



# Myanmar Outlet Survey Findings, 2015

*ACTwatch Group, & PSI/Myanmar*

# Presentation Outline

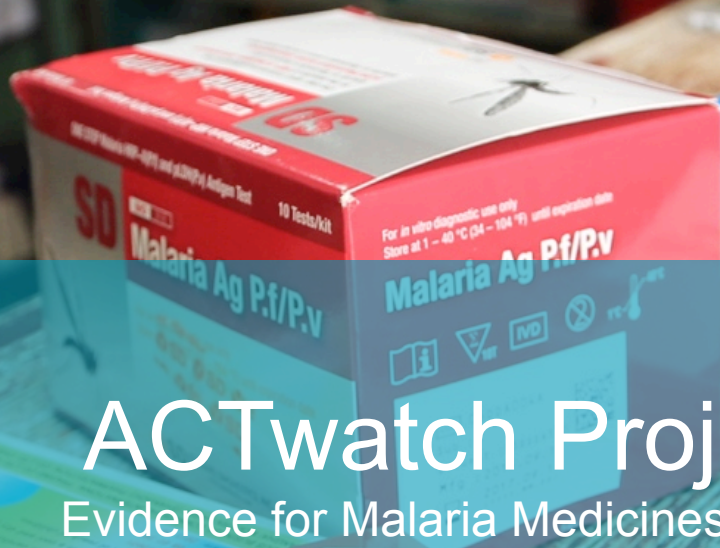


1. Background: ACTwatch overview
2. Methodology
3. Results & insights
4. Conclusions



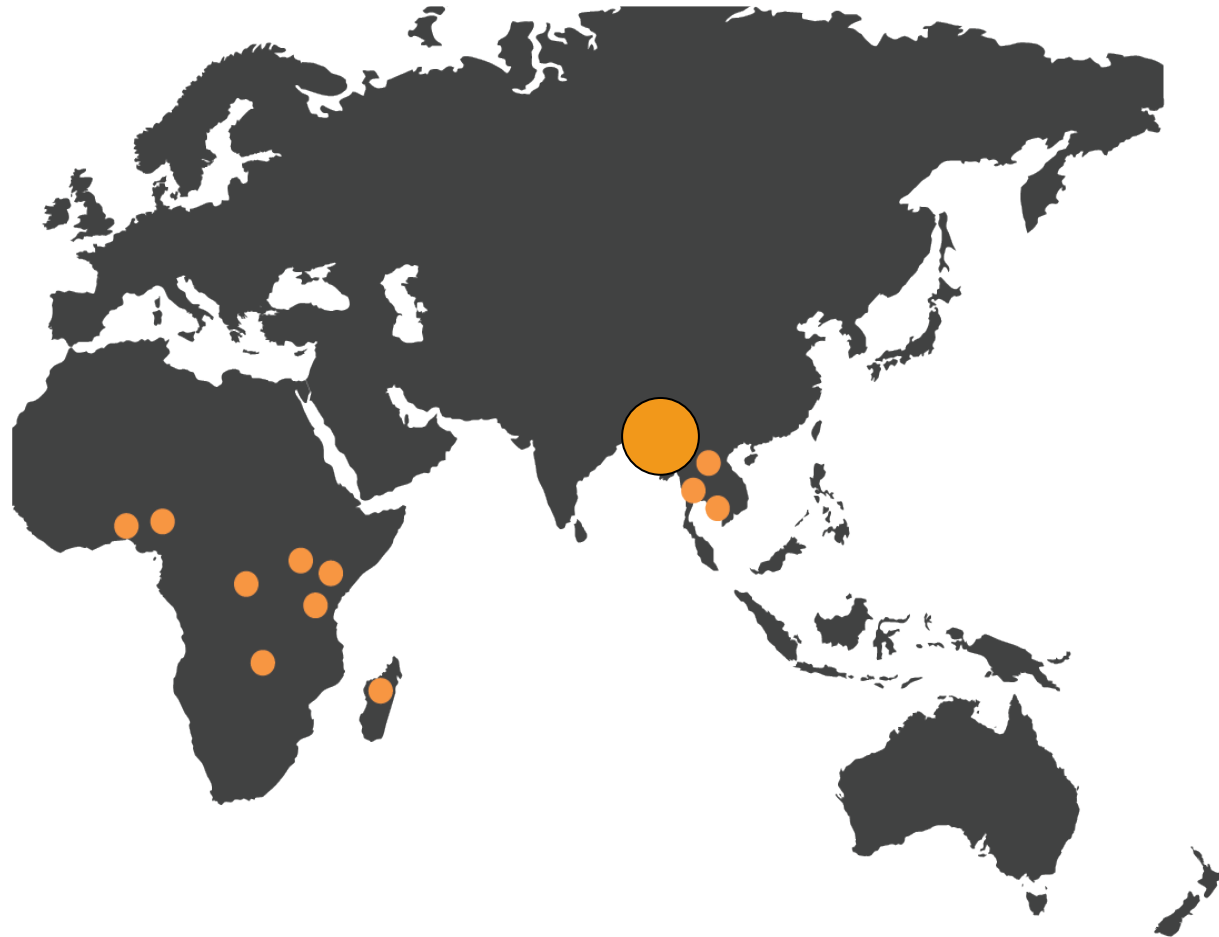
# ACTwatch Project

Evidence for Malaria Medicines Policy



## ACTwatch (2008-2016) has been implementing outlet surveys in Myanmar since 2012

- Outlet surveys in Myanmar measure the **availability, price, and market share** among community health workers and the private sector for malaria medicines & diagnostics
- Surveys aim to provide evidence for effective **policies** and **strategies**





# ACTwatch relevancy in Myanmar

- **National level antimalarial and malaria diagnostic evidence is critical given recent commitment to eliminate malaria.**
- **ACTwatch evidence helps to monitor past, current, and future strategies & to identify where adjustments to policy, strategy and funding decisions may be needed.**

A woman with dark hair tied back, wearing a light blue short-sleeved shirt and a blue lanyard, is seated at a desk. She is looking down and writing in a notebook with a pen. The scene is dimly lit, with a soft light source from the left illuminating her face and the desk. A teal horizontal bar is overlaid across the middle of the image, containing the text "Outlet Survey Methods" in white. The background is dark and out of focus.

# Outlet Survey Methods

# Outlet Survey Population

- **Study Population:**

- Outlets with antimalarials or malaria blood testing available

## OUTLETS INCLUDE:

- **What is a community health worker?**

NGO-trained workers & government health staff

- **What is a private sector outlet?**

- Health facility
- Pharmacy
- General Retailer
  
- Mobile vendor/Itinerant Drug Vendor





# Study Sites & Sampling

- Country Stratification
- Representative sample of clusters
- **Urban/wards and village tracks**



**Eastern / AMTR  
Intervention**



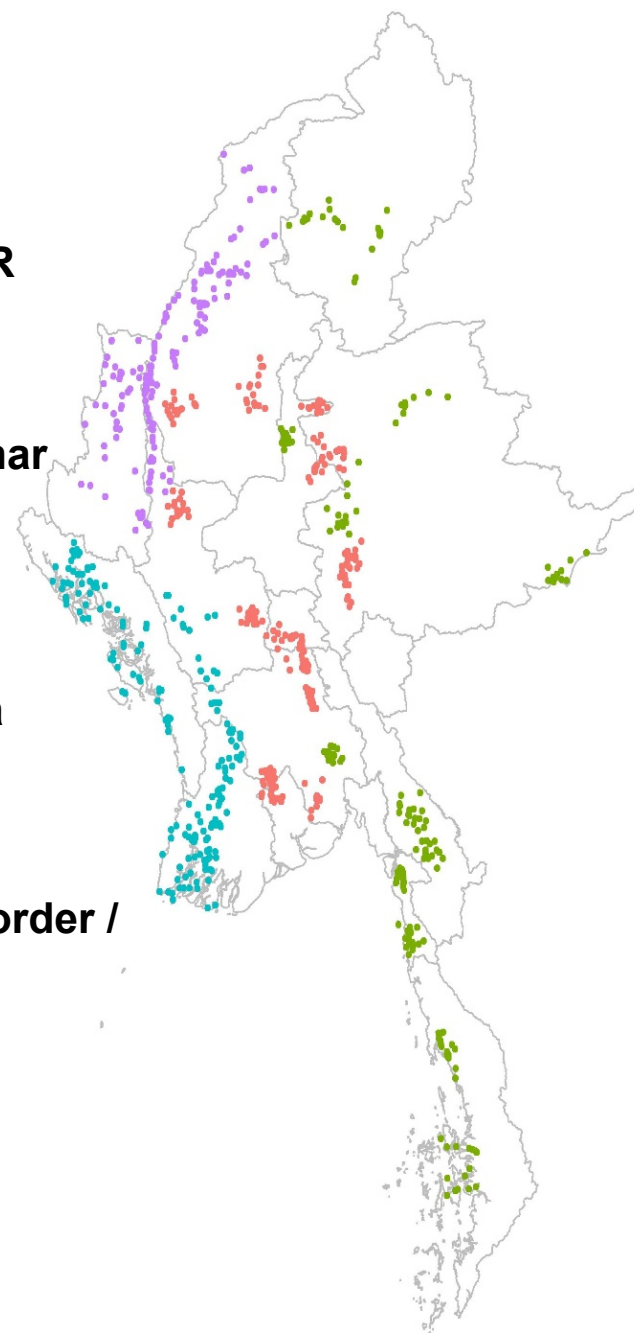
**Central Myanmar**



**Western / India  
Border**



**Bangladesh Border /  
Rakhine**





**How were outlets selected?**



# 1) Complete census of all potentially eligible outlets





## 2) Screen for antimalarials in stock or malaria blood testing availability





### 3) When products are in stock: product audit





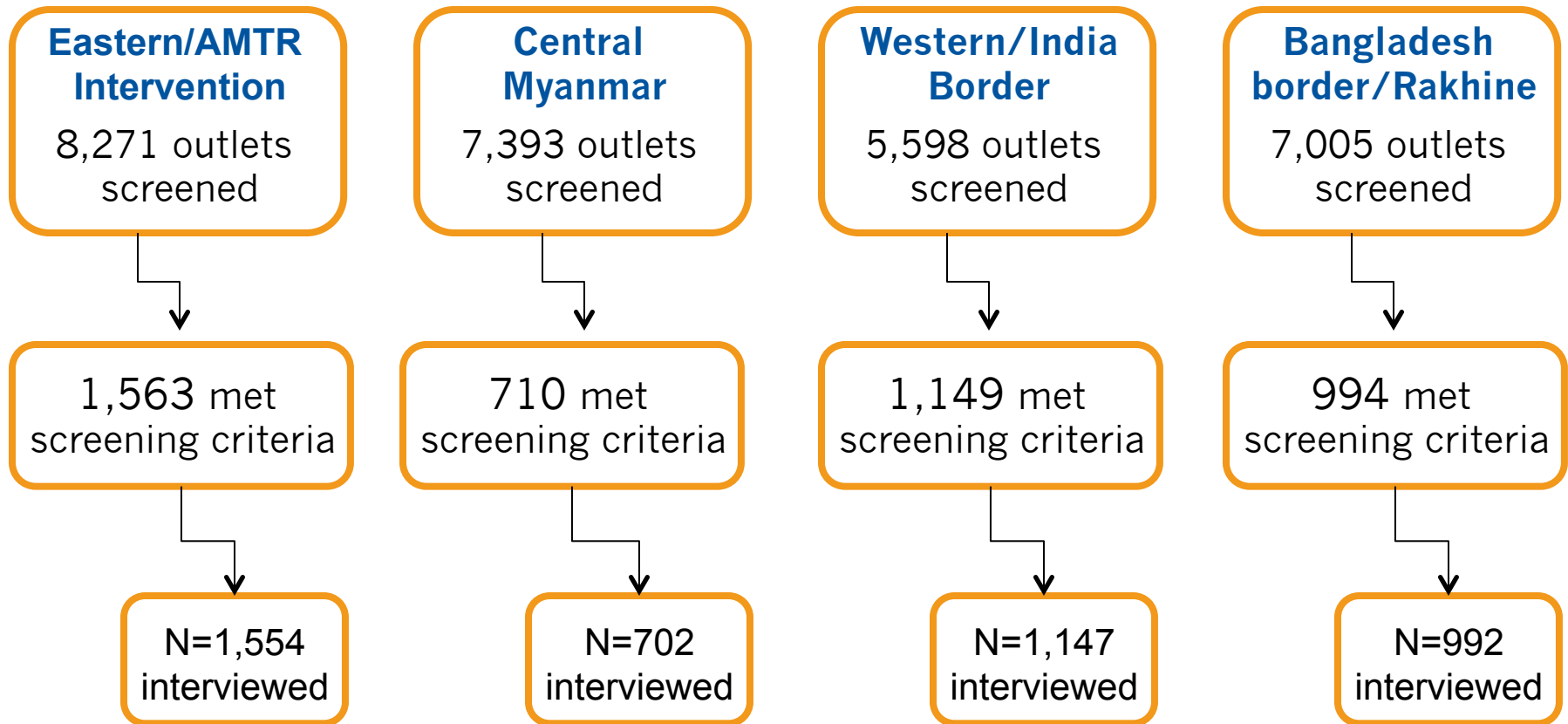




# RESULTS



## Outlet survey sample by domain, 2015



- **28,267 outlets screened; 4,416 met the screening criteria; 4,395 interviewed**





# Outlets in the sample

4,395

number of outlets in the sample in 2015

3,859

number of outlets with antimalarials

413

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

123

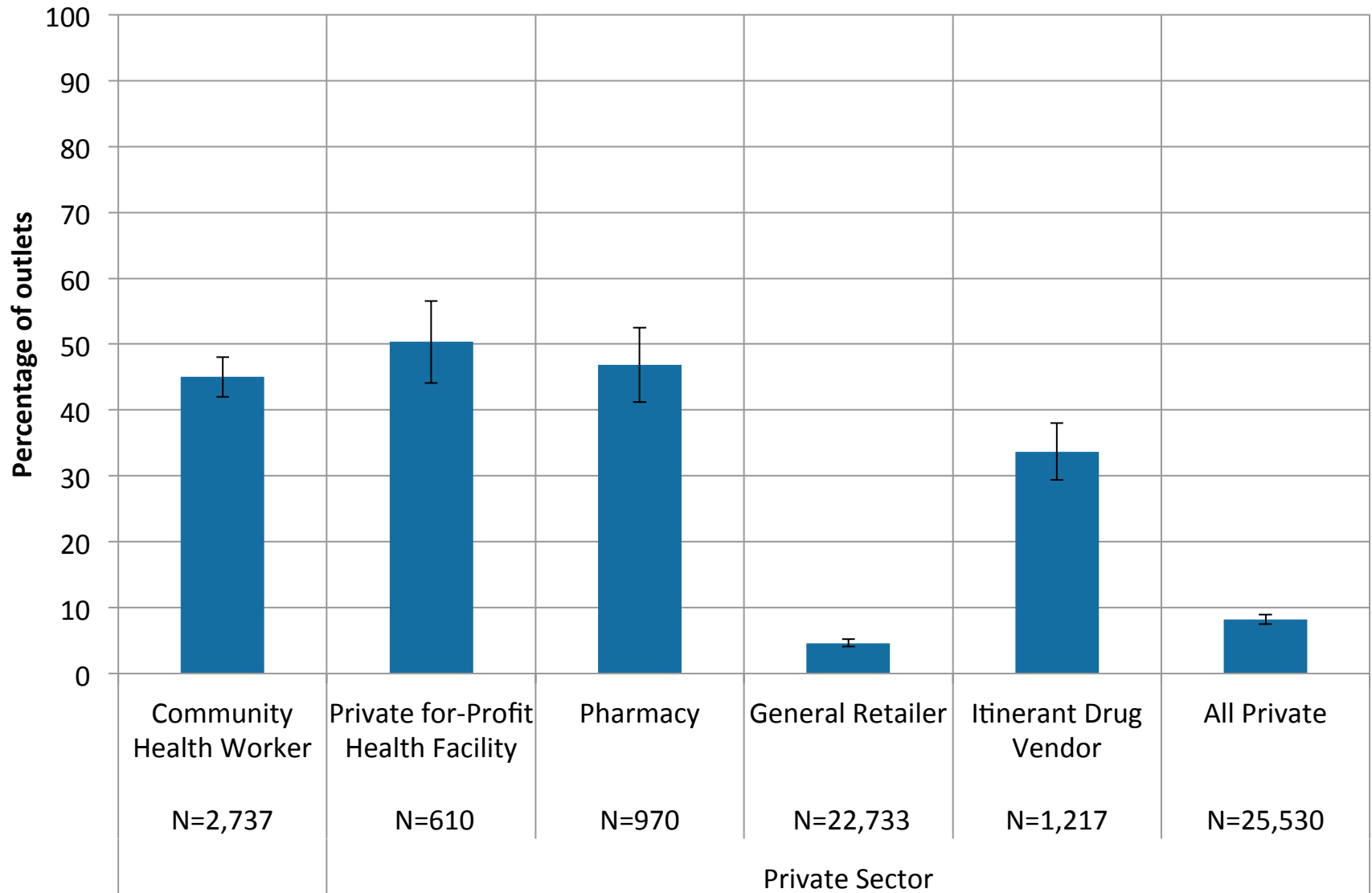
stocked malaria diagnostic tests but not antimalarials



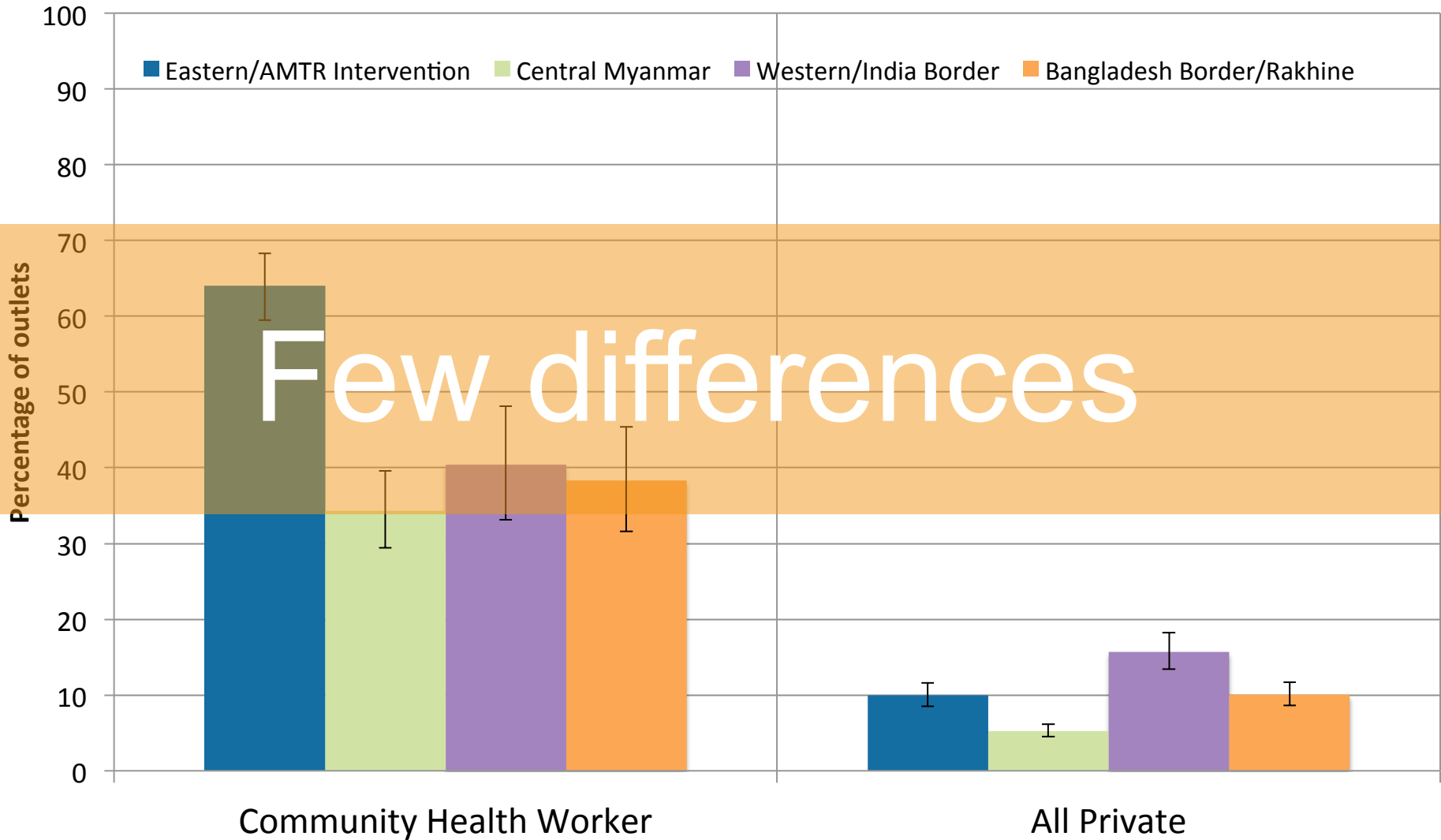
What is the availability of antimalarials among the outlets?



# Availability of any antimalarial



# Availability of any antimalarial

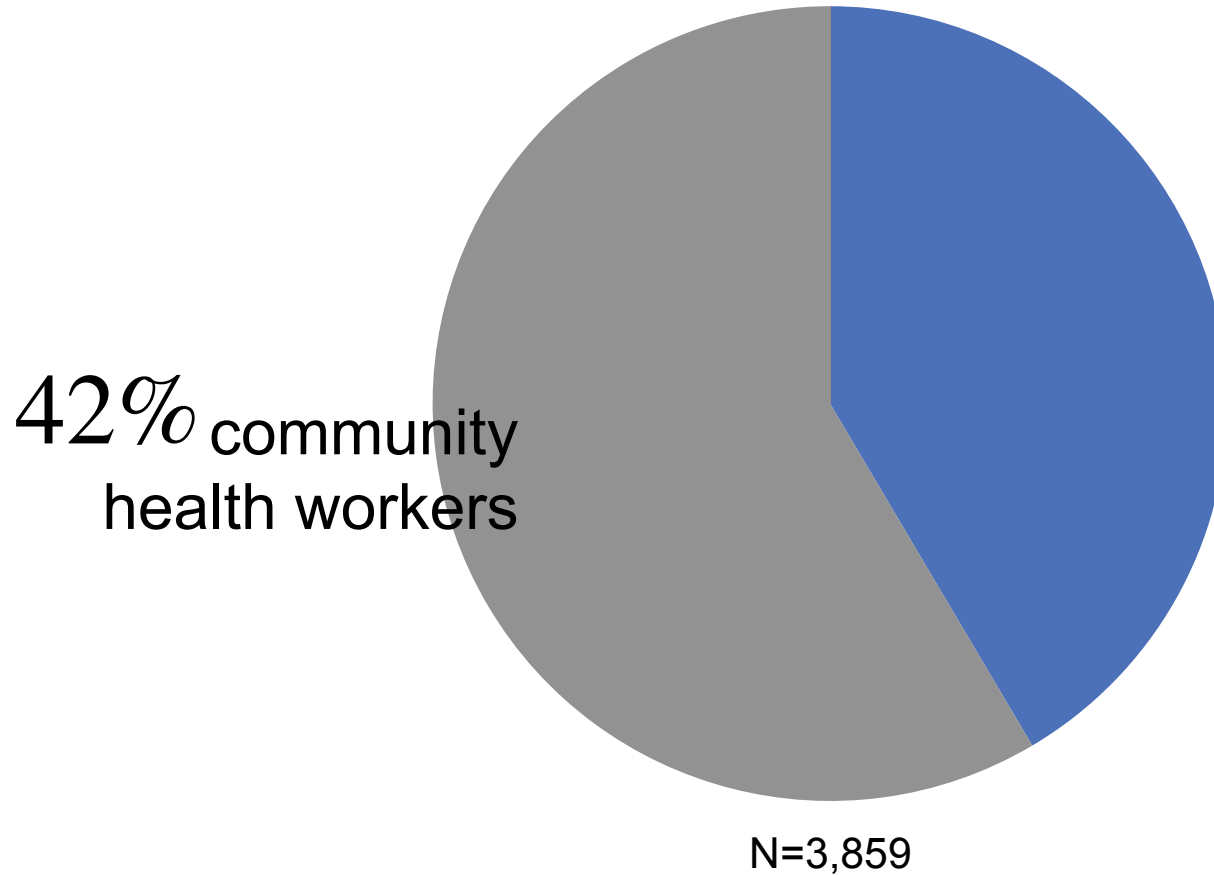






What is the outlet composition among antimalarial-stocking outlets?

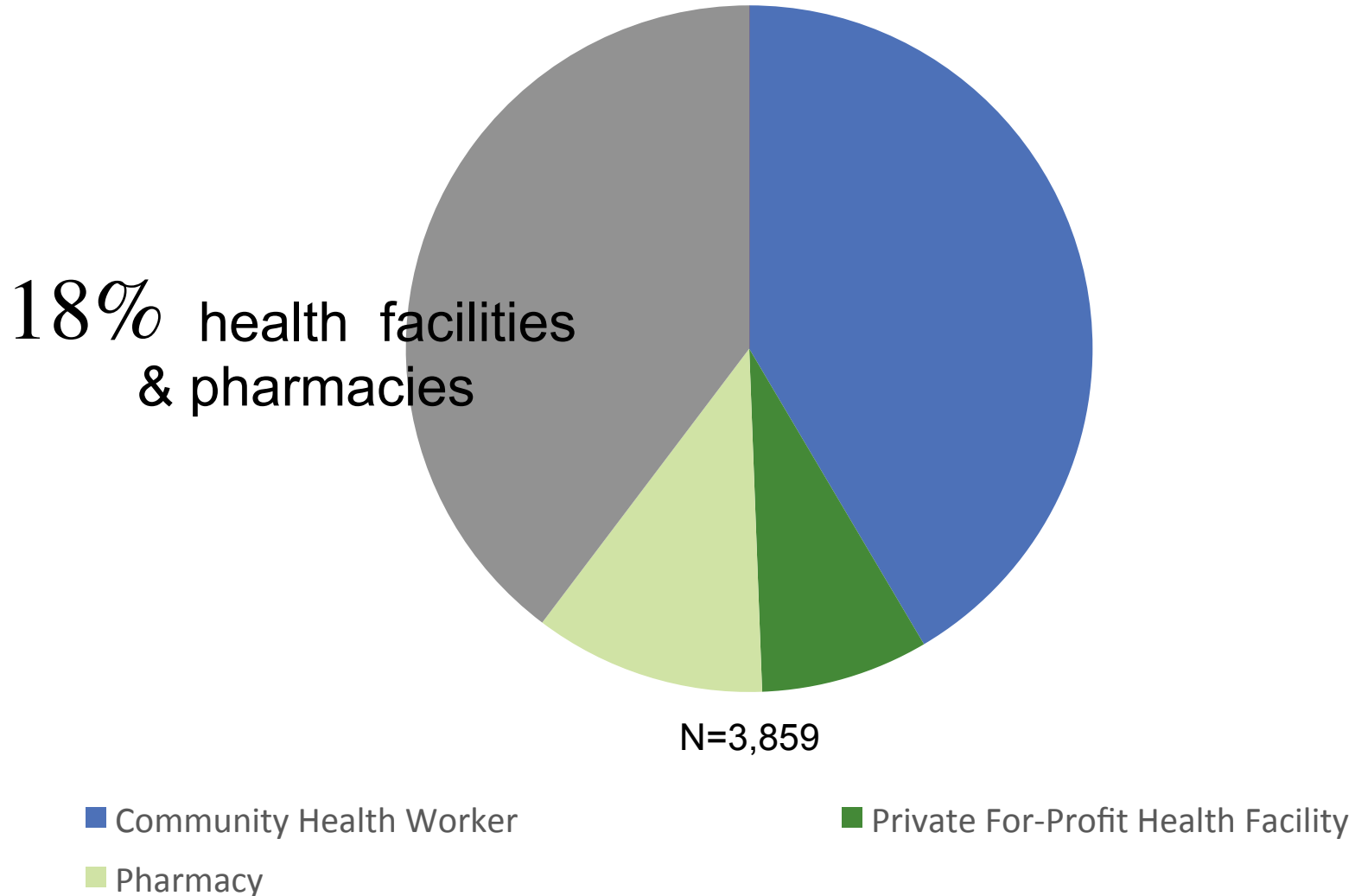
# Antimalarial Market Composition



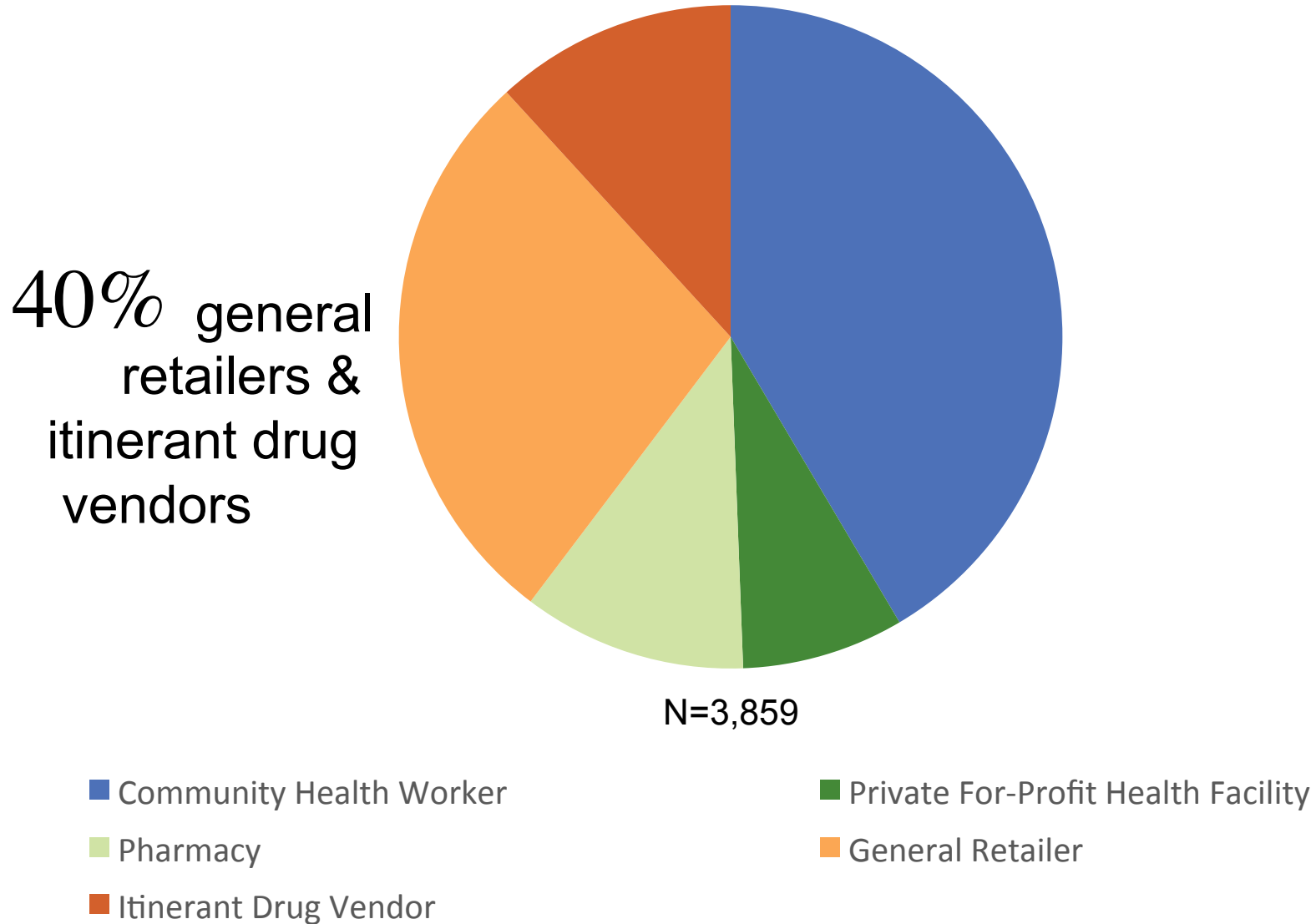
■ Community Health Worker



# Antimalarial Market Composition

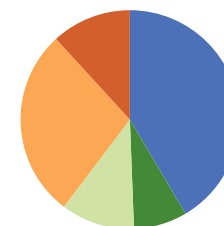


# Antimalarial Market Composition





# Antimalarial Market Composition



N=3,859



Eastern/AMTR  
Intervention  
N=1,330



Central  
Myanmar  
N=594



Western/  
Indian Border  
N=1,065



Bangladesh Border/  
Rakhine  
N=870

Community Health Worker  
Pharmacy  
Itinerant Drug Vendor

Private For-Profit Health Facility  
General Retailer

# 4 insights

antimalarial and diagnostic market availability and composition  
in Myanmar



**1**

**In 2015, 30-50% of screened outlets across outlet types stocked an antimalarial with the exception of general retailers where stocking was lower.**

**2**

**In 2015 more than half of the market composition of antimalarial stocking outlets was comprised of the private sector.**

**3**

**A large proportion of private sector market composition is composed of general retailers.**

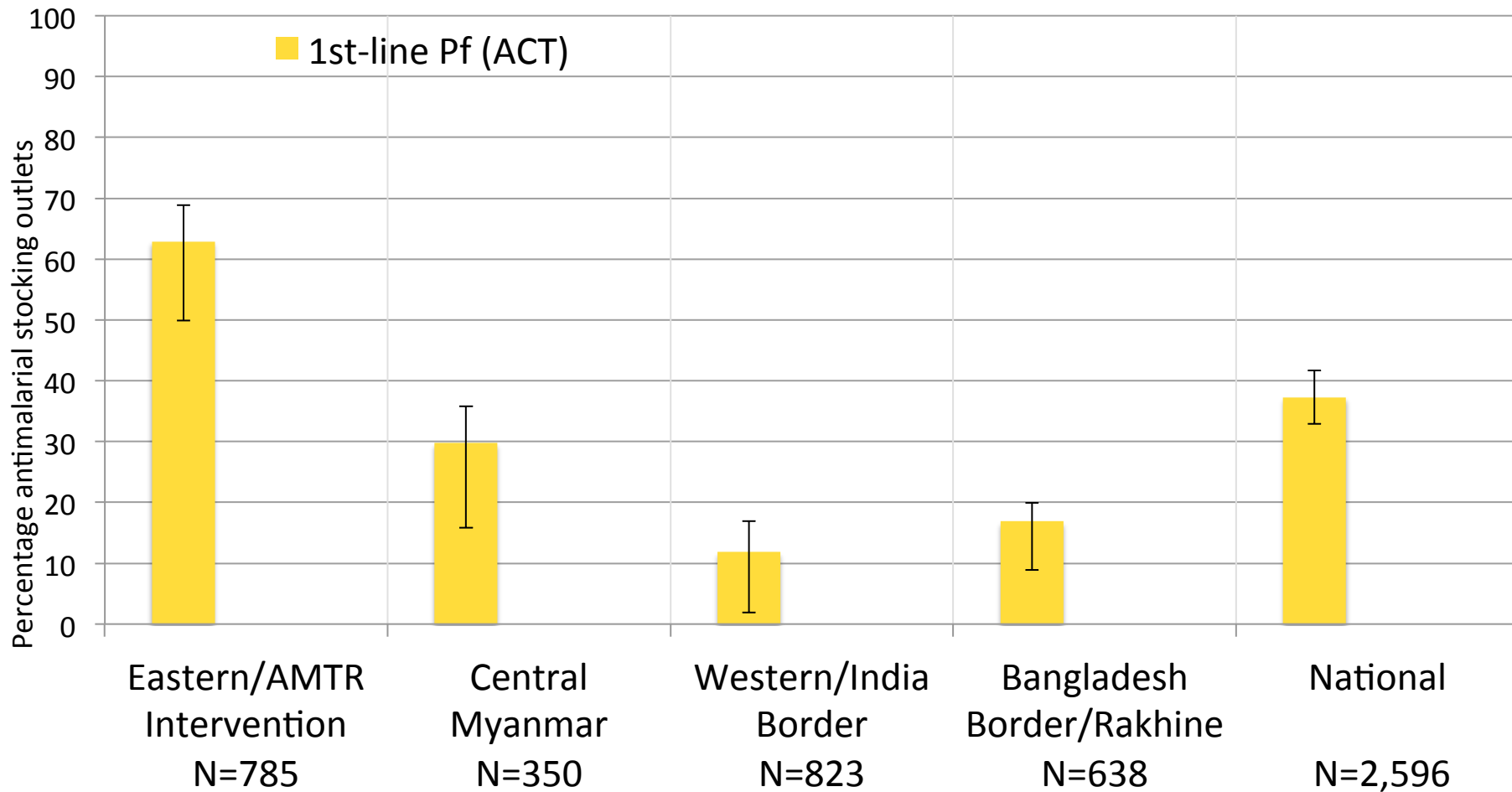
**4**

**The private sector contributes to a slightly larger proportion in the India and Bangladesh border domains.**



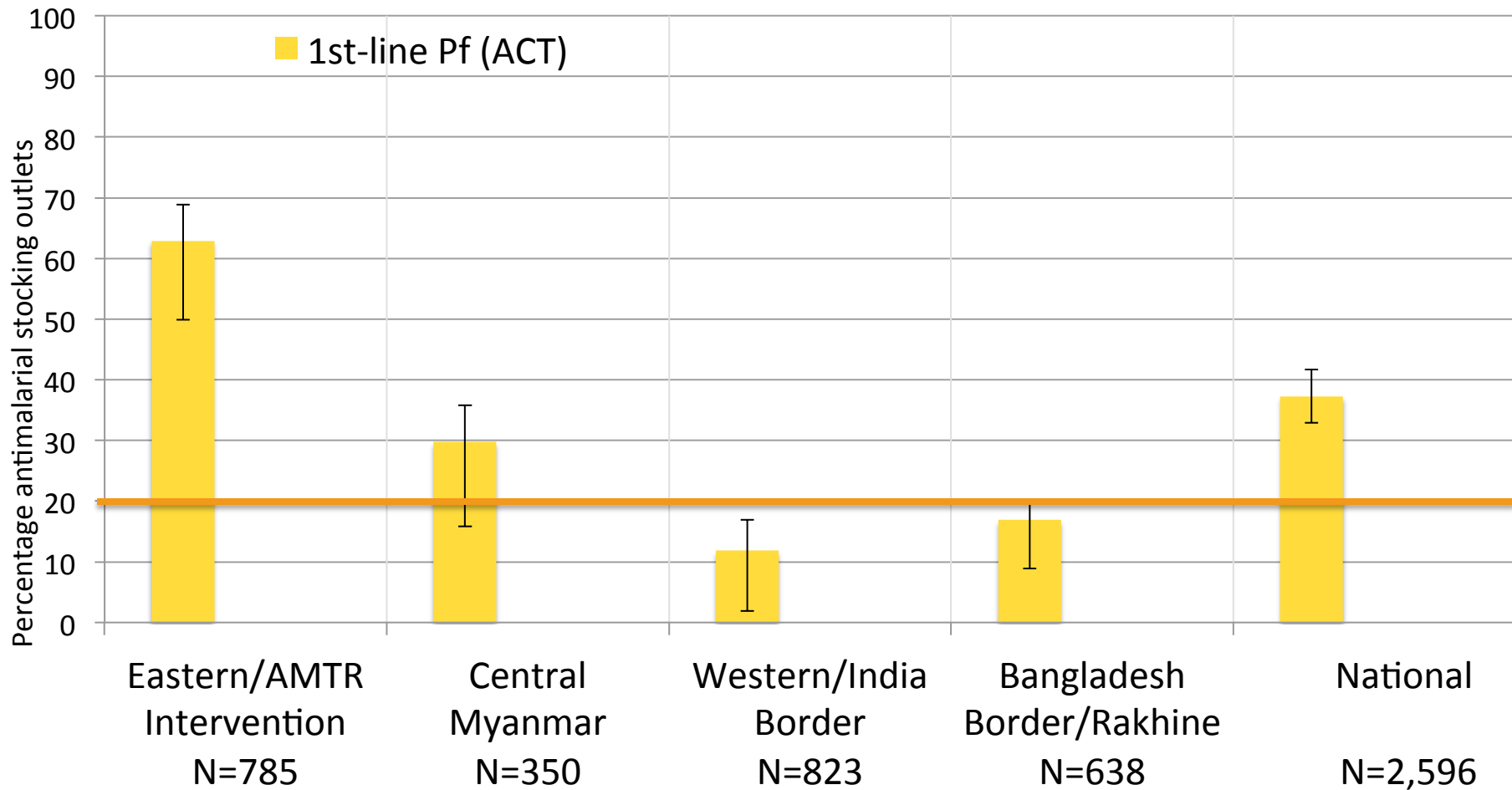
Among private sector outlets with an antimalarial, what types of antimalarials were found in 2015?

## Private Sector: Availability of 1<sup>st</sup> line treatment for *Pf* malaria (ACT), by domain

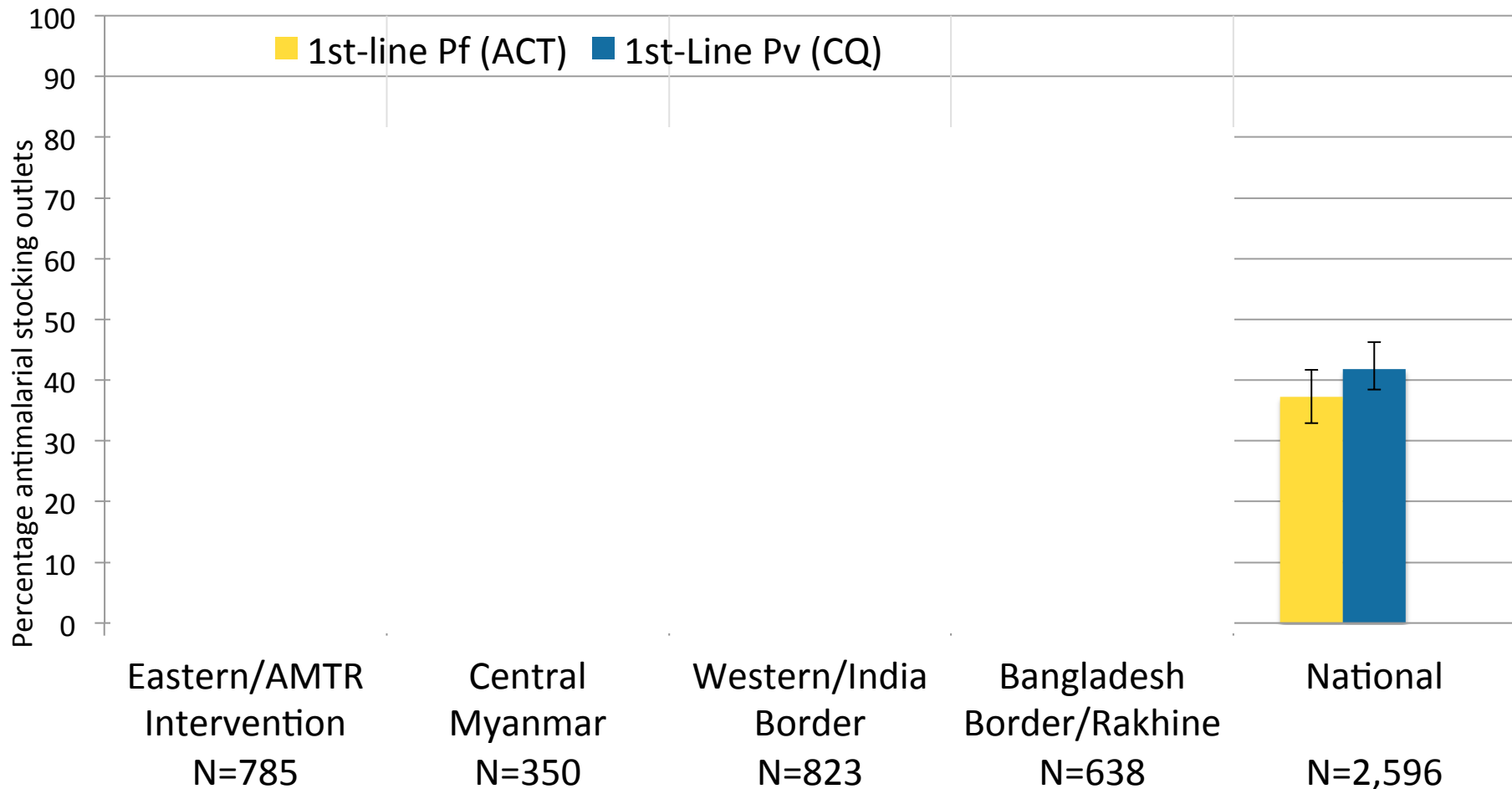




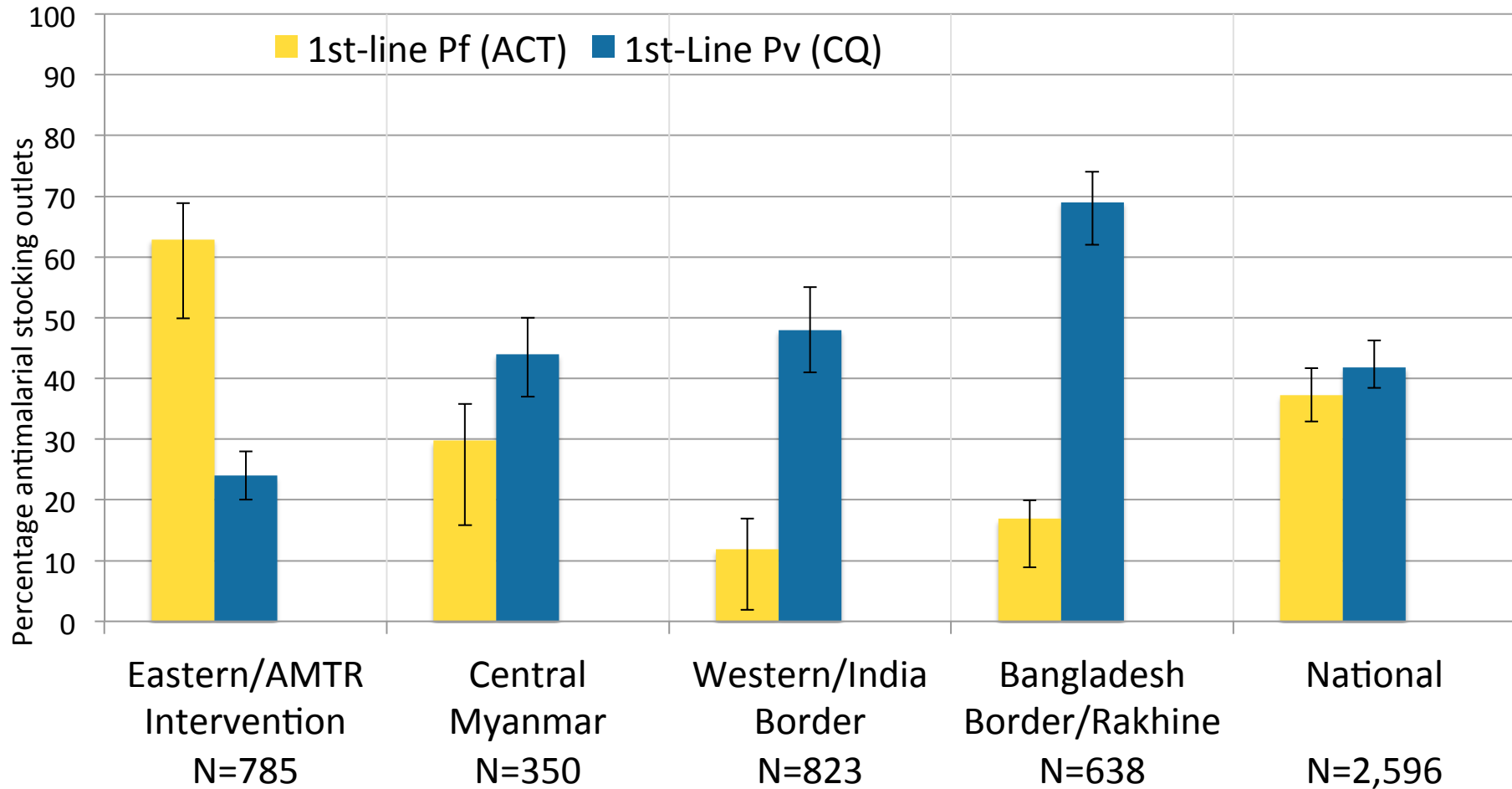
## Private Sector: Availability of 1<sup>st</sup> line treatment for *Pf* malaria (ACT), by domain



## Private Sector: Availability of 1<sup>st</sup> line treatment for *Pf* malaria (ACT), 1<sup>st</sup> line treatment for *Pv* malaria (CQ), by domain

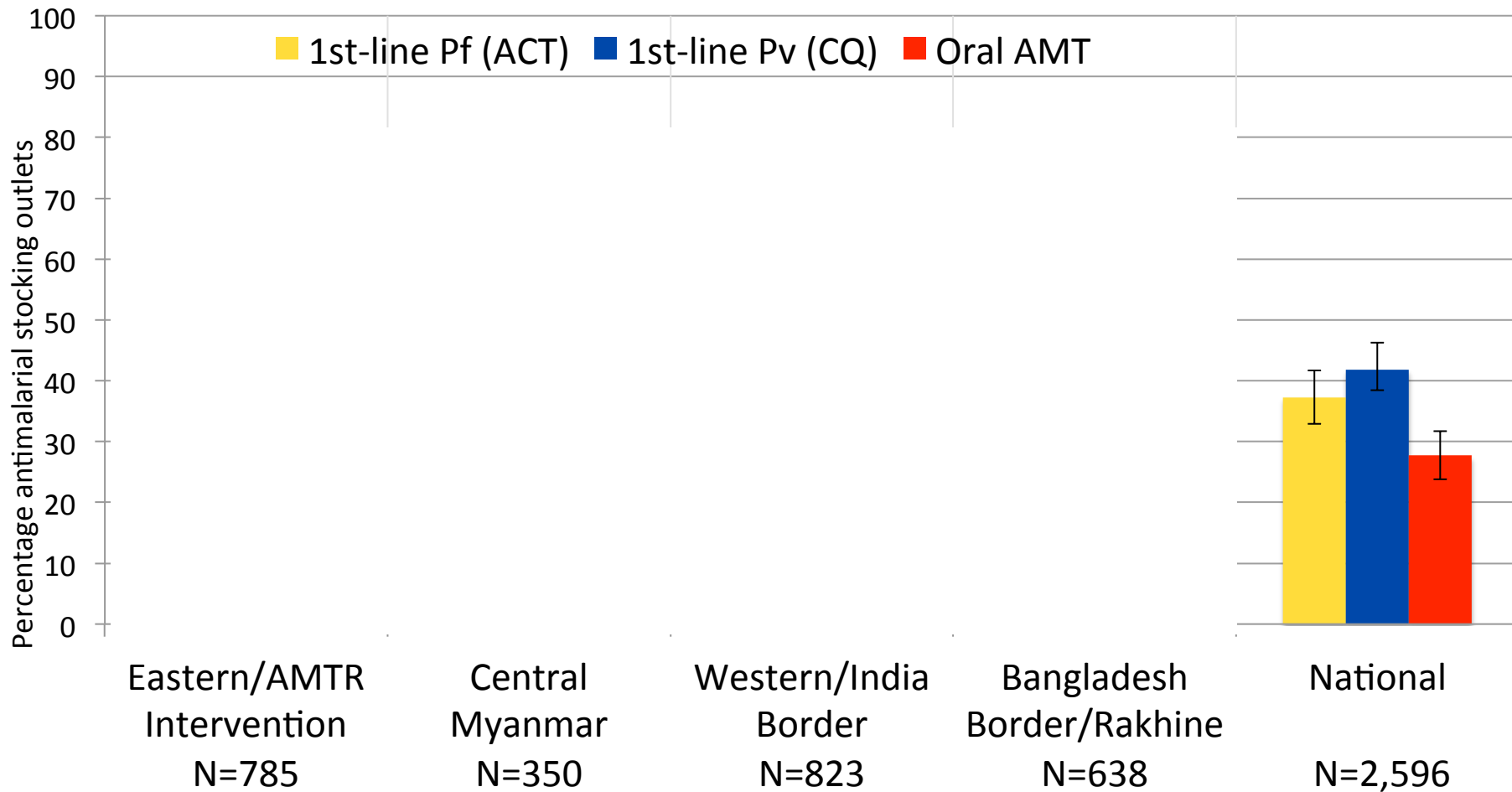


## Private Sector: Availability of 1<sup>st</sup> line treatment for *Pf* malaria (ACT), 1<sup>st</sup> line treatment for *Pv* malaria (CQ), by domain

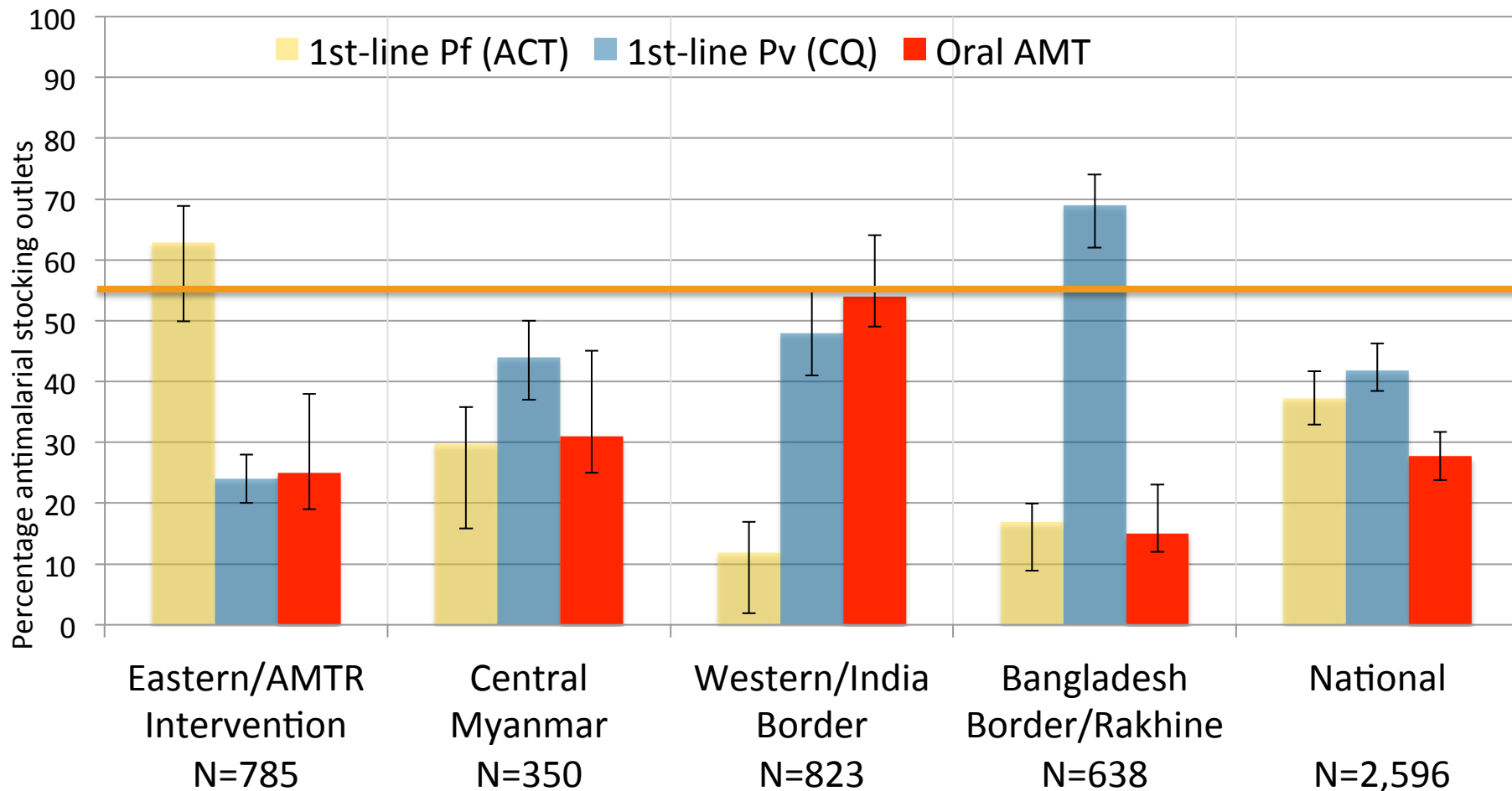


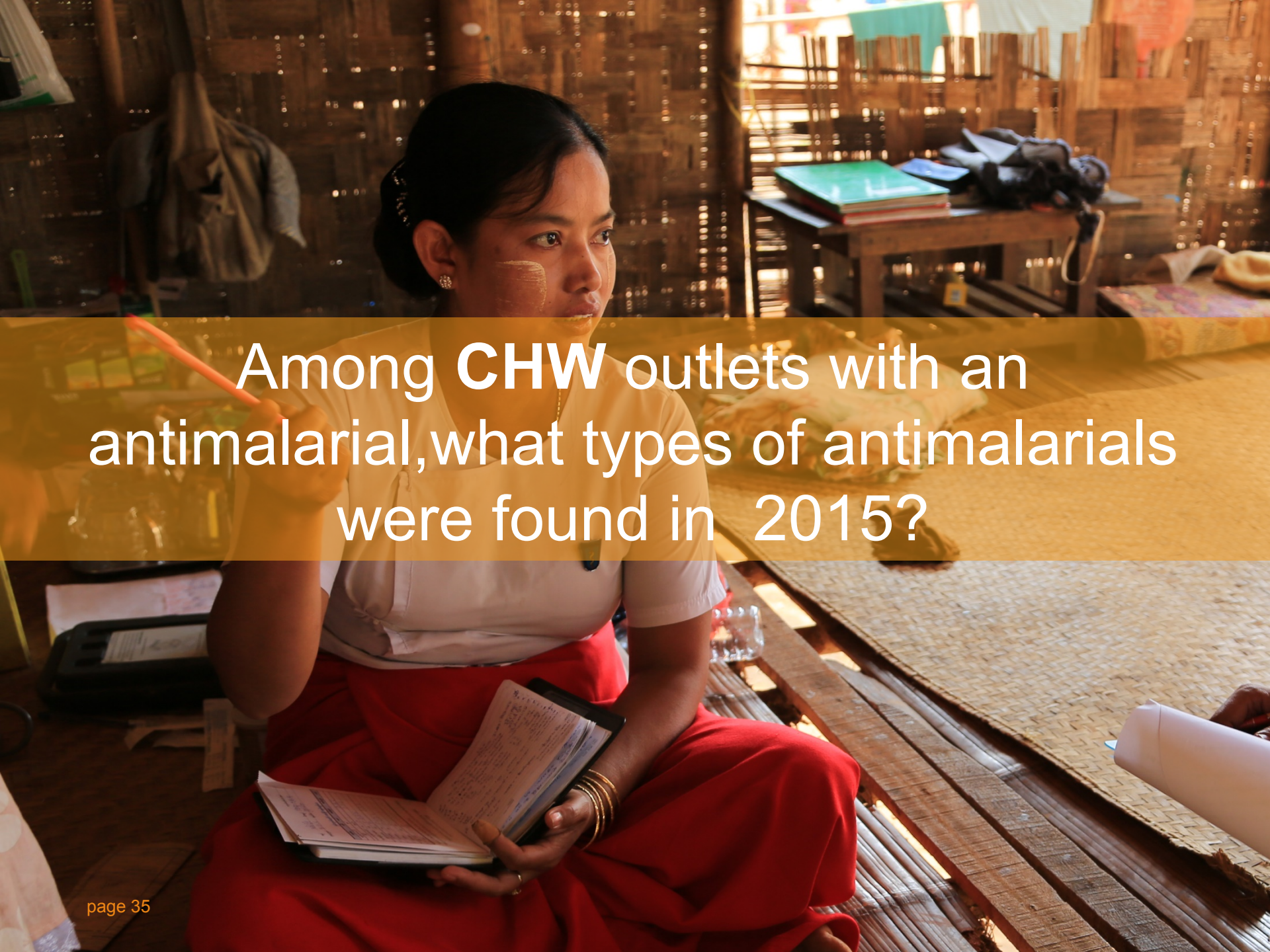


## Private Sector: Availability of 1<sup>st</sup> line treatment for *Pf* malaria (ACT), 1<sup>st</sup> line treatment for *Pv* malaria (CQ), and oral artemisinin monotherapy, by domain



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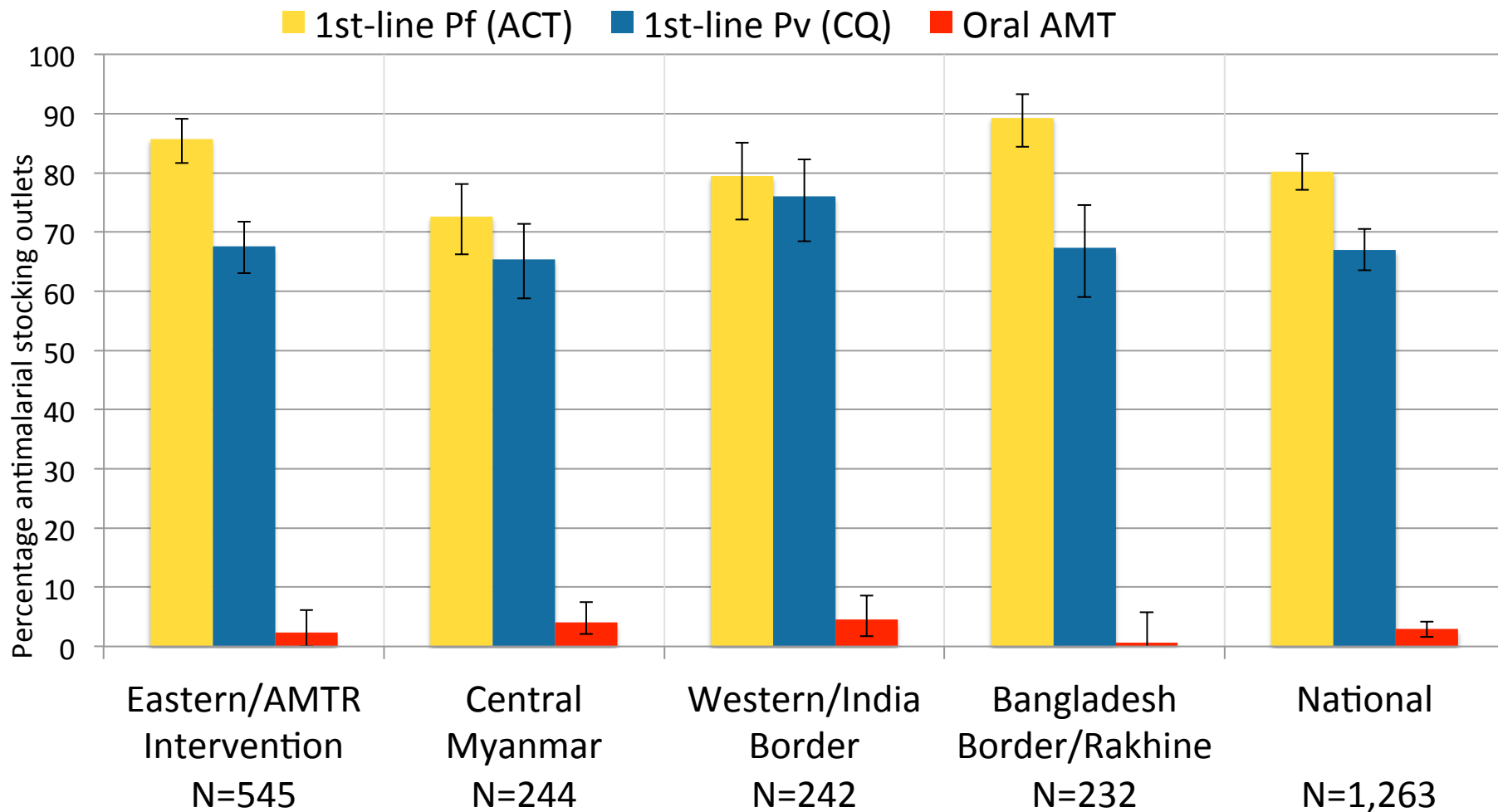


A woman with dark hair pulled back, wearing a white short-sleeved shirt and a red longyi, is sitting on a wooden bench. She is holding a notebook in her lap and a pen in her right hand, looking off to the side with a thoughtful expression. The background shows a rustic interior with wooden walls and a table with books and other items.

Among **CHW** outlets with an antimalarial, what types of antimalarials were found in 2015?



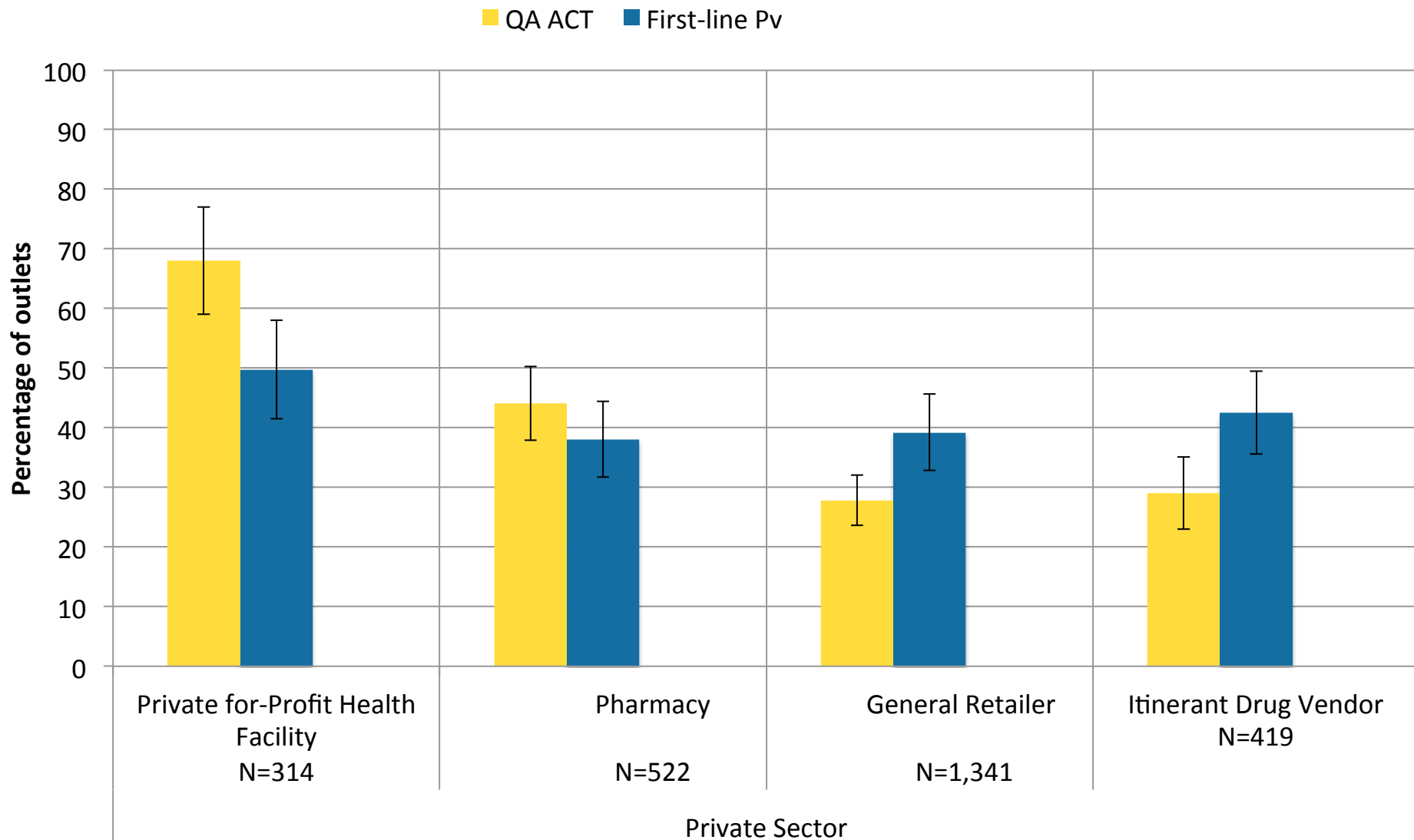
## **CHW:** Availability of 1<sup>st</sup> line treatment for *Pf* malaria (ACT), 1<sup>st</sup> line treatment for *Pv* malaria (CQ), and oral artemisinin monotherapy, by domain





Does availability differ by outlet type  
in the private sector?

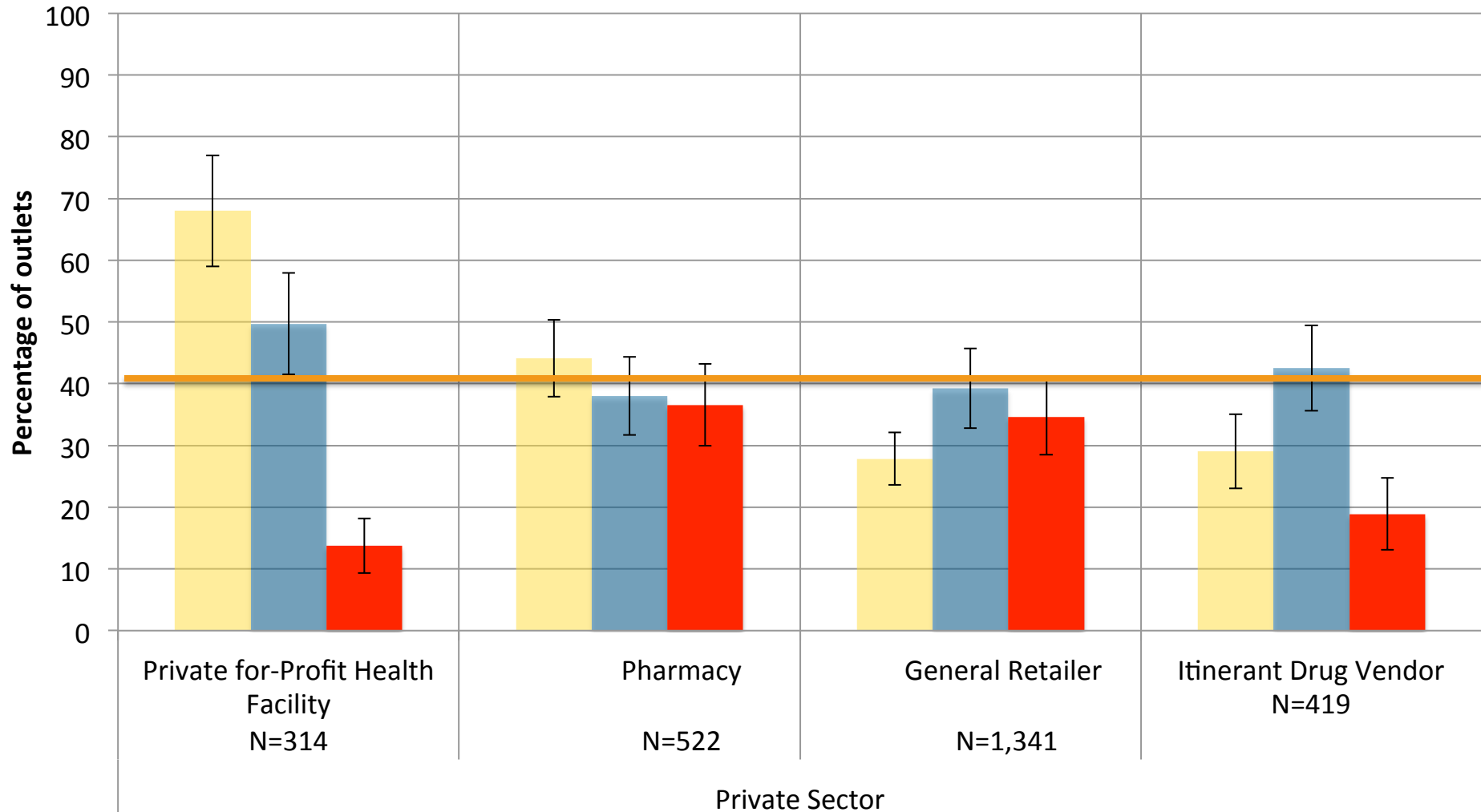
# Availability of 1<sup>st</sup> line treatment for *Pf* malaria (ACT), 1<sup>st</sup> line treatment for *Pv* malaria (CQ), by private sector, outlet type



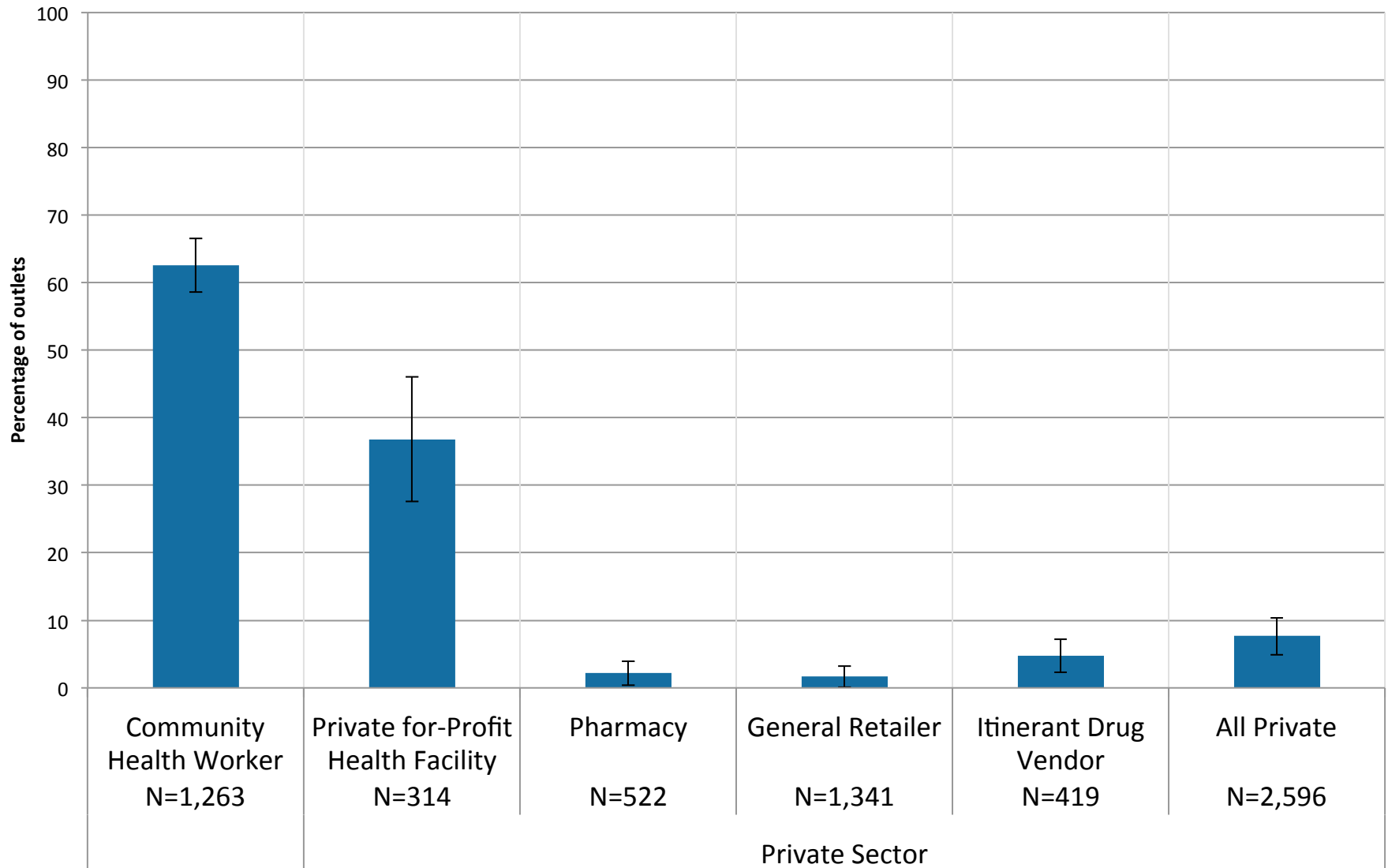


# Availability of 1<sup>st</sup> line treatment for *Pf* malaria (ACT), 1<sup>st</sup> line treatment for *Pv* malaria (CQ), and oral artemisinin monotherapy, by outlet type

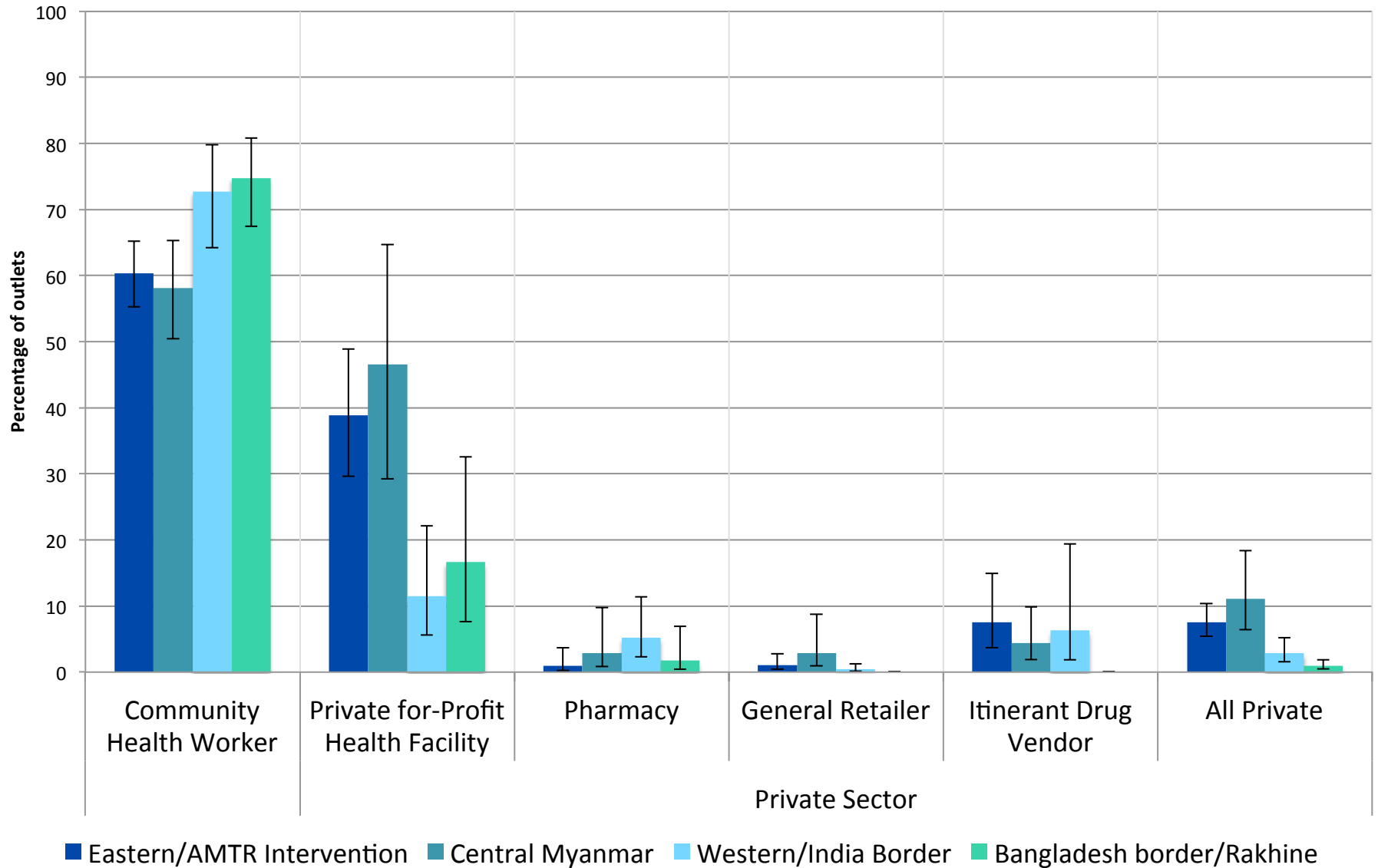
■ First-line Pv   ■ First-line Pv   ■ Oral AMT



# Availability of primaquine, by outlet type



# Availability of primaquine, by domain

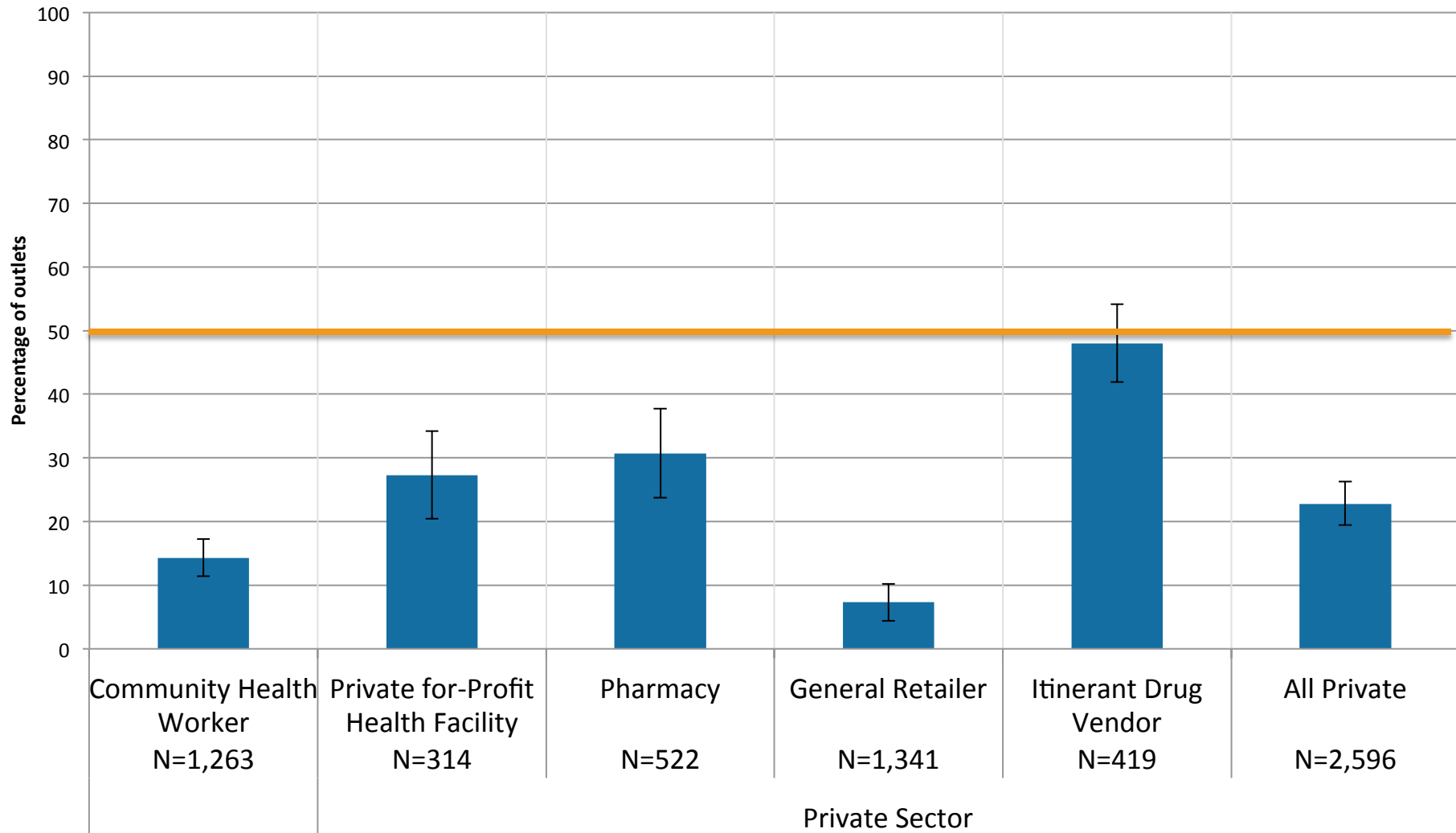




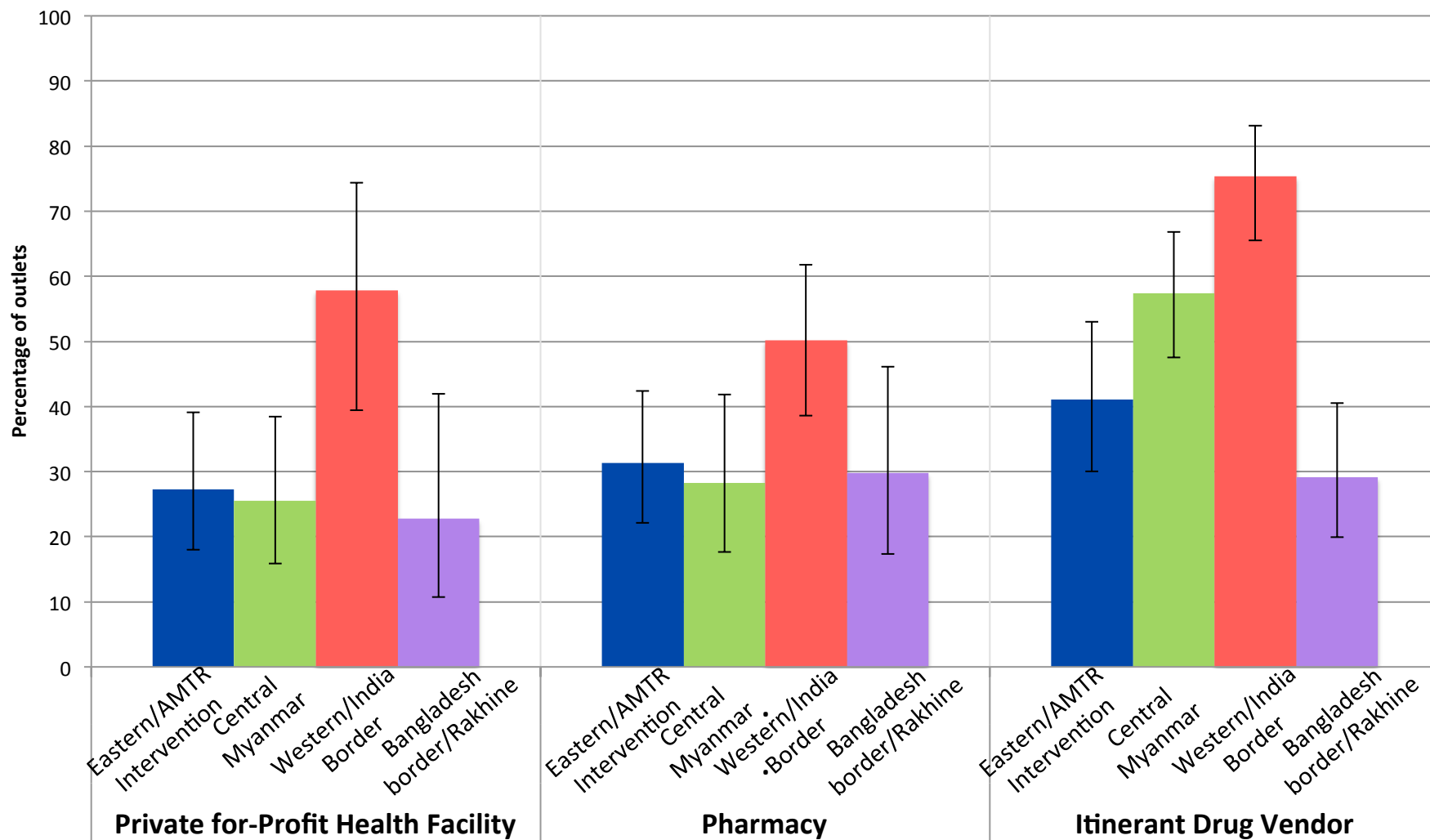
A young boy with dark hair and a small earring is holding a baby. The boy is wearing a striped shirt with the word 'HAPPY' visible. The baby is wearing a red shirt. The background is a blurred outdoor setting with green foliage. A semi-transparent blue banner is overlaid across the middle of the image, containing white text.

How available is treatment for  
severe malaria?

# Availability of treatment for severe malaria, by outlet type

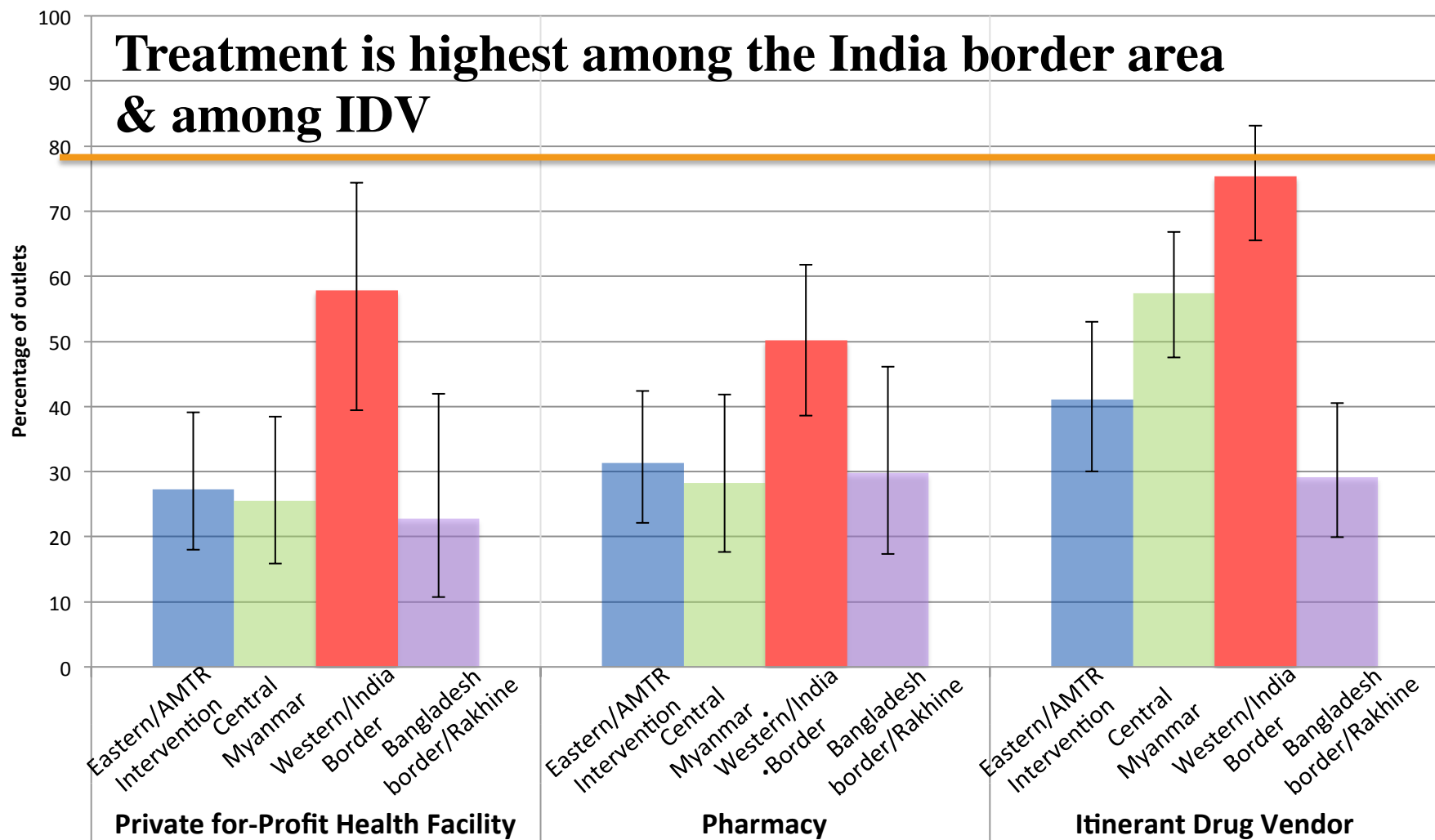


# Availability of treatment for severe malaria in the private sector, by domain





# Availability of treatment for severe malaria in the private sector, by domain



# 4 insights

availability of different classes of antimalarials in Myanmar

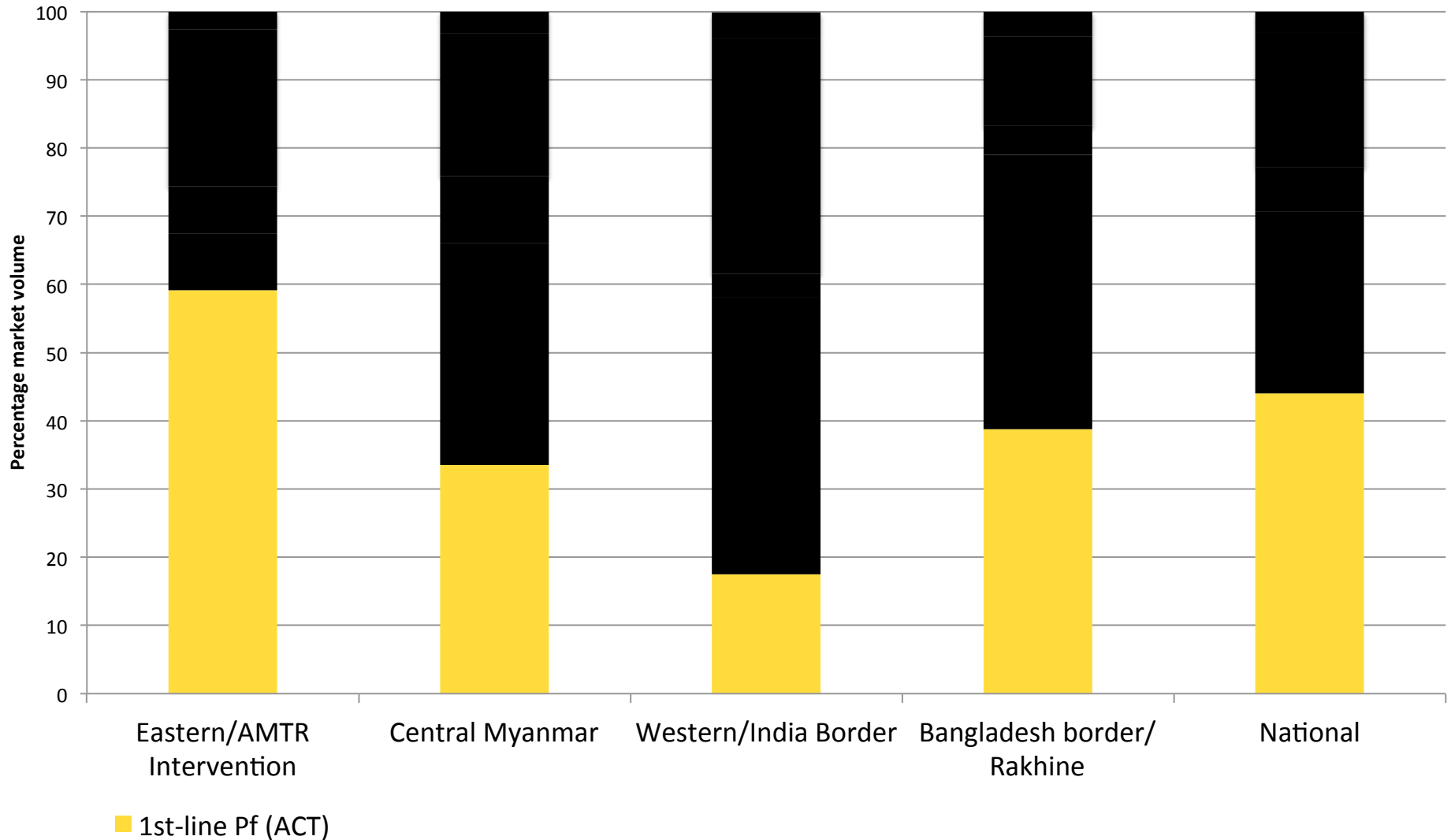
- 1** Nationally, private sector first line treatment of *Pf* and *Pv* was similar (~40%) – differences across domains.
- 2** CHWs had higher stocks of ACT, CQ and PQ, versus the private sector and had much lower oral AMT availability.
- 3** Treatment for severe malaria was high among IDV and in the Indian border areas (70%)
- 4** 1 in 5 private sector outlets had oral artemisinin monotherapy available. And over 50% of private outlets in the Western/India border domain.



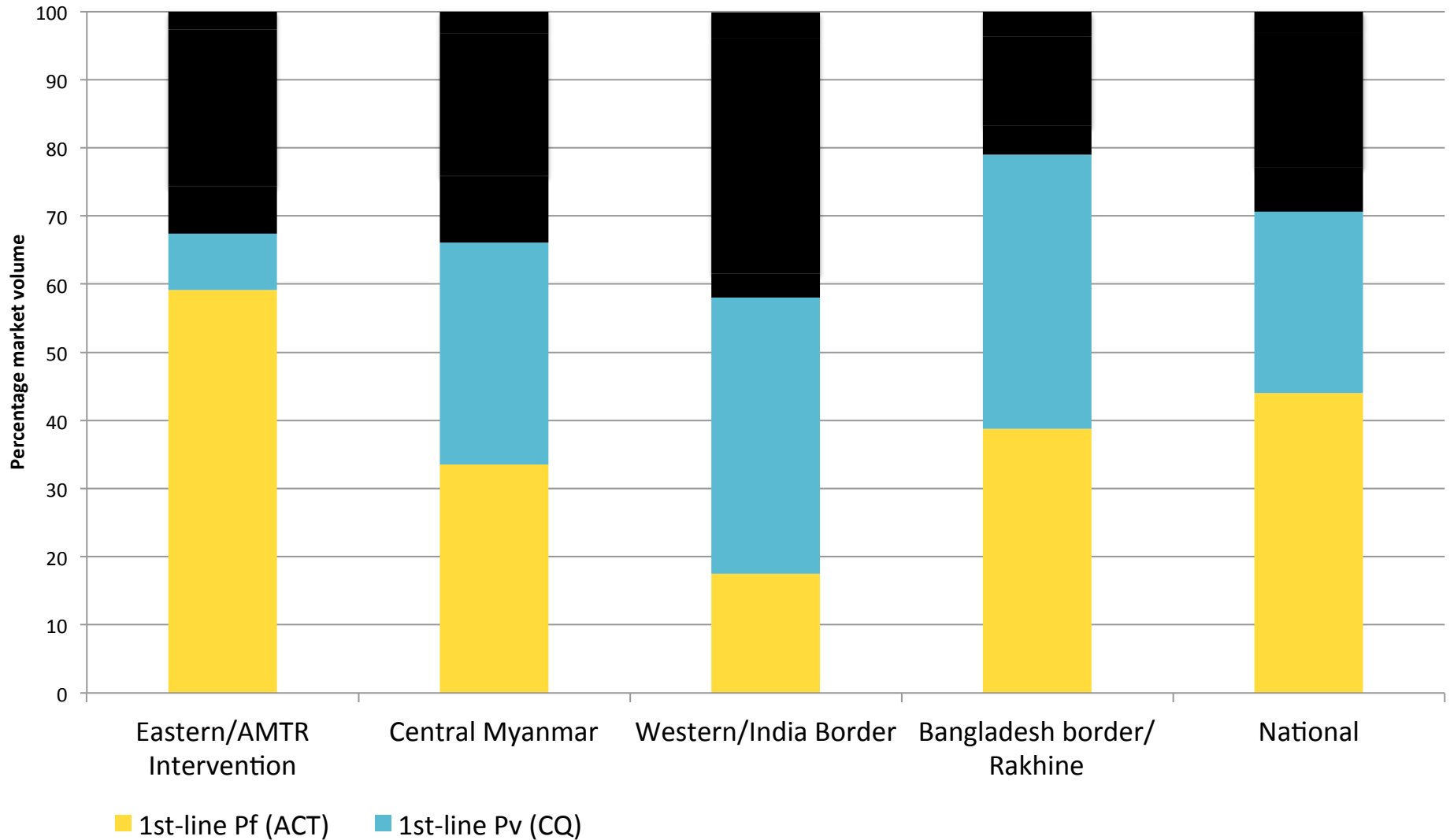


What is the antimalarial market share between the public and private sectors?

# Private sector market share by domain, 2015



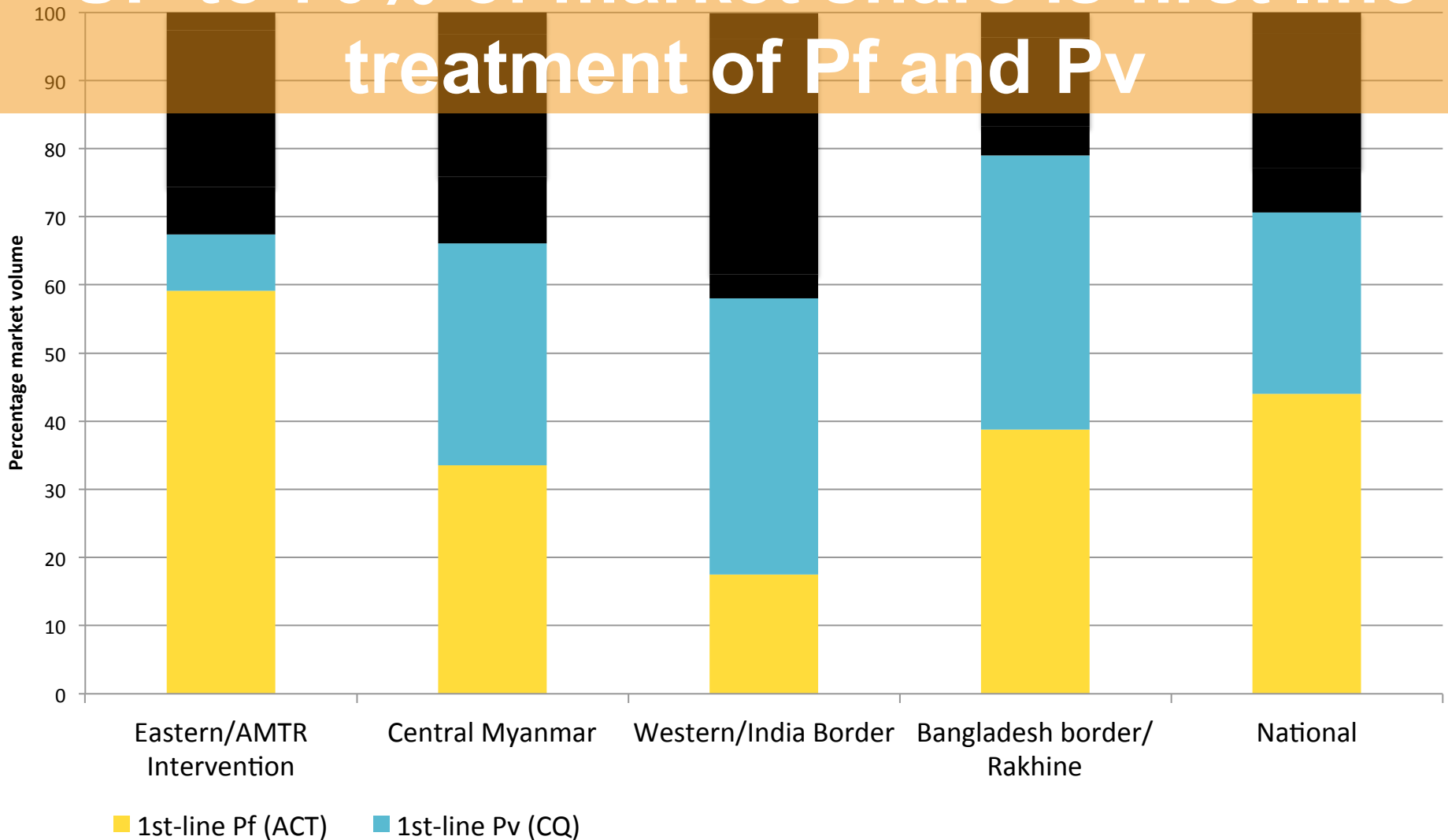
# Private sector market share by domain, 2015



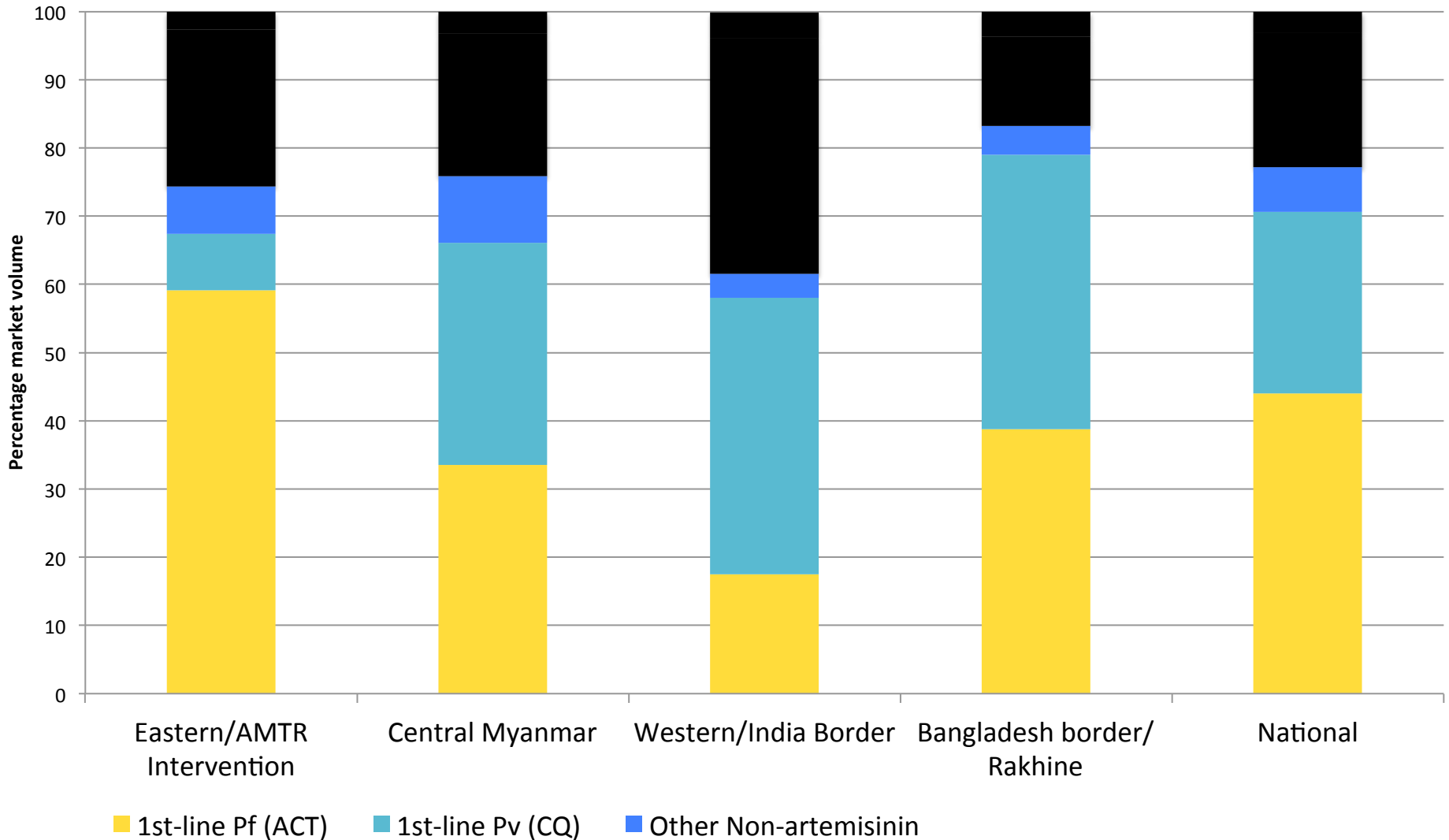


# Private sector market share by domain, 2015

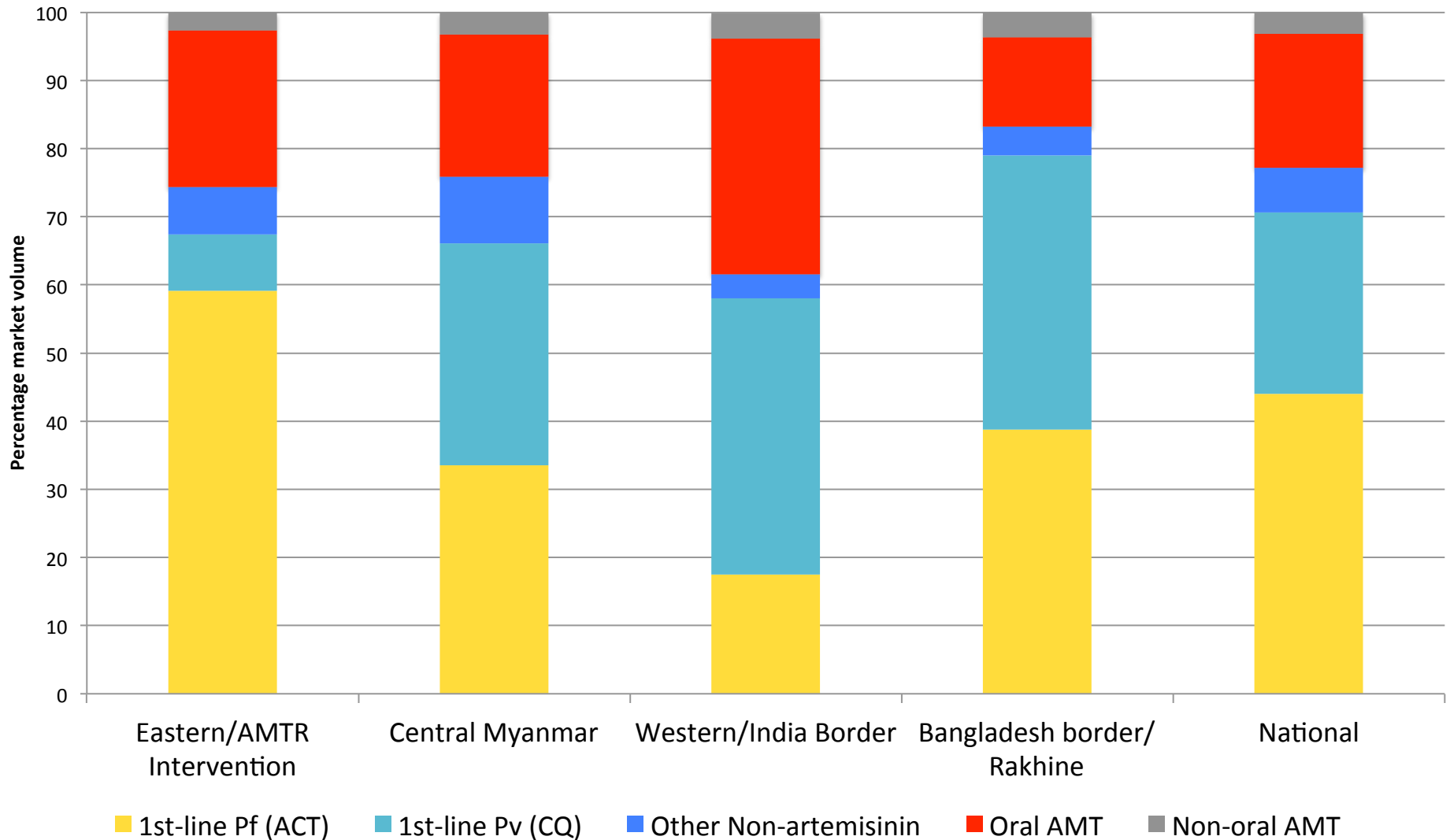
UP to 70% of market share is first line treatment of Pf and Pv



# Private sector market share by domain, 2015

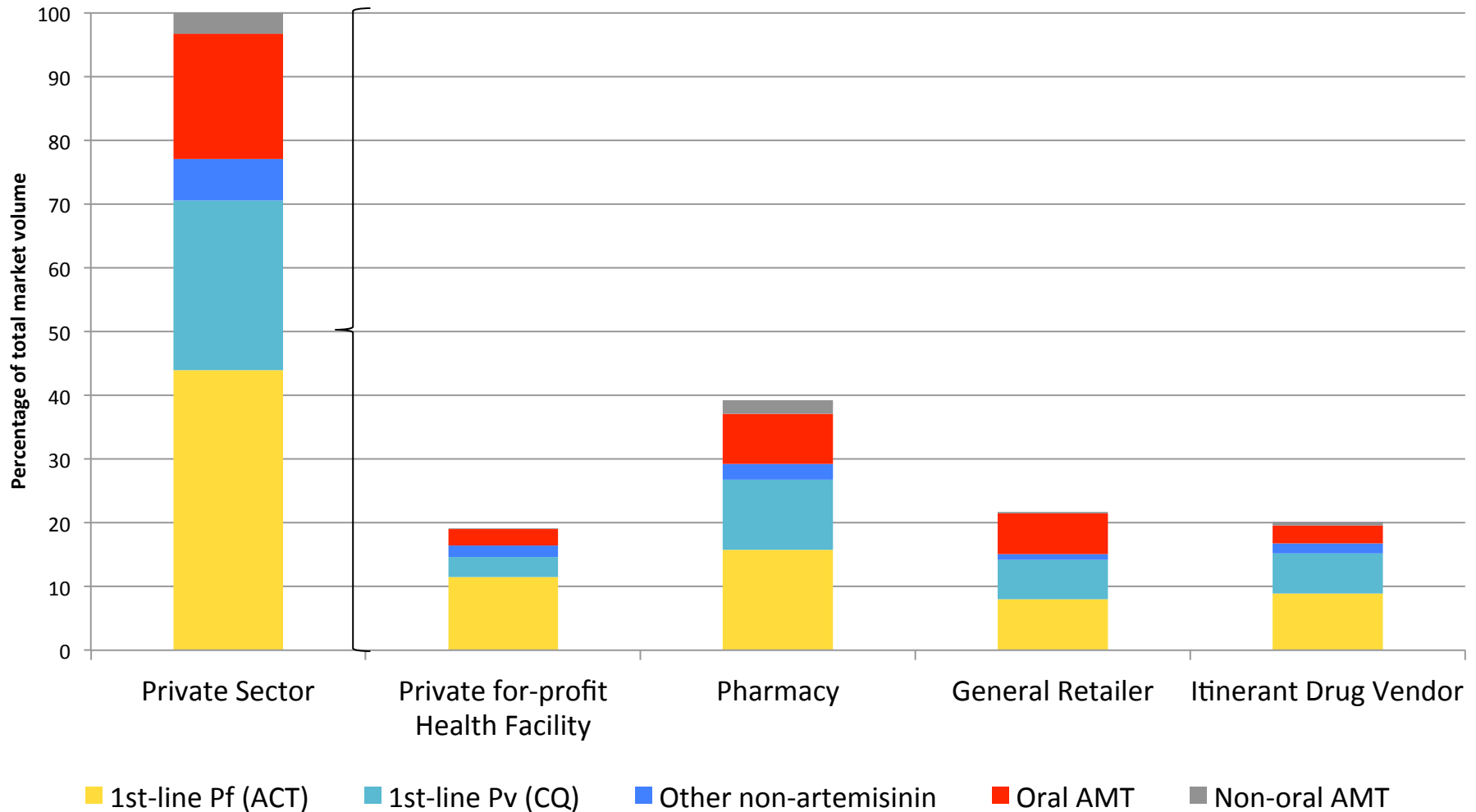


# Private sector market share by domain, 2015





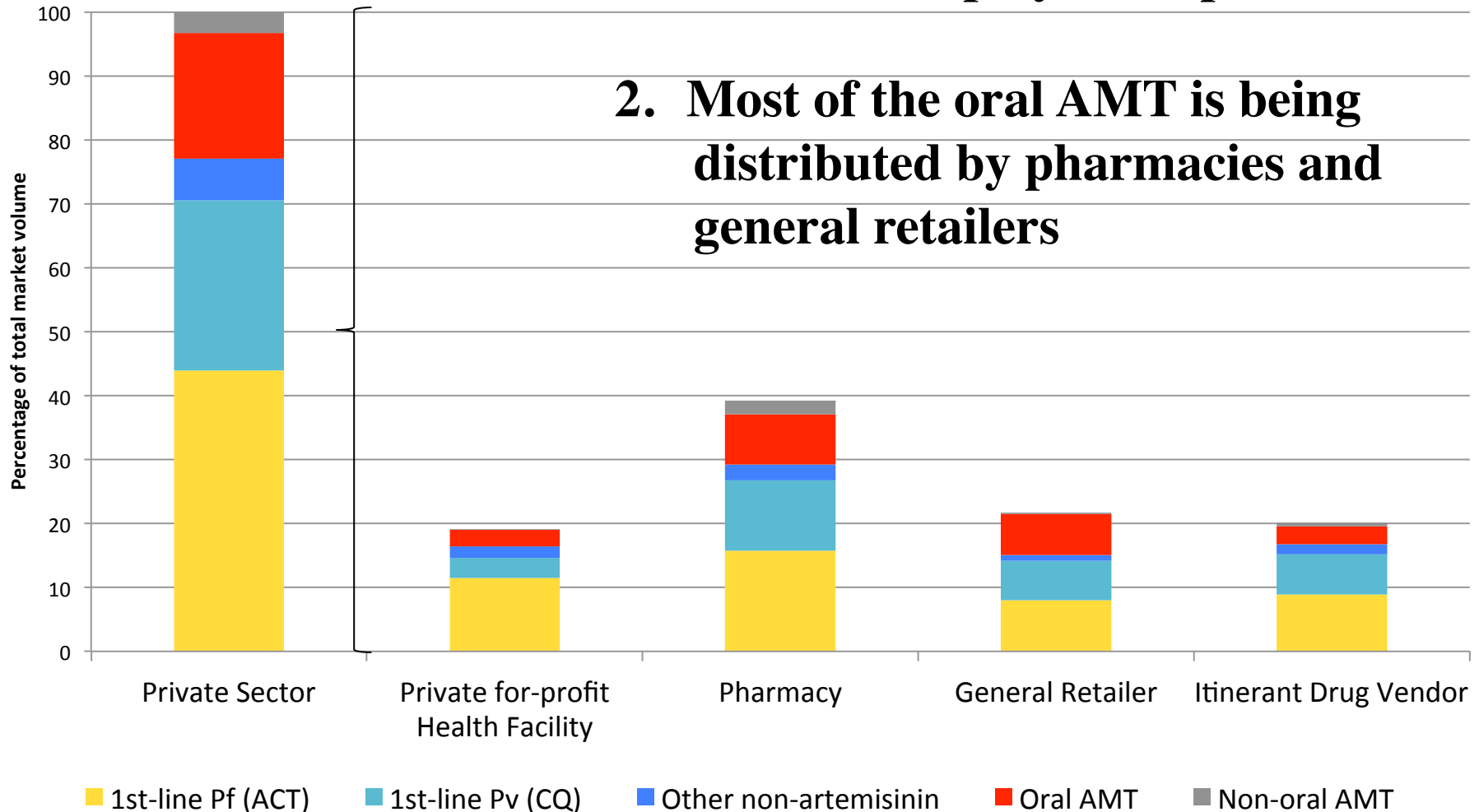
# Private sector market share across outlet type, 2015



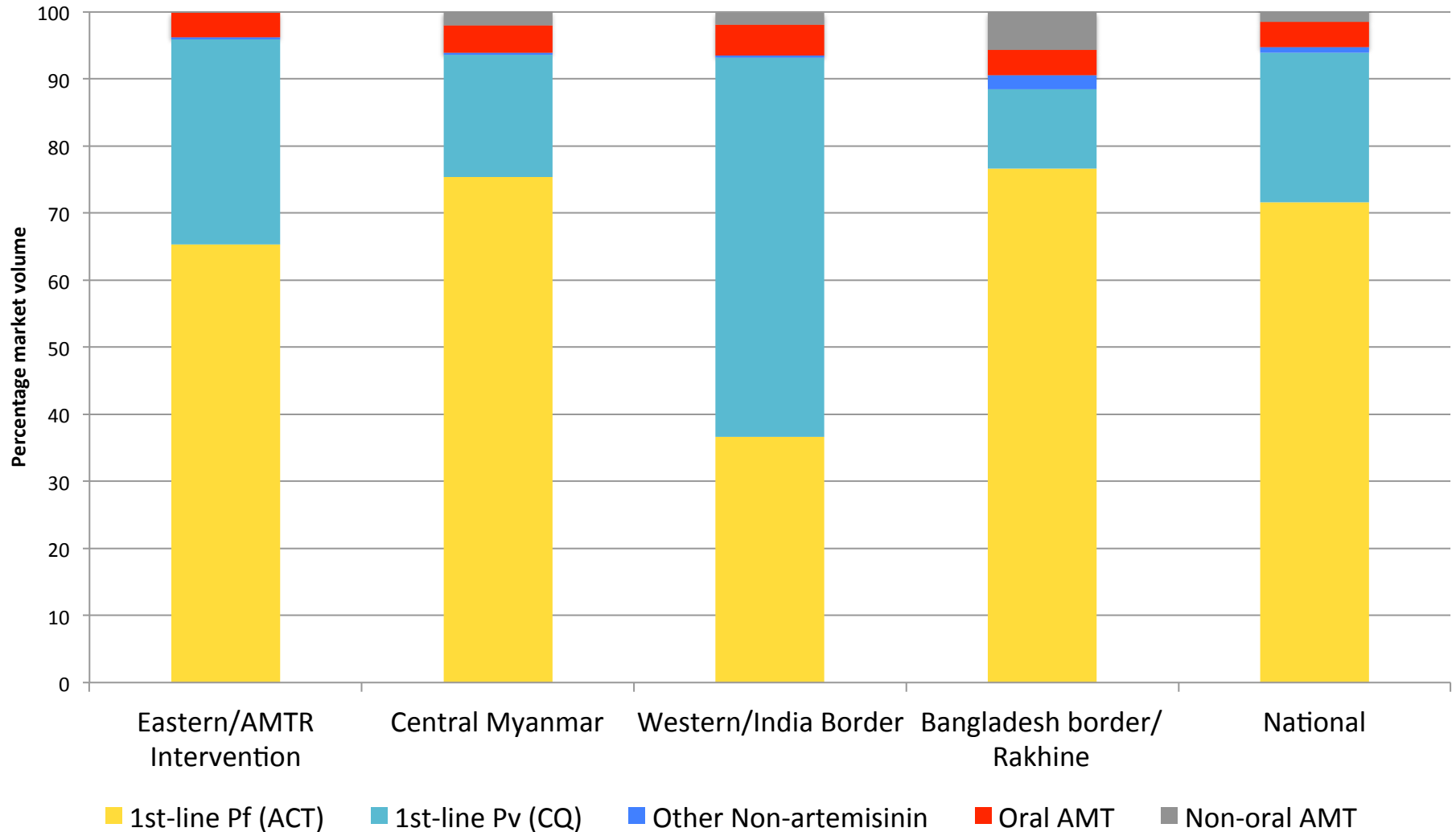
# Private sector market share across outlet type, 2015

**1. Pharmacies play an import role**

**2. Most of the oral AMT is being distributed by pharmacies and general retailers**



# Community health worker market share by domain, 2015



# 4 insights

antimalarial market share in Myanmar



**1**

**First-line treatments accounted for about 70% of private sector market share.**

**2**

**Among CHWs, first line treatments comprise over 90% of market share.**

**3**

**In the private sector, oral AMT accounts for 20% of national antimalarial market share and is particularly high in the Western/India border domain.**

**4**

**Oral AMT distribution is greatest among general retailers and pharmacies.**



Is malaria blood testing available among  
antimalarial stocking outlets?

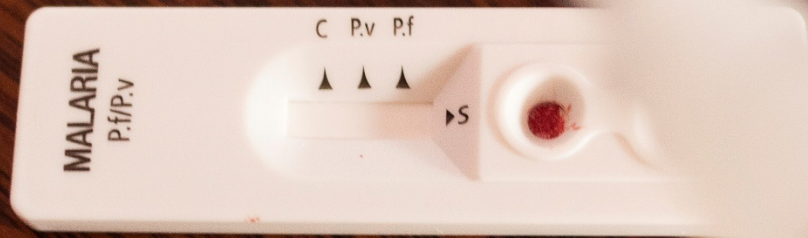


# Malaria microscopy availability in 2015

0.4%

Percent of private for profit facilities with microscopy available

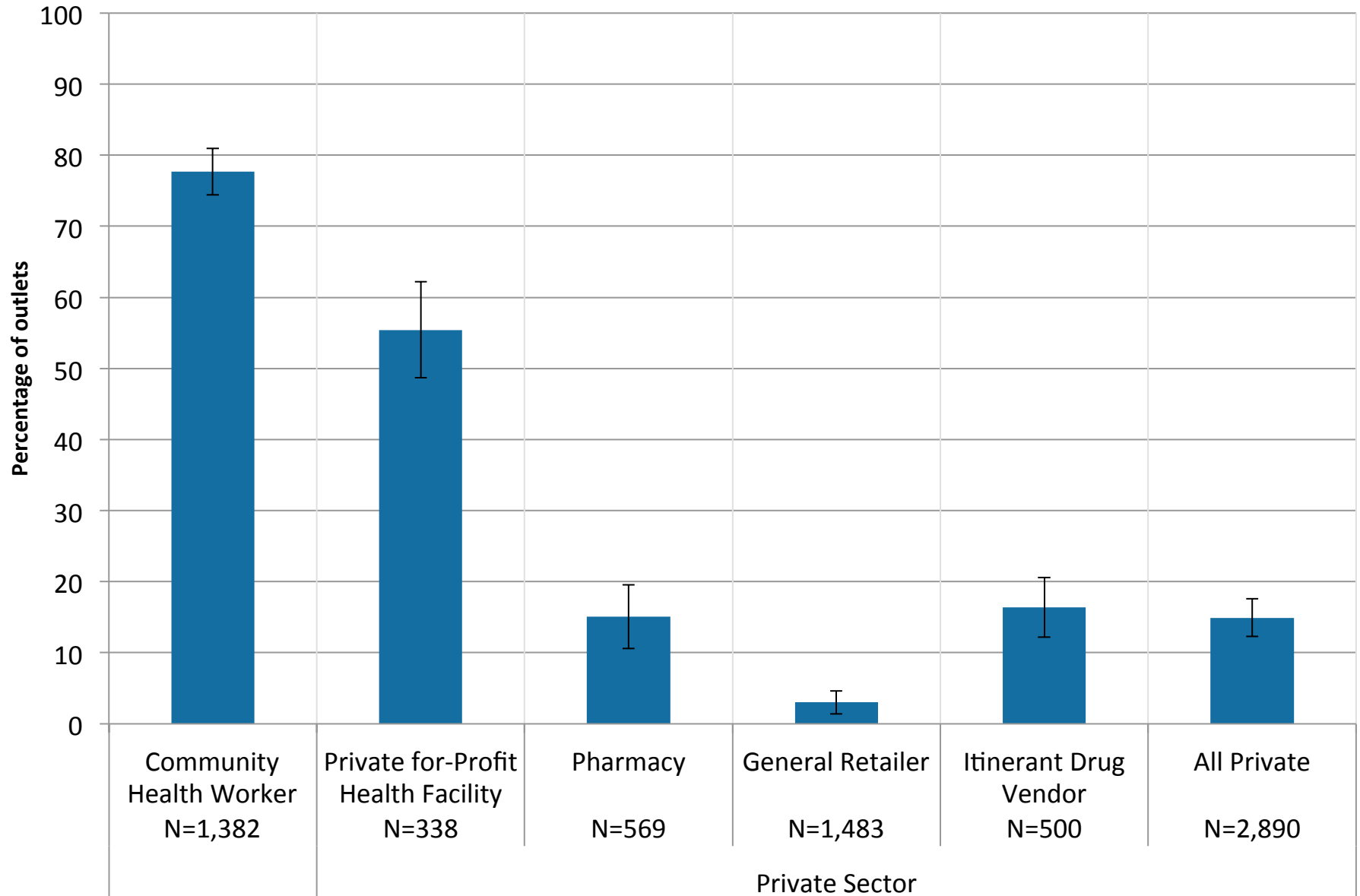




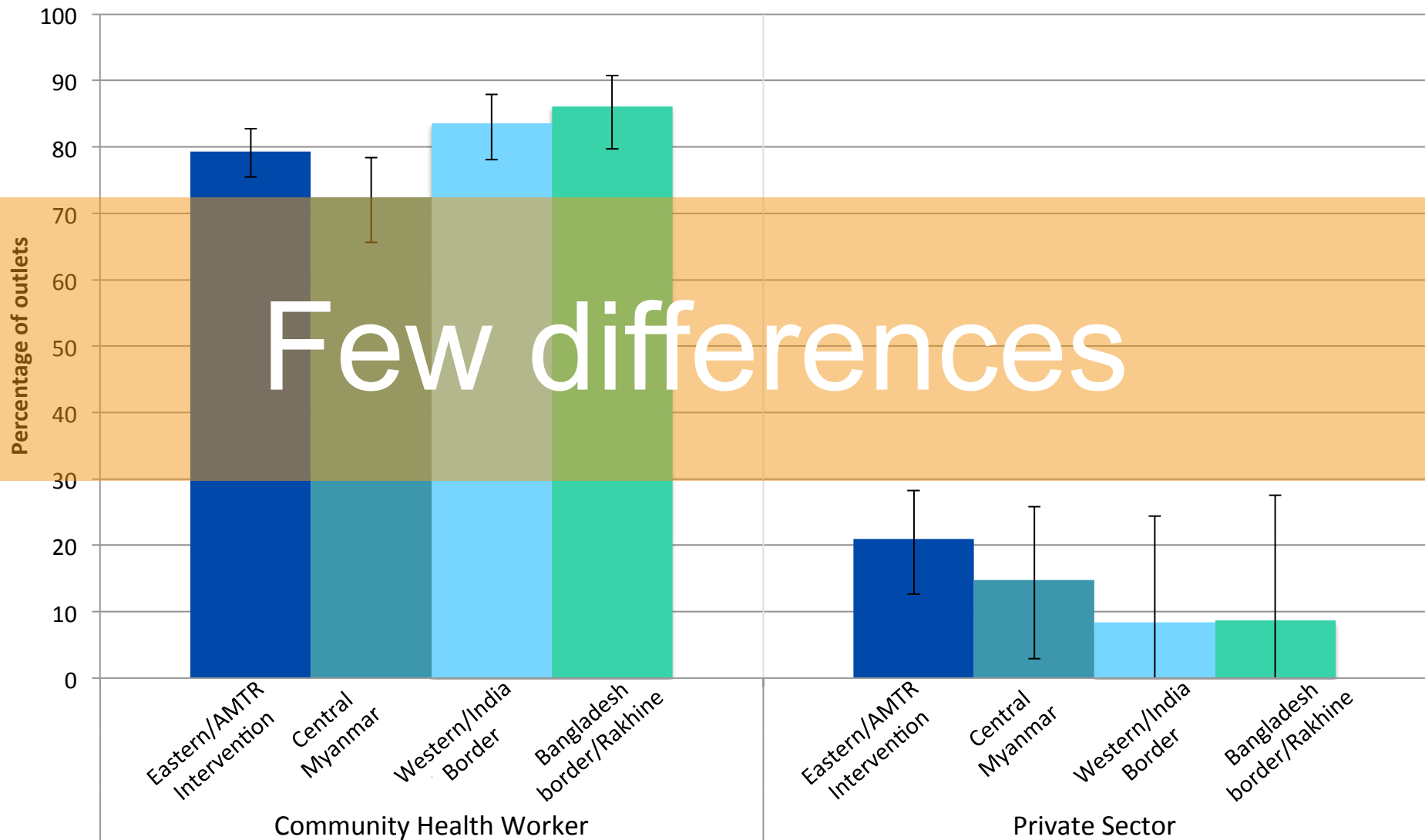
How available are malaria RDTs?



# Availability of mRDTs by outlet type, 2015



# Availability of mRDTs by domain, 2015



# 4 insights

malaria diagnostics in Myanmar



**1** Availability of diagnostic tests among CHWs was quite high (greater than 70%) across all domains.

**2** Availability of RDTs in the private sector was extremely low across all outlet types except private for-profit facilities where it was around 55%.

**3** Availability of RDTs in the private sector was also extremely low in the private sector across all domains.

**4** Malaria RDTs account for greater than 99% of malaria testing across all outlet types and domains .



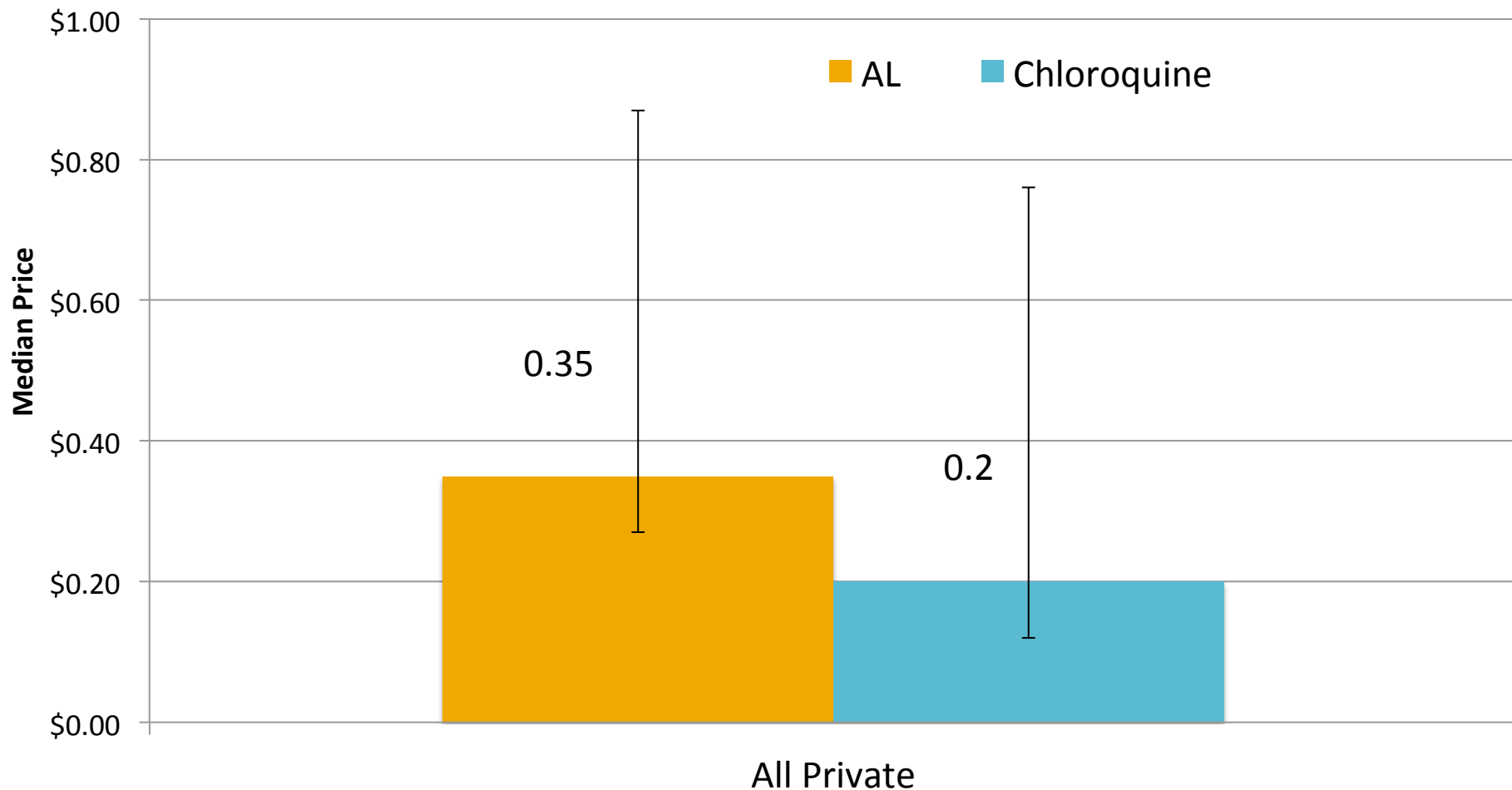


What is consumer price of AL, and CQ?

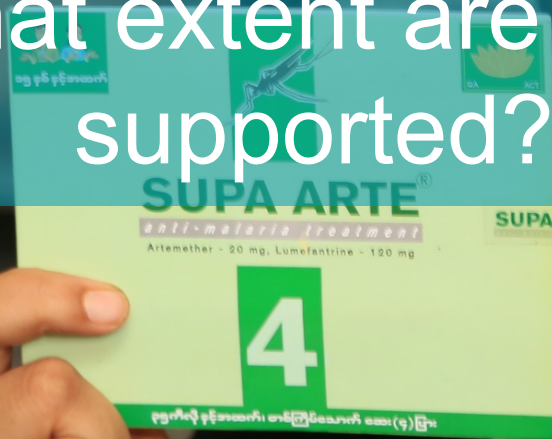




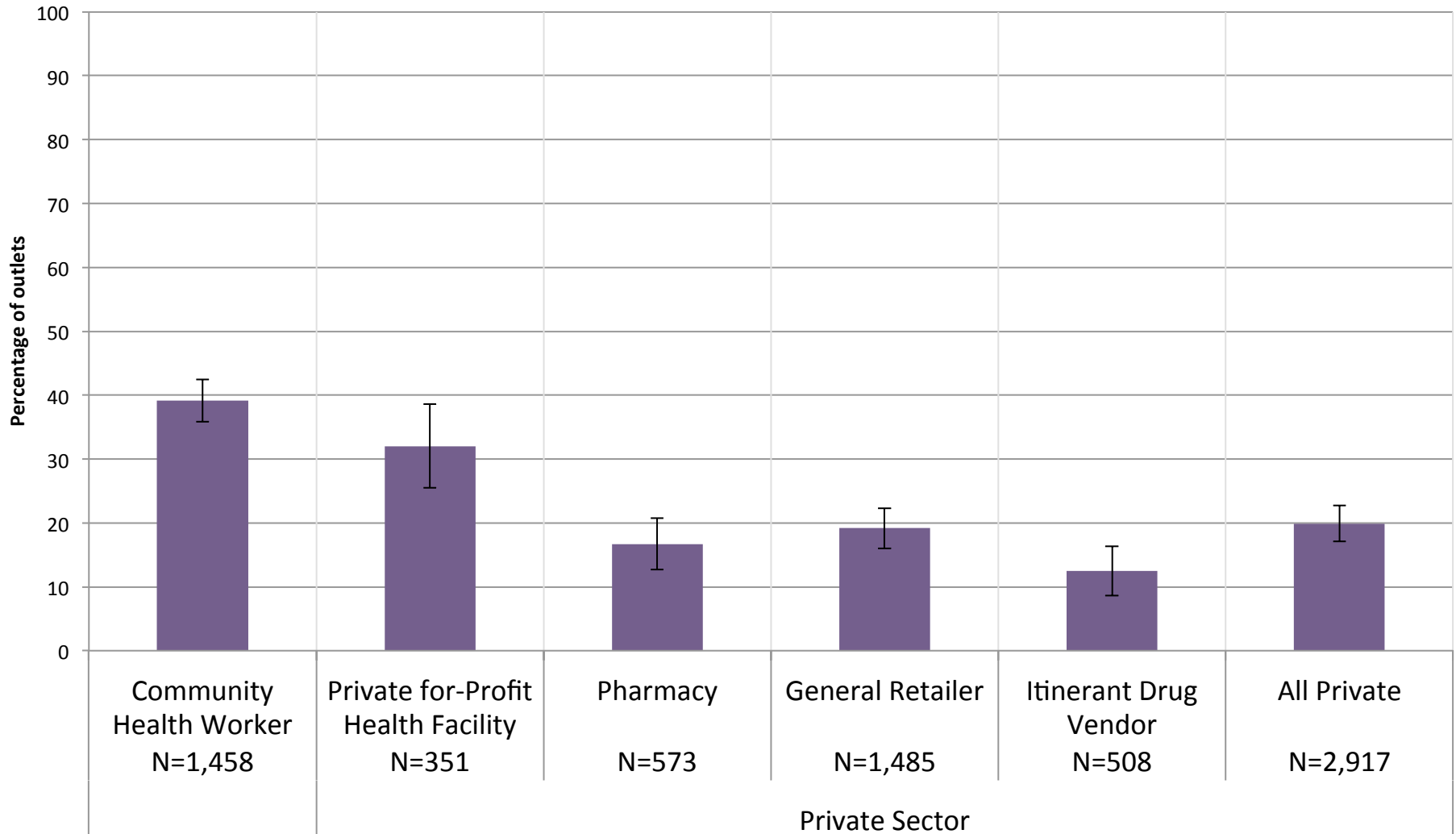
# Median private sector consumer prices (USD) for AL, CQ in 2015



To what extent are outlets supported?

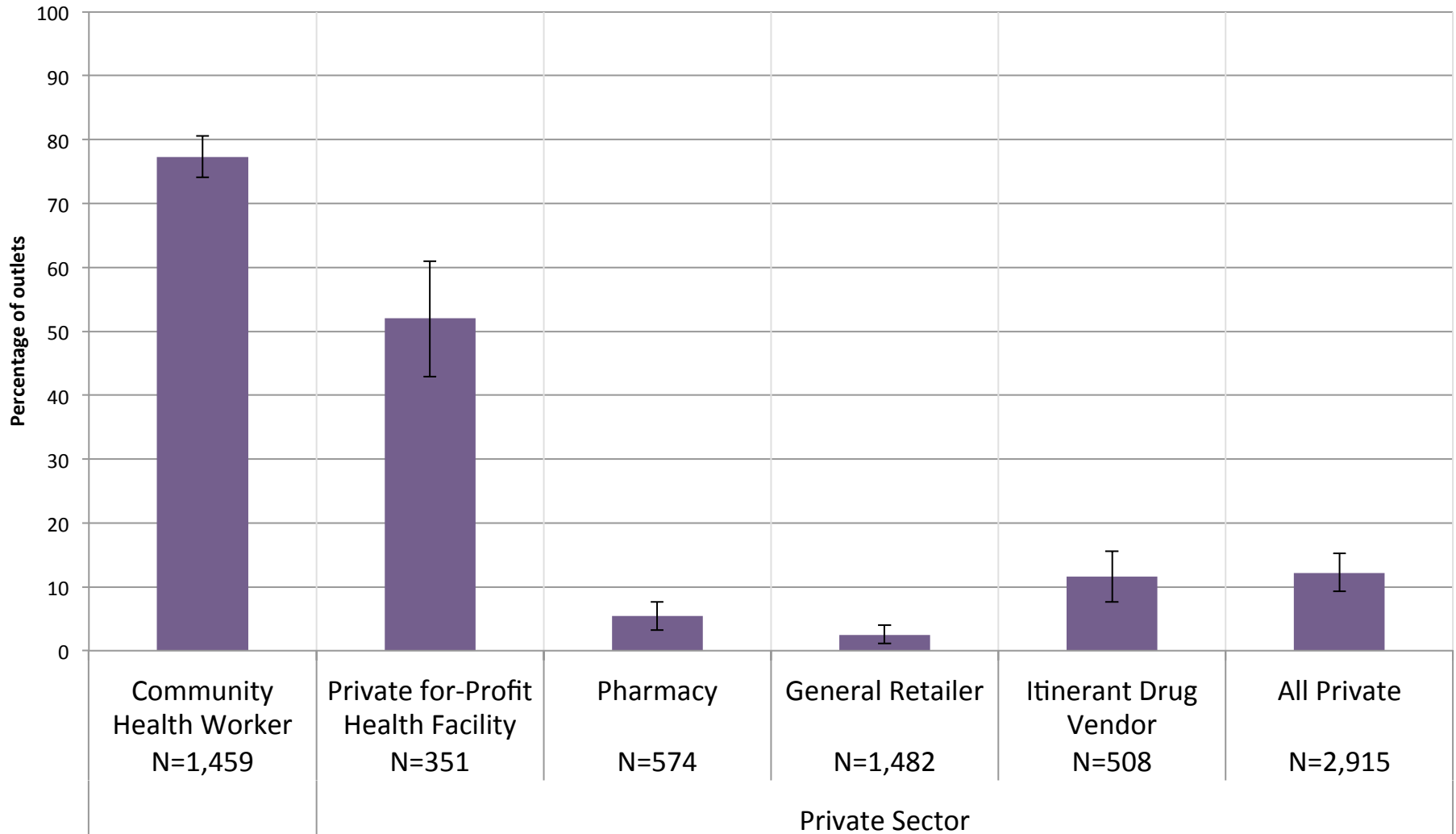


# Supervision across outlet type





# Malaria caseload reporting across outlet type



A photograph of a medical kit, likely for malaria treatment, resting on a colorful, woven mat. The kit is open, revealing numerous small, round, yellow and orange pills. A stethoscope is also visible. In the foreground, a small metal tray contains several blister packs of pills. The background shows a person's hand holding a small object, possibly a pill or a piece of paper. The overall scene suggests a rural or community health setting.

What are the characteristics of Oral AMT in Myanmar?

# Oral AMT is a common antimalarial

**8,500**

number of antimalarials audited in 2015

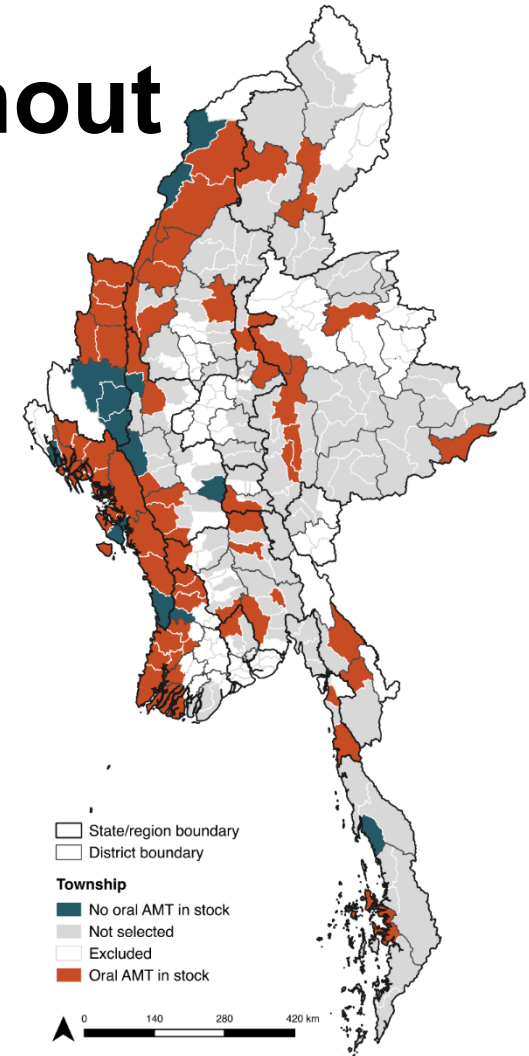
**1,036**

number of audited antimalarials that were oral AMT

# Oral AMT is found throughout Myanmar

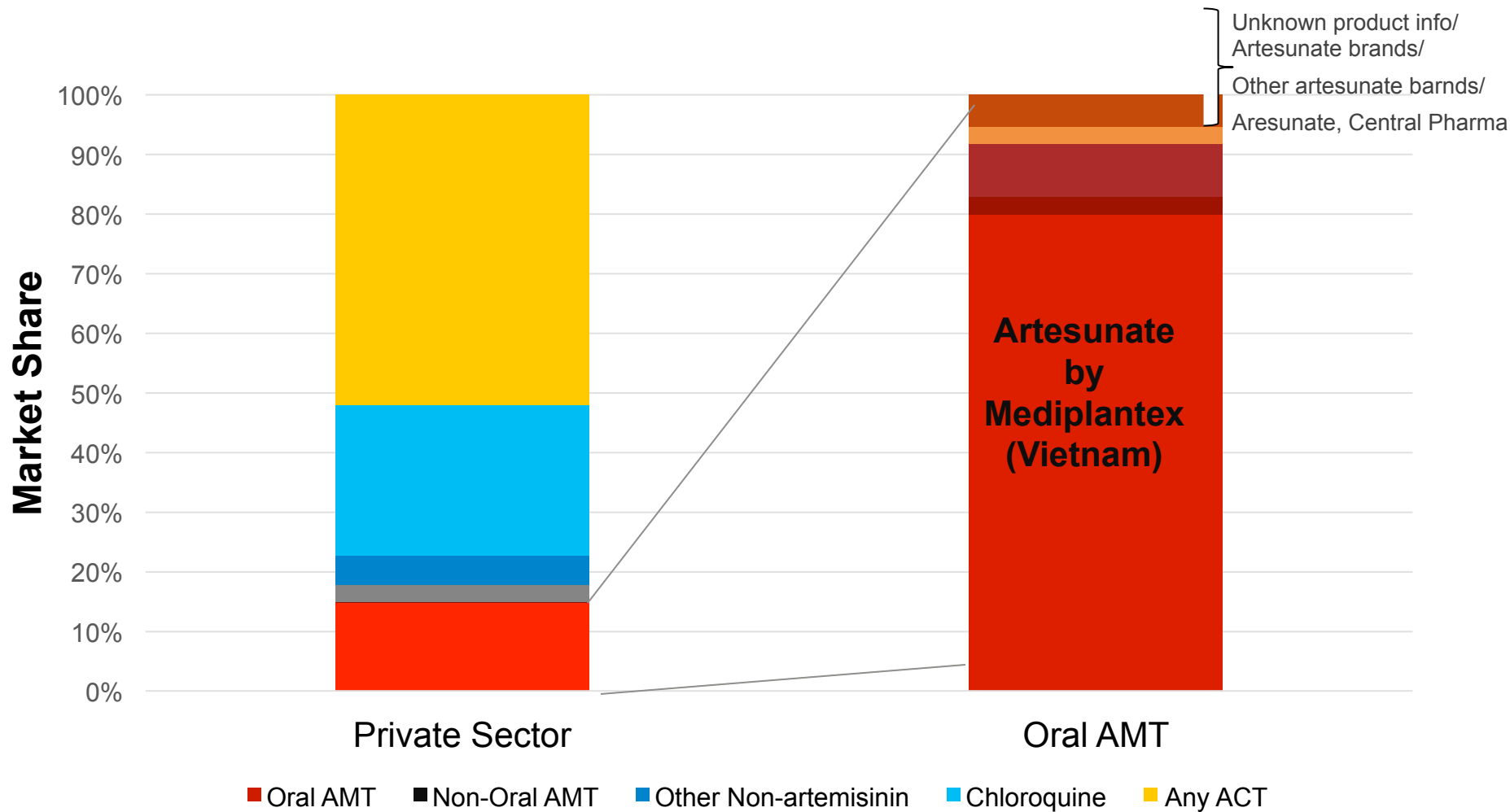
80

percent of townships with at least one outlet stocking oral AMT





# Oral AMT accounts for 20% of private market share



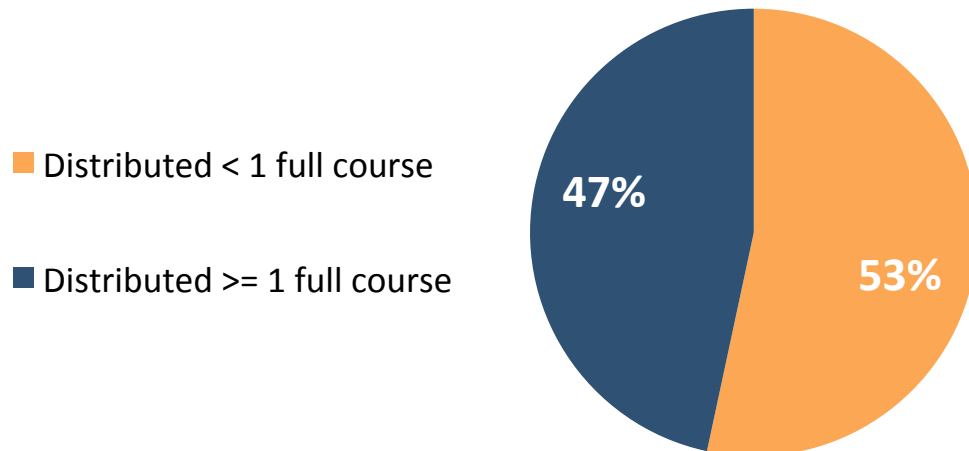
Oral AMT is commonly manufactured outside of  
country in Vietnam



Among all oral AMT audited, between **68%-84%** were Artesunate, by Mediplantex

# Oral AMT is commonly distributed at sub-optimal dosing

**2** Tablets of oral AMT were typically sold to patients





# Oral AMT is as affordable as quality assured ACT

**2** Tablets of oral AMT were  
typically sold to patients

**\$0.32** price sold to patients

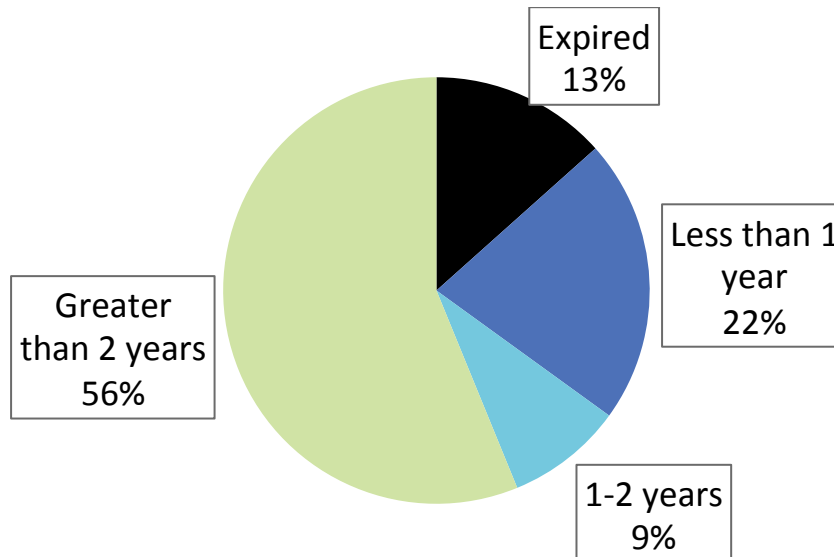




# Oral AMT is unlikely to be expired

## 2016, 2018

Expiry dates found on most of the packaging





# 5 insights

from national data regarding oral AMT in Myanmar



**1** Oral AMT is found throughout Myanmar, across all outlet types and domains; availability was highest in the Western/India border.

**2** The majority of oral AMT found was Artesunate, manufactured by Mediplantex in Vietnam.

**3** Oral AMT accounts for 20% of private sector market share.

**4** It is most commonly distributed at sub-optimal dosing, usually 2 tabs and is comparable in price to AL & CQ.

**5** The majority of oral AMT still had a shelf life of greater than 2 years.





# CONCLUSIONS



**1 Availability to first line treatments is moderate and there are differences by domains and outlet types**

**2 Most of the AM market share was first line treatment for Pf and Pv**

**3 Presumptive treatment in the private sector remains common due to low availability of testing.**

**4 Several insights into oral AMT include:**

- typical sale of 2 tablets per patient, at \$0.33**
- mostly manufactured in Vietnam,**
- unlikely to be expired,**
- most common in the India border area and certain outlets**



**Thank you**

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