

(MIS)DIAGNOSING MALARIA



NIGERIAN BREWERIES PLC CASE STUDY

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BACKGROUND

- Eight(8) clinics across the country.
- FTE – 3,200 (22,400 medical beneficiaries).
- The clinics are opened 24/7.
- Clinic establishment:
 - Lagos – 2 doctors, 2 medical laboratory scientists and 5 nurses on 04 shift
 - Other sites – 1 doctor and 5 nurses on 04 shift
- Scope of services: primary and secondary care.

BACKGROUND CONTD

- Extensive workplace malaria campaign.
- Standard laboratory in Lagos.
- Side laboratories in other sites.
- Presently only confirmed malaria cases are treated.
- Regular malaria webcast with Heineken Global Health Affairs

**WHICH OF THESE IS AVAILABLE
IN NB PLC?**

Misdiagnosis
Alex Swensen

The image shows the cover of a book titled 'Misdiagnosis' by Alex Swensen. The cover features a dark, blurred background with a grid of light-colored, hexagonal shapes that resemble a molecular or cellular structure. The title and author's name are printed in white text at the top.

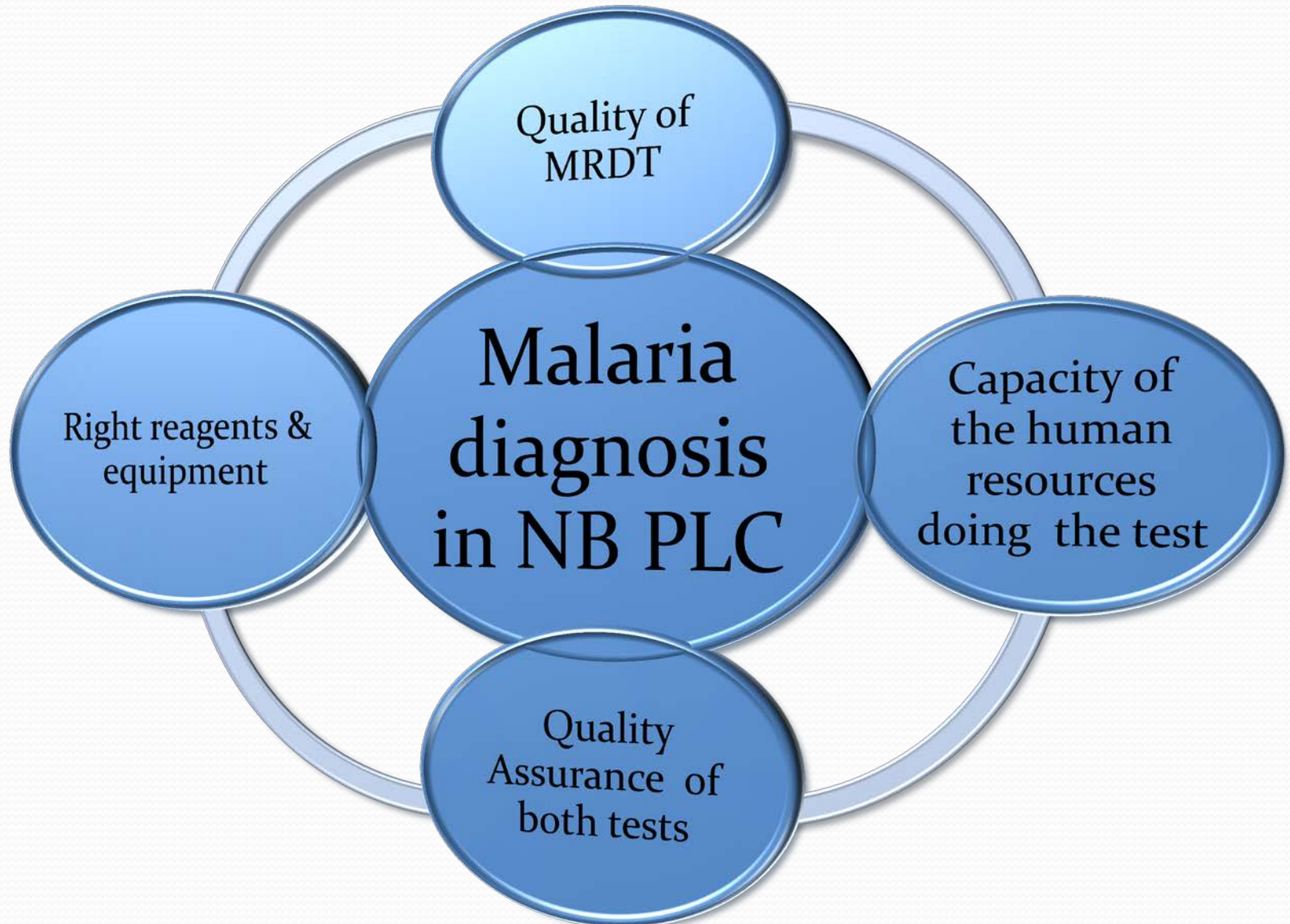
MALARIA DIAGNOSIS IN NB PLC



MALARIA DIAGNOSIS IN NB PLC

- Malaria antigen(Ag) rapid diagnostic test(RDT),used in all clinics since 2007.
- Malaria light microscopy (thick and thin blood film)is available in the Lagos clinic only.
- Malaria microscopy is only available in Lagos clinic.
- Malaria microscopy is provided by external laboratories to other sites.
- There is a yearly audit of the external laboratories by NB PLC senior medical laboratory scientist.

Elements of malaria diagnosis in NB PLC



Details of the Elements

1. RIGHT REAGENTS & EQUIPMENT

- The right stain and of good quality.
- Good working microscope
- ph. of the water for diluting stain.
- storage of stain
- Good and clean microscope slides

2. QUALITY OF MRDT IN USE

- Choice of MRDT is based on best first 5 brands on WHO/FIND current evaluation result.
- Lot/batch testing before each procurement twice a year.

Details of the Elements

3. CAPACITY OF THE HUMAN RESOURCE DOING THE TEST

- Training of the 2 MLS on malaria diagnosis by ANID centre, CMUL.
- Proficiency testing of NB PLC MLS and external medical providers' MLS, by ANID centre, CMUL.
- Re- training of NB PLC MLS and assessment of their expertise on microscopy every 4 years by ANID centre, CMUL.

4. QUALITY ASSURANCE OF BOTH TESTS

- Yearly QC of about 25 samples with ANID centre, CMUL. Results are 100% compliant
- QC of about 15 samples with Pathcare Nigeria since 2012. Results are 100% compliant.
- Compare other best first 5 brands with current brand in use, if more sensitive

Example- Humasis, Carestat, First response, ABON, Binax NOW

Breakthrough in malaria diagnosis

- Diagnosed Plasmodium ovale and Plasmodium malariae in averagely 3 patients(Nigerians) yearly since 2008.

Case study of malaria misdiagnosis

● 1

A patient went to an hospital after 2 days of having fever and was diagnosed of malaria and typhoid by the hospital laboratory.

ACT & antibiotic were given by the doctor.

Patient sought a second before administering the drugs after a day because the symptoms had subsided.

Laboratory result from NB PLC showed negative result for malaria(both MRDT & microscopy) and no significant titre for the widal reaction.

● 2

Clinicians from some external medical providers prescribe both AcT & antibiotic without any laboratory investigation.

Diagnosis is made by patient complain,

Case study no 3

Patient present in NB PLC clinic with complain of some signs & symbols with a personal diagnosis of malaria.

Routinely, Full blood count, MRDT & malaria microscopy tests are usually requested .

Laboratory investigations reveals leucocytosis, neutrophilia, lymphocytosis and sometimes eosinophilia with a negative malaria test results, for significant number of these patients .

Patient feel better with the administration of the right prescribed drug without an antimalarial.

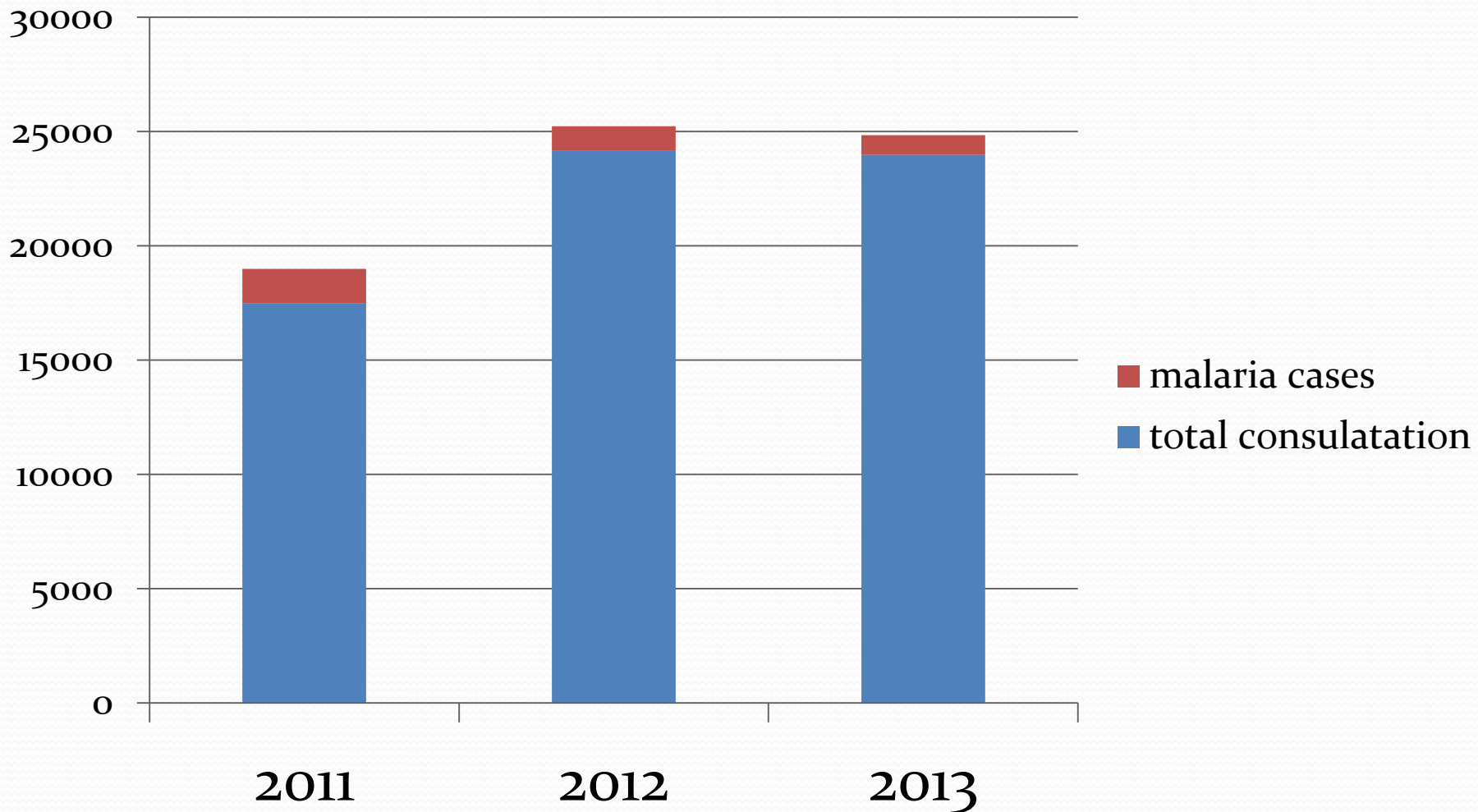


10 STEPS TO BETTER CARE®

STEP 1: KNOW WHAT YOU'RE DEALING WITH

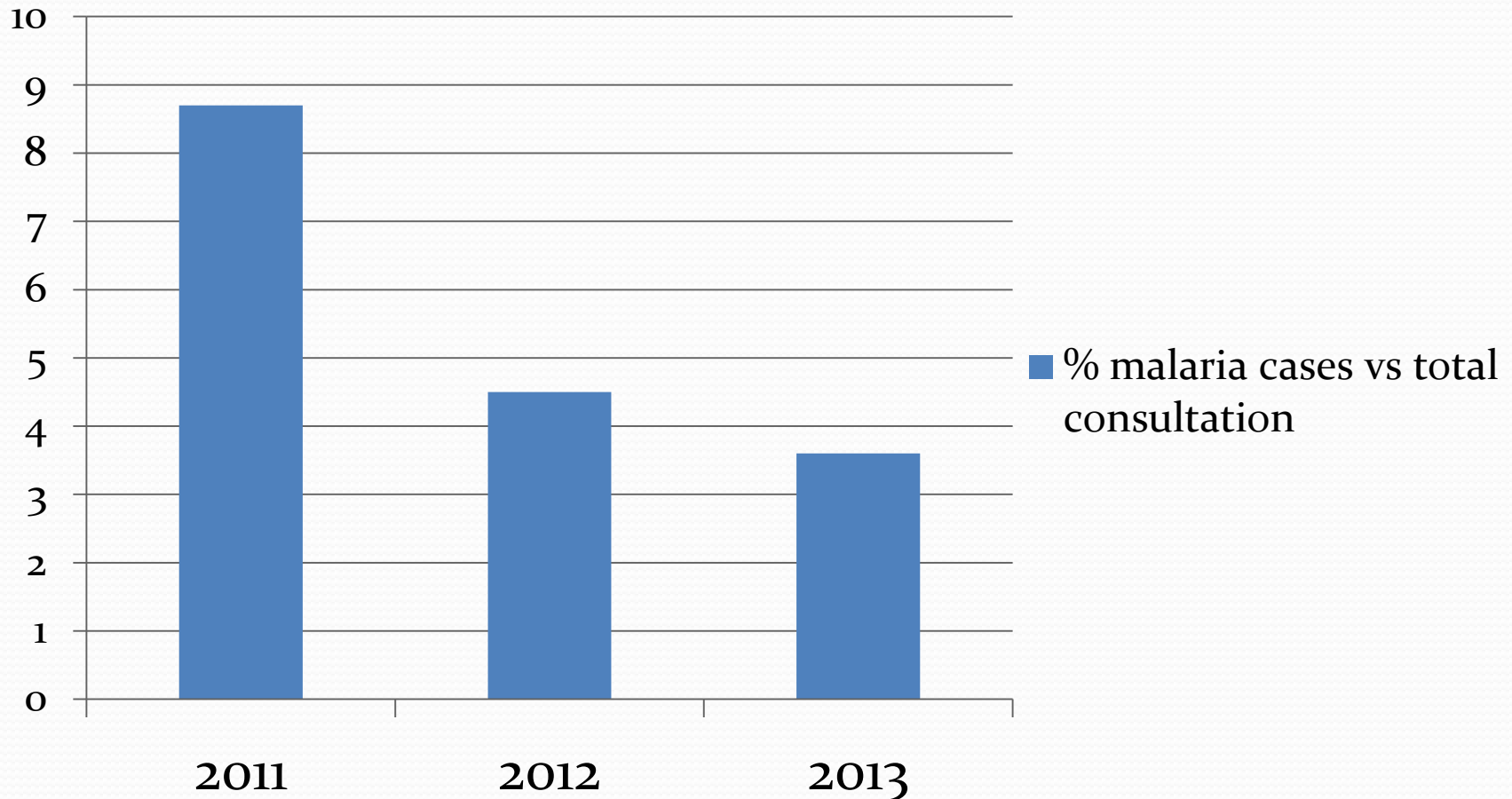
Get the correct diagnosis

No of malaria cases vs total consultations in all clinics



Percentage malaria case of the total consultations in all clinics.

% malaria cases vs total consultation



SUCCESS

- Positive malaria result has reduced from 1 out of 6 to 1 out of 11, because of all the preventive measures in place and accurate diagnosis.
- Malaria now account for about 4 % of all our clinics' consultation as at 2013.
- Paradigm shift recorded in patient orientation on malaria.

CHALLENGES



- Patient orientation and mind-set- solved by education using KAP on malaria
- Quality of MRDTs procured – solved by QA on MRDTs batch
- Easy access to antimalarial drugs by employees across the counter.
- Strong employee union with initial poor knowledge on malaria
- Refusal of expatriates to take their malaria chemoprophylaxis



THANKS