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**Africa Conference on Healthcare Delivery (AHD)**
Sheraton Abuja Hotel, Abuja  
Pre-conference workshop: June 12, 2017  
Main conference: June 13-14, 2017  

**Organized by:** The Nigeria Supply Chain Integration Project (NSCIP)


**THEME OF THE CONFERENCE:** Advancing Effectiveness and Efficiency in Health Supply Chain Management for Improved Health Outcomes in the African Region.

**CONFERENCE 2017 CONVENER:** Prof. Ehijie F.O. Enato, PhD, Faculty of Pharmacy, University of Benin, Nigeria

**Background and introduction**

The conference on Africa Healthcare Delivery (AHD conference) was held from June 12-14, 2017 in Abuja, Nigeria. Many stakeholders with an interest in healthcare delivery attended the inaugural AHD meeting. The conference provided in-depth analysis of issues and strategies for improving effectiveness and efficiency in health supply chain management in the African region. Priorities were given to papers that described in-country supply chain management, with a special focus on in-country driven processes, innovations and institutionalization. Plenary sessions and short pre-conference training workshops for professionals and students were also held. An impressive array of regional and international experts/partners were present during the meeting to mentor students, youths, mid-level and senior supply chain management and global healthcare professionals.

**Pre-CONFERENCE:** The pre-conference which was held on June 12, 2017. The aim of the pre-conference was to promote the participation of youth in health supply chain management, and was attended by both professionals and students. The topics discussed included:

- (Public) Supply Chain Management  
- Interrelationship of the logistics management system  
- The purpose of the Logistics Management Information System (LMIS)  
- Assessing stock status and capturing the necessary data to assess stock status
The purpose of an inventory control system
The importance of and guidelines for proper storage of health commodities
The purpose and components of a logistics management coordinating unit
Integrated supply chain management of health commodities for ATMRH & V
Warehouse and distribution of health commodities
Key performance indicators for benchmarking and quality improvement in health supply chain
Leadership coordination and strategy in health supply chain

KEYNOTE ADDRESS by Martin Ellis, Head of Supply Chain, Global Fund

Global Fund representative Martin Ellis drew attention to the need to offer more help to countries that lack national supply chain capabilities and capacity. Mr. Ellis added that the Global Fund, and other donor and implementing partner reports have indicated that there are many shortcomings in national supply chain operations.

Mr. Ellis noted that a thematic report highlighted a need for the Global Fund to influence downstream supply chain activities to make them more efficient and that funded countries have varying degrees of supply chain knowledge and operational maturity.

He expressed dismay that the national supply chain inefficiency is resulting in a number of significant issues ranging from stock-outs to expirations due to overstocking. This is associated with high working capital as well as inventory management costs.

Mr. Ellis said there are many typical challenges facing national supply chains, such as:

- High degree of paper systems in place which take time to review and complete and which are subject to human error.
- Inaccurate / unavailable demand and inventory data
- High buffer stocks, working capital, inventory carrying costs and risk of expiration.
- Inefficient warehousing leading to excessive intra-warehouse transportation and cost due to satellite warehouses
- Manual / Excel ordering not integrated into warehouse management systems
- Practical and meaningful KPIs not being properly utilized
- Too many parallel supply chains!
- Over dependence on pharmacies and health facilities collecting supplies rather than scheduled delivery service
- Limited supply chain professionals
- Long replenishment frequency / periodicity at all supply chain levels not conducive to optimizing levels of inventory which has led to high levels of inventory and expired product
- Unsafe transportation from district pharmacies to health facilities.
- Stock-outs

Mr. Ellis also remarked that the private sector had greater expertise in logistics and supply chain management services from simple transportation and warehousing services to full blown third and fourth party holistic supply chain solutions. Two issues must be addressed, namely recognizing the strengths and weaknesses of the Ministry of Health and national supply chain
operations as well as ensuring that there was an open and free market place for the private sector to operate.

**Recommendations for advancing effectiveness and efficiency in health chain management**

- Introduce barcoding
- Introduce standardized e-LMIS (electronic logistics management information system)
- Focus on the collation and analysis of accurate and timely demand and inventory data
- Establish leading practice and standardized forecasting tools
- Become more agile and increase the frequency of delivery
- Develop Standard Operation Procedures (SOPs) for all stages of the supply chain operations
- Right size efficient warehousing
- Improve warehouse safety
- Use private sector where available and economically feasible
- Introduce robust and agile warehouse management systems – standardize where possible
- Introduce practical and meaningful KPIs
- Work to reduce parallel supply chains
- Coordinate implementing partners
- Move from collection to centrally coordinated delivery
- Place supply chain trust in highly qualified logisticians
- Grow national supply chain professionals through academia and private sector partnerships
- Improve transportation safety

**Impact this will have on health outcomes in the African region:**

- Patients’ needs will be better met, thereby enhancing the level of customer service
- Scarce resources will be used more efficiently for treatments to be provided for at the same level of donation
- Supply chain costs per patient will remain stable or reduce
- Orders for pharmaceuticals will be procured more effectively, reducing costs and increasing availability and patient satisfaction

**SUB THEMES**

1. New models of healthcare delivery
2. Healthcare supply chain with long-term sustainability
3. Primary healthcare supply chain strengthening and revitalization
4. Antimicrobial resistance, pharmacovigilance and the role of the supply chain

**KEY NOTES ON MODELS OF HEALTHCARE DELIVERY**

*Topic: Policy and Practice; Barriers and Facilitators to Developing capacity for medicines and commodities in Africa by Dr. Obi Adigwe (Executive Secretary PMGMAN)*

During his presentation, Dr. Adigwe described manufacturing as the beginning of healthcare delivery while the objective is to ensure sustainable access to affordable, safe, high quality Medicines/Healthcare for all.

**Health Indicators representative of the African situation**
• The African Continent has 75% of the world’s HIV/AIDS cases
• Nine out of ten deaths due to malaria occur in Africa
• Tuberculosis and other infectious diseases still cause substantial morbidity and mortality
• It also has the highest burden of infant and maternal mortality
• Between 1975 and 1999, a total of 1,393 new chemical entities were developed only 16 were for tropical diseases

Dr. Adigwe listed two key pharmaceutical manufacturing plans for Africa:
• To develop a competitive and enduring integrated pharmaceutical manufacturing industry in Africa
• Ability to respond to the continent’s need for a secure and reliable supply of efficacious medicines.

He also outlined some significant challenges limiting local medicine manufacturing capacity in Africa:
– Policy incoherence and insufficient political will
– Relevant frameworks for knowledge transfer
– Inadequate capacity
– Lack of relevant incentives
– Lack of adequate infrastructure
– Access to affordable finance
– Low patronage (government and international agencies)
– Market related barriers

To make medicines more affordable and accessible for the people, he said the following must be considered:
• Affordable and long term financing
• Contextual and innovative partnership models
• Reduction and removal of national and regional restrictions
• Procurement preferences – government & development partners
• Robust and comprehensive industry engagement
• Tax and other finance related incentives
• Knowledge sharing and technology transfer
• Strengthening regulatory capacity

Dr. Adigwe emphasised that developing local manufacturing capacity on the continent could facilitate development in the areas of:
• Sustainability of medicine supply
• Improved access to medicines
• Increased affordability of medicines etc.

In conclusion, Dr Adigwe noted that the epidemiological nature of the diseases in Africa, together with the relevant demographic indices, requires robust engagement with African manufacturers. This is necessary for achieving sustainable access to affordable, high quality medicines.
**Topic 2: THE ROLE OF THE PRIVATE SECTOR IN EFFECTIVE AND EFFICIENT HEALTHCARE DELIVERY** by Dr. Muntaq Umar (Chief Executive Officer, Private Sector Health Alliance, PSHAN)

This presentation was anchored on three key pillars: Innovation, Partnership and Advocacy.

Dr. Umar remarked that Nigeria’s complex and dynamic health system was laden with demand and supply challenges that resulted in an estimated annual loss of one million lives of women and children from preventable causes.

**SUPPLY SIDE CHALLENGES**

- Shortage of critical human resources
- Weak supply chain systems
- Commodity stock-outs
- Infrastructure deficit

He also noted that the demand for critical services was very low which was largely attributed to poor quality of care, affordability, cultural barriers and awareness. Despite recent improvement, there was still a record of sub-optimal health outcomes ranging from lack of care to inadequate protection financially.

In order to meet the Sustainable Development Goals (SDGs) target, he commented that Nigeria needed to rapidly accelerate progress by reducing child mortality and improving maternal health.

**Topic 3: Assessing Human Resources for the Immunization Supply Chain management; A HOLISTIC APPROACH** by Beverly Chawaguta

Beverly listed the necessary variables for a holistic approach to human resources:

- Training and development
- Payment and benefits
- Job satisfaction
- Management
- Supervision
- Communication
- Work environment
- Career progression
- Performance and reward

**KEY MESSAGES:** Well performing countries have the following in place:

- National ownership, vision and leadership
- Continuous improvement in immunization coverage
- Sustained good performance
- Key supply chain positions filled with qualified staff
- Timely replacement of retiring staff
- Inclusive partnerships
CONCLUSION AND NEXT STEPS

- Study provides quantifiable insight into HR strengths/weaknesses and sets a baseline
- Clear variation between countries good and poor performers (HR)
- Practical HR action plans developed that can be integrated into country plans
- Key success factors for HR action plan implementation:
  - Buy-in by MoH senior management
  - Integrate HR Assessment into EVM (mandatory) and country plans
- Focused TA support to countries, as per HR Action Plan
- Partner collaboration (NLWGs), government-led
- Institutionalization and scale up through integration with EVM
- Training Needs Analysis Toolkit / Job Descriptions
- Collaboration with regional/local institutions

TOPIC 4: HEALTH SUPPLY CHAINS WITH LONG TERM SUSTAINABILITY IN AFRICA-OPPORTUNITIES AND CHALLENGES

The future of healthcare delivery system by Prof Yehuda Bassok (University of Southern California, USA)

In his presentation, Prof. Bassok remarked that there has always been funding from western countries but it had not solved the problem of lack of sustainability in the healthcare system. He identified the lack of a proper infrastructure as the major problem. He said most of the funds donated to the health sector were usually spent buying commodities, noting that simply putting money into development does not work. These are the challenge we are facing:

We want to provide healthcare with less money, but how can it be done?

Prof. Bassok commented that there was a need to source Nigerians who can manage the healthcare delivery system. People who are experts in operation, accounting and data analysis. He described this integration concept as cost efficient, effective and sustainable.

TOPIC 5: ROADMAP TO SUSTAINABLE HEALTH SUPPLY CHAINS THROUGH EFFICIENT LAST MILE DELIVERY BY KENNY OTTO (GHSC-PSM)

In his presentation, Mr. Otto stated that the supply chain which begins from the manufacturers to the end users costs money. In order to achieve a sustainable supply chain, an enabling environment is required where the government takes the lead.

He also stated that when the government performs its oversight function of monitoring and regulating the supply chain, it would ensure that commodities come at the right API and meet the needs of patients. There is also need for a public-private partnership where the private sector manages the supply chain.

At this juncture, the session was divided into three groups to discuss the following questions:

1. Who pays for the supply chain cost?
2. Efficiency of a system does not determine the effectiveness of medicine
3. How do we get a sustainable healthcare delivery in Nigeria?

1. GROUP ONE SUBMISSIONS (Who pays for the supply chain cost?)
In their submissions said the group said that everyone pays for healthcare delivery as a shared cost:

- People pay a premium for the National Health Insurance Scheme.
- Government pays a subsidy for healthcare delivery services
- External forces such as donors and partners pay for interventions
- For sustainability to be achieved, there must be public private partnership

2. **GROUP TWO SUBMISSIONS** (Efficiency of a system does not determine the effectiveness of medicine). (Yes and No as answers were shared)

   **Yes:** Efficiency in the total supply chain guarantees effectiveness of medicines when everyone in the chain carries out their functions effectively.

   **No:** The efficiency of a system does not determine the effectiveness of medicines especially when the entire supply chain wants to save costs.

3. **GROUP THREE SUBMISSIONS** (How do we achieve a sustainable healthcare delivery in Nigeria?)

   To achieve sustainability there has to be:
   1. An enabling environment (policies)
   2. Capacity development (local content)
   3. Technology

**CONCLUSION**

Mr. Otto concluded by calling for the establishment of a model that incorporates the states warehouses without compromising on the quality of the medicines at the health facility using the PPP.

**PANEL DISCUSSION:**

The session went into a panel of discussion to further discuss *healthcare supply chains with long term sustainability.*

**Topic 6: PHARMACOVIGILANCE WITHIN SUPPLY CHAIN AS A STRENGTH AGAINST ANTI-MICROBIAL RESISTANCE** by Jayesh Pandit (pharmacovigilance country head at Bayer East Africa)

Mr. Pandit’s presentation focused on the processes involved from the development stage to when medicines reach the end user with two important views in mind:

- Identifying information on potential hazards
- Preventing harm

**HOW TO ENSURE PHARMACOVIGILLANCE OF MEDICINES**

Good manufacturing practices, good distribution practices and proper documentation. Mr. Pandit said the indiscriminate use of medicines on animals meant for consumption with adherence to the
time modules could contribute to anti-microbial resistance in humans when they consume such animals as food.

SOLUTION

- The use of ‘mini labs’ as used in Africa for analysis of anti-malaria medicines can be adopted
- Engage in post market surveillance activities
- More funding

Prof. Mahmud commented that universal health coverage (UHC) has the objective to provide quality health services for all, to ensure that population is covered equitably and to provide financial protection. He also outlined the necessary **Factors to attain UHC** which include:

- Political will, vision and leadership
- Reform legislations especially for equity
- Strong local health system
- Accelerate coverage for health

While carrying out his research, Prof. Mahmud observed that the supply chain was not included in the SDG health module. He said that a strong health system at the primary healthcare level was essential to providing quality health services.

In order to have effective supply chain management, there has to be:

- Regulation
- Qualification
- Enhanced capacity for procurement
- Reliable inventory management and distribution

CONCLUSION

The conference was a great success for supply chains. It was agreed that it will become an annual event to articulate supply chain issues in Africa.