Lao PDR 2015 Outlet Survey Findings
October 25th
Presentation outline

ACTwatch project
Outlet survey methods

Results

- Antimalarial and test landscape overview
- Antimalarial availability
- Malaria blood testing availability
- Antimalarial sale and distribution, & market share
- Antimalarial diagnostic market share
- Antimalarial price
- Provider knowledge and characteristics
- Training, supervision, and reporting in the private sector

Conclusions
Background
ACTwatch countries

Standardized *malaria medicine & diagnostic evidence* across 13 countries
ACTwatch countries

2015 Laos Survey

Standardized malaria medicine & diagnostic evidence across 13 countries
ACTwatch relevancy in Lao PDR

- Lao PDR has set the goal of eliminating malaria by 2030.

- Accelerating progress toward malaria elimination in Lao PDR will require high coverage of appropriate management of suspected malaria cases.

- ACTwatch evidence helps monitor this goal & identify where adjustments to policy, strategy, and funding decisions may be needed to help meet it and increase coverage for case management.
Outlet Survey

Methods
What is an outlet in Laos?

**Public Health Facility**
(Provincial Hospitals, District Hospitals and health centers)

**Community Health Worker (CHW)**
(Village Health Workers and Mobile Outreach Workers)

**Private For-profit Health Facility**
(Private hospitals, clinics, and diagnostic laboratories)

**Pharmacy**
(These include Levels 1, 2 and 3 pharmacies as well as clinical pharmacies)

**Drug Store**
(Drug stalls in rural markets and shops)

**General Retailer**
(Grocery stores and village shops)

**Itinerant Drug Vendor**
(Mobile drug vendors)
What areas were selected?

- Representative sample from 5 Southern Provinces
- 41 of 42 districts.
- Cluster: village groups
  - Public-private mix (PPM) program (25 districts)
  - Non-public-private mix program (16 districts)
How were outlets selected?
1) Complete census of all potentially eligible outlets
2) Screen for antimalarials in stock or malaria blood testing availability
* One or more antimalarials were in stock on the day of the survey
One or more antimalarials were in stock in the three months preceding the survey.
*Malaria blood testing (microscopy or rapid diagnostic test) was available
3) When products are in stock: product audit
### 4) Product audit

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</tbody>
</table>

5. Manufacturer

6. Country of manufacture

7. Package size

8. Is product a fixed-dose combination (FDC)?

9. Does product have the Green leaf logo?

10. Amount sold/distributed in the last 7 days to individual consumers (Record # of packages / tins described in Q7 OR record the total # of tablets / suppositories / granule packs sold)

11. Stocked out at any point in the past 3 months?

12. Retail selling price

13. Wholesale purchase price

14. Why do you stock this medicine [SHOW PRODUCT]?

15. Comments

<table>
<thead>
<tr>
<th>Free supply</th>
<th>Profitable</th>
<th>Recommended by the government</th>
<th>Low price</th>
<th>Customer demand or preference</th>
<th>Positive brand reputation</th>
<th>Often prescribed by doctors</th>
<th>Most effective for treating malaria</th>
<th>Don’t know</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>X</td>
<td>Z</td>
</tr>
</tbody>
</table>

Tablet Audit Sheet [__] of [__]
Antimalarial product in stock

Formulation (tablet, syrup, injection, etc.)
Brand/generic names
Strength
Manufacturer
Country of manufacture
Amount distributed in the past week
Retail & wholesale price

mRDT product in stock
2015 Outlet Survey Results
Outlet survey sample in 2015

- 7,586 outlets screened
  - 6,861 outlets did not meet screening criteria
  - 725 outlets met screening criteria
    - 1 outlet not interviewed
  - 724 outlets interviewed
Outlets in the 2015 sample

724
number of outlets in the sample

630
number of outlets with antimalarials in stock

49
stocked antimalarials in the last three months but not on the day of survey

45
stocked malaria diagnostic tests but not antimalarials
What does the antimalarial landscape look like?
Are antimalarials available in the public sector?
Availability of any antimalarial: public sector

Among all screened outlets in the survey, 99% of public health facilities had antimalarials in stock on the day of the survey. N=414/465 CMPE trained.
Availability of any antimalarial: public sector

Among all screened outlets in the survey

5.2% stocked in the last 3 months but not on the day of survey
How does antimalarial availability in the public sector compare with the private sector?
Availability of any antimalarial: private sector

Private-sector availability is lower than public sector.

Pharmacies had the highest stock of antimalarials, at 71%.
Availability of any antimalarial: private sector

Among all screened outlets in the survey

<table>
<thead>
<tr>
<th>Category</th>
<th>PERCENT OF OUTLETS</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Facility</td>
<td>40%</td>
<td>172</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>77%</td>
<td>479</td>
</tr>
<tr>
<td>Drug Store</td>
<td>15%</td>
<td>15</td>
</tr>
<tr>
<td>General Retailer</td>
<td>3%</td>
<td>6,295</td>
</tr>
<tr>
<td>Itinerant Drug Vendor</td>
<td>3%</td>
<td>67</td>
</tr>
<tr>
<td>Total Private Sector</td>
<td>47%</td>
<td>7,028</td>
</tr>
</tbody>
</table>

Private for-profit facilities: 62
Pharmacies: 338
Drug Stores: 3
General Retailers: 31
Itinerant Drug Vendors: 169
Total Private Sector: 7,028
Comparison of PPM & non-PPM Private Health Facilities & Pharmacies
Public-private Mix (PPM) Program Overview

- Launched in 2008 to increase access to malaria diagnosis and treatment and remove poor-quality antimalarials from the private sector.

- Under the program, AL and malaria RDTs are distributed to PPM-registered private facilities and pharmacies.

- Of the 41 districts included in the 2015 outlet survey, 25 districts were part of the PPM program.
Outlets with at least one antimalarial in stock in 2015

Among all screened outlets across PPM and non-PPM programs.
Antimalarial market composition
Among all outlets with at least one AM in stock

Antimalarial market share composition in 2015

\[ N=402 \]

outlets with antimalarials
Among all outlets with at least one AM in stock

Antimalarial market share composition in 2015

N=402

65% public sector market composition

- Public Health Facility
- Community Health Worker
Antimalarial market share composition in 2015

Among all outlets with at least one AM in stock

N=402

27% private facilities & pharmacies

- Public Health Facility
- Community Health Worker
- Pharmacy
- Health Facility
Antimalarial market share composition in 2015

Among all outlets with at least one AM in stock

8% Drug stores, general retailers, & itinerant drug vendors

N=402

- Public Health Facility
- Pharmacy
- Itinerant Drug Vendor
- Community Health Worker
- Drug Store
- Health Facility
- General Retailer
insights
availability and market composition in Lao PDR
Public health facilities’ availability was high, with an almost universal availability of antimalarials.

1 in 3 CHWs had antimalarials available, and CHWs are meant to access rural, remote populations.

In the private sector, 70% of pharmacies and 40% of private for-profit facilities had antimalarials available.

Private-sector availability is much lower in drug stores and negligible among itinerant drug vendors. General retailers also rarely stock antimalarials.

Market composition: Most of the antimalarial service delivery points include public health facilities and CHWs, followed by private for-profit facilities.
Among outlets with an antimalarial, what types of antimalarials were found in 2015?
First-line ACT (AL)
Availability of any national first-line ACT in the public sector, 2015

Among all outlets with at least one AM in stock

99.5% of antimalarial stock in public health facilities and 83% of CHWs have ACT
Availability of any national first-line ACT in the public & private sector, 2015

Among all outlets with at least one AM in stock
Among all outlets with at least one AM in stock

Availability of any national first-line ACT in the public & private sector, 2015

- Public Health Facility: 63%
- Community Health Worker: 52%
- Total Public Sector: 63%
- Health Facility: 63%
- Pharmacy: 52%
- General Retailer: 6%
- Total Private Sector: 6%
Types of AL Products Audited, 2015

Among all AL products audited, N=1242

- Artefan
- AL (IPCA)
- Coartem
- Combiart

N=1242
Comparison of PPM & non-PPM Private Health Facilities & Pharmacies
Availability of national first-line ACT across outlets located in PPM and non-PPM areas, 2015

Among all outlets with at least one AM in stock

PRIVATE HEALTH FACILITY

PHARMACY
What is the availability of oral artemisinin monotherapy?
ORAL AMT BAN 2007
1 box of oral AMT was found in the entire study, and it was found in a private for-profit facility.
Artesunat

Artesunat..........................50 mg

ANTIMALARIAL AGENT

PHARMACEUTICAL FACTORY №120 - ARMEPHACO JOINT STOCK COMPANY

118 Vu Xuan Thieu - Long Bien - Ha Noi / Tel: 04 3674 0056 - 069 575 024
Website: www.armephaco.com.vn / Email: armephaco@armephaco.com.vn
The government-recommended, second-line treatment for P. vivax malaria is chloroquine + primaquine.

CQ tablets are recommended in the National Treatment Guidelines for pregnant women who have uncomplicated malaria in their 1st trimester.
Availability of chloroquine in the public sector, 2015

14% of antimalarial-stocking public-sector outlets have chloroquine
Availability of chloroquine across both sectors, 2015

Among all outlets with at least one AM in stock

Percent of outlets by sector and outlet type:

- Public Health Facility
- Community Health Worker
- Total Public Sector
- Health Facility
- Pharmacy
- General Retailer
- Total Private Sector
- Total
The most common CQ audited was Maraquine (245 of the 327 CQ products audited)
Percent of outlets were found to stock both chloroquine and primaquine.
Comparison of PPM & non-PPM Private Health Facilities & Pharmacies
Availability of chloroquine across outlets located in PPM and non-PPM areas, 2015

Among all outlets with at least one AM in stock
How available is treatment for severe malaria?
Availability of treatment for severe malaria in 2015

Among all outlets with at least one AM in stock, 9/19 of public hospitals outlets stock treatment for severe malaria.
## Availability of treatment for severe malaria in 2015

### Among all outlets with at least one AM in stock

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent of Outlets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Health Facility</td>
<td>10%</td>
</tr>
<tr>
<td>Community Health Worker</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Total Public Sector</td>
<td>&lt;1%</td>
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</table>
5 insights

availability of different classes of antimalarials in Lao PDR
First-line treatment availability is high among antimalarial-stocking public health facilities and CHWs, and moderate among pharmacies and private for-profit facilities.

Oral AMT is not available: only 1 oral AMT product was found in a private for-profit facility.

Chloroquine is still widely available in the private sector. No outlets stock CQ and primaquine.

The public sector rarely has chloroquine in stock.

Availability of the first-line treatment was higher in outlets located in PPM districts; conversely availability of CQ was higher in non-PMM areas.
Is malaria blood testing available among outlets that have an antimalarial in stock?
Availability of malaria blood testing in 2015

Among all outlets with at least one AM in stock or in the past 3 months

Public Health Facility    Community Health Worker    Total Public Sector

Public Sector

PERCENT OF OUTLETS

0  10  20  30  40  50  60  70  80  90  100
Availability of malaria blood testing in 2015

Among all outlets with at least one AM in stock or in the past 3 months.
Availability of malaria microscopy in 2015

23% of public sector have malaria microscopy
OnSite Rapid Test

For in vitro diagnostic use only
Store at 2-30°C, sealed

CTK Biotech, Inc
10110 Mesa Rim Road
San Diego, CA 92121, USA
E-mail: info@ctkbioitech.com

EC REP MDSS GmbH
Schiffgraben 41
30175 Hannover, Germany

Lateral Flow Rapid Test
1 cassette
Availability of malaria RDTs in 2015

Among all outlets with at least one AM in stock or in the past 3 months

Health Facility  Pharmacy  General Retailer  Total Private Sector

PERCENT OF OUTLETS

Private Sector
Availability of across outlets located in PPM and non-PPM areas, 2015

Among all outlets with at least one AM in stock or in the past 3 months
5 insights
malaria blood testing in Lao PDR
1. Malaria testing availability is high in the public sector.

2. 77% of private for-profit health facilities and 56% of pharmacies have malaria blood tests in stock.

3. Antimalarial stocking general retailers rarely have tests in stock.

4. Most outlets with malaria testing in stock test have RDTs.

5. Availability of testing was higher in PPM areas than non-PPM areas.
What is the antimalarial market share between the public and private sectors?
Antimalarial Market Share in 2015

Relative sale/distribution of antimalarial AETD in the last week
Relative sale/distribution of antimalarial AETD in the last week

Antimalarial Market Share in 2015

<table>
<thead>
<tr>
<th></th>
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<th>Private</th>
</tr>
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<tbody>
<tr>
<td>AL</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>Chloroquine</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>Oral artemisinin monotherapy</td>
<td>70</td>
<td>30</td>
</tr>
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<td>Non-oral artemisinin monotherapy</td>
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Antimalarial Market Share in 2015

Relative sale/distribution of antimalarial AETD in the last week

PERCENTAGE OF MARKET VOLUME

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<td>Blue</td>
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<tr>
<td>Oral</td>
<td>Non-oral</td>
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<tr>
<td>Artemisinin</td>
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<tr>
<td>Monotherapy</td>
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Antimalarial Market Share in 2015

Relative sale/distribution of antimalarial AETD in the last week

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Antimalarial Market Share in 2015

Relative sale/distribution of antimalarial AETD in the last week

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<td>Artemisinin</td>
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<td>Monotherapy</td>
<td>Monotherapy</td>
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Antimalarial Market Share in 2015

40% of the market share is comprised of ACT, but 60% of the distribution is from chloroquine. The public sector performs very well, almost exclusively distributing ACT. Most chloroquine is distributed through the private sector.
What is the market share according to different outlet types?
Antimalarial Market Share: 2015

Relative sale/distribution of antimalarial AETD in the last week

- **AL**
- Chloroquine
- Oral artemisinin monotherapy
- Non-oral artemisinin monotherapy

**Total Public**

**Total Private**
Antimalarial Market Share: 2015

Relative sale/distribution of antimalarial AETD in the last week

PERCENTAGE OF MARKET VOLUME

0 10 20 30 40 50 60 70 80 90 100

Total Public  Public Health Facility  CHW  Total Private

- AL
- Chloroquine
- Oral artemisinin monotherapy
- Non-oral artemisinin monotherapy
Antimalarial Market Share: 2015

Relative sale/distribution of antimalarial AETD in the last week

- Total Public
- Public Health Facility
- CHW
- Total Private
- Health Facility
- Pharmacy
- General Retailer

- AL
- Chloroquine
- Oral artemisinin monotherapy
- Non-oral artemisinin monotherapy
Antimalarial Market Share: 2015

Relative sale/distribution of antimalarial AETD in the last week
Antimalarial Market Share (by type of ACT): 2015

Relative sale/distribution of antimalarial AETD in the last week

- Artefan
- Combiart
- Non-oral artemisinin monotherapy
- AL IPCA
- Chloroquine
- Oral artemisinin monotherapy
- Coartem

Total Public
Public Health Facility
CHW
Total Private
Health Facility
Pharmacy
General Retailer
Market share within each sector 2015

Relative sale/distribution of antimalarial AETD in the last week

Public

- Combiart
- Coartem

Private

- Artefan
- Combiart
- Non-artemisinin monotherapy
- Oral AMT
- Non-oral AMT
- AL IPCA
- Coartem
Antimalarial market share in 2015

Relative sale/distribution of antimalarial AETD in the last week
Antimalarial market share in 2015

Relative sale/distribution of antimalarial AETD in the last week
Antimalarial market share in 2015

Relative sale/distribution of antimalarial AETD in the last week

- Chloroquine
- Non-oral artemisinin monotherapy
- Oral artemisinin monotherapy
- AL
Antimalarial market share in 2015

Relative sale/distribution of antimalarial AETD in the last week

- Chloroquine
- Oral artemisinin monotherapy
- Non-oral artemisinin monotherapy

- AL

<table>
<thead>
<tr>
<th>Market Share</th>
<th>Chloroquine (PPM)</th>
<th>Chloroquine (non-PPM)</th>
<th>Oral artemisinin monotherapy (PPM)</th>
<th>Oral artemisinin monotherapy (non-PPM)</th>
<th>Non-oral artemisinin monotherapy (PPM)</th>
<th>Non-oral artemisinin monotherapy (non-PPM)</th>
<th>General Retailer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Public</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Total Private</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Facility (PPM)</td>
<td>70%</td>
<td>30%</td>
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<td></td>
</tr>
<tr>
<td>Health Facility (non-PPM)</td>
<td>10%</td>
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<td></td>
</tr>
<tr>
<td>Pharmacy (PPM)</td>
<td>10%</td>
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</tr>
<tr>
<td>Pharmacy (non-PPM)</td>
<td>10%</td>
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<tr>
<td>General Retailer</td>
<td>10%</td>
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</tbody>
</table>
What is the malaria diagnostic market share between the public and private sectors?
Malaria Diagnostic Market Share in 2015

Relative sale/distribution of malaria tests in the last week

PERCENTAGE OF MARKET VOLUME

Microscopy
RDT

Total Public

Total Private
Malaria Diagnostic Market Share in 2015

Relative sale/distribution of malaria tests in the last week

PERCENTAGE OF MARKET VOLUME

Microscopy  RDT

Total Public

Total Private
Malaria Diagnostic Market Share in 2015

Relative sale/distribution of malaria tests in the last week

- Total Public
  - Public Health Facility
  - Community Health Worker
- Total Private
  - Total Tests

PERCENTAGE OF MARKET VOLUME

- Microscopy
- RDT
Malaria Diagnostic Market Share in 2015

Relative sale/distribution of malaria tests in the last week

- Total Public
- Public Health Facility
- Community Health Worker
- Total Private
- Health Facility
- Pharmacy
- General Retailer

PERCENTAGE OF MARKET VOLUME

Microscopy
RDT
Malaria Diagnostic Market Share in 2015

Public sector: 100% Standard Diagnostics (not shown).
5 insights
malaria market share in Lao PDR
Private-sector antimalarial market share is greater than for the public sector, and pharmacies distribute about half of all antimalarials in southern Lao PDR.

However, most testing is done through the public sector and using RDTs.

Chloroquine is the most commonly distributed antimalarial, namely in the private sector and by pharmacies.

Market share data show that most ACTs are distributed through the public sector.

Most of the chloroquine distributed is by pharmacies located in the non-PPM areas.
<table>
<thead>
<tr>
<th>Outlet Type</th>
<th>Malaria Tests Distributed</th>
<th>Antimalarial AETD Treatments Distributed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Health Facility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Health Worker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Public Sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Health Facility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug Store</td>
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<td>General Retailer</td>
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<td></td>
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<tr>
<td>Itinerant drug vendor</td>
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</tr>
<tr>
<td>Total Private Sector</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What is consumer price of RDT and first-line treatment?
What is the price of antimalarial treatment and diagnostic testing?
Among all AL available within private-sector facilities

Median private-sector consumer prices for AL for adults, 2015

- Private for-Profit Health Facility: $0.00
- Pharmacy: $0.00
- Total Private: $0.00

MEDIAN PRICE IN 2015 USD
Types of AL Products Audited, 2015

- Free
- 1,000-15,000
- Missing Price

N=525
Median private-sector consumer prices for CQ for adults, 2015

Median price in 2015 USD:
- Health Facility: $0.62
- Pharmacy: $0.62
- General Retailer: $0.62
- Total Private: $0.62

Among all CQ available within private-sector facilities.
Antimalarial market share, 2015

Relative sale/distribution of antimalarial AETD in the last week

- Chloroquine
- Oral artemisinin monotherapy
- Non-oral artemisinin monotherapy

Zero availability of AL

21% availability of AL
Antimalarial market share, 2015

Zero availability of AL

Relative sale/distribution of antimalarial AETD in the last week
Relative sale/distribution of antimalarial AETD in the last week

Antimalarial market share, 2015

- **Zero availability of AL**

- **21% availability of AL**
Antimalarial market share, 2015

Relative sale/distribution of antimalarial AETD in the last week

67% availability of AL

PERCENTAGE OF MARKET VOLUME

- **AL**
- **Oral artemisinin monotherapy**
- **Chloroquine**
- **Non-oral artemisinin monotherapy**
Customer demand for CQ?

- Frequency for which customer demand or preference was mentioned as a reason for stocking a CQ product
  - In PPM districts: 65.7%
  - In non-PPM districts: 72.8%
Nearly half of these private-sector providers reported CQ as:
- (1) the government recommended treatment for pf or pv malaria, OR
- (2) or as the most effective treatment for malaria, OR
- (3) as the most often recommended medicine they use to treat malaria.
MARAQUINE:
Most popular brand
Manufactured in Laos
Trusted by patients?
One of the few AM with Laos language writing: brand recognition and trust?
Median prices for malaria RDT testing, 2015

Among all RDT 7 AM available within private-sector facilities

<table>
<thead>
<tr>
<th>Health Facility</th>
<th>Pharmacy</th>
<th>General Retailer</th>
<th>Total Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDIAN PRICE IN 2015 USD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RDT</td>
<td>AL</td>
<td>Chloroquine</td>
<td></td>
</tr>
<tr>
<td>$2.50</td>
<td>$0.50</td>
<td>$1.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>$0.62</td>
<td>$0.62</td>
<td>$0.62</td>
<td>$0.62</td>
</tr>
</tbody>
</table>
Comparison of PPM & non-PPM Private Health Facilities & Pharmacies
Price of mRDT for adults across outlets located in PPM and non-PPM areas, 2015

Among all outlets with at least one AM in stock

- Median price USD to consumers
  - PPM
  - Non-PPM

- Price of mRDT for adults across outlets located in PPM and non-PPM areas, 2015
  - Free (n=164)
  - n/a (n=2)
Do the providers working in outlets stocking antimalarials know the correct first-line treatment for uncomplicated malaria?
Providers who correctly state the first-line treatment (AL) and first-line dosing regimen (AL) for uncomplicated malaria in 2015 among all outlets with at least one AM or malaria test in stock.
Among all outlets with at least one AM or/& malaria test in stock

Providers who correctly state the first-line treatment (AL) and first-line dosing regimen (AL) for uncomplicated malaria in 2015
Comparison of PPM & non-PPM Private Health Facilities & Pharmacies
Providers who correctly state the first-line dosing regimen for uncomplicated malaria (AL) for an adult in 2015

Among all outlets with at least one AM or malaria test in stock.
Do private providers receive training, supervision, and reporting on case load data?
Do providers receive training and supervision?
Providers who reportedly received a **supervisory or regulatory visit** within the past year in 2015

**Among all outlets with at least one AM or/\& malaria test in stock**

![Bar chart showing 50% for Health Facility and 62% for Pharmacy]
Providers who reportedly received training on malaria diagnosis (RDT and/or microscopy) in 2015

- Health Facility: 37%
- Pharmacy: 43%
Providers who reportedly received training on **national malaria treatment guidelines** in 2015

Among all outlets with at least one AM or/\& malaria test in stock

<table>
<thead>
<tr>
<th>Health Facility</th>
<th>Pharmacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>23%</td>
<td>28%</td>
</tr>
</tbody>
</table>
Providers who reportedly keep records on the number of patients tested/treated for malaria in 2015

Among all outlets with at least one AM or/&malaria test in stock
Comparison of PPM & non-PPM Private Health Facilities & Pharmacies
Among all outlets with at least one AM or/\& malaria test in stock

Providers who reportedly received a **supervisory or regulatory visit** within the past year, 2015
Among all outlets with at least one AM or/\& malaria test in stock

Providers who reportedly keep records on the number of patients tested/treated for malaria in 2015
6 insights

provider knowledge, training, supervision, and reporting
1. Provider knowledge is generally high in the public sector and more variable in the private sector, though it remains high among providers in private for-profit facilities.

2. Only 50% of providers had correct knowledge at pharmacies.

3. Of providers who had knowledge, most knew the dosing regimen.

4. In terms of reported training, only one in three private facilities and pharmacies had training on diagnosis. Fewer had training on treatment guidelines.

5. 50% of private for-profit facilities and 60% of pharmacies had received a supervisory visit in the last year, and over half report on caseload data.

6. Performance was better among providers in the among pharmacies and private health facilities in PPM districts.
Survey Limitations
Data collection was implemented during Nov and Dec, not during the malaria peak season.

Providers could have ‘hidden’ drugs that were not nationally registered. Mystery clients or other methods may be used in future.

Survey methodology was not designed to detect differences between PPM and non PPM outlets.
1. Strong readiness in the public sector to test and appropriately treat malaria cases.

2. However, the private sector plays an important role in antimalarial distribution:
   - Address availability and distribution of chloroquine.
   - Close gaps in private sector readiness.

3. Private sector outlets in districts with the PPM program were better equipped to manage malaria as compared with outlets in non-PPM districts.
   - Most striking for pharmacies.

4. Need to increase coverage of private sector engagement including passive surveillance to track and respond to all malaria cases.
Thank you