



Government of Sierra Leone  
Ministry of Health and Sanitation  
Reproductive and Child Health Directorate

FACILITY IMPROVEMENT TEAM (FIT) ASSESSMENT  
REPORT

*JUNE, 2015*

## **Acknowledgement**

The introduction of the FIT assessment in 2010 has helped in galvanizing the support of MOHS and its development partners, district stakeholders and line ministries in making the 78 designated EmONC facilities compliant for the delivery of essential and quality reproductive and child health services in Sierra Leone. The assessment has been an all inclusive exercise; conducted with DHMT whilst adequately informing the local councils and partners operating in the districts.

The FIT assessment in June, 2015 like the one in December, 2014 was challenging due to the ongoing Ebola outbreak in some parts of the country. I will like to commend the assessors, supervisors and their drivers who accessed facilities to collect data during this difficult time.

Options Consultancy Services have been the key financier of the FIT exercise since its introduction in 2010. The MOHS recognizes and appreciates their continued financial and technical support to this process.

The MoHs also appreciates the financial support of Evidence for Action (E4A) and the World Bank supported RCHP Phase II funds in past FIT assessments. The participation of the DHMT 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.

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 EmONC compliant facilities; which are key to providing quality services for the vulnerable women and children in Sierra Leone.

It is my hope that, this report will be vital in informing the planning of programmes by partners, DHMTs and other stakeholders

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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
MDR	Maternal Death Review
MMR	Maternal Mortality Ratio
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
SBA	Skilled Birth Attendant
SECHN	State Enrolled Community Health Nurse

## Executive summary

In the quest to ensure that quality Maternal Newborn and Child Health (MNCH) services are provided for the vulnerable women and children in Sierra Leone, the government is working towards equipping all hospitals and Community Health Centres (CHCs) with the inputs required to provide quality Emergency Obstetric and Neonatal Care (EmONC) services. On the recognition that achieving this is infeasible in a short time, the MOHS and the government focuses on certifying 13 hospitals for Comprehensive Emergency Obstetric and Neonatal Care (CEmONC) services, one per district ; and five Community Health Centres (CHC) per district to be equipped to provide basic emergency obstetric and neonatal care (BEmONC) services.

The Facility Improvement Team (FIT) assessment exercise is the system used to track the progress of the selected seventy-eight (78) facilities towards certification and was adopted in November 2010. Facilities are scored on seven standards which need to be met in order to achieve the relevant status. These became known as enablers. These enablers are:

- ❖ Water and sanitation
- ❖ Electricity
- ❖ Referrals
- ❖ Equipment for special procedures
- ❖ Blood storage and laboratory
- ❖ Staffing
- ❖ Drugs and supplies

Between the period 2010 and 2013, the assessment was done on a quarterly basis; but since late 2013, the assessment became a six-monthly activity. This change is to allow district stakeholders to act on recommendations in addressing gaps identified in each of the 78 facilities. This report covers the first half of 2015 (January-June, 2015) on progress made by facilities towards becoming EmONC compliant.

### **Findings on Enablers progress**

This report analyzed data obtained from 65 Community Health Centres and 13 Hospitals considered as Basic and Comprehensive Emergency Obstetric and Newborn Care facilities respectively. These facilities were assessed for their compliance to provide quality Emergency Obstetric and Newborn Care services. Overall, there is progress in the performance of the health facilities towards the achievement of EmONC status as compared to the December 2014 report. However, no facility in the country is considered EmONC certified as per set standards.

Among the CEmONC facilities, Pujehun maternity complex had the highest rating and the least ranked CEmONCs is Bonthe hospital. Among the BEmONCs, Kono district has the highest score of 83.5 % for enablers combine with Ross Road CHC in Western Area leading all facilities nationally with 96.4%. The least performing facilities are Madina and Tihun CHCs in Bonthe district.

Referral is the enabler with the highest score (86.0%) for both BEmONC and CEmONC. The high performance achieved in the referral category could be attributed to the fleet of ambulances in country to contain the Ebola Viral Disease outbreak. The electricity situation is encouraging for both BEmONCs and CEmONCs) with at least one source of power supply in each facility. Laboratory and blood services are the least performing enabler in both CEmONC and BEmONCs.

### **Key recommendations**

The key recommendations arising from this assessment are:

1. Strengthening laboratory services at the BEmONC level through provision of equipment , appropriate reagents and capacity building of lab personnel to be able to perform basic, haematology ,microscopy and biochemistry, and where applicable, posting of trained lab personnel to these facilities.
2. Equipping the health facilities with the required equipment and consumables such as Manual Vacuum Extractor, Manual Vacuum Aspirator & elbow gloves to carry out necessary procedures.
3. The DHMTs should continue to engage Councils, and NGOs to support the respective districts in addressing the gaps identified in the each of the facilities.
4. Provision of accommodation, training, and posting of more technical staff including midwives to the health facilities and providing other incentives by MoHS and its partners.
5. Extending the Performance Based Financing scheme to health facilities that become EmONC compliant to motivate others and also lead to sustainability for those who have already attained EmONC status.
6. The MoHS and partners should convene a meeting that will bring together all line ministries, partners, councils and other key stakeholders to discuss and come up with a more sustainable way of making facilities EmONC compliant for quality service delivery.

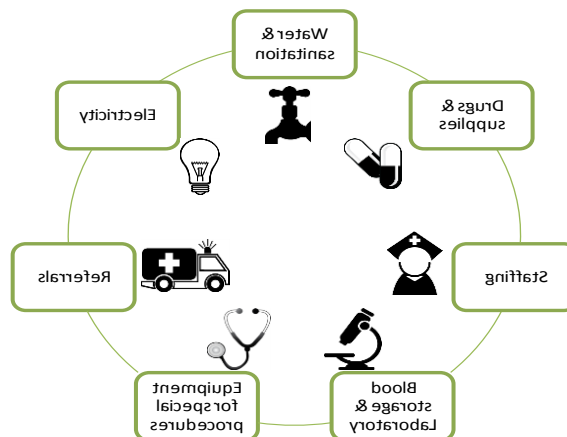
## 1.0 INTRODUCTION

Emergency Obstetrics and Neonatal Care (EmONC) has been identified as a key strategy for the reduction of maternal and infant morbidity and mortality. In pursuance of this objective, 65 Community Health Centres (CHCs); five in each district were identified to be equipped to provide Basic Emergency Obstetrics and Neonatal Care (BEmONC) and 13 public Hospitals to be equipped to provide Comprehensive Emergency Obstetrics and Neonatal Care (CEmONC). Following this development, a system of tracking the progress of the selected facilities based on agreed standards such as, drug supply, water, staffing, laboratory/blood services, equipment, referrals and electricity were put in place.

**Figure 1. Facility improvement enablers**

### Enablers





The Facility Improvement Team (FIT) assessment exercise monitors the minimum standards of inputs required to achieve EmONC status in the seven enablers as shown in Fig.1. Meeting the set criteria for each of the enablers contributes towards the facility to provide quality EmONC services.



### Scoring approach

The FIT exercise set a scoring system in order to enable the ministry and partners identify gaps and areas that require resources. Scoring green on an enabler depicts that it meets all the criteria for that enabler. All facilities should attain green status for all enablers to be certified as EmONC compliant facilities. This is to say the facility has met the minimum requirements as identified in the BPEHS. Further, each tracker code is allocated a percentage score which is used to compare overall progress from one assessment to another. Thus, the maximum score a facility can achieve, is 28 (maximum score for green is four for each of seven enablers). Table 1 below, list the definitions and scores of each tracker code:

**Table 1 Coding criteria**

<b>Code</b>	<b>Color</b>	<b>Score</b>	<b>Facility has:</b>
	Green	4	Met all criteria
	Yellow	3	Mostly met criteria
	Amber	2	Partially met criteria
	Red	1	Not met criteria

## **2.0 FIT Methodology**

The FIT assessment team comprised of seven teams of two personnel. Senior MOHS technical staff were recruited and trained. They provide on the job mentoring and guidance during the data collection exercise. Each team covers two districts with the exception of the team in Western Area. These teams are joined at district level by members of the DHMT as part of the assessors in the respective districts. This is to ensure that DHMT are aware of issues identified in facilities and take prompt action.

There were 3 supervisors comprising the RCH Director, RCHD Team Leader and the Options Programme Coordinator. Each supervisor covered a region.

### **FIT tools**

The FIT tools comprised of two sets of questionnaires, one for the hospitals (CEmONC) and one for the CHCs (BEmONCs). These tools defined the criteria that each designated CEmONC or BEmONC facility need to achieve for each of the seven enablers to be classified as an EmONC compliant facility. These criteria are set in accordance with existing guidelines of the MOHS such as the Basic Package of Essential Health Services (BPEHS) for Sierra Leone, Norms and Standards for Improved Reproductive, Sexual, Newborn and Child Health Service Delivery in Sierra Leone and the Primary Health Care Handbook.

### **Orientation meeting**

Prior to the exercise, a one -day orientation meeting was held to discuss the questionnaires to make sure assessors collect the required set of data in the field. Challenges and lessons learnt in the last FIT assessment were also highlighted and discussed in the meeting.

### **FIT assessment visits**

The June FIT exercise started on the 24<sup>th</sup> June to 5<sup>th</sup> July 2015. It lasted for 12 days. Entrance and exit meetings were held in the respective districts. The purpose of the entrance meeting was



to inform DHMTs about the FIT process, discuss the last FIT findings and request a member of the DHMT to work with the FIT team. The exit meeting discussed the gaps identified in each facility for the current FIT assessment and ways of addressing them.

**Data entry and analysis**

Data entry and analysis was done using, Epi-Info and Microsoft Excel to generate scorecards, tables and percentages. Prior to data entry, a validation exercise was conducted on the completed questionnaires to ensure completeness and accuracy of data.

**3.0 OVERVIEW OF KEY FINDINGS.**

**3.1 FIT Trend analysis, 2010-2015**

This is an overview of the performance of BEmONC and CEmONC facilities assessed since the introduction of the FIT assessment model in November, 2010.

**Figure 2: BEmONC achievement trends.**

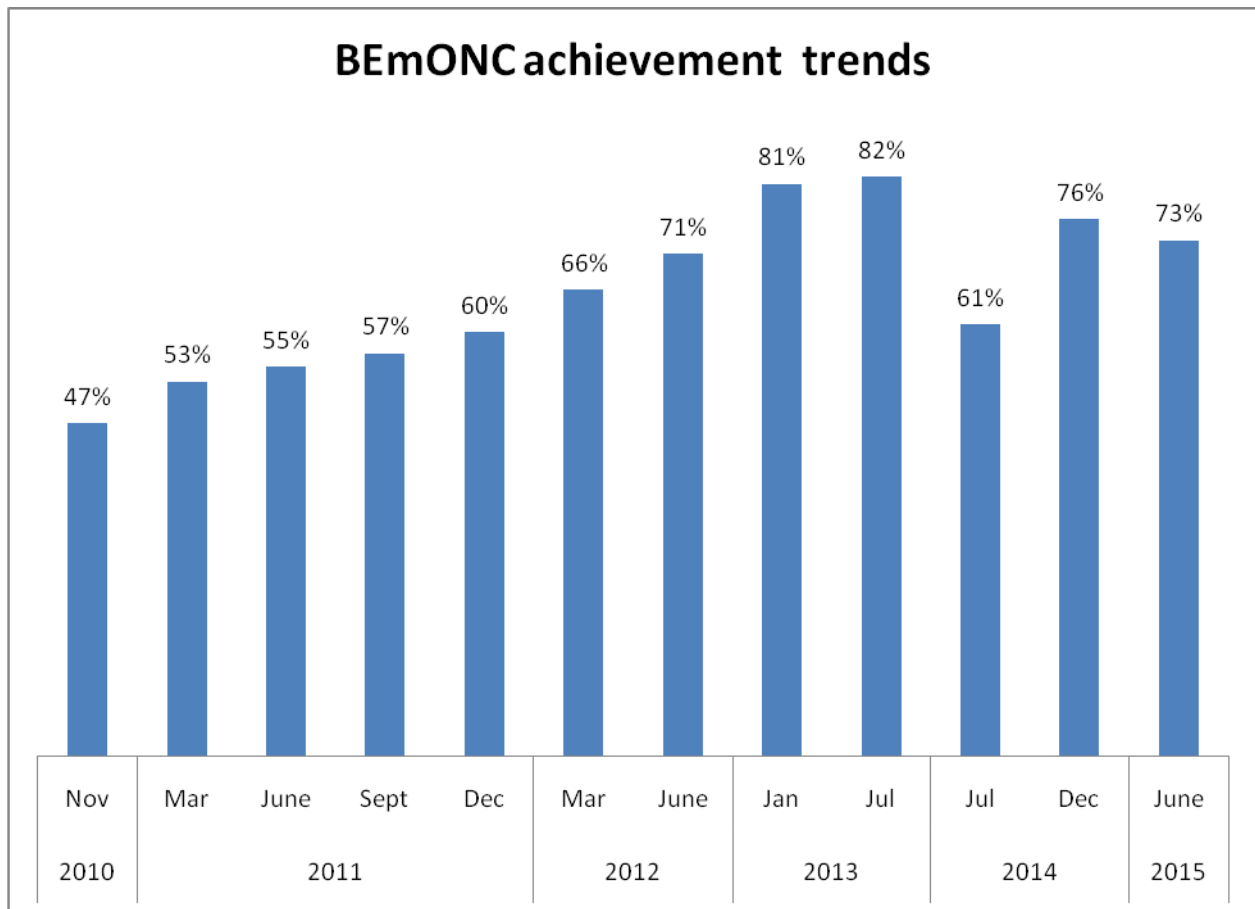
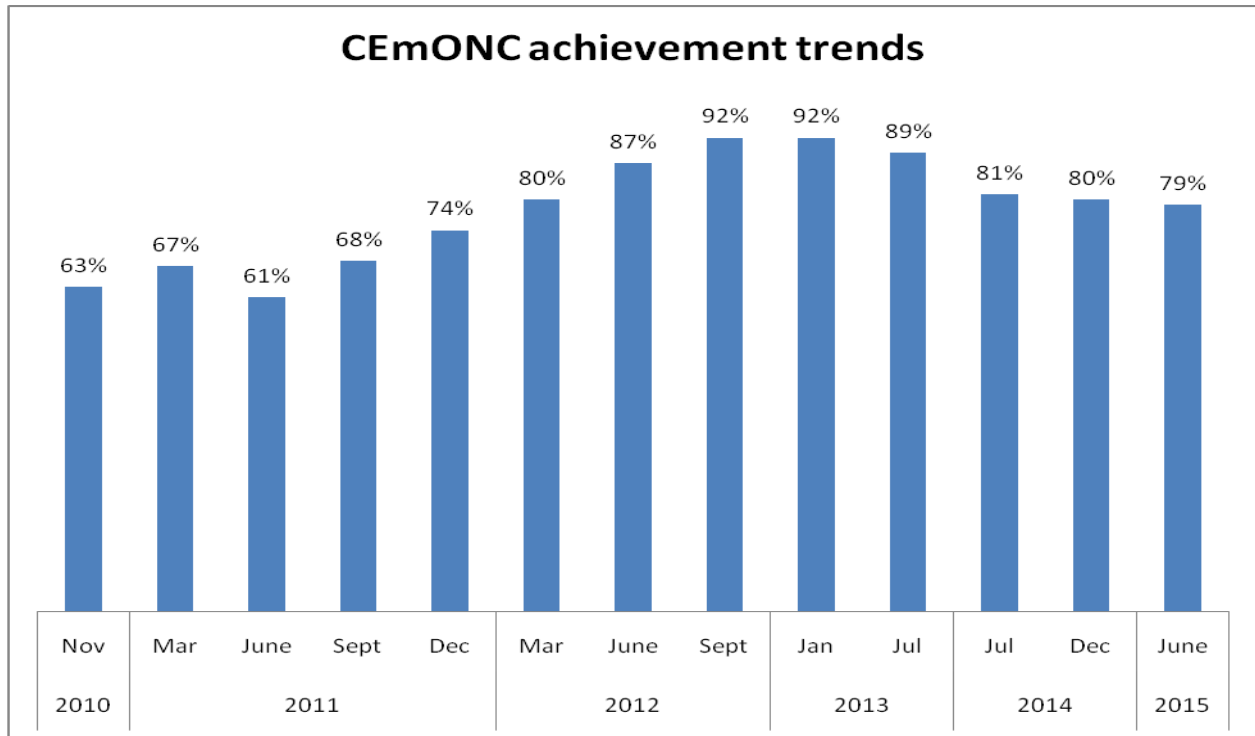


Figure 2 above, shows a gradual improvement made over the years since the commencement of the FIT process. However, a drop was observed in 2014 and 2015 which may be due to the EVD outbreak.

**Figure 3: CEmONC achievement trends.**



In the CEmONCs, although the progress is encouraging, a declining trend is also observed in 2014 and 2015.

**Figure 4 District achievement comparisons**

**3.2 District achievement comparison**

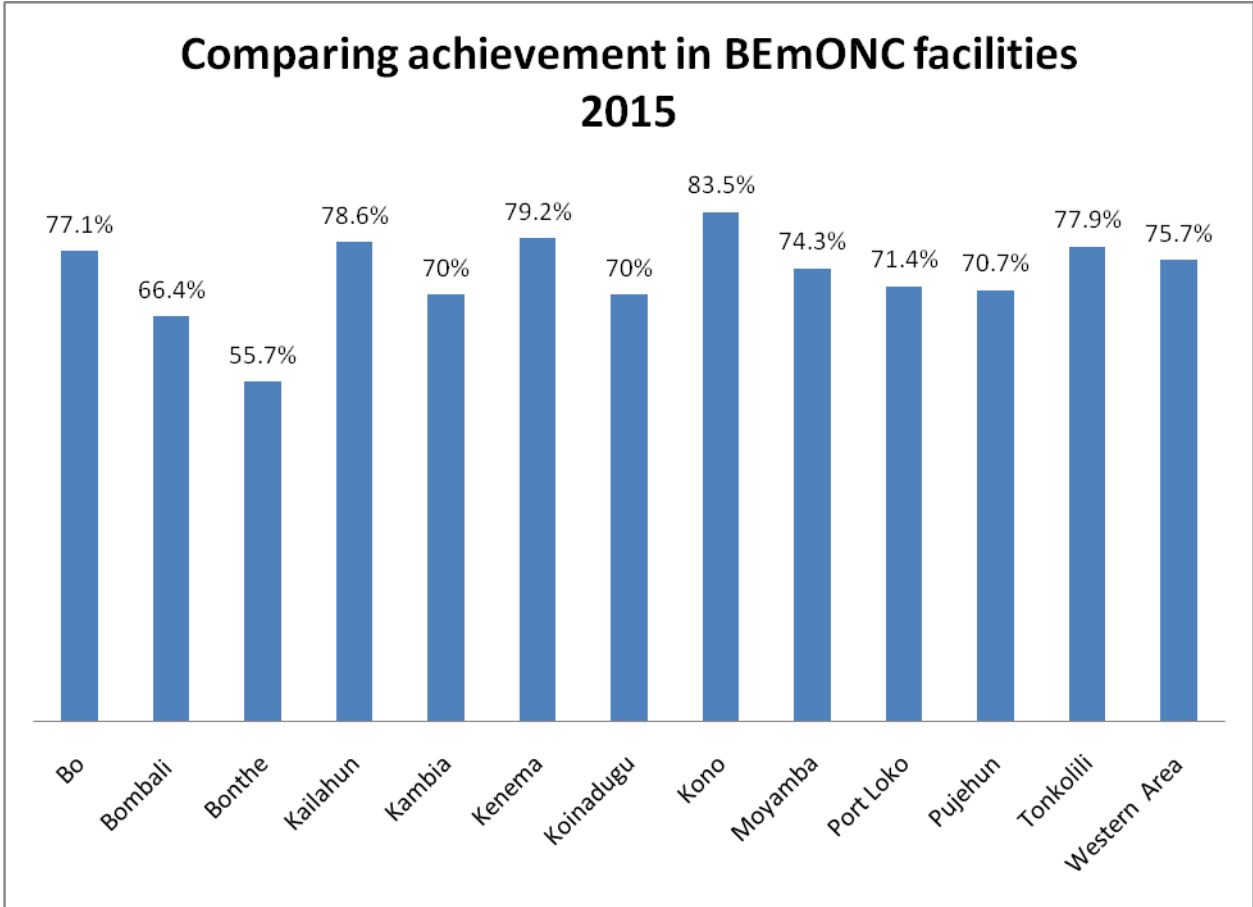
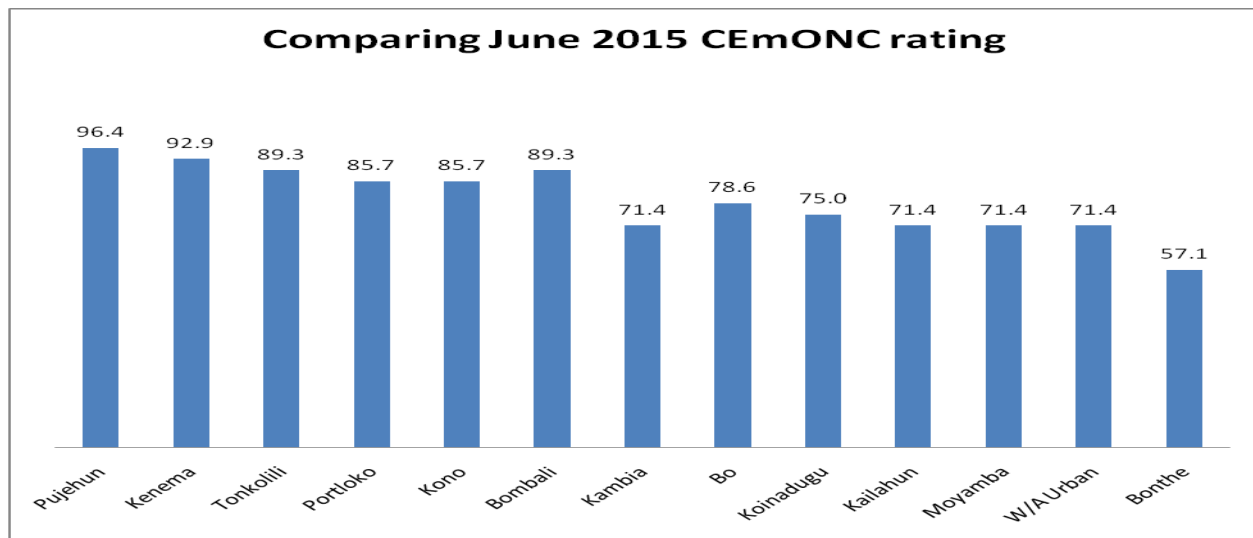


Figure 4 above, Kono district has the highest score of 83.5%, whilst Bonthe has the least score of 55.7%.

Figure 5: Comparising June 2015 CEmONC rating



Overall achievement in the CEmONCs as shown in figure 5 indicates that Pujehun maternity is leading with the highest score of 96.4%. Bonthe district is the least with 57.1%.

### 3.3 Enabler achievement comparison

#### 3.3.0 Water & Sanitation

##### 3.3.1

Water and safe disposal of waste is crucial in the prevention and control of communicable diseases. The overall rating/ achievement for water and sanitation is 73.8% for the BEmONCs and 80.8% for CEmONCs.

In the BEmONCs, only Koinadugu and Kono districts have three facilities each that are complaint for water and sanitation, whilst Kailahun, Pujehun, Tonkolili and Bonthe districts have no BEmONC that is complaint. There is urgent need to restore water and sanitation facilities in these BEmONCs to enhance effective infection prevention and control for both staff and patients/client especially with the current Ebola outbreak.

**Figure 6: Water and sanitation Status in BEmONC facilities**

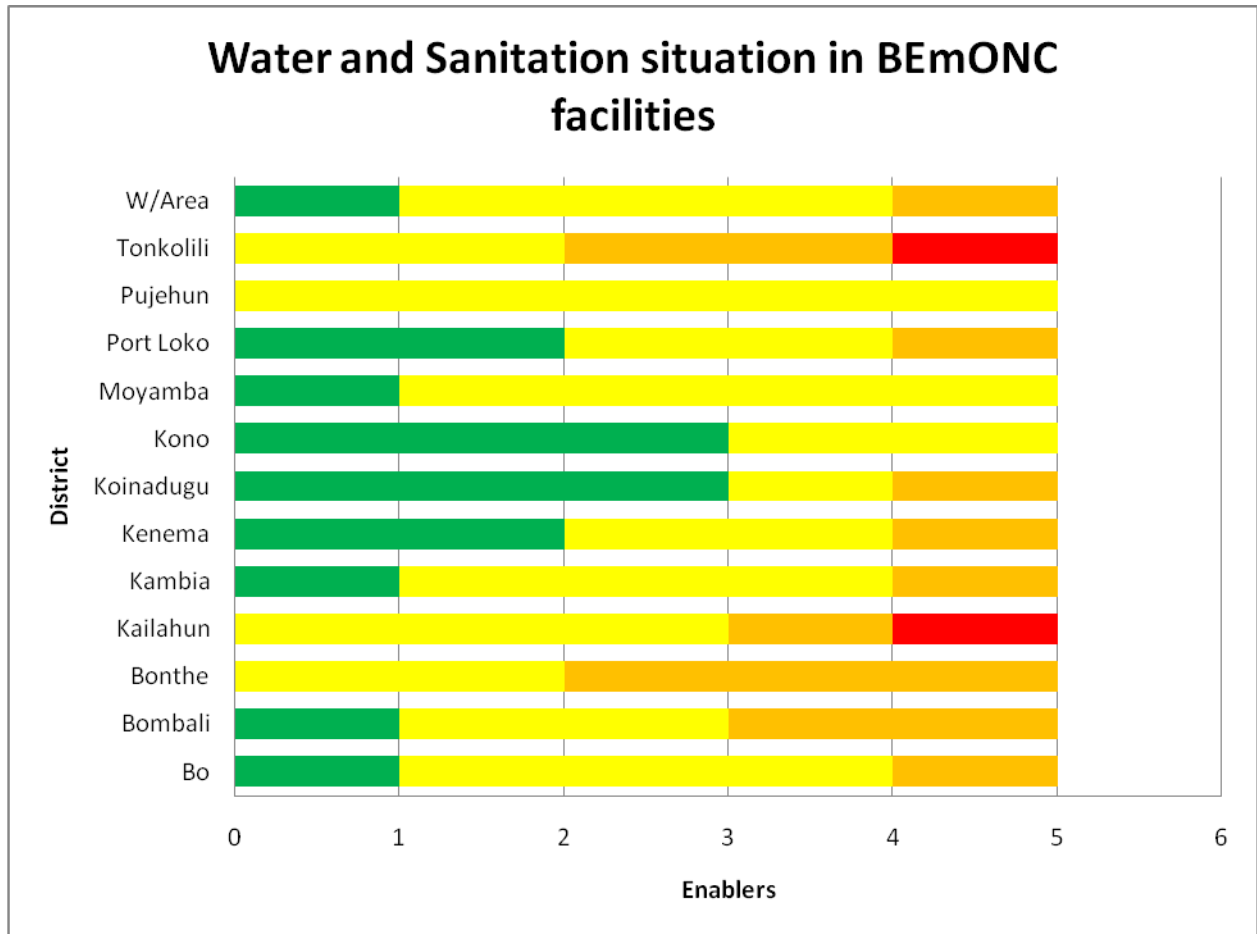


Table 2 below shows that, amongst the CEmONCs facilities 6 hospitals are green; 4 hospitals are yellow and 3 hospitals are amber for water and sanitation

**Table 2: Color coding for WatSan in CEmONC facilities**

Facility	Coding attained
Pujehun	Green
Kenema	Green
Tonkolili	Green
Portloko	Green
Kono	Green
Bombali	Yellow
Kambia	Green
Bo	Orange
Koinadugu	Yellow
Kailahun	Orange
Moyamba	Yellow
W/A Urban	Yellow
Bonthe	Orange

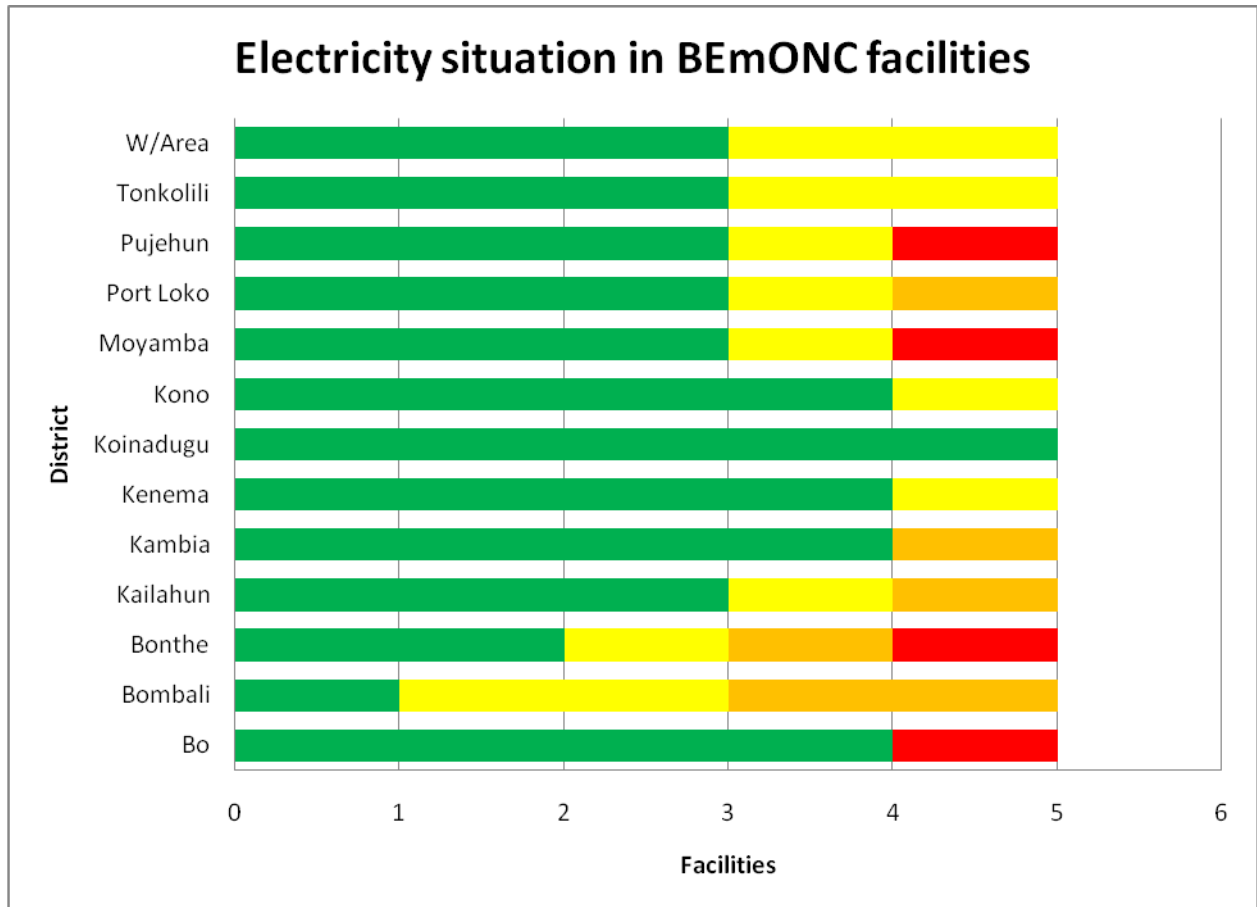
The main challenge with this enabler is the lack of piped-borne water supply into the labour ward, toilet and theatre. There is a dire need to restore pipe borne water into Bo, Bonthe and Kailahun Government Hospitals.

### 3.3.2 Electricity

The main source of power supply for BEmONCs is primarily solar and central electricity or generator for CEmONCs. The assessment showed that 85.8% and 90.4% of BEmONCs and CEmONCs have at least one source of electricity supply respectively. Only 64.6% of the BEmONCs and 76.9% of the CEmONC facilities met the criteria for electricity. Koinadugu district is the only district with all five BEmONCs compliant in this enabler. Four districts Bo, Kambia, Kenema and Kono have four BEmONCs compliant in this enabler. On the other hand, there are four facilities that are completely red and they include Zimmi CHC in Pujehun district; Ngalu CHC in Bo district; Shenge CHC in Moyamba district and Gambia CHC in Bonthe district.

The chart below shows the BEmONC standing in electricity by district.

**Figure 7. Electricity situation in BEmONC facilities.**



In the CEmONC facilities, 76.9% (n=9) of the hospitals are complaint (scored Green) for electricity (see table 3 below).

Magburaka, Koidu and Port Loko Government hospitals are yellow while Bonthe hospital is red.

**Table 3: Status of power in CEmONC facilities**

Status of power in CEmONC facilities

Hospital	Main source 24hrs (when needed available)	Second source	Coding
Makeni	1	1	2
Magburaka	0	1	1
Kabala	1	1	2
Kenema	1	1	2
Bonthe	0	0	0
Kailahun	1	1	2
Portloko	1	0	1
Pujehun	1	1	2
Bo	1	1	2
Moyamba	1	1	2
Kono	1	0	1
Kambia	1	1	2
PCM Hospital	1	1	2

### 3.3.3 Referrals

The overall rating for the referral enabler for both BEmONCs and CEmONCs is encouraging with 89.2% and 82.7% respectively.

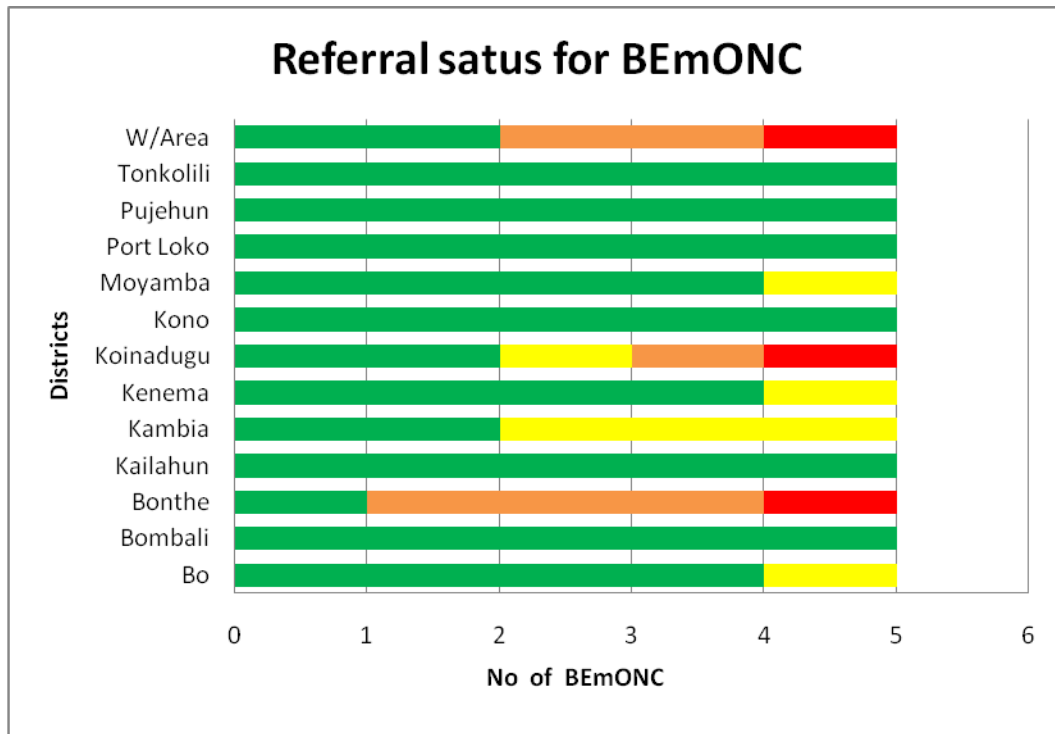
In the CEmONCs, 83.3% have a 24 hours ambulance service and more than 91% met the response time of 3 hours for emergency referrals, dedicated staff to accompany the ambulance and a means of communication to call an ambulance. Kambia, Koinadugu and PCMH hospitals scored amber for this enabler whilst Koidu, Kailahun and Moyamba hospitals scored yellow. Bo and PCM hospitals are in need of 24 hour ambulance and communication services.

In the BEmONCs, 75.4% and CEmONCs 53.8% are compliant for referral.

Figure 8 below indicates that all the BEmONCs in Tonkolili, Pujehun, PortLoko, Kono, Kailahun and Bombali districts are compliant for this enabler. Two facilities in Western Area and three in Bonthe districts are amber. Bonthe, Koinadugu districts and Western Area have one facility each that is red.



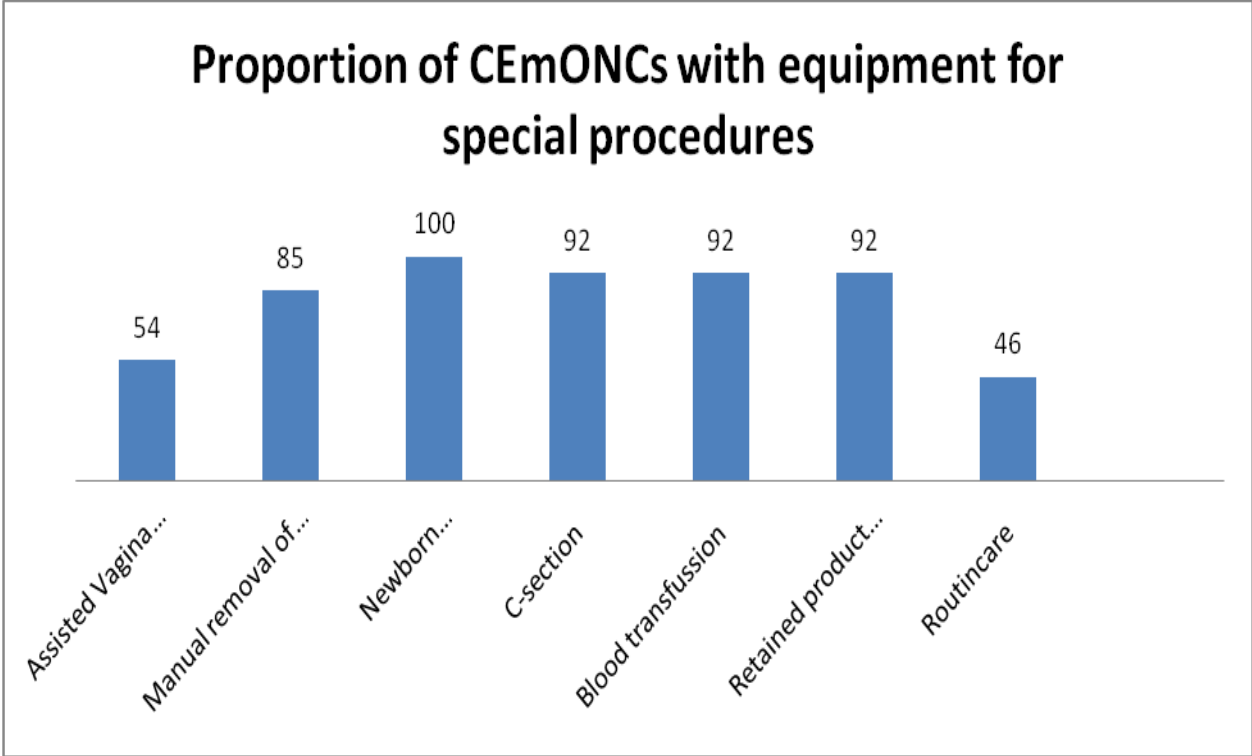
**Figure 8: Referral status in BEmONCs**



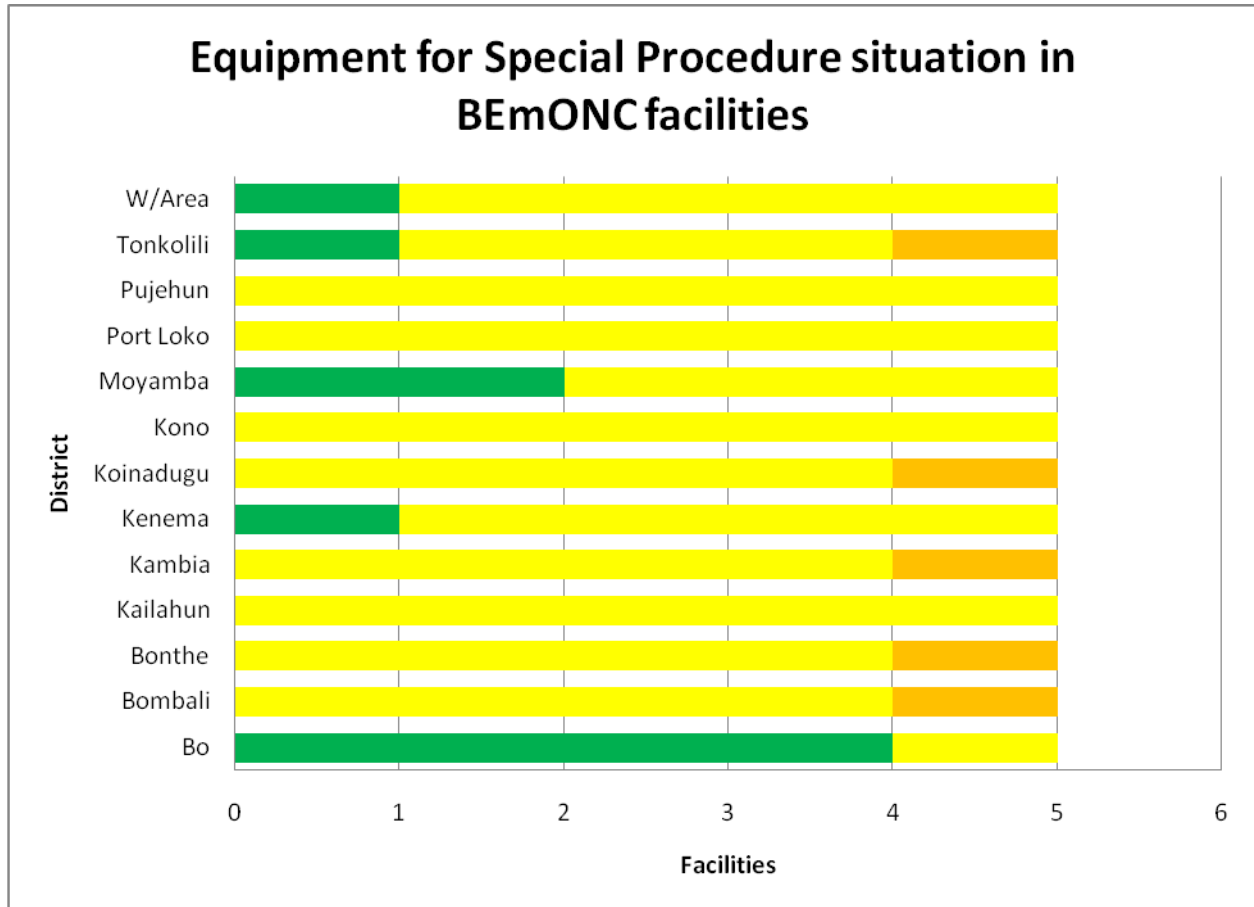
### 3.3.4 Equipment for special procedures

Health facilities need appropriate equipment to provide quality obstetric and newborn care at all times. This enabler combines both the availability of equipment and staff capacity to perform key life-saving procedures. Only one hospital (Pujehun hospital) and nine BEmONCs are compliant for this enabler. The greatest challenge for the CEmONCs are shortage of equipment to perform assisted vaginal deliveries and basic equipment for routine care and the lack of chlorhexidine spray for cord care. Port Loko, Bo and PCM hospitals are the least performing for this enabler.

**Figure 9: Proportion of CEmONCs with Equipment to perform special and routine procedures**



**Figure 10: Equipment for special procedures in BEmONC facilities**



In the BEmONCs as shown in Figure 10 above, no health facility is rated red for this enabler. Nine (9) facilities in five districts scored green in at least one health facility– Bo district being the highest with four facilities. The facilities that scored green are: Baoma Koya CHC in Kenema district, Ross road CHC in the Western Area, Mile 91CHC inTonkolili district, Sumbuya CHC, Koribondo CHC, Jembe CHC, and Dambala CHC in Bo district; Taiama CHC and Rotifunk CHC in Moyamba district. 78.4% of the other facilities scored yellow.

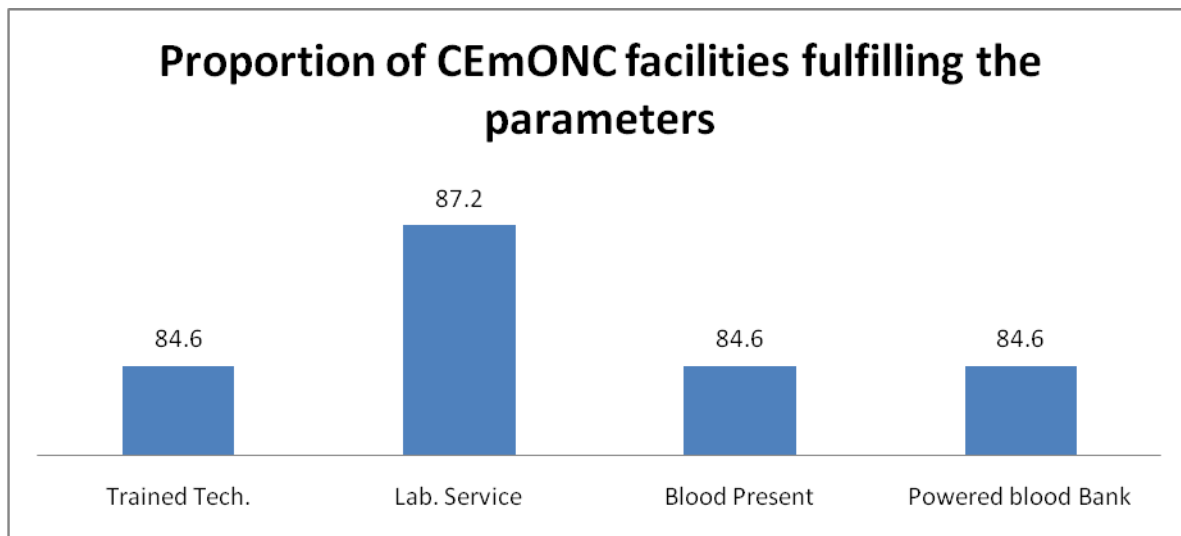
### **3.3.5 Blood handling and Laboratory.**

The combined score for blood handling and laboratory in the BEmONCs is 48.8%, and only 6.2% met the green criteria. Two parameters are used to rate the laboratory in BEmONCs; the availability of a laboratory equipment and the presence of trained Lab Assistant/Technician

to perform hematology, microscopy and biochemistry. Four parameters are used to rate laboratory and blood handling for CEmONC facilities; the availability of 24hrs powered blood bank, presence of blood in the blood bank and/or no reported stock out for the past three months and a full laboratory service with trained Lab Technician available 24hrs daily.

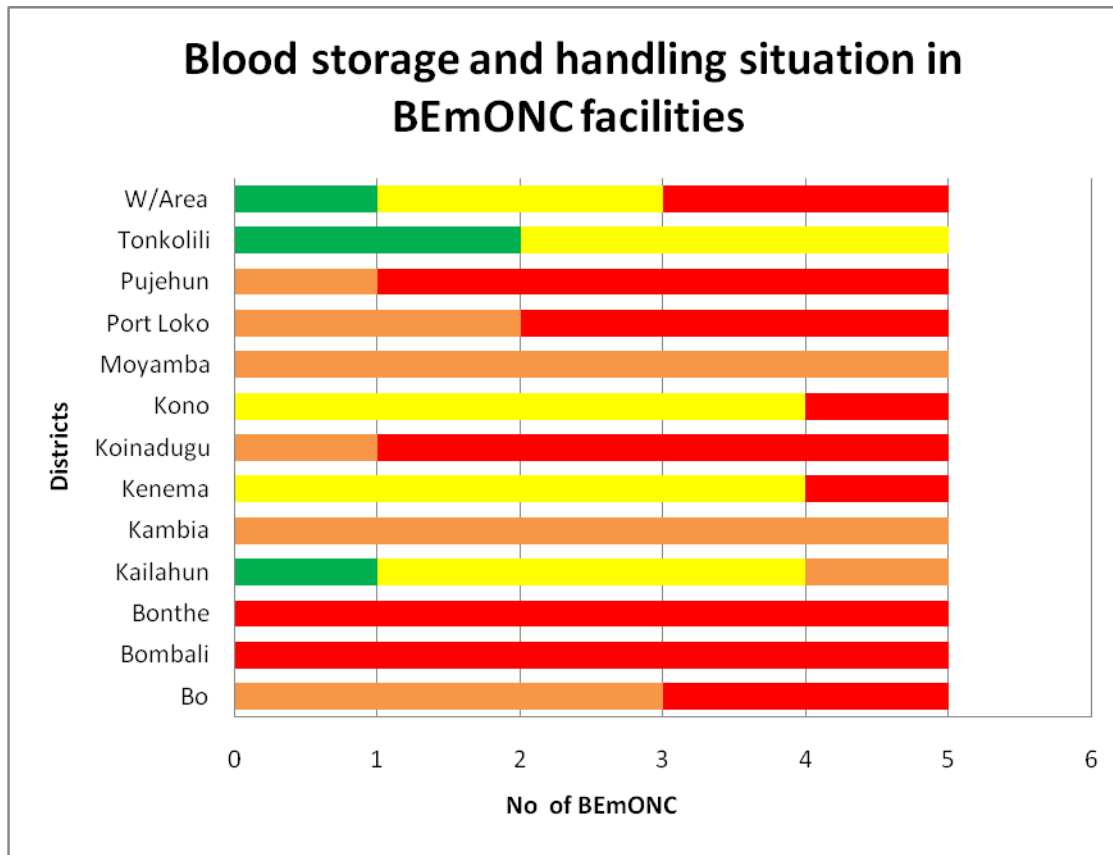
The performance of the CEmONCs in this enabler shows an overall score of 76.9% with 53.8% compliance. Seven (7) hospitals (Pujehun, Kenema, Magburaka, Port loko, Koidu, Makeni and Bo) scoring green. Bonthe and Moyamba hospitals have the greatest challenge with blood storage and handling.

**Figure 11. Blood handling parameters**



More than half of the BEmONCs scored red in laboratory services. Only Western Area (Regent CHC) Tonkolili (Bumbuna and Mile 91 CHCs) and Kailahun (Jojoima CHC) districts have BEmONCs that are compliant for laboratory services. Two districts- Bo and Bonthe have all of the BEmONCs rated red. Pujehun and Koinadugu districts had red in four and amber in one facility each.

**Figure 12. Status of laboratory in BEmONC facilities.**



### 3.3.6 Staffing

The Basic Package of Essential Health Services (BPEHS, 2010) categorized the technical staff that should be available in a BEmONC and CEmONC facility. For BEmONC there should be at least 1 Community Health Officer, 1 Midwife, 2 State Enrolled Community Health Nurses or Community Health Assistants, 3 Maternal and Child Health Aides and a Laboratory Technician/Assistant. Whilst in the CEmONCs there should be: 2 Doctors capable of performing caesarian section, 4 Midwives, 10 SRN/SECHN, 2 Pharmacists/Technician, 2 Lab Technicians and 1 Nurse Anaesthetist.

The composite score for staffing is 59.6 % for BEmONCs and 80.8% for the CEmONCs. Despite these scores, further analysis shows that only 10.8% and 30.8% of BEmONCs and CEmONCs met the criteria on staffing respectively. Pujehun, Kenema, Bombali and PCMH are rated green for this enabler.

In this assessment, no district has all the required number of health staff in the five BEmONC facilities. Table 4 below shows the total number of staff per cadre available in the districts and the number needed to fill the gaps. All districts have the required number of CHOs except Bonthe that has three CHOs. Community Health Officers are not available at Yoni and Bendu CHCs. Five midwives are needed to fill the current gap in Bonthe, Bo, Kailahun, Kenema and Tonkolili districts for BEmONCs and CEmONCs. The greatest gap on staffing is lack of the required SECHN/CHA, MCH Aides and laboratory Technician/Assistants. A total of 51 SECHN/CHAs, 91 MCH Aides and 25 laboratory Technician/Assistants are needed to meet the staffing criteria for BEmONCs. Interestingly, Western Area is over staffed with SECHNs whilst the districts are in need of them. Kono is the only district without SECHN/CHA in any of the BEmONCs. A visible gap is also noted for the MCH Aide cadre. To fully address this gap, 91 MCH Aides should be distributed in all the BEmONCs. Two districts (Kambia and Port Loko) are without Laboratory Technician/Assistant in their BEmONC facilities. Four districts; Kenema, Tonkolili, Pujehun and Western Area met the required number for Laboratory Tech/Assistants. To fully satisfy the standards for this cadre the ministry needs to train and deploy 25 lab personnel.

In the table below, note that the color codes are not rating but used to indicate areas of priority. Green denotes meeting the required number of staff, yellow denotes not meeting the required number and red the gaps to be filled.

**Table 4: Status of staffing in BEmONCs per district**

District	CHO (1 per CHC = 5)		Midwife (1 per CHC = 5)		SECHN/CHA (2 per CHC = 10)		MCHA (3 per CHC = 5)		Lab Assist (1 per CHC = 5)	
	Available	Gap	Available	Gap	Available	Gap	Available	Gap	Available	Gap
Bo	8	0	4	1	9	1	12	3	1	4
Bombali	5	0	5	0	4	6	4	11	2	3
Bonthe	3	2	4	1	3	7	4	11	2	3
Kailahun	6	0	4	1	11	0	8	7	4	1
Kambia	5	0	5	0	1	9	9	6	0	5
Kenema	5	0	4	1	11	0	5	10	7	0
Koinadugu	5	0	5	0	4	6	3	12	3	2
Kono	5	0	5	0	0	10	7	8	4	1
Moyamba	5	0	5	0	7	3	14	1	4	1
Port Loko	5	0	5	0	8	2	8	7	0	5
Pujehun	5	0	5	0	6	4	10	5	5	0
Tonkolili	5	0	4	1	7	3	5	10	7	0
Western	11	0	8	0	59	0	27	0	9	0

Area											
Total Needed		2		5		51		91			25

Table 5 below shows the situation of required technical staff in the CEMONCs as of July, 2015. All districts have the required number of doctors that can perform C/S except Bonthe and Kambia that have only one each. Nationally, there are 14 midwives needed to fill the gap. Bombali, Western Area, Bo and Kenema districts met the criteria for midwives.

The current number of SRN and SECHN combined nationally are enough to meet the standards for these cadres in the CEMONCs. There is high concentration in Bo, Moyamba and Kenema leaving gaps in Bonthe, Pujehun, Kono, Kambia and Koinadugu. Equal deployment of these staff will go a long way not only to address the gaps in the CEMONC but also in the BEMONCs where SECHNs are also needed.

Bonthe hospital is the only facility without a Pharmacy Technician whilst in Kailahun, Koinadugu, Bo and Pujehun additional deployment of one each is required. All districts are rated green for Laboratory Technician except Koinadugu and Bonthe which requires deployment of one and two additional personnel respectively. Nurse Anesthetists are present in all the CEMONCs except Bonthe district.

**Table 5: Status of staffing in CEMONC Facilities**

*Standard: 2 Doctors, 4 Midwives, 10SRN/SECHN, 2 Pharmacist/technician/assistant, 2 Lab technicians, 1 Nurse Anesthetist*

	Doctors		Midwives		SRN/SECHN		Pham. Tech		Lab. Tech.		Nurse Anaesthetist	
	Available	Gap	Available	Gap	Available	Gap	Available	Gap	Available	Gap	Available	Gap
Bombali	4	0	6	0	29	0	5	0	21	0	3	0
Tonkolili	3	0	2	2	26	0	3	0	3	0	2	0
Koinadugu	3	0	3	1	9	1	1	1	1	1	1	0
Kenema	4	0	10	0	45	0	2	0	32	0	4	0
Bonthe	1	1	1	3	7	3	0	2	0	0	0	1
Kailahun	2	0	2	2	37	0	1	1	6	0	0	1
Portloko	2	0	3	1	10	0	2	0	5	0	1	0
Pujehun	2	0	3	1	8	2	1	1	2	0	1	0
Bo	2	0	4	0	21	0	1	1	16	0	1	0
Moyamba	2	0	3	1	44	0	2	0	8	0	1	0
Kono	3	0	2	2	9	1	2	0	10	0	1	0
Kambia	1	1	3	1	8	2	4	0	3	0	2	0

PCMH	8	0	36	0	120	0	9	0	20	0	13	0
Total Needed		2		14		9		6		1		2

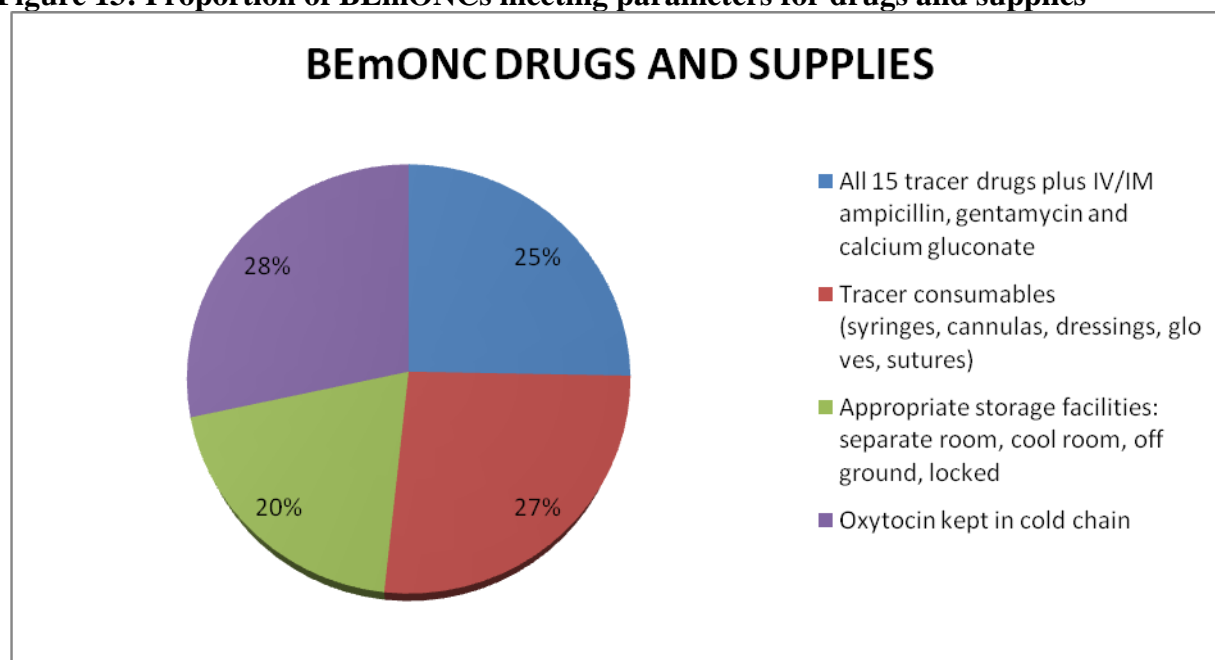
### 3.3.7 Drugs and medical supplies

Fifteen products have been identified to be needed and available in the health facilities at all times. These are monitored as tracers which is an indicator of quality in-terms of the availability of drugs. Among these, there are four life saving EmONC drugs: Calcium gluconate, magnesium sulphate, parenteral antibiotics and oxytocin. The criteria to rate drugs and supplies are the availability of 3 and 2 months supply of the 15 tracer drugs for CEmONCs and BEmONCs respectively plus the presence of appropriate storage facilities and cold chain storage of oxytocin.

The total scoring for drugs and supplies in the BEmONCs and CEmONCs are 78.1% and 75% respectively. However, only 32.3% of BEmONCs and 7.7% of CEmONCs are compliant for this enabler. Koidu hospital is the only facility that meets this enabler .

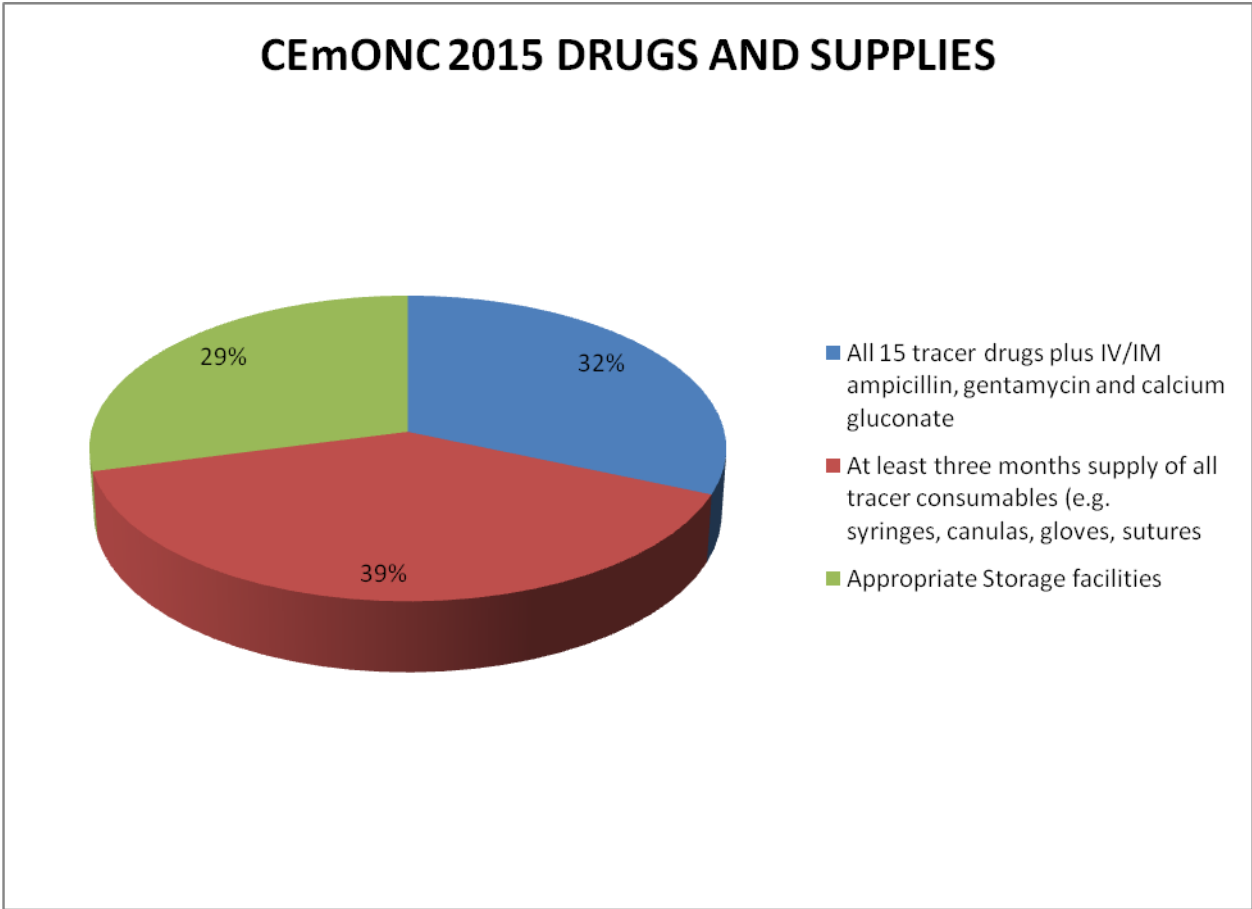
Figure 13 below, shows that only 25% of the BEmONCs have all the tracer drugs plus IV/IM Ampicillin, Gentamycin and calcium gluconate.

**Figure 13: Proportion of BEmONCs meeting parameters for drugs and supplies**



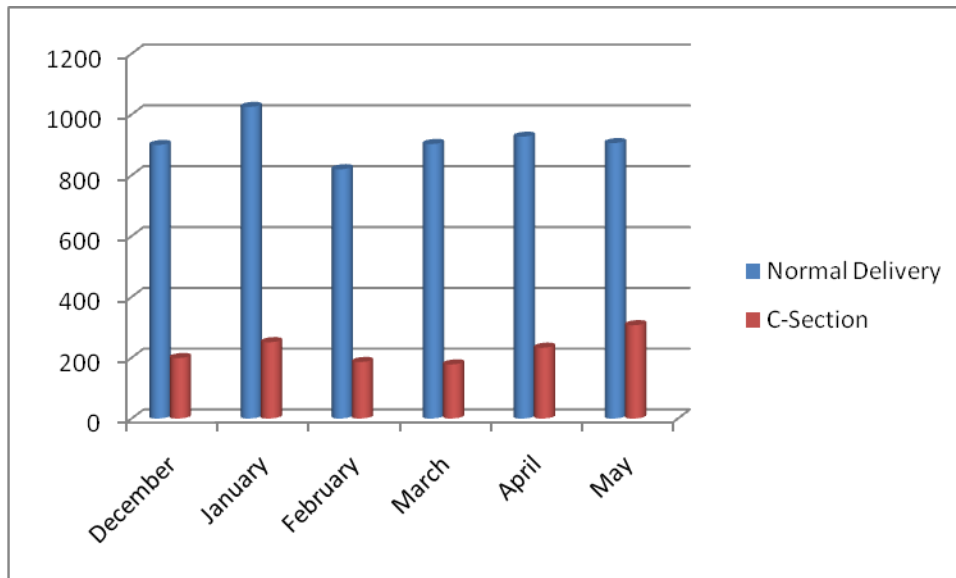


**Figure 14: Proportion of CEmONCs meeting parameters for drugs and supplies**



## 4.0 Expanded Items

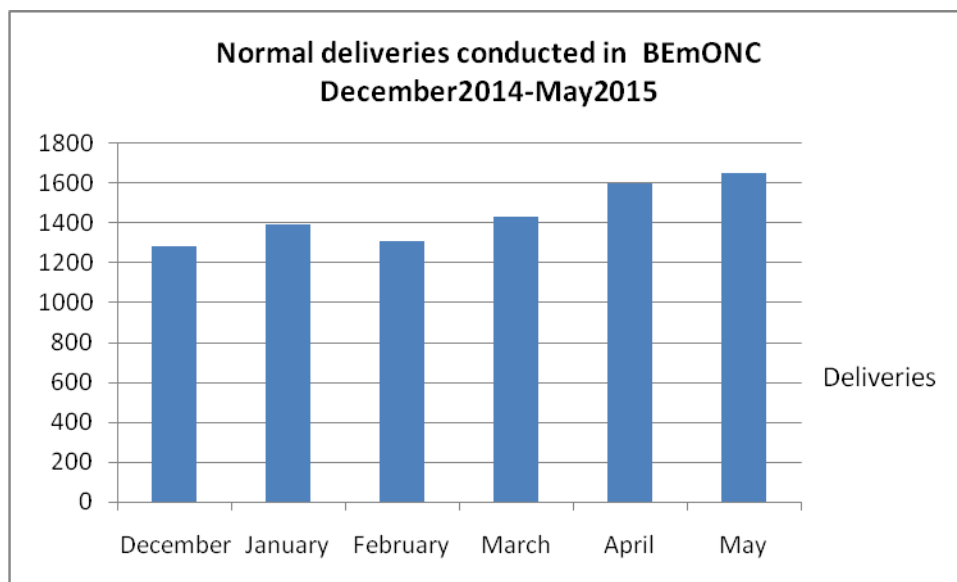
### 4.1 Normal Deliveries and C-Sections



**Figure 15: Normal Deliveries and C-sections conducted at CEmONCs facilities December 2014- May2015**

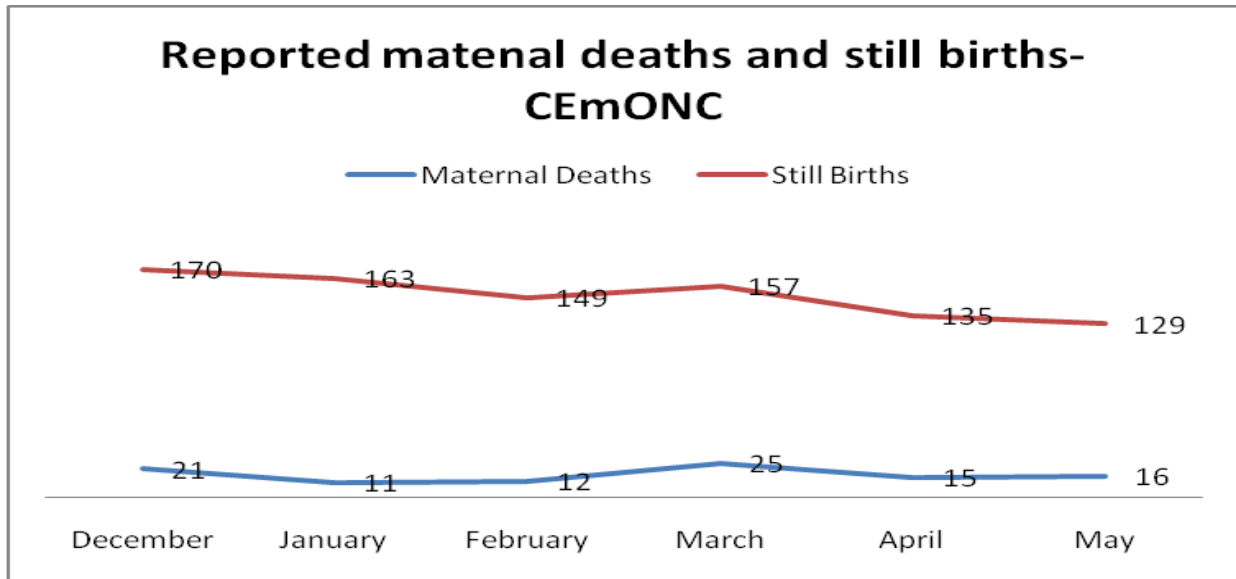
For normal deliveries, there was a drop in December as compared to January. However, there was a steady increase between March, April and May 2015. The number of C-sections fluctuated in the last six months.

Figure 16: Normal Deliveries conducted in BEmONC facilities for the period under review.



From the Figure 16 above, it could be seen that there were few deliveries in December to March compared to April and May. This could be attributed to some of the IPC interventions (eg the roll out of the Maternal and Newborn Health Guidelines in the context of Ebola which helped to build the confidence of communities to access health services).

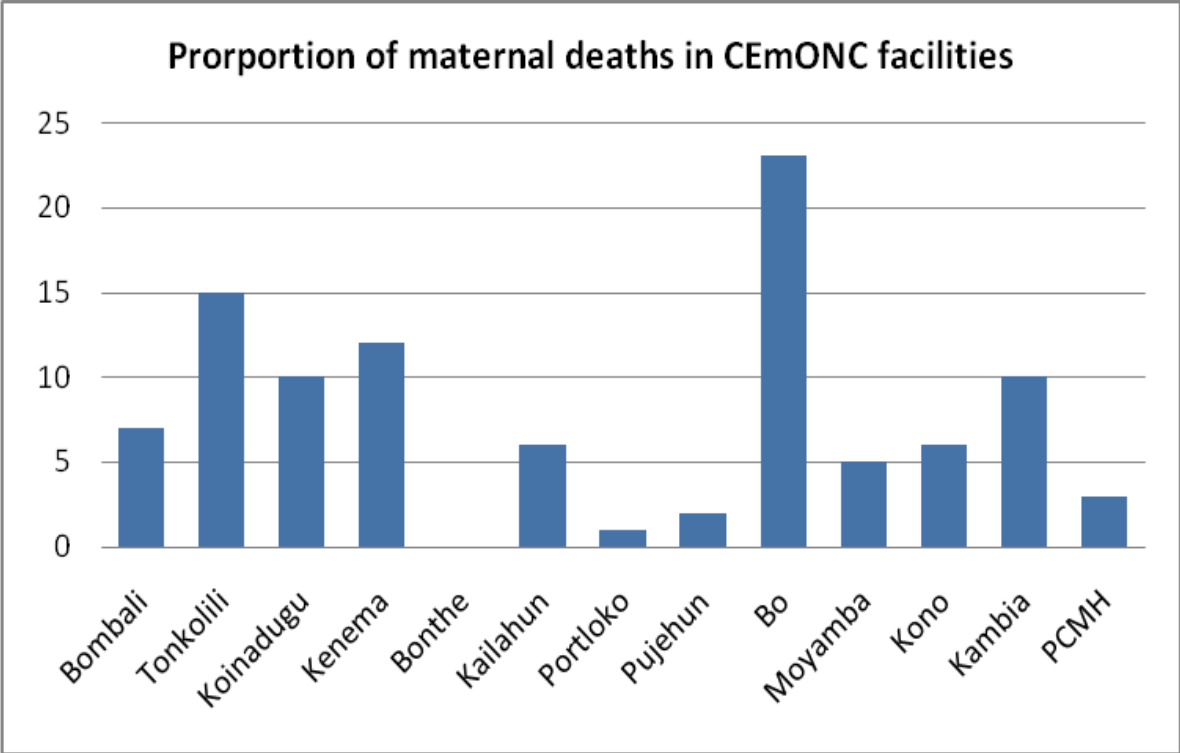
**Figure 17: Recorded maternal deaths and Stillbirths at CEmONC Level**



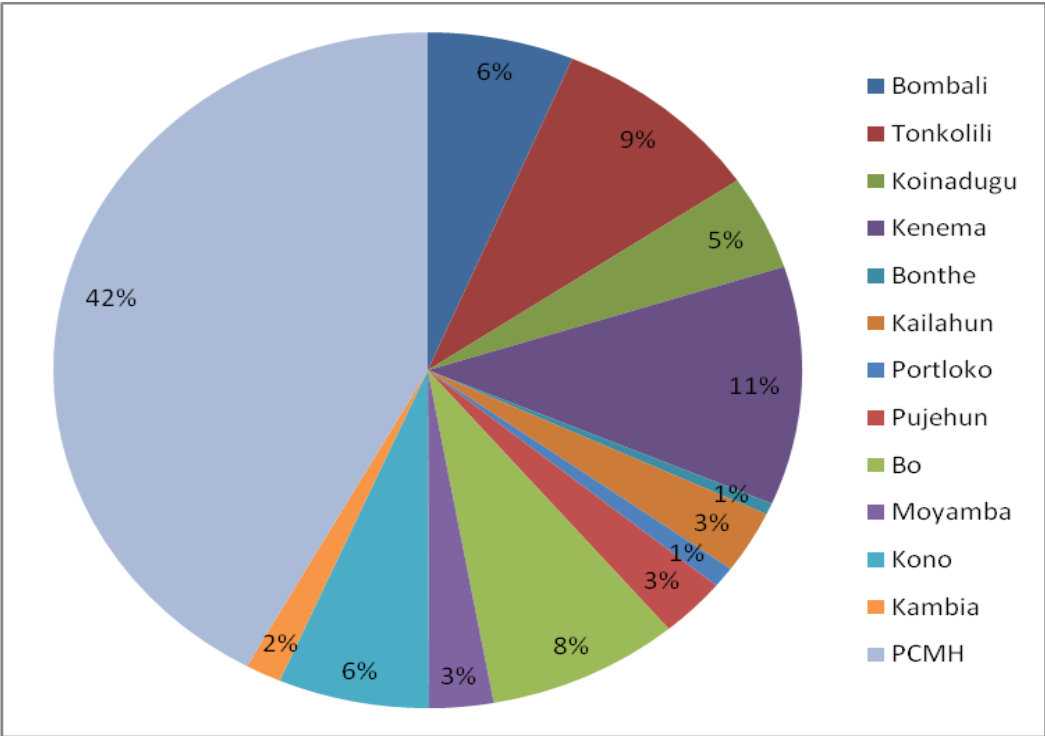
The total number of recorded maternal deaths and still births in CEmONC facilities between December and May 2015 was 100 and 903 respectively. There was an increased maternal deaths and still births in December 2014 and March 2015. However, the questionnaire did not capture the causes of maternal death.

Figure 18 shows the distribution of maternal deaths in hospital during the period under review. Of the total recorded deaths, Bo hospital recorded the highest deaths followed by Magburaka hospital. Deaths were also high in Kambia, Kenema, Makeni and Kabala hospitals. PCMH reported 3 maternal deaths, Pujehun 2 and Port Loko 1. Bonthe hospital is the only district with no maternal death.

**Figure 18: Distribution of maternal death by CEmONCs in proportion of total deaths**

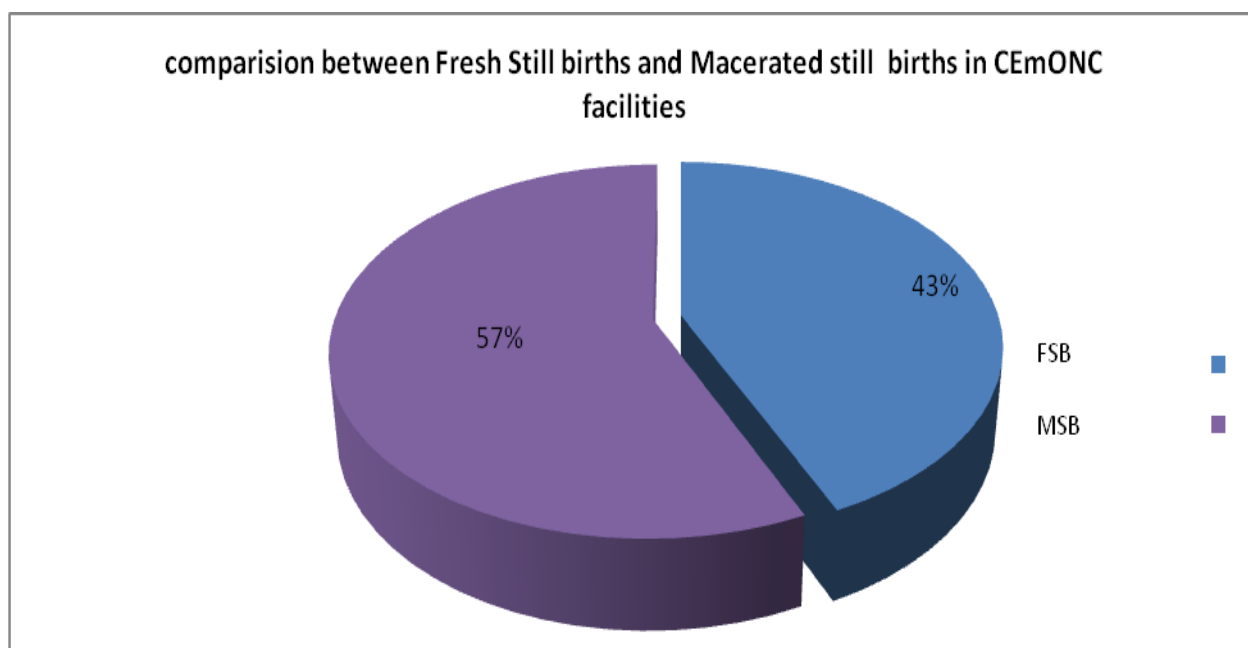


**Figure 19: Percentages of reported stillbirths**



There were also 903 recorded cases of stillbirths across the country. Figure 19 above shows the distribution by hospitals. 42% of the recorded stillbirths occurred at the PCM hospital. Kenema hospital is the second with highest stillbirths. Bonthe is the only hospital with 1% of still births.

**Figure 20: comparison between FSB and MSB in CEmONC**



The above result shows that there were more macerated still births than fresh still births. PCMH has the highest number of macerated and fresh still births.

## **5.0 CONCLUSIONS AND RECOMMENDATIONS**

1. Access to portable water all year round and proper sanitation is crucial for proper infection prevention and control. There is urgent need to provide pipe-borne water and adequate sanitation in Gbangbatoke and Goderich facilities.
2. Strengthening laboratory services at the BEmONC level by providing appropriate reagents and capacity building for lab personnel to be able to perform hematology, microscopy and biochemistry.
3. Equip health facilities with the required equipment to carry out life-saving procedures.
4. DHMTs should continuously engage Local Councils, NGOs and other stakeholders to support the respective districts in addressing gaps identified in each of the 78 facilities.
5. The MOHS and its partners should invest in the training, employing and posting more technical staff to the health facilities and provide appreciable remote allowance and accommodation among other incentives.

6. The MOHS to extend the Performance Based Financing scheme to health facilities that become EmONC compliant to motivate others and to sustain those who have already attained EmONC status.
7. The MOHS should pay much attention to upgrading health facilities to EmONC status to enhance quality service delivery
8. The MoHS and partners should convene a meeting that will bring together all line ministries, partners, Local councils and other key stakeholders to discuss a more sustainable way of making facilities EmONC compliant
9. In view of the high maternal and neonatal death, there is an urgent need to strengthen the maternal death reviews in all districts to provide feasible and pragmatic solutions to mitigate this trend.



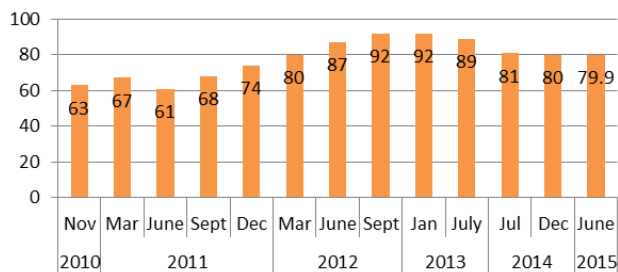
## Annex 1: June 2015 CEmONC Ranking

### Progress of selected Government Hospitals in achieving comprehensive emergency obstetric & neonatal care (CEmONC) status, June 2015

The Facility Improvement Team (FIT) assessments score selected health facilities, including Government Hospitals, on their readiness to provide quality EmONC based on whether they meet certain criteria for each of seven enablers ranging from water and sanitation to essential drugs. See over page for the details of these criteria. The criteria for a hospital is different to a community health centre (CHC) because hospitals are expected to perform complicated deliveries that need instrumental or operative procedures. Each facility is scored using the same traffic light colour system for each enabler as described on the score card for hospitals.

Performance rating	Score	Facility has:
	Green 4	Met all criteria
	Yellow 3	Mostly met criteria
	Orange 2	Partially met criteria
	Red 1	Not met criteria

CEmONC Trend 2010-2015










Each facility is given an overall score. The image to the left shows the progress for all hospitals since the FIT assessments started based on the total scores of all enablers of the hospitals together (and expressed as a percentage).

See below for more details of how each hospital performed for each enabler using the traffic light rating and how each hospital ranked among all the hospitals assessed under the FIT.

For more details, contact : Dr Santigie Sesay  
Director, Reproductive & Child Health, MoHS  
Sierra Leone;: [sanniesay@gmail.com](mailto:sanniesay@gmail.com)

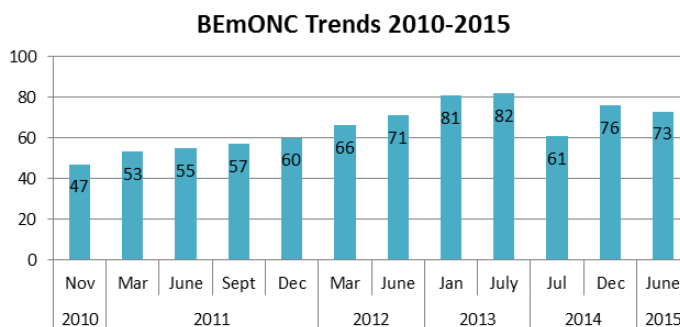
FACILITY PERFORMANCE AGAINST ENABLERS								
	Ranking	Water & Sanitation	Electricity	Referrals	Equipment	Blood & Laboratory	Staffing	Drugs
Pujehun Govt. Hospital	1 <sup>st</sup>							
Kenema Govt. Hospital	2 <sup>nd</sup>							
Magbaruka Govt. Hosp	3 <sup>rd</sup>							
Makeni Govt. Hospital	3 <sup>rd</sup>							
Port Loko Govt. Hospital	4 <sup>th</sup>							
Koidu Govt. Hospital	4 <sup>th</sup>							
Bo Govt. Hospital	5 <sup>th</sup>							
Kabala Govt. Hospital	6 <sup>th</sup>							
Kambia Govt Hospital	7 <sup>th</sup>							
Kailahun Govt. Hospital	7 <sup>th</sup>							
Moyamba Govt. Hospital	7 <sup>th</sup>							
PCM. Hospital	7 <sup>th</sup>							
Bonthe Govt. Hospital	8 <sup>th</sup>							

ENABLER	CRITERIA TO ACHIEVE GREEN STATUS FOR HOSPITALS
 <p>Water &amp; Sanitation</p>	<p>Water supply needs to be:</p> <ul style="list-style-type: none"> <li>• Safe (i.e. drinkable)</li> <li>• Piped and available in labour room, theatre toilet</li> <li>• Available 24 hours a day</li> <li>• Effectively drained from the facility</li> <li>• Functional hand washing facilities available in the labour ward, theatre &amp; toilet</li> </ul> <p>Waste disposal:</p> <ul style="list-style-type: none"> <li>• Incinerator available</li> <li>• Waste bins for dry and wet waste with cover</li> <li>• Functional autoclave</li> </ul>
 <p>Electricity</p>	<p>Main source: Solar, Generator or Central Power that is available 24 hours daily, when needed</p> <p>Second source: available in labour room and operating theatre (minimum)</p>
 <p>Referrals</p>	<p>Transportation:</p> <ul style="list-style-type: none"> <li>• Availability of functional ambulance 24 hours daily</li> <li>• Response time to PHU and back within 3 hours.</li> <li>• Dedicated medical personnel to accompany ambulance</li> </ul> <p>Communication:</p> <ul style="list-style-type: none"> <li>• Communications with cellular phone or VHF radio</li> <li>• 24 hour availability of communication</li> </ul>
 <p>Equipment for special procedures</p>	<p>Availability of functional equipment for the following procedures :</p> <ul style="list-style-type: none"> <li>• Assisted vaginal delivery</li> <li>• Manual removal of placenta</li> <li>• Resuscitation</li> <li>• Caesarean section</li> <li>• Blood transfusion</li> <li>• Routine care</li> <li>• Removal of retained product of conception.</li> </ul>
 <p>Blood storage &amp; handling &amp; laboratory</p>	<p>Facility needs to have:</p> <ul style="list-style-type: none"> <li>• 24 hour powered blood bank (central power, generator, solar)</li> <li>• Blood present in the blood bank and / or no stock out for the past three months</li> <li>• Full laboratory service</li> <li>• Trained Lab Technician available 24 hours daily.</li> </ul>
 <p>Staffing</p>	<p>Staff to include at least:</p> <ul style="list-style-type: none"> <li>• 2 Doctors able to perform caesarean section (operative delivery)</li> <li>• 4 Midwives</li> <li>• 10 SRN/ SECHN</li> <li>• 2 Pharmacist / Technician / Assistant</li> <li>• 2 Lab Technician</li> <li>• 1 Nurse Anaesthetist</li> <li>• 5 Porters and/or Cleaners</li> <li>• 2 Ambulance drivers</li> </ul> <p>Plus</p> <p>Staff able to perform all procedures: manual vacuum extraction, removal of placenta, removal of products of conception, resuscitation.</p>
 <p>Drugs</p>	<p>At least a three month supply of:</p> <ul style="list-style-type: none"> <li>• All 16 tracer drugs plus IV/IM ampicillin, gentamycin and calcium gluconate;</li> <li>• At least three months' supply of all Tracer consumables (e.g. syringes, cannulae, gloves, sutures)</li> <li>• Appropriate storage facilities: separate room, cold room, off-ground, locked.</li> </ul>

## Annex 2: June 2015 BEmONC Ranking

### Progress of selected Government Hospitals in achieving basic emergency obstetric & neonatal care (BEmONC) status, June 2015

The Facility Improvement Team (FIT) assessments score selected health facilities, including Community Health Centres (CHCs), on their readiness to provide quality EmONC based on whether they meet certain criteria (see back) for each of seven enablers ranging from water and sanitation to essential drugs. The criteria for a CHC is different to a hospital because CHCs are not expected to perform complicated deliveries that need instrumental or operative procedures. Each facility is scored using the same traffic light colour system for each enabler as described on the scorecard for hospitals.



Each facility is given an overall score. The image above shows the progress since the FIT assessments started based on the total scores of all enablers of the CHCs together and expressed as a percentage. Data from September 2012 are excluded as only 26 facilities that fell under the President's Performance Contract were assessed in the rainy season.

See below for more details of how each CHC performed for each enabler using the traffic light rating and how each CHC ranked among all the CHCs assessed under FIT.

For more details, contact Dr. Santigie Sesay, Director, Reproductive & Child Health, MoHS Sierra Leone; [sanniesay@gmail.com](mailto:sanniesay@gmail.com)

Performance rating	Score	Facility has:
	Green 4	Met all criteria
	Yellow 3	Mostly met criteria
	Orange 2	Partially met criteria
	Red 1	Not met criteria

FACILITY PERFORMANCE AGAINST ENABLERS	Ranking	Water & Sanitation	Electricity	Referrals	Equipment	Blood & Laboratory	Staffing	Drugs
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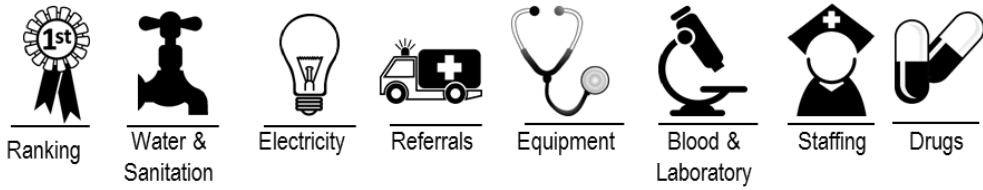
#### Kono District, ranked 1<sup>st</sup> among all districts (overall score 83.6%)

Sewafe CHC	3 <sup>rd</sup>							
Kayima CHC	3 <sup>rd</sup>							
Kangama CHC	6 <sup>th</sup>							
Gandorhun CHC	2 <sup>nd</sup>							
Kombayendeh CHC	4 <sup>th</sup>							

#### Kenema District, ranked 2<sup>nd</sup> among all districts (overall score 79.3%)

Baoma CHC	8 <sup>th</sup>							
Joru CHC	4 <sup>th</sup>							
Gegbwema CHC	4 <sup>th</sup>							
Largo CHC	4 <sup>th</sup>							
Levuma CHC	4 <sup>th</sup>							

**FACILITY PERFORMANCE AGAINST ENABLERS**



**Kailahun District**, ranked **3<sup>rd</sup>** among all districts (overall score 78.6%)

CHC	Ranking	Water & Sanitation	Electricity	Referrals	Equipment	Blood & Laboratory	Staffing	Drugs
Pendembu CHC	4 <sup>th</sup>	Yellow	Green	Green	Yellow	Yellow	Yellow	Yellow
Daru CHC	4 <sup>th</sup>	Red	Green	Green	Yellow	Yellow	Green	Green
Jojoima CHC	4 <sup>th</sup>	Yellow	Yellow	Green	Yellow	Green	Green	Orange
Koindu CHC	6 <sup>th</sup>	Orange	Green	Green	Yellow	Orange	Yellow	Yellow
Beudu CHC	7 <sup>th</sup>	Yellow	Orange	Green	Yellow	Yellow	Yellow	Orange

**Tonkolili**, ranked joint **4<sup>th</sup>** among all districts (overall score 77.9%)

CHC	Ranking	Water & Sanitation	Electricity	Referrals	Equipment	Blood & Laboratory	Staffing	Drugs
Mile 91 CHC	2 <sup>nd</sup>	Yellow	Yellow	Green	Green	Green	Yellow	Green
Bumbuna CHC	3 <sup>rd</sup>	Orange	Green	Green	Yellow	Green	Green	Yellow
Massingbi CHC	5 <sup>th</sup>	Yellow	Green	Green	Orange	Yellow	Yellow	Yellow
Makali CHC	7 <sup>th</sup>	Orange	Yellow	Green	Yellow	Yellow	Orange	Yellow
Yele CHC	9 <sup>th</sup>	Red	Green	Green	Yellow	Yellow	Red	Orange

**Bo District**, ranked joint **5<sup>th</sup>** among all districts (overall score 77.1%)

CHC	Ranking	Water & Sanitation	Electricity	Referrals	Equipment	Blood & Laboratory	Staffing	Drugs
Sumbuya CHC	3 <sup>rd</sup>	Green	Green	Green	Green	Orange	Orange	Green
Koribondu CHC	4 <sup>th</sup>	Yellow	Green	Green	Green	Orange	Orange	Green
Jembe CHC	5 <sup>th</sup>	Yellow	Green	Green	Green	Red	Orange	Green
Dambala CHC	5 <sup>th</sup>	Yellow	Green	Green	Green	Red	Orange	Green
Ngalu CHC	10 <sup>th</sup>	Orange	Red	Yellow	Yellow	Orange	Orange	Green

**Western Area**, ranked joint **6<sup>th</sup>** among all districts (overall score 75.7%)

CHC	Ranking	Water & Sanitation	Electricity	Referrals	Equipment	Blood & Laboratory	Staffing	Drugs
Ross Road CHC	1 <sup>st</sup>	Green	Green	Green	Green	Yellow	Green	Green
Waterloo CHC	3 <sup>rd</sup>	Yellow	Green	Green	Yellow	Yellow	Green	Yellow
Regent CHC	4 <sup>th</sup>	Orange	Green	Orange	Yellow	Green	Green	Green
Hastings CHC	11 <sup>th</sup>	Yellow	Yellow	Red	Yellow	Red	Orange	Yellow
Goderich CHC	11 <sup>th</sup>	Yellow	Yellow	Orange	Yellow	Red	Orange	Orange

FACILITY PERFORMANCE AGAINST ENABLERS



Ranking



Water & Sanitation



Electricity



Referrals



Equipment



Blood & Laboratory



Staffing



Drugs

**Moyamba District**, ranked **7<sup>th</sup>** among all districts (overall score 74.3%)

CHC	Ranking	Water & Sanitation	Electricity	Referrals	Equipment	Blood & Laboratory	Staffing	Drugs
Taiama CHC	3 <sup>rd</sup>	Green	Green	Green	Green	Orange	Orange	Green
Shenge CHC	10 <sup>th</sup>	Yellow	Red	Yellow	Yellow	Orange	Orange	Yellow
Rotifunk CHC	7 <sup>th</sup>	Yellow	Yellow	Green	Green	Orange	Orange	Orange
Moyamba Junction CHC	5 <sup>th</sup>	Yellow	Green	Green	Yellow	Orange	Orange	Green
Gbangbatuke CHC	6 <sup>th</sup>	Yellow	Green	Green	Yellow	Orange	Orange	Yellow

**Port Loko District**, ranked **8<sup>th</sup>** among all districts (overall score 71.4%)

CHC	Ranking	Water & Sanitation	Electricity	Referrals	Equipment	Blood & Laboratory	Staffing	Drugs
Petifu CHC	6 <sup>th</sup>	Yellow	Green	Green	Yellow	Red	Orange	Yellow
Masiaka CHC	7 <sup>th</sup>	Green	Yellow	Green	Yellow	Red	Orange	Yellow
Mange CHC	7 <sup>th</sup>	Yellow	Green	Green	Yellow	Red	Orange	Yellow
Rogbere CHC	7 <sup>th</sup>	Green	Orange	Green	Yellow	Orange	Orange	Yellow
Lunsar CHC	8 <sup>th</sup>	Orange	Green	Green	Yellow	Red	Orange	Yellow

**Pujehun District**, ranked **9<sup>th</sup>** among all districts (overall score 70.9%)

CHC	Ranking	Water & Sanitation	Electricity	Referrals	Equipment	Blood & Laboratory	Staffing	Drugs
Zimmi CHC	9 <sup>th</sup>	Yellow	Red	Green	Yellow	Orange	Orange	Yellow
Sahn CHC	8 <sup>th</sup>	Yellow	Yellow	Green	Yellow	Red	Orange	Yellow
Potoru CHC	7 <sup>th</sup>	Yellow	Green	Green	Yellow	Red	Orange	Yellow
Bumpeh CHC	6 <sup>th</sup>	Yellow	Green	Green	Yellow	Red	Orange	Green
Gbondapi CHC	6 <sup>th</sup>	Yellow	Green	Green	Yellow	Red	Orange	Green

**Koinadugu District**, ranked **10<sup>th</sup>** among all districts (overall score 70.0%)

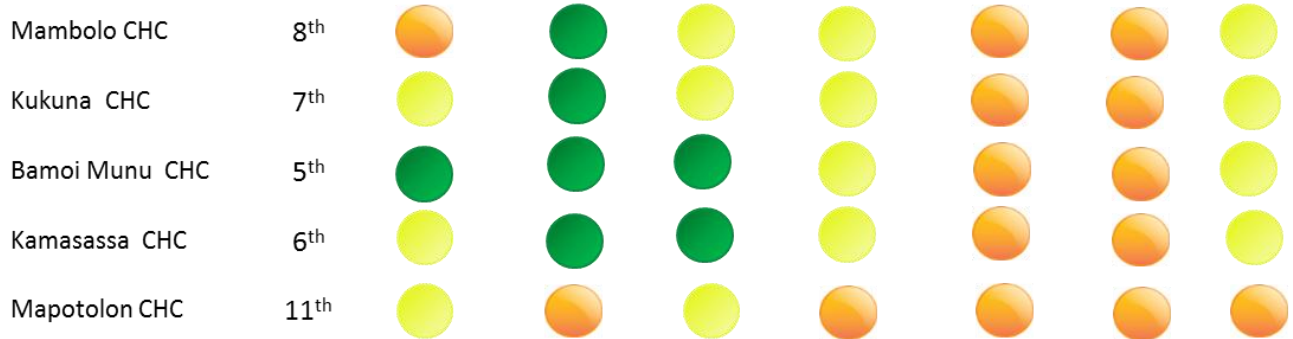
CHC	Ranking	Water & Sanitation	Electricity	Referrals	Equipment	Blood & Laboratory	Staffing	Drugs
Sinkunia CHC	4 <sup>th</sup>	Green	Green	Green	Yellow	Orange	Yellow	Yellow
Kondembaya CHC	6 <sup>th</sup>	Green	Green	Green	Yellow	Red	Orange	Yellow
Yiffin CHC	7 <sup>th</sup>	Yellow	Green	Yellow	Yellow	Red	Orange	Green
Krubola CHC	9 <sup>th</sup>	Green	Green	Red	Yellow	Red	Red	Green
Mongo CHC	11 <sup>th</sup>	Orange	Green	Orange	Orange	Red	Yellow	Orange



FACILITY PERFORMANCE AGAINST ENABLERS



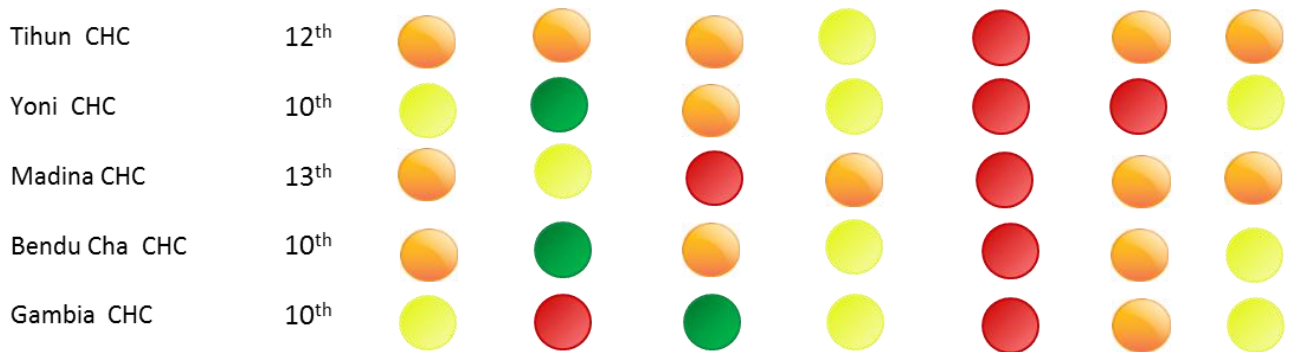
**Kambia District**, ranked **10<sup>th</sup>** among all districts (overall score 70.0%)










**Bombali District**, ranked **11<sup>th</sup>** among all districts (overall score 66.4%)



**Bonthe District**, ranked **12<sup>th</sup>** among all districts (overall score 55.7%)



ENABLER	CRITERIA TO ACHIEVE GREEN STATUS FOR COMMUNITY HEALTH CENTRES
 <p>Water &amp; Sanitation</p>	<p>Water supply needs to be:</p> <ul style="list-style-type: none"> <li>• Safe (i.e. drinkable)</li> <li>• Piped and available in labor room, theatre toilet</li> <li>• Available 24 hours a day</li> <li>• Effectively drained from the facility</li> <li>• Functional hand washing facilities available in the labor ward, theatre &amp; toilet</li> </ul> <p>Waste disposal:</p> <ul style="list-style-type: none"> <li>• Incinerator available</li> <li>• Waste bins for dry and wet waste with cover</li> <li>• Functional autoclave</li> </ul>
 <p>Electricity</p>	<p>Main source: Solar, Generator or Central Power that is available 24 hours daily, when needed</p> <p>Second source: available in labor room (minimum)</p>
 <p>Referrals</p>	<p>Transportation:</p> <ul style="list-style-type: none"> <li>• Availability of functional Ambulance 24 hours daily</li> <li>• Response time to CHC to hospital and back within 3 hours.</li> </ul> <p>Communication:</p> <ul style="list-style-type: none"> <li>• Communications with cellular phone or VHF radio</li> <li>• 24 hour availability of communication</li> </ul>
 <p>Equipment for special procedures</p>	<p>Availability of functional equipment for the following procedures :</p> <ul style="list-style-type: none"> <li>• Assisted vaginal delivery</li> <li>• Manual removal of placenta</li> <li>• Resuscitation</li> <li>• Routine care</li> <li>• Removal of retained product of conception.</li> </ul>
 <p>Blood storage &amp; handling &amp; laboratory</p>	<p>Facility needs to have:</p> <ul style="list-style-type: none"> <li>• Full laboratory service</li> <li>• Trained Lab Technician available 24 hours daily.</li> </ul>
 <p>Staffing</p>	<p>Staff to include at least:</p> <ul style="list-style-type: none"> <li>• 1 CHO</li> <li>• 1 Midwives</li> <li>• 2 SECHN/ CHA</li> <li>• 3 MCHA</li> <li>• 1 Lab Technician/ assistant</li> <li>• 1 Porter/or Cleaner</li> </ul> <p>Plus</p> <p>Staff able to perform all procedures: manual vacuum extraction, removal of placenta, removal of products of conception, resuscitation.</p>
 <p>Drugs</p>	<p>At least a Three month supply of:</p> <ul style="list-style-type: none"> <li>• All 16 tracer drugs plus IV/IM ampicillin, gentamycin and calcium gluconate;</li> <li>• At least three months' supply of all Tracer consumables (e.g. syringes, cannulae, gloves, sutures)</li> <li>• Appropriate Storage facilities: separate room, cold room, off-ground, locked.</li> <li>• Oxytoxics kept in cold chain</li> </ul>