



REPORT ON DRUG DISTRIBUTION SYSTEM IN JIGAWA STATE

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**Empowering Communities.
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Transforming Health Systems in Nigeria

The Partnership for Transforming Health Systems Phase Two (PATHS2) is a six year development initiative that aims to ensure Nigeria achieves important health-related Millennium Development Goals.

Funded by UKaid from the DFID, PATHS2 is working in partnership with the Government of Nigeria and other stakeholders, to improve the planning, financing and delivery of sustainable health services for those most in need. In addition to its work at the Federal level, PATHS2 programme is implemented in five states of Enugu, Jigawa, Kano, Kaduna and Lagos. PATHS2 follows the successful PATHS, which was implemented from 2002 to 2008.

PATHS2 is managed by Abt Associates Incorporated USA, in association with Options, Mannion-Daniels, and Axios Foundation.



Mannion Daniels



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ABBREVIATIONS

BEOC	Basic Emergency Obstetrics Care
BHC	Basic Health Center
C. H.	Cottage Hospital
CEOC	Comprehensive Emergency Obstetrics Care
D & E	Deferral & Exception
DFID	UK Department for International Development
DRF	Drug Revolving Fund
FMCH	Free Maternal and Child Health
FMS	Financial Management System
FV	Fund Valuation
G. H.	General Hospital
GHS	Gunduma Health System
GHSB	Gunduma Health System Board
GHSC	Gunduma Health System Council
HF	Health Facility
IGR	Internally Generated Revenue
IMO	Internal Market Operation
IST	In-State-Team
JIDMA	Jigawa Drug Management Agency
JIMSO	Jigawa Medicare Supply Organization
LGA DS	Local Government Area Drugs Store
MPHC	Model Primary Health Centre
NHIS	National Health Insurance Scheme
PATHS2	Partnership for Transforming Health Systems Phase II
PHC	Primary Health Care
RSSH	Rashidi Shekoni Specialist Hospital
SDSS	Sustainable Drugs Supply System
SHC	Secondary Health Care
SMOH	State Ministry of Health
SOP	Standard Operating Procedure
SR	Stores Record
SSLO	Systems Strengthening Logistics Officer

SECTION ONE: EXECUTIVE SUMMARY

The objective of this assignment is to support Jigawa State to strengthen its drugs distribution system including warehousing and transportation. The activity did not stop at distribution between the Jigawa Medicare Supply Organization to health facilities and Local government Areas drug stores, but also included strengthening distribution of medical consumables from the Drug Revolving Fund store of a facility to its various service units. The pre-study activities conducted include desk review of existing documents, interviewing some selected health facility staff and decision makers on various drugs distribution options; and data collection on 110 selected health facilities across the 9 Gunduma Health Councils. Some selected service points are considered in the data collection. These are Pharmacies, Laboratories, Theatres, X-ray, Scanning, Eye clinic, Dental clinic, National Health Insurance Scheme (NHIS) and Free Maternal and Child Health/ Deferral and Exemption. In each unit, the value and sources of procurement was considered. Numbers of patients, and sales were also considered. The data collected was for a period of one year from January 2013 to December 2013.

The thrust of this assignment was to establish a standard distribution system within the state based on three Jigawa Medicare Supply Organization (JIMSO) regional stores. This would help in reducing the logistics cost of transporting drugs from the Central Medical Store to the health facilities (HFs) or Local Government Area (LGA) Drug stores (DS). The assignment will also ensure all HFs source their medical requirements from JIMSO or LGA DS. Service points are meant to source their requirements from the Drug Revolving Fund (DRF) stores of their facilities; this exercise has checked this also. The internally generated revenue from the various service points are meant to be utilized in improving the services provide by the HF, including maintaining the general condition of the facility. The equipment supplied by different partners should be maintained by the facility using the Internally Generated Revenue (IGR) from the various service units.

A total of 110 out of the 492 health facilities (HFs) participating in the UKaid funded PATHS2 project's Drugs Revolving Fund (DRF) scheme were selected for the study. The selection of the facilities was guided by the State's Gunduma Health System Board and Council; the state's version of the district health system recommended by the World Health Organisation (WHO) - and Jigawa cluster system. The selected HFs are from the PATHS2 cluster model. Comprehensive/Basic Emergency Obstetric Centres (C/BEOCs), and Primary care Centres (PHCs) were selected in each Gunduma Health Systems Council.

Four indicators were used to conduct facility-based survey to monitor, evaluate and analyse the frequency, value and sources of procurement. Total sales and number of patients on monthly bases give light to the distribution system at all levels. Exercises at baseline, midterm and end line stages are graphically represented in the body of the report.

Another shortcoming of the revised Logistics Management Information System was the omission of feedback reporting. A form was subsequently designed for feedback reporting – to address issues highlighted by status reports and encourage reporting compliance.

SECTION TWO: INTRODUCTION

2.1 BACKGROUND TO THE ASSIGNMENT

Partnership for Transforming Health Systems Phase II (PATHS2), a UKaid funded programme, has the objective of improving the planning, financing and delivery of sustainable pro-poor health services for common health problems in 5 states in Nigeria, one of which is Jigawa State. Axios Foundation in partnership with the PATHS2 programme, is implementing the logistics component of the programme aimed at pioneering solutions that increase access to medicines, diagnostics and healthcare services.

One of the key reasons for poor logistics decision making is inadequate information available to decision makers. To address this gap, PATHS2 supported Jigawa State in developing an option for drugs distribution system based on three JIMSO regional stores.

It is expected that the outcome of this activity will be; a reduction in lead time, reduced logistics cost, complete compliance to the DRF guidelines at all levels of operation. It is planned that by 2014, a three regional stores will be functioning adequately to provide services to a projected number of 650 health facilities that will procure their health commodities and other consumables from them.

PATHS2 and its predecessor programme have made significant investment in strengthening sustainable availability of health products to improve service delivery. This support has resulted in significant improvement in availability and accessibility of health commodities. JIMSO turnover has gone up from almost nil to close to 600 million Naira per annum providing commodities to 492 HFs. Out of this, 90 recently came on board. The next stage of investment proposed by PATHS2 will further improve health commodity availability.

However this extraordinary improvement in health commodity flow is putting immense stress on the government system and institutions. To address this PATHS2 is supporting Jigawa state in strengthening the Drugs Supply Chain Management (distribution, warehousing and transportation systems). This is to ensure the sustainability of the Sustainable Drug Supply System (SDSS). One of the key innovations in strengthening government institutions was the creation of regional stores to ease distribution, transportation and warehousing within the State.

So far, PATHS2 has collaborated with the State through the SDSS committee to provide guidance to JIMSO to test run the newly developed procurement system, assessed and evaluated in 27 LGA DRF stores, and quantified essential equipment and reagents for phases IV and V support. The SDSS will need to be strengthened by developing best options for the drugs distribution across the regional stores, LGA drug stores, SHCs and PHCs. This can effectively function as a system for ensuring sustainable drug supply in Jigawa state.

2.2 ASSIGNMENT OBJECTIVES

To strengthen the distribution capability at the three JIMSO regional stores through the development and implementation of distribution, warehousing and transportation structures that will make logistics parameters easy and thus provide accessible, affordable and sustainable drug supply system in the State.

2.3 SCOPE

The scope of this mission covers the following activities.

- Facilitate the start-up of the second regional JIMSO Store in Hadejia.
- Facilitate capitalization and start-up of the third regional JIMSO Store in Gumel
- Streamline the distribution system for Jigawa to develop options based on the three-regional stores model.
- Strengthen internal market operation
- Implement the finalized drug distribution system structure.

2.4 ACTIVITIES CONDUCTED DURING THE ASSIGNMENT

The consultant had the responsibility of serving as the thematic facilitator to carry out the following tasks:

- Develop tools to capture data
- Collect data from 110 DRF facilities including 12 general hospitals, 27 LGA PHCs and 70 HFs across the 9 Gunduma Health Councils.
- Identifying and collecting key documents for review
- Conducting stakeholder interviews involving (collate options for the distribution and transportation schedules) the Hon. Commissioner, Permanent Secretary, 3 SDSS Committee members, 3 Secondary Health Centers (SHCs) and 5 PHCs across the State.
- Presentation of zero draft to selected stakeholders for deliberation, and conduct of training on Internal Market Operations
- Conduct of a two-day non-residential meeting of SMOH / SDSS, Gunduma Health systems, JIMSO, SHCs and PHCs to review and finalize Drug Distribution System structure.
- Validate and produce a final draft copy of the distribution structure and analysis of the finding from the HFs
- Collate, analyse and evaluate reports of the data collected from the facilities
- Report and submit overall findings of the analysed data and the structure of the drugs distribution system.

110 out of the 492 DRF health facilities were selected for the data collection. The selection was guided by the State's Gunduma Health System and Jigawa Cluster System.

Table 1: Facilities selected for data collection

S/No.	GUNDUMA	CEOC	BEOC	PHC	TOTAL
1.	Birnin Kudu	Birnin Kudu General Hospital			12
2.	Birniwa	Birniwa General Hospital			12

3.	Dutse	Dutse Hospital RSSH	General and		
4.	Gumel	Gumel Hospital	General		
5.	Hadejia	Hadejia Hospital	General		
6.	Jahun	Jahun Hospital	General		
7.	Kafin-Hausa	Kafin-Hausa General Hospital			
8.	Kazaure	Kazaure Hospital	General		
9.	Ringim	Ringim Hospital	General		

2.5 JIGAWA STATE GUNDUMA HEALTH SYSTEM

Jigawa state is currently operating a structure called the 'Gunduma' Health System (GHS). This is the state's own version of the district health system recommended by the World Health Organisation (WHO). The GHS is an integrated system that brings primary and

secondary care services together under one management structure. The adoption of the GHS concept rather than District Health System created a sense of association between the people and their culture. The key features of GHS are:

- Organising the 27 LGA health authorities into nine health districts or 'Gunduma' (Hausa word for 'bigger' LGAs or 'together') to allow for ease of management, using criteria based on population, political boundaries, numbers, type of facility, and so on;
- Replacing the fragmented management structure with a single body - a Gunduma Health System Board (GHSB) comprising representatives from the State Ministries of Health (SMoH), Local Government, and Women Affairs.
- Pooling all health funds for the Gundumas, with contributions made by the SMoH and Local Government, the 27 LGAs and development partners;
- Restructuring the management arrangements while keeping the day-to-day work of health staff the same; all staff within the gunduma are assigned to work under single line of accountability, creating clarity and improving efficiency.

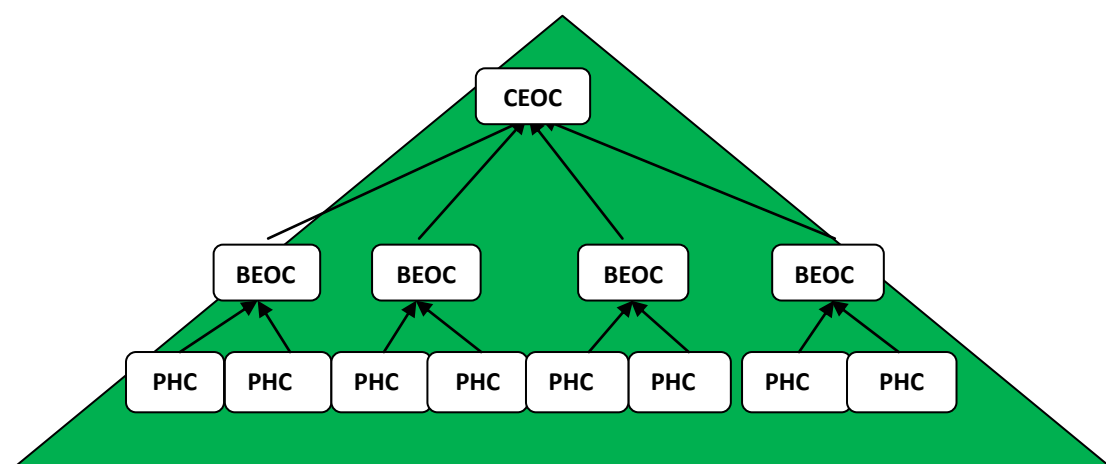
The SMoH is now shifting its focus from direct service delivery to take on a more strategic stewardship role of policy development, macro-planning, regulation and sector financing.

2.6 JIGAWA CLUSTER SYSTEM

PATHS2 is supporting Jigawa to establish 9 clusters, each comprising 13 HF, one in each Gunduma Council. The cluster system ensures smooth referral for obstetrics and new born care from the primary healthcare, through the basic emergency obstetrics centres (BEOCs) to the comprehensive emergency obstetrics centres (CEOCs). One CEOC provides services to four BEOCs. Attached to each BEOC for referral are two PHCs.

BEOCs have capabilities for administration of antibiotics, oxytocics, and anticonvulsants; manual removal of placenta; removal of retained products following miscarriage or abortion; assisted vaginal delivery, preferably with vacuum extractor; and newborn care.

CEOCs, typically provided in district hospitals, include all basic functions of BEOCs, plus caesarean section, safe blood transfusion and care to sick and low birth weight newborns, including resuscitation.



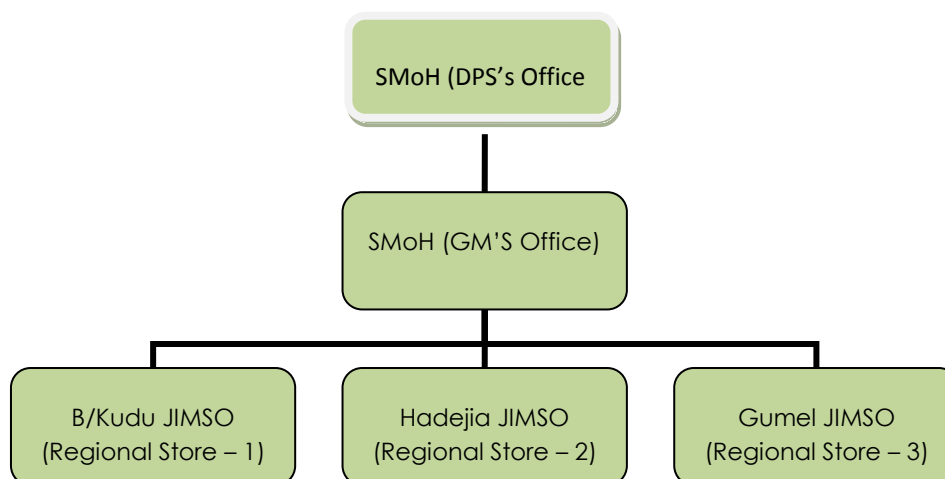
Guidelines jointly issued in 1997 by WHO, UNICEF, and UNFPA, recommended that for every 500,000 people there should be four facilities offering basic and one facility offering comprehensive essential obstetric care.

2.7 DESIGN

The drugs distribution structure will have 2 components

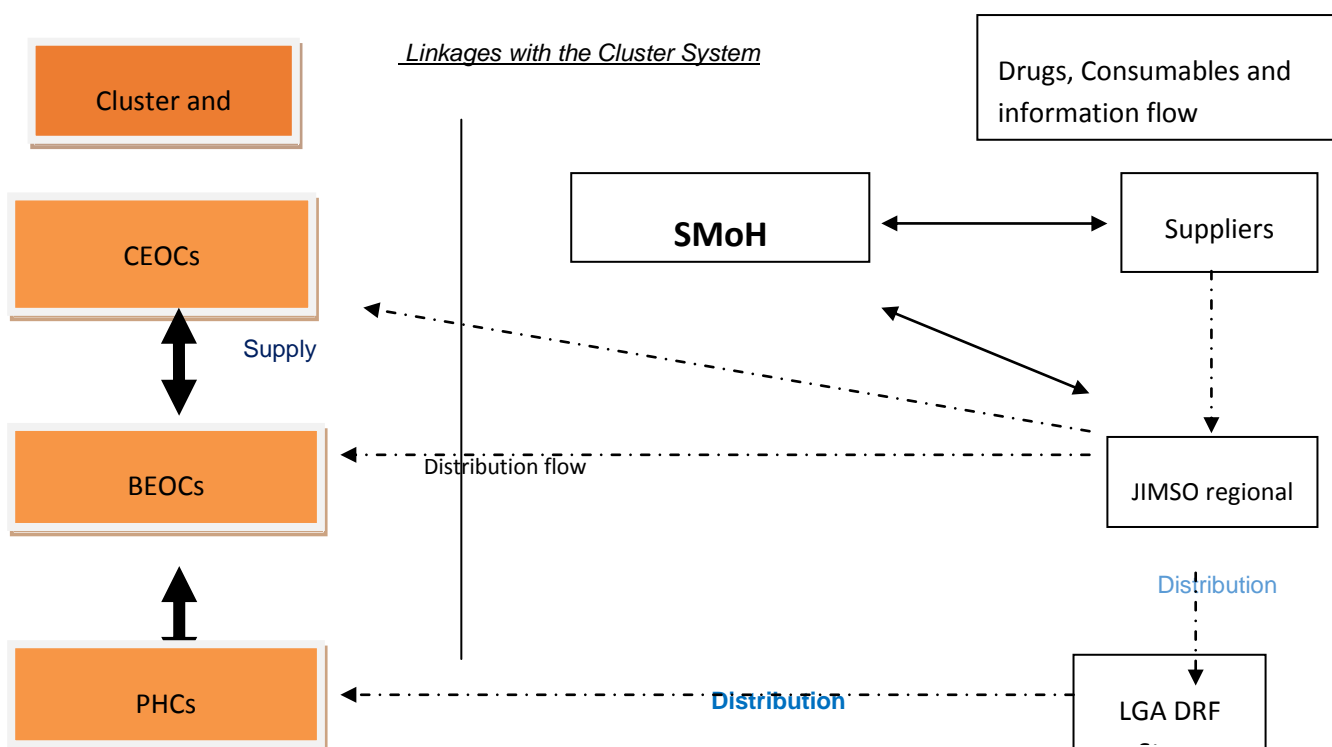
- The administration component
- The drugs distribution component

ADMINISTRATION COMPONENT



All administrative activities including procurement processes will be channeled from the office of the General Manager, which will be in the SMOH. After every procurement (through tender), the supplier will be asked to deliver to the regional stores according to needs/requirement which are submitted earlier during quantification.

DRUGS DISTRIBUTION COMPONENT



Key: -



Two ways referral system



Drugs distribution flow



Information Flow for informed Logistics decision

The office of the General Manager in the SMoH will control the three JIMSO regional stores. Information will flow from the SMoH to the JIMSO Regional Stores and to the suppliers and vice versa. In a typical service delivery cluster, the CEOC will buy from the JIMSO regional store closer to it. Likewise the BEOCs under that cluster will buy from the same JIMSO regional store. All the PHCs in that cluster will buy from their respective LGA DRF store.

2.8 SCHEDULE OF ACTIVITIES

Task	LTA
Initial planning meeting with key stakeholders	
Briefing and planning meeting with PATHS2	1 day
Identifying and collecting key documents for review	
Stakeholders interviews (to gather options for the distribution and transportation options) Hon. Com. PS, 3-SDSS MC members, 3 SHCs and 5 PHCs across the State	1 day
Desk review of documents by consultants	1 day
Data collection from 110 DRF facilities (9 GC general hospitals, RSSH, 27 LGA PHCs and 63 HFs across the 9 GC.	2 days
Presentation of zero draft to selected stakeholders for deliberation. And training on Internal Market Operation. (45 people)	1 day
2-day residential meeting by SMoH / SDSS, GHS, JIMSO, SHCs and PHCs to review and finalize Drug Distribution System structure.	2-days
Correction and producing a final draft copy of the distribution structure and analysis of the finding from the HFs	1 day
Presentation of final draft of distribution structure to a larger group of stakeholders at Dutse (non-residential)	1 day
Final report and debrief	-
Total Number of Days =	10 days

SECTION THREE: MAIN FINDINGS

Table 2. The table below shows the drugs distribution system based on the three JIMSO regional stores

S/No.	JIMSO	GHSC GH	LGA DS	GH (CEOCs)
	B/Kudu Regional Store (5 General Hospitals (GH) and 7 LGA PHCs)	1). B/Kudu GC	B/Kudu	1 GH
			Buji	1 Cottage
			Gwaram	
		2). Dutse GC	Dutse	1 GHs & 1 RSSH
			Kiyawa	
		Can buy from either Regional Store	3). Jahun GHSC	Jahun
Miga				
2.	Hadejia Regional Store (4 General Hospitals and 8 LGA PHCs)	4). Hadejia GC	Hadejia	1 GH
			Kaugama	
			M/Madori	
		5). Birniwa	Birniwa	1 GH
			Guri	
		6). K/Hausa	Auyo	1GH
K/Hausa	1 Cottage			
3	Gumel Regional Store (4 General Hospitals and 12 LGA PHC)	7). Gumel GC	Gagarawa	1 GH
			Gumel	
			Maigatari	
			S/Tankarkar	
		8). Kazaure GC	Gwiwa	1 GH
			Kazaure	
Can buy from either Regional Store1	9). Ringim	Roni	2 GH	
		Yankwashi		
		Babura		
		Garki		
		Ringim		
		Taura		

Table 3: List of PHC facilities that were up-upgraded to implement SHC level DRF guideline based on their performance.

GHSC	LGA	HEALTH FACILITY	NEAREST JIMSO REGIONAL STORE
Birnin Kudu	Birnin Kudu	Sundumina PHC	Birnin Kudu Regional Store
		Ungwar Ya MPHIC	
		Yalwan Damai MPHIC	
		Bamaina BHC	
	Buji	Gantsa MPHIC	
Dutse	Dutse	Chamo PHC	
		Sakwaya PHC	
	Kiyawa	Katanga MPHIC	
		Katuka BHC	
Hadejia	Hadejia	Gawuna MPHIC	
		Agumau MPHIC	
	Kaugama	Kaugama PHC	
		Garin Gabas MPHIC	

		Nuhu Alpha PHC	Hadejia Regional Store	
Birniwa	Birniwa	Kazura BHC		
		Digimsa BHC		
	Kirikasamma	Kirikasamma PHC		
	Guri	Guri MPHC		
Lafiya MPHC				
Kafin-Hausa	Auyo	Auyo MPHC		
		Gatafa MPHC		
		Shakato BHC		
		Jabo MPHC		
Gumel	Sule–Tankarkar	Sule-Tankarkar MPHC	Gumel Regional Store	
		Amanga BHC		
	Gagarawa	Gagarawa PHC		
Kazaure	Kazaure	Dandi PHC		
		Kazaure MPHC		
	Yan-Kwashi	Karkarna PHC		
	Gwiwa	Gwiwa MPHC		
Jahun	Jahun	Kado-Wawa BHC		Either of the Stores
		Kanwa BHC		
		Aujara PHC		
	Miga	Miga PHC		
Ringim	Ringim	Chai-Chai PHC		
		Dabi BHC		
		Sankara MPHC		
	Babura	Kanya Babba PHC		
	Garki	Doko PHC		
Total Number of HFs		39 HFs	3 Regional Stores	

Table 4: Summary

S/N	REGIONAL STORE	CEOCs (that will buy from JIMSO)	BEOCs (that will buy from JIMSO)	LGA DS (that will buy from JIMSO)
1.	Birnin Kudu Reg. Store	4	9	5
2.	Hadejia Regional Store	3	14	8
3.	Gumel Regional Store	2	7	8
4.	Either of the Store	3	9	6
	TOTAL	12	39	27

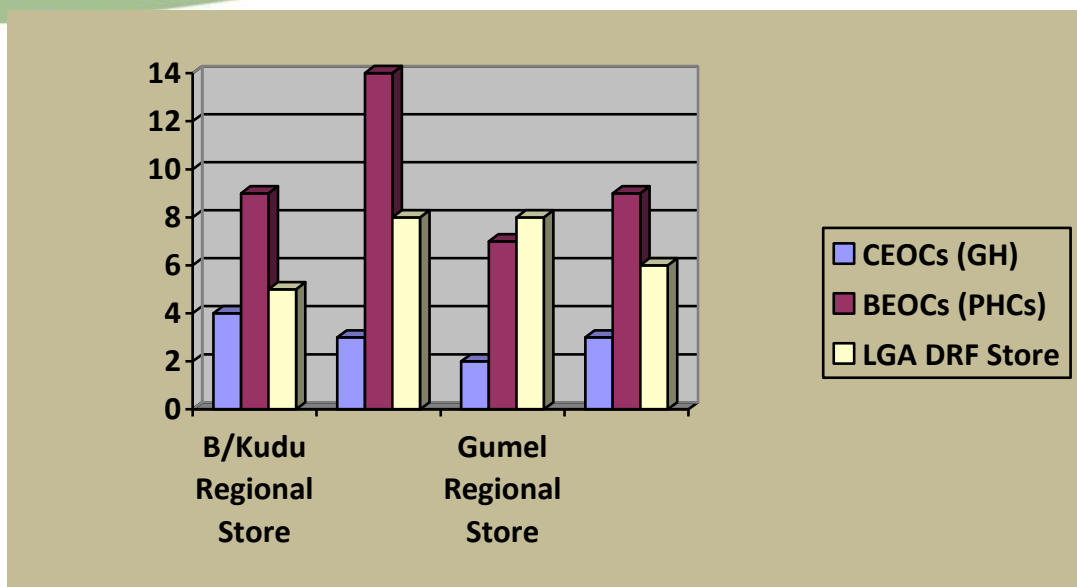


Figure 1: - Number of GHs, PHCs & LGA DRF stores that will procure from each of the JIMSO Regional Store

Jahun and Ringim Gunduma can buy from either regional store because of their proximity to all the regional stores

SECTION FOUR: RECOMMENDATIONS

- The SDSS MC should be more proactive to ensure the drugs distribution system was adhered to strictly.
- The SDSS MC should ensure all the processes of Internal Market Operations are followed up.
- JIMSO should be sure that all medical consumables required by all the service units in all the HFs of the State are readily available.
- The SMOH and the GHSB should ensure that all the IGR from facilities are been utilized effectively in the development of the various services within the facility for sustainability.

SECTION SIX: LESSONS LEARNT

The Developed drugs distribution system structure will help the system in the following ways

- The cost of Logistics will be reduced in all the health facilities
- The out of stock problem will be solved
- Lead Time will be reduced.
- The whole DRF system will be strengthen and sustained.

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