recommendations

- DHMTs, District Councils and NGOs should undertake greater effort in addressing gaps identified in health facilities to improve service delivery.
- The MoHS and partners should increase availability of key maternal health medicines, supplies, and equipment (such as delivery kits, manual vacuum extractors (MVEs) & manual vacuum aspirators (MVAs)) for EmONC services.
- The MoHS to accelerate the process of implementing the national emergency ambulance service in all chiefdoms in the country.
- The MoHS through the Directorate of Hospitals and Laboratory Services should capacitate existing laboratory assistants in BEmONC facilities and equip laboratories to carry out basic hematology, microscopy and biochemistry.
- Train and deploy qualified staff and supply drugs and blood products at national and district levels, especially

for saving lives of mothers who need comprehensive EmONC services related to sepsis, haemorrhage, severe anaemia, or abortions

- The MoHS through the RCHD to strengthen community maternal death surveillance and response (MDSR) to ensure every death is reported.
 - The MoHS and its partners to put in place motivating mechanism for midwives and other staff posted to BEmONC facilities such as good accommodation.
 - The MoHS especially the RCH Directorate should be involved in the design, construction or rehabilitation of health facilities to ensure they meet the standards set for the seven enablers.
 - The RCH Programme should consider the use of technology (possible mobile health) in the conduct of FIT assessment. This will reduce paper use, reduce errors in data collection and also facilitate speedy analysis and reporting.
 - Health facility staff should judiciously utilize Performance Based Financing incentive for minor repairs and other issues which do not require huge cost instead of waiting for the DHMT and District Council.
-

1.0 Background

The MoHS with joint funding support from Options Consultancy Services and UNICEF undertook the Facility Improvement Team (FIT) assessment on 13 public hospitals (one for each of the 13 health districts) and 65 community health centres (CHCs) - five in each of the health districts. The aim of the assessment was to determine the readiness of health facilities to provide Emergency Obstetric and Newborn Care (EmONC) services.

Assessment was based on seven enablers and nine signal functions performed in the selected facilities. The identified signal functions for BEmONCs are: administration of parenteral antibiotics, oxytocic drugs, anti-convulsants for pre-eclampsia /eclampsia, manual removal of retained placenta, newborn resuscitation and assisted vaginal delivery. Two additional signal functions—safe blood transfusion and surgery (i.e. caesarean delivery)—constitute the package for CEmONC and the enablers are:

- Water and sanitation (WATSAN)
- Electricity
- Drugs supplies
- Equipment
- Staffing
- Referral
- Blood and laboratory

Criteria were developed on each of the seven enablers to ascertain the readiness and safety of health facilities to provide EmONC services. The status of health facilities is assessed using a traffic rating system as follows: GREEN is ALL criteria were satisfied, YELLOW if MOST of the criteria are satisfied, AMBER if criteria are only PARTIALLY satisfied and RED if NONE of the criteria is satisfied.

2.0 Methodology

A quantitative methodology was adopted for the assessment which was conducted in June 2016. Structured questionnaires, one each for BEmONCs and CEmONCs were adopted for the assessment. A one - day orientation meeting was organized to review and update the questionnaires and give opportunity for assessors to further familiarise themselves with the tools. Actual fieldwork was conducted by seven teams each composed of three experienced health personnel with background in maternal, newborn and child health conducted the assessment.

For quality assurance, four supervisors provided technical field oversight.

Teams spent six days to assess selected facilities in each district which included 1 CEmONC and 5 BEmONC. Teams conducted pre and post assessment meetings with members of the District Health Management Team (DHMT), District Council and NGOs to give updates on results of assessment and inspire actions to address gaps.

At the completion of field work, filled out questionnaires were vetted and the status of each enabler was rated before questionnaires were turned in for data entry. To eliminate bias, data management was done by an independent consultant. The consultant carried out the analysis using Microsoft excel and SPSS. Data for this report is presented in the form of tables, graphs and charts.

3.0 Findings

Results of this are presented in two (2) sections: a) National and b) District profile

3.1 National Profile

3.1.1 FIT Trends Analysis 2012-2016

Figures 1 and 2 below give an overview of health facility performance on the seven enablers over a five year period between 2012 and 2016.

Fig 1: CEmONC Trend 2012-2016

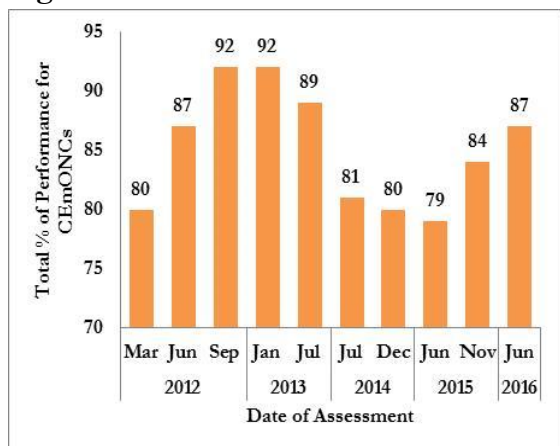
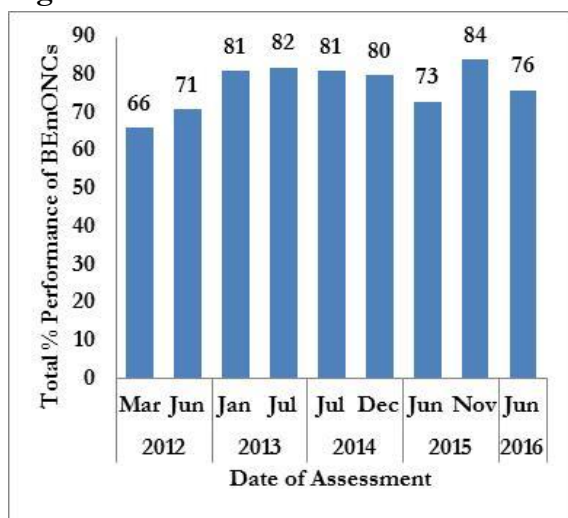


Fig 2: BEmONC Trend 2012-2016



Generally, results from Fig 1 & 2 show that CEmONCs are gradually improving on meeting the enabler criteria while there is a decline among BEmONCs. This latter occurrence is experienced in Staffing, Electricity and Laboratory where performance dropped from 18 (28%) to 10 (15%), 41 (63%) to 29 (45%) and from 20 (30%) to 19 (29%); December 2015 to June 2016 respectively.

3.1.2 Deliveries and Outcomes

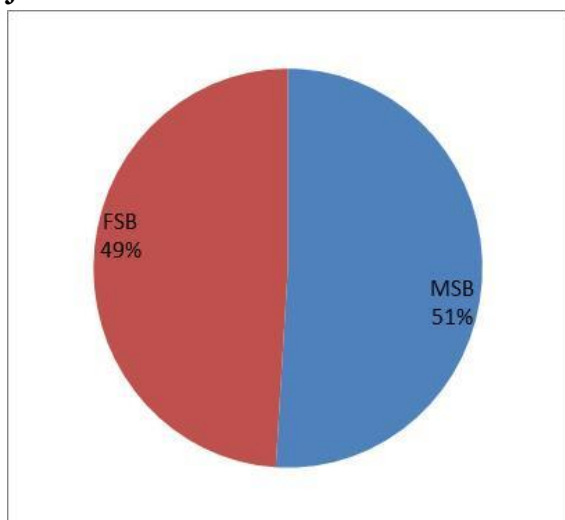
Between December 2015 and May 2016, health facilities recorded a total of 13,885 normal deliveries, 2,017 caesarean sections, 424 assisted deliveries and 208 maternal deaths respectively. Western Area (21%) recorded the highest number of deliveries followed by Kenema (9%), Bombali (8%), Bo (8%), Tonkolili (7%) and Kailahun (7%) respectively. Western area also recorded the highest C/S cases(37%) followed by Bombali (13%), Bo (10%) and Pujehun (10%). Only Western Area has a high rate (>20%) which is probably due to the fact that it has the only tertiary hospital in the country and referrals come from all over the country. Similarly, Western Area accounted for the highest maternal deaths (28%) of all maternal deaths recorded followed by Kenema (12%), Kambia (11%) and Kono (10%). Results from this assessment show that the three commonest causes of maternal deaths were Haemorrhage (45) followed by Eclampsia (20) and Obstructed labour (17). Bonthe was the only district with no reported case of maternal death in the facilities assessed. This may suggest instituting or enhancing community maternal death surveillance and reporting in the district.

3.1.2 Still Births

There were 1,136 recorded still births in all facilities assessed. Results showed an almost equal proportion of macerated still births (51%) and fresh still births (49%). Data showed that for all still births, Western Area accounted for the highest (32%), followed by

Bo (10%), Kono (8%), Kambia (8%) and Kenema (7%) respectively.

Fig 4: Comparison between FSB and MSB June 2016

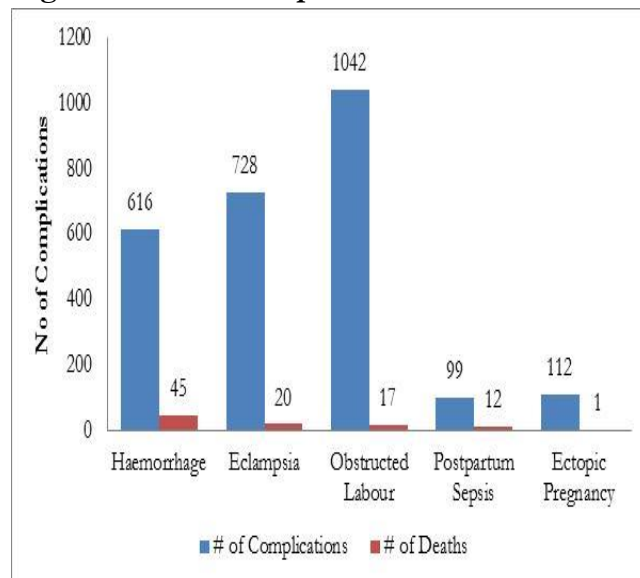


The high proportion of FSB occurring in health facilities is provoking questions to whether the quality of health services are squarely to blame for the high incidence of still births and maternal deaths in facilities. The persistently high mortalities in health facilities could potentially inspire an investigation of the underlying factors within communities that could have a negative influence on case management and outcomes in the health facilities.

3.1.3 Obstetric Complications & Deaths

Figure 5 shows the different obstetric complications accounting for maternal deaths recorded in all 78 EmONC facilities in the country for the period under review. The highest number of complications was obstructed/prolonged labour followed by eclampsia and haemorrhage (APH and PPH combined). Post-partum sepsis accounted for the highest mortality (12%) among these complications followed by haemorrhage (7%).

Fig 5: Obstetric Complications & Deaths




















































3.1.4 Capacity to Perform Signal Functions (CEmONC and BEmONC Combined)

Data from this assessment showed a total of 3,662 of the nine signal functions were performed nationwide in all 78 EmONC facilities within six months (December 2015 – May 2016). The five most performed signal functions related to the administration of intramuscular and intravenous (IM/IV) uterotonic drugs (787); followed by IM/IV antibiotics (729), maternal and neonatal resuscitation (693), manual removal of placenta (255) and assisted vaginal delivery (244).

Evidence from this assessment indicates that various cadres of health facility staffs are able to perform signal functions in the provision of EmONC services including Doctors, Midwives, CHOs, SECHNs and MCHAs. Ideally, all health staffs that are directly involved in conducting deliveries should have the required skills to enhance safe and clean deliveries towards reducing the incidence of delivery related mortality and morbidity. Evidence from this assessment showed a total of 188 healthcare providers had undergone EmONC training. This excludes data from four districts which were not available during the assessment.

3.2 District Profile/Enablers' Performance by District (December 2015 – May 2016)

Table 1: Kono District








	Govt. Hosp. Kono	Gandorhun CHC	Kangama CHC	Kayima CHC	Kombayendeh CHC	Sewafe CHC
Rank/Position	6 th	8 th	64 th	26 th	56 th	26 th
 Water and Sanitation						
 Electricity						
 Referrals						
 Equipment						
 Laboratory						
 Staffing						
 Drugs						
Gaps	No pipe borne water in theatre, postnatal and labour wards Only one CS and anesthesia sets	No second source of power No standard delivery bed Only one pair of BP machine No chlorhexidine cord spray <2 months' supply of all 16 tracer drugs	No toilet in labour ward. No second power source. Ambulance not accompanied by nurse and response time more than 3 hours. No BP machine, patellar hammer, vaginal speculum No microscopy, biochem & hematology not performed in the facility, <2 months' supply of all 16 tracer drugs	No power in labour ward. No SECHN and only 1 MCHA No ORS, Zinc and misoprostol <2 months' supply of 16 tracer drugs	No power in labour ward Ambulance not accompanied by nurse No microscopy, biochem & hematology. <2 months' supply of 16 tracer drugs No IV/IM Ampicillin, Gentamycin, needles, syringes, vaginal speculum, catheters. Only 1 SECHN & 2 MCHAs	Only 1 standard delivery bed No microscopy, biochem & hematology No SECHN Ambulance not accompanied by a nurse

No health facility in Kono district is fully compliant for the set standards to ensure the provision of quality EmONC services. Among the CHCs in the district, Gandorhun is the best performing being compliant in three enablers and meeting most of the criteria in the other four enablers. Kangama is the worst performing CHC not being compliant in any enabler. The worst performing enablers are Laboratory, Referral and Electricity. Four CHCs report lack of a two month supply of ALL 16 Tracer drugs and other Equipment.

Recommendations

- Provide toilet and pipe-borne water especially within labour wards in the identified facilities
- Fill staffing gaps including SECHN and MCH Aides in the identified facilities
- Supply equipment including blood pressure (BP) machines, standard delivery beds, patella hammer etc. in facilities
- Ensure availability of ALL 16 Tracer drugs in Gandorhun, Kangama, Kayima and Kombayendeh CHCs.
- Train staff and provide reagents to facilitate the conduct of laboratory tests in the identified facilities

Table 2: Tonkolili District

	Magbruka Govt. Hosp	Bumbuna CHC	Hinistas CHC	Makali CHC	Masingbi CHC	Yele CHC
Rank/Position	3 rd	38 th	5 th	63 rd	26 th	14 th
 Water and Sanitation	●	●	●	●	●	●
 Electricity	●	●	●	●	●	●
 Referrals	●	●	●	●	●	●
 Equipment	●	●	●	●	●	●
 Laboratory	●	●	●	●	●	●
 Staffing	●	●	●	●	●	●
 Drugs	●	●	●	●	●	●
Gaps	No anesthesia set, No BP machine, No catheter, No urine bags No chlorhexidine cord spray. No biochemistry	No pipe borne water. Only one standard delivery bed & Examination couch No Delivery kit <2 months supply of all tracer drugs. No ampicillin, gentamycin and sodium chloride. Only 1 SECHN	No second power source Response time for ambulance service is > 3hrs. No BP machines.	No Electricity No BP machine, patellar hammer, vaginal speculum No Laboratory No MCHAs <2 months supply of all 16 tracer drugs No IV/IM ampicillin gentamycin	No delivery kit No BP machine No microscopy, biochemistry & hematology. <2 months supply of all 16 tracer drugs No IV/IM ampicillin and gentamycin	No microscopy, biochemistry and hematology Only one MCHAs <2 months supply of tracer drugs No IV/IM ampicillin and Gentamycin








There is no EmONC compliant facility in Tonkolili district. The best performing facility is Magburaka Government Hospital being compliant in five out of the seven enablers while the worst performing facility is Makali CHC not meeting any of the criteria in three out of the seven enablers (Electricity, Equipment and Laboratory). The best performing enabler in the district is Referral followed by WATSAN. Most facilities are compliant in Referral with the exception of Makali CHC where there were reported delays exceeding three hours in the DHMT's response to calls for the ambulance from the PHU. Similarly, most facilities are compliant in WATSAN with the exception of Bumbuna CHC which has no water in the facility. Equipment, Laboratory, Staffing and Drugs rank among the least performing enablers. There is no laboratory in Makali while Masingbi and Yele lack the trained personnel to perform simple lab tests. Two CHCs (Makali and Masingbi) are short on MCH Aides and need to be staffed accordingly. Four of the CHCs (Bumbuna, Makali, Masingbi and Yele) have

stock outs of emergency drugs and insufficient supplies of ALL 16 Tracer drugs.

Recommendations

- Supply essential equipment (BP machine, anaesthesia set, catheter and urine bags) in Magburaka government hospital
- Supply delivery set, delivery bed and examination couch in Bumbuna CHC.
- Restore pipe-borne water in Bumbuna CHC.
- Deploy MCH Aides in Makali and Masingbi CHCs.
- Supply emergency drugs and ensure two month supply of ALL 16 Tracer drugs in Bumbuna, Makali, Masingbi and Yele CHCs.
- Train staff and provide reagents to facilitate the conduct of Laboratory tests in the government hospital, Makali, Masingbi and Yele CHCs

Table 3: Port Loko District


















































	Govt. Hosp.	Lunsar CHC	Mange CHC	Masiaka CHC	Petifu CHC	Rogbere CHC
Rank/Position	10 th	60 th	51 st	26 th	26 th	14 th
 Water and Sanitation	●	●	●	●	●	●
 Electricity	●	●	●	●	●	●
 Referrals	●	●	●	●	●	●
 Equipment	●	●	●	●	●	●
 Laboratory	●	●	●	●	●	●
 Staffing	●	●	●	●	●	●
 Drugs	●	●	●	●	●	●
Gaps	No functional hand washing sink in labour ward No MVE&MVA No hematology No powered blood bank No Amoxicillin, emergency contraceptives, Paracetamol tabs, Methyldopa tabs and Nevirapine syrup	No piped water in labour room and toilet No Electricity in labour room No MVE No standard examination couch No urine bags. Only one BP cuff No lab	No pipe borne water in labour room No MVE&MVA catheters, urine bags No lab tech and assistant Only 1 SECHN No Emergency contraceptive, No Nevirapine syrup, iron folate and Paracetamol tabs.	No functional hand washing sink in labour room & toilet No power in labour ward No catheters, urine bags, No lab tech No Cotrimoxazole Albendazole and Ampicillin injection	No piped water No toilet in labour room. No lab tech/assi Only 1 SECHN Only 2 MCHAs No Paracetamol, Cotrimoxazole, Fefol, emergency contraceptives, IV D5%.	No piped water No catheters, urine bags, No biochem, hematology & hemoglobin No emergency drugs No IV/IM Ampicillin

No facility is EmONC compliant in Kambia district as none met the set criteria for EmONC certification. Three among the best performing facilities (Port Loko government hospital, Petifu and Rogbere CHCs) achieved green in three out of the seven enablers. The best performing enabler in the district is Referral in which all facilities are compliant; in contrast to Laboratory. the worst performing enabler where two health facilities are rated red (Lunsar & Mange CHCs).. Water and Sanitation (WATSAN) is the second worst performing enabler in the district thus implying serious threats in the maintenance of infection prevention and control (IPC) practices. There is uniform performance across all health facilities in drugs meeting most of the criteria (YELLOW).

Recommendations

- Supply essential drugs and equipment (Manual Vacuum Aspirator, Manual Vacuum Extractor, Blood Pressure machines, catheter and urine bags) to identified facilities
- Restore pipe-borne water in Lunsar, Mange, Petifu and Rogbere CHCs and functional hand washing sinks in the government hospital and Masiaka CHC
- Deploy SECHNs and MCH Aides in Mange and Petifu CHCs respectively.
- Deploy trained staff and provide reagents to facilitate the conduct of Laboratory tests in the government hospital, Mange, Masiaka, Petifu and Rogbere CHCs.

Table 4: Kailahun District


















































	Govt. Hosp.	Buedu CHC	Daru CHC	Joijoma CHC	Koindu CHC	Pendembu CHC
Rank/Position	6 th	26 th	38 th	45 th	51 st	1 st
 Water and Sanitation						
 Electricity						
 Referrals						
 Equipment						
 Laboratory						
 Staffing						
 Drugs						
Gaps	No incinerator Only 1 CS & anesthesia set Blood not stored exclusively for emergency obstetrics. Only 2 midwives instead of 4	No toilet in labour ward No urine bags & catheter, Only 2 MCHAs No Lab tech	No piped water & functional hand washing sink in labour room & toilet No Electricity No MVE No methyldopa Nevirapine syrup, Ampicillin injection.	No toilet & piped water in labour room No Electricity No urine bags & catheter, Only 2 MCHAs	No pipe borne water in labour room & toilet No Electricity No MVE, baby scale, urine bags & catheters Only 1 MCHA Only 1 SECHN	Only 1 SECHN No Laboratory tech.

No health facility is EmONC compliant in the Kailahun district. The best performing facility is Pendembu CHC which met all criteria in six out of the seven enablers, while the worst performing facility is Koindu CHC meeting criteria for only two out of the seven enablers. The best performing enabler is Referral in which all facilities are compliant followed by Laboratory in which four health facilities meet all of the criteria. The worst performing enabler is Electricity in which three facilities are rated red for not meeting any set criteria. Daru, Jojoima & Koindu CHCs lack any source of power. WATSAN is the second worst performing enabler with issues relating to the lack of incinerator, piped water and toilet in labour wards in health facilities.

Recommendations

- Improve WATSAN by: providing incinerator in Kailahun government hospital, toilet and pipe borne water in Buedu, Daru, Jojoima and Koindu CHCs
- Improve Electricity by providing power source in Daru, Jojoima and Koindu CHCs
- Supply the following equipment: one CS and Anaesthesia sets in Kailahun government hospital, urine bags, catheters and MVE in Buedu, Jojoima, Daru and Koindu CHCs respectively.
- Deploy the required category and number of staff - Lab technicians, SECHNs and MCH Aides.

Table 5: Kenema District


















































	Govt. Hosp.	Baoma Koya CHC	Gegbwema CHC	Joru CHC	Largo CHC	Levuma CHC
Rank/Position	3 rd	26 th	14 th	14 th	26 th	8 th
 Water and Sanitation						
 Electricity						
 Referrals						
 Equipment						
 Laboratory						
 Staffing						
 Drugs						
Gaps	No incinerator No MVE (kiwi) No Vitamin A No Ringers lactate No emergency contraceptives	No second power source No Laboratory Only 1 MCHA Only 1 SECHN No lab tech/assistant	No piped water & functional sink in labour room & toilet No second source of power Only 1 MCHA Only 1 SECHN No Vit A, Amox tabs, Zinc, ORS, PCM, Nevirapine syrup	No toilet, piped water & functional sink in labour room Only 1 delivery bed No lab assistant No sutures No Vit A, Amox tabs, Zinc	No piped water and functional sink in labour room and toilet No power in labour room No MCHA & lab assistant No Vit A, Amox tabs, Zinc	No second source of power Only 1 MCHA No Zinc tabs No IV/IM Ampicillin

Though no health facility is EmONC compliant, in Kenema district, the Kenema government hospital is close to compliance as the hospital met all of the criteria in four out of the seven enablers (Electricity, Referral, Laboratory & Staffing) and most of the criteria in the remaining three enablers (WATSAN, Equipment & Drugs). The second best performing facility is Levuma CHC meeting all of the criteria in four out of seven enablers. The best performing enabler for the district is Referral in which all facilities met the criteria. The worst performing enabler is WATSAN with lack of incinerator (Kenema government hospital), no pipe borne water and hand washing sinks in labour ward and toilet in three health facilities (Gegbwema, Joru and Largo CHCs) and the second worst performing enabler is Electricity mostly due to “no second power source” or the lack of power.

Recommendations

- Improve WATSAN by: providing incinerator in Kenema government hospital, construct toilet in Joru CHC, and restore pipe borne water in Gegbwema, Joru and Largo CHCs
- Improve electricity by providing “second power source” Baoma, Gegbwema and Levuma CHCs and electrify the labour ward in Largo CHC.
- Improve on equipment by supplying MVE (Kiwi) at Kenema hospital, one standard delivery bed and sutures at Joru CHC.
- Deploy the required category and number of staff - lab assistant, SECHNs and MCH Aides in Baoma, Gegbwema, Joru and Largo CHCs.
- Establish a functional laboratory by deploying trained staff and supply reagents at Baoma CHC
- Ensure the following drugs are supplied in the required quantities – Emergency contraceptives, Ringers Lactate, Vitamin A, Amoxicillin tabs, Zinc, ORS, Paracetamol and Nevirapine Syrup.

Table 6: Moyamba District

	Moyamba Govt. Hosp	Moyamba Junction CHC	Gbangbatoke CHC	Rotifunk CHC	Shenge CHC	Taiama CHC
Rank/Position	11 th	14 th	45 th	8 th	56 th	14 th
 Water and Sanitation						
 Electricity						
 Referrals						
 Equipment						
 Laboratory						
 Staffing						
 Drugs						
Gaps	No autoclave or piped water in labor room, No second source of power Interrupted powered blood bank No midwife & SRN No Amox, methyldopa, ampicillin inj and misoprostol	No second source of power No sutures, Cannulas, catheter, Only 1 standard delivery bed, No hematology & biochemistry Only 1 SECHN & 2 MCHA, No Zinc tablets, misoprostol and diazepam inj	No Electricity Labour room not spacious to accommodate two beds No trained lab tech/assistant. Only 2 MCHAs	No Electricity in labour room. No second source of power. No hematology and biochemistry Only 1 SECHN	No piped water in labor room No Electricity. No trained lab tech/assistant Only 1 SECHN & 1 MCHA No Nevirapine	No Laboratory Only 1 SECHN & 1 MCHA


















































The table above shows no health facility met the criteria for all seven enablers. The main referral hospital is compliant in only two enablers with serious gaps in Laboratory and staffing. This has direct implications in maternal and child health outcomes and consequently people’s trust in the health system. Taima CHC is the best performing facility meeting the green criteria in five out of seven enablers; followed by Rotifunk CHC in which four enablers rated green and the worst performing facility is Shenge CHC. WATSAN, Referral & Equipment rated as the best performing enablers in which four out of six facilities met all of the set criteria. Among the worst performing enablers are Electricity and Laboratory. Two facilities (Gbangbatoke and Shenge CHCs) have “no power source” while Moyamba government hospital and Moyamba Junction CHC have “no second source of power”. In one facility (Taiama CHC) there is no laboratory while the remaining facilities either lack the trained personnel or the reagents needed to perform laboratory tests. All facilities lack the full complement of staff as recommended in the basic package for essential health services.

Recommendations

Generally, the district needs massive improvement in the following enablers: Staffing, Laboratory and Electricity

- Provide generator and/or solar in Shenge and Gbangbatoke CHC, provide second power source in Moyamba hospital, Moyamba Junction and Rotifunk CHCs.
- Ensure uninterrupted powered blood bank in the Moyamba government hospital, deploy trained lab technicians/assistants and supply reagents, post SRN/Midwife in Moyamba government hospital, SECHNs and MCH Aides in the CHCs
- Improve WATSAN by providing autoclave in Moyamba hospital and piped water in labour ward at Shenge CHC
- Supply essential drugs to Moyamba hospital, Moyamba Junction and Shenge CHC.

Table 7: Bonthe District

Enabler	Bonthe Govt. Hosp.	Bendu CHC	Gambia CHC	Madina CHC	Tihun CHC	Yoni CHC
Rank/Position	13 th	60 th	45 th	38 th	51 st	65 th
 Water and Sanitation						
 Electricity						
 Referrals						
 Equipment						
 Laboratory						
 Staffing						
 Drugs						
Gaps	No piped water in labour room. Incomplete CS sets. No vaginal speculum, Only 1 BP machine in labour ward No trained lab tech, Pharmacist, anesthetists Only 2 midwives. Incomplete tracer drug Stock out of dressing materials and IV metronidazole	No piped water in labour room. No ambulance. No mucous suction, urine bags, urethral catheters. No lab. No CHO, SECHN, Only 1 MCHA. Incomplete tracer drugs.	No second power source. No urine bag. No lab No CHO, Only 1 SECH and 2 MCHA. Incomplete tracer drugs	No second power source No lab Only 1 MCHA No SECHN. Incomplete tracer drug list, ampicillin inj.	No Electricity. No urine bag, MVE. No lab. Only 1 MCHA Incomplete tracer drugs	No piped water in labour room. No drainage pit. No lab No ambulance No CHO, midwife. Only 1 SECHN and 1 MCHA. Incomplete tracer drugs


















































The healthcare delivery system in Bonthe could best be described as dysfunctional. No health facility is EmONC compliant. The worst performing enabler is Laboratory in which no health facility met any of the set criteria. The lack of a functional laboratory at the referral hospital and PHUs could have negative implications that may contribute to poor maternal and neonatal outcomes. Results also show a serious shortage of trained and qualified staff with no Community Health Officers (CHOs) in three out of the five CHCs. Other staffing gaps include inadequate numbers of midwives, SECHNs and MCHAs. The provision of services in the district is further constrained by grossly inadequate equipment including incomplete C/S Set at the main referral hospital. Electricity is also a serious challenge. In two CHCs (Tihun and Yoni) there is no power source; and “no second power source” in Gambia and Madina CHCs. Water and Sanitation is also a major issue. Three facilities

including the district referral hospital lack piped water in the labour ward.

Recommendations

- Post trained lab personnel and supply lab reagents in all facilities
- Provide generators and solar for Tihun and Yoni CHC and second power source Gambia and Madina CHCs
- Provide water ambulance for Bendu and Yoni CHCs
- Supply required Equipment as identified in gaps.
- Office of Chief Nursing Officer to ensure required cadre of nurses are posted to the identified health facilities.

Table 8: Bombali District








Enabler	Makeni Govt. Hosp.	Batkanu CHC	Binkolo CHC	Kagbere CHC	Kamabai CHC	Kalangba CHC
Rank/Position	3 rd	51 st	45 th	14 th	26 th	38 th
 Water and Sanitation						
 Electricity						
 Referrals						
 Equipment						
 Laboratory						
 Staffing						
 Drugs						
Gaps	No piped water in labor room. Insufficient BP machines and delivery beds in the maternity section.	No piped water and toilet in labor room. No functional sinks. No power source. No MCHA & only 1 SECHN, No lab tech/asst. No HB test. Incomplete tracer drugs	No piped water & toilet in labor room. No functional sinks. No power source. No MVE. No HB & biochem. Only 2 SECHN & 1 MCHA. Incomplete f tracer drugs, No ampicillin and gentamycin inj.	No second power source. No HB tests. No MCHA & only 1 SECHN, No lab tech/asst. Incomplete tracer drugs	No piped water & toilet in labor room. No second power source. No biochemistry. Incomplete tracer drugs, no ampicillin inj, oxytocin. Only 1 SECHN	No waste bin. No MVE and MVA. No HB tests. No MCHA and lab tech only 1 SECHN. Incomplete tracer drugs, no ampicillin inj, calcium gluconate

As with the general performance of health facilities in the country, no facility in Bombali district is EmONC compliant as none of them was able to meet all stipulated criteria to guarantee safe service delivery. The district referral hospital is the best performing, meeting all criteria in five out of the seven enablers. The worst performing facility is Batkanu CHCs.. The best performing enabler is Referral in which all facilities met all of the criteria followed by Equipment in which three facilities met all criteria. Among the worst performing enablers are Drugs and Staffing. All five CHCs in the district are short in the required list of tracer drugs in addition to stock outs of emergency drugs. The identified staffing gaps relate to inadequate numbers of MCH Aides and SECHNs in four out of the five CHCs and the lack of laboratory technician/assistant. The major problem with WATSAN are the lack of toilet and piped water in labour ward, functional hand washing sinks and waste bin for wet trash.

Recommendations

- Improve WATSAN by restoring piped water in Makeni Government Hospital, Batkanu, Binkolo and Kamabai CHCs. Also provide toilet in labour ward in Batkanu and Binkolo CHCs.
- Provide generator and/or solar in Batkanu and Binkolo CHCs.
- Supply BP machines and delivery beds in Makeni Government Hospital, MVE and MVA in Batkanu and Kalangba
- Equip labs by deploying trained lab technicians and supply reagents
- Deploy MCH Aides and SECHNs in Batkanu, Binkolo, Kagbere and Kalangba CHCs

Table 9: Koinadugu District


















































Enabler	Kabala Govt. Hosp.	Kondembaia CHC	Kurubola CHC	Mongo CHC	Sinkunia CHC	Yiffin CHC
Rank/Position	1 st	26 th	45 th	45 th	26 th	51 st
 Water and Sanitation	●	●	●	●	●	●
 Electricity	●	●	●	●	●	●
 Referrals	●	●	●	●	●	●
 Equipment	●	●	●	●	●	●
 Laboratory	●	●	●	●	●	●
 Staffing	●	●	●	●	●	●
 Drugs	●	●	●	●	●	●
Gaps		No MVE, vaginal speculum and only one BP machine. No hematology and biochemistry tests. No MCHA Only 1 SECHN. No sutures & IV metronidazole.	Ambulance response > 3hrs. No BP machine in labour room. No hematology and biochemistry No SECHN, MCHA and lab tech/asst. Incomplete tracer drugs	No water in labor room. Ambulance response >3hrs. No BP machine, MVA & urinary catheter. No hematology, No MCHA, lab tech, only 1 SECHN. Incomplete tracer drug, no gentamycin inj, IV metronidazole and sutures.	No second source of Electricity. No light in the labour room. No urine bag. Laboratory cannot perform hematology and biochemistry tests. No SECHN. Incomplete tracer drugs, no sutures	No water in labor room. No second power source. Ambulance response > 3hrs. No BP machine Only 1 delivery bed. No functional Lab. No MCHA, lab tech/asst. Incomplete Tracer Drugs

Results show that Koinadugu Government Hospital satisfied the criteria for all seven enablers and is therefore considered safe for the provision of EmONC services. The hospital has the capacity and is ready to receive emergency and newborn cases from PHUs in the district. The second best performing is Kondembaia CHC attaining green in WATSAN, Referral and Electricity and meeting most of the criteria (yellow) in Equipment, Laboratory and Drugs. In contrast to the hospital's performance, no PHU is EmONC compliant. The worst performing facility is Yiffin CHC. Electricity is the best performing enabler in which all facilities met all of the criteria except Sinkunia CHC. The worst performing enabler is Staffing where two facilities Kondembaia and Kurubola CHCs are each short of MCH Aides and SECHNs. The second worst performing enabler is Laboratory. Four facilities (Kondembaia, Kurubola, Mongo and Yiffin CHCs) have insufficient supplies of BP machines in the labour wards.

Recommendations

- Deploy MCH Aides and SECHNs in required numbers in all CHCs
- Improve laboratory services by deploying trained lab technicians/assistants and supply reagents.
- Supply BP machines, MVEs, MVAs, sutures, urinary catheters and urine bags in all identified facilities.
- Directorate of Drugs and Medical Supplies to ensure that district medical stores (DMS) and health facilities have the required quantities of all drug categories at any given time.
- Reduce ambulance response time by taking prompt action when emergencies are alerted at PHU level

Table 10: Western Area District

Enabler	PCMH Hosp.	Goderich CHC	Hasting CHC	Regent CHC	Ross Road CHC	Waterloo CHC
Rank/Position	8 th	60 th	56 th	26 th	1 st	3 rd
 Water and Sanitation						
 Electricity						
 Referrals						
 Equipment						
 Laboratory						
 Staffing						
 Drugs						
Gaps	Interrupted water supply No powered blood bank. No blood bank refrigerator. Normal saline not available	No piped water in labor room No MVE & MVA No standard examination couch, No BP machine, No delivery kit, No thermometer, catheter, urine bag, No lab facility. No normal saline, no BCG, nevirapine, misoprostol.	No functional sink in postnatal ward. No urine bag, chlorhexidine cord spray No lab facility No Midwife, Amoxicillin tabs/caps ferrous sulphate, cotrimoxazole, normal saline, ringers, glucoe 5%, albendazole and zinc tablets, stock out of emergency drugs and tetanus toxoid. Stock out of suturing material, lack of Cannula	No piped water in labor room No BP machine No urine bag No reagents No Vitamin A, methyldopa, normal saline, No IV/IM ampicillin & gentamycin	No amoxicillin tabs, cotrimoxazole, paracetamol tab, ferrous sulphate and folic, vitamin A, emergency contraceptive, glucose 5%, ampicillin inj, and misoprostol	No Vitamin A, emergency contraceptive, methyldopa, nevirapine, normal saline, metronidazole inj, and diazepam inj.


















































No health facility is EmONC compliant in the Western Area.. The best performing health facility is Ross Road CHC in which six out of the seven enablers met all of the enabler specific criteria followed by Waterloo with the same status except that Ross Road performed better in Drugs supplies. The Princess Christian Maternity Hospital (PCMH) which is the main obstetric emergency referral facility in the country met all the criteria in only three out of the seven enablers (Electricity, Referral and Staffing). Goderich and Hastings CHCs are the two worst performing facilities. Two enablers (Referral and Electricity) are rated as the best performing as opposed to the other enablers. The PCM Hospital is probably the most looked after in the country as it is supposed to be the model of excellence from where the rest of other districts hospitals in the country emulate. However, the hospital has interrupted water supply, no powered blood bank and lack of normal saline.

The worst performing enabler is Drugs in which no facility is compliant followed by Laboratory in which Goderich and Hastings CHCs haveno laboratory facility.

Recommendations

- Post trained lab technicians and equip with reagents in Goderich and Hastings.
- Supply the required drugs and the right quantities in all health facilities.
- Provide piped water in the labour ward in Goderich and Hastings, and provide hand washing sink in Hasting
- Supply the following Equipment: MVA, MVE, standard examination couch, delivery kit, thermometers, urine bags and catheters

Table 11: Kambia District


















































Enabler	Kambia Govt Hosp.	Barmoi Munu CHC	Mambolo CHC	Mapotolon CHC	Kamasasa CHC	Kukuna CHC
Rank/Position	8 th	8 th	8 th	8 th	14 th	14 th
 Water and Sanitation						
 Electricity						
 Referrals						
 Equipment						
 Laboratory						
 Staffing						
 Drugs						
Gaps	No second power source No MVE & MVA, No BP machine No OBY/GYN, No pediatricians,	No second power source No urethral catheter, No SECHNs or CHAs, No methylodopa, nevirapine, ampicillin inj, misoprostol, tetanus toxoid	No piped water in labor room No sutures, dressing material, ringer's lactate, sodium choline, dextrose 5%, metronidazole inj, OPV. No SECHNs,	No piped water in labor room No functional sink Ambulance response >3hrs & not accompanied by nurse No SECHNs or CHA, , No sutures, dressing material, Cotrim tabs, nevirapine, ,methylodopa, metronidazole inj, ampicillin inj, misoprostol PCV	Ambulance response >3hrs No hematology hemoglobin, biochemistry No SECHNs or CHAs, No Lab Tech or assistant	No water in labor, postnatal ward and toilet, No MVE, delivery kit, set, No baby scale, BP machine, thermometer, urethral catheter No SECHN, CHAs, No sutures, dressing material, ringer's lactate, sodium chloride, emergency contraceptive, methylodopa, ampicillin inj and BCG

The results above from Kambia district suggest a generally good performance with most of the enablers meeting all of the set criteria. The best performing enabler is Laboratory in which all of the criteria were met in five out of the six facilities. Three enablers (Electricity, Referral and Equipment) all performed similarly, meeting all criteria in four out of the six facilities. Staffing is the most constrained enabler in which none of the facilities met the requirements, followed by Drugs in which only one facility is compliant.

Recommendations

- Provide second power source in Kambia Government Hospital and Barmoi Munu CHC.
- Post the required staff as identified in Table 11 and in the right numbers
- Provide piped water in labour, postnatal ward and toilet in Kukuna CHC; provide piped water in labour ward in Mambolo and Mapotolon CHCs.
- Provide MVE, MVA and BP machine in Kambia Government Hospital. Provide MVE, delivery kit, delivery set, baby scale, BP machine, thermometer and urethral catheters in Kukuna CHC.
- Directorate of Drugs and Medical Supplies to ensure that District Medical Store (DMS) and PHUs have enough drugs

Table 12: Bo District








Enabler	Govt. Hosp.	Dambala CHC	Jembe CHC	Koribondo CHC	Ngalu CHC	Sumbuya CHC
Rank/Position	12 th	56 th	14 th	5 th	5 th	14 th
 Water and Sanitation						
 Electricity						
 Referrals						
 Equipment						
 Laboratory						
 Staffing						
 Drugs						
Gaps	No MVA, Patella harmer, complete anesthesia set Blood not scored exclusively for EmONC There has been a stock out of blood in the past 3 months Lack supply of ampicillin, gentamycin, metronidazole and misprostol	No pipe-borne water in labor room No second power source No Chlorhexidine cord spray No technician No lab tests Only 2 MCH Aides No SECHN, Incomplete Tracer drugs	No pipe borne water No second power source No lab technician Incomplete tracer drugs	No pipe borne water in labour room No urine bags and catheter No chlorhexidine cord spray No lab technician	No lab technician Incomplete tracer drugs	No second power source available Delivery room lack curtain and lack BP machine Chlorhexidine cord spray No lab technician available Incomplete tracer drugs

In Bo District, no health facility is compliant in all enablers. The best performing enabler is Referral while the worst is Blood and Laboratory. All facilities reported a very good referral system with ambulance responding most of the time under one hour of making the call. Koribondo CHC is the only facility with compliance in drugs. Equipment and Electricity are the two second best performing enablers in the district. Jembe and Koribondo are the only facilities compliant for staffing

Recommendations

- Supply with all tracer drugs in all health facilities
- Restore pipe-borne water and generator as second power source in Dambala, Jembe and Koribondo CHCs.
- Deploy lab technicians and supply lab reagents in the identified facilities.

Table 13: Pujehun District

Enabler	Pujehun Govt. Hosp	Bumpe Perri CHC	Gbondapi CHC	Potoru CHC	Sahn Malen CHC	Zimmi CHC
Rank/Position	1 st	14 th	3 rd	38 th	38 th	38 th
 Water and Sanitation	●	●	●	●	●	●
 Electricity	●	●	●	●	●	●
 Referrals	●	●	●	●	●	●
 Equipment	●	●	●	●	●	●
 Laboratory	●	●	●	●	●	●
 Staffing	●	●	●	●	●	●
 Drugs	●	●	●	●	●	●
Gaps		Electricity not always available No biochem No Urethral Catheter, No IV Cannulas, No Sutures, No Dextrose 5% Lack 2 months supply of Tracer Drugs	No running water in labour and postnatal wards No syringes, sutures and IV Cannulas Lack 2 months supply of Tracer Drugs	No toilet & running water in labour ward No biochem No second source of Electricity No SECHN No Urethral Catheter, Urine Bags Lack of 2 months supply of Tracer Drugs	No water in labour and postnatal wards No second power source No Patella hammer Only 1 SECHN, Pharm Tech, Lab Tech No Sutures Lack 2 months supply of Tracer Drugs	Water not available 24 hours, no water in labour and postnatal wards No Electricity in the facility - No solar, no generator No Urine Bags Only 1 SECHN Pharm Tech, Lab Tech

Pujehun Maternity Hospital is the only compliant facility for all enablers. Among CHCs, Gbondapi CHC is the best performing PHU with four enablers compliant followed by Bumpeh with two enablers compliant. The best performing enabler is Referral with compliance for all facilities. The worst performing PHUs in the district are Sahn and Potoru CHCs. Zimmi CHC is the only facility without any source of power. Only two PHUs Gbondapi and Zimmi CHCs are compliant for Equipment

- Provide flush toilet in Potoru, and piped water in Zimmi and Sahn malen CHCs.
- Provide source of power in Zimmi and other facilities.
- Improve Equipment by supplying urethral catheter, IV Cannulas, sutures and urine bags in identified facilities.
- Post trained lab technicians/assistants and provide reagents in identified facilities
- Directorate of Drugs and Medical Supplies to ensure that District Medical Store (DMS) and PHUs have enough drugs.

Recommendations