



**Client Satisfaction Survey 2016
Wave III - Draft REPORT**

**Submitted to National Medical Stores
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EXECUTIVE SUMMARY

Background: In 2012, a Client Satisfaction Survey (CSS) baseline study was conducted and the results revealed areas that needed to be consolidated and those whose gaps needed to be filled. Since then, several interventions were implemented to fill in gaps. Therefore, to understand changes in the level of satisfaction and the impact created following the interventions since the baseline study, NMS conducted another wave of the Client Satisfaction Survey (CSS) in 2016. The 2016 wave was a follow-up to previous waves commissioned to help NMS assess their service delivery in terms of effectiveness and efficiency, among others. Like previous rounds, the 2016 wave set out to achieve the following objectives; i) to identify areas of service delivery that NMS clients find important ii) to rate the relative level of importance attached to each of the identified areas of service delivery iii) compare results of 2013 CSS baseline study with the 2016 results to establish the progress NMS is making towards achieving customer Satisfaction iv) to make clear recommendations to enable NMS improve or restructure and improve its service delivery mechanisms to have a reliable and efficient service delivery channel to enable it reach out to its clients.² .

Methodology: By design, the study was longitudinal in nature. It considered and sampled the same cohort of respondents and facilities studied in NMS-CSS wave I & II. A national survey was undertaken, considering all major nine regions served by NMS. The total number of health facilities visited were 755 from 55 districts nationwide³. In total, 985 interviews were conducted (quantitative - 950, and qualitative – 35 interviews). The target respondents at each of the Health Centre Facilities were officials that deal with the NMS staff on a regular basis such as Health facility in-charges and Store in-charges as well as facility administrators. The study also targeted relevant officials at national and local government levels. Key informants interviewed were from various organizations and institutions. These included NMS partners and relevant government departments. The study employed both quantitative and qualitative techniques of sampling, data collection, analysis and presentation. Descriptive and analytic approaches were adopted as the study sought to analyze and describe the changes in client satisfaction.

Key findings

Based on the findings, clients were generally impressed by the positive changes that took place since 2012. Overall, the level of satisfaction on all attributes and parameters measured was 7.7 out of ten. This was a commendable score though it was slightly lower than that of 2013 (7.8 out of ten).

Storage Facilities: Although storage facilities at health facilities are owned and managed by health facilities themselves, the study also evaluated them. This was intended to ascertain whether NMS drugs are kept in right conditions to avoid, for instance, extreme temperatures that could spoil the drugs. Of course, people who may not be aware of the fact that NMS is not in charge of storage facilities would inadvertently accuse NMS of not ensuring good and suitable drug conditions. Therefore, this section evaluated storage facilities (at health center facilities) and their managers. The findings indicate that the overall satisfaction with storage facilities was 8.1. In comparison with the previous waves, this score is higher than the 2012 score (7.5) but slightly lower than the 2013 score (8.2). None of the attributes was scored less than 8 indicating a commendable performance despite a decline in having clean stores (from 9 to 8.4). At region level, the satisfaction with storage facilities was low in Karamoja and West Nile regions. The major issue raised about storage facilities was limited space for storage.

² Like the previous waves, Ipsos Ltd (formerly Synovate Ltd) was contracted to conduct the 2016 wave.

³ A list of all health facilities visited by districts is attached

Distribution, Delivery and Supply Systems: Slightly more clients in 2016 (76%) compared to 2013 (68%) felt that the distribution, delivery and supply systems the situation has improved/bettered since 2012. In comparison with 2013 and 2012, the level of satisfaction with distribution, delivery and supply remained the same in 2016 to 7.8 from 7.6 in 2012 and 7.8 in 2013. Across all levels of health facilities NMS was scored above 7 with regards to distribution, delivery and supply systems save for NRI and RRH. However, similar to previous rounds, the majority of the respondents scored NMS low on flexibility to handle emergencies.

Range, quantity, quality, shelf-life and packaging of EMHLS: In 2016, the percentage of participants who felt that the range, quantity, quality, shelf-life and packaging of commodities had improved was 70%. The overall satisfaction with the range, quantity, quality, shelf-life and packaging of EMHLS was 7.7 out of ten. At segment level, the satisfaction for higher levels, such as hospitals, RRHs, NRHs and NRIs, was slightly lower; at 7. Participants asserted that medical equipment including laboratory equipment like micro scopes were not being supplied in the desired quantities. Participants cited the inconsistencies in packaging. It was asserted that sometimes boxes show different drugs from what is packed inside. Participants also argued that some drugs and reagents require refrigeration but - NMS does not provide for that both at the district and even at the delivery points-health facility level.

Quality Control Systems: The overall satisfaction with QC processes reduced to 7.9 though it remained higher than that of 2012 (7.42). At segment levels, all levels of care scored 8 save for NRH and NRI which scored 7. Majority (60%) of the participants were in favour of both NDA and NMS jointly handling quality control processes. Only 23% reasoned that NMS should solely handle quality control processes, and the fewest, 17%, of participants felt that NDA should solely handle the quality control processes. The issue of quality control assurance is not primarily an NMS function but they can contribute to the overall quality control assurance for all the commodities in the country. Therefore, cooperating with NDA and other monitoring agencies or departments is the right strategy.

Personality and Skills of NMS Staff: In the realm of Personality and Skills of NMS Staff, there was no significant changes between 2013 and 2016. The level of overall client satisfaction with personality and skills of NMS staff largely remained the same. The satisfaction was 8 for all levels of care save for NRI (score 7). Notably, few respondents find NMS staff as staff that communicate frequently on status of orders placed.

Information Dissemination: The overall Satisfaction with information dissemination by NMS in 2016 increased significantly to 7.4 from 6.3 in 2012. At health facility level, HCIVs were the most satisfied and NRI were the least satisfied. Notably, awareness of different communication channels used by NMS was higher in 2013 compared to 2016. In terms of awareness of communication channels, majority (74%) of participants were aware of the telephone, followed by emails, radio and television. Telephones were scored highest as an important communication channel while Televisions and Bulletins had the lowest scores. West Nile scored all communication channels low about importance except for telephones. The overall satisfaction with communication channels was 5.9, lower than the score of 7.4 in 2013. Clients were most satisfied with the Telephone as a communication channel by NMS. Overall less than half (43%) of the respondents had received information about NMS in the past six months. The results indicated that majority (52%) received information from NMS staff and few (17%) from NMS information materials. The results indicate that Telephone is the most preferred (69%) communication channel followed by email (28%) and radio (20%). However, some of the clients find the email as ineffective communication channel and prone to delayed response.

Complaint Management: About, 33% had ever had problems with NMS. Out of 315 participants whose problems were handled by NMS, 72% were not satisfied with how they were handled. The most common problems mentioned by clients were not supplying according to orders made, shortage of essential medicine/ low supply and delay/ failure to deliver in time.

Vaccines and Gases: Overall, satisfaction with vaccines and gas was scored at 8.0, slightly lower than that of 2013 (8.3). Participants were particularly most satisfied with attributes related to vaccines that are approved by NDA, well and appropriately labelled and packaged vaccines. Participants expressed lack of specific vaccines such as anti-Rabies vaccine that needed special attention. Certain populations need special attention as they face unique circumstances. This is the case for refugee hosting communities who reported inadequate quantities of vaccines due to presence of refugees. Most clients are not satisfied with the amount of gas supplied based on the on the number of empty cylinders and not need.

Recommendations

Storage facilities

- Special focus needs to be put to storage facilities in Karamoja and West Nile regions. Expansion of storage space and facilities needs to be prioritized. There is need to provide more space or open more stores especially upcountry. District authorities in each region should coordinate, assisted by the government, to establish regional storage facilities to manage emergency orders.

Distribution, Delivery and Supply Systems

- The push system dilemma. NMS needs to do more to convince lower levels of care such as HCIIIs, HCIIIIs and HCIVs about the effectiveness and efficiency of the push system. Majority of these health facilities had until 2016 not bought into it and would prefer supply to be made according to their needs and orders. NMS should institutionalize M&E processes at regional offices
- Expansion of transportation infrastructure: Perhaps, NMS needs to procure vehicles for each NMS region to enable drug monitoring and transportation and removing drugs from one health center where they are not needed to where they are needed or to the main central stores of the district and be transported when they are required. Understandably, ofcourse, although this may be out of NMS's mandate, NMS could still play a supportive role to districts and particular health facilities to ensure safe transfer of drugs from where they are plenty/not urgently needed to health facilities with greater need/emergency.
- Improve coordination and communication of distribution system: NMS should prior share a copy of the list of items the clients are expected to receive. This will enable health centers to check whether what is on the list is what was requested and is what is delivered. This list can be for instance be sent via email in advance.
- Safety: NMS should Improve on the security and safety of products. For instance, Last Mile Delivery (Three ways) should have enough well covered vehicles for delivery. In addition, measures or plan of what to do for expired drugs should be communicated.
- Delivery time: NMS should have enough time to deliver in working hours. Delivery time should also be clear. In addition, NMS delivery staff should be in position to communicate earlier to the in charges before delivery.
- An emergence response plan or strategy needs to be developed and shared with all levels of health care.

Recommendation - Quality Control Systems

- District authorities and other partners including NMS should sustain inspections in different health facilities to ensure that medicines are safe and not siphoned to private drug shops
- Quarterly review meetings should be maintained and implemented consistently.

Personality and Skills of NMS Staff

- NMS should set up and organize client service events across regions. This will increase visibility and interaction with the clients and provide relevant feedback for improving the relationship between clients and NMS staff.
- NMS staff should organize client sensitization meetings focusing on how to make orders and manage medicines and other supplies. These meetings should target representatives from all levels of care and should be held at either district hospitals or regional referral hospitals.

Information Dissemination

- NMS should introduce toll free lines at regional offices for easing communication and complaints management. The toll free line should be rooted directly to the responsible officers
- Communication using email needs to be done strategically. Not many clients check their mails regularly due to power and internet limitations. This is especially true with remote and lower levels of care such as HCIs, HCIIIs and HCIVs. NMS may need to follow-up emails with phone call reminders or SMS notifications alerting the clients to check their emails.
- Use of social media and its opportunities should be maximized and taken advantage of. Health facilities located in urban centres and with easy access to internet could benefit from social media platforms. This needs to be supplemented with the other communication channels such as emails, print media, IEC materials, the NMS website.
- The existing communication structures especially at the local government level should be utilized. This includes RDCs, CAOs and DHOs who are key in coordination and monitoring.

Vaccines and gas

- Certain populations need special attention as they face unique circumstances. This is the case for refugee hosting communities who reported inadequate quantities of vaccines due to presence of refugees. There is need for special programs for such communities in relation to range and quantity of vaccines. NMS should alert the government and other partners about this in order to secure extra funding to enable refugee host communities receive extra medical and laboratory supplies.
- Most clients are not satisfied with the amount of gas supplied based on the number of empty cylinders and not need. There might be a need to consider the rate of consumption at the facility for proper projections. The efficiency of having spare gas cylinders for back up at every health facility should be explored and examined. Each facility is supposed to have two gas cylinders so that when one gets finished, they use the spare and take another one for refilling. This needs to be revisited at all levels of care that receive gas.
- Some clients at health facilities expressed dissatisfaction with the packaging of some of the vaccines. This needs to further be studied and assessed.

Table 1: Comparative Overall Satisfaction

Attribute	2016	2013	2012
Overall satisfaction	7.7	7.8	7.7
Storage facilities	8.1	8.2	7.5
Distribution, delivery and supply systems	7.8	7.7	7.4
Quality control systems	7.9	8.1	7.4
Staff personality and skills	8.0	7.9	7.7
Information dissemination	7.4	7.2	6.3
Awareness of NMS communication channels	5.9	7.4	
Vaccine and gas supplies	8.0	8.3	
Range, quantity, quality, shelf-life and packaging of EMHLS	7.7	7.6	7.4

Areas of further research

There is need by NMS to revisit and improve quantification of EMHS in order to stabilize medicine availability at facility level. Ongoing monitoring and updating of the quantification is critical to keep NMS development partners and other stakeholders informed on the availability of drugs, timely decision making about product selection, financing and delivery of commodities. Similarly, overtime and regular monitoring can improve the accuracy of NMS forecasts and the overall quality of quantifications. Likewise, advanced contract monitoring is vital to ensure that suppliers meet their obligations and that products arrive on time and in expected quality and quantity. Further, NMS needs to explore it current method of invoice delivery to health facilities. This should indicate all items that were ordered but have not been delivered and reasons why. Promoting preventive health is the sure way to have quality population, NMS should rethink and expedite more ways of contributing to this area.

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ABBREVIATIONS

ARVs	Antiretroviral
BCG	Bacillus Calmette–Guérin
CAO	Chief Administrative Officer
CHAI	Clinton Health Access Initiative
DHO	District Health Officer
DISO	District Security Officer
DPC	District Police Commissioner
EMHLS	Essential Medicine, Health and Laboratory supplies
HCII	Health Centre Two
HCIII	Health Centre Three
HCIV	Health Centre Four
HPV	Human Papilloma Virus
IEC	Information Education and Communication
UNICEF	The United Nations Children's Fund
IPV	Inactivated polio vaccine
MSH	Management Sciences for Health
NDA	National Drug Authority
OPD	Out Patient Department
RDC	Residential District Commissioner
NRH	National Referral Hospital
NRI	National Referral Institute
QC	Quality Control
RRH	Regional Referral Hospital
TB	Tuberculosis
UBC	Uganda Broadcasting Corporation
UNEPI	Uganda National Expanded Programme on Immunization
USAID	The United States Agency for International Development
VVM	Vaccine Vial Monitor

1.0 INTRODUCTION

National Medical stores (NMS) is an autonomous government corporation established in 1993 by Act of Parliament, under Chapter 207 of the Laws of Uganda. NMS's vision is to ensure a Population with adequate and accessible quality medicines and medical supplies. It is mandated to procure, store and distribute essential medicines and medical supplies to all public health facilities from Health Centre IIs to National Referral Hospitals and Institutes. This mandate has gradually grown to cover all government health facilities including the police, army and prisons. In August 2012, this mandate was further expanded to include the distribution of Vaccines across the country. NMS distributes to its clients on a routine basis in response to the orders made by clients. NMS aims at ensuring effectiveness and efficiency while executing the constitutional mandate.

1.1 Background

In 2012, a Client Satisfaction Survey (CSS) baseline study was conducted whose objectives were like the current wave - wave three, 2016. The results of the previous waves revealed the strengths and weaknesses of NMS i.e. areas that needed to be consolidated and those whose gaps needed to be filled. It is assumed that several interventions were implemented to fill the gaps realized. To understand changes in the level of satisfaction and the impact created because of the new strategies implemented since the baseline study, NMS conducted another wave of the Client Satisfaction Survey (CSS, 2013). Therefore, the third wave of the NMS Customer Satisfaction wave was a follow-up to previous waves and was commissioned to help NMS assess their service delivery in terms of effectiveness and efficiency, among others.

1.2 Objectives

1.2.1 Overreaching Objective

Congruent with the previous rounds, the overall objective of the 2016 CSS wave was to measure the level of satisfaction of NMS clients on a range of aspects of service and continuously monitor internal and external areas of service delivery clients attach importance to.

1.2.2 Specific Objectives:

Like previous rounds, the 2016 wave had the following objectives;

- To identify areas of service delivery that NMS clients find important by segments and overall
- To rate the relative level of importance attached to each of the identified areas of service delivery by segment and overall
- Compare results of 2013 CSS study with the 2016 results in order to establish the progress NMS is making towards achieving customer Satisfaction
- To make clear recommendations to enable NMS improve or restructure and improve its service delivery mechanisms to have a reliable and efficient service delivery channel to enable it reach out to its clients.⁴

⁴ Like the previous waves, Ipsos Ltd (formerly Synovate Ltd) was contracted to conduct the 2016 wave.

2.0 DESIGN AND METHODOLOGY

2.1 Research Design

By design, this study was longitudinal in nature as it considered and sampled the same cohort of respondents and facilities studied in NMS-CSS wave I & II. The study employed both quantitative and qualitative techniques of sampling, data collection, analysis and presentation. Descriptive and analytic approaches were adopted as the study sought to highlight the changes in client satisfaction.

2.2. Methodology

2.2.1 Study Areas and Sites

A national study was undertaken, considering all major nine regions served by NMS, i.e. Kabarole, Mbarara, Mbale, Gulu, Soroti, Kampala, Hoima, Karamoja, West Nile. Since NMS is mandated to supply essential medicines, medical supplies as well as laboratory supplies to all government assisted health facilities at all levels, like previous rounds, government health facilities at all levels were targeted. These included, National Referral Hospitals, National Referral Institutes, Regional Referral Hospitals, General Hospitals, Health Centre IVs, Health Centre IIIs and Health Centre IIs. Regions with more health facilities such as Mbarara, Kampala, Mbale, Gulu, Kabalore were prioritised and were each represented by 2 districts. In total, 55 districts were selected across the country.

2.2.2 Study Participants

The target respondents at each of the Health Facilities were officials that deal with the NMS staff on a regular basis such as Health facility in-charges and Store in-charges as well as facility administrators. The study also targeted relevant officials at the ministry of health, District Health Officers (DHOs) Chief Administrative Officers (CAOs), Resident District Commissioners (RDCs) and officials from key development partners such as Clinton Health Access Initiative (CHAI), UNICEF, MSH (Management Science for Health, Uganda Health Supply Chain Program), Health Monitoring unit, and USAID.

2.2.3 Sample size – Overall

Out of 1009 interviews targeted, 985 interviews were achieved. In comparison with the previous waves, the total sample achieved in the current wave is slightly higher than the sample for the 2012 wave but slightly lower than the sample for the 2013 wave. In 2012 and 2013, 891 interviews and 1032 interviews respectively were conducted. Overall, 755 health facilities were visited.⁵

2.2.4 Sample Size-Quantitative

Out of 969 quantitative interviews targeted, 950 interviews were achieved. Overall, 985 interviews were conducted as indicated in table 1 below:

Table 2; Number of achieved interviews – Survey

Region	Regional Sample	Level of Facility						
		NRH	NRI	RRH	GH	HC4	HC3	HC2
Total Sample	950	11	8	85	64	145	216	421
Percentage		1%	1%	9%	7%	15%	23%	44%

⁵ The details of the number of health facilities visited by level of care and district is attached as an annex

Mbarara	169	0	0	14	11	25	31	88
Mbale	161	0	0	7	6	28	37	83
Kampala	156	11	8	12	4	29	26	66
Kabarole	126	0	0	7	12	22	26	59
Hoima	83	0	0	14	6	11	25	27
Gulu	81	0	0	7	6	12	19	37
West Nile	75	0	0	7	6	8	24	30
Soroti	63	0	0	10	6	8	23	16
Karamoja	36	0	0	7	7	2	5	15

2.2.5 Sample size for Key Informant Interviews

Thirty-five (35) in-depth interviews were conducted with relevant key informants at local government and national level. One key informant was interviewed at the Ministry of Health (Director General Health services division)⁶ and another with the Deputy Chief of party Management Sciences for Health (MSH) At regional and district levels, three categories of respondents were targeted. These were: District Health Officer (DHOs), Chief Administrative Officer (CAOs) and Resident District Commissioner (RDCs). However, we selected a DHO from all 14 districts with many health facilities. In addition, one (1) RDCs and 1 CAO from each region were targeted. These three categories of respondents were targeted because of the key role they play in overseeing and monitoring the distribution and usage of drugs.

Table 3; Sample Size Distribution for KIIs

NMS Region	No. of in-depth interviews achieved
Gulu	4
Hoima	3
Kabarole:	4
Kampala	7
Mbale	4
Mbarara	4
Soroti	3
Karamoja	3
West Nile	3
Total	35

2.2.6 Sampling and Selecting Study Areas and Sites

As intimated before, like the baseline studies, the 2016 wave targeted a total of 55 districts. Districts with Regional Referral Hospitals, National Referral Hospital and National Referral Institutes were automatically sampled. These were 15 districts: Arua, Gulu, Hoima, Jinja, Kabale, Kabarole, Kampala, Lira, Luwero, Masaka, Mbale, Mbarara, Moroto, Mubende, and Soroti. The rest, 40 districts, were proportionately sampled.

2.2.7 Selection procedure

The sample size of the health facilities was allocated proportionately based on the overall total population of the health facility level and within each district and region. This meant that regions and districts with more health

⁶ Other target participants from the Ministry of Health could not be interviewed due to their tight schedule,

facilities were given higher representation. This was applied to all levels of health facilities from HCIIIs to General Hospitals. Thus, HCIIIs made 44% of the sample, HCIIIs made 23%, HCIVs 15%, General hospitals 7%, RRHs 9%, National Referral Hospital, 1%, and National Referral Institutes 1%. Overall, 755 health facilities were visited. Within each region, district samples were got using the simple random sampling technique. The same technique was used to select the segments/health facilities for data collection

For key informants, purposive sampling technique was adopted. This enabled the researchers to select respondents who, in our view were more informed about NMS and their clientele. The targeted key informants were either representatives from the government departments or Aid agencies that directly deal with NMS or have interest in NMS operations.

3.0 FINDINGS

This section presents findings from the study and since it is a comparative/follow up study, results from the 2016 wave are compared to the previous waves at segment level and region where -applicable. Like previous waves, parameters measured included:

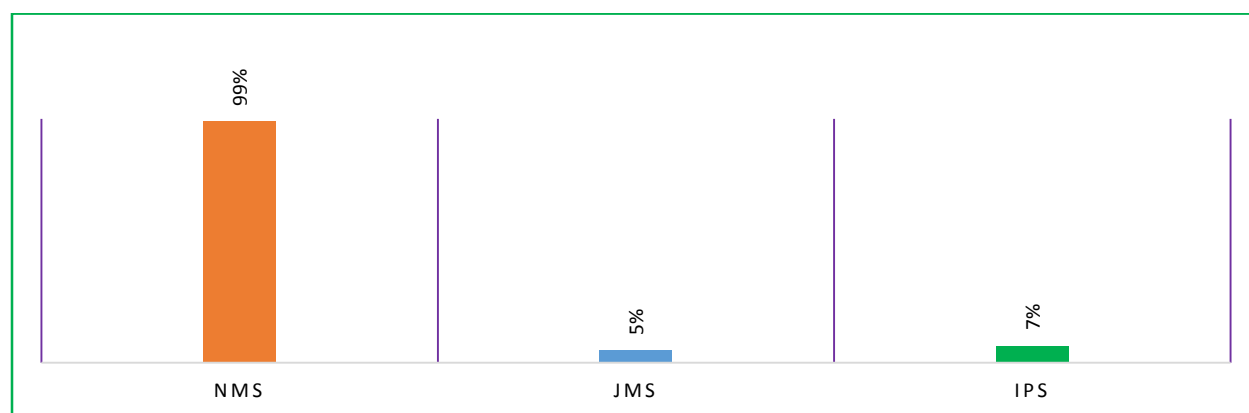
- Storage facilities at health centres; the distribution, delivery and supply systems
- Range, quality, quantity, shelf-life, packaging, and value for money of commodities stocked and supplied;
- Quality control systems;
- Staff personality and skills;
- Information dissemination;
- Complaints management; and
- Evaluation of range, quantity, quality, shelf-life and packaging of vaccines and gas.

3.1 SUPPLIERS OF ESSENTIAL MEDICINES AND LABORATORY SUPPLIES (EMLS)

3.1.2 Suppliers of essential medicines and laboratory supplies

The results indicate that NMS (99%) is the largest supplier of essential medicines and laboratory supplies to government health facilities. Implementing Partners (IPs-7%)⁷ and JMS (5%) are the other notable suppliers.

Figure 1: Dominant suppliers of essential medicines and laboratory supplies



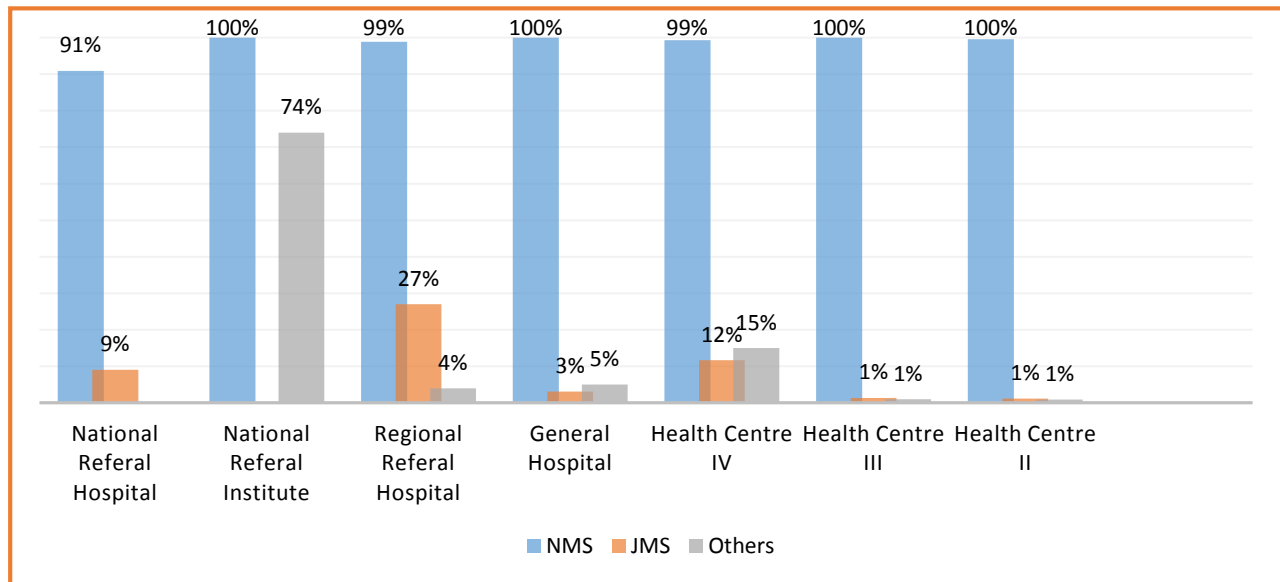
3.1.3 Suppliers of essential medicines and laboratory supplies by region and Segment

By region, Kabarole and Soroti regions received a notable proportion of supplies from Baylor Uganda. Kampala on the other hand, received a notable proportion of supplies from IPs. Mbale, Mbarara and Soroti regions received the biggest proportion of supplies from JMS compared to other regions. By segment, national referral hospitals mainly received supplies from NMS and JMS. The trend was similar to regional referral hospitals.

⁷ These included: Kampala Pharmaceuticals limited, USAID, PACE, HUMAN DIAGNOSTICS UGANDA LIMITED, UNICEF, Medical team international, Other government facilities, ABACUS, World Vision, Plan international, UHMG, WELSHARE, Sustain, GAVE, BOOTS PHARMACY AND MEDIQUIP, Surgipharm, URC, SAFAID MICRO HEMASANTIFIC, SHIFA CHEMISTS, ROYAL PHARMA, Uganda cares, MARISTOPES, Medical Access, World food programme, KODAI, Japgaigo, GENDA HEALTH, IRC, MOTI PHARMACY UGANDA LTD, MEDI LAB, HIWA PROJECT, TOLOTE COMPANY, MRCR, RHITES, UN Store

Segments with the most variety of suppliers are National referral institutes and health Centre IVs. General hospitals, Health center IIIs, and IIs mostly rely on supplies from NMS. Health Centre IIIs and general hospitals received a notable proportion of supplies from Baylor Uganda.

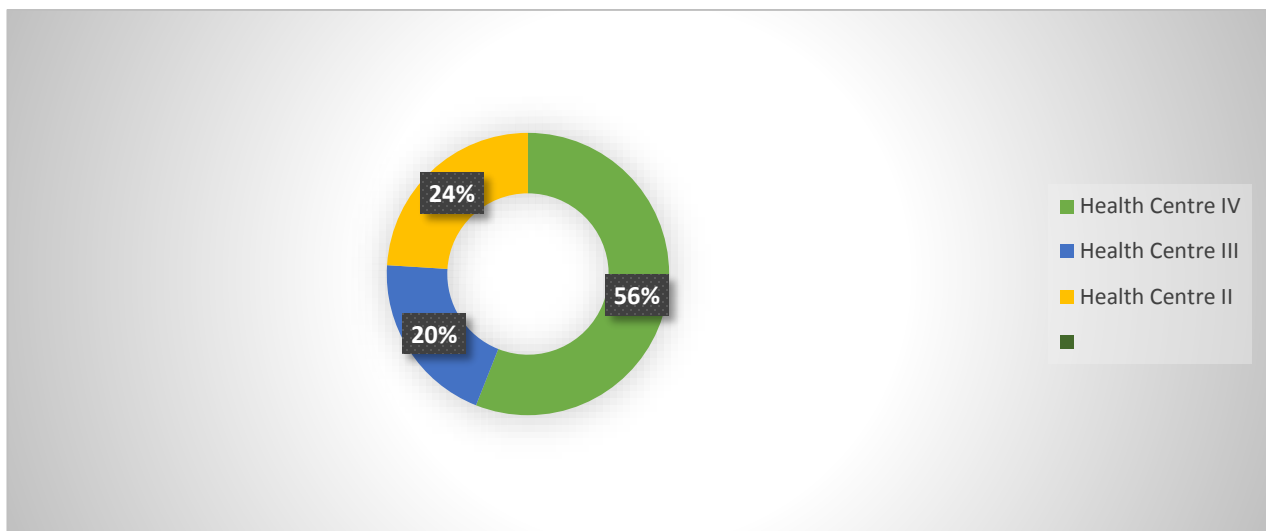
Figure 2: Biggest Suppliers by Segment



3.2 Visit to NMS Entebbe Premises

The findings revealed that only 7% of the 782 participants had visited Entebbe based NMS offices at the time of the survey. This implies that NMS needs to put in more efforts in inspiring and encouraging their clients to visit the National main offices to enhance the relationship between the NMS and her clients. At segment level, the study found that most clients who had ever visited NMS Entebbe offices were from HCIVs (56%). About one quarter (20%) were from Health Centre III and Health Centre II (24%).

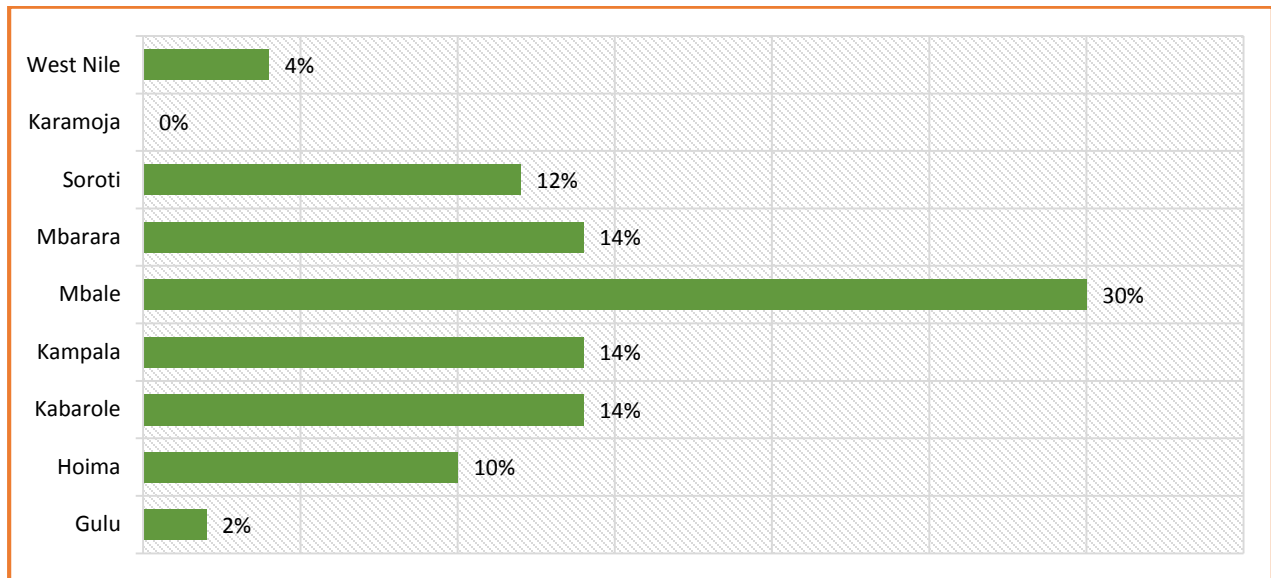
Figure 3: Visit to NMS Entebbe Premises by Segment



3.2.2 Visit to NMS Entebbe Premises by region

Most clients who had ever visited NMS Entebbe offices were from Kampala, Mbale, Mbarara, and Kabarole. Other regions such as Gulu, Hoima and West Nile had significantly less number of clients (less than 10%) who had ever visited NMS head offices in Entebbe. Notably, none of the participants from Karamoja admitted to have ever visited the premises.

Figure 4: Visit to NMS Entebbe Premises by Region



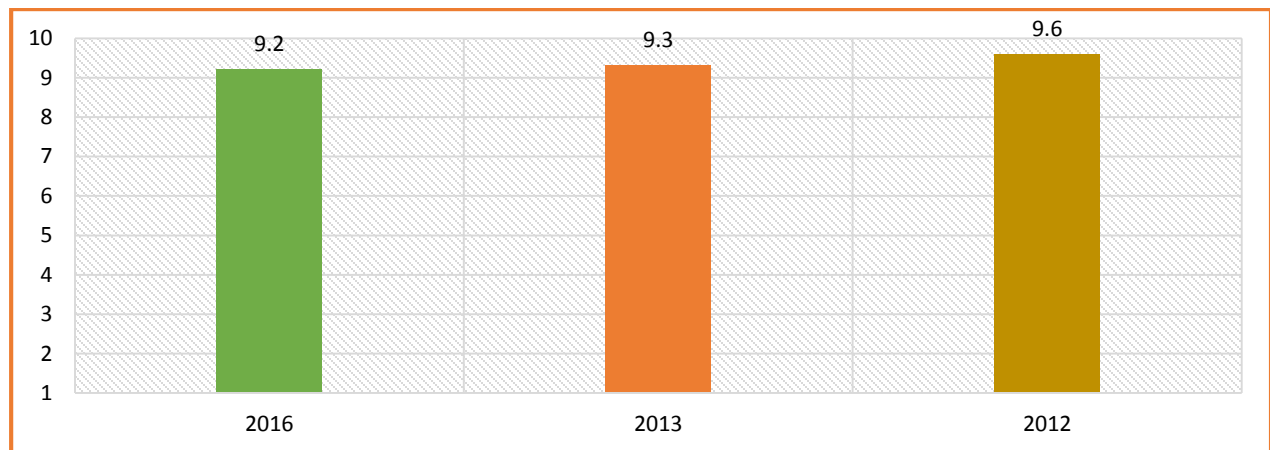
4.0 STORAGE FACILITIES AT HEALTH CENTERS

Introduction: Although storage facilities at health centres are owned and managed by health centers themselves and the district in general, the study also evaluated them. This was intended to ascertain whether NMS drugs and supplies are kept in right conditions to avoid, for instance, extreme temperatures that could spoil the drugs. Of course, people who may not be aware of the fact that NMS is not in charge of storage facilities at health facilities would perhaps inadvertently accuse NMS of not ensuring good and suitable drug conditions. Therefore, this section evaluated storage facilities at health center level.

4.1. Importance attached to storage facilities

On a scale of 1 to 10, overall importance attached to storage facilities was 9.2. This was slightly lower than 9.3 and 9.6 for 2013 and 2012 respectively. None of the attributes got a score less than 9, which can be termed as a commendable.

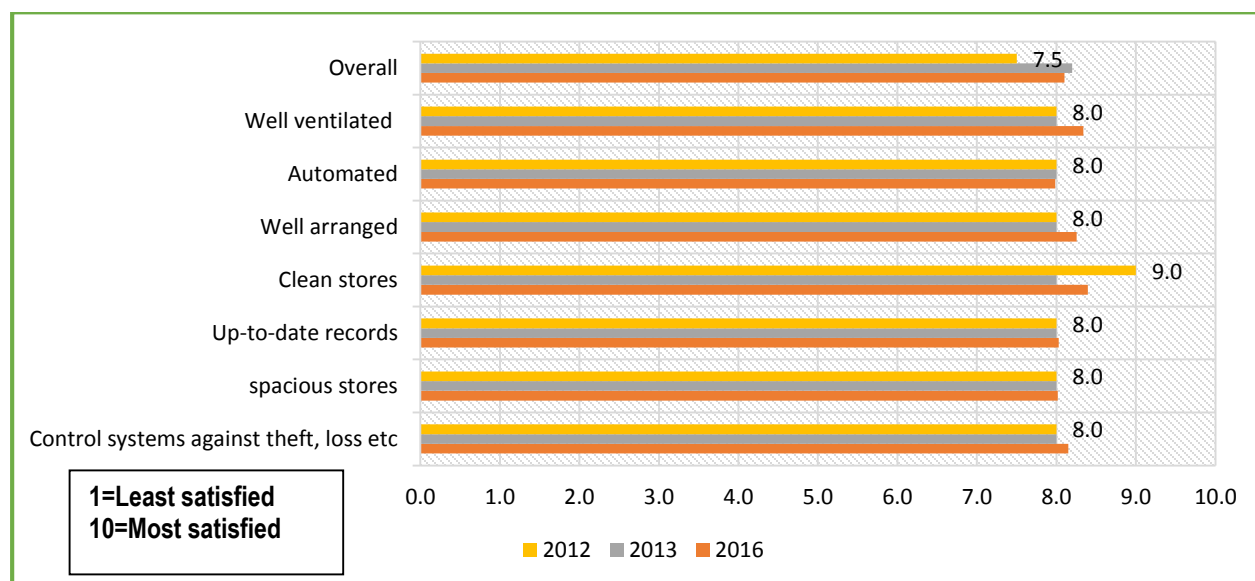
Figure 5: Overall importance for storage facilities



4.2 Level of satisfaction with storage facilities

The findings indicate that the overall satisfaction with storage facilities was 8.1. In comparison with the previous waves, this score is higher than the 2012 score (7.5) but slightly lower than the 2013 score (8.2). None of the attributes was scored less than 8 indicating a commendable performance despite a decline in having clean stores (from 9 to 8.4).

Figure 6: Level of satisfaction by attributes



4.3 Level of satisfaction with storage facilities by segment

At segment level, the satisfaction was oscillating between 8 and 9 save for only two attributes⁸ at NRI with satisfaction of 7.

Table 4: Level of satisfaction with storage facilities by Segment

Attribute	NRH	NRI	RFH	GH	HCIV	HCIII	HCII
Having control systems in place against theft, loss e.tc.	8	7	8	8	9	9	9
Stores are spacious and not congested	8	8	8	8	9	9	9
Having up-to-date records	8	8	8	8	8	9	9
Having clean stores	8	8	8	8	9	9	9
Well managed and arranged	9	9	8	8	9	9	9
Having automated, with up-to-date information	8	7	8	8	8	9	8
Storage facility that is well ventilated and meet medicinal temperature requirements	8	9	8	8	9	9	8
Total average	8	8	8	8	9	9	9

4.5 Level of satisfaction with storage facilities by region

At regional level, the satisfaction ranged between 8 and 9 save for Karamoja and West Nile where the level of satisfaction was 7.

⁸ Having systems in place against safety, loss e.tc. and Having automated systems, with update information

Table 5: Level of satisfaction with storage facilities by region

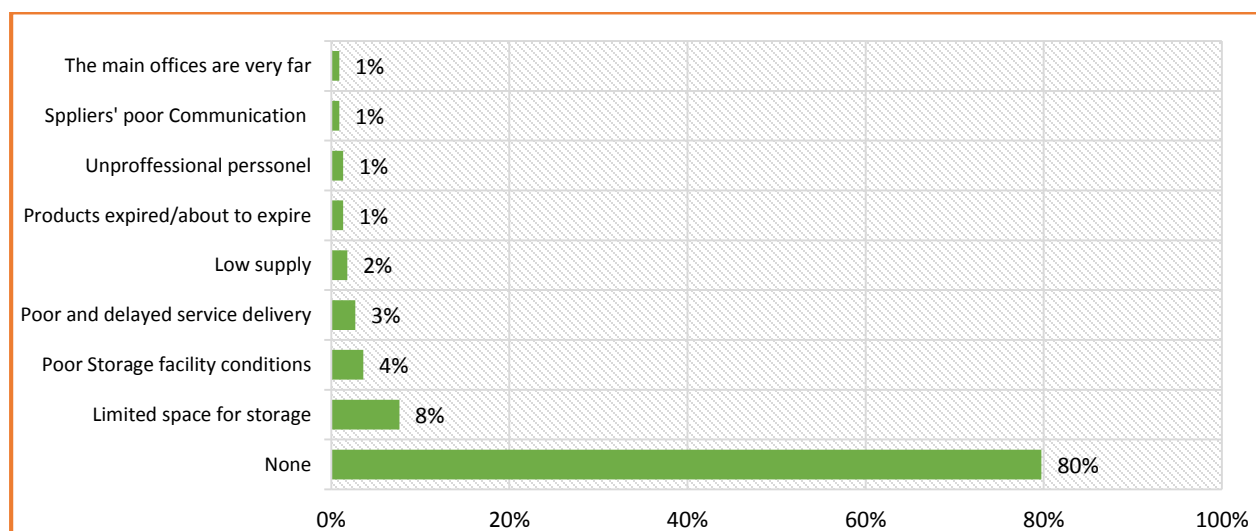
Attributes	Total	Gulu	Hoima	Kabarole	Kampala	Mbale	Mbarara	Soroti	Karamoja	West Nile
Having control systems in place against theft, loss etc	8	8	8	8	8	8	9	8	7	7
Stores are spacious and not congested	8	8	8	9	8	9	9	8	7	7
Having up-to-date records	8	8	8	9	8	9	8	8	7	7
Having clean stores	8	9	8	9	8	9	9	8	7	7
Well managed and arranged	8	8	8	9	8	9	9	8	7	7
Having automated, with up-to-date information	8	8	8	9	8	9	8	8	7	7
Storage facility that is well ventilated and meet medicinal temperature requirements	8	8	8	9	8	9	9	8	7	7
Total Average	8	8	8	9	8	9	9	8	7	7

Key: 1=Least satisfied 10=Most satisfied

4.6 Other issues raised on storage facilities

A Notable proportion (20%) of the survey participants that raised issues about storage facilities cited limited space for storage (8%), poor storage facility conditions (4%), poor service delivery (3%).

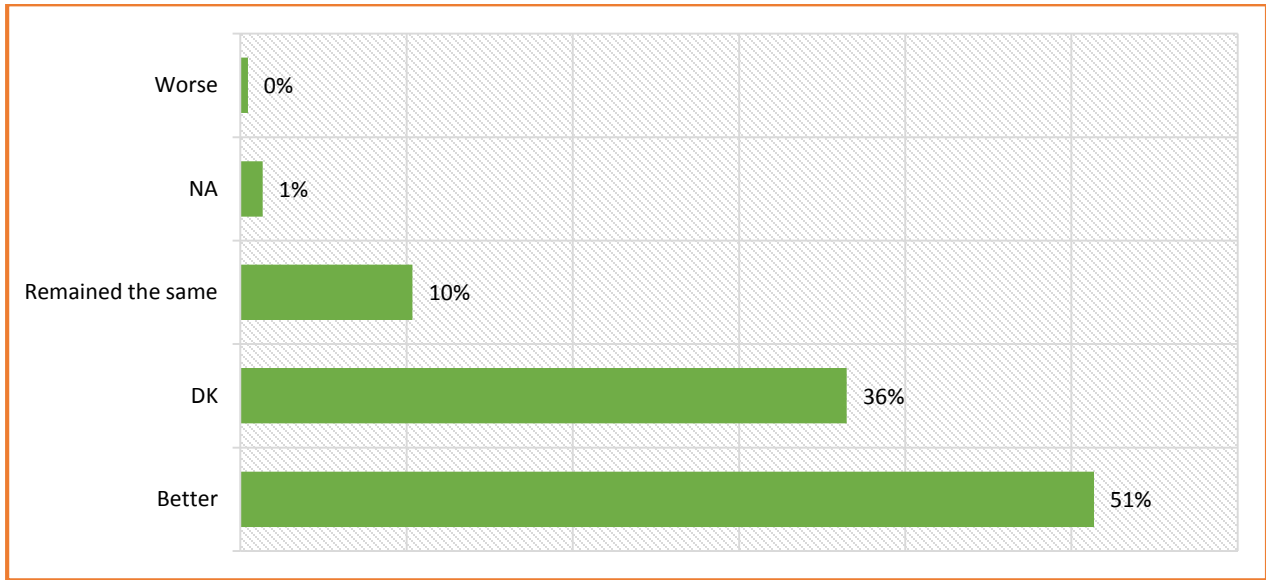
Figure 7: Issues raised about storage facilities



4.7 Changes and improvement in storage facilities since 2012

When asked whether they noticed any changes made in storage facilities since 2012, 51% of the participants noted that storage facilities were better and 10% felt the conditions remained the same. In 2013, a similar percentage (51%) thought that there was positive improvement and 14% felt that the conditions remained the same at the time.

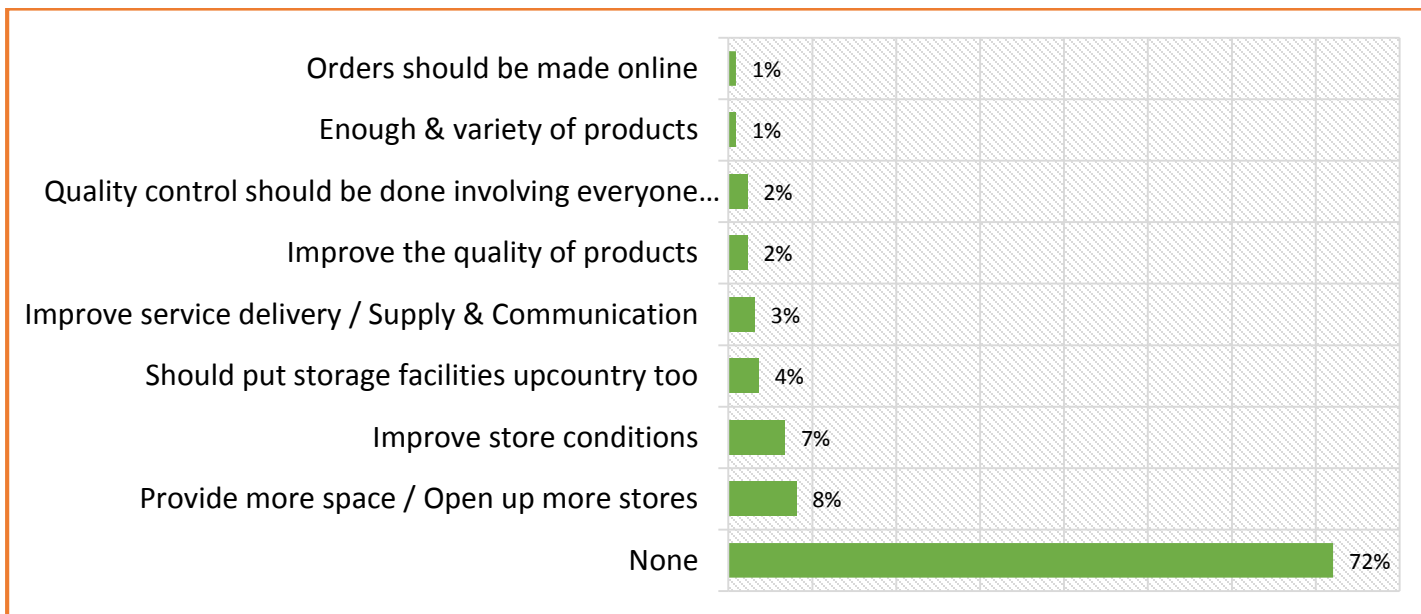
Figure 8: Changes and improvement in storage facilities since 2012



4.8 Suggestions to improve storage facilities

When participants were asked to suggest ways of improving storage facilities, they suggested the need to provide more space or open more stores especially upcountry (8%), improve store conditions (7%), improve service delivery / supply & Communication (3%).

Figure 9: Suggestions to improve storage facilities

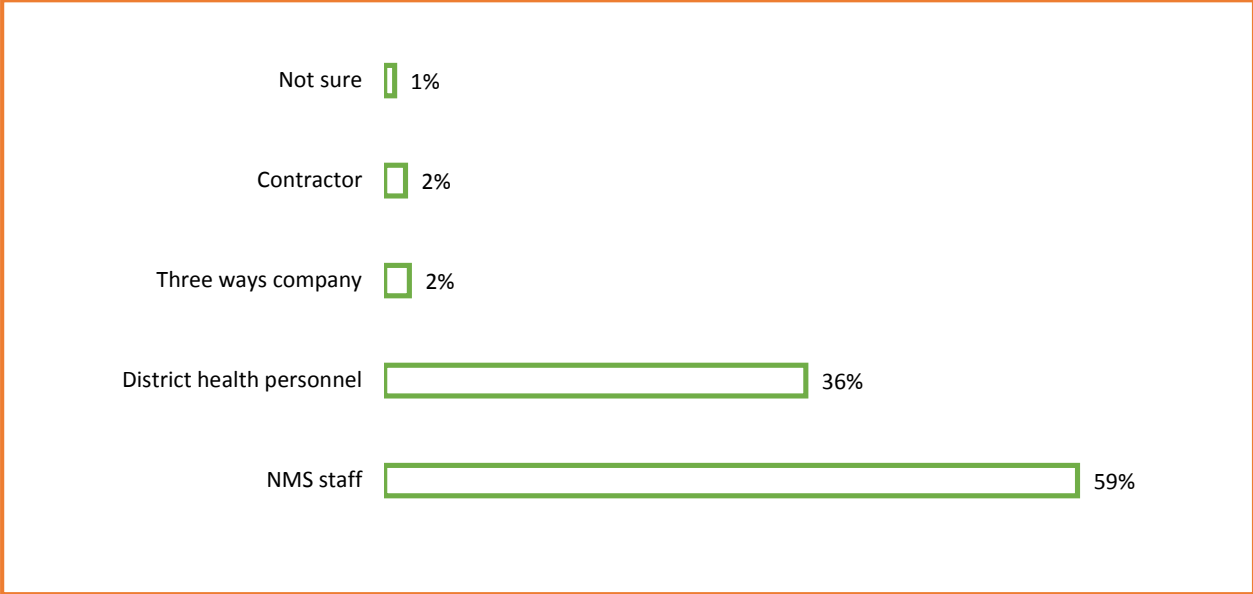


5.0 DISTRIBUTION, DELIVERY AND SUPPLY SYSTEMS

5.1 Distributors of Medicines and Supplies

In relation to the medicines and supplies from NMS, the results indicate that 59% of the participants mentioned NMS staff as the most popular distributors, 36% mentioned district health personnel while 3% mentioned Three ways company:

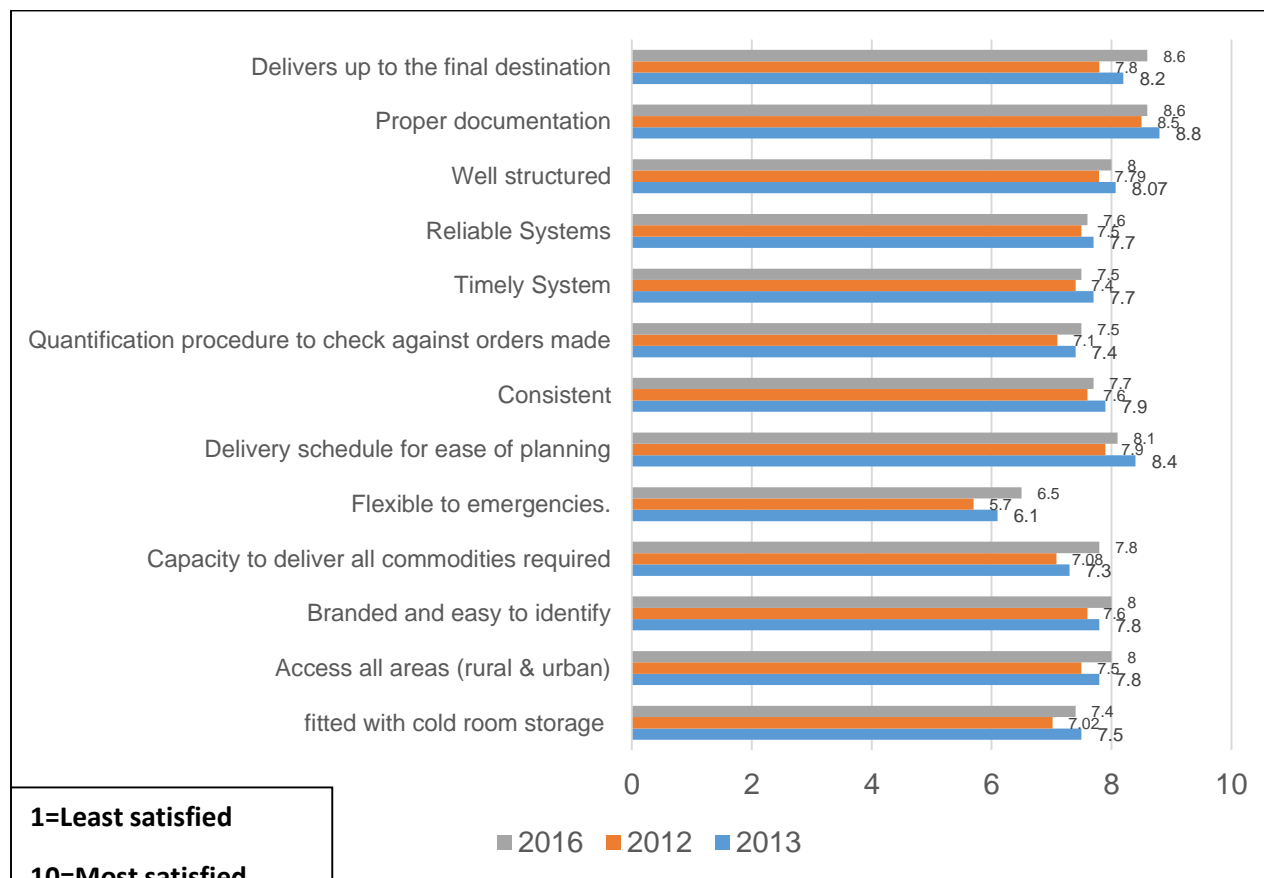
Figure 10: Distributors of Medicines and Supplies



5.2 Participants’ level of satisfaction with distribution, delivery and supply systems

The findings indicate that, in comparison with 2013 and 2012, the level of satisfaction slightly increased in 2016 to 7.8 from 7.4 in 2012 and 7.7 in 2013. NMS has improved on the documentation procedures and delivery schedules. However, as the figure 12 below shows, for all the waves, NMS’ performance has relatively remained low on two attributes: Quantification procedures that check against orders made and flexibility to handle emergencies.

Figure 11: Level of satisfaction with NMS' transport facilities, distribution, delivery & supply systems



5.3 Level of satisfaction with NMS' transport facilities, distribution, delivery & supply systems by segment

As the table below shows, vehicles that are branded came up as the most rated attribute. All other attributes scored 7 and above at all levels of care save for two attributes: transport facilities that are fitted with cold room storage – to fit drug temperature requirements, and a distribution, delivery and supply system that is flexible to accommodate emergencies. Further, across all levels of care save for NRI and RRH which had some attributes scores of 4, 6 and 7, all other levels of care had scores of 7 and above.

Table 6: Level of satisfaction with NMS' transport facilities, distribution, delivery & supply systems by segment

Overall	over all	NR H	N RI	RR H	G H	HC IV	HC III	H CII
Transport facilities that are fitted with cold room storage – to fit drug temperature requirements	7	9	9	8	8	7	7	7
NMS is able to access all areas (rural & urban)	8	8	8	8	8	8	8	8
Vehicles that are branded and easy to identify	8	8	10	8	9	8	8	8

Transport facilities that have a capacity to deliver all commodities required	8	8	8	8	8	8	8	8
A Distribution, delivery and supply system that is flexible to accommodate emergencies.	7	8	4	7	7	6	6	7
A Distribution, delivery and supply systems that has a delivery schedule for ease of planning	8	8	6	8	8	8	8	8
A Distribution, delivery and supply systems that is consistent	8	8	5	8	8	8	8	8
A Distribution, delivery and supply systems that has a quantification procedure to check against orders made	8	8	6	7	8	7	7	8
A Distribution, delivery and supply system that is timely	8	8	5	7	8	8	8	8
A Distribution, delivery and supply systems that is reliable	8	8	4	7	8	8	8	8
A Distribution, delivery and supply systems that is well structured	8	8	8	8	8	8	8	8
A Distribution, delivery and supply systems that has proper documentation	9	8	8	8	9	9	9	9
A Distribution, delivery and supply system that delivers up to the final destination	8	8	9	8	8	8	8	8
Total average	8	8	7	8	8	8	8	8

5.4 Other issues regarding transport, distribution, delivery and NMS supply systems

When asked to raise other issues on other issues regarding transport, distribution, delivery and NMS supply systems, few issues came up as vividly described by one participant:

Box 1: Other issues raised on transport, distribution and delivery

“Transport is okay but the problem is in distribution and supply. The last time I checked they were supplying after two months. The problem we had during that time we would have drug stock outs and we would have to wait. The NMS’ argument was that you need to procure what you think is enough but you cannot estimate sicknesses. At times patients are too many and at times they are not too many and when you have a drug stock out you must wait that was the problem. I do not know whether they can have a system that when you run out of drugs you can call and they supply the drugs” : **Interview with the CAO**

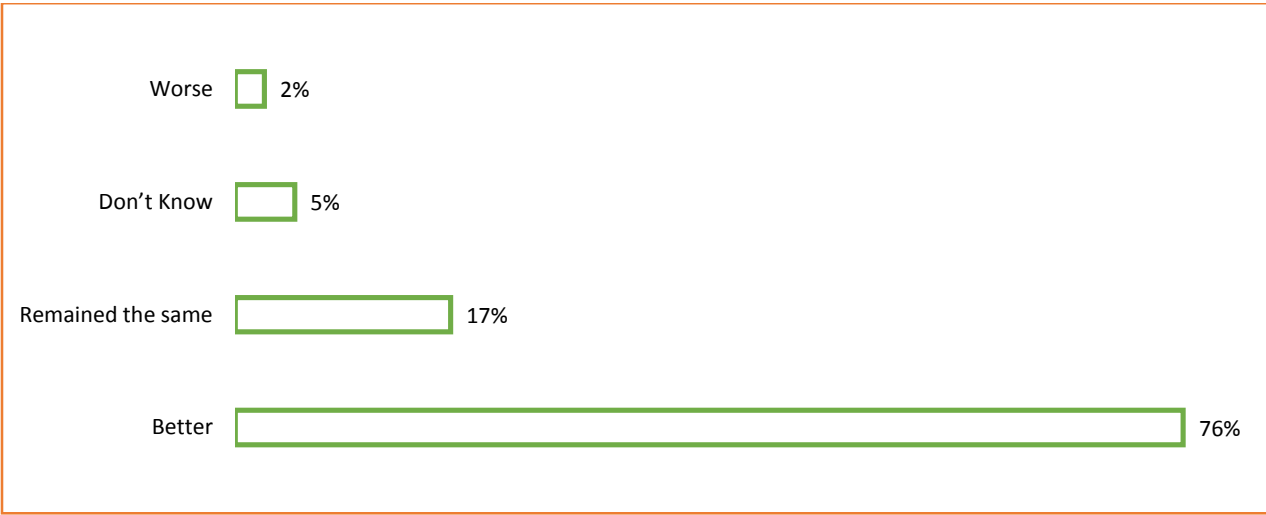
However, some participants sympathized with NMS and thought it was too much work for them. This was aptly expressed by an official from the partner NGOs;

“Am always worried it is almost moving to the smallest village. I think they are over spending, some of these things can be done at the district level where by when NMS drops the drugs at the district centres, then each HCIV could pick and distribute to other lower health centres” **Interview with an official from NMS’ partner NGO**

5.5 Changes and improvement in the distribution, delivery and supply systems since 2012

Regarding changes made in the distribution, delivery and supply systems since 2012, the findings indicated that 76% felt the situation had improved/bettered, 17% felt that the situation remained the same, while 1% admitted that the situation had become worse at the time of the study. These findings showed great improvement. For instance, in 2013, only 68% felt that the situation had bettered or improved.

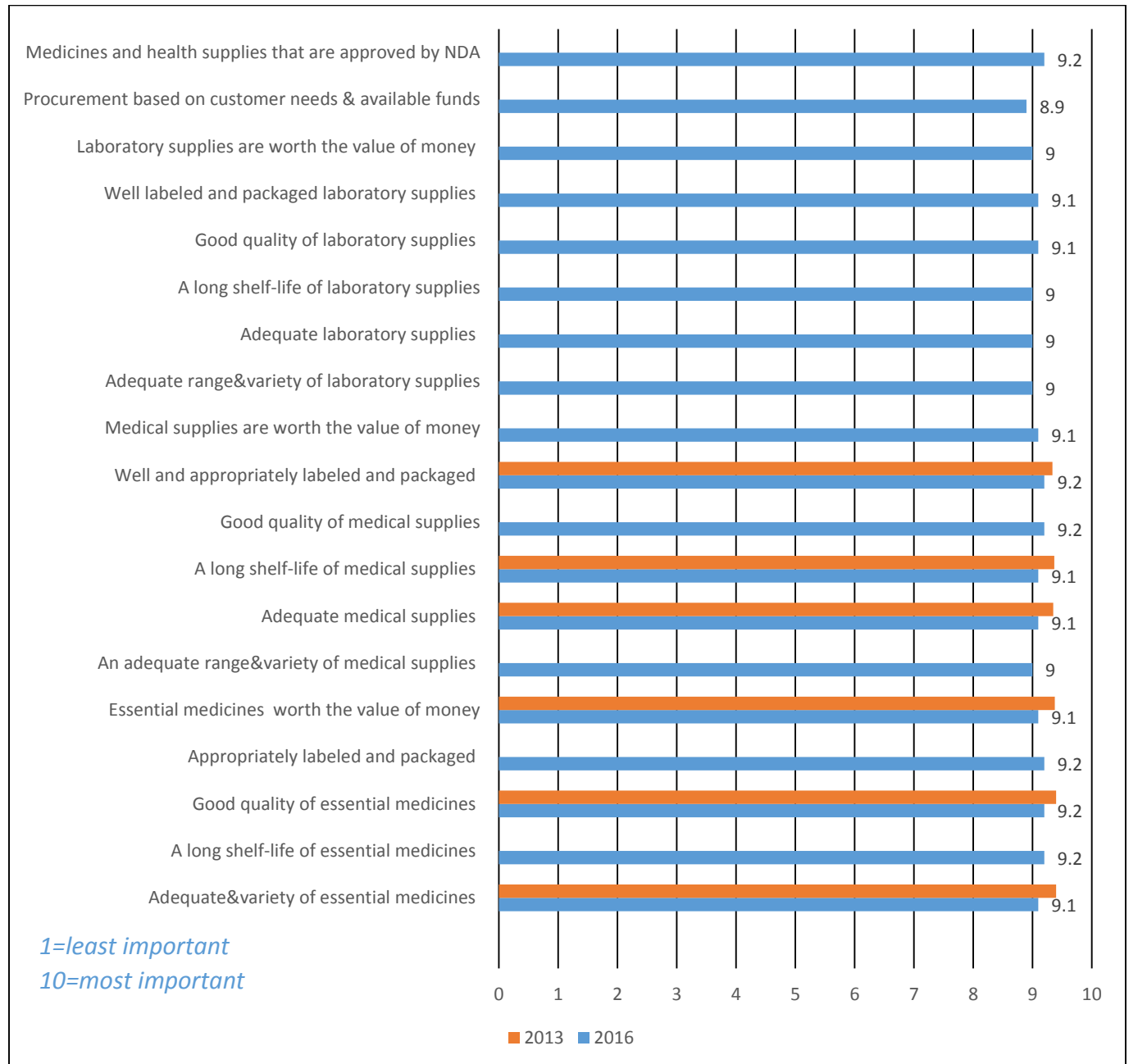
Figure 12: Changes and improvement in the distribution, delivery and supply systems since 2012



6.0 RANGE, QUANTITY, QUALITY, SHELF-LIFE AND PACKAGING OF COMMODITIES

Overall importance attached to the range, quantity, quality, shelf-life and packaging of essential medicines and health and laboratory supplies was 9.1 out of 10. This was slight decrease from 2013 (9.4) and 2014 (9.5).

Figure 13: Range, quantity, quality, shelf-life and packaging of essential medicines and laboratory supplies



6.1 Level of Importance attached to Range, quantity, quality, shelf-life and packaging EMHLS

NRIs scored NMS exceptionally well with the maximum score of 10 most attributes. All other levels of care also scored well with an average of 9 on most attributes. The overall average importance was 9 for all levels of care and attributes.

Table 7: Importance attached to Range, quantity, quality, shelf-life and packaging EMHLS by segment

	NR	N	RR	G	HC	HC	HC	HC
	H	RI	H	H	IV	III	I	I
An adequate range/variety of essential medicines that are stocked and supplied	9	9	10	9	9	9	9	9
Adequate essential medicines that are stocked and supplied	9	9	10	9	9	9	9	9
A long shelf-life of essential medicines that are stocked and supplied	9	9	10	9	9	9	9	9
Good quality of essential medicines that are stocked and supplied	9	9	10	9	9	9	9	9
Well and appropriately labeled and packaged essential medicines that are stoked and supplied	9	9	9	9	9	9	9	9
The essential medicines supplied are worth the value of money paid	9	9	10	9	9	9	9	9
An adequate range/variety of medical supplies that are stocked and supplied	9	9	10	9	9	9	9	9
Adequate medical supplies that are stocked and supplied	9	9	10	9	9	9	9	9
A long shelf-life of medical supplies that are stocked and supplied	9	9	10	9	9	9	9	9
Good quality of medical supplies that are stocked and supplied	9	9	10	9	9	9	9	9
Well and appropriately labeled and packaged medical supplies that are stoked and supplied	9	9	10	9	9	9	9	9
The medical supplies supplied are worth the value of money paid	9	9	10	9	9	9	9	9
An adequate range/variety of laboratory supplies that are stocked and supplied	9	8	10	9	9	9	9	9
Adequate laboratory supplies that are stocked and supplied	9	9	9	9	9	9	9	9
A long shelf-life of laboratory supplies that are stocked and supplied	9	9	10	9	9	9	9	9
Good quality of laboratory supplies that are stocked and supplied	9	9	10	9	9	9	9	9
Well and appropriately labeled and packaged laboratory supplies that are stoked and supplied	9	9	10	9	9	9	9	9
The laboratory supplies supplied are worth the value of money paid	9	9	10	9	9	9	9	9
Procurement that is prioritized based on national essentials drugs list versus customer needs and available funds	9	9	5	9	9	9	9	9
Essential medicines and health supplies that are approved by the Drug Regulations Board (National Drug Authority)	9	9	10	9	9	9	9	9
Total averages	9	9	9	9	9	9	9	9

6.2 Regional level of importance attached to range, quantity, quality, shelf-life and packaging of EMHLS

Regions such as Mbarara, Gulu, Kabarole attach maximum importance of 10. Hoima, Kampala, Soroti and Mbale attach slightly lower score, 9. On the other hand, regions such as Karamoja and West Nile attach lowest score, 8, which is still relatively a good score vis-à-vis the overall score of 9.

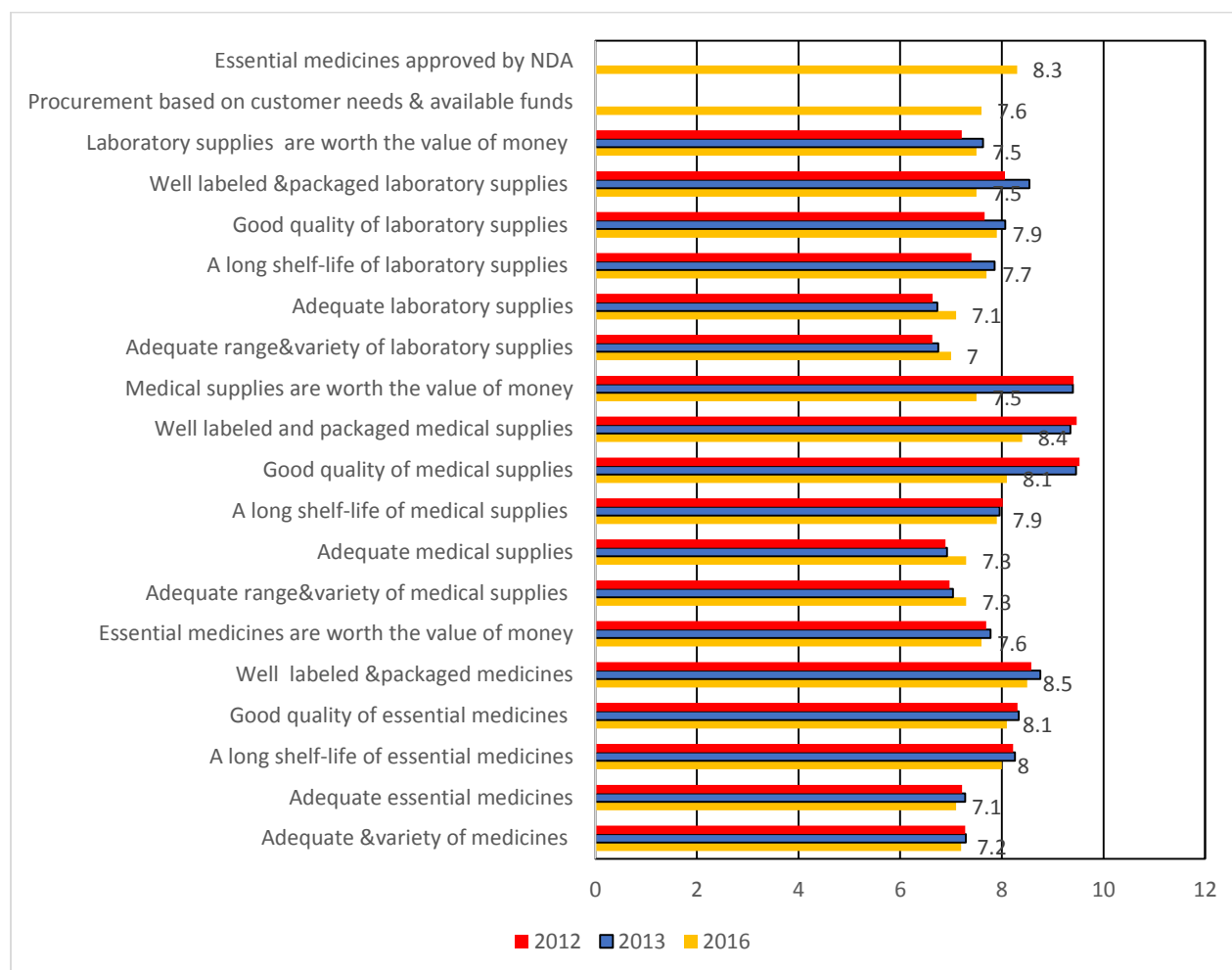
Table 8: Regional level of importance attached to range, quantity, quality, shelf-life and packaging of EMHLS by region

Region	Total	Gulu	Holma	Kabarole	Kampala	Mbale	Mbarara	Soroti	Karamoja	West Nile
An adequate range/variety of essential medicines that are stocked and supplied	9	9	10	10	9	9	10	9	9	8
Adequate essential medicines that are stocked and supplied	9	10	9	10	9	9	10	9	9	8
A long shelf-life of essential medicines that are stocked and supplied	9	10	10	10	9	9	10	9	9	8
Good quality of essential medicines that are stocked and supplied	9	10	9	10	9	9	10	9	9	8
Well and appropriately labeled and packaged essential medicines that are stoked and supplied	9	10	9	10	9	9	10	9	8	8
The essential medicines supplied are worth the value of money paid	9	10	9	10	9	9	10	9	8	8
An adequate range/variety of medical supplies that are stocked and supplied	9	9	9	10	9	9	10	9	8	8
Adequate medical supplies that are stocked and supplied	9	10	9	10	9	9	10	9	8	7
A long shelf-life of medical supplies that are stocked and supplied	9	10	9	10	9	9	10	9	8	8
Good quality of medical supplies that are stocked and supplied	9	10	9	10	9	9	10	9	8	8
Well and appropriately labeled and packaged medical supplies that are stoked and supplied	9	10	9	10	9	9	10	9	8	8
The medical supplies supplied are worth the value of money paid	9	10	9	10	9	9	10	9	8	8
An adequate range/variety of laboratory supplies that are stocked and supplied	9	9	9	10	9	9	10	9	8	8
Adequate laboratory supplies that are stocked and supplied	9	9	9	10	9	9	10	9	8	8
A long shelf-life of laboratory supplies that are stocked and supplied	9	9	9	10	9	9	10	9	8	8
Good quality of laboratory supplies that are stocked and supplied	9	9	9	10	9	9	10	9	8	8
Well and appropriately labeled and packaged laboratory supplies that are stoked and supplied	9	10	9	10	9	9	10	9	8	8
The laboratory supplies supplied are worth the value of money paid	9	9	9	10	9	9	10	9	8	8
Procurement that is prioritized based on national essentials drugs list versus customer needs and available funds	9	9	9	10	8	9	9	9	8	7
Essential medicines and health supplies that are approved by the Drug Regulations Board (National Drug Authority)	9	10	10	10	9	9	10	9	8	7
Total averages	9	10	9	10	9	9	10	9	8	8

6.3 Level of satisfaction with essential medicines and laboratory supplies

The results revealed that the overall satisfaction with the range, quantity, quality, shelf-life and packaging of essential medicines and health and laboratory supplies was 7.7. As indicated in the graph below, there was a very slight increase from 7.6 and 7.4 for 2013 and 2012 waves respectively.

Figure 14: Level of satisfaction with essential medicines and laboratory



6.4 Level of satisfaction with essential medicines and laboratory supplies by segment

At segment level, the level of satisfaction was higher (score of 8) at lower levels such as HC IIIs, HCIIIs and IVs. At higher levels, such as hospitals, RRHs, NRHs and NRIs, the satisfaction was slightly lower; at 7 - slightly lower than the overall average of 8.

Table 9: Level of satisfaction with essential medicines and laboratory supplies by segment

Attributes	Total	NRI	RRH	GH	HC IV	HCIII	HCII
An adequate range/variety of essential medicines that are stocked and supplied	7	6	7	7	7	7	7

Adequate essential medicines that are stocked and supplied	7	7	7	7	7	7	7
A long shelf-life of essential medicines that are stocked and supplied	8	6	8	8	8	8	8
Good quality of essential medicines that are stocked and supplied	8	7	8	8	8	8	8
Well and appropriately labeled and packaged essential medicines that are stoked and supplied	9	8	8	8	9	9	9
The essential medicines supplied are worth the value of money paid	8	7	7	7	7	8	8
An adequate range/variety of medical supplies that are stocked and supplied	7	6	7	7	7	7	8
Adequate medical supplies that are stocked and supplied	7	6	7	7	7	7	8
A long shelf-life of medical supplies that are stocked and supplied	8	6	7	8	8	8	8
Good quality of medical supplies that are stocked and supplied	8	6	7	8	8	8	8
Well and appropriately labeled and packaged medical supplies that are stoked and supplied	8	8	8	9	8	8	9
The medical supplies supplied are worth the value of money paid	8	7	7	7	7	8	8
An adequate range/variety of laboratory supplies that are stocked and supplied	7	5	7	7	7	7	7
Adequate laboratory supplies that are stocked and supplied	7	6	6	7	7	7	7
A long shelf-life of laboratory supplies that are stocked and supplied	8	8	7	8	8	7	8
Good quality of laboratory supplies that are stocked and supplied	8	7	8	8	8	8	8
Well and appropriately labeled and packaged laboratory supplies that are stoked and supplied	8	9	8	8	8	8	8
The laboratory supplies supplied are worth the value of money paid	8	7	7	7	8	8	8
Procurement that is prioritized based on national essentials drugs list versus customer needs and available funds	8	4	7	7	8	8	8
Essential medicines and health supplies that are approved by the Drug Regulations Board (National Drug Authority)	8	9	8	8	8	8	9
Total Average	8	7	7	7	8	8	8

6.5 Issues raised pertaining to range, quantity, quality, shelf-life and packaging of EMHLS

When participants were asked to raise any issues or concerns pertaining to range, quantity, quality, shelf-life and packaging of essential medicines and health and laboratory supplies, the following issues were raised:

- It was reported that sometimes NMS staff blame the wrong people. For example, NMS staff should be able to stand their ground and tell the public that the drugs are not enough because of underfunding from the government instead of arguing that the health facilities do not make orders. However, NMS personnel insisted that some health facilities make orders a bit late which explains late response from NMS.
- Key informants noted that medicines supplied to the district annually are less than the money that is allocated to the HFs. They stressed that when NMS supplies medicines, there always remain a balance of the money at the end of each financial year and that money is clients' money; the money reportedly belongs to the HF and the HF should ideally use it to purchase medicines they require. Clients therefore

emphasized that NMS should either supply them with drugs worth the money allocated to the district or give back the balance of money to the HF.⁹

- Participants asserted that medical equipment including laboratory equipment like micro scopes were not being supplied in the desired quantities. The standard kit should be reviewed to match with the growing population. However, other participants recognized the cause of the problem:

Box 2: Issues raised pertaining to range, quantity, quality, shelf-life and packaging of EMHLS

“it’s a national problem and it’s about the money they are given because every facility is allocated some money but the drugs are not enough. Surely the quantity is low but that is the budget issue because before they supply, we are normally invited for a planning meeting and they show us the money allocated to each facility”: **Interview with DHO**

- Participants cited the inconsistencies in packaging. It was asserted that sometimes boxes show different drugs from what is packed inside. Participants argued that when NMS delivers drugs to the district they bring them in boxes and they do not allow the staff to check what is in the boxes immediately to ensure that they have received what they ordered for and give immediate feedback to NMS. As a result, cases of NMS failing to deliver per orders have occurred. However, NMS personnel refuted the allegation that they do not allow recipients to check boxes. They argued that it is in their interest to ensure that the whole process is transparent and to satisfy clients.
- Participants also argued that some drugs and reagents require refrigeration but - NMS does not provide for that both at the district and even at the delivery points. To countermeasure against spoilage, the health personnel put such reagents in freezers to cool them and thereafter, the vaccines are put in vaccine carriers. This however is not convenient and at the end of it all some vaccines allegedly get spoiled.¹⁰

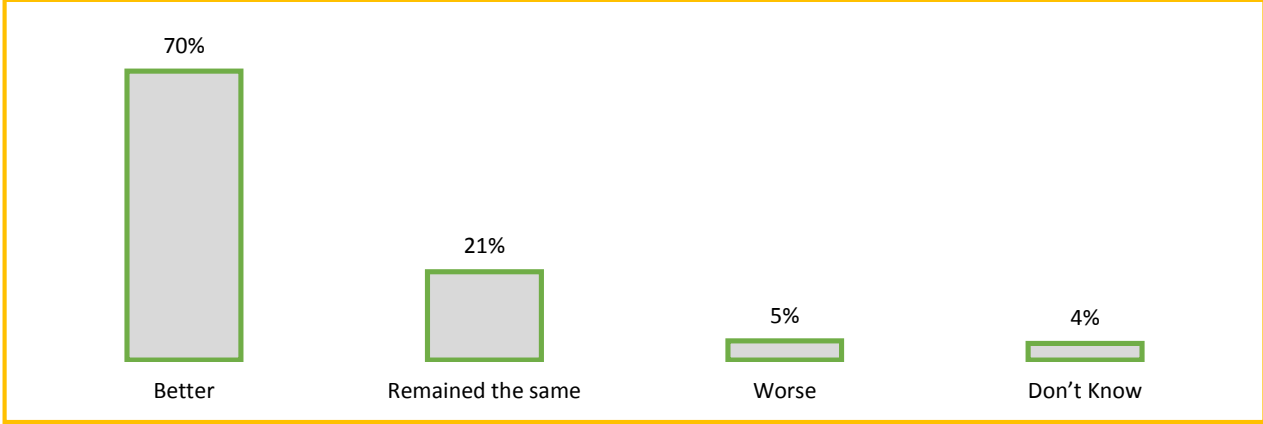
6.7 Changes made in the range, quantity, quality, shelf-life and packaging of EMHLS since 2012

In 2013, there was 69% improvement/betterment on the range, quantity, quality, shelf-life and packaging of commodities from NMS from 2012. However, in 2016, the percentage of participants who felt there was improvement increased to 70% as shown by the graph below.

⁹ Interview with the CAO

¹⁰ Interview with DHO, 13/10/2016

Figure 15: Changes made in the range, quantity, quality, shelf-life and packaging of essential medicines and health and laboratory supplies since 2012

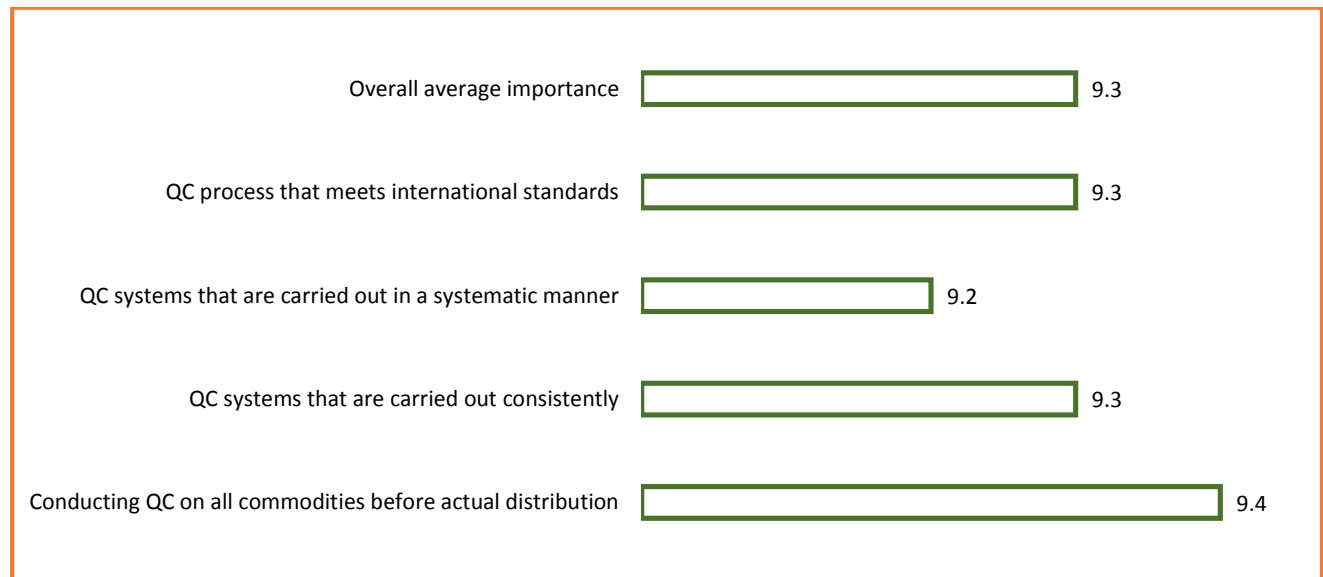


7.0 QUALITY CONTROL SYSTEMS

7.1 Level of importance attached to NMS' QC processes

Participants were asked to rate the level of importance attached to quality control processes in supply and distribution of essential medicines and health and laboratory supplies. The findings revealed that the overall average importance was 9.3 as indicated by the figure 15 below:

Figure 16: Level of importance attached to NMS' quality control processes



7.2 Level of importance attached to NMS' QC processes by segment

NRHs, NRI and GHs scored the maximum rating, 10 for all attributes. All other levels of health centers scored a rating of 9, which was also the overall score for all attributes and for all levels of care.

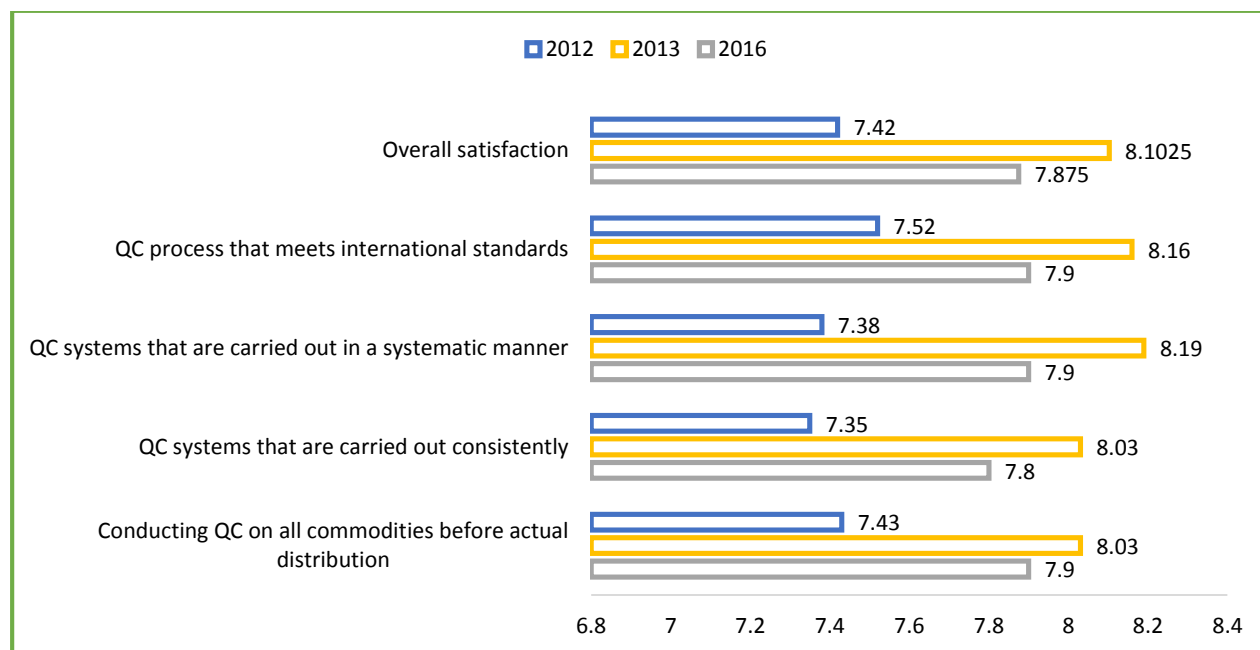
Table 10: Level of importance with QC processes by segment

Attribute	Overall average	NRH	NRI	RRH	GH	HCIV	HCIII	HCII
Conducting quality control on all commodities before actual distribution	9	10	10	9	10	10	9	9
Quality control systems that are carried out consistently	9	10	10	9	10	9	9	9
Quality control systems that are carried out in a systematic manner	9	10	10	9	10	9	9	9
Quality control process that meets international standards	9	10	10	9	10	9	9	9
Total average	9	10	10	9	10	9	9	9

7.3 Level of satisfaction with NMS' QC processes by attribute

Participants were asked to rate their level of satisfaction with quality control processes of NMS. The results indicate that in 2016, the overall satisfaction was 7.9. In 2013 and 2012, the overall satisfaction with Quality control systems was 8.05 and 7.42 respectively.

Figure 17: Level of satisfaction with NMS' QC processes



7.4 Level of satisfaction with QC by segment

As the table below shows, all levels of care scored 8 save for NRH and NRI which scored 7 which was slightly lower than the overall score of 8.

Table 11: Level of satisfaction by segment

	Total Average	NRH	NRI	RRH	GH	HCIV	HCIII	HCII
Conducting quality control on all commodities before actual distribution	8	8	7	7	8	8	8	8
Quality control systems that are carried out consistently	8	8	8	7	8	8	8	8
Quality control systems that are carried out in a systematic manner	8	8	9	7	8	8	8	8
Quality control process that meets international standards	8	7	7	7	8	8	8	8
Total Average	8	7	8	7	8	8	8	8

7.5 Level of Satisfaction with QC by region

Satisfaction with quality control processes of NMS was further disaggregated by region and the results indicate that Hoima, Kalomoja and West Nile had lower level of satisfaction (7.0) vis-à-vis other regions with 8.0.

Table 12: Level of Satisfaction with QC by region

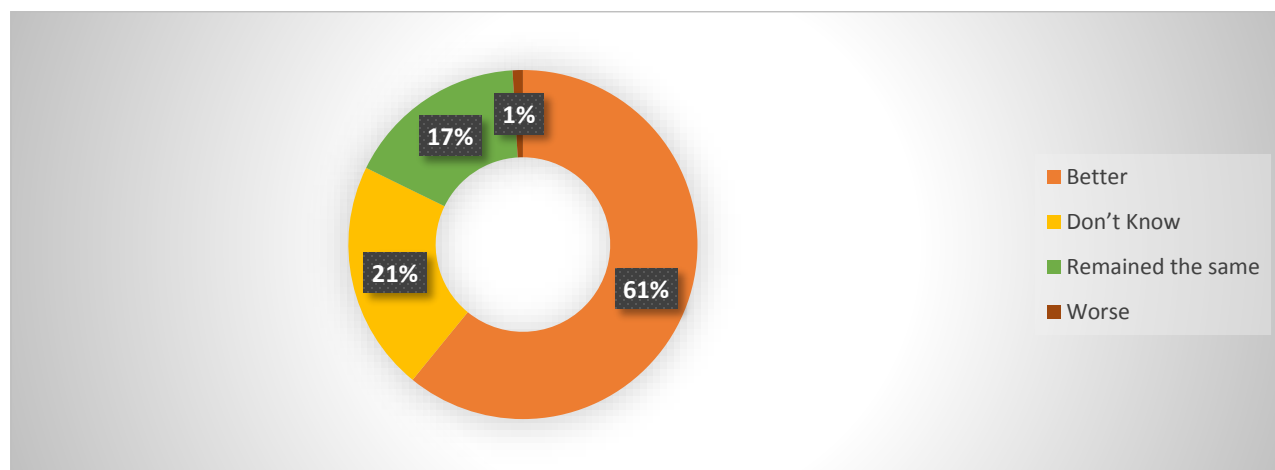
Attributes (Level of Satisfaction by region)	Total Averages	Gulu	Holma	Kabarole	Kampala	Mbale	Mbarara	Soroti	Karamoja	West Nile
Conducting quality control on all commodities before actual distribution	8	8	7	8	8	9	8	8	8	7
Quality control systems that are carried out consistently	8	8	7	8	8	8	8	8	7	7
Quality control systems that are carried out in a systematic manner	8	8	7	8	8	8	8	8	7	7
Quality control process that meets international standards	8	8	7	8	7	9	9	8	7	7
Total Averages	8	8	7	8	8	8	8	8	7	7

7.6 Changes made in quality control systems since 2012

Participants were asked to mention any changes made, if any, in quality control systems since 2012. The results indicated the following:

- Participants revealed that at the time of study, unlike before, vaccine store were well equipped to handle the cold chain items
- Participants also revealed that unlike before, there was a lot of checking, a lot of supervision and that sent a message; not to play around with drugs and go away with it. Many drug shops had been closed which was a sign of increased monitoring.
- Participants also acknowledged the introduction of monitoring tools like fridge’s which monitor temperatures, especially for vaccines. This, reportedly works like a phone and is placed in a fridge to record changes on a vaccine.

Figure 18: Changes made in QC since 2012



7.7 Handlers of quality control processes

HF's believe that NMS should continue handling quality control processes or it should be handled by National Drug Authority (NDA) or both NMS and NDA. The results indicate that about 60% of the participants were in favour of both NDA and NMS jointly handling quality control processes. Only 23% reasoned that NMS should solely handle quality control processes, and the fewest, 17%, of participants felt that NDA should solely handle the quality control processes as indicated below.

Figure 18: Handlers of quality control processes

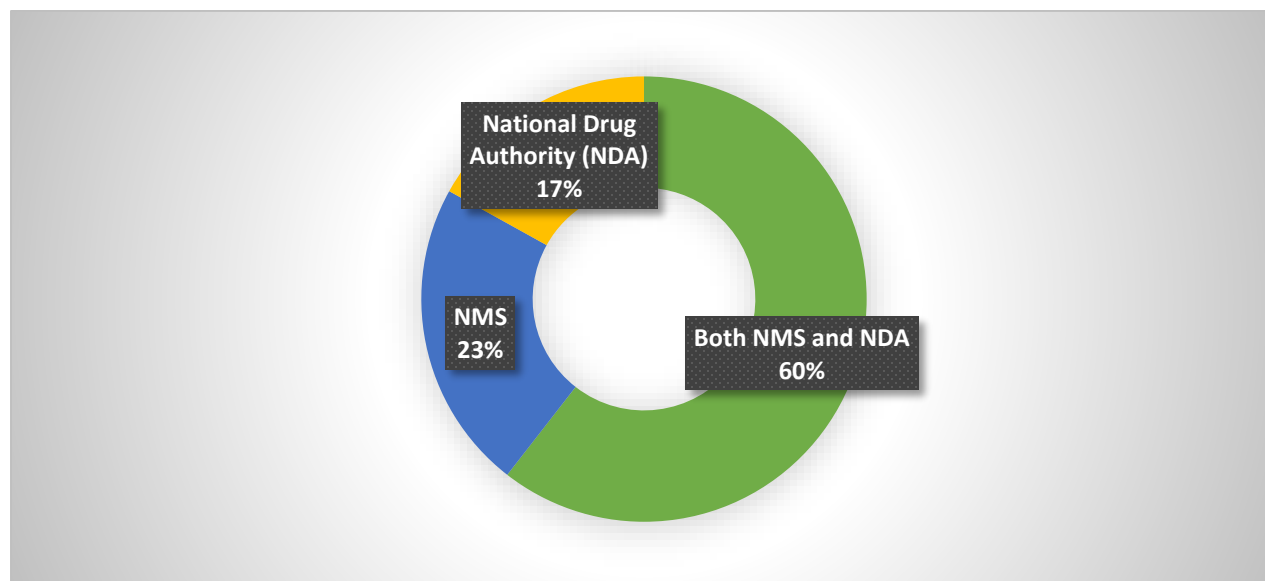


Table 13: Reasons why NMS, NDA or both should do the quality control

Reasons why NMS, NDA or both should do the quality control		
Both	NMS	NDA
Both can collaborate to reduce loop holes	It is the one responsible for distributing drugs	Too many players in the field will become expensive for government to handle
To improve quality of work	They are more professional in handling those issues	There should be a chain for feedback to the customers
Collaboration leads to good quality services	Because it is an independent autonomous body which wouldn't tolerate gaps	
For better checks and balances		
They are both strongly supported by the government		
They have experience in doing quality control		
Quality control is done well by skilled team from both bodies		
Collaboration enables transparency		
Collaboration ensures comparison		
Collaboration ensures effectiveness		
Collaboration reduces biases		

7.8 Specific Issues raised regarding quality control

Participants were further asked to raise any specific issues regarding NMS' quality control systems. The following issues were raised:

- They should introduce delivery based check lists by sending one of their people to have evidence based delivery system.
- Quality control was allegedly recommendable. It was reported that before NMS supplies medicines, they should ensure that there are good storage systems. Most of the health center IIIs and HCIVs reportedly had good storage for drugs.
- Participants also cautioned NMS to take care when procuring drugs because there are allegedly fake companies and medicines on the market
- Participants were also concerned with the differences in prices of the same drugs. It was reported that some pharmacies sell drugs say from Germany expensively and others made by other countries cheaply. Participants were wondering whether that also implies a difference in the quality and strength of the drugs. Such drugs are expected to cure the same diseases, so participants were wondering whether NMS considers process or origins/companies, that make drugs during the procurement processes.
- Other participants reported that at times medicines are delivered, and after some months, they get communication that the medicine batch number X and Y should be withdrawn. And yet, withdrawing medicines which have already been distributed up to health facilities is not easy. Moreover, participants reported that there was no serious follow up on the patients who already used the faulty medicine to reduce any potential harmful impact on their health.
- Participants also reported that they use a tool called VVM which indicates whether a vaccine is still potent or whether it has lost potency. So, they just implement quality control using the already provided instructions but do not subject drugs to any quality control tests.
- The issue of quality control assurance is not primarily an NMS function but they can contribute to the overall quality control assurance for all the commodities in the country. Therefore, cooperating with NDA and other monitoring agencies or departments is the right strategy
- Participants also noted that if the drug is expiring in few weeks or months, it should not be supplied because patients may be given drugs that are already in danger zone.

8.0 PERSONALITY AND SKILLS OF NMS STAFF

8.1 Importance and satisfaction with the Personality and Skills of NMS Staff

Personality and skill measure based on honest (integrity), professionalism, respect for customers, knowledge of customers, friendliness, and smartness. The overall level of importance of personality and skills of the NMS Staff was 9.1, slightly lower than 2013 and 2012 whose level of importance was 9.4 and 9.5 out of 10 respectively. The overall level of satisfaction of personality and skills of the NMS Staff was 8.0 compared to 7.9 in 2013 and 7.7 in 2012. These figures imply that the level of overall satisfaction has largely invariably remained the same. As the table below shows, almost all attributes scored the same score on the level of importance in 2016.

Table 14: Importance and satisfaction with the Personality and Skills of NMS Staff

Attributes	Importance			Satisfaction		
	2016	2013	2012	2016	2013	2012
Staff that is honest (integrity)	9.3	9.43	9.5	8.2	8.22	8
Staff that is empathetic	9.1	9.25		8.1	7.98	
Staff that understands customer's needs and are knowledgeable	9.2	9.42		8.1	8.08	
Staff that is friendly	9.1	9.32	9.4	8.3	8.3	8.2
Staff that respect customers	9.2	9.41	9.5	8.3	8.28	8.2
Staff that is courteous	9	9.31		8.1	8.09	
Staff that is patient	9.1	9.39		7.9	7.57	
Staff that is smart	9	9.27	9.3	8.3	8.17	8.2
Staff that is time conscious	9.1	9.43	9.5	7.9	7.7	7.4
Staff that is adequate in number	9	9.36	9.4	7.6	7.47	7.1
Staff that communicates frequently on status of orders placed	9.1	9.48	9.5	7.5	7.24	6.7
Staff that gives correct information always and is well informed	9.1	9.53		8	7.88	
Staff that is always reliable and available when needed	9.1	9.51	9.5	7.7	7.49	7.1
Staff that is flexible to accommodate customer needs	9.1	9.48	9.5	7.6	7.51	7.2
Staff that is quick and efficient	9.1	9.45		7.9	7.8	
Staff that is professional	9.2			8.3		
Staff that listens to customers' requests and complaints	9.1	9.56		7.9	8.07	
Staff that gives advice in case of problems	9.1			7.9		

8.2 Level of satisfaction with the Personality and Skills of NMS Staff by segment

As table below shows, the overall satisfaction of personality and skills of the NMS Staff was 8 for all levels of care save for NRI which scored them 7.

Table 15: Level of satisfaction with the Personality and Skills of NMS Staff by segment

Attributes	Total Averages	NRH	NRI	RRH	GH	HCV	HCI	HCI

Staff that is honest (integrity)	8	8	7	8	8	8	8	8
Staff that is empathetic	8	8	8	8	8	8	8	8
Staff that understands customer's needs and are knowledgeable	8	8	8	8	8	8	8	8
Staff that is friendly	8	8	7	8	8	8	8	9
Staff that respect customers	8	8	8	8	8	8	8	8
Staff that is courteous	8	8	8	8	8	8	8	8
Staff that is patient	8	8	8	8	8	8	8	8
Staff that is smart	8	8	8	8	8	8	8	9
Staff that is time conscious	8	8	8	8	8	8	8	8
Staff that is adequate in number	8	8	7	7	7	8	8	8
Staff that communicates frequently on status of orders placed	8	8	6	7	8	8	7	8
Staff that gives correct information always and is well informed	8	8	6	8	8	8	8	8
Staff that is always reliable and available when needed	8	8	7	8	8	8	8	8
Staff that is flexible to accommodate customer needs	8	8	8	7	8	8	7	8
Staff that is quick and efficient	8	8	6	8	8	8	8	8
Staff that is professional	8	8	8	8	8	8	8	8
Staff that listens to customers' requests and complaints	8	8	7	8	8	8	8	8
Staff that gives advice in case of problems	8	7	6	8	8	8	8	8
Total averages	8	8	7	8	8	8	8	8

8.3 Issues raised regarding personality, skills of NMS staff

Participants were asked to mention any issues, they had with the personality and skills of NMS staff. The results revealed mixed feelings:

To some clients, NMS's customer care is still demanding. It was noted that when products are delivered, they are supposed to acknowledge and sign for the deliveries. It was reported that most times the NMS staff supply products and leave them before clients acknowledge them.¹¹ However, the NMS personnel argued that sometimes when they arrive, they do not find the supposed recipient personnel at the health facilities. Therefore, the drugs end-up being received by whoever is around.

Box 3: Issues raised regarding skills of NMS staff

“They normally come here and we discuss issues. I think they satisfy us because they communicate timely, they send us messages, they also communicate using emails, at times, they even call. Generally, they are fine, we have no issues with them”. NMS staff meet our expectations because they move down to district level and they are quite knowledgeable. If you ask them anything, they swiftly respond, and for us we are privileged we have the regional office so we can get feedback from there”.

Interview with CAO

¹¹ Interview with RDC

“At least the people who come to the field are good people. They are very polite, patient, professional and humorous while talking to us”

“The regional offices offer a great support; at least they have the capacity to handle many of the concerns raised. The only challenge is delivering items less of orders”

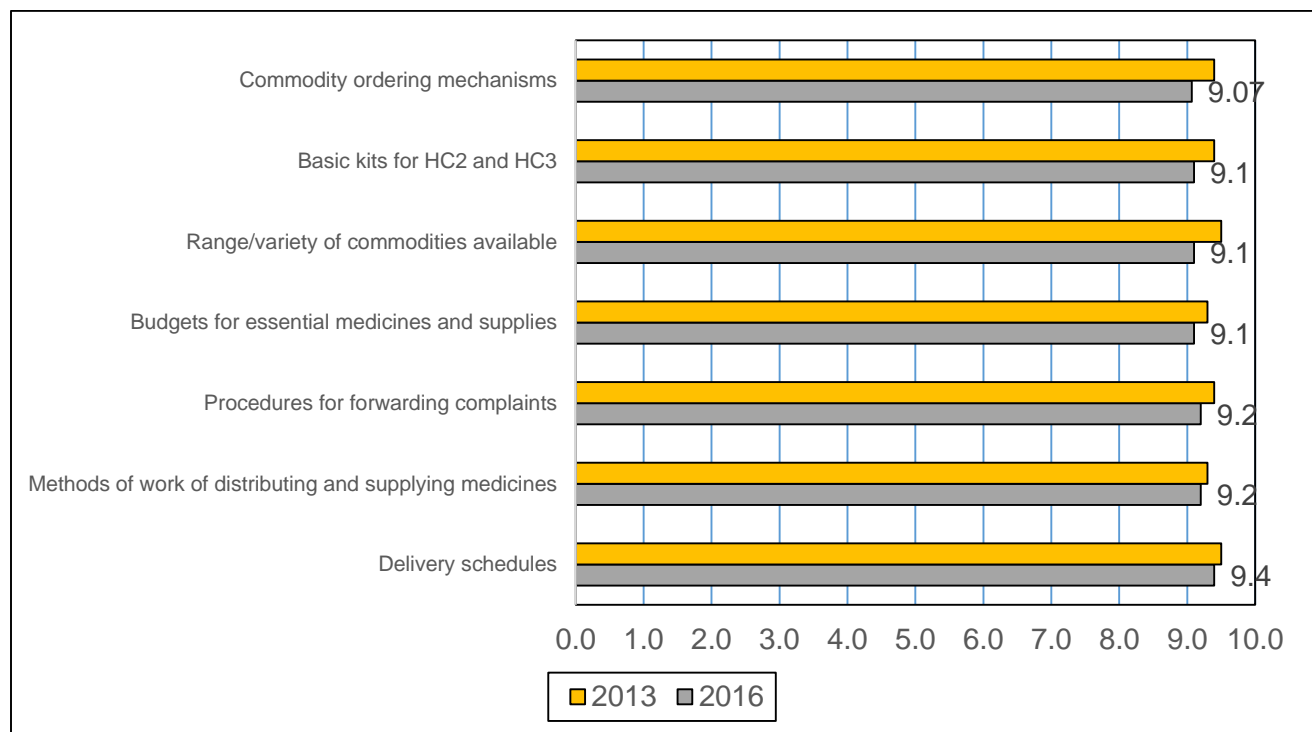
“The NMS staff are generally okay but the problem is with logistics - because if one man is given one truck to deliver medicines to this region that has about 15 districts, the last districts will receive supplies late”

9.0 INFORMATION DISSEMINATION

9.1 Importance attached to availability and dissemination of information by NMS

The results indicate that the overall importance attached to information distribution by NMS was high at 9.2, slightly lower than 9.4 in 2013 as indicated in the graph below. Attributes with the highest importance, were delivery schedules, procedures for forwarding complaints, commodity ordering mechanisms and Basic kits for HC2 and HC3.

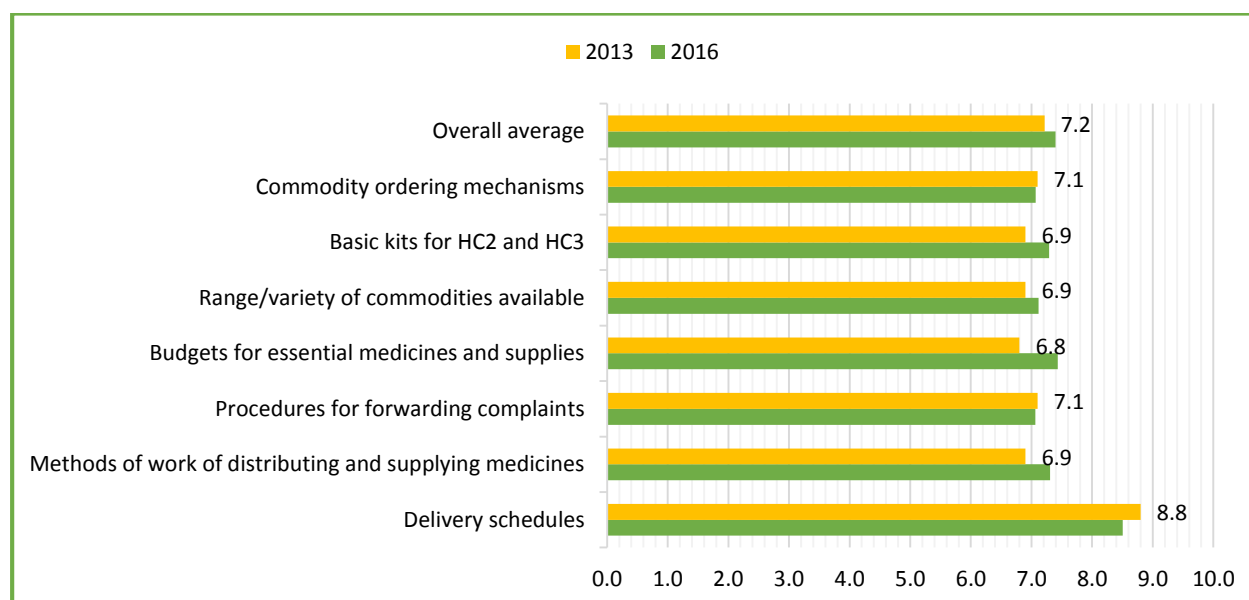
Figure 19: level of importance attached to the need for knowledge on supply & distribution of essential medicine



9.2 Satisfaction with availability and dissemination of information by NMS

The results indicate that the overall Satisfaction attached to information distribution by NMS was 7.4, which was slightly higher than 7.1 and 6.3 in 2013 and 2012 respectively. Attributes with the highest scores, were budgets for essential medicines and supplies, and Basic kits for HC2 and HC3.

Figure 20: Satisfaction with availability and dissemination of information by NMS



9.3 Level of satisfaction by segment

At health facility level, HCIVs were the most satisfied with information distribution by NMS at a score of 8. Regional referrals were the least satisfied with the score of 6. Attributes which were highly rated across all health facilities were information on delivery schedules and budgets for essential medicines and supplies.

Table 16: Satisfaction with availability and dissemination of information by segment

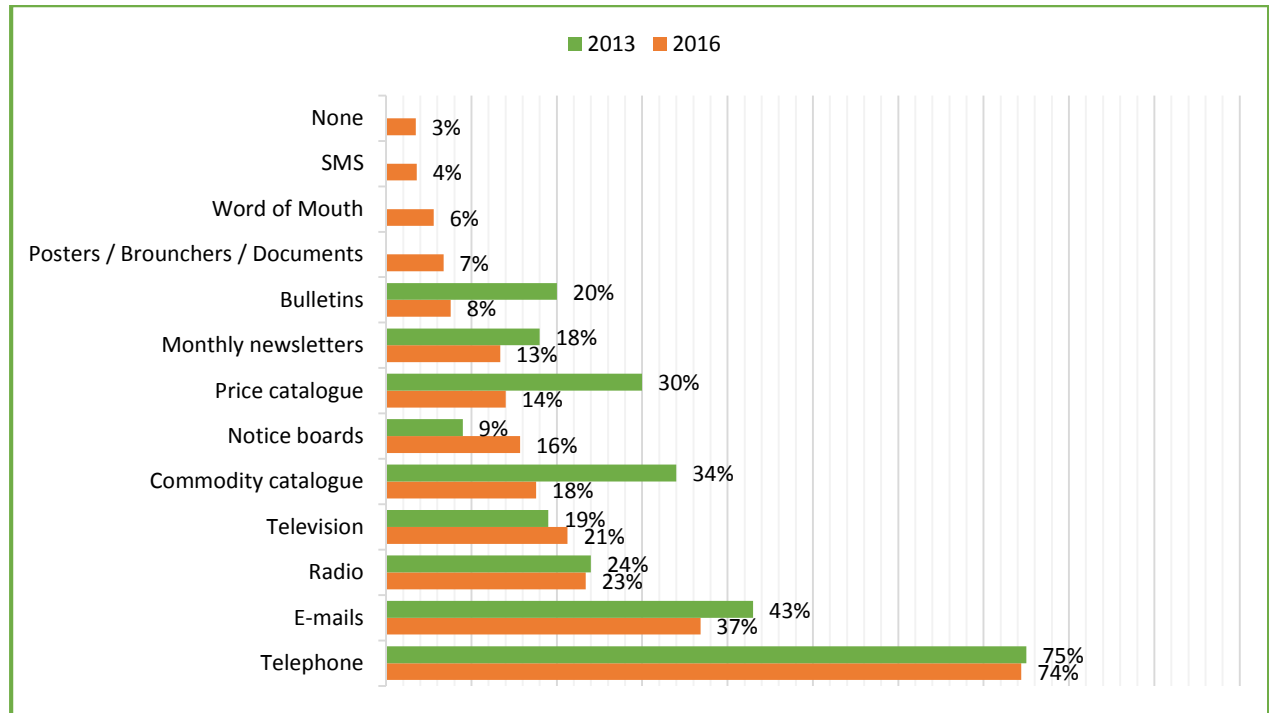
Attributes	Level of Health Facility							
	Total averages	NRH	NRI	RRH	GH	HCIV	HCIII	HCII
Delivery schedules	9	9	5	8	8	9	9	9
Methods of work of distributing and supplying medicines	7	8	5	7	7	7	7	7
Procedures for forwarding complaints	7	7	5	7	7	7	7	7
Budgets for essential medicines and supplies	7	7	8	7	8	8	7	7
Range/variety of commodities available	7	7	6	7	7	7	7	7
Basic kits for HC2 and HC3	7	8	7	7	7	7	7	7
Commodity ordering mechanisms	7	7	7	7	7	7	7	7
Total Averages	7	7	6	7	7	8	7	7

9.4 Awareness of communication channels used by NMS

Participants were further asked to mention communication channels which they were aware of, that are used by NMS to disseminate information about its products and services or any other relevant issues. The results indicate that 74% of participants were aware of the telephone, 37%, emails; 23% radio; and 21% television. The rest of the channels were mentioned by less than 20% of the participants as indicated in the graph below.

Notable, 3% were not aware of any channels NMS uses for communication in 2016. Word of mouth, posters and brochures were only mentioned in 2016; they were not mentioned in 2013. Overall, awareness of different communication channels used by NMS was higher in 2013 compared to 2016.

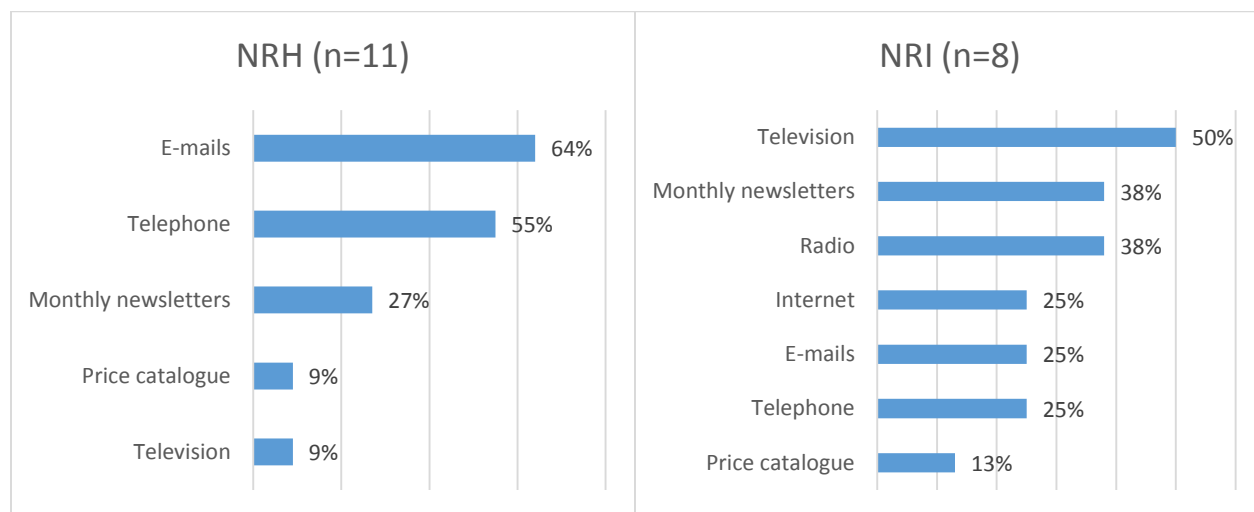
Figure 21: Awareness of communication channels used by NMS



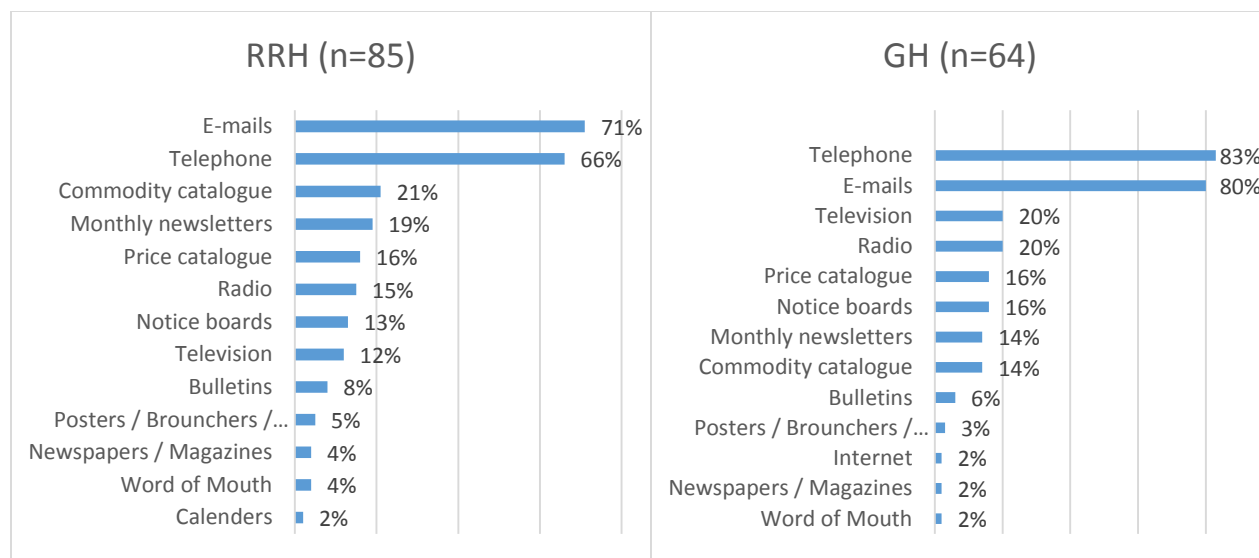
9.5 Awareness of communication channels used by NMS by segment

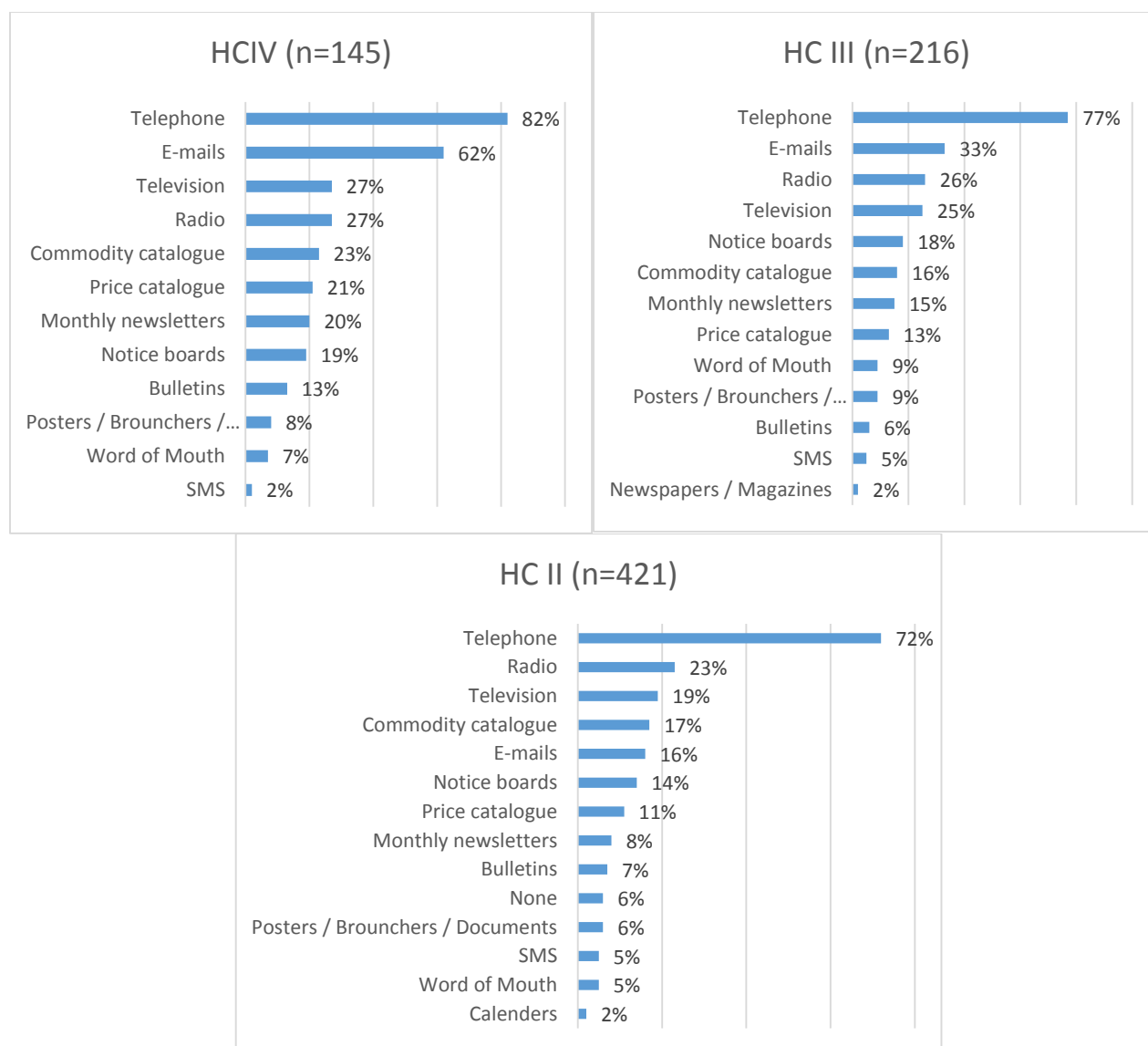
At segment level, emails and telephone were the most popular channels among National referral hospital clients, while television, monthly newsletters and radio were the most popular channels among National referral institute clients.

Table 17: Awareness of communication channels used by NMS to disseminate information by segment



Similar to national referral hospitals, emails and telephone were the most popular channels among regional referral hospitals, general hospitals, HCIVs and HC IIIs. At HC II level, radio and telephone were the most popular channels.





9.6 Awareness of communication channels used by NMS by region

At regional level, as indicated below, telephones (74%), emails (37%), radios (23%) and television (21%) were the most popular channels among clients. Again, the least popular was branded cars.

Table 18: Awareness of communication channels used by NMS to disseminate information by region

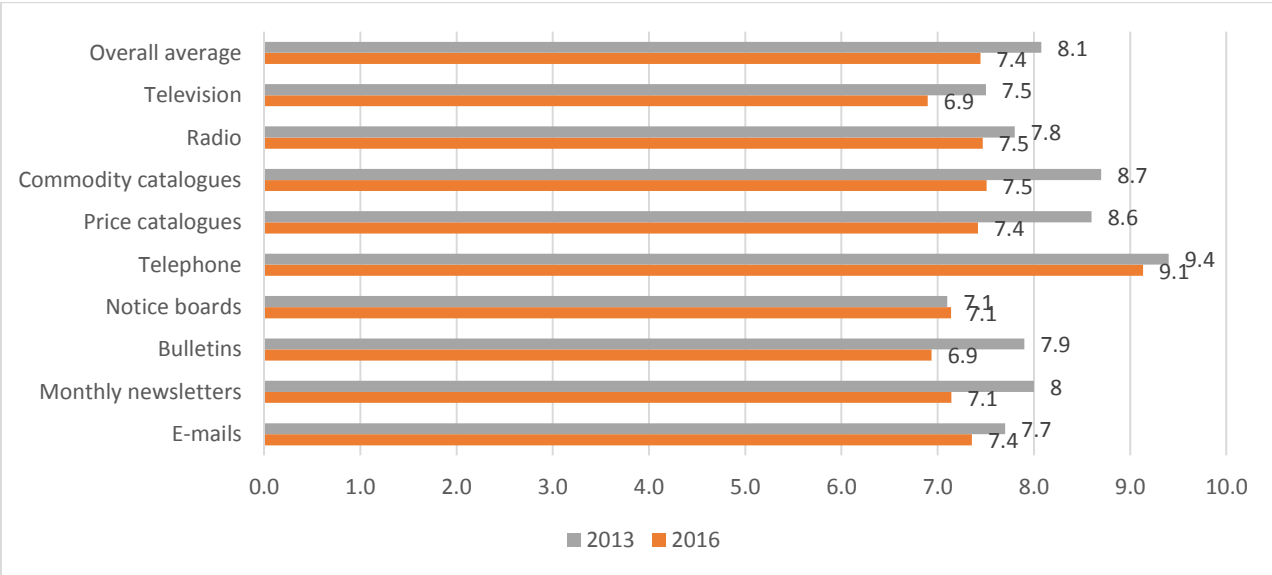
	Total	Gulu	Hoima	Kabarole	Kampala	Mbale	Mbarara	Soroti	Karamoja	West Nile
Total	950	81	83	126	156	161	169	63	36	75
Telephone	74%	84%	54%	71%	55%	77%	80%	94%	83%	93%
E-mails	37%	46%	36%	44%	38%	32%	33%	49%	28%	28%
Radio	23%	20%	6%	25%	17%	47%	24%	35%	3%	5%

Television	21%	5%	7%	23%	22%	42%	23%	33%	0%	1%
Commodity catalogue	18%	6%	22%	34%	16%	27%	14%	14%	3%	0%
Notice boards	16%	12%	14%	27%	4%	13%	26%	19%	3%	11%
Price catalogue	14%	10%	22%	27%	6%	20%	10%	22%	3%	0%
Monthly newsletters	13%	6%	4%	10%	15%	25%	15%	17%	6%	5%
Bulletins	8%	2%	2%	10%	4%	7%	18%	10%	0%	1%
Posters / Brochures / Documents	7%	20%	6%	9%	1%	2%	13%	2%	0%	4%
Word of Mouth	6%	5%	13%	2%	4%	6%	8%	0%	14%	1%
SMS	4%	1%	2%	8%	3%	2%	1%	14%	0%	1%
Newspapers / Magazines	1%	4%	0%	1%	0%	2%	0%	0%	0%	7%
Calendars	1%	1%	2%	2%	1%	3%	0%	2%	0%	0%
Internet	1%	0%	1%	0%	2%	0%	1%	0%	0%	0%
Branded cars	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%

9.7 Importance attached to communication channels used by NMS

On a scale of 1 to 10 where 1 is least important and 10 is most important, participants were asked to rate the level of importance attached to NMS' communication channels in relation to supply and distribution of essential medicines health and laboratory supplies. The results indicate that the overall level of importance was 7.4, which was slightly lower than 8.1 in 2013. Again, telephones had the highest score, 9.1, and Televisions and Bulletins had the lowest scores 6.9 and 6.9 respectively. This could be attributed to the fact that a sizeable number of clients may either not possess TVs or possess TV but do not always have time to watch the TVs. Again, Bulletins scored minimally perhaps because clients were always too busy and didn't have time to read Bulletins.

Figure 22: Importance attached to communication channels used by NMS



9.8 Importance attached to communication channels by segment

Emails as an important channel of communication was scored least by HC IIIs and HC IIs. Bulletins as an important channel of communication was scored least by NRH. Notice boards as an important channel of communication was scored least by NRI. All the other communication channels were scored highly as important means of communication for NMS.

Table 19 Importance attached to communication channels by segment

	NRH	NRI	RRH	GH	HC IV	HC III	HC II
E-mails	9	9	9	9	8	7	6
Monthly newsletters	9	9	8	8	7	7	7
Bulletins	3	8	7	7	7	7	7
Notice boards	7	6	7	8	7	7	7
Telephone	10	10	9	9	9	9	9
Price catalogues	8	7	8	8	8	7	7
Commodity catalogues	8	7	8	8	8	7	7
Radio	7	8	8	7	7	8	7
Television	7	9	8	7	7	7	7
Total averages	8	8	8	8	8	7	7

9.9 Importance attached to communication channels by region

West Nile scored all communication channels low about importance except for telephones. Monthly newsletter, bulletins, notice boards- television as important channels of communication was scored least by Gulu and West Nile regions. Bulletins as an important channel of communication was also scored least by Soroti.

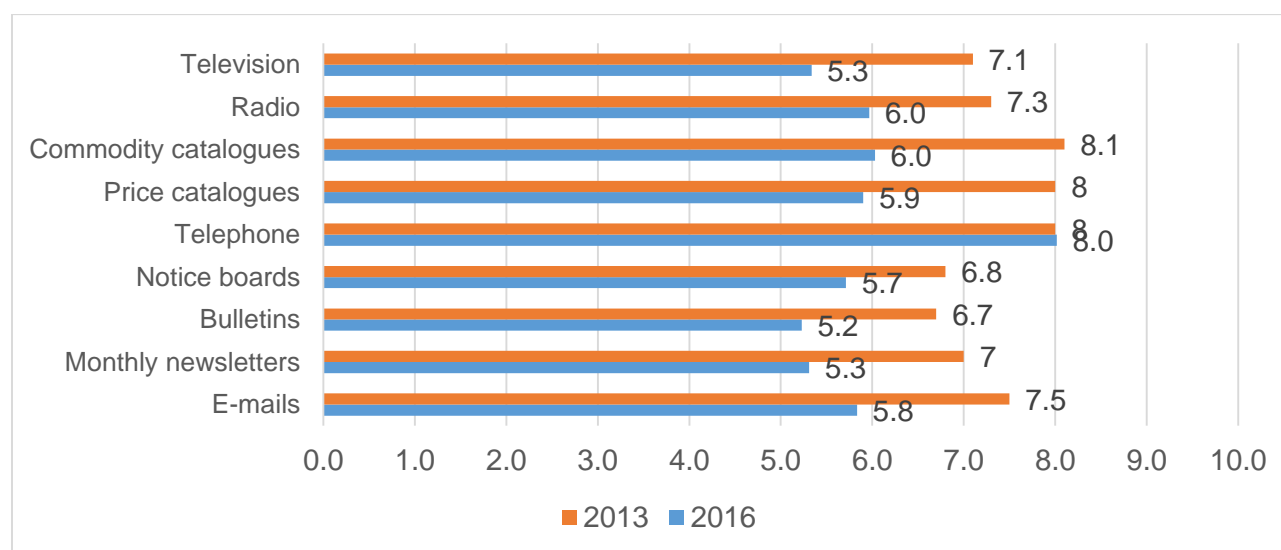
Table 20: Importance attached to communication channels by region

Attributes	Gulu	Hoima	Kabarole	Kampala	Mbale	Mbarara	Soroti	Karamoja	West Nile
E-mails	8	8	7	8	7	8	7	9	5
Monthly newsletters	6	8	8	7	7	8	7	8	5
Bulletins	6	8	7	7	7	8	6	8	4
Notice boards	6	8	8	7	7	8	8	8	5
Telephone	9	9	10	9	9	9	9	8	9
Price catalogues	7	8	9	7	8	8	7	8	4
Commodity catalogues	7	9	9	7	8	8	7	8	4
Radio	7	7	8	7	8	8	8	8	5
Television	6	7	7	7	8	7	7	8	3
Total average	7	8	8	7	8	8	7	8	5

9.10 Satisfaction with communication channels

The results indicated that the overall satisfaction with communication channels used by NMS was relatively low at 5.9, lower than 7.4 in 2013. Telephone as a communication channel used by NMS was the most satisfied with by clients at a score of 8. Satisfaction with Bulletins and Televisions as NMS communication channels was minimal.

Figure 23: Level of satisfaction with NMS communication channels



9.11 Level of satisfaction with NMS communication channels by segment

At segment level, participants' satisfaction score was 6 across all levels of health facilities save for the National Referral Institute whose score was 5. Clients were most satisfied with the Telephone than all other communication channels. NRHs were most satisfied with monthly newsletters and least satisfied with Bulletins as communication channels for information from NMS.

Table 21: Level of satisfaction with NMS communication channels by segment

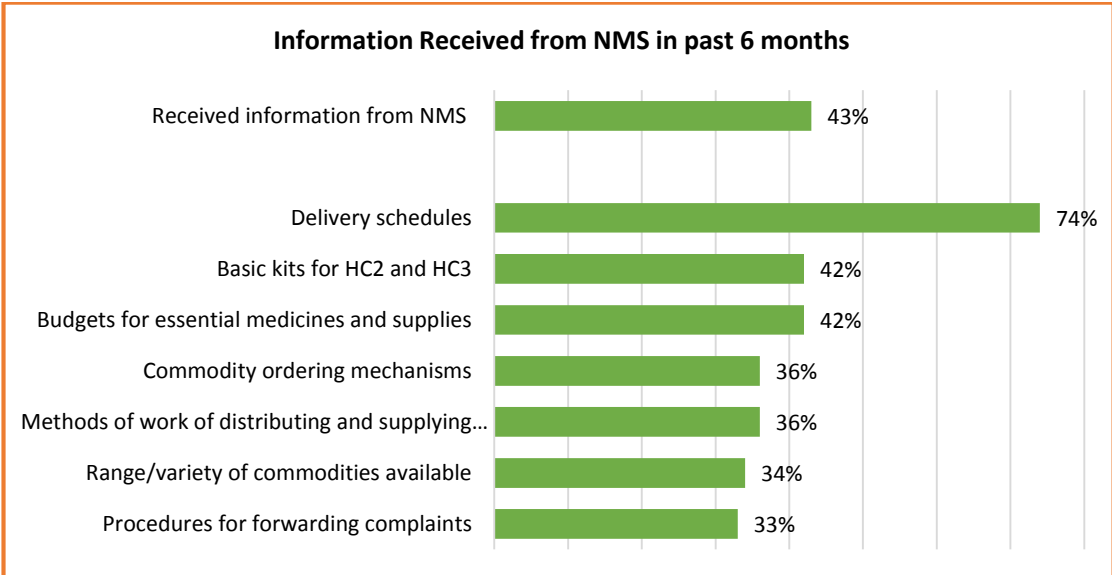
Channels	NRH	NRI	RRH	GH	HC IV	HC III	HC II
E-mails	7	6	7	8	7	6	5
Monthly newsletters	9	4	5	6	6	5	5
Bulletins	3	5	5	6	6	5	5
Notice boards	7	4	6	6	6	6	6
Telephone	7	7	8	8	8	8	8
Price catalogues	6	5	6	7	7	6	6
Commodity catalogues	7	5	6	7	6	6	6
Radio	5	5	6	5	6	6	6

Television		7	5	5	6	5	5
Total average	6	5	6	6	6	6	6

9.12 Receipt of Information about NMS in the past six months

Participants were asked to indicate whether they had received any information about NMS in the past six months. The findings revealed that overall 43% had received information about NMS in the past six months. Most information received was about Basic Kits for HC2 and HC3, Budgets for essential medicines and supplies, and commodity ordering mechanisms as indicated in the graph below:

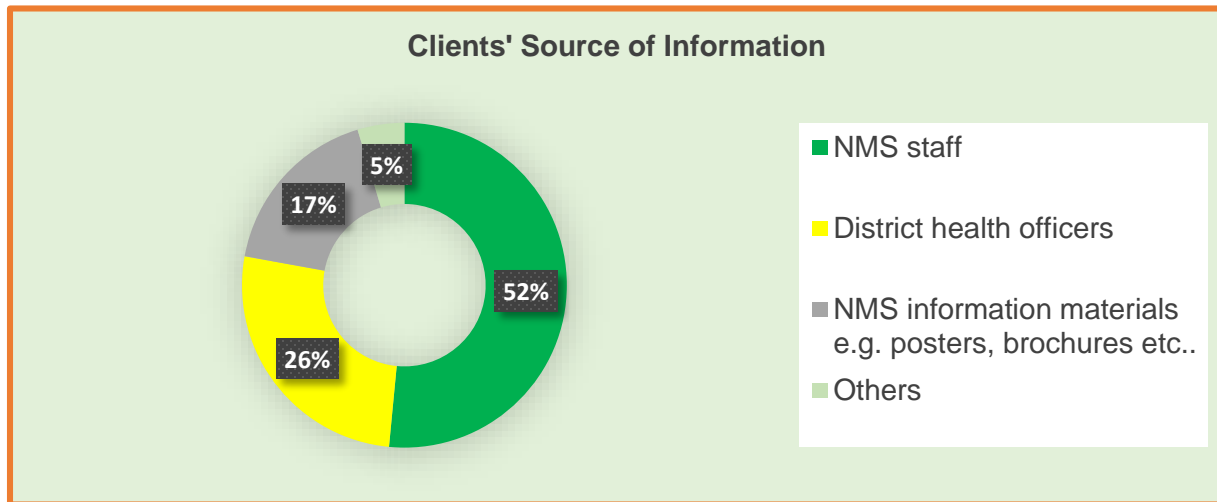
Table 22: Receipt of Information about NMS in the past six months



9.13 Sources of information

The participants who admitted to have received information were further asked to name the sources of information. The results indicated that majority (52%) received information from NMS staff, 26% received it from District Health Officers, 17% from NMS information materials.

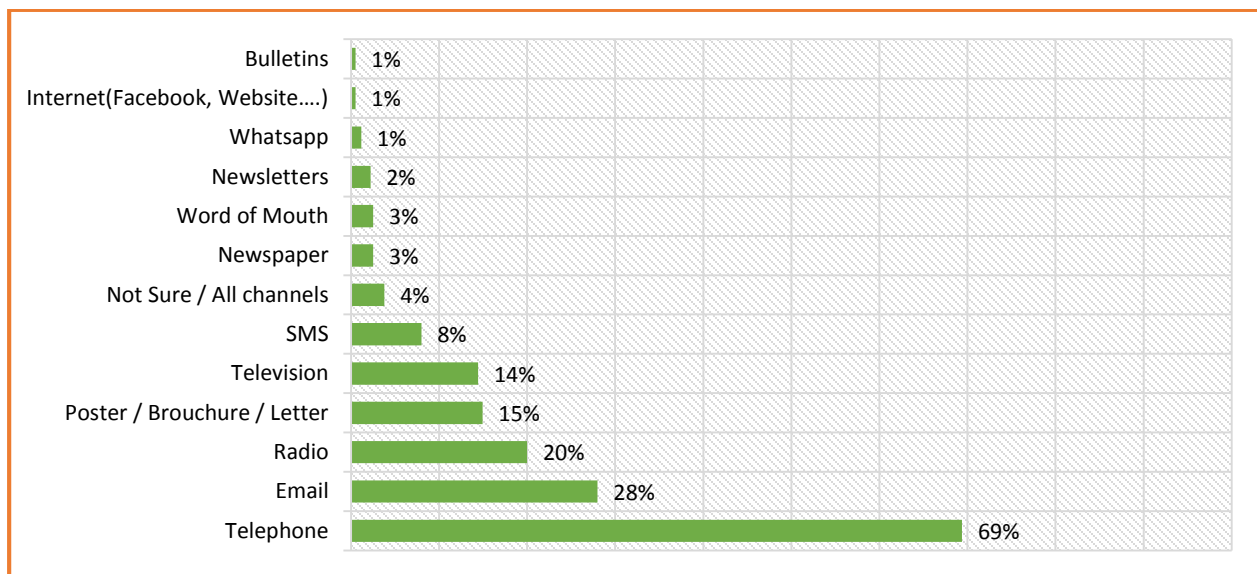
Figure 24: Sources of information



9.14 Preferred Communication channels

Respondents were asked which would be their preferred channel of communication for information from NMS. The results indicate that Telephone was the most preferred (69%) communication channel followed by email (28%) and radio (20%).

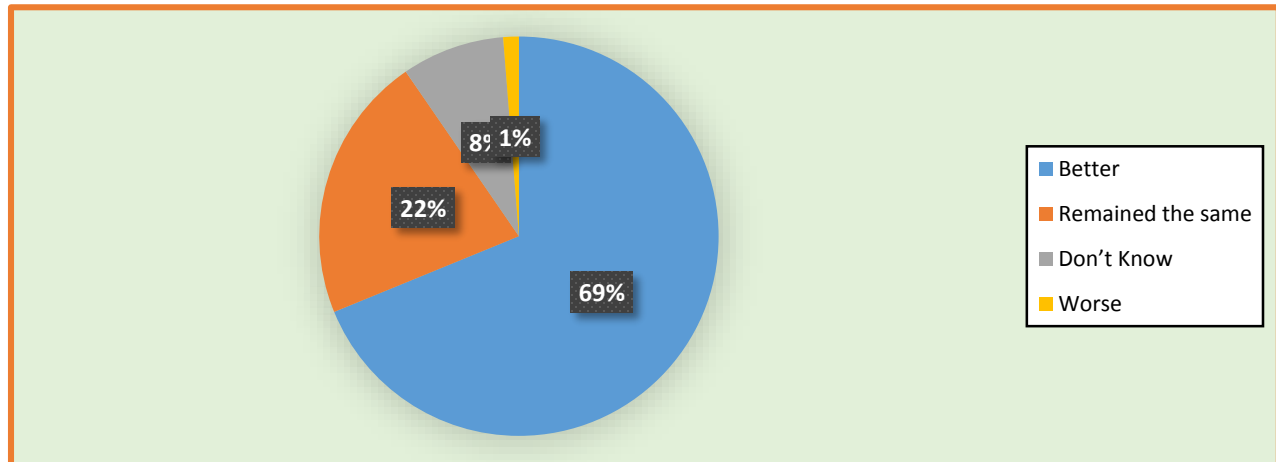
Figure 25: Recommended Communication channels



9.15 Changes made in communication since 2012

Majority (69%) of the clients reported that there had been improved communication due to changes implemented since 2012. A small proportion (22%) reported that they had not observed any improvement in the communication from NMS. Only 1% thought the communication from NMS had become worse since 2012.

Figure 26: Changes made in communication since 2012



9.16 Other issues raised about dissemination of information

When participants were asked to raise other issues related to information dissemination, the following were mentioned:

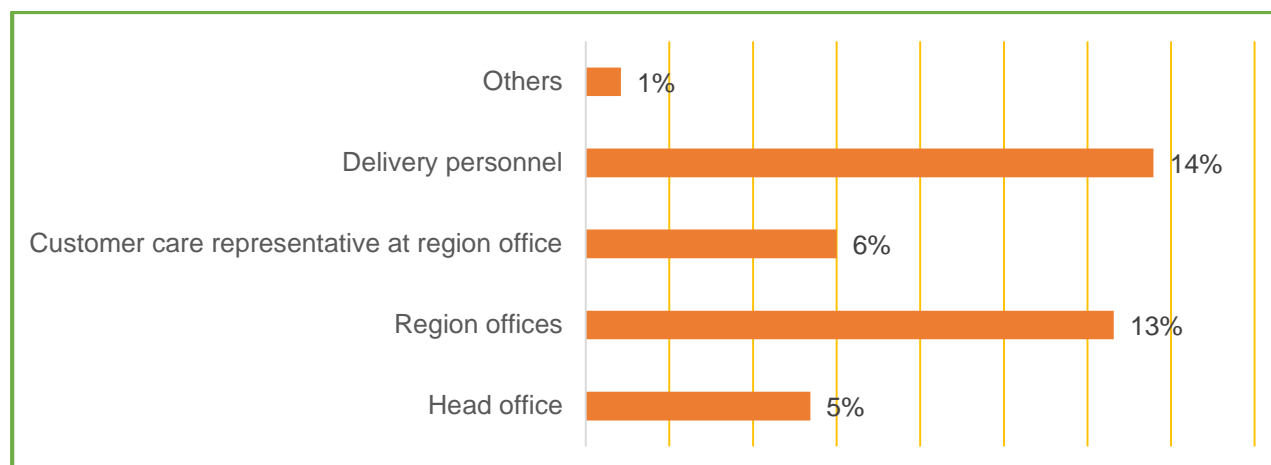
- *Delayed response:* Participants raised the fact that at times NMS doesn't reply their e-mails. Clients further reported that at times they get the information via email past the time the information was supposed to be received. On the other hand, some clients noted that when they send an email, NMS responds but doesn't act immediately.
- *Ineffective communication channels.* Phone calls were found reliable since one cannot fail to pick a call unless they are in a meeting. E-mails were reported ineffective by some clients because it's based on the assumption that clients can buy internet bundles/data which is usually not the case. It was suggested that NMS provide data; otherwise, they might continue missing urgent messages from NMS via internet. Some clients further noted that television is watched by very few -the elites, and yet most of the elites go to private health facilities. It was recommended that NMS uses appropriate communication channels targeting ordinary people that use public health facilities most.

10.0 COMPLAINTS MANAGEMENT

10.1 Clients' Contact with NMS in the Past 3 Months

The results indicated that 14% of clients that had contact with NMS officials, contacted NMS delivery personnel and 13% contacted regional offices. Six (6%) contacted NMS customer care representative at regional office and 5% contacted the head office.

Figure 27: Clients' Contact with NMS in the Past 3 Months



10.2 Mode of contact/communication with NMS in the last 3 months

Participants were further asked to mention the mode of communication they used to contact the NMS staff. The results indicated that physical visits and telephones were the most popular means of communication. E-mail was the other notable mode of communication used to get in touch with NMS officials.

Table 23: Mode of contact/communication with NMS in the last 3 months

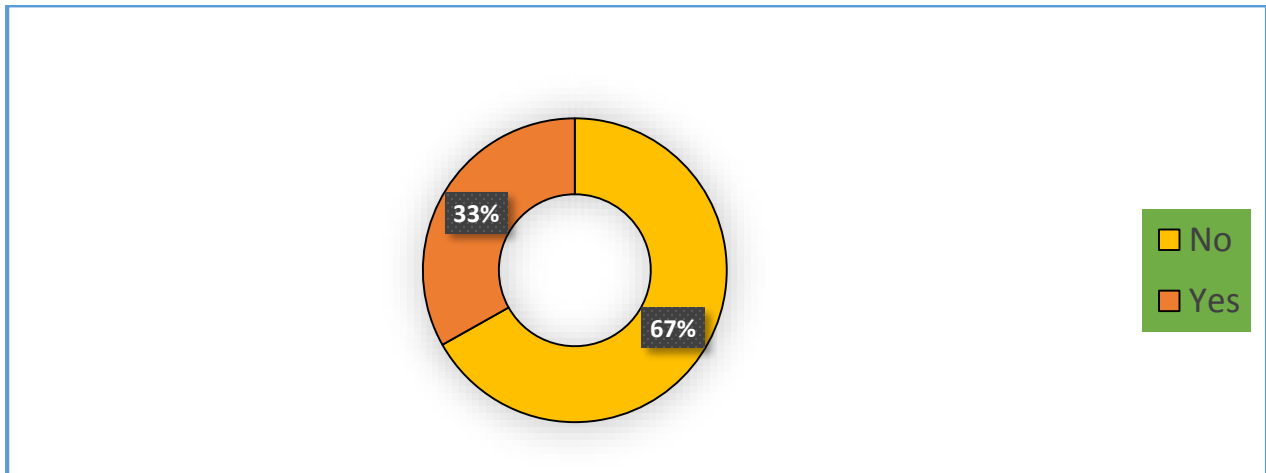
Staff/Office	Mode	Percentage
Head office	Telephone	53%
	Email	24%
	Physical visit	20%
	Letters/written document	4%
Region offices	Telephone	52%
	Physical visit	34%
	Email	13%
	Letters/written document	1%
	Others	1%
Customer care representative at region office	Telephone	44%
	Physical visit	44%
	Email	11%
	Others	2%
Delivery personnel	Physical visit	73%

Staff/Office	Mode	Percentage
	Telephone	21%
	Others	4%
	Letters/written document	2%
	Email	1%

10.3 Client issues or problems with NMS

Participants were further asked if they had ever experienced any problems with or been let down by NMS. The results revealed that only 33% answered in affirmative (had ever experienced any problems with or been let down by NMS), and 67% of the participants did not experience any problems with NMS as illustrated by the graph below:

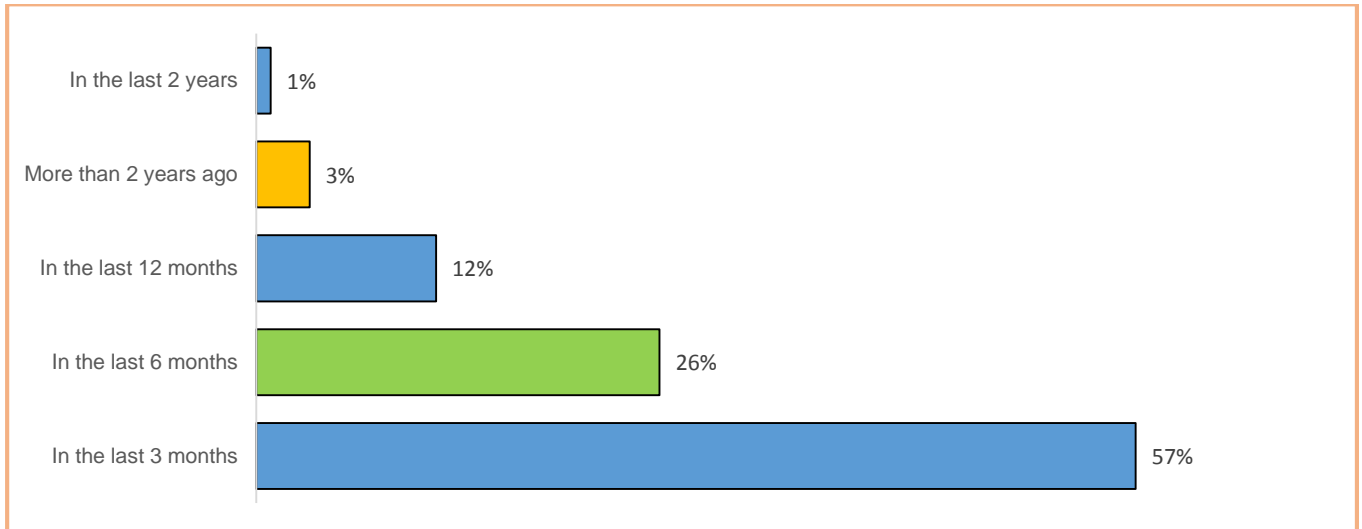
Figure 28: Had problems with NMS before



10.4 Period when problems with NMS occurred

The results revealed the following: 57% of clients experienced problems with NMS in the past three months, 26% in the past 6 months, 12% in the past 12 months, and 3% more than 2 years ago.

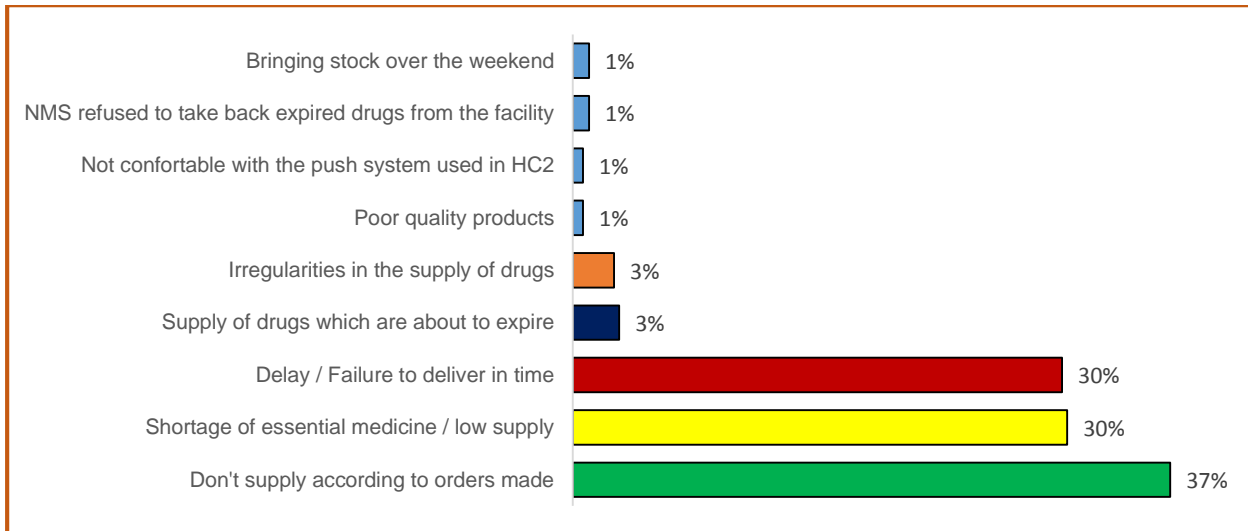
Figure 29: Period when problems with NMS occurred



10.6 Problems with NMS

Participants were asked to mention the actual problems or issues they had had with NMS and the results revealed the most common problems being; not supplying according to orders made, shortage of essential medicine/ low supply and delay/ failure to deliver in time.

Figure 30: Problems with NMS

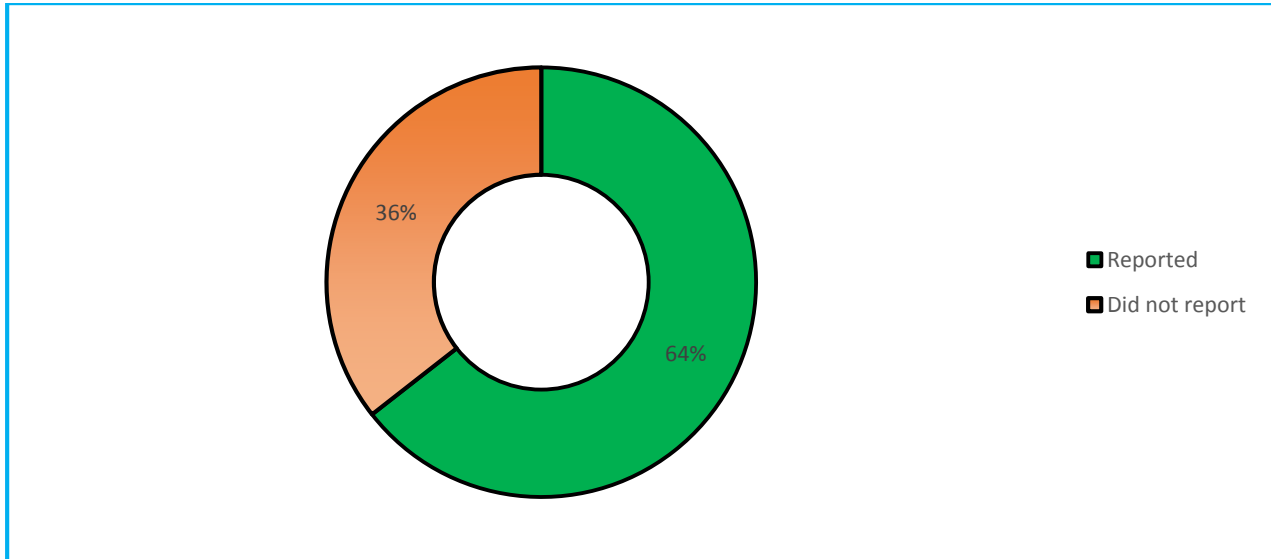


In 2013, problems with NMS that were mentioned include: Less medicine than what's on delivery notes/boxes 28%, delivering what is not order for 26%, not delivering on time 17%, running out of medical supply 15%, delivering expired medicines 7%, and not delivering essentials medicines 6%.

10.7 Problem reporting

Participants who admitted to have had problems with NMS were again asked to mention whether they reported the problems or not. The results indicated that about 64% reported and only 36% did not report as illustrated by the chart below:

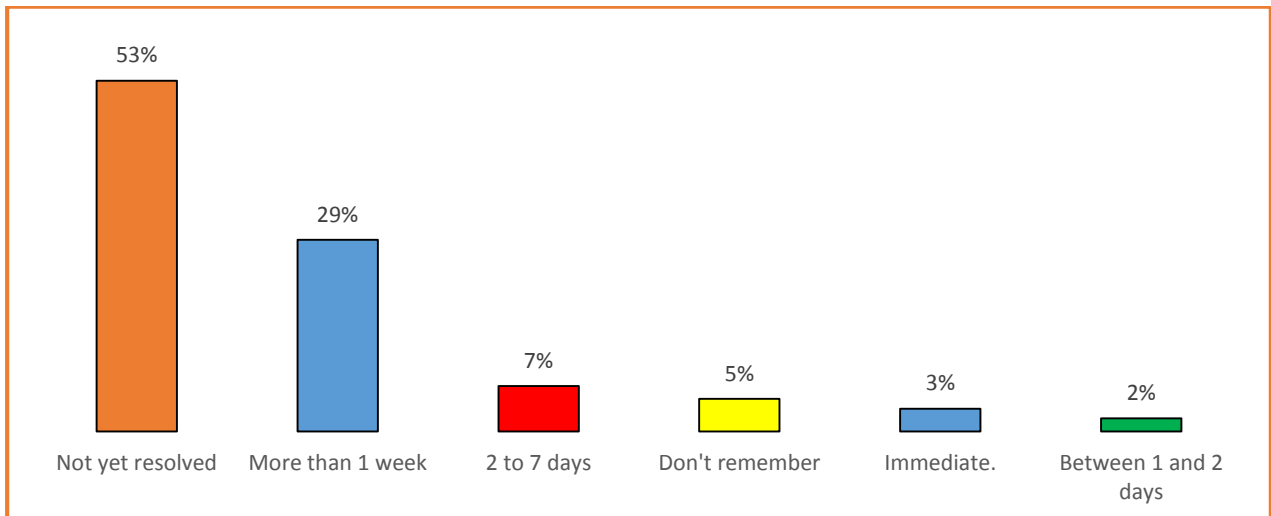
Figure 31: Problem reporting



10.8 Period taken to resolve issues

The same participants were asked about the time it took to resolve such problems. The results indicated that 53% of the participants' problems were still pending; waiting for solutions. 29% had been resolved more than a week ago – at the time of data collection, 7% reported that it took two -seven days, 5% did not remember, 3% reported that the problem was immediately resolved and only 2% reported that it took only 1 to 2 days to resolve the problem as illustrated by the figure 30 below:

Figure 32: Period taken to resolve issues

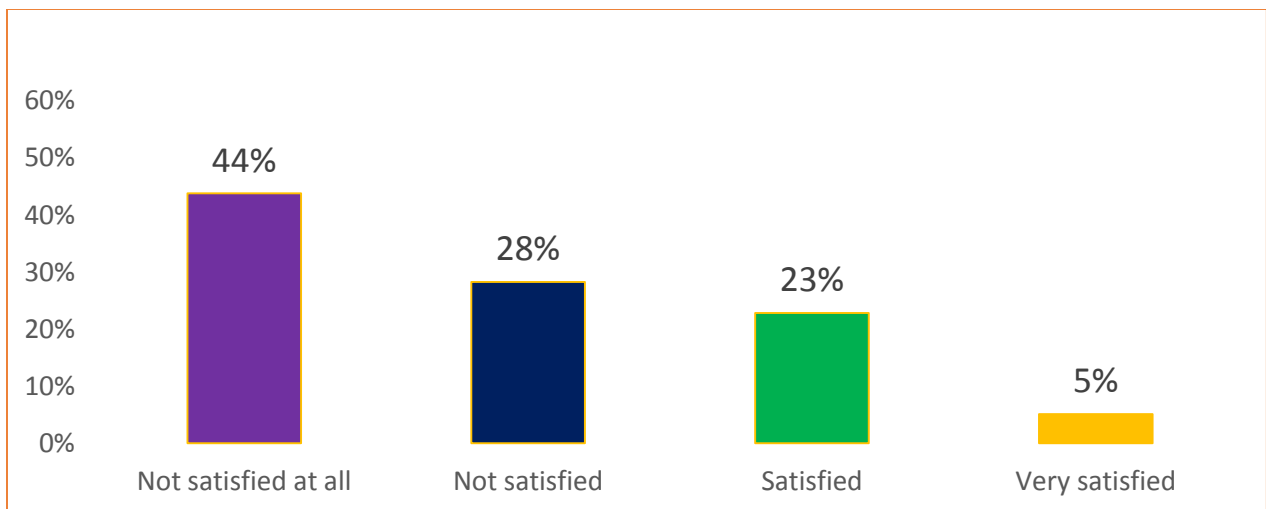


Comparatively, in 2013, 9% of the problems were reportedly never resolved, 57% of the issues took longer than expected, 20% were resolved in expected time, and 14% were resolved faster than expected.

10.9 Satisfaction with problem handling

Out of 315 participants whose problems were handled by NMS, 44% reported not satisfied at all with how the problem was handled; 28% were not satisfied, 23% were satisfied, and only 5% were very satisfied as indicated by the graph below:

Figure 33: Satisfaction with NMS' problem handling

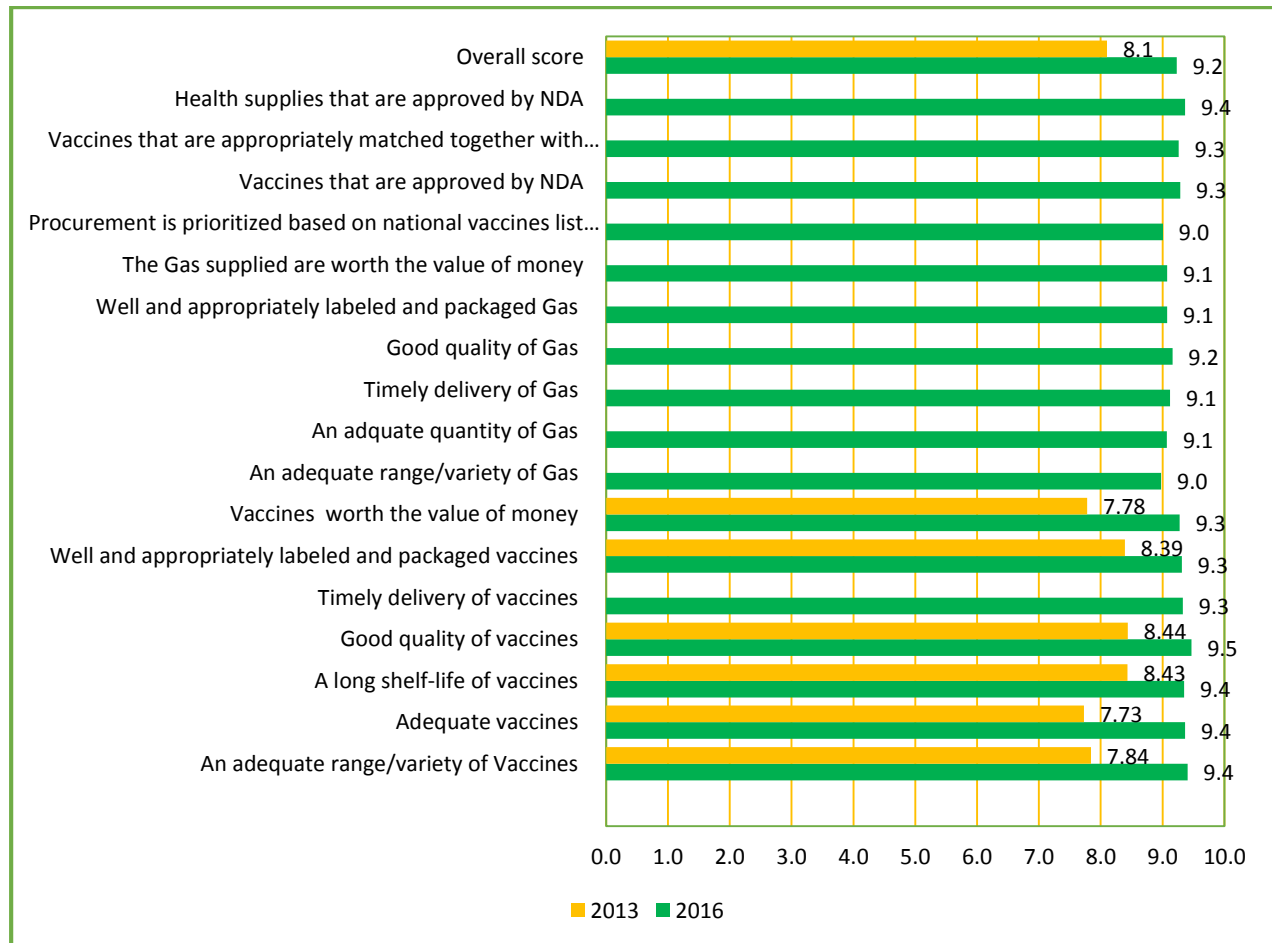


11.0 VACCINES AND GAS

11.1 Importance attached to vaccines and gas

Results from the 2016 wave indicate that the overall importance attached to vaccines and gas was 9.2, higher than 8.1 in 2013 wave. Some of the attributes related to vaccines and gas captured in 2016 were not captured in the previous wave. Attributes that were highly rated included: adequacy and variety of vaccines, long shelf of vaccines, good quality of vaccines and health supplies that are approved by NDA as illustrated by the graph below;

Figure 34: Importance attached to vaccines and gas



11.2 Importance attached to vaccines and gas at segment level

At segment level, the overall importance attached to vaccines and gas was 9. All levels of health care scored 9 save for NRHs and GHs which scored exceptionally well with the maximum score of 10.

Table 24: Importance attached to vaccines and gas

	Total average	NRH	RRH	GH	HC IV	HCIII	HCII
An adequate range/variety of Vaccines that are stocked and supplied	9	10	9	10	9	9	9
Adequate vaccines that are stocked and supplied	9	10	9	10	9	9	9
A long shelf-life of vaccines that are stocked and supplied	9	10	9	10	9	9	9
Good quality of vaccines that are stocked and supplied	9	10	9	10	9	9	9
Timely delivery of vaccines to health facilities	9	10	9	10	9	9	9
Well and appropriately labeled and packaged vaccines that are stoked and supplied	9	10	9	10	9	9	9
The vaccines supplied are worth the value of money paid	9	10	9	10	9	9	9
An adequate range/variety of Gas that are stocked and supplied	9	10	9	10	9	9	9
An adquate quantity of Gas that are stocked and supplied	9	10	9	10	9	9	9
Timely delivery of Gas to health facilities	9	10	9	10	9	9	9
Good quality of Gas that are stocked and supplied	9	10	9	10	9	9	9
Well and appropriately labeled and packaged Gas that are stoked and supplied	9	10	9	10	9	9	9
The Gas supplied are worth the value of money paid	9	10	9	10	9	9	9
Procurement is prioritized based on national vaccines list versus customer needs and available funds	9	10	9	9	9	9	9
Vaccines that are approved by the Drug Regulations Board (National Drug Authority)	9	10	9	10	9	9	9
Vaccines that are appropriately matched together with administration accessories	9	10	9	10	9	9	9
Health supplies that are approved by the Drug Regulations Board (National Drug Authority)	9	10	9	10	9	9	9
Overall importance	9	10	9	10	9	9	9

11.3 Importance attached to vaccines and gas at regional level

At regional level, regions that attached high importance to Vaccines and Gas were Gulu, Hoima and Kabarore. These attached a score of 10 which is the highest score. All other regions attached a score of 9 save for Karamoja and West Nile which attached a score of 8 and 7 respectively.

Table 25: Importance attached to vaccines and gas by region

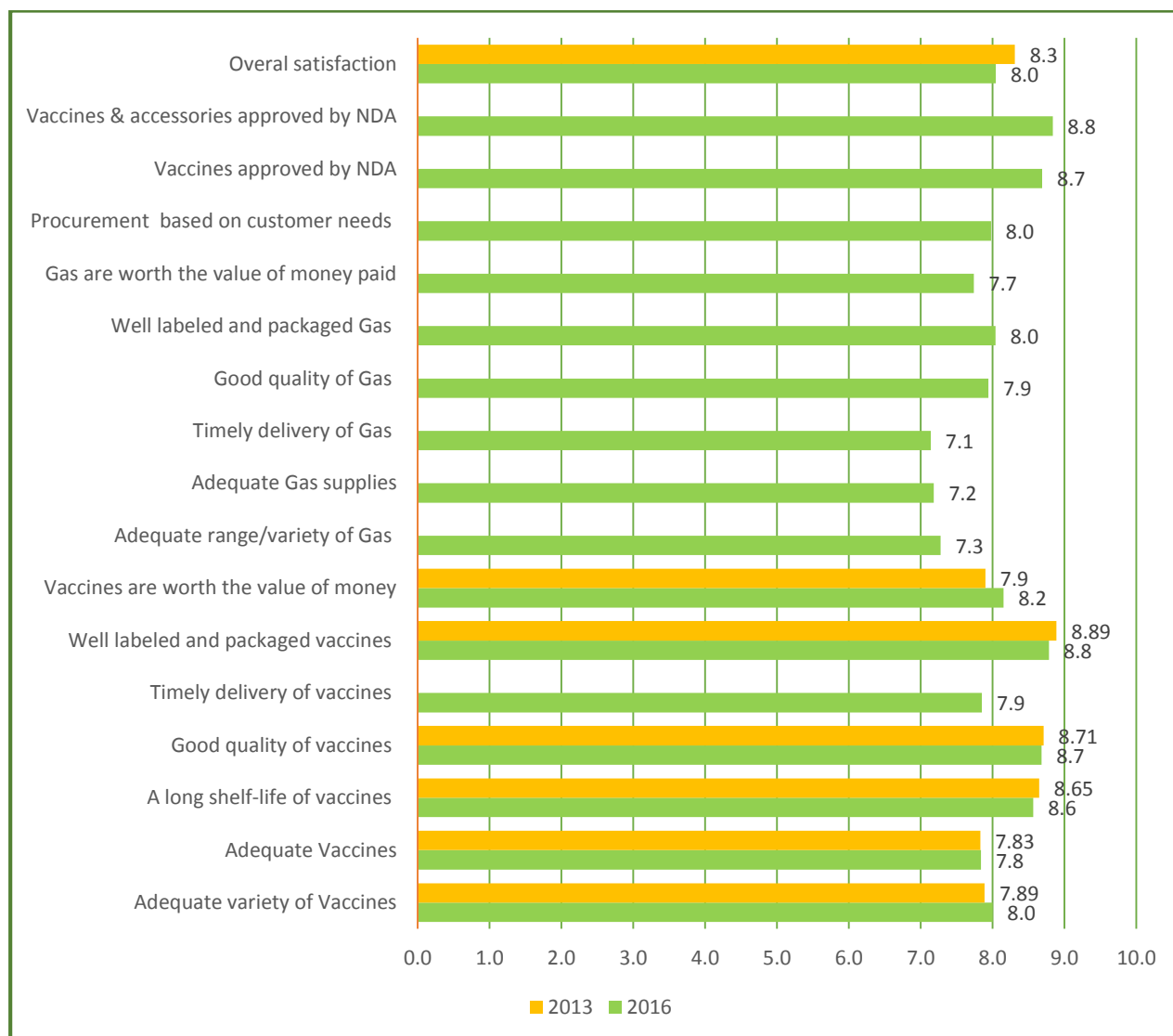
Attributes	Gulu	Hoima	Kabarole	Kampala	Mbale	Mbarara	Soroti	Karamoja	West Nile
An adequate range/variety of Vaccines that are stocked and supplied	9	9	10	9	9	10	9	9	8
Adequate vaccines that are stocked and supplied	9	10	10	9	9	10	9	9	7
A long shelf-life of vaccines that are stocked and supplied	9	10	10	9	9	10	9	9	7
Good quality of vaccines that are stocked and supplied	9	10	10	9	9	10	9	9	7
Timely delivery of vaccines to health facilities	9	10	10	9	9	9	9	8	7

Well and appropriately labeled and packaged vaccines that are stoked and supplied	9	10	10	10	9	9	9	9	8	7
The vaccines supplied are worth the value of money paid	9	10	10	9	9	9	9	9	8	7
An adequate range/variety of Gas that are stocked and supplied	9	9	10	9	9	9	9	9	8	7
An adequate quantity of Gas that are stocked and supplied	9	10	10	10	9	9	9	9	8	7
Timely delivery of Gas to health facilities	9	10	10	10	9	9	9	9	8	6
Good quality of Gas that are stocked and supplied	9	10	10	10	9	9	9	9	8	7
Well and appropriately labeled and packaged Gas that are stoked and supplied	9	10	10	9	9	9	9	9	8	7
The Gas supplied are worth the value of money paid	9	10	10	9	9	9	9	9	8	7
Procurement is prioritized based on national vaccines list versus customer needs and available funds	9	10	10	10	9	9	9	9	8	7
Vaccines that are approved by the Drug Regulations Board (National Drug Authority)	9	10	10	10	9	9	10	9	8	7
Vaccines that are appropriately matched together with administration accessories	9	10	10	10	9	9	10	9	8	7
Health supplies that are approved by the Drug Regulations Board (National Drug Authority)	9	10	10	10	9	9	10	9	8	7
Total Averages	9	10	10	10	9	9	9	9	8	7

11. 4 Clients’ satisfaction with Vaccines and Gas

Participants were particularly most satisfied with attributes such as vaccines that are approved by NDA at 8.7, well and appropriately labelled and packaged vaccines at 8.8. None of the rest of the attributes scored the rate less than 7, which is remarkably a good score. In terms of the overall satisfaction, the score was 8.0 for 2016 which was slightly lower than that Of 2013, 8.3.

Figure 35: Clients' satisfaction with Vaccines and Gas



11.5 Participants' satisfaction with Vaccines and Gas by segment

At the level of health facility, the satisfaction with vaccines and gas was the same. They all attached an overall score of 8 which is an impressive rating. Across all health facilities, participants were particularly satisfied with attributes such as Vaccines and administration accessories approved by the Drug Regulations Board (National Drug Authority) and a Well and appropriately labeled and packaged vaccines that are stocked and supplied as indicated by the table below;

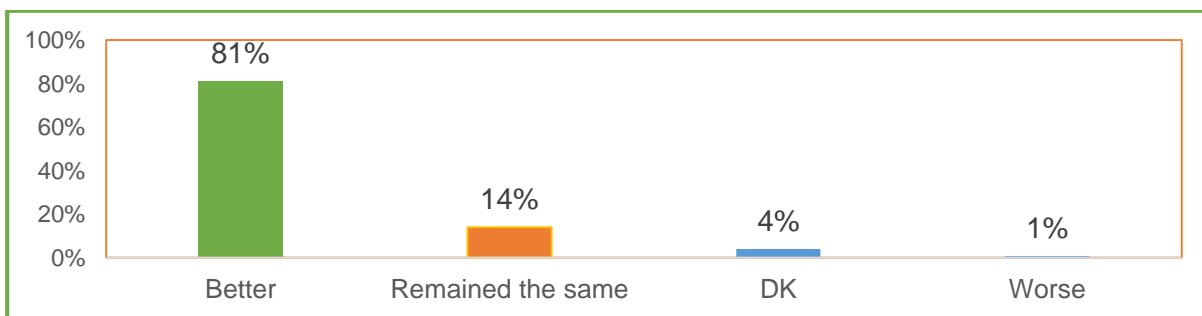
Figure 36: Satisfaction with vaccines and gas by segment

Attributes	Total average	N R H	R R H	G H	H C IV	H C II	H C II
An adequate range/variety of Vaccines that are stocked and supplied	8	8	7	7	8	8	8
Adequate Vaccines that are stocked and supplied	8	8	7	7	8	8	8
A long shelf-life of vaccines that are stocked and supplied	9	9	8	8	8	9	9
Good quality of vaccines that are stocked and supplied	9	9	8	9	8	9	9
Timely delivery of vaccines to health facilities	8	8	6	8	7	8	8
Well and appropriately labeled and packaged vaccines that are stoked and supplied	9	9	8	9	9	9	9
The vaccines supplied are worth the value of money paid	8	9	7	8	8	8	8
Adequate range/variety of Gas that are stocked and supplied	7	9	7	7	7	7	7
Adequate Gas that are stocked and supplied	7	9	7	6	7	7	7
Timely delivery of Gas to health facilities	7	8	7	7	7	7	7
Good quality of Gas that are stocked and supplied	8	8	8	8	8	8	8
Well and appropriately labeled and packaged Gas that are stoked and supplied	8	8	8	9	8	8	8
The Gas supplied are worth the value of money paid	8	9	8	9	8	8	8
Procurement that is prioritized based on customer needs and available funds	8	8	8	7	8	8	8
Vaccines that are approved by the Drug Regulations Board (National Drug Authority)	9	8	8	9	9	9	9
Vaccines and administration accessories approved by the Drug Regulations Board (National Drug Authority)	9	9	8	9	9	9	9
Average	8	8	8	8	8	8	8

11.6 Changes made in vaccines, accessories and gas supplies since 2012

Statistically, 81% of the 402 participants who answered the question expressed their gratitude to NMS for the great improvements. However, about 14% felt that the situation had invariably remained the same, 4% did not know and only 1% felt that the situation instead became worse as illustrated by the graph below;

Figure 37: Changes made in vaccines, accessories & gas supplies since 2012



When participants were further asked to mention whether they had observed or experienced any changes in the supply of vaccines, accessories and gas supplies. The results indicated mixed reactions:

- Other participants shared the same sentiments that NMS had greatly improved but they advised NMS to always supply what is ordered. They also advised NMS to inspect and grade their stores both at the district, regional and national levels
- Participants urged NMS to continue engaging the regional managers to sit with Health In-Charges to do forecast and planning for their essential commodities
- NMS should also enable them track and know the progress of consumption levels so that they can make informed adjustments or mid-term review of consumption
- NMS should pick expired drugs for destruction from facilities they supplied themselves,

11.7 Issues raised about the range, quantity, quality, shelf-life and packaging of vaccines supplies, accessories and Gas supplied from NMS

Participants were asked to raise any issues, concerns or comments on the range, quantity, quality, shelf-life and packaging of vaccines supplies, accessories and Gas supplied from NMS. The following were raised:

- Participants demanded that they should be given where to dump expired drugs to clear the stores.
- Participants expressed lack of anti-Rabies vaccine for cases like dog bites. The anti-rabies vaccine which has become very rare should again be supplied like all other vaccines especially to health center IVs because it is equally demanded.
- For facilities that had no power or electricity, they were reportedly supplied only one cylinder of gas, when this got used up, the cold chain would be broken because the gas reportedly, was not refilled and delivered in time and so this is an issue
- About polio IPV vaccine, this was reportedly supplied but later the supply allegedly stopped. Participants wanted to know why it stopped.
- Some areas reportedly had a problem of nodding disease should be able to have some vaccine. No big attempt had been made to address completely the question of nodding disease with vaccines
- Participants especially those around refugee settlements reported that they used to get adequate quantities of vaccines but the presence of refugees created shortages.
- There is need to improve on the packaging of HPV vaccine. At least it should be five HPV vials/ doses for five people.
- Participants also alleged that Gas supplies at times depended on the number of empties of cylinders they had which was not fair; they needed spare gas cylinders. They argued that every facility must have a backup so that when one Gas is off, there is a second standby waiting there. so, every facility should be entitled to two gas cylinders especially for those ones who don't have solar and electricity.

12.0 CONCLUSIONS

Based on the findings, clients were generally impressed by the positive changes that took place since 2012. Overall, the level of satisfaction on all attributes and parameters measured was 7.7 out of ten. This was a commendable score though it was slightly lower than that of 2013 (7.8).

Storage Facilities: Although storage facilities at health facilities are owned and managed by health facilities themselves, the study also evaluated them. This was intended to ascertain whether NMS drugs are kept in right conditions to avoid, for instance, extreme temperatures that could spoil the drugs. Of course, people who may not be aware of the fact that NMS is not in charge of storage facilities would perhaps inadvertently accuse NMS of not ensuring good and suitable drug conditions. Therefore, this section evaluated storage facilities (at health center facilities). The findings indicate that the overall satisfaction with storage facilities was 8.1. In comparison with the previous waves, this score is higher than the 2012 score (7.5) but slightly lower than the 2013 score (8.2). None of the attributes was scored less than 8 indicating a commendable performance despite a decline in having clean stores (from 9 to 8.4). At region level, the satisfaction with storage facilities was low in Karamoja and West Nile regions. The major issue raised about NMS storage facilities was limited space for storage.

Distribution, Delivery and Supply Systems: Slightly more clients in 2016 (76%) compared to 2013 (68%) felt that the distribution, delivery and supply systems the situation has improved/bettered since 2012. In comparison with 2013 and 2012, the level of satisfaction with distribution, delivery and supply systems slightly increased in 2016 to 7.8 from 7.8 in 2012 and 7.6 in 2013. Across all levels of health facilities NMS was scored above 7 with regards to distribution, delivery and supply systems save for NRI and RRH. However, similar to previous rounds, majority of the respondents scored NMS low on flexibility to handle emergencies.

Range, quantity, quality, shelf-life and packaging of EMHLS: In 2016, the percentage of participants who felt there was improvement on the range, quantity, quality, shelf-life and packaging of commodities increased to 70% from 69% in 2013. The overall satisfaction with the range, quantity, quality, shelf-life and packaging of EMHLS was 7.7, a very slight increase from 7.6 and 7.4 for 2013 and 2012 waves respectively. At segment level, the level of satisfaction with EMHLS was higher (score of 8) at lower levels such as HC IIIs, HC IIs and IVs. At higher levels, such as hospitals, RRHs, NRHs and NRIs, the satisfaction was slightly lower; at 7. Participants asserted that medical equipment including laboratory equipment like microscopes were not being supplied in the desired quantities. Participants cited the inconsistencies in packaging. It was asserted that sometimes boxes show different drugs from what is packed inside. Participants also argued that some drugs and reagents require refrigeration but - NMS does not provide for that both at the district and even at the delivery points.

Quality Control Systems: The overall satisfaction with QC processes reduced to 7.9 though it remained higher than that of 2012 (7.42). At segment levels, all levels of care scored 8 save for NRH and NRI which scored 7. Majority (60%) of the participants were in favour of both NDA and NMS jointly handling quality control processes. Only 23% reasoned that NMS should solely handle quality control processes, and the fewest, 17%, of participants felt that NDA should solely handle the quality control processes. The issue of quality control assurance is not primarily an NMS function but they can contribute to the overall quality control assurance for all the commodities in the country. Therefore, cooperating with NDA and other monitoring agencies or departments is the right strategy.

Personality and Skills of NMS Staff: In the realm of Personality and Skills of NMS Staff, there was no significant changes between 2013 and 2016. The level of overall client satisfaction with personality and skills of NMS staff largely remained the same. The satisfaction was 8 for all levels of care save for NRI (score 7). Notably, few respondents find NMS staff as staff that communicate frequently on status of orders placed.

Information Dissemination: The overall Satisfaction with information distribution of NMS in 2016 increased significantly to 7.4 from 6.3 in 2012. At health facility level, HCIVs were the most satisfied and regional referrals were the least satisfied. Notably, awareness of different communication channels used by NMS was higher in 2013 compared to 2016. In terms of awareness of communication channels, majority (74%) of participants were aware of the telephone, followed by emails, radio and television. Telephones were scored highest as an important communication channel while Televisions and Bulletins had the lowest scores. West Nile scored all communication channels low about importance except for telephones. The overall satisfaction with communication channels was 5.9, lower than the score of 7.4 in 2013. Clients were most satisfied with the Telephone as a communication channel by NMS. Overall less than half (43%) of the respondents had received information about NMS in the past three months. The results indicated that majority (52%) received information from NMS staff and few (17%) from NMS information materials. The results indicate that Telephone is the most preferred (69%) communication channel followed by email (28%) and radio (20%). However, some of the clients find the email as ineffective communication channel and prone to delayed response.

Complaint Management: About, 33% had ever had problems with NMS. Out of 315 participants whose problems were handled by NMS, 72% were not satisfied with how they were handled. The most common problems mentioned by clients were not supplying according to orders made, shortage of essential medicine/ low supply and delay/ failure to deliver in time.

Vaccines and Gases: Overall, satisfaction with vaccines and gas was scored at 8.0, slightly lower than that of 2013 (8.3). Participants were particularly most satisfied with attributes related to vaccines that are approved by NDA, well and appropriately labelled and packaged vaccines. Participants expressed lack of specific vaccines such as anti-Rabies vaccine that needed special attention. Certain populations need special attention as they face unique circumstances. This is the case for refugee hosting communities who reported inadequate quantities of vaccines due to presence of refugees. Most clients are not satisfied with the amount of gas supplied based on the on the number of empty cylinders and not need.

13.0 RECOMMENDATIONS

Storage facilities

- Special focus needs to be put to storage facilities in Karamoja and West Nile regions. Expansion of storage space and facilities needs to be prioritized. There is need to provide more space or open more stores especially upcountry. District authorities in each region should coordinate, assisted by the government, to establish regional storage facilities to manage emergency orders.

Distribution, Delivery and Supply Systems

- The push system dilemma. NMS needs to do more to convince lower levels of care such as HCIIIs, HCIIIIs and HCIVs about the effectiveness and efficiency of the push system. Majority of these health facilities had until 2016 not bought into it and would prefer supply is made according to their needs and orders. NMS should institutionalize M&E processes at regional offices
- Expansion of transportation infrastructure: Perhaps, NMS needs to procure vehicles for each NMS region to enable drug monitoring and transportation and removing drugs from one center where they are not needed to where they are needed or to the main central stores of the district and be transported

when they are required. Understandably, ofcourse, although this may be out of NMS's mandate, NMS could still play a supportive role to districts and particular health facilities to ensure safe transfer of drugs from where they are plenty/not urgently needed to health facilities with greater need/emergency.

- Improve coordination and communication of distribution system: NMS should prior share a copy of the list of items the clients are expected to receive. This will enable health centers to check whether what is on the list is what was requested and is what is delivered. This list can be for instance be sent via email in advance.
- Safety: NMS should Improve on the security and safety of products. For instance, Last Mile Delivery (Three ways) should have enough well covered vehicles for delivery. In addition, measures or plan of what to do for expired drugs should be communicated.
- Delivery time: NMS should have enough time to deliver in working hours. Delivery time should also be clear. In addition, NMS delivery staff should be in position to communicate earlier to the in charges before delivery.
- An emergence response plan or strategy needs to be developed and shared with the clients.

Recommendation - Quality Control Systems

- District authorities and other partners including NMS should sustain inspections in different health facilities to ensure that medicines are safe and not siphoned to private drug shops
- Quarterly review meetings should be maintained and implemented consistently.

Personality and Skills of NMS Staff

- NMS should set up and organize client service events across regions. This will increase visibility and interaction with the clients and provide relevant feedback for improving the relationship between clients and NMS staff.
- NMS staff should organize client sensitization meetings focusing on how to make orders and manage medicines and other supplies. These meetings should target representatives from all levels of care and should be held at either district hospitals or regional referral hospitals.

Information Dissemination

- NMS should introduce toll free lines at regional offices for easing communication and complaints management. The toll free line should be rooted directly to the responsible officers
- Communication using email needs to be done strategically. Not many clients check their mails regularly due to power and internet limitations. This is especially true with remote and lower levels of care such as HCIIIs, HCIIIs and HCIVs. NMS may need to follow-up emails with phone call reminders or SMS notifications alerting the clients to check their emails.
- Use of social media and its opportunities should be maximized and taken advantage of. Health facilities located in urban centres and with easy access to internet could benefit from social media platforms. This needs to be supplemented with the other communication channels such as emails, print media, IEC materials, the NMS website.
- The existing communication structures especially at the local government level should be utilized. This includes RDCs, CAOs and DHOs who are key in coordination and monitoring.

Vaccines and gas

- Certain populations need special attention as they face unique circumstances. This is the case for refugee hosting communities who reported inadequate quantities of vaccines due to presence of refugees. There is need for special programs for such communities in relation to range and quantity of

vaccines. NMS should alert the government and other partners about this in order to secure extra funding to enable refugee host communities receive extra medical and laboratory supplies.

- Most clients are not satisfied with the amount of gas supplied based on the number of empty cylinders and not need. There might be a need to consider the rate of consumption at the facility for proper projections. The efficiency of having spare gas cylinders for back up at every health facility should be explored and examined. Each facility is supposed to have two gas cylinders so that when one gets finished, they use the spare and take another one for refilling. This needs to be revisited at all levels of care that receive gas.
- Some clients expressed dissatisfaction with the packaging of some of the vaccines. This needs to further be studied and assessed.

- **Areas of further research**

There is need by NMS to revisit and improve quantification of EMHS in order to stabilize medicine availability at facility level. Ongoing monitoring and updating of the quantification is critical to keep NMS development partners and other stakeholders informed on the availability of drugs, timely decision making about product selection, financing and delivery of commodities. Similarly, overtime and regular monitoring can improve the accuracy of NMS forecasts and the overall quality of quantifications. Likewise, advanced contract monitoring is vital to ensure that suppliers meet their obligations and that products arrive on time and in expected quality and quantity. Further, NMS needs to explore its current method of invoice delivery to health facilities. This should indicate all items that were ordered but have not been delivered and reasons why. Promoting preventive health is the sure way to have quality population, NMS should rethink and expedite more ways of contributing to this area.

REFERENCES

Client Satisfaction Survey 2013- Wave II – Final Report – prepared by Ipsos Ltd

Client Satisfaction Survey 2012- Wave II – Final Report – prepared by Ipsos Ltd

ANNEXES

Annex 1: Number of health facilities visited at each level of care by district and region

REGION/Zone	District	HC 2	HC 3	HC 4	GH	NRH	NRI	RRH	Total
Kampala	Wakiso	21	4	2	1				
	Buikwe	5	3						
	Kampala	2	-	2	1	2	2		
	Jinja	10	4	2				1	
	Maska	5	3	2				1	
	Bukomansimbi	3	3	1					
	Mityana	8	4	2					
	Mukono	8	4	2					
	Total		62	25	13	2	2	2	2
Zone	District	HC 2	HC 3	HC 4	GH	NRH	NRI	RRH	
Mbale	Bugiri	9	6	1					
	Bulambuli	5	5	1					
	Busia	10	3	1					
	Iganga	16	8	2					
	Kamuli	13	5	2	1				
	Mayuge	18	3	2					
	Mbale	3	7	3	1				
	Sironko	5	4	2					
	Total		79	41	14	2			
Zone	District	HC2	HC3	HC4	GH	NRH	NRI	RRH	
Soroti	Kumi	3	5	1	1				
	Ngora	2	6	1					
	Palisa	4	9	1					
	Soroti	5	4	1				1	
	Total		14	24	4	1			1
Zone	District	HC2	HC3	HC4	GH	NRH	NRI	RRH	
Gulu	Agago	10	4						
	Kole	5	4	1					
	Amuru	6	4	1					
	Apac	10	3	1	1				
	Gulu	15	5	2				1	
	Lira	6	2	2					
Total		52	25	7	1			1	86

ZONE	DISTRICT	HC2	HC3	HC4	GH	NRH	NRI	RRH	
Karamoja	Abim	7	1		1				
	Kaabong	5	3	1					
	Moroto	3	1					1	
	Total	15	5	1	1			1	23
ZONE	DISTRICT	HC2	HC3	HC4	GH	NRH	NRI	RRH	
West Nile	Adjumani	6	4	1	1				
	Moyo	5	4	1					
	Maracha	3	3						
	Arua	6	8	1				1	
	Nebbi	11	4	1					
	Total	31	23	4	1			1	60
ZONE	DISTRICT	HC2	HC3	HC4	GH	NRH	NRI	RRH	
Kabarole	Ibanda	9	3	2					
	Rubirizi	5	3	1					
	Kabarole	9	6	3				1	
	Buhweju	5	3	1					
	Kasese	15	8	1	1				
	Kyenjojo	3	1						
	Sheema	11	1	2	1				
	Total	57	25	10	2			1	95
ZONE	DISTRICT	HC2	HC3	HC4	GH	NRH	NRI	RFH	
Mbarara	Isingiro	7	6	2					
	Kanugu	8	3	2					
	Kabale	31	5	3				1	
	Kiruhura	5	4	1					
	Lyantode	5	3		1				
	Mbarara	13	4	3				1	
	Ntugamo	10	2	2	1				
	Rukugiri	15	6	2					
	Total	84	32	15	2			2	146
REGION/Zone	DISTRICT	HC2	HC3	HC4	GH	NRH	NRI	RFH	
Hoima	Hoima	10	7					1	
	Masindi	6	4						
	Kibaale	7	13	3	1				
	Mubende	2		2				1	57
Total									755

Annex 2: Tools for data collection

Client Survey TOOL

IDENTIFICATION PARTICULARS

NAME OF Health Facility: _____ Code _____
Level of Facility: (NRH..1 NRI..2 RRH...3 GH..4 HC4...5 HC3..6 HC2..7) _____
Region: (1..Gulu, 2..Hoima, 3..Kabarole, 4.Kampala, 5..Mbale, 6..Mbarara, 7..Soroti, Karamoja and West Nile) _____
District: _____
NMS Zone: _____
NO. of Staff: _____

Name of Respondent: _____
Title: _____
DEPARTMENT: _____
TEL: (Work): _____
Mob: _____
GPS Coordinates: _____

Interviewer Name: _____
Interview Date: (DD/MM/YY): _____
Start Time: _____ End Time: _____

Supervisor's Name: _____
Edited by: _____
Back-checked by: _____
Back-checking details

Back check:
Personal
Telephone
Neither

INTRODUCTION: Good morning/afternoon. My name is.....from Ipsos Limited. We are doing a survey on behalf of the National Medical Stores and are interested in your satisfaction with the medicines, supplies and services that it offers you.

We thank you for being a customer of NMS. Please help NMS improve their commodities and services to you by participating in this survey. Your responses will help us to address any issues that you may have as well as help NMS to better target her commodities and services to meet your needs. Your responses will be kept strictly confidential.

Please ask the respondent to sign below:

I _____ (name of RESPONDENT) understand the objectives of the questionnaire and agree to participate in this study.

Interviewee's signature _____	Date (DD/MM/YYYY) <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
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S1. Please kindly tell me who supplies essential medicines and health and laboratory supplies to your facility? **(Do not read list. Multiple answers possible.)**

1. JMS
2. NMS
3. Surgipharm
4. Kampala Pharmaceuticals limited

Others (Specify) _____

EVALUATION OF STORAGE FACILITIES

Interviewer instructions: *If the facility is HC4, HC3 or HC2 please ask the following question before proceeding to ask questions 1a to 1e. Else if facility is NRH, NRI, RRH or GH, then do not ask question S2 but skip to 1a.*

S2: Have you ever been to or visited the National Medical Stores' premises in Entebbe? Yes..1 No..2. **If Yes then continue with asking question 1a else skip to question 2a.**

1a. INTERVIEWER ASK: SHOW CARD: On a scale of 1 to 10 where 10 is strongly agree and 1 is least agree to what extent do you agree or disagree with each of the following statements about the **Storage Facilities?** **READ OUT SCALE.**

		RATING										
		Strongly agree					Strongly Disagree					
a.	Have control systems in place against theft, loss etc	10	9	8	7	6	5	4	3	2	1	DK
b.	They are spacious and not congested	10	9	8	7	6	5	4	3	2	1	DK
c.	Have up-to-date records	10	9	8	7	6	5	4	3	2	1	DK
d.	They are clean	10	9	8	7	6	5	4	3	2	1	DK
e.	They are well arranged	10	9	8	7	6	5	4	3	2	1	DK
f.	They are automated, with up-to-date information	10	9	8	7	6	5	4	3	2	1	DK
g.	They are well ventilated and meet drug temperature requirements	10	9	8	7	6	5	4	3	2	1	DK

1b. On a scale of 1 to 10 where 1 is least important and 10 is most important, how important are the following attributes in relation to storage facilities for medical supplies?

		RATING										
		Most important					Least important					
a.	Having control systems in place against theft, loss etc	10	9	8	7	6	5	4	3	2	1	DK
b.	Stores are spacious and not congested	10	9	8	7	6	5	4	3	2	1	DK
c.	Having up-to-date records	10	9	8	7	6	5	4	3	2	1	DK
d.	Having clean stores	10	9	8	7	6	5	4	3	2	1	DK
e.	Well managed and arranged	10	9	8	7	6	5	4	3	2	1	DK
f.	Having automated, with up-to-date information	10	9	8	7	6	5	4	3	2	1	DK

g.	Storage facility that is well ventilated and meet medicinal temperature requirements	10	9	8	7	6	5	4	3	2	1	DK
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1c. On a scale of 1 to 10 where 1 is least satisfaction and 10 is very satisfied, how satisfied are you with storage facilities on the following attributes?

		RATING										
		Very satisfied						Least satisfied				
a.	Having control systems in place against theft, loss etc	10	9	8	7	6	5	4	3	2	1	DK
b.	Stores are spacious and not congested	10	9	8	7	6	5	4	3	2	1	DK
c.	Having up-to-date records	10	9	8	7	6	5	4	3	2	1	DK
d.	Having clean stores	10	9	8	7	6	5	4	3	2	1	DK
e.	Well managed and arranged	10	9	8	7	6	5	4	3	2	1	DK
f.	Having automated, with up-to-date information	10	9	8	7	6	5	4	3	2	1	DK
g.	Storage facility that is well ventilated and meet medicinal temperature requirements	10	9	8	7	6	5	4	3	2	1	DK

1d. Is there any other issue you would like to highlight on the storage facilities?

1e. Do you have any suggestions for improvement of the storage facilities?

1f. Have there been any changes made in storage facilities since 2012. Would you say that it has become....

Better Remained the same Worse DK NA

EVALUATION OF DISTRIBUTION, DELIVERY AND SUPPLY SYSTEMS

S3: In relation to the medicines and supplies from NMS, who often distributes and delivers the medicines and supplies to this facility? NMS staff..1 District health personnel..2, Others specify..3

2a. INTERVIEWER ASK: SHOW CARD: On a scale of 1 to 10 where 10 is strongly agree and 1 is least agree, to what extent do you agree or disagree with each of the following statements about the **Transport facilities and Distribution, Delivery and Supply systems** at NMS? **READ OUT SCALE.**

		RATING	
		Strongly agree	Strongly Disagree

a.	NMS Transport facilities are fitted with cold room storage – to fit drug temperature requirements	10	9	8	7	6	5	4	3	2	1	DK
b.	NMS is able to access all areas (rural & urban)	10	9	8	7	6	5	4	3	2	1	DK
c.	NMS' vehicles are branded and easy to identify	10	9	8	7	6	5	4	3	2	1	DK
d.	NMS uses a variety of transportation to deliver all commodities required	10	9	8	7	6	5	4	3	2	1	DK
e.	NMS Distribution, delivery and supply system is flexible to accommodate emergencies.	10	9	8	7	6	5	4	3	2	1	DK
f.	NMS Distribution, delivery and supply systems have a delivery schedule for ease of planning	10	9	8	7	6	5	4	3	2	1	DK
g.	NMS Distribution, delivery and supply system is consistent	10	9	8	7	6	5	4	3	2	1	DK
h.	NMS Distribution, delivery and supply systems have a quantification procedure to check against orders made	10	9	8	7	6	5	4	3	2	1	DK
i.	NMS Distribution, delivery and supply system is timely	10	9	8	7	6	5	4	3	2	1	DK
j.	NMS Distribution, delivery and supply systems is reliable	10	9	8	7	6	5	4	3	2	1	DK
k.	NMS Distribution, delivery and supply systems are well structured	10	9	8	7	6	5	4	3	2	1	DK
l.	NMS Distribution, delivery and supply systems have proper documentation	10	9	8	7	6	5	4	3	2	1	DK
m.	NMS deliver up to the final destination	10	9	8	7	6	5	4	3	2	1	DK

2b. On a scale of 1 to 10 where 1 is least important and 10 is most important, how important are the following attributes in relation to transport facilities and distribution, delivery and supply systems of suppliers and distributors of essential medicines and health supplies?

		RATING										DK
		Most important					Least important					
a.	Transport facilities that are fitted with cold room storage – to fit drug temperature requirements	10	9	8	7	6	5	4	3	2	1	DK
b.	NMS is able to access all areas (rural & urban)	10	9	8	7	6	5	4	3	2	1	DK
c.	Vehicles that are branded and easy to identify	10	9	8	7	6	5	4	3	2	1	DK
d.	Transport facilities that have a variety to deliver all commodities required	10	9	8	7	6	5	4	3	2	1	DK

e.	A Distribution, delivery and supply systems that is flexible to accommodate emergencies.	10	9	8	7	6	5	4	3	2	1	DK
f.	A Distribution, delivery and supply system that has a delivery schedule for ease of planning	10	9	8	7	6	5	4	3	2	1	DK
g.	A Distribution, delivery and supply system that is consistent	10	9	8	7	6	5	4	3	2	1	DK
h.	A Distribution, delivery and supply system that has a quantification procedure to check against orders made	10	9	8	7	6	5	4	3	2	1	DK
i.	A Distribution, delivery and supply systems that is timely	10	9	8	7	6	5	4	3	2	1	DK
j.	A Distribution, delivery and supply systems that is reliable	10	9	8	7	6	5	4	3	2	1	DK
k.	A Distribution, delivery and supply systems that is well structured	10	9	8	7	6	5	4	3	2	1	DK
l.	A Distribution, delivery and supply system that has proper documentation	10	9	8	7	6	5	4	3	2	1	DK
m.	A Distribution, delivery and supply system that delivers up to the final destination	10	9	8	7	6	5	4	3	2	1	DK

2c. On a scale of 1 to 10 where 1 is least satisfaction and 10 is very satisfied, how satisfied are you with NMS' transport facilities and distribution, delivery and supply systems on the following attributes?

		RATING										DK
		Very satisfied					Least satisfied					
a.	Transport facilities that are fitted with cold room storage – to fit drug temperature requirements	10	9	8	7	6	5	4	3	2	1	DK
b.	NMS is able to access all areas (rural & urban)	10	9	8	7	6	5	4	3	2	1	DK
c.	Vehicles that are branded and easy to identify	10	9	8	7	6	5	4	3	2	1	DK
d.	Transport facilities that have a variety to deliver all commodities required	10	9	8	7	6	5	4	3	2	1	DK
e.	A Distribution, delivery and supply system that is flexible to accommodate emergencies.	10	9	8	7	6	5	4	3	2	1	DK
f.	A Distribution, delivery and supply systems that has a delivery schedule for ease of planning	10	9	8	7	6	5	4	3	2	1	DK
g.	A Distribution, delivery and supply systems that is consistent	10	9	8	7	6	5	4	3	2	1	DK
h.	A Distribution, delivery and supply systems that has a quantification procedure to check against orders made	10	9	8	7	6	5	4	3	2	1	DK
i.	A Distribution, delivery and supply system that is timely	10	9	8	7	6	5	4	3	2	1	DK

j.	A Distribution, delivery and supply systems that is reliable	10	9	8	7	6	5	4	3	2	1	DK
k.	A Distribution, delivery and supply systems that is well structured	10	9	8	7	6	5	4	3	2	1	DK
l.	A Distribution, delivery and supply systems that has proper documentation	10	9	8	7	6	5	4	3	2	1	DK
m.	A Distribution, delivery and supply system that delivers up to the final destination	10	9	8	7	6	5	4	3	2	1	DK

2d. Is there any other issue you would like to highlight about the transport, distribution, delivery and supply systems of NMS?

2e. Do you have any suggestions for improvement of the transport, distribution, delivery and supply systems of NMS?

2f. Have there been any changes made in the distribution, delivery and supply systems

By NMS since 2012. Would you say that it has become....

Better Remained the same Worse DK NA

EVALUATION OF RANGE, QUANTITY, QUALITY, SHELF –LIFE AND PACKAGING OF COMMODITIES

3a. **INTERVIEWER ASK: SHOW CARD:** On a scale of 1 to 10 where 10 is strongly agree and 1 is least agree, to what extent do you agree or disagree with each of the following statements about the **range, quantity, quality, shelf-life and packaging** of commodities supplied by NMS? **READ OUT SCALE.**

		RATING										
		Strongly agree					Strongly Disagree					
a.	NMS stocks and supplies an adequate range/variety of essential medicines	10	9	8	7	6	5	4	3	2	1	DK
b.	NMS stocks and supplies adequate essential medicines	10	9	8	7	6	5	4	3	2	1	DK
c.	NMS stocks and supplies essential medicines that have a long shelf-life	10	9	8	7	6	5	4	3	2	1	DK
d.	NMS stocks and supplies essential medicines of good quality	10	9	8	7	6	5	4	3	2	1	DK
e.	NMS stocks and supplies well and appropriately labeled and packaged essential medicines	10	9	8	7	6	5	4	3	2	1	DK

f.	NMS supplies essential medicines that are worth the value of money paid	10	9	8	7	6	5	4	3	2	1	DK
g.	NMS stocks and supplies an adequate range/variety of medical supplies	10	9	8	7	6	5	4	3	2	1	DK
h.	NMS stocks and supplies adequate medical supplies	10	9	8	7	6	5	4	3	2	1	DK
i.	NMS stocks and supplies medical supplies that have a long shelf-life	10	9	8	7	6	5	4	3	2	1	DK
j.	NMS stocks and supplies medical supplies of good quality	10	9	8	7	6	5	4	3	2	1	DK
k.	NMS stocks and supplies well and appropriately labeled and packaged medical supplies	10	9	8	7	6	5	4	3	2	1	DK
l.	NMS supplies medical supplies that are worth the value of money paid	10	9	8	7	6	5	4	3	2	1	DK
m.	NMS stocks and supplies an adequate range/variety of laboratory supplies	10	9	8	7	6	5	4	3	2	1	DK
n.	NMS stocks and supplies adequate laboratory supplies	10	9	8	7	6	5	4	3	2	1	DK
o.	NMS stocks and supplies laboratory supplies that have a long shelf-life	10	9	8	7	6	5	4	3	2	1	DK
p.	NMS stocks and supplies laboratory supplies of good quality	10	9	8	7	6	5	4	3	2	1	DK
q.	NMS stocks and supplies well and appropriately labeled and packaged laboratory supplies	10	9	8	7	6	5	4	3	2	1	DK
r.	NMS supplies laboratory supplies that are worth the value of money paid	10	9	8	7	6	5	4	3	2	1	DK
s.	NMS' Procurement is prioritized based on national essentials drugs list versus customer needs and available funds	10	9	8	7	6	5	4	3	2	1	DK
t.	Essential medicines and health supplies are approved by the Drug Regulations Board (National Drug Authority)	10	9	8	7	6	5	4	3	2	1	DK

3b. On a scale of 1 to 10 where 1 is least important and 10 is most important, how important are the following attributes in relation to **range, quantity, quality, shelf-life and packaging** of essential medicines and health and laboratory supplies?

		RATING										
		Most important					Least important					
a.	An adequate range/variety of essential medicines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
b.	Adequate essential medicines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK

c.	A long shelf-life of essential medicines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
d.	Good quality of essential medicines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
e.	Well and appropriately labeled and packaged essential medicines that are stoked and supplied	10	9	8	7	6	5	4	3	2	1	DK
f.	The essential medicines supplied are worth the value of money paid	10	9	8	7	6	5	4	3	2	1	DK
g.	An adequate range/variety of medical supplies that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
h.	Adequate medical supplies that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
i.	A long shelf-life of medical supplies that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
j.	Good quality of medical supplies that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
k.	Well and appropriately labeled and packaged medical supplies that are stoked and supplied	10	9	8	7	6	5	4	3	2	1	DK
l.	The medical supplies supplied are worth the value of money paid	10	9	8	7	6	5	4	3	2	1	DK
m.	An adequate range/variety of laboratory supplies that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
n.	Adequate laboratory supplies that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
o.	A long shelf-life of laboratory supplies that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
p.	Good quality of laboratory supplies that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
q.	Well and appropriately labeled and packaged laboratory supplies that are stoked and supplied	10	9	8	7	6	5	4	3	2	1	DK
r.	The laboratory supplies supplied are worth the value of money paid	10	9	8	7	6	5	4	3	2	1	DK
s.	Procurement that is prioritized based on national essentials drugs list versus customer needs and available funds	10	9	8	7	6	5	4	3	2	1	DK
t.	Essential medicines and health supplies that are approved by the Drug Regulations Board (National Drug Authority)	10	9	8	7	6	5	4	3	2	1	DK

3c. On a scale of 1 to 10 where 1 is least satisfaction and 10 is very satisfied, how satisfied are you with **range, quantity, quality, shelf-life and packaging** of essential medicines and health and laboratory supplies from NMS on the following attributes?

		RATING										
		Very satisfied						Least satisfied				
a.	An adequate range/variety of essential medicines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
b.	Adequate essential medicines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
c.	A long shelf-life of essential medicines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
d.	Good quality of essential medicines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
e.	Well and appropriately labeled and packaged essential medicines that are stoked and supplied	10	9	8	7	6	5	4	3	2	1	DK
f.	The essential medicines supplied are worth the value of money paid	10	9	8	7	6	5	4	3	2	1	DK
g.	An adequate range/variety of medical supplies that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
h.	Adequate medical supplies that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
i.	A long shelf-life of medical supplies that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
j.	Good quality of medical supplies that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
k.	Well and appropriately labeled and packaged medical supplies that are stoked and supplied	10	9	8	7	6	5	4	3	2	1	DK
l.	The medical supplies supplied are worth the value of money paid	10	9	8	7	6	5	4	3	2	1	DK
m.	An adequate range/variety of laboratory supplies that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
n.	Adequate laboratory supplies that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
o.	A long shelf-life of laboratory supplies that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
p.	Good quality of laboratory supplies that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
q.	Well and appropriately labeled and packaged laboratory supplies that are stoked and supplied	10	9	8	7	6	5	4	3	2	1	DK
r.	The laboratory supplies supplied are worth the value of money paid	10	9	8	7	6	5	4	3	2	1	DK

s.	Procurement that is prioritized based on national essentials drugs list versus customer needs and available funds	10	9	8	7	6	5	4	3	2	1	DK
t.	Essential medicines and health supplies that are approved by the Drug Regulations Board (National Drug Authority)	10	9	8	7	6	5	4	3	2	1	DK

3d. Is there any other issue you would like to highlight about the **range, quantity, quality, shelf-life and packaging** of essential medicines and health and laboratory supplies from NMS?

3e. Do you have any suggestions for improvement of **range, quantity, quality, shelf-life and packaging** of essential medicines and health and laboratory supplies from NMS?

3f. Have there been any changes made in the range, quantity, quality, shelf –life and packaging of commodities from NMS since 2012. Would you say that it has become

Better Remained the same Worse DK NA

EVALUATION OF QUALITY CONTROL SYSTEMS

5a. **INTERVIEWER ASK: SHOW CARD:** On a scale of 1 to 10 where 10 is strongly agree and 1 is least agree, to what extent do you agree or disagree with each of the following statements about the **Quality Control** at NMS? **READ OUT SCALE.**

		RATING										DK
		Strongly agree					Strongly Disagree					
a.	Quality control is conducted on all commodities before actual distribution	10	9	8	7	6	5	4	3	2	1	DK
b.	Quality control is carried out consistently	10	9	8	7	6	5	4	3	2	1	DK
c.	Quality control is carried out in a systematic manner	10	9	8	7	6	5	4	3	2	1	DK
d.	NMS' quality control process meets quality control standards internationally	10	9	8	7	6	5	4	3	2	1	DK

5b. On a scale of 1 to 10 where 1 is least important and 10 is most important, how important are the following attributes in relation to **quality control processes** in supply and distribution of essential medicines and health and laboratory supplies?

		RATING										
		Most important					Least important					

a.	Conducting quality control on all commodities before actual distribution	10	9	8	7	6	5	4	3	2	1	DK
b.	Quality control systems that are carried out consistently	10	9	8	7	6	5	4	3	2	1	DK
c.	Quality control systems that are carried out in a systematic manner	10	9	8	7	6	5	4	3	2	1	DK
d.	Quality control process that meets international standards	10	9	8	7	6	5	4	3	2	1	DK

5c. On a scale of 1 to 10 where 1 is least satisfaction and 10 is very satisfied, how satisfied are you with **quality control processes** of NMS on the following attributes?

		RATING										
		Very satisfied					Least satisfied					
a.	Conducting quality control on all commodities before actual distribution	10	9	8	7	6	5	4	3	2	1	DK
b.	Quality control systems that are carried out consistently	10	9	8	7	6	5	4	3	2	1	DK
c.	Quality control systems that are carried out in a systematic manner	10	9	8	7	6	5	4	3	2	1	DK
d.	Quality control process that meets international standards											

5d. Is there any other issue you would like to highlight about the **quality control processes** by NMS?

5e. Do you have any suggestions for improvement of **quality control processes** by NMS?

5f. Have there been any changes made in quality control systems since 2012? Would you say that it has become....

Better Remained the same Worse DK NA

5g. In your opinion, do you think NMS should continue handling quality control processes? Or should be National Drug Authority (NDA) or both NMS and NDA? Why?

EVALUATION OF STAFF PERSONALITY AND SKILLS

6a. **INTERVIEWER ASK: SHOW CARD:** On a scale of 1 to 10 where 10 is strongly agree and 1 is least agree, to what extent do you agree or disagree with each of the following statements about the **Personality and Skills of the Staff** at NMS? **READ OUT SCALE.**

		RATING										
		Strongly agree					Strongly Disagree					
a.	The staff are honest (integrity)	10	9	8	7	6	5	4	3	2	1	DK

b.	The staff are empathetic	10	9	8	7	6	5	4	3	2	1	DK
c.	The staff understand customer's needs and are knowledgeable	10	9	8	7	6	5	4	3	2	1	DK
d.	The staff are friendly	10	9	8	7	6	5	4	3	2	1	DK
e.	The staff respect customers	10	9	8	7	6	5	4	3	2	1	DK
f.	They are courteous	10	9	8	7	6	5	4	3	2	1	DK
g.	They are patient	10	9	8	7	6	5	4	3	2	1	DK
h.	They are smart	10	9	8	7	6	5	4	3	2	1	DK
i.	They are time conscious	10	9	8	7	6	5	4	3	2	1	DK
j.	They are adequate in number	10	9	8	7	6	5	4	3	2	1	DK
k.	They communicate frequently on status of orders placed	10	9	8	7	6	5	4	3	2	1	DK
l.	They give correct information always and are well informed	10	9	8	7	6	5	4	3	2	1	DK
m.	They are always reliable and available when needed	10	9	8	7	6	5	4	3	2	1	DK
n.	They are flexible to accommodate customer needs	10	9	8	7	6	5	4	3	2	1	DK
o.	They are quick and efficient	10	9	8	7	6	5	4	3	2	1	DK
p.	They are professional	10	9	8	7	6	5	4	3	2	1	DK
q.	They listen to customers requests and complaints	10	9	8	7	6	5	4	3	2	1	DK
r.	They give advice in case of problems	10	9	8	7	6	5	4	3	2	1	DK

6b. On a scale of 1 to 10 where 1 is least important and 10 is most important, how important are the following attributes in relation to **Personality and Skills of the Staff** in supply and distribution of essential medicines and health and laboratory supplies?

		RATING										DK
		Most important					Least important					
a.	Staff that is honest (integrity)	10	9	8	7	6	5	4	3	2	1	DK
b.	Staff that is empathetic	10	9	8	7	6	5	4	3	2	1	DK
c.	Staff that understands customer's needs and are knowledgeable	10	9	8	7	6	5	4	3	2	1	DK
d.	Staff that is friendly	10	9	8	7	6	5	4	3	2	1	DK
e.	Staff that respect customers	10	9	8	7	6	5	4	3	2	1	DK
f.	Staff that is courteous	10	9	8	7	6	5	4	3	2	1	DK
g.	Staff that is patient	10	9	8	7	6	5	4	3	2	1	DK
h.	Staff that is smart	10	9	8	7	6	5	4	3	2	1	DK
i.	Staff that is time conscious	10	9	8	7	6	5	4	3	2	1	DK
j.	Staff that is adequate in number	10	9	8	7	6	5	4	3	2	1	DK
k.	Staff that communicates frequently on status of orders placed	10	9	8	7	6	5	4	3	2	1	DK

l.	Staff that gives correct information always and is well informed	10	9	8	7	6	5	4	3	2	1	DK
m.	Staff that is always reliable and available when needed	10	9	8	7	6	5	4	3	2	1	DK
n.	Staff that is flexible to accommodate customer needs	10	9	8	7	6	5	4	3	2	1	DK
o.	Staff that is quick and efficient	10	9	8	7	6	5	4	3	2	1	DK
p.	Staff that is professional	10	9	8	7	6	5	4	3	2	1	DK
q.	Staff that listens to customers requests and complaints	10	9	8	7	6	5	4	3	2	1	DK
r.	Staff that gives advice in case of problems	10	9	8	7	6	5	4	3	2	1	DK

6c. On a scale of 1 to 10 where 1 is least satisfaction and 10 is very satisfied, how satisfied are you with **personality and skills** of NMS on the following attributes?

		RATING										DK
		Very satisfied					Least satisfied					
a.	Staff that is honest (integrity)	10	9	8	7	6	5	4	3	2	1	DK
b.	Staff that is empathetic	10	9	8	7	6	5	4	3	2	1	DK
c.	Staff that understands customer's needs and are knowledgeable	10	9	8	7	6	5	4	3	2	1	DK
d.	Staff that is friendly	10	9	8	7	6	5	4	3	2	1	DK
e.	Staff that respect customers	10	9	8	7	6	5	4	3	2	1	DK
f.	Staff that is courteous	10	9	8	7	6	5	4	3	2	1	DK
g.	Staff that is patient	10	9	8	7	6	5	4	3	2	1	DK
h.	Staff that is smart	10	9	8	7	6	5	4	3	2	1	DK
i.	Staff that is time conscious	10	9	8	7	6	5	4	3	2	1	DK
j.	Staff that is adequate in number	10	9	8	7	6	5	4	3	2	1	DK
k.	Staff that communicates frequently on status of orders placed	10	9	8	7	6	5	4	3	2	1	DK
l.	Staff that gives correct information always and is well informed	10	9	8	7	6	5	4	3	2	1	DK
m.	Staff that is always reliable and available when needed	10	9	8	7	6	5	4	3	2	1	DK
n.	Staff that is flexible to accommodate customer needs	10	9	8	7	6	5	4	3	2	1	DK
o.	Staff that is quick and efficient	10	9	8	7	6	5	4	3	2	1	DK
p.	Staff that is professional	10	9	8	7	6	5	4	3	2	1	DK
q.	Staff that listens to customers requests and complaints	10	9	8	7	6	5	4	3	2	1	DK
r.	Staff that gives advice in case of problems	10	9	8	7	6	5	4	3	2	1	DK

6d. Is there any other issue you would like to highlight on the personnel at NMS?

6e. Do you have any suggestions for improvement on the personnel at NMS?

1f. Have there been any changes made in staff personality and skills since 2012. Would you say that it has become ...

Better Remained the same Worse DK NA

EVALUATION OF INFORMATION DISSEMINATION

7a. **INTERVIEWER ASK: SHOW CARD:** On a scale of 1 to 10 where 10 is strongly agree and 1 is least agree, to what extent do you agree or disagree with each of the following statements about the **Dissemination of information** by NMS? **READ OUT SCALE.**

		RATING										
		Strongly agree						Strongly Disagree				
a.	NMS disseminates information on delivery schedules	10	9	8	7	6	5	4	3	2	1	DK
b.	NMS provides information on its methods of work	10	9	8	7	6	5	4	3	2	1	DK
c.	NMS provides information on complaints procedures	10	9	8	7	6	5	4	3	2	1	DK
d.	NMS disseminates information about budgets for essential medicines and supplies	10	9	8	7	6	5	4	3	2	1	DK
e.	NMS provides information on range/variety of commodities available	10	9	8	7	6	5	4	3	2	1	DK
f.	NMS provides information on basic kits for HC2 and HC3	10	9	8	7	6	5	4	3	2	1	DK
g.	NMS provides information on commodity ordering mechanisms	10	9	8	7	6	5	4	3	2	1	DK

7b. On a scale of 1 to 10 where 1 is least important and 10 is most important, how important is it for you to know the following in supply and distribution of essential medicines and health and laboratory supplies?

		RATING										
		Most important						Least important				
a.	Delivery schedules	10	9	8	7	6	5	4	3	2	1	DK
b.	Methods of work of distributing and supplying medicines	10	9	8	7	6	5	4	3	2	1	DK
c.	Procedures for forwarding complaints	10	9	8	7	6	5	4	3	2	1	DK
d.	Budgets for essential medicines and supplies	10	9	8	7	6	5	4	3	2	1	DK
e.	Range/variety of commodities available	10	9	8	7	6	5	4	3	2	1	DK

f.	Basic kits for HC2 and HC3	10	9	8	7	6	5	4	3	2	1	DK
g.	Commodity ordering mechanisms	10	9	8	7	6	5	4	3	2	1	DK

7c. On a scale of 1 to 10 where 1 is least satisfaction and 10 is very satisfied, how satisfied are you with **availability and dissemination of information** by NMS on the following attributes?

		RATING										
		Very satisfied										Least satisfied
a.	Delivery schedules	10	9	8	7	6	5	4	3	2	1	DK
b.	Methods of work of distributing and supplying medicines	10	9	8	7	6	5	4	3	2	1	DK
c.	Procedures for forwarding complaints	10	9	8	7	6	5	4	3	2	1	DK
d.	Budgets for essential medicines and supplies	10	9	8	7	6	5	4	3	2	1	DK
e.	Range/variety of commodities available	10	9	8	7	6	5	4	3	2	1	DK
f.	Basic kits for HC2 and HC3	10	9	8	7	6	5	4	3	2	1	DK
g.	Commodity ordering mechanisms	10	9	8	7	6	5	4	3	2	1	DK

7d: Which communication channels are you aware of used by NMS to disseminate information about its products and services or any other relevant issues? (Multiple answers)

- E-mails
- Monthly newsletters
- Bulletins
- Notice boards
- Telephone
- Price catalogue
- Commodity catalogue
- Radio
- Television
- Others

7e. On a scale of 1 to 10 where 1 is least important and 10 is most important, how important is it for you that NMS communicates to you through the following channels in relation to supply and distribution of essential medicines and health and laboratory supplies?

		RATING										
		Most important										Least important
a.	NMS communicates through E-mails	10	9	8	7	6	5	4	3	2	1	DK
b.	NMS communicates through Monthly newsletters	10	9	8	7	6	5	4	3	2	1	DK
c.	NMS communicates through Bulletins	10	9	8	7	6	5	4	3	2	1	DK
d.	NMS communicates through Notice boards	10	9	8	7	6	5	4	3	2	1	DK
e.	NMS communicates through Telephone	10	9	8	7	6	5	4	3	2	1	DK

f.	NMS communicates through Price catalogues	10	9	8	7	6	5	4	3	2	1	DK
g.	NMS communicates through Commodity catalogues	10	9	8	7	6	5	4	3	2	1	DK
h.	NMS communicates through Radio											
i.	NMS communicates through Television											

7f. On a scale of 1 to 10 where 1 is least satisfaction and 10 is very satisfied, how satisfied are you with **the following NMS communication channels?**

		RATING										
		Very satisfied					Least satisfied					
a.	E-mails	10	9	8	7	6	5	4	3	2	1	DK
b.	Monthly newsletters	10	9	8	7	6	5	4	3	2	1	DK
c.	Bulletins	10	9	8	7	6	5	4	3	2	1	DK
d.	Notice boards	10	9	8	7	6	5	4	3	2	1	DK
e.	Telephone	10	9	8	7	6	5	4	3	2	1	DK
f.	Price catalogues	10	9	8	7	6	5	4	3	2	1	DK
g.	Commodity catalogues	10	9	8	7	6	5	4	3	2	1	DK
h.	Radio											
i.	Television											

7g: In the past 6 months, have you received any information about the NMS on the following issues?

7h: If yes what was the source of this information? **(Multiple mentions) (codes: NMS staff..1, NMS information materials e.g posters, brochures etc..2, District health officers..3, Others specify..4)**

Information details	Yes..1	No..1	Sources		
Delivery schedules					
Methods of work of distributing and supplying medicines					
Procedures for forwarding complaints					
Budgets for essential medicines and supplies					
Range/variety of commodities available					
Basic kits for HC2 and HC3					
Commodity ordering mechanisms					

7i(i): What do you like about the different NMS communication channels?

7i(ii): What do you dislike about the different NMS communication channels?

7i (iii) Which channels do you recommend that can be utilized by NMS to communicate its services related to supply and distribution of medicines?

1f. Have there been any changes made in mode of communication by NMS since 2012. Would you say that it has become....

Better Remained the same Worse DK NA

EVALUATION OF COMPLAINTS MANAGEMENT

8a: Have you contacted NMS in the last 3 months? Yes..1 No..2 (**Excludes contact during delivery of supplies or the regular visits to submit commodity orders**)

8b: If yes, whom did you contact or talked to?

8c: And how did you get into contact with NMS?

8b: Person of office contacted	Yes..1 No..2	8c: Mode of contact	
Head office			
Region offices			
Customer care representative at region office			
Delivery personnel			
Other (PLEASE SPECIFY)			

Codes for 8c: Telephone...1 Email..2, Letters/written document..3, Physical visit...4 othersepcify...5.

8d. Have you ever experienced any problems with or been let down by NMS? Yes..1 No..2

8e: If yes, when was the last time you experienced any problems or let down by NMS? (**single response**)

In the last 3 months	
In the last 6 months	
In the last 12 months	
In the last 2 years	
More than 2 years ago	

8f; The last you experienced problems with NMS, what were the issues?

8g: Did you report this problem to someone at their office? Yes..1 No..2

8h: If yes in 8g, to whom or where did you report the problem or complaint?

Head office	1
Region offices	2
Customer care representative at region office	3
Delivery personnel	4
Other (PLEASE SPECIFY)	5

8i: How long did NMS take to resolve your problem? **READ OUT. ONE MENTION ONLY.**

Immediate.	1
One day.	2
Between 1 and 2 days	3
2 to 7 days	4
More than 1 week	5
Don't remember	6
Not yet resolved	7

8j: Did NMS commit to a timeline for giving you feedback on your problem? Yes..1 No..2

8k: How would you rate the total time it took to sort out your problem? **READ OUT. ONE MENTION ONLY.**

Quicker than expected	1
As long as expected	2
Longer than expected	3
Other(PLEASE SPECIFY)	5

8l: How satisfied were you with the way NMS handled the problem? **READ OUT. ONE MENTION ONLY.**

Very satisfied	1
Satisfied	2
Not satisfied	3
Not satisfied at all	4

8m. Have there been any changes made in service delivery in regards to complaint management since 2012. Would you say that it has become....

Better Remained the same Worse DK NA

EVALUATION OF TRAINING SERVICES BY NMS

9a: In the past 12 months, has any member of this facility attended/participated in the training conducted or organized by NMS? Yes..1 No..2.

9b: If yes, What was the training about:

- (i) _____
- (ii) _____
- (iii) _____

9c: In the past 12 months, did you attend any training conducted or organized by NMS? Yes..1 No..2.

9d: If yes, What was the training about:

- (i) _____
- (ii) _____
- (iii) _____

9e: On a scale of 1 to 5, where 1 is not relevant and 5 extremely relevant, how relevant was the training(s) to job tasks?

Extremely relevant				Not relevant at all		Don't Know
--------------------	--	--	--	---------------------	--	------------

5	4	3	2	1
---	---	---	---	---

11

9f: What type of trainings do you wish to be conducted for health workers like you by NMS?

- (i) _____
- (ii) _____
- (iii) _____

9g. Have there been any changes made in trainings made by NMS since 2012. Would you say that it has become

Better Remained the same Worse DK NA

OVERALL EVALUATION

10a: If 10 is excellent and 1 is not at all good, how many points out of 10 would you give to NMS for making its services Simpler, Better and Faster for you?

Excellent										Not at all Good		Don't Know
10	9	8	7	6	5	4	3	2	1			11

10b. Thinking about the services you receive from NMS generally, how would you rate these services? Use the scale from 10 to 1, where 10 means excellent and 1 means not at all good. **SHOW CARD:**

Excellent										Poor		Don't Know
10	9	8	7	6	5	4	3	2	1			11

10c. If 10 is excellent and 1 is not at all good, how many points out of 10 would you give NMS for their overall service delivery **SHOW CARD:**

Excellent										Poor		Don't Know
10	9	8	7	6	5	4	3	2	1			11

10d. How likely are you to recommend NMS to someone else?

READ OUT SCALE.

Very likely										Very Unlikely		Don't Know
10	9	8	7	6	5	4	3	2	1			11

10e. How likely are you to actively search for alternative service provider? **READ OUT SCALE**

Very likely									Very Unlikely		Don't Know
10	9	8	7	6	5	4	3	2	1		11

10f. What is the likelihood that you will remain a customer of NMS?

READ OUT SCALE.

Very likely									Very Unlikely		Don't Know
10	9	8	7	6	5	4	3	2	1		11

Why? _____

1f. Overall have there been any changes made in service delivery since 2012. Would you say that it has become.....

Better Remained the same Worse DK NA

THANK YOU FOR PARTICIPATING IN OUR SURVEY. IN THE NEXT FEW DAYS MY SUPERVISOR MAY CONTACT YOU TO EVALUATE THE QUALITY OF MY WORK AND ANSWER ANY QUESTIONS YOU MAY HAVE ABOUT THE INTERVIEW.

EVALUATION OF RANGE, QUANTITY, QUALITY, SHELF –LIFE AND PACKAGING OF VACCINES AND GAS
(Ask to cold chain assistants or in-charges of HC ii, iii, iv, in-charge immunization in all hospitals)

3a. INTERVIEWER ASK: SHOW CARD: On a scale of 1 to 10 where 10 is strongly agree and 1 is least agree, to what extent do you agree or disagree with each of the following statements about the **range, quantity, quality, shelf-life and packaging** of Vaccines and Gas supplied by NMS? **READ OUT SCALE.**

		RATING										
		Strongly agree										Strongly Disagree
u.	NMS stocks and supplies an adequate range/variety of vaccines	10	9	8	7	6	5	4	3	2	1	DK
v.	NMS stocks and supplies adequate vaccines	10	9	8	7	6	5	4	3	2	1	DK
w.	NMS stocks and supplies vaccines that have a long shelf-life	10	9	8	7	6	5	4	3	2	1	DK
x.	NMS stocks and supplies vaccines of good quality	10	9	8	7	6	5	4	3	2	1	DK
y.	NMS makes timely delivery of vaccines to health facilities	10	9	8	7	6	5	4	3	2	1	DK
z.	NMS stocks and supplies well and appropriately labeled and packaged vaccines	10	9	8	7	6	5	4	3	2	1	DK
aa.	NMS supplies vaccines that are worth the value of money paid	10	9	8	7	6	5	4	3	2	1	DK
bb.	NMS stocks and supplies an adequate range/variety of Gas	10	9	8	7	6	5	4	3	2	1	DK
cc.	NMS stocks and supplies adequate quantity of Gas	10	9	8	7	6	5	4	3	2	1	DK
dd.	NMS makes timely delivery of Gas to health facilities	10	9	8	7	6	5	4	3	2	1	DK
ee.	NMS stocks and supplies Gas of good quality	10	9	8	7	6	5	4	3	2	1	DK
ff.	NMS stocks and supplies well and appropriately labeled and packaged Gas	10	9	8	7	6	5	4	3	2	1	DK
gg.	NMS supplies Gas that are worth the value of money paid	10	9	8	7	6	5	4	3	2	1	DK
hh.	NMS' Procurement is prioritized based on national vaccines list versus customer needs and available funds	10	9	8	7	6	5	4	3	2	1	DK
ii.	Vaccines are approved by the Drug Regulations Board (National Drug Authority)	10	9	8	7	6	5	4	3	2	1	DK
jj.	NMS appropriately matches vaccines together with administration accessories	10	9	8	7	6	5	4	3	2	1	DK

3b. On a scale of 1 to 10 where 1 is least important and 10 is most important, how important are the following attributes in relation to **range, quantity, quality, shelf-life and packaging** of Vaccines and Gas?

		RATING										
		Most important					Least important					

u.	An adequate range/variety of Vaccines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
v.	Adequate vaccines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
w.	A long shelf-life of vaccines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
x.	Good quality of vaccines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
y.	Well and appropriately labeled and packaged vaccines that are stoked and supplied	10	9	8	7	6	5	4	3	2	1	DK
z.	The vaccines supplied are worth the value of money paid	10	9	8	7	6	5	4	3	2	1	DK
aa	An adequate range/variety of vaccines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
bb	Adequate vaccines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
cc	Good quality of Gas that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
dd	Well and appropriately labeled and packaged Gas that are stoked and supplied	10	9	8	7	6	5	4	3	2	1	DK
ee	The Gas supplied are worth the value of money paid	10	9	8	7	6	5	4	3	2	1	DK
ff.	Vaccines that are approved by the Drug Regulations Board (National Drug Authority)	10	9	8	7	6	5	4	3	2	1	DK
gg	Health supplies that are approved by the Drug Regulations Board (National Drug Authority)	10	9	8	7	6	5	4	3	2	1	DK

3c. On a scale of 1 to 10 where 1 is least satisfaction and 10 is very satisfied, how satisfied are you with **range, quantity, quality, shelf-life and packaging** of Vaccines and Gas from NMS on the following attributes?

		RATING										DK
		Very satisfied					Least satisfied					
u.	An adequate range/variety of Vaccines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
v.	Adequate Vaccines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
w.	A long shelf-life of vaccines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
x.	Good quality of vaccines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
y.	Well and appropriately labeled and packaged vaccines that are stoked and supplied	10	9	8	7	6	5	4	3	2	1	DK
z.	The vaccines supplied are worth the value of money paid	10	9	8	7	6	5	4	3	2	1	DK

aa	An adequate range/variety of vaccines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
bb	Adequate vaccines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
cc	A long shelf-life of vaccines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
dd	Good quality of vaccines that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
ee	Well and appropriately labeled and packaged vaccines that are stoked and supplied	10	9	8	7	6	5	4	3	2	1	DK
ff.	The vaccines supplied are worth the value of money paid	10	9	8	7	6	5	4	3	2	1	DK
gg	Adequate Gas that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
hh	Good quality of Gas that are stocked and supplied	10	9	8	7	6	5	4	3	2	1	DK
ii.	Well and appropriately labeled and packaged Gas that are stoked and supplied	10	9	8	7	6	5	4	3	2	1	DK
jj.	The Gas supplied are worth the value of money paid	10	9	8	7	6	5	4	3	2	1	DK
kk	Procurement that is prioritized based on customer needs and available funds	10	9	8	7	6	5	4	3	2	1	DK
ll.	Vaccines that are approved by the Drug Regulations Board (National Drug Authority)	10	9	8	7	6	5	4	3	2	1	DK
m	Vaccines administration accessories approved by the Drug Regulations Board (National Drug Authority)											

3d. Is there any other issue you would like to highlight about the **range, quantity, quality, shelf-life and packaging** of vaccines supplies from NMS?

3e. Is there any other issue you would like to highlight about the **range, quantity, quality, shelf-life and packaging** of vaccines accessories supplies from NMS?

3d. Is there any other issue you would like to highlight about the **range, quantity, quality, shelf-life and packaging** of Gas supplies from NMS?

3e. Do you have any suggestions for improvement of **range, quantity, quality, shelf-life and packaging** of vaccines supplies from NMS?

3e. Do you have any suggestions for improvement of **range, quantity, quality, shelf-life and packaging** of vaccines accessories from NMS?

3e. Do you have any suggestions for improvement of **range, quantity, quality, shelf-life and packaging** of Gas from NMS?

3f. Have there been any changes made in the range, quantity, quality, shelf –life and packaging of commodities from NMS since 2012. Would you say that it has become

Better

Remained the same

Worse

DK

NA

Question Guide for Key Informants

- Q1 Interview Number:
- Q2 Interviewer Name:
- Q3 NMS Region:
- Q4 District:
- Q5 Respondent age:
- Q6 Sex of respondent:
- Q7 Highest education level:
- Q8 Respondent position/title:
- Q9 GPS coordinates:

Storage facilities

- Q10 Have you visited any of the NMS storage facilities in the last three years? Are there specific issues you would like to highlight on the NMS storage facilities?
- Q11 Have there been any changes made in storage facilities of NMS since 2012? If yes, please elaborate!
- Q12 Do you have any suggestions for improvement of the storage facilities at NMS?

Transport

- Q13 Do you have issues you would like to mention about the transport, distribution, delivery and supply systems of NMS?
- Q14 Have there been any changes made in the distribution, delivery and supply systems by NMS since 2012. If yes, please describe!
- Q15 Do you have any suggestions for improvement of the transport, distribution, delivery and supply systems of NMS?

Packaging

- Q16 Are there specific issues you would like to mention about the range, quantity, quality, shelf-life and packaging of essential medicines and health and laboratory supplies from NMS?
- Q17 Have there been any changes made in the range, quantity, quality, shelf –life and packaging of commodities from NMS since 2012?
- Q18 Do you have any suggestions for improvement of range, quantity, quality, shelf-life and packaging of essential medicines and health and laboratory supplies from NMS?

Quality Control Systems

- Q19 Are there specific issues you would like to mention about the **quality control processes** by NMS?
- Q20 Have there been any changes made in quality control systems since 2012?
- Q21 Do you have any suggestions for improvement of quality control processes by NMS? If yes, please mention them?

Personnel

- Q22 Are there any issues you would like to highlight on the personnel at NMS? Do the NMS normally staff meet your expectations? Please elaborate!
- Q23 Have there been any changes made in staff personality and skills since 2012?
- Q24 Do you have any suggestions for improvement on the personnel at NMS?

Communication

- Q25 What do you like about the different NMS communication channels?
- Q26 What do you dislike about the different NMS communication channels?
- Q27 Have there been any changes made in mode of communication by NMS since 2012

Q28 Which channels do you recommend that can be utilized by NMS to communicate its services related to supply and distribution of medicines?

Trainings

Q29 Have you participated in any of NMS trainings in the last three years? If yes, what type of training was it? And in what capacity did you participate?

Q30 In your opinion, how differently should NMS conduct its trainings going forward?

VACCINES AND GAS

Q31 Do you have specific issues you would like to highlight about the range, quantity, quality, shelf-life and packaging of vaccines supplies from NMS?

Q32 Do you have issues you would like to raise about the range, quantity, quality, shelf-life and packaging of vaccines accessories supplies from NMS?

Q33 Are there issues you would like to raise about the range, quantity, quality, shelf-life and packaging of Gas supplies from NMS?

Q34 Do you have any suggestions for improvement of range, quantity, quality, shelf-life and packaging of vaccines supplies from NMS?

Q35 Do you have any suggestions for improvement of range, quantity, quality, shelf-life and packaging of vaccines accessories from NMS?

Q36 Do you have any suggestions for improvement of range, quantity, quality, shelf-life and packaging of Gas from NMS?

Q37 Any other comments?

Thank you for your participation!