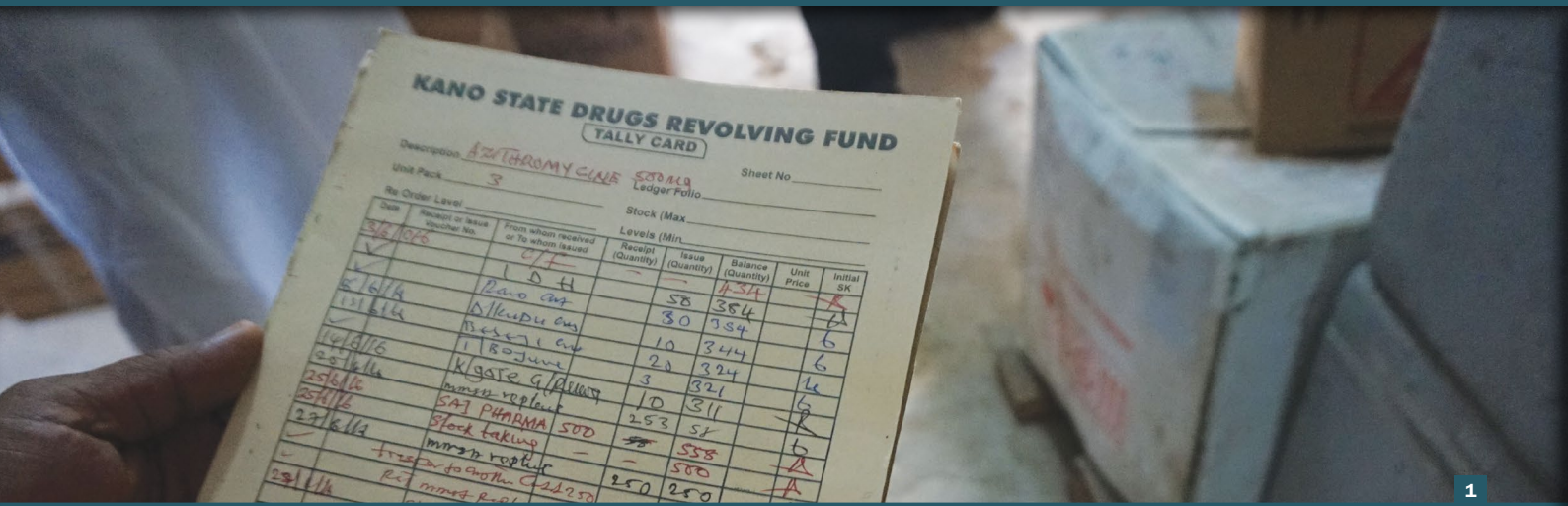
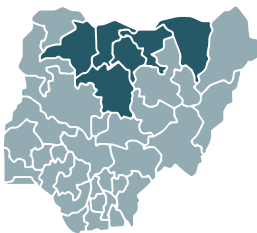


# Improving Reliability of Drugs and Medical Supplies through Integrated Supply Chain Management



The **Maternal, Newborn and Child Health Programme** in Northern Nigeria (MNCH2) is a UK government-funded five-year programme designed to improve maternal and child health across six states – **Jigawa, Kaduna, Kano, Katsina, Yobe and Zamfara.**



A key aim of MNCH2 is to strengthen logistics and supply chain management to improve the availability of medical commodities. To achieve this, MNCH2 works with agencies and organisations throughout the medical commodity supply chain to create integrated and harmonised supply chain management system.

The programme supports intense capacity development within all aspects of the supply chain from procurement through to the end user. As part of this initiative, MNCH2 is working in partnership with the Drugs and Medical Consumables Supply Agency (DMCSA) in Kano state to build human resource capacity and to operationalise zonal stores to reduce the travel distance of facilities and to create a more reliable supply and timely access to vital medical commodities.

## Reviewing Existing Structures

As a first stage, MNCH2 supported each state to review the key policy documents or operational guidelines relating to supply chain management. The ultimate aim was to improve the performance of the Drug Revolving Fund (DRF) in order to improve drugs availability in facilities,

integrate and harmonise all vertical supply chain (Free MNCH inclusive) into a unified supply chain management system.

In Kano, the review resulted in the Honourable Commissioner of Health approving the formation of a Communique Development Committee, chaired by the Director of Planning, Research and Statistics from the State Ministry of Health (SMoH) and the Director of Admin and General Services of DMCSA acting as Secretary. The Communique mandated MNCH2 to provide technical support to operationalise zonal stores

From the Kano State Communique:

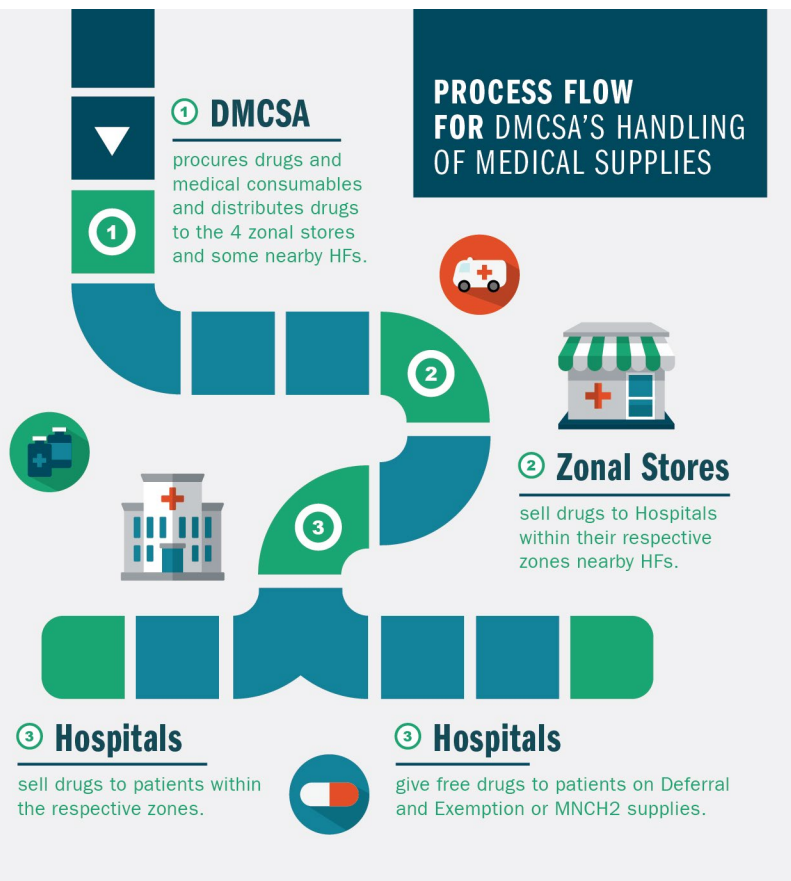
- DMCSA to work with MNCH2 and SDSSC2 to ensure early take off of all the 4 zonal stores
- The SDSS3 zonal structure shall be based in line with the DMCSA zonal stores and shall be headed by the host Zonal Director of the HMB4

1. Kano State DMCSA staff conduct inventory at the Central Medical Store.  
2. SDSSC: Sustainable Drugs Supply System Committee  
3. SDSS: Sustainable Drugs Supply System  
4. HMB: Hospital Management Board



## Drug Revolving Fund and DMCSA

The state DMCSA relies upon a state Drug Revolving Fund (DRF), funded by the government and external partners by injection of funds to purchase drugs, medical supplies and commodities, which the DMCSA then sells for a small mark-up. The profit is re-invested in the purchase of more drugs, supplies and commodities.



The DMCSA operates under the State Ministry of Health and is fully autonomous. Sourcing products directly from manufacturers, drugs and medical consumables are purchased at negotiated prices through a framework contract agreement that is lower than on the open market. The salaries of staff and some overheads of the DMCSA are paid by the government, so this expense is not calculated into the mark-up – allowing for more funds to go directly to the purchase of drugs and supplies.

The percentage mark-up is the same on each drug's price, and covers five elements: Inflation; Supervision; Sustainability (to support the cost of the programmes ongoing activities); Deferral and exemption (covering costs for those unable to afford drugs); and Expiry (covering costs of drugs that are lost through expiration).

Within the supply chain, provisions are made for pregnant women, children, poor and most vulnerable; who qualify for free drugs under Deferral and Exemption.

## Building Capacity in the DMCSA

MNCH2 supported Kano State to strengthen Logistics and Supply Chain Management by developing the capacity of DMCSA staff, in order to ensure proper handling of health commodities in an integrated manner. Most of the staff trained by MNCH2 are

already trained health professionals – Pharmacists, Pharmacy Technicians, Store Managers etc. Although the staff will have received initial training and in-work supervision, some skill gaps remain.

MNCH2 worked with the DMCSA to select a core group of Master Trainer Mentors (MTM), who participated in a rigorous 2-week training. These Mentors then cascade the training to local training teams (LTTs), who in turn train the local staff under the MTMs' supervision. This MNCH2 supported training with key staff members in the DMCSA and zonal stores – Medical Store Officers, LGA Essential Drug Officers, LGA Maternal and Child Health (MCH) Coordinators and the LGA Cold Chain Officers.

The store teams are trained based on identified training needs in each location, including training in good warehousing practices, improved integrated supply chain management, accountability for drugs handled, storage, and the use of tools available. This training also covered some methods for monitoring and evaluating DRF processes – in line with programme surveillance systems used by the Ministry of Health.

## Decentralisation to Zonal Stores

One of the greatest challenges to creating a reliable supply chain for drugs and commodities in northern Nigeria, is the distance between facilities and the central DMCSA, coupled with poor infrastructure. This has seen facilities purchasing drugs from alternative suppliers, sometimes at the cost of the quality of drugs – thus putting lives at risk.

PATHS2, the predecessor programme to MNCH2, established zonal stores to cater to the different zones of each state eliminating the great distance require to travel to the central store and creating a more consistent and reliable supply chain. However, zonal stores were still



## Lessons from Kano

In 2009 the former Drugs Management Agency (DMA) received a new mandate and name change to the Drugs and Medical Consumables Supply Agency (DMCSA). The DMCSA mandate was extended to include medical consumables and to supply all health facilities in its respective state with drugs and medical consumables and is designed to be self-sustaining. At this time in Kano state, drugs came from the DMA's central medical store, which supplied 20 Primary Health Care (PHC) facilities, and 10 Secondary Health Care (SHC) facilities across the state. As of November 2015, KADMCSA (Kano DMCSA) is supplying over 700 health facilities across Kano (661 PHCs, and 39 SHCs) from 2 central medical stores and 4 zonal stores.

“ [MNCH2 training] has really boosted the way we work here...

We're very proud of how the system has helped our people, by mobilising them to come to the hospital to access quality and affordable drugs.

– Awwalu Abdullah, *Pharmacist for Kano Medical Supply Agency*

### Launching Satellite Stores in Kano

The Kano State government launched 4 'satellite' zonal stores to provide services to all Local Government Areas (LGAs) in 2013, but was unable to operationalise all 4 stores. They suffered delays due to non-delivery of supplies, and inadequate human resources. DMCSA contributed to the seed stock of drugs and medical consumables, while MNCH2 supported training to strengthen human resource capacity within both central and zonal stores. This collaboration has resulted in the full operationalization of two zonal stores (Dambatta and Gwarzo) with two more to come online in 2016.

not operational due to lack of human resources and lack of training. MNCH2 collaborated with the DMCSAs to operationalise these zonal stores through capacity development and the injection of drugs and medical consumables into the supply chain of each state in the MNCH2 intervention area – including drugs which are to be given free at no cost to the consumer.

5. Opening ceremony of the Danbatta zonal store.

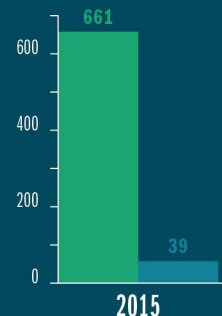
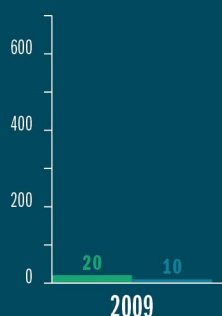


## GROWTH IN DMCSA'S SUPPLY OF DRUGS ACROSS KANO STATE

Distribution of drugs from the Drug and Medical Consumables Supply Agency (DMCSA) Central Medical Stores and Zonal Stores to Health Care Facilities across Kano State.



■ Primary Health Care (PHC) Facilities  
■ Secondary Health Care (SHC) Facilities

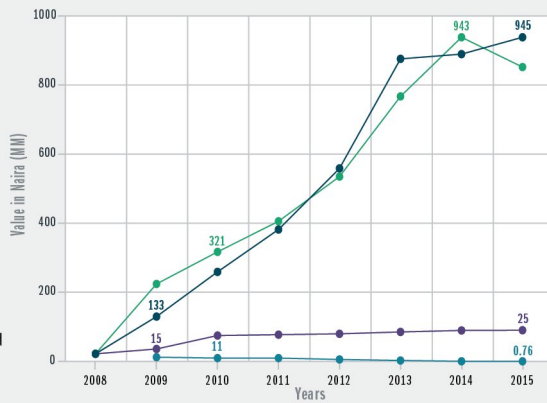




## KADMCSA TURNOVER

Kano State DMCSA Central Medical Store procurement, sales, loss, expiration and availability of medical supplies valued in millions of Naira.

- Procurement of medical supplies
- Sales of medical supplies
- Supplies lost as expired
- % Drugs available on request



- Danbatta:** Opened February 2016; 14 million NGN worth of supplies from DMCSA; MNCH2 trained staff on supply chain management and the store is now fully operational. The store now serves facilities under Danbatta, Makoda, D/Tofa, Bichi, Bagwai, Shanono, Tsanyawa, Kunchi Tofa LGAs
- Gwarzo:** Opened April 2016; 12 million NGN worth of supplies from DMCSA; staff trained by MNCH2. The store now serves facilities in Gwarzo, Karaye, Rogo, Kiru, Bebeji, Kabo, Bagwai, and Rimin Gado LGAs
- Gaya:** To open in late 2016; Pharmacist and store officer have been trained by DCMSA and MNCH2
- Rano:** To open in late 2016; The pharmacist and store officer have been trained by DCMSA and MNCH2

## Achieving Results

With support from MNCH2, the DRF and previous interventions, the KDMCSA has seen the availability of drugs on request go from 25% in 2007 to 93% in 2015.

## Next Steps: Managing Logistics and Supply Chains

The aim for state DMCSAs is to integrate supply chain management across the state, to reduce logistics costs and improve lead times. However, a number of challenges remain. One such challenge is to harmonise monitoring of facilities, zonal stores and the central store to better track inventory levels and anticipate needs. Integrating the supply chain management requires management decentralisation and a robust database with reliable internet. Steady internet is only available in some areas, and the current database needs improvement.

Good progress in this direction is now underway, with the installation of 'mSupply' a medical supplies Logistics inventory management system. Despite internet difficulties preventing usage for the past 4 years, MNCH2 has now provided the support to make mSupply fully functional. Supply monitoring will soon be integrated into one system, without relying only on hard copies.

## Ensuring Sustainability with Facility Health Committees

Serving a community of approximately 65,000 and established in 1967, Gwagwarwa Primary Health Care Facility (PHC) has four catchment communities: Kaura goje, Tudun wada, Gama and Gawuna.

The Facility Health Committee (FHC), established under PATHS2,

has been activated and trained by MNCH2.

The increased capacity of the committee members has helped secure the sustainability of the PHC by ensuring sufficient funds and revenue are generated via the Drug Revolving Fund mark-up to pay for refurbishments and structural maintenance, as well as, improved IT systems for data collection and inventory monitoring, which includes

the use of WiFi enabled tablets for effective inventory monitoring and reporting.

Additionally, the FHC contributes to the facility service account any money which is generated from community members, thus the account has over ₦700,000 available for daily expenses such as buying water, detergents, antiseptics etc.



### NATIONAL OFFICE

No. 20 Dawaki Road, Off Ahmadu Bello Way, Nassarawa GRA, Kano State, Nigeria

MNCH2 is managed by Palladium and its partners - Axios, Marie Stopes International (MSI), Options Consultancy, Society for Family Health (SFH), MannionDaniels and Association for Reproductive and Family Health (ARFH)

### JIGAWA STATE OFFICE:

Opposite Deputy Governor's House, Off Nuhu Muhammad Sanusi Way, Yadi, GRA Dutse

### KADUNA STATE OFFICE

C/o PATHS2/ESSPIN Office, No. 1. Idoma Road, Anguwar Rimi, G.R.A

### KANO STATE OFFICE

No. 20 Dawaki Road, Off Ahmadu Bello Way, Nassarawa GRA

### KATSINA STATE OFFICE

Ministry of Health State Secretariat Complex, Katsina State

### YOBE STATE OFFICE

No. C111 Obasanjo Housing Estate Off Gujba Road, Damaturu

### ZAMFARA STATE OFFICE

Millionaires Quarters, Off Garba Bisu St. Tudun Wada Area, Gusau