1ST QUARTER REPORT OF THE KADUNA STATE PUBLIC HEALTH SUPPLY CHAIN TRANSFORMATION PROJECT

January – March, 2017
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**Acronyms and usages**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>BMGF</td>
<td>Bill and Melinda Gates Foundation</td>
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<tr>
<td>DMA</td>
<td>Drug Management Agency, used instead of KDSDMSMA</td>
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<tr>
<td>DRF</td>
<td>Drug Revolving Fund</td>
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<tr>
<td>FMCH</td>
<td>Free Maternal and Child Health</td>
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<td>HFs</td>
<td>Health Facilities</td>
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<tr>
<td>IHS</td>
<td>Imperial Health Sciences</td>
</tr>
<tr>
<td>KDSDMSMA</td>
<td>Kaduna State Drugs and Medical Supplies Management Agency</td>
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<tr>
<td>LMCU</td>
<td>Logistics Management Coordination Unit</td>
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<td>LMD</td>
<td>Last Mile Delivery</td>
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<tr>
<td>LMIS</td>
<td>Logistics Management Information System</td>
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<tr>
<td>MoH&amp;HS</td>
<td>Ministry of Health and Human Services</td>
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<tr>
<td>PHCs</td>
<td>Primary Health Centres</td>
</tr>
<tr>
<td>PSA</td>
<td>Pamela Steele Associates Ltd.</td>
</tr>
<tr>
<td>SCM</td>
<td>Supply Chain Management</td>
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<tr>
<td>SDPs</td>
<td>Service Delivery Points</td>
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<td>SDSS</td>
<td>Sustainable Drugs Supply System</td>
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<tr>
<td>SHCs</td>
<td>Secondary Health Centres</td>
</tr>
<tr>
<td>SOPs</td>
<td>Standard Operating Procedures</td>
</tr>
<tr>
<td>SPHCDA</td>
<td>State Primary Health Care Development Agency (…of Kaduna)</td>
</tr>
<tr>
<td>SteeringCo</td>
<td>Steering Committee</td>
</tr>
<tr>
<td>TA</td>
<td>Technical Assistance</td>
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</table>
Acknowledgement

Appreciation goes to the under-listed entities for their continued support of the Kaduna State Public Health Supply Chain Transformation Project:

- Transformation Project Steering and Operations Committees
- Kaduna State Logistics Management Coordination Unit (LMCU)
- Kaduna State Ministry of Health and Human Services (MoH&HS)
- Kaduna State Primary Health Care Development Agency (KSPHCDA)
- Kaduna State Drugs and Medical Supplies Management Agency (DMA)
- Kaduna State Sustainable Drug Supply System (SDSS) Management Committee
- Bill and Melinda Gates Foundation (BMGF)
- Pamela Steele Associates Ltd
- Imperial Health Science

As it is important to have a mid-way review of the Pilot execution, hopes are that this report will prove a useful resource for replicating successes, in addressing identified challenges and for overall documentation of the Project as the implementation continues.
Executive Summary

The Kaduna State Public Health Supply Chain Transformation Project was conceived by the State Government to address challenges of public health supply chain in the State, which includes weak capacity of the State personnel on Supply Chain Management (SCM), lack of State-wide visibility on commodity availability, supply chain decisions not informed by data analytics, parallel implementation of individual programs health commodities’ supply chain systems without effective coordination and collaboration, resulting in fragmented logistics data collection systems, duplication of efforts; wastages and significant losses in value for money. The Project enjoys support from the Bill and Melinda Gates Foundation (BMGF), with technical assistance by Pamela Steele Associates (PSA) Limited. The Pilot phase of the Project was officially launched in January, 2017 with a total of 28 selected Service Delivery Points (SDPs). The phased-based pilot is expected to end by June, 2017 and this report attempts to evaluate project implementation for the 1st quarter covering January to March, 2017. The report is structured to reflect the key findings, discuss successes and weaknesses, document lessons learnt and proffer recommendations as necessary. Drawn conclusion aims to support the quest for programme sustainability and the States’ government eventual ownership of its public health interventions leading to the Project’s goal of an established and sustained “gold” health supply chain at all SDPs in the State by 2020.
Introductory Background

The Transformation Project was launched on 19th January, 2017 by His Excellency, the Executive Governor: Mallam Nasir Ahmad El-Rufai at a flag-off attended by stakeholders. The event marked the beginning of the Pilot rollout for 23 Primary Health Centers (PHCs) and 5 Secondary Health Centres (SHCs), with plans of scaling up to all the 255 PHCs across the 255 wards of the State through phased approach. The Project was conceived to remedy challenges militating against effective public health supply chain in the State, top of which were institutional inefficiencies, high stock-out of commodities and poor data visibility across the State. Implementation of the Project is overseen by a Steering Committee (SteeringCo) consisting of leadership from the State Primary Health Care Development Agency (SPHCDA); Kaduna State Drugs and Medical Supplies Management Agency (KSDMSMA) and the State Logistics Management Coordinating Unit (LMCU), with oversight supervision by the Sustainable Drug Supply System (SDSS) Management Team of the State Ministry of Health and Human Services (MOH&HS). The Project funded by BMGF, with technical support from PSA Limited aims to transform the State’s public health supply chain into a unified system with good data visibility to ensure consistent availability of quality health commodities at SDPs. This report reviews the Project’s seven intervention target areas for the period covering January to March 2017 highlighting successes recorded, challenges experienced and recommendations from lessons learnt to guide future strategy implementation.
Review of Project Activities

Communication Strategy: Formal communications and interactions among the transformation project stakeholders were through information dissemination via electronic mail and bi-weekly SteeringCo Meetings. Several meetings were held within the first quarter to set a course for the transformation project. The first post inaugural meeting of the Supply Chain Pilot Transformation Committee held on January 8, 2017, with major decisions taken to modify the roles and responsibilities of the SteeringCo, which were itemized to include the management of available resources and their effective allocation, ensuring alignment of initiatives and priority setting for investments, development sustainability plans beyond 3 years of the integrated project, conduct of performance management of processes, activities and outcomes agreed on the KPIs, provision of leadership and technical directions for supply decisions and transformation, supervision of the supply chain transformation activities and all other activities that will help to achieve the supply chain transformation objectives. A Stakeholders’ Meeting involving other partners in the State also held within the quarter at which the roles and responsibilities of the LMCU for the Transformation Project were reviewed. The Pilot Project activity process map design was also reviewed and areas of capacity gaps of the LMCU members discussed to allow for appropriate capacity building intervention. The SteeringCo held 3 meetings before the pilot launch and deliberated on preparations while 2 meetings were held after the launch to review lessons learnt from the pilot launch on one hand, and data collection, transmission and distribution of commodities on the other. The SteeringCo Meeting of January 17, 2017 had the Hon. Commissioner of Health (HCH) in attendance, which was a great evidence of the State Governments’ commitment to the project. As an improvement strategy, the SteeringCo secretary was mandated to develop and share a 3-month calendar to indicate dates for SteeringCo meetings. The Meeting schedule has been shared and SteeringCo meetings now holds bi-weekly on Tuesdays by 2pm at the DMA Conference Hall. The schedule took effect from the 2nd quarter of project implementation.

Advocacy engagements were also articulated by the project SteeringCo during the 1st quarter of the transformation project implementation. There were advocacy visits to SDSS Management Committee for approval for the suspension of the old SDSS/FMCH programs management in the 28 pilot health facilities. The Transformation Project SteeringCo was provided with TA from PSA to make a compelling case to the SDSS Management Committee for the isolation of the 28 pilot health facilities from the old SDSS/FMCH programs and the request was approved, which necessitated the total transfer of ownership of current inventory in the 28 pilot HF’s to the DMA. The Project SteeringCo also developed an advocacy note for securing approval from the State Accountant-General to open a central dedicated bank account by the DMA where payments for sales for products from the 28 HF will be lodged. The advocacy drive and physical visits were supported by PSA in the 2nd quarter of project implementation and which will be covered in the 2nd quarters’ review report accordingly.

Financial Management: Efforts were made during the 1st quarter to standardize the financial management of the project. Capacity building exercises were conducted for the Transformation Team on January, 2017. The sessions highlighted the importance of finance compliance and examined issues relating to the DMA financial procedures and processes. Financial aspects of the Transformation Project including strategies for mitigating frauds, positions of zero budgeting, auditing and taxation, bookkeeping principles, relationships between financial officers: procuring officers, Accountants and Auditors, etc.) were duly explained. The opportunities are believed to have helped in improving the knowledge of the State team on financial management as it relates the Transformation Project. Financial and procurement concerns were also discussed at a meeting between the project technical partners, the DMA Procurement Team and selected pilot facilities on January 26, 2017, which featured PowerPoint presentations on standard and transparent procurement procedures. The meeting emphasized DMA’s role as the acceptable procuring institution under the transformation project from which the facilities are expected to obtain their health commodities. Concerns on availability of commodities and the lead times were also extensively discussed to ensure constant availability of commodities for distributions to the HFs. There is a need for more in-depth financial management training as the first attempt was merely an overview of finance for non-finance managers.
For the review period, commodities procurements were centrally obtained by the DMA for the SDSS programme from which supplies were made to the 28 pilot facilities. DMA procurements were made on monthly need basis of varying values as shown on the chart below.

Fig. 1: DMA Procurement Values for Quarter 1

![DMA Procurement Values Chart]

Value of commodities procured by the DMA in January, 2017 was NGN41,002,566. The amount decreased to NGN11,963,770 in February, 2017 but rose to NGN26,601,128 in March, 2017. The values represent DMA procurements for the whole SDSS approach, including resupplies to the 28 pilot facilities.

**Warehousing:** Prior to the Transformation Project Pilot kick-off, the DMA warehouses assessment were conducted by IHS and recommendations made, which included warehouse dejunking and the need to develop new and review existing Standard Operating Procedures (SOPs) as a lead for good warehouse management practice. Interventions carried out included general cleaning of the warehouses and the DMA environment, installation of temperature recording devices, pallets, ventilation enhancements and upgrades of the firefighting equipment. Efforts made within quarter 1 of project implementation to enhance the efficacy and operations of the warehouse included the development of DMA Warehouse check, discussed at the Corrective and Preventive Action (CAPA) review meeting with project stakeholders. The warehouse staffs’ capacity in the operationalization of supply chain activities especially warehouse and inventory management, distribution, transportation and SOP adherence were also enhanced through the various capacity building activities that were conducted within the period.

As the DMA procures commodities and medical supplies for the Transformation Project, the commodities are warehoused centrally at the DMA stores, which currently utilizes the mSupply Software for the inventory management of commodities. Plans are however underway to design an improved inventory management system for the Transformation Project that will achieve 80% track and trace visibility of health commodities at the DMA by October, 2017. The new Inventory Management System will ensure that the various sections of the DMA warehouse are properly labelled based on the health commodities’ different formulation and therapeutic classes. More enhancements will however be required for the warehouse as the project delivery progresses.
Data Visibility and Analytics (Cloud-Based Visibility Platform: Control Tower): The period witnessed initiation of the collation of inputs on unique codes for products and the 28 pilot HFIs. The unique codes are part of Master Data for system-wide application, which includes the mSupply, and E2Open Control Tower systems. Assignment of Master Codes for products and health facilities could not be completed during the first quarter of project implementation due to other competing priorities of the LMCU teams.

The State Project team working on development of policy system for assigning master codes to products and health facilities recently agreed to use a Six (6) digits coding policy where the first 3 digits would represent the Product description (physical form, full international non-proprietary nomenclature, formulation strength/Size). The second set of 2 digits would represent the brand names while the last single digit would represent the product pack size. The team will be receiving technical assistance (TA) from PSA to apply this coding systems and develop an SOPs for addition of new products and removal of obsolete products, if discovered. The finalized products with their master codes would be presented to the SteeringCo for approval. These will be duly documented in the quarter 2 project report.

The LMCU model of data collection was applied during quarter 1 of the project. A total number of 40 LMCU teams and 13 teams of supervisors supported the conduct of the 5 rounds of biweekly consumption data collection exercise from the 28 Pilot facilities between January to March, 2017. While the LMCU Model facilitated direct mentoring of facility staff by LMCU members during data collection exercises and promoted increased patronage of the State-owned DMA commodities by the HFIs, the approach had major weaknesses including non-cash backings by the Government, poor data quality generation, neglect of other vital responsibilities of the LMCU and the high cost of implementation. The SteeringCo recognized these shortfalls and in a final review of the model, recommended that the approach be discontinued since it proved ineffective and unsustainable. Though the plan to discontinue the LMCU Model of data collection was prompted within the 1st quarter, the discontinuation decision was not reached until the completion of a final report for the review of the 5 rounds of the LMCU model of bi-weekly data collection in May, 2017. Upon the discontinuation decision, the SteeringCo recently activated strategic advocacies to engage key stakeholders on building a business case for the institutionalization of a more sustainable consumption data collection model for the Project. The State team was supported by PSA on the development of a proper business case for a sustainable data collection from the pilot health facilities. PSA has provided TA to the State on the use of either or both the SMS and USSD technologies and elucidated their suitability for the Project. PSA’s technical suggestions and the emerging trends were within the 2nd quarter of project implementation, details of which is to be captured in the quarter 2 project report.

Key findings of the LMCU Model-led 5 rounds of completed biweekly consumption data collection exercise are as indicated in the table below:
<table>
<thead>
<tr>
<th>Rounds</th>
<th>Number of LMCU team</th>
<th>Number of Supervisors</th>
<th>Bi-weekly Period covered</th>
<th>Tools used</th>
<th>Number of Days used to assess funds</th>
<th>Data Collection Days (Planned &amp; Actual)</th>
<th>Data cleaning &amp; report submission (Planned)</th>
<th>Data cleaning &amp; report submission (Actual)</th>
<th>Total Costs for exercise (NGN)</th>
<th>Funding Source</th>
</tr>
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<tbody>
<tr>
<td>1st</td>
<td>8</td>
<td>2</td>
<td>31-Jan-2017 to 03-Feb-2017</td>
<td>Baseline Survey Tool, DCREM and Assessment Checklist for PHCs</td>
<td>30</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>355,000</td>
<td>BMGF</td>
</tr>
<tr>
<td>2nd</td>
<td>8</td>
<td>2</td>
<td>01-Feb-2017 to 14-Feb-2017</td>
<td>DCREM only</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>355,000</td>
<td>BMGF</td>
</tr>
<tr>
<td>3rd</td>
<td>8</td>
<td>3*</td>
<td>15-Feb-2017 to 28-Feb-2017</td>
<td>DCREM only</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>355,000</td>
<td>MOH&amp;HS</td>
</tr>
<tr>
<td>4th</td>
<td>8</td>
<td>3*</td>
<td>01-Mar-2017 to 14-Mar-2017</td>
<td>DCREM only</td>
<td>30</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>355,000</td>
<td>UNPFA</td>
</tr>
<tr>
<td>5th</td>
<td>8</td>
<td>3*</td>
<td>15-Mar-2017 to 28-Mar-2017</td>
<td>DCREM only</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>355,000</td>
<td>SDMSMA</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5</strong></td>
<td><strong>40</strong></td>
<td><strong>13</strong></td>
<td><strong>56</strong></td>
<td></td>
<td><strong>3</strong></td>
<td><strong>81</strong></td>
<td><strong>20</strong></td>
<td><strong>15</strong></td>
<td><strong>23</strong></td>
</tr>
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* An Additional Volunteer Supervisor from the Project SteeringCo supported the exercise.
Order Management: Within the review period, requisition orders for supplies were made by the facilities according to their needs and commodities utilization. The requisitions were facilitated by the trained pharmacy technicians (in the case of PHCs) and the Pharmacist in-charge (in the case of SHCs). Orders of the required commodities by the pilot facilities were raised by the LMCU in consultation with the facilities through phone calls, SMS, internet communication or physical visits, where necessary. Distribution documents (tally cards, store ledger and other store records for commodities management) were prepared by the respective officer to ensure standard documentation of distribution activities. Distribution of commodities from DMA were directly made to the selected Supply Chain pilot facilities in accordance to standard distribution practice through an outsource of the transportation to IHS under 3PL arrangement.

Orders for the required commodities by the pilot facilities were raised by the LMCU in consultation with the facilities through phone calls, SMS, internet communication or physical visits, where necessary. Distribution documents (tally cards, store ledger and other store records for commodities management) were prepared by the respective officer to ensure standard documentation of distribution activities. Distribution of commodities from DMA were directly made to the selected Supply Chain pilot facilities in accordance to standard distribution practice through an outsource of the transportation to IHS under 3PL arrangement.

HF. requisitions were submitted to DMA, after which pick slips were generated and sent to facilities for payment. Packing and staging were carried out only after payment confirmations. Details of processed orders and corresponding distributions for the 1st quarter are discussed under the distribution sub-head. However, the charts below show the order fulfillment rates and corresponding logistics lead times for orders processed by the DMA rates for the quarter. The graphic presentations are segregated according to the facility levels to aid easy understanding.

Fig. 2: Percentage of Requisition and Order Fulfilments (PHCs and SHCs)

There were no distributions from the DMA to the HF's in January, 2017. 100% of requisitions made by the PHCs were fulfilled in both February and March, 2017 representing 21 and 3 requisitions for the months. For the SHCs, all 2 requisitions received in February, 2017 were fulfilled while only 4 out of the 7 orders for March, 2017 were met respectively 100% and 57% fulfillment rates respectively. The non-fulfillment of all order requisitions for the quarter was primarily due to the inability of the HF to make/complete payment as commodity delivery by DMA was made to be based on confirmation of payment. Some facilities sent orders but did not have the funds to pay, which necessitated giving out commodities on loan to HF's in the past, pending when they have funds to pay back.

Within the quarter, DMA made efforts to determine the satisfaction rate of the HF's by developing a Customer Feedback Form. Receiving HF's were requested to form a simple survey form that the number of items/commodities required and the number of the items that were received and/or not supplied. The performance control process was however discontinued after a while but the DMA Authority has assured of reviving the personal assessment process to determine full rate/percentage of Order requisition and fulfillment at each time.
Fig. 3: DMA Logistics Lead time per Pilot PHCs Invoice for First Quarter 2017

The chart above shows that the average time for processing requisition from the PHCs at the DMA during the 1st Quarter of project implementation was 13 days. The logistics lead time witnessed for the period varied from 1 – 19 days for the deliveries made for the period.

The reason for the significant lengthy logistics lead time were identified to includes lack of adherence to the 48hrs lead-time between obtaining pick slips and payment by the facilities, payment communication challenges between the Finance department at the DMA and the mSupply (payments alerts received from HFs by the Director of Administration and Finance are not always communicated immediately to the mSupply unit to prompt resupply processing). Some facilities also do not have enough funds to pay for their request, thus resupplies processes are not commenced until payment confirmations by the requesting HFs for commodities are confirmed by the warehousing team at the DMA.
Processing time of requisitions from the SHCs at the DMA during the Projects’ 1st quarter was between 1 to 35 days. The average logistics lead time equals that of the PHCs of 13 days.

**Distribution:** Last Mile Delivery (LMD) of commodities from the DMA to the HF’s were facilitated by an outsource to Imperial Health Science (IHS) under the Third-Party Logistics (3PL) arrangement. Frequency of resupplies was based on the facilities needs and commodities utilization. Though distributions were carried in accordance to standard practices, the formalization of the distribution SOP was only recently signed-off by the SteeringCo. The SOP was developed based on the National Health Commodities Distribution Policy to guide the transportation of commodities. Warehouse staff were formally trained on the distribution SOPs for effective commodities distribution process prior to the pilot take-off.

Shipment commences only after payment confirmation and order processing by the DMA. The proceeding charts shows delivery lead times, values of commodities delivered by month and the proportional value of products delivered to HF’s and their respective sales values for the quarter, segregated by facility level.

Most commodities deliveries from the DMA to the respective PHCs were within a day. Same day deliveries were also recorded by the 3PL. The Average delivery lead time for the period was below 1 day.
Most commodities deliveries from the DMA to the respective PHCs were within a day. Same day deliveries were also recorded by the 3PL. The Average delivery lead time for the period was below 1 day.

Deliveries were not made in January, 2017. Total values of commodities delivered to the HF's in February and March, 2017 were 6,761,126.82 and 9,645,876.26 respectively indicating a month-wise appreciation.
While the total value of all products available for distribution by the DMA was NGN196,614,277.28, a total of NGN12,991,696.87 representing 6% were delivered to the SHCs and NGN3,415,306.21 (2%) to the PHCs. The remaining % values reveals that the pilot is only a fraction of the DMA distribution mandate as the commodities still served the other SDSS facilities within the State.

Facilities Sales Figures:

The above sales data from PHCs within the Northern zone reveals that PHC Tukur recorded the highest sales of NGN42,620.00 in January, 2017 while there were no sales recorded at PHC K/Kogi and Kauran Wali. Sales data for PHC Kayarda and FHU Abdu-Kwari were not available.
Quarter 1 sales data from Pilot PHCs within the Central zone of the State shows that PHC Barnawa recorded the highest sales record of NGN100,650 in March, 2017 while PHC Tabanni recorded no sales for both January and March, 2017.

Among PHCs within the Southern zone of the State, PHC Daddu and PHC Fadan Kamatan recorded no sales throughout quarter 1. The highest sales record of NGN126,080 was by MPHC Kubacha in March, 2017.
There was no commodities distribution in January, 2017, however the cumulative sales by the PHCs for the month was NGN439,980 while product delivery values for February and March, 2017 were NGN3,157,268.02 and N248,588.19 representing 87% and 24% respectively. Commodities’ sales for the 2 months were NGN476,130.10 and 781,091.13 (13% and 76% for February and March, 2017), showing a month-wise increase in March.

Barau Dikko Teaching Hospital recorded the highest sales value among the 5 pilot SHCs within Q1. The highest value of NGN11,324,434.98 was made in March, 2017. The high sales values made by Barau Dikko can be attributed to the hospital been a tertiary facility with wide range of care and treatment services that requires quantitative amounts of health commodities.
There was no product delivery from the DMA in January, 2017 but the total sales of the SHCs was NGN18,747,688.75. The SHCs sales for February, 2017 decreased to NGN17,377,795.32 with a delivery value of NGN3,560,808.80 while sales for March, 2017 was NGN19,275,981.98 and delivery value of NGN9,430,888.07. There was a decrease in SHCs sales in February, 2017 but it picked up in March, 2017.

The above chart suggests that greater percentage of products consumed/sold at the facilities were from other sources other than supplies from DMA. Total value of products delivered by DMA to all the 28 pilot HFs between January-March, 2017 was NGN16,407,003.08 while the pilot SHCs and PHCs recorded sales values of NGN55,401,466.05 and NGN16,407,003.08 for the period respectively.
Performance Management Framework: The pilot project implementation was directed by the SteeringCo under the leadership of the Executive Secretary of the DMA as the chairperson, with the LMCU Coordinator acting as the Committee Secretary. Decision making and project’s key notes during the first quarter were majorly marred by delays and bureaucratic inefficiencies. There were delays in sourcing and handing over of documents and project related information by past leaderships and general lack of strategic steer to drive the project.

To improve the system and enhance the project performance, the first quarter of pilot implementation articulated an outline of instructive approaches to build the capacity of the State Transformation Project Team in supporting the transformation project and ultimately towards achieving the project objectives. A Corrective and Preventive Action (CAPA) review meeting with project stakeholders (State team, technical partners and other implementing partners in the State) was held within the period, and featured review of the DMA CAPA approach. There was also a 3-day formal supply chain training for the 28 pilot health facilities workers, and a training on the Cloud-Based Visibility Platform: Control Tower, facilitated by the Plaster Group in January, 2017 for the DMA and LMCU team with officials of the Bill and Melinda Gates Foundation (BMGF) and PSA participating as observers and technical contributors. Dr. Andre Kreie, the Manager Global Education Program LEARN from the Kuehne Foundation, Switzerland with support from the BMGF also conducted an Overview Course on Supply Chain Management (SCM) for the State Transformation Project Teams in February 2017.
Success Recorded

- There was significant increase in HF's patronage of DMA commodities as their sales rose.
- Prospect for a more sustainable and real-time data collection approach was necessitated by the shortfalls of the LMCU Model.
- Through the LMCU data collection exercise conducted during the period, HF staff were mentored and provided with supportive supervision.
- Need for standard procedures for data collection and products distribution became imperative and resulted in successful engagements, reviews and development of relevant SOPs.
- Development of high team spirit and enthusiasm, which saw to the successful deliveries to 7 HFs on the first day of project implementation amidst so much anxiety and uncertainties.
- Creativity of the LMCU team explored, with the development and utilization of baseline survey and data collection tools used for the bi-weekly HF's consumption data collection.
- Successful reconciliations of confirmed discrepancies between HF sales and remittals by 3PL fund collectors at some facilities, and the present efforts to ensure release of all trapped HF's funds.
- Greater prospects of checkmating existing parallel DRF systems within the facilities following the SteeringCo approval for the sole financial management of the facilities accounts through a DMA-managed Central Account for the Transformation Project.
Challenges Experienced

- Conflicting stakeholders’ interest and competing priorities negatively affected project activities such as LMCU delays in meeting timelines, late starting of meetings and absenteeism.
- Non/late release of funds for project activities; even when approvals were gotten, cash backing remained an issue as with the release of funds for the bi-weekly data consumption exercise.
- Overall capacity of the LMCU staff was inadequate, requiring intermediate capacity development in both SCM and information technology. The intervention of the Kuehne Foundation delivering learning sessions for the State team on SCM helped in this regard.
- Substantive SOPs for data collection, distribution and information dissemination were not available. Draft reviews by the State team were delayed due to competing engagements.
- Significant financial leakages and losses were recorded in the system due to parallel DRF activities at some HFs and unstructured DMA procurements.
- The bureaucratic process of the State SDSS Committee affected the speed of project deliveries as approvals had to wait for the SDSS meetings and considerations.
- There were poor handover of knowledge and administrative rights both at the HFs and central levels within the LMCU when staff leaves or changes responsibilities.
- Some curfews were recorded, which caused closure of some health facilities and delay in payments where there were bank closures.
- Inconsistency were discovered in the price list and other records data at the HFs. SDSS sales mark-up elements and LMIS reporting tools were not readily available nor understood by most staff.
- There were insufficient amount and ranges of products at the DMA to fill Health Facilities Orders. Commodities were also not arranged in a manner that will be easy for picking e.g. therapeutic class.
- Reviews of previous rounds of LMCU data collection activities were not done before the next rounds, at such mistakes and challenges encountered earlier were recurrent.
- Long picking time was very common during the period occasioned by prolonged DMA logistics lead-time for processing requisitions and the conduct of LMDs after closing hours. Some HF staff could not be contacted due to poor network connection.
- Banking challenges recorded included: poor access to bank by HFs at the rural area; bank payments were also often made with abbreviations, which made it difficult to link to the facility. Some HF focal persons made deposits with their names as against the facility name, and in some cases, bank tellers were completed with incomprehensible handwriting. Regrettably too, some HFs could not make requests and get commodities as their funds were trapped by the TSA (Treasury Single Accounts).
- Some HFs make requisition but also cannot pay on time due to difficulties in accessing their funds.
- DMA was also receiving request for loans from facilities before paying back when funds were available instead of cash and carry.
Lessons Learnt

- The Project requires consistent commitment by both government and the partners to achieve the objectives. Government leadership remains vital.
- Bi-annual supportive visits to the pilot HFs is essential to provide mentoring and supervisory opportunity; it will require ample notice, adequate time and financial allocations.
- The discontinued LMCU Model of data collection should be replaced with a more sustainable approach that assures accurate and real-time consumption data generation from the HFs.
- Pilot HF now have clear visibility of higher level SC functions, the tempo should be sustained while maintaining the change in leadership style (from bureaucratic to transformational) to drive milestone achievements.
- Positive review of the bank processes and payments systems would address the recurrent cumbersome process and challenges faced by most HFs especially those at the rural areas.
- It remains important to document the project processes and lessons learnt, to guide further project implementation.
- Continuous self-assessment by the DMA is important for improvement hence the need to revive the completion of the Customer Feedback Form by HFs receiving commodities.
**Suggested Recommendations**

- Enhanced project stakeholder’s commitment should be encouraged through constant engagements and effective communication to minimize competing values and assure greater dedication.

- The capacity building efforts for the State team on SCM should be encouraged and staff encouraged to apply and replicate the skills developed.

- High-level advocacies by the Transformation Project Team to relevant State institutions should be sustained. Articulated agendas and prayers presently been sought should be pursued by the State Transformation Team with vigor till their eventual actualizations.

- Training on all SOPs should be conducted to refresh present State project teams and to ensure that new comers have the awareness of them and knowledge.

- A monitoring process for adherence to the SOPs should be developed to ensure that all procedures are followed for maximum gains.

- The quest for a more suitable and real-time data collection model should be supported across the State to ensure its early take-off and eventual institutionalization.

- Partners should consider formal trainings for the State Project Team on key performance indicators, to enhance their technical competencies in appreciating performance concepts and interdependency of key factors.
Conclusion
Guided by the establishing principles, the Kaduna State Public Health Supply Chain Transformation Project during the 1st quarter of implementation strived to maintain discernible authority of State level ownership, organized thinking, success definition, explores for fact-based interventions, continuous stakeholders’ collaboration, sought and application of technical support, documentation of lessons and emphasis on overall sustainability. The Project within the period was strategically construed to bring positive change to the State public health supply chain system. This review report sustains the stance, as it provides important mid-way progress analysis of the project implementation for the indicated period covering January to March, 2017. Hopes are high that the successes recorded herein will prove motivational for greater commitment while the weaknesses identified will serve as incentives towards addressing the challenges as project implementation progresses. It is also held that the lessons learnt will propel greater achievements as the project pilot phase gradually comes to an end. Continuous stakeholders’ engagement and high-level advocacies proffered among the recommendations will help ensure that interests are harmonized for the project’s good. The Project SteeringCo must be commended for the giant stride thus far and even more, applauded for the beyond-the-now vision it upholds for an effective and uniformed public health supply chain system in the State. The SteeringCo novel quests for an apt and sustainable model of consumption data collection and the fundamental change proposed for the SDSS to Sustainable Health Commodities System should be supported by all the project stakeholders at ensuring the continual attainment of projects’ milestones during the quarter 2 of project implementation and beyond.