



Kenya: 2014 ACTwatch Outlet Survey

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The ACTwatch project



ACTwatch produces standardized malaria medicine & diagnostic evidence in 13 countries



BILL & MELINDA
GATES foundation

UNITAID


Department
for International
Development


UKaid
from the British people

■ National Outlet Surveys

- 2010
- 2011
- 2014



Context for ACTwatch Outlet Surveys in Kenya



Co-paid ACTs – Global Fund

AMFm

Co-payment mechanism



AL scale up strategies



RDT pilot

2009 2010 2011 2012 2013 2014 2015

A close-up, profile view of a person with dark skin, wearing a green shirt, looking down at a shelf. The shelf is part of a wooden cabinet and holds several boxes of medicine. The person's hand is visible, resting on the shelf. The background is slightly blurred, showing more shelves and a person in a white coat. A semi-transparent green banner is overlaid across the middle of the image, containing the text "Outlet Survey Methods" in white.

Outlet Survey Methods

Study Population

- Study Population: Outlets with antimalarials or with malaria blood testing available
- What is an outlet?
 - Public Health Facility
 - Community Health Worker
 - Private Not For-Profit Facility
 - Private For-Profit Facility
 - Registered Pharmacy
 - Unregistered Pharmacy
 - General Retailer
 - Itinerant Vendor



Sampling

- Representative sample of clusters (Locations) from urban and rural domains: 26 urban Locations, and 27 rural Locations selected
- Complete a census of all potentially eligible outlets
- Extend the census area to the division level to boost the sample size for key market segments, including public health facilities and registered pharmacies (Booster sample)
- Screen for antimalarials in stock or malaria blood testing available

Product Audit

When products are in stock: Product audit

- Record information about each antimalarial product in stock:
 - Formulation (tablet, syrup, injection, etc.)
 - Brand/generic names
 - Strength
 - Manufacturer
 - Country of manufacture
 - Amount distributed in the past week
 - Retail and wholesale price
- Record information about each mRDT product in stock



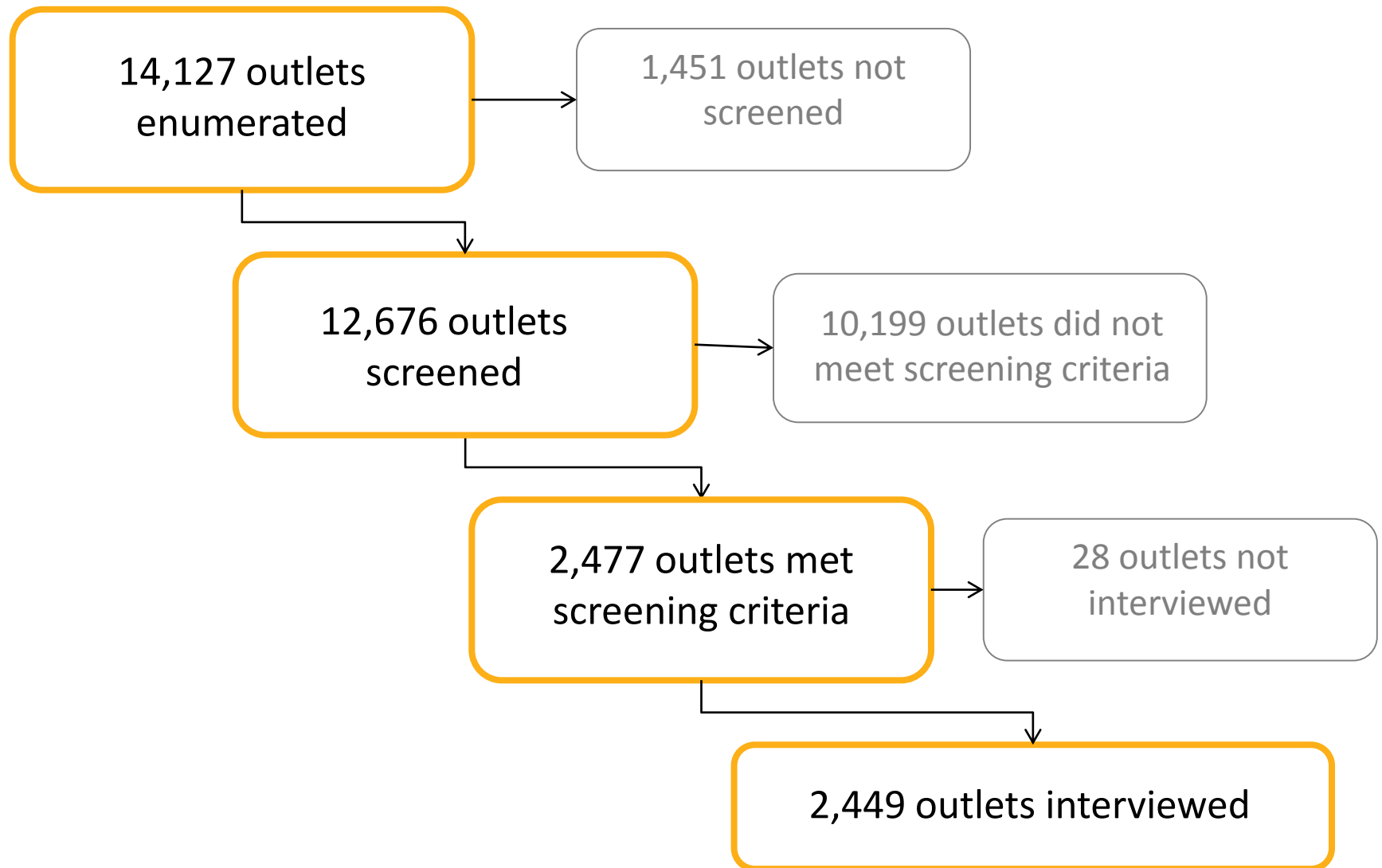
Locations

Urban		Rural		
CENTRAL	MIRIGA MIERU E.	BAHATI	KIENI EAST	MUNICIPALITY
CHANGAMWE	MSAMBWENI	CENTRAL	KIKUYU	MUTUATI
DAGORETTI	MUNICIPALITY	EKERENYO	KIMILILI	MWIMBI
EMBAKASI	NAKURU MUNI.	GACHOKA	KIPKELION	NDIVISI
KASARANI	NGONG	KADIBO	KOLLOWA	NGONG
KASIPUL	NYAMIRA	KAHURO	KUBO	NYAMIRA
KESSES	PUMWANI	KAKUZI	KWANZA	OGEMBO
KIBERA	SOY	KANGUNDO	LIKUYANI	RONGAI
KIKUYU	TOWNSHIP	KASIPUL	MANYATTA	SOTIK
KISAUNI	WESTLANDS	KATHONZWENI	MIRIGA MIERU E.	SOY
LIKONI	WINAM	KESSES	MSAMBWENI	TIRIKI WEST
		KHWISERO	MULOT	WINAM

Outlet Survey Results - Antimalarials



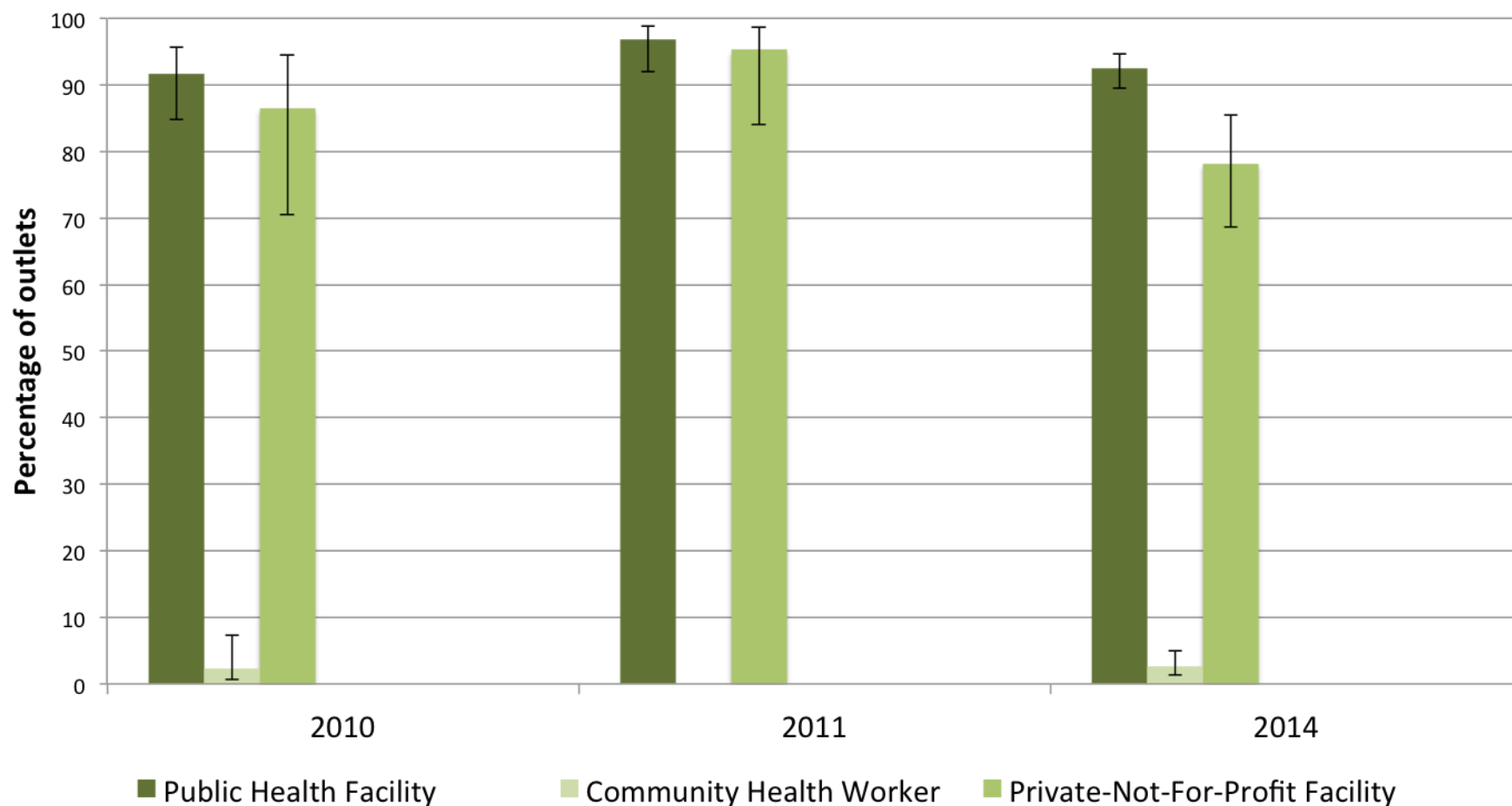
Outlet Survey Sample



What is the availability of antimalarials
among these screened outlets?

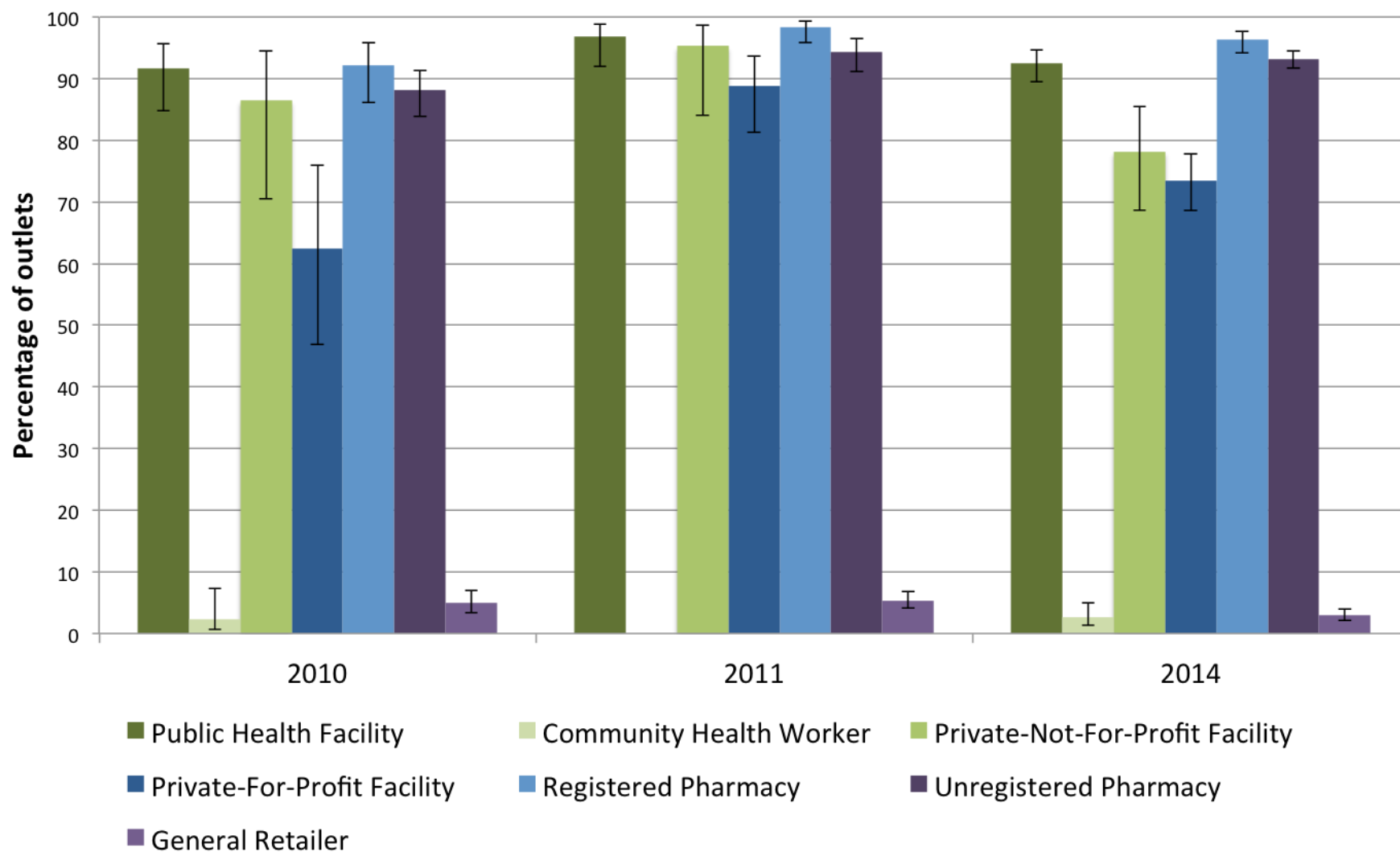
Availability of any antimalarial in the public sector

Among all screened public outlets, across survey round



Availability of any antimalarial in all sectors

Among all screened outlets, across survey round

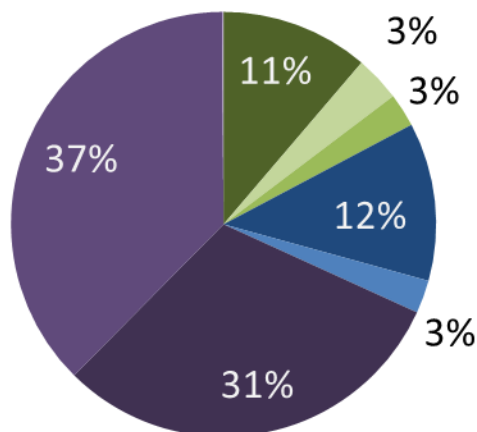


What types of outlets are stocking
antimalarials?

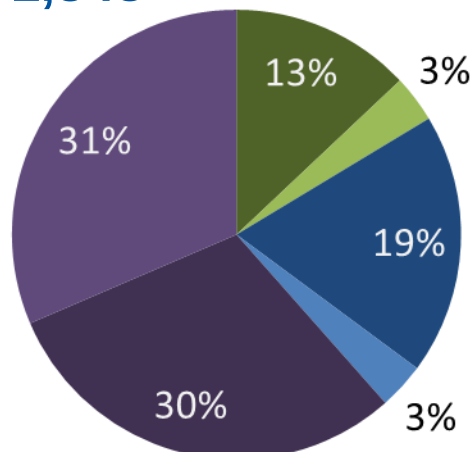
Market Composition

Outlet type, among outlets stocking any antimalarial, across survey round

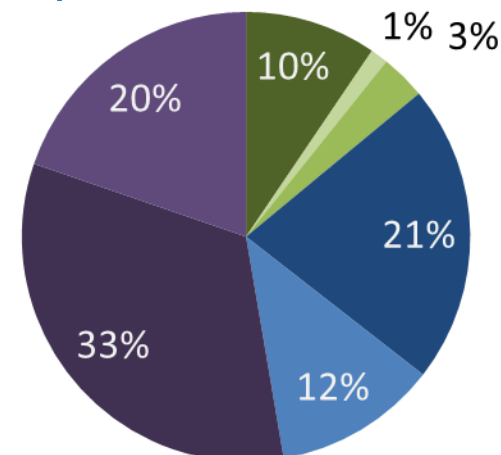
2010
N=1,471



2011
N=1,348



2014
N=1,501



- Public Health Facility
- Community Health Worker
- Private Not For-Profit Facility
- Private For-Profit Facility

- Pharmacy
- Drug Store
- General Retailer
- Itinerant Vendor

What types of antimalarials were found in the outlets?

- ☐ Quality-assured ACTs
- ☐ Quality-assured ACTs with ‘green leaf’ logo
- ☐ Non quality-assured ACTs
- ☐ Sulfadoxine-pyrimethamine
- ☐ Other non-artemisinin therapies

Quality-assured ACTs (QA ACT)

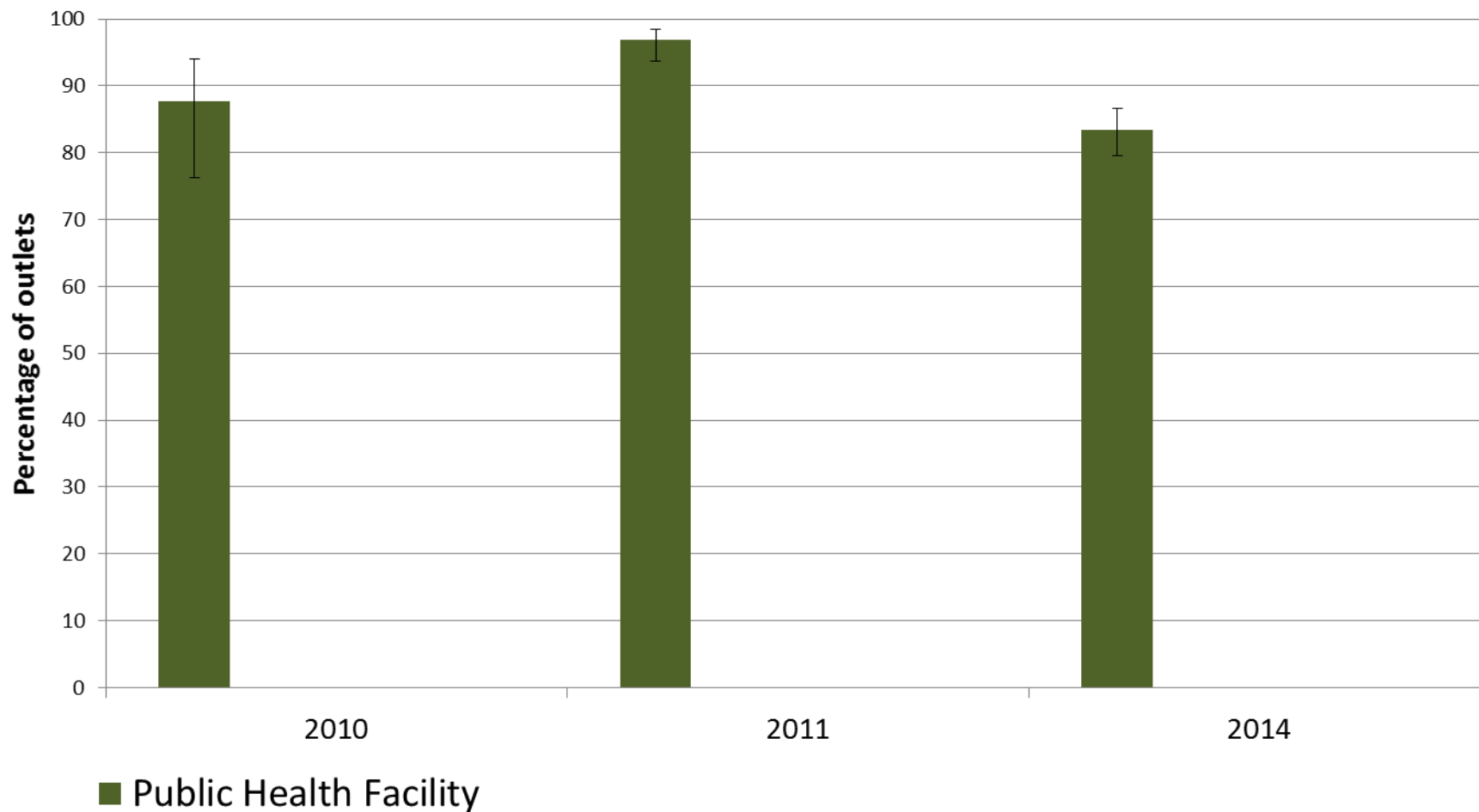
What are quality-assured ACTs (QA ACT)?

- QA ACTs are ACTs with WHO pre-qualification from a manufacturer with “Good Manufacturing Practices” (GMP)
 - Includes any ACT that appeared on the Global Fund’s indicative list of assured antimalarials prior to data collection
 - Includes any ACTs that previously had C-status in an earlier Global Fund quality assurance policy and was used in a program supplying subsidized ACT
 - Includes any ACT that had been granted regulatory approval by the European Medicines Agency



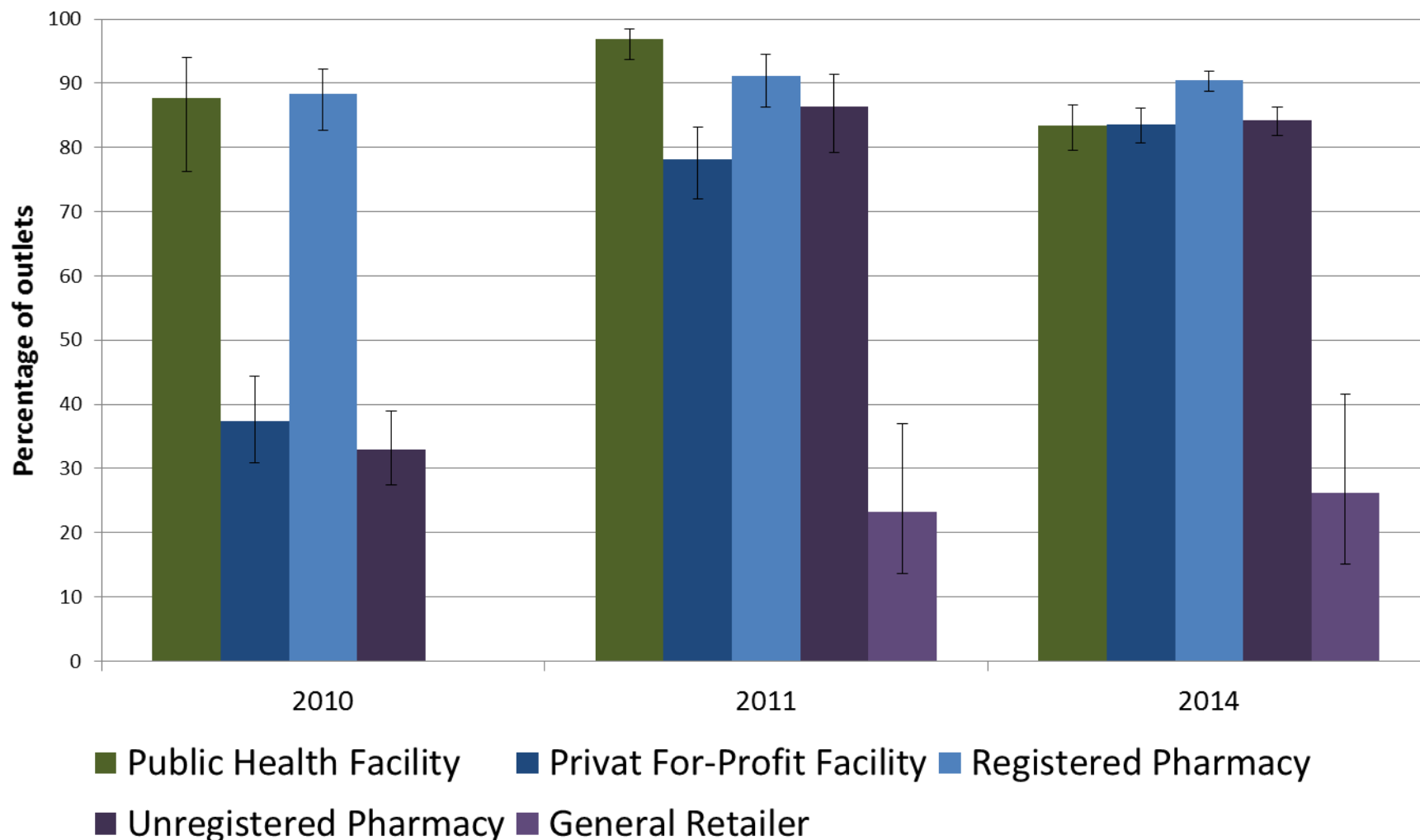
Availability of QA ACTs in the public sector

Among all public facilities with at least one antimalarial in stock, across survey round



Availability of QA ACTs in all sectors

Among all facilities with at least one antimalarial in stock, across survey round



Quality-assured ACTs with 'green leaf' logo

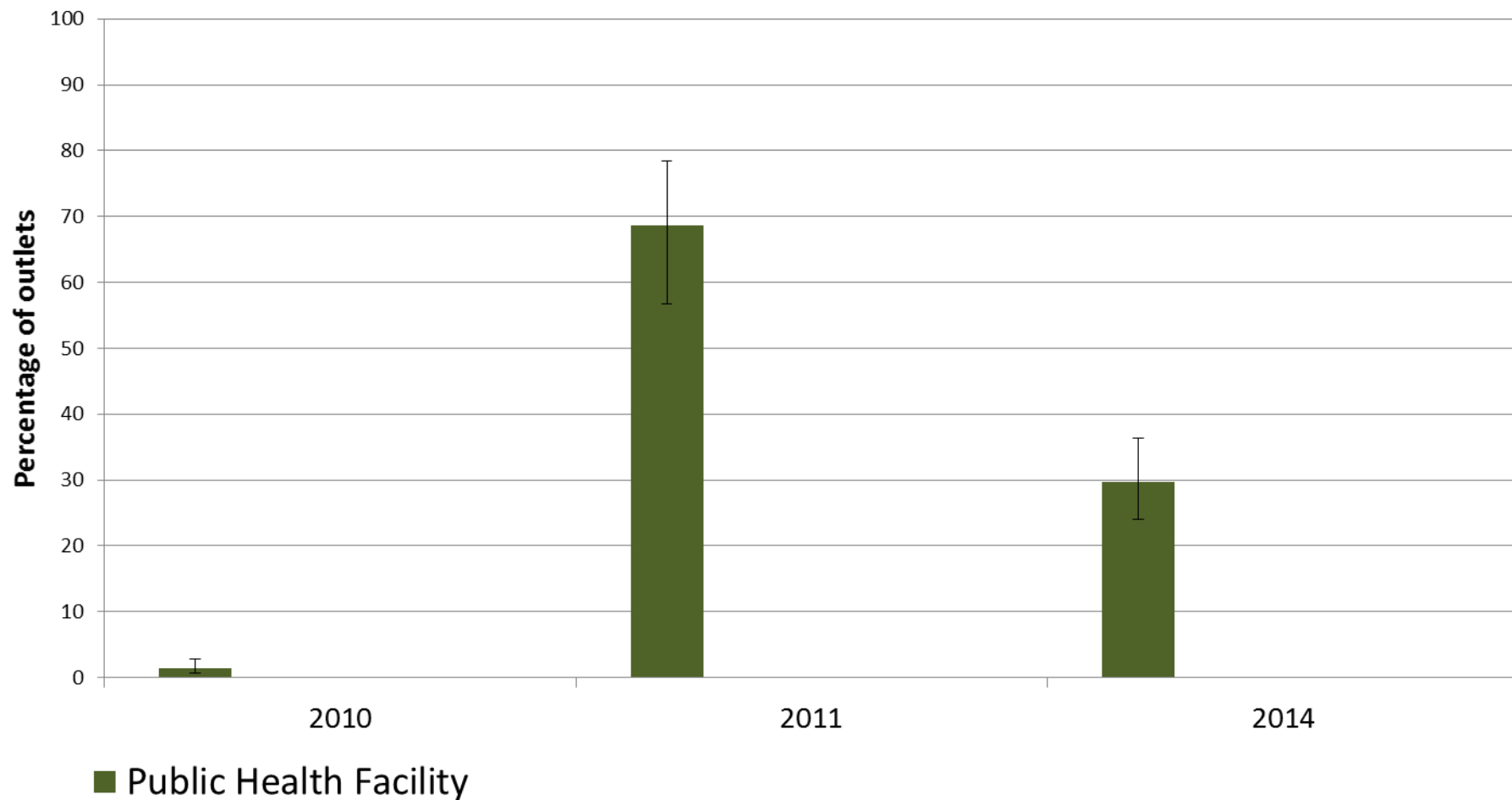


What is the 'green leaf' logo?

- The 'green leaf' logo indicates that an ACT was subsidized by the Global Fund as a part of a private sector co-payment mechanism
- From 2010-2011, the 'green leaf' logo subsidy program was known as AMFm and these ACTs were available in the public and private sector. Since 2012, the project is a private sector co-payment mechanism only

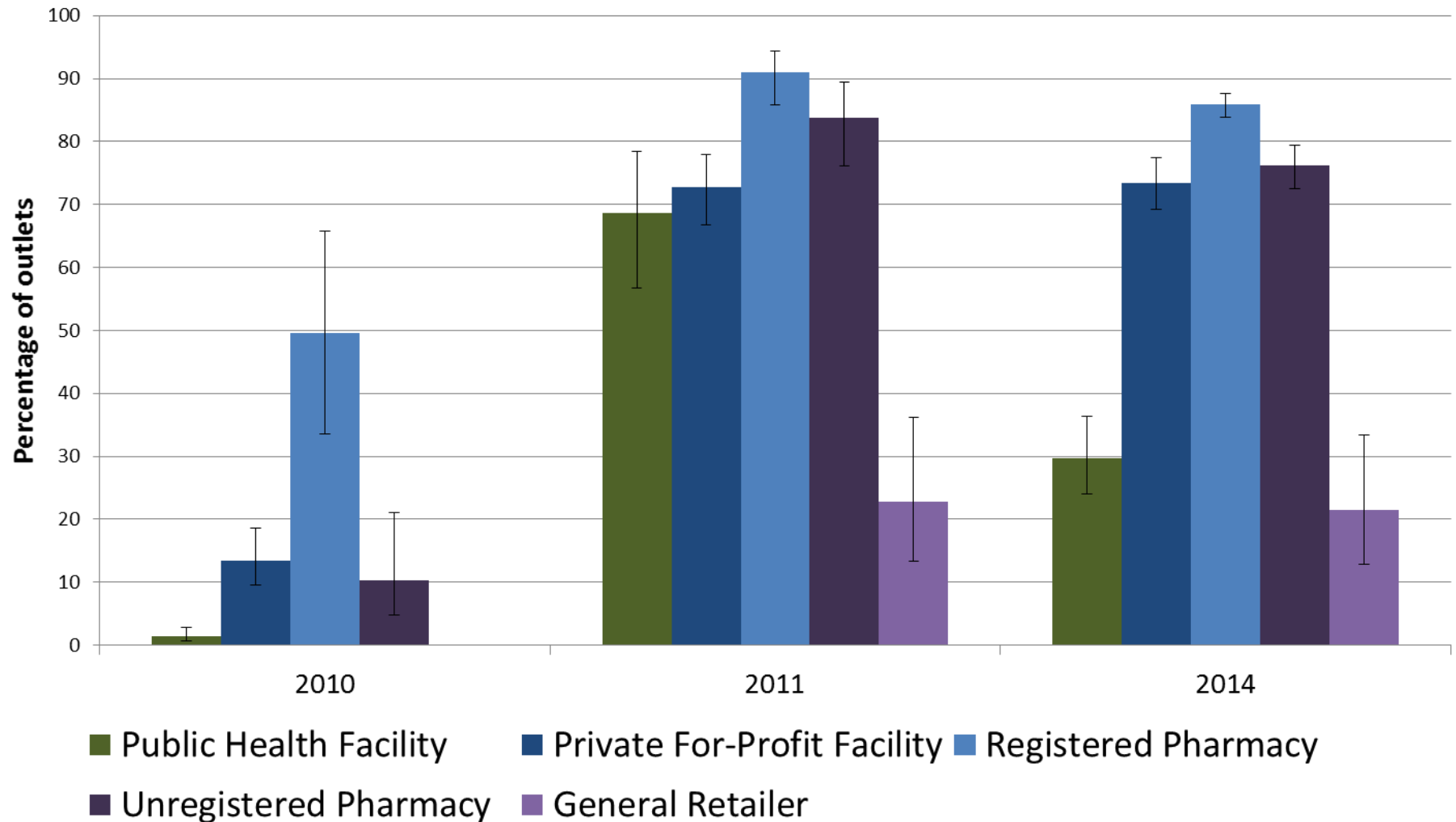
Availability of QA ACT with 'green leaf' logo, public sector

Among all public health facilities with at least one antimalarial in stock, across survey round



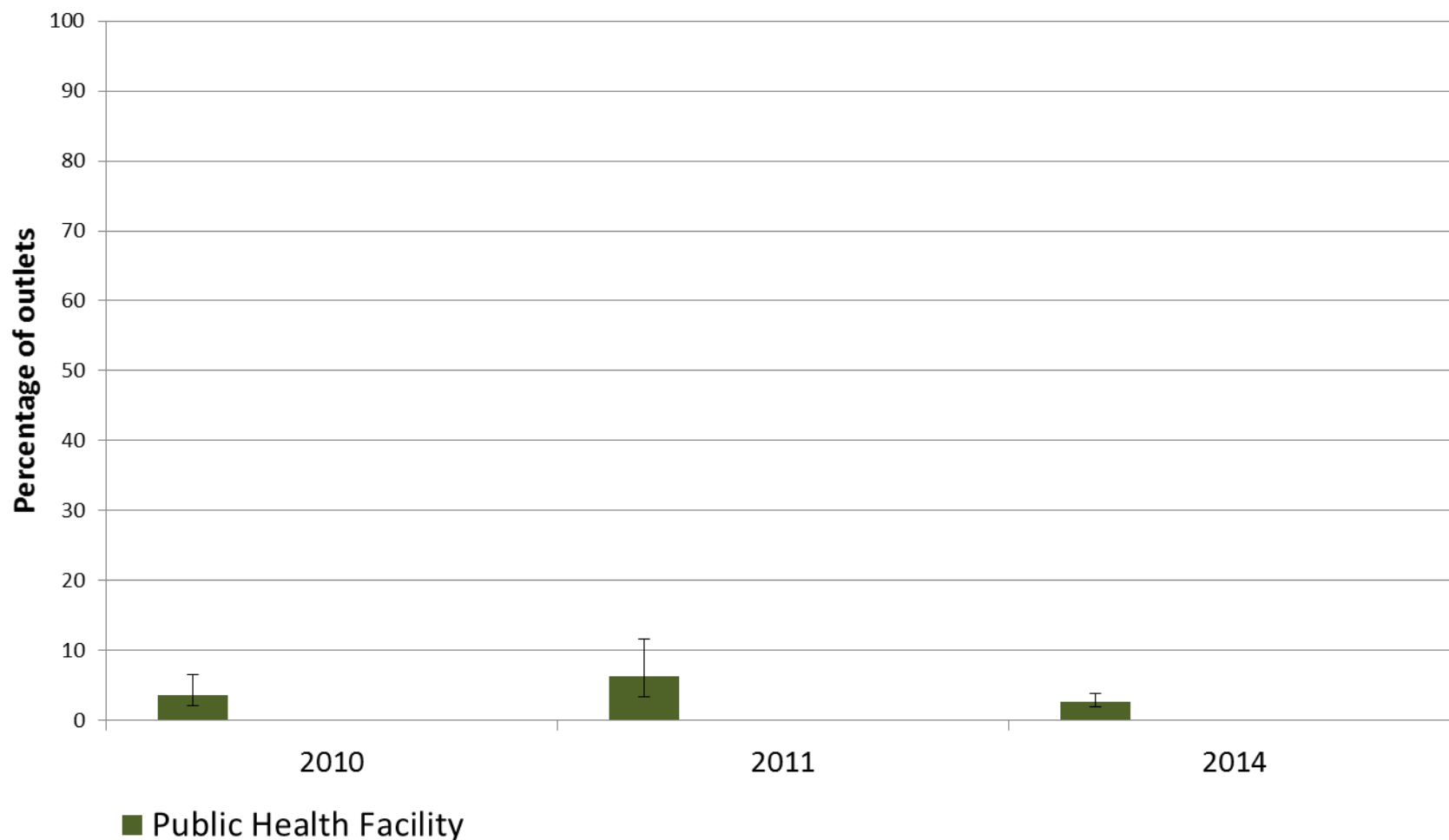
Availability of QA ACT with 'green leaf' logo, all sectors

Among all health facilities with at least one antimalarial in stock, across survey round



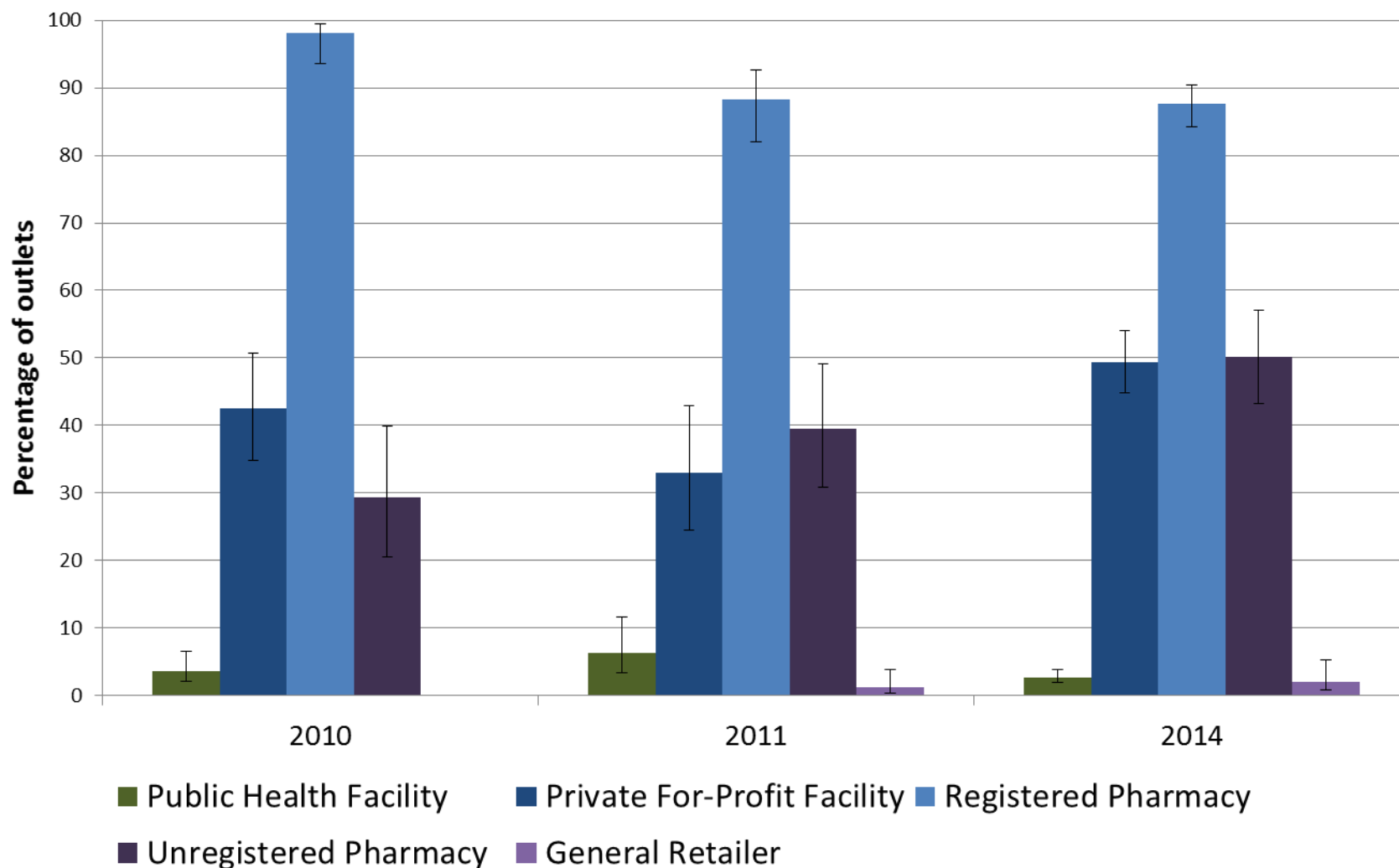
Availability of non-QA ACTs in the public sector

Among all public facilities with at least one antimalarial in stock, across survey round



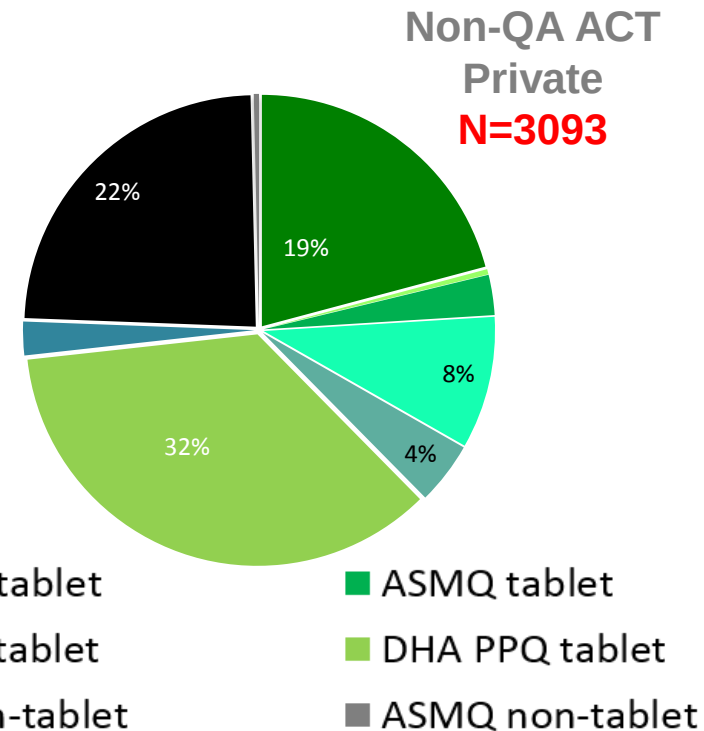
Availability of non-QA ACTs in all sectors

Among all facilities with at least one antimalarial in stock, across survey round



Types of non-QA ACT available in the private sector

- Most are non-QA AL or non-QA DHA PPQ
- Most by Bliss GVS Pharmaceuticals (AL and DHA) or Beijing Holley-Cotec Pharmaceuticals (DHA)
- 3,093 drugs found



- AL tablet
- A PPQ tablet
- AN tablet
- DHA PPQ non-tablet

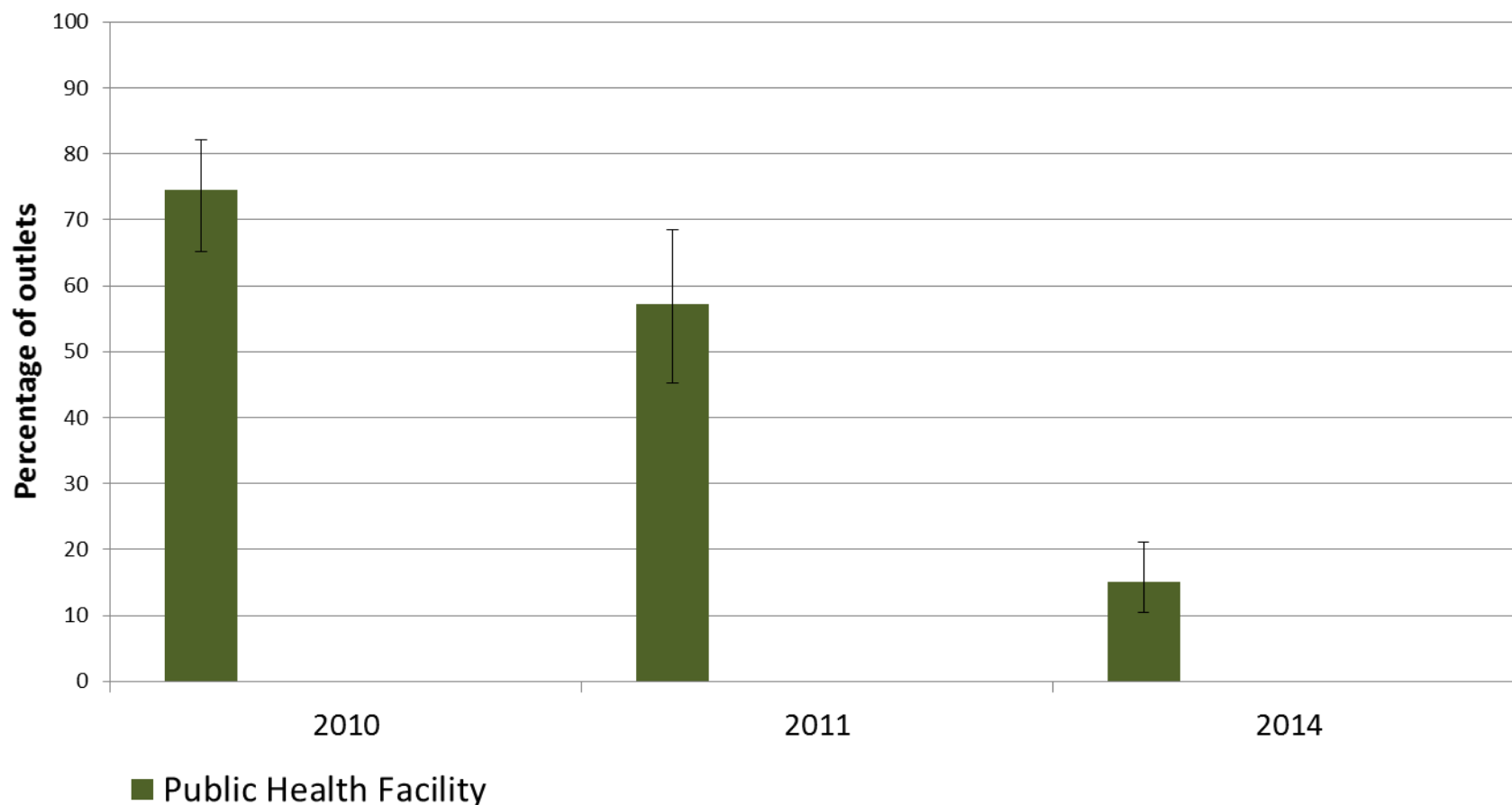
- ASAQ tablet
- AS SP tablet
- AL non-tablet

- ASMQ tablet
- DHA PPQ tablet
- ASMQ non-tablet



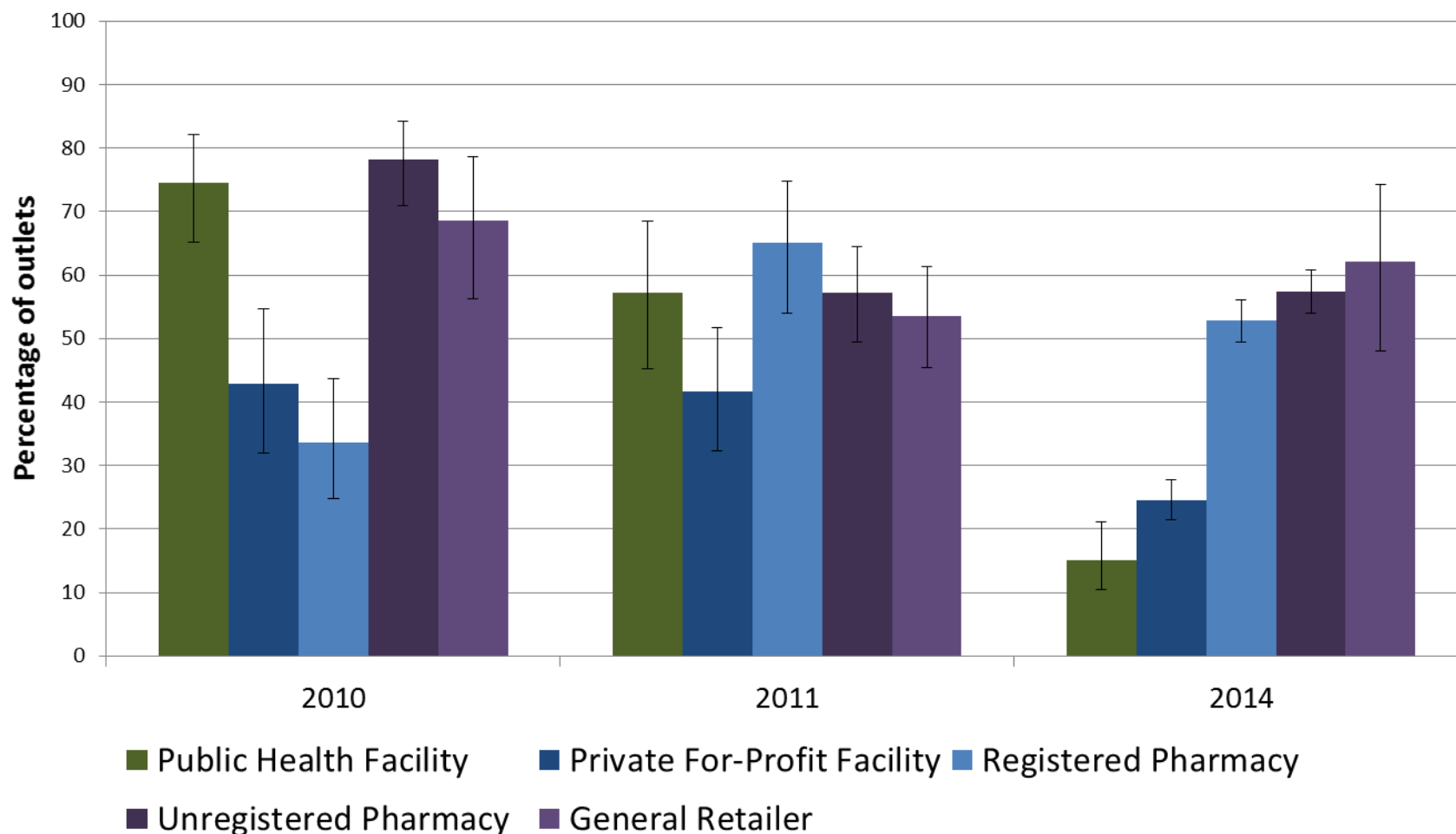
Availability of SP, public health sector

Among all public health facilities with at least one antimalarial in stock, across survey round



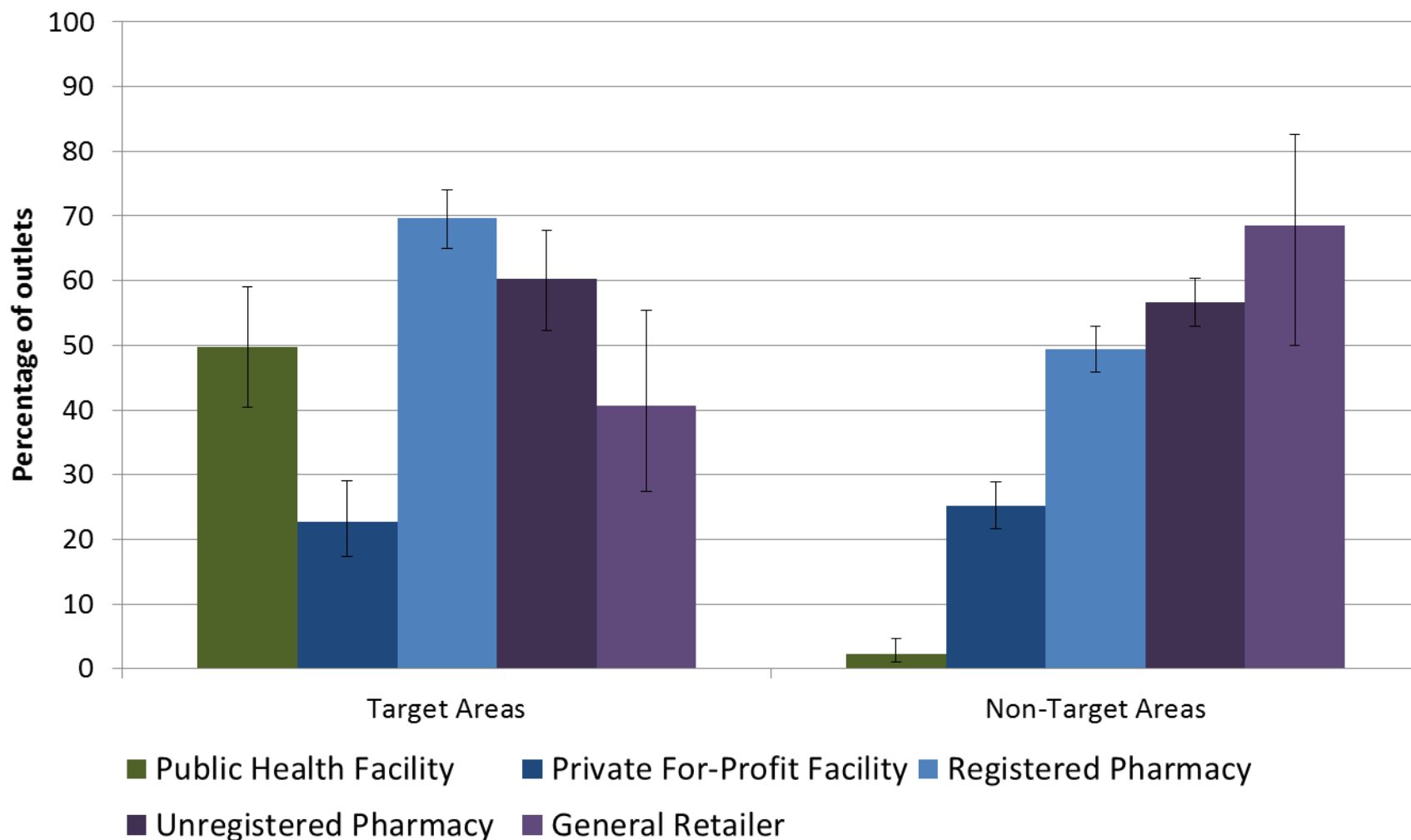
Availability of SP, all sectors

Among all health facilities with at least one antimalarial in stock, across survey round



Availability of SP, all sectors, by IPTp region

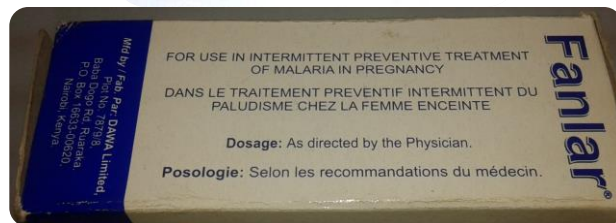
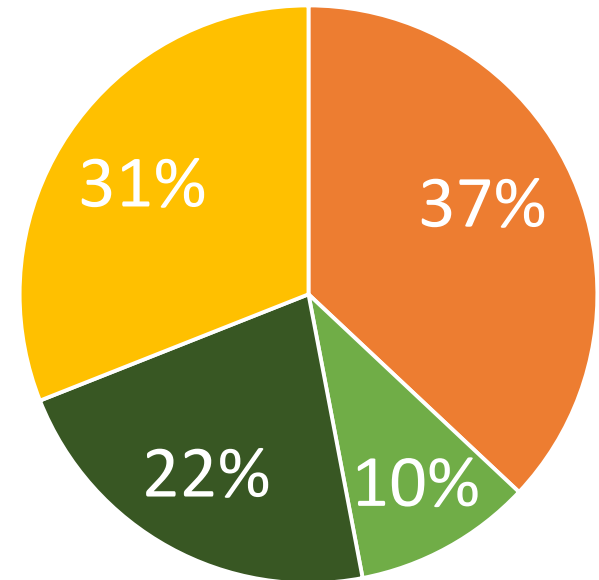
Among all health facilities with at least one antimalarial in stock, across survey round



Types of SP available in the private sector

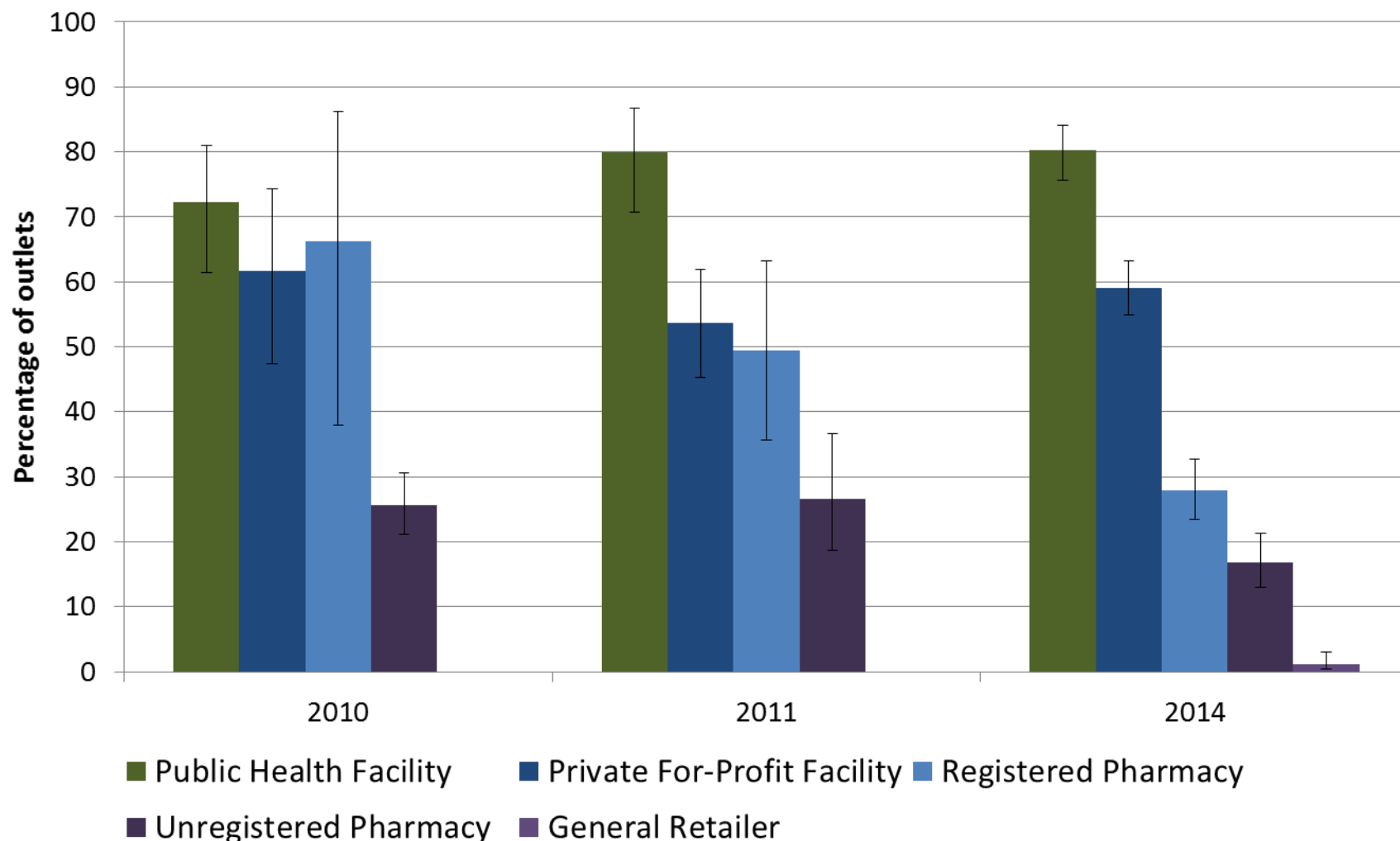
- >80% of SP audited in private sector was manufactured in Kenya
- Tablet formulations – typically 2 or 3-tablet packages
- Fanlar and Malodar are both marketed for IPTp

- Fanlar
- Malafin
- Malodar
- Other



Availability of severe malaria treatment, all sectors

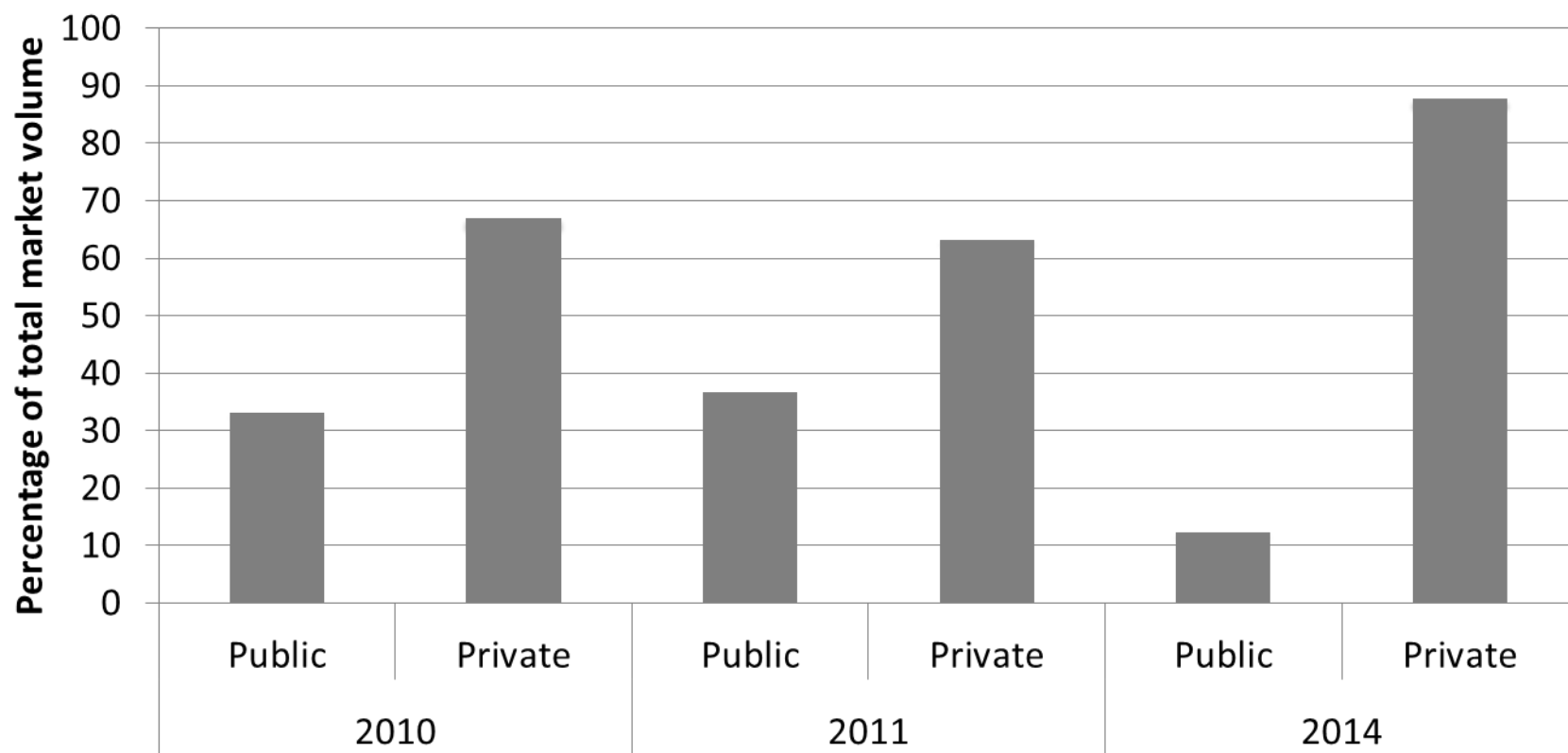
Among all health facilities with at least one antimalarial in stock, across survey round



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

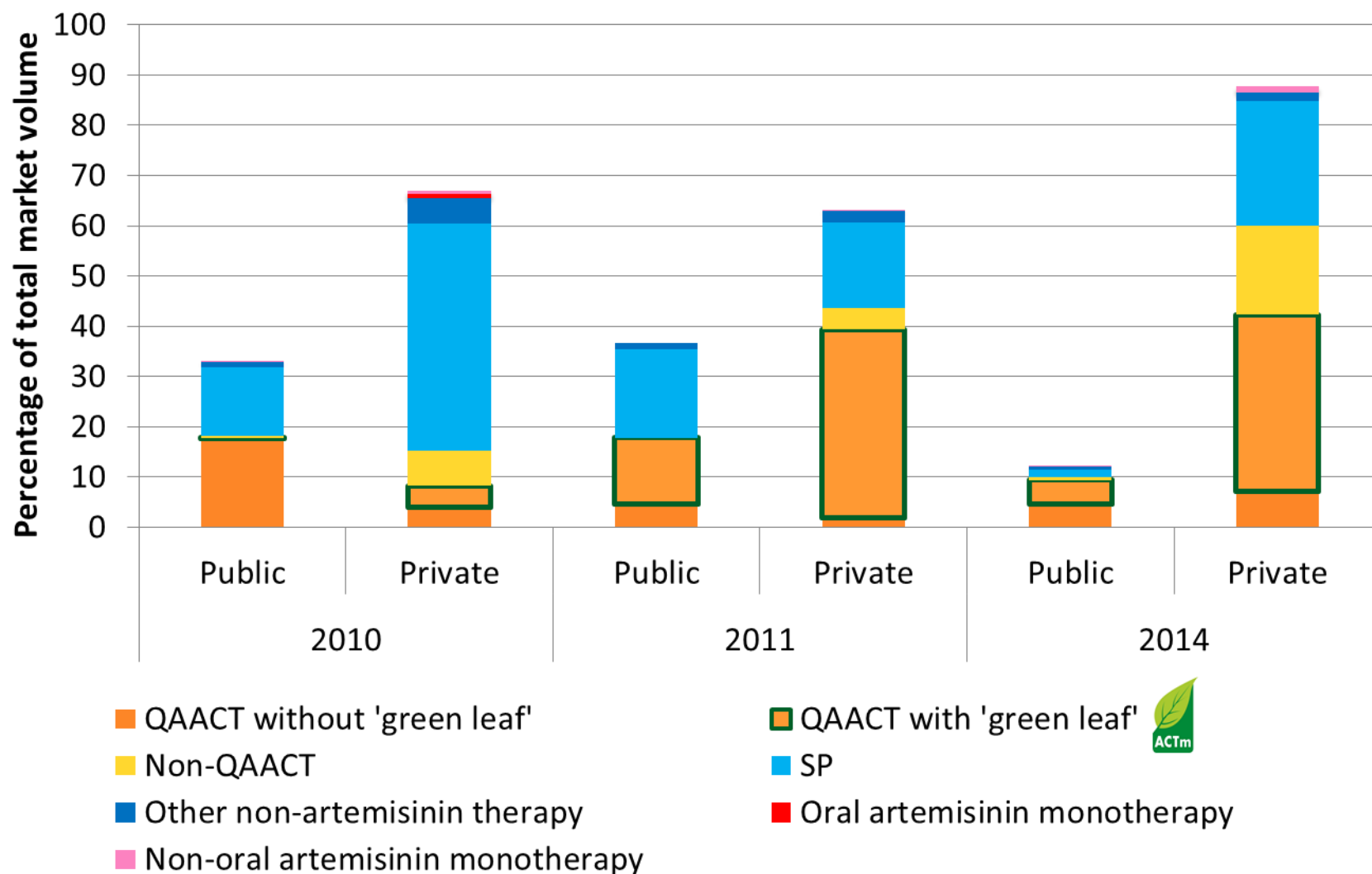
Antimalarial Market Share, 2010-2014

Relative market volume (sale/distribution) of antimalarial AETDs, by sector and antimalarial class



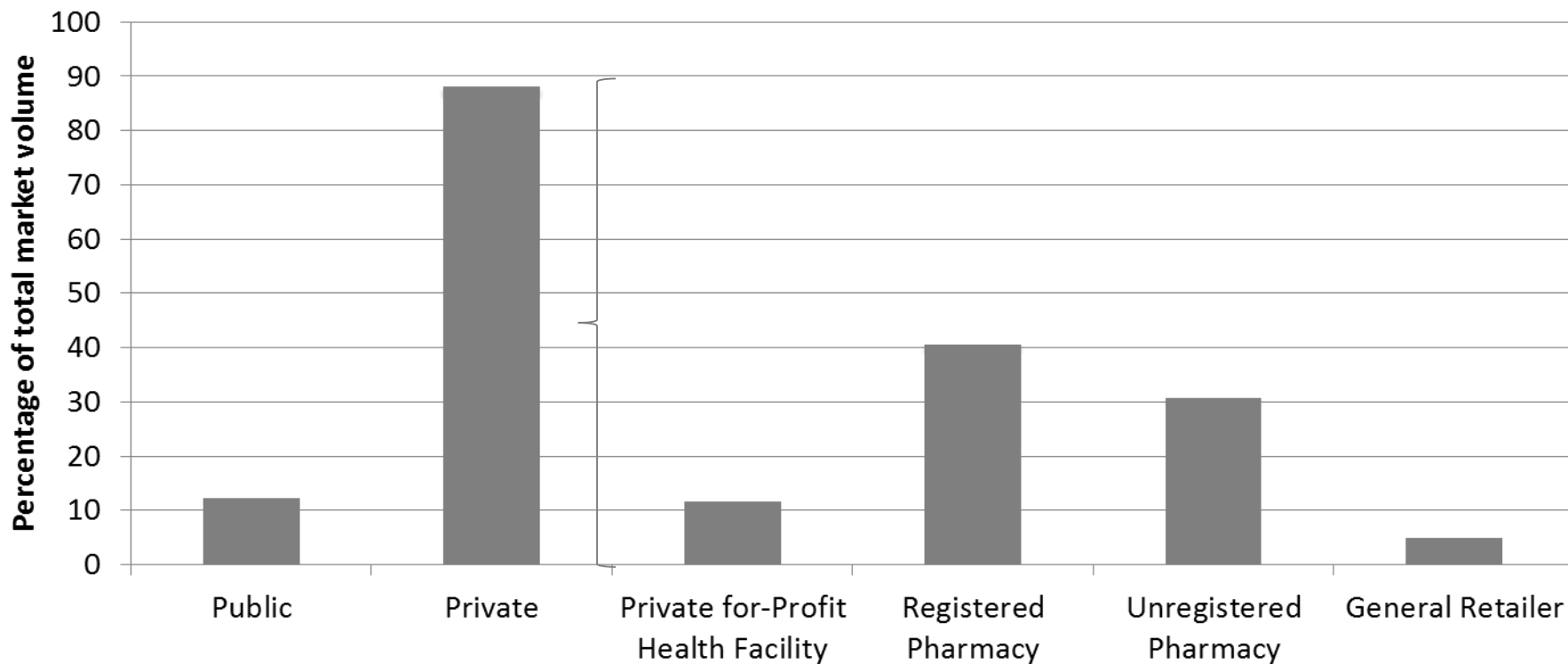
Antimalarial Market Share, 2010-2014

Relative market volume (sale/distribution) of antimalarial AETDs, by sector and antimalarial class



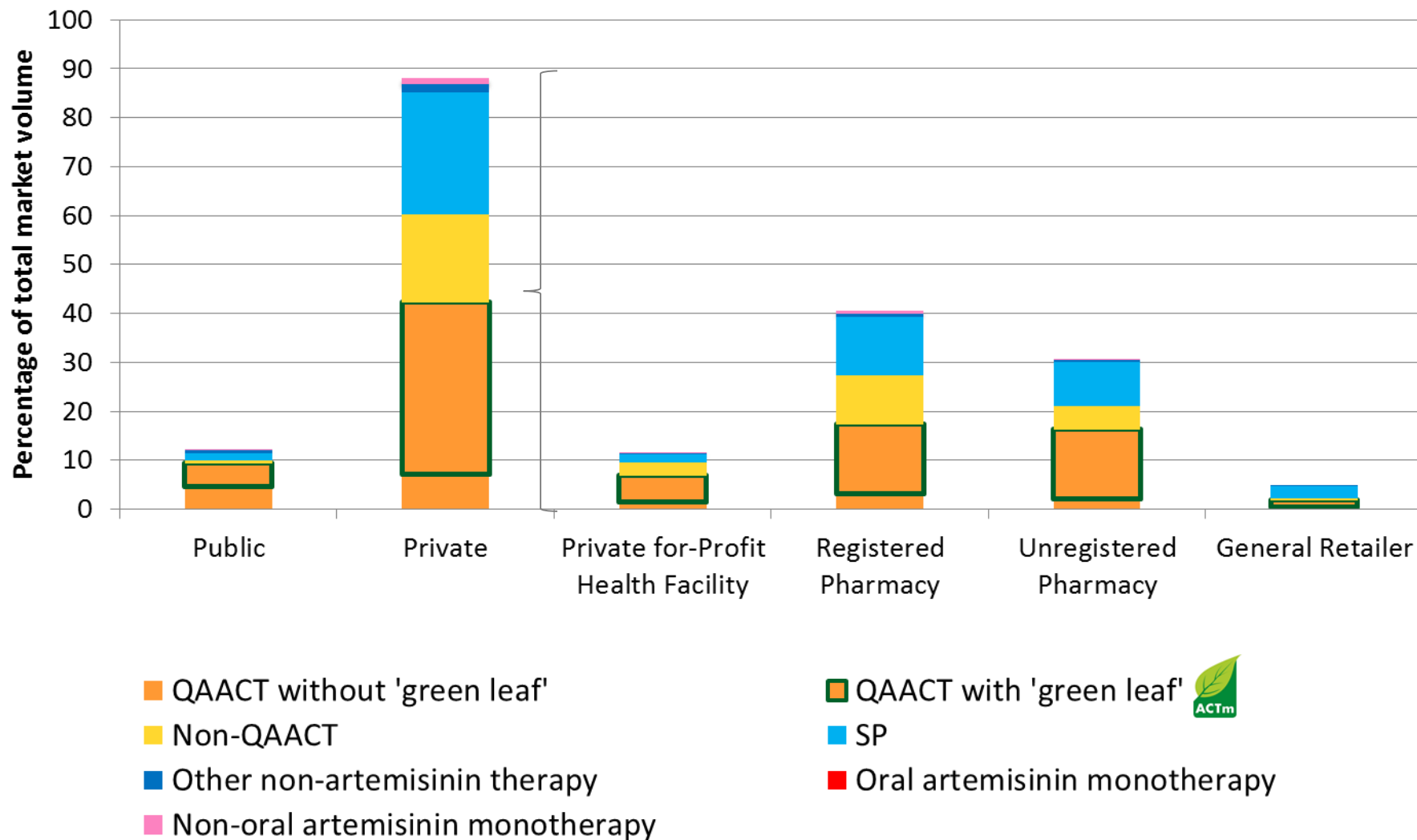
Antimalarial Market Share

Relative market volume (sale/distribution) of antimalarial AETDs, 2014



Antimalarial Market Share

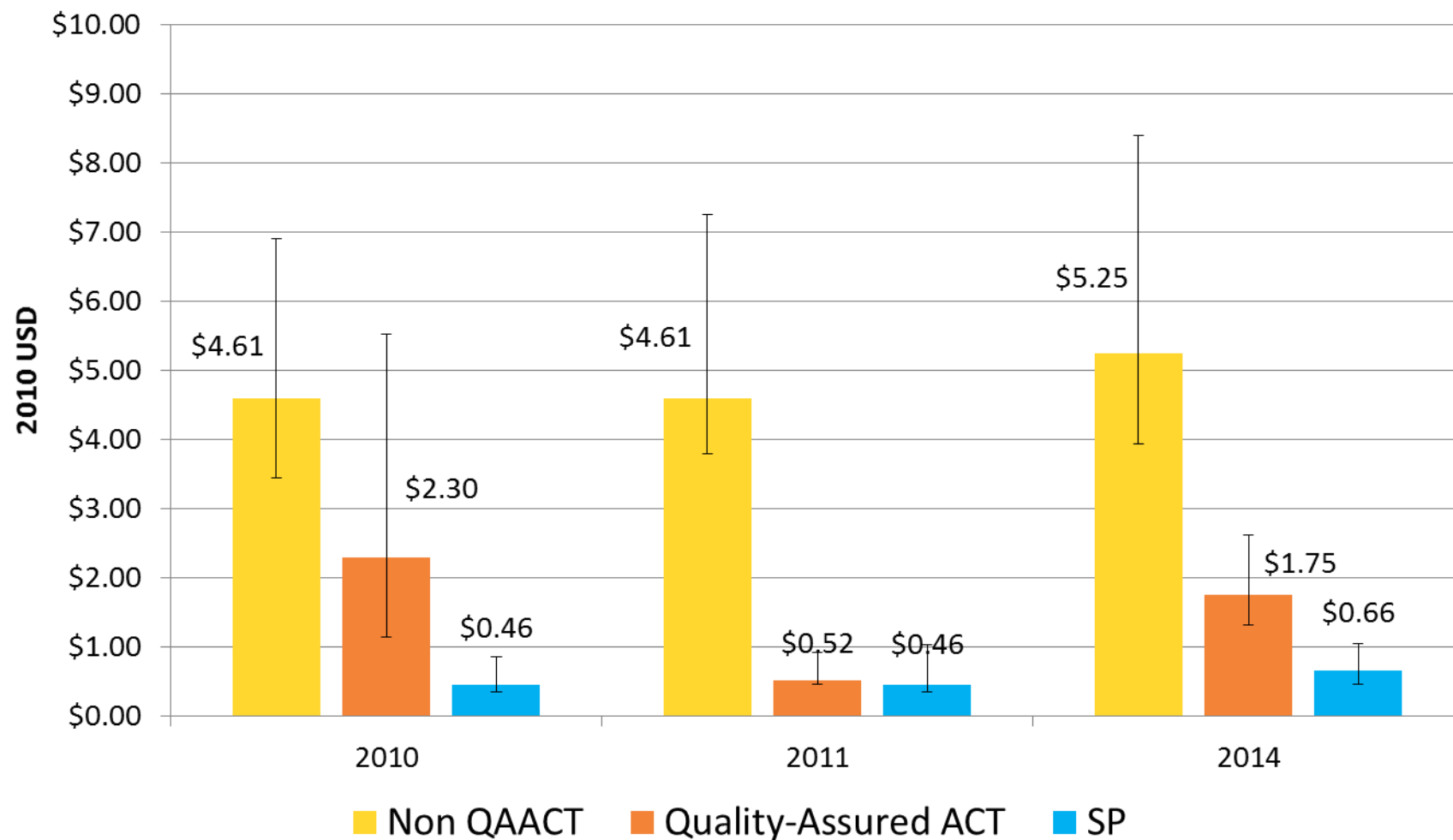
Relative market volume (sale/distribution) of antimalarial AETDs, by sector and drug class, 2014



How much do antimalarials cost in the private sector?

Private sector median price of AETD, 2009-2014

Among all drugs of this type available in the private sector, in 2009 US dollars



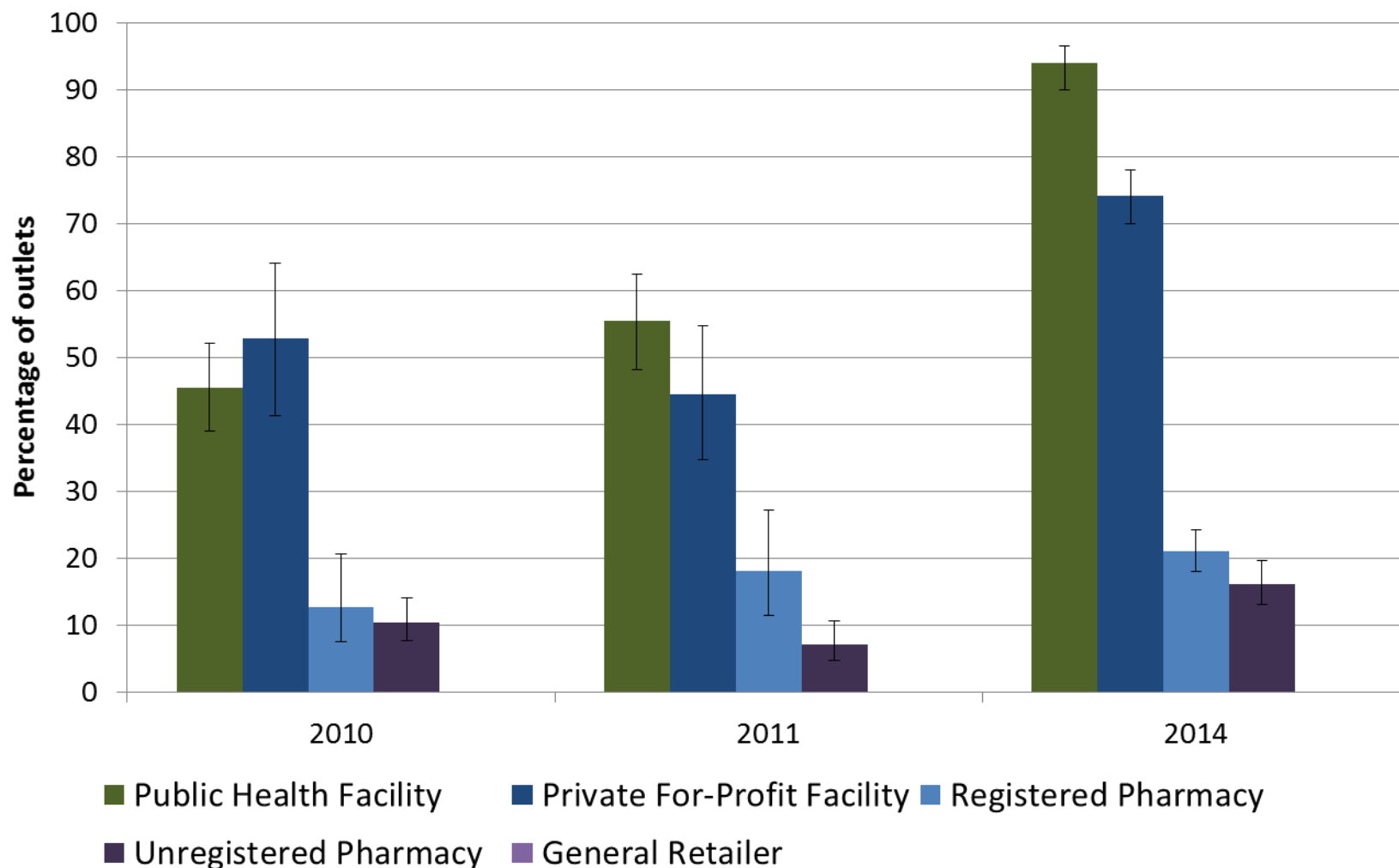
A close-up photograph showing a person's finger being pricked with a lancet. A gloved hand is holding the finger, and another gloved hand is using the lancet to make a small incision. A small drop of blood is visible on a glass slide held below the finger. The background is blurred.

Outlet Survey Results – Blood testing

Is malaria blood testing available where
antimalarials are distributed?

Malaria Diagnostic Test Availability (RDT or Microscopy)

Among outlets stocking antimalarials, 2010-2014



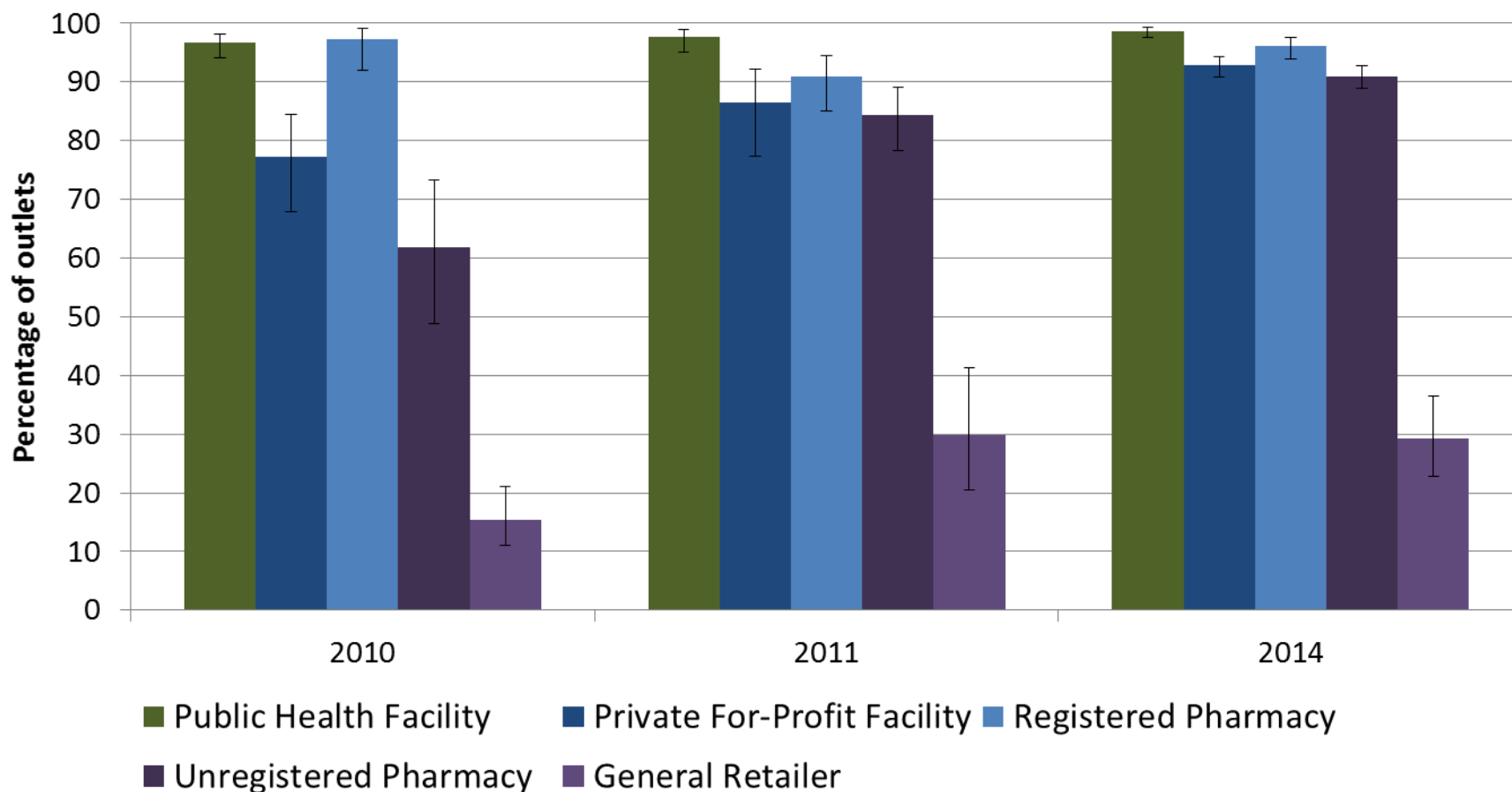


Results – Knowledge

Do the providers working in outlets stocking antimalarials know the correct first-line treatment for uncomplicated malaria?

Antimalarial drug knowledge, 2009-2014

Providers who state the first-line treatment for uncomplicated malaria, among antimalarial stocking outlets, across survey round



ALPHA RETAILER'S



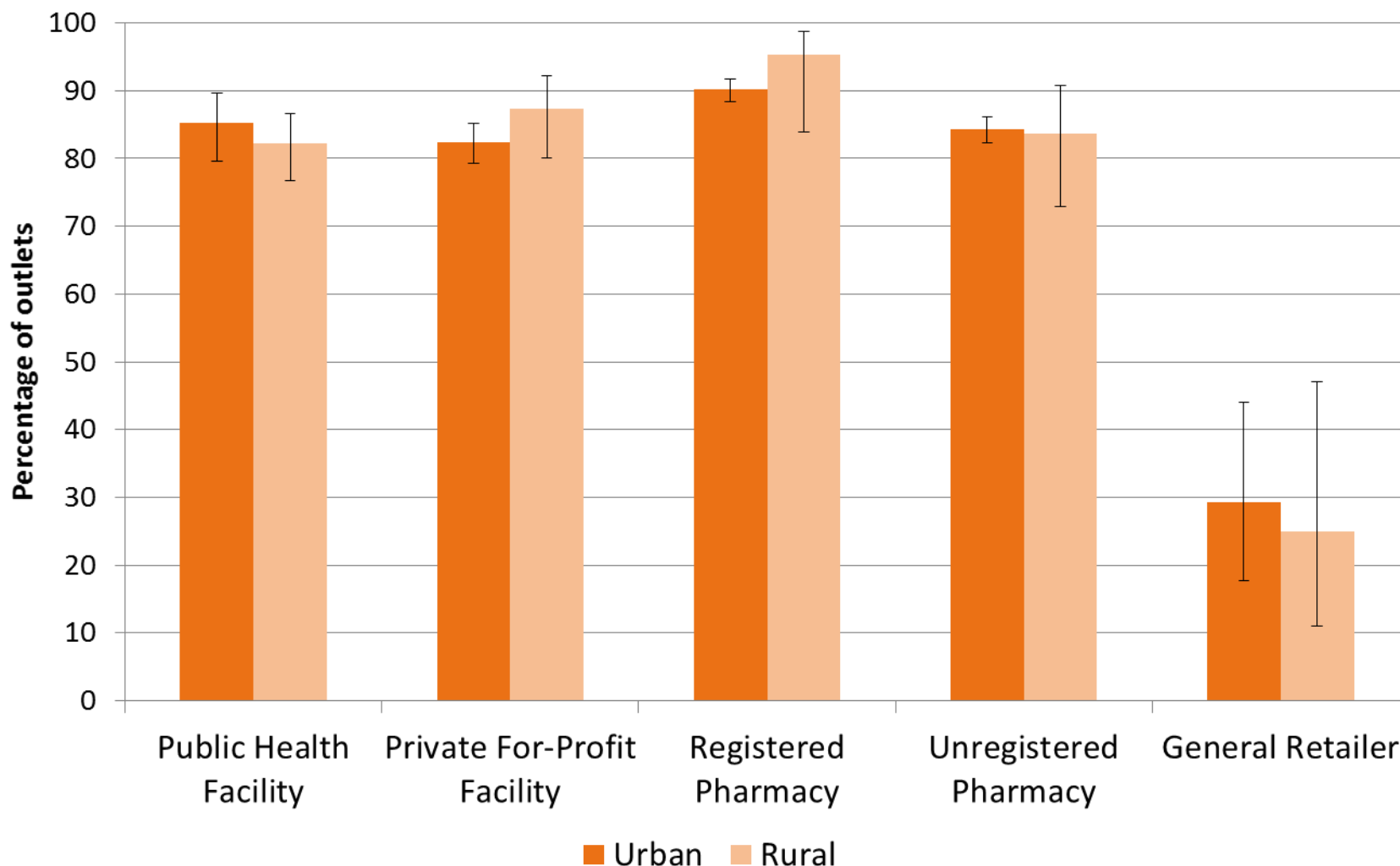
Urban/Rural Comparisons



Is the availability of QA ACTs different in urban and rural areas?

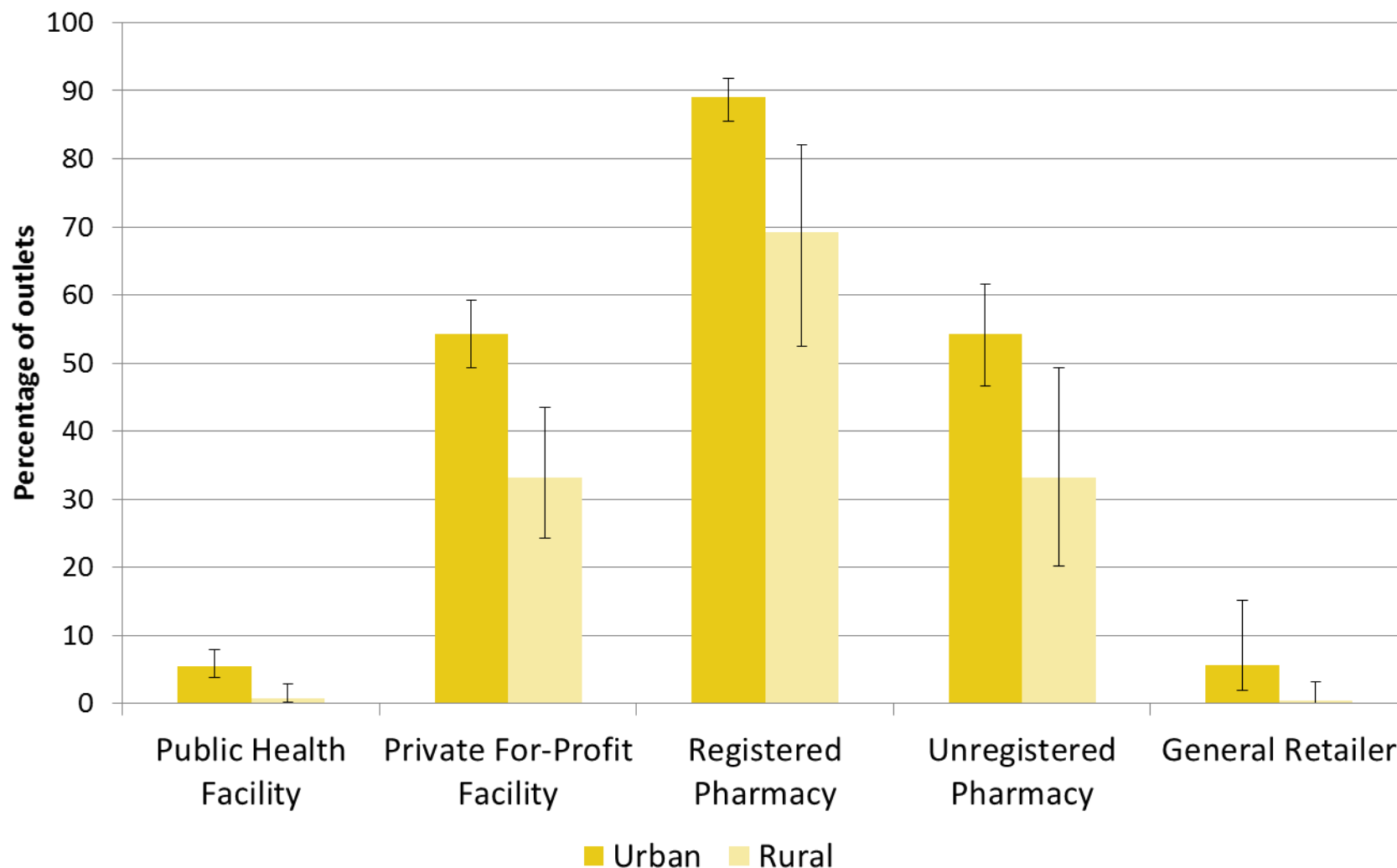
Availability of QA ACTs, urban/rural

Among all outlets with at least one antimalarial in stock, 2014



Availability of Non-QA ACTs, urban/rural

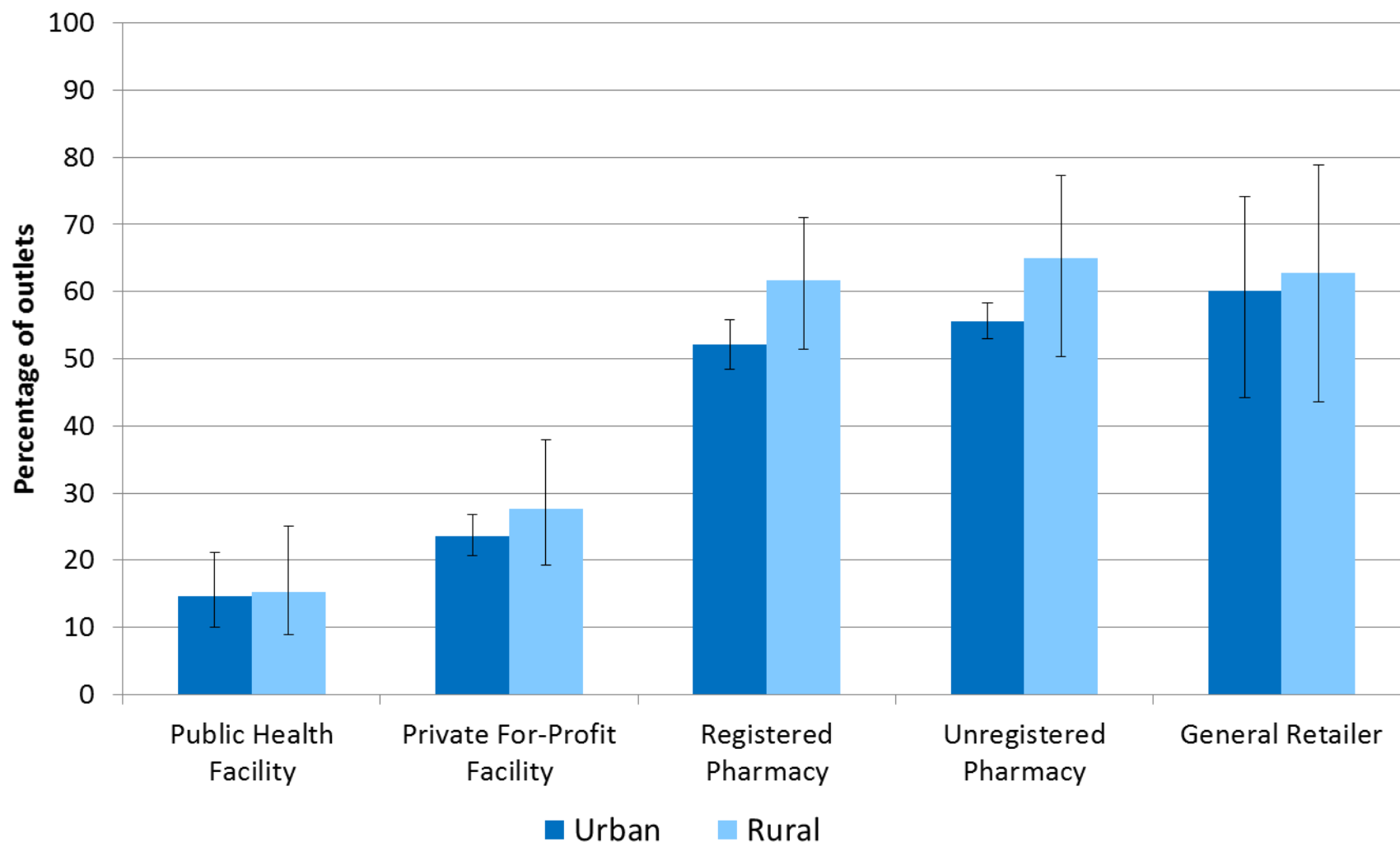
Among all outlets with at least one antimalarial in stock, 2014



Is the availability of SP different in urban
and rural areas?

Availability of SP, urban/rural

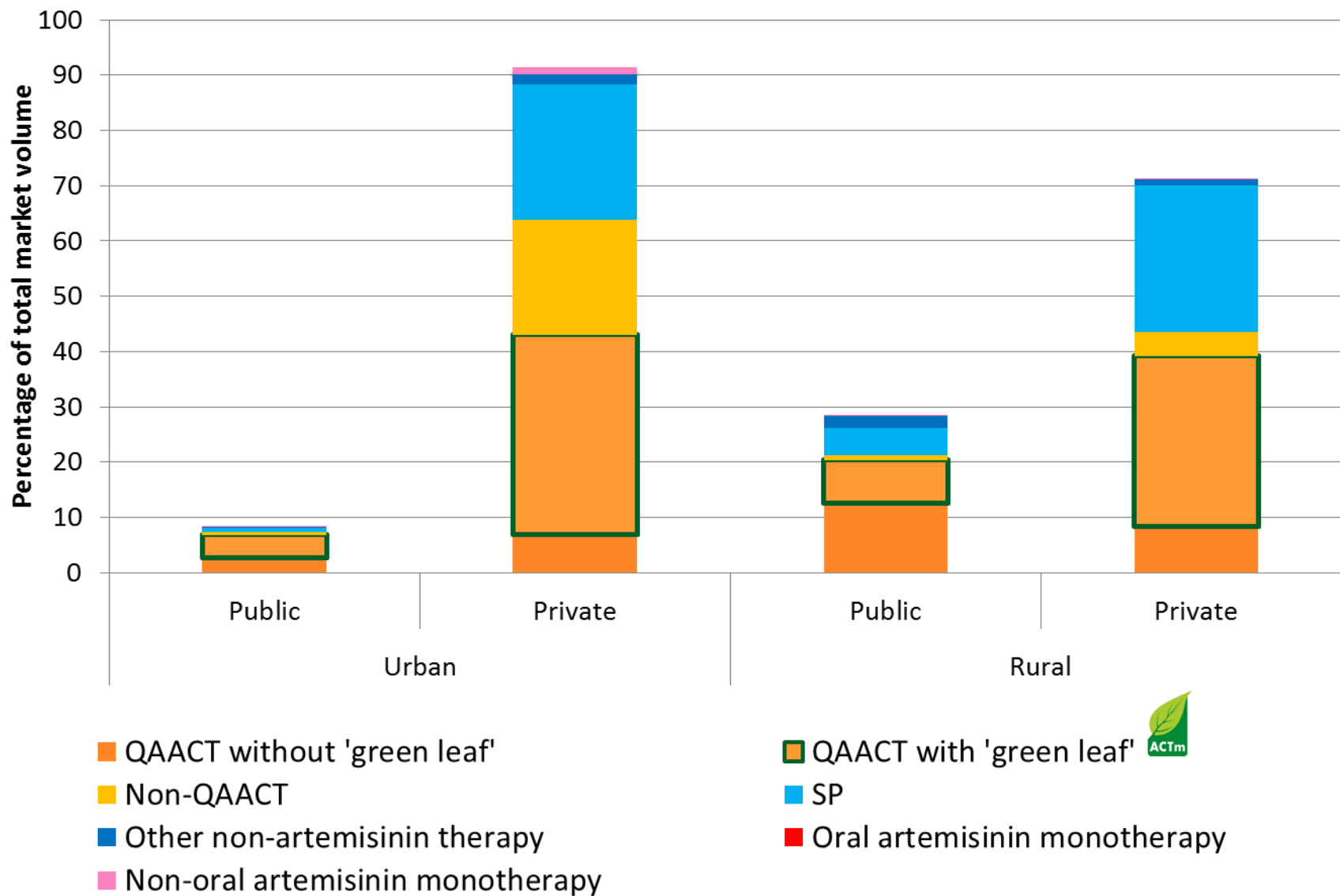
Among all outlets with at least one antimalarial in stock, 2014



Is the antimalarial market share different
in urban and rural areas?

Antimalarial Market Share, urban/rural

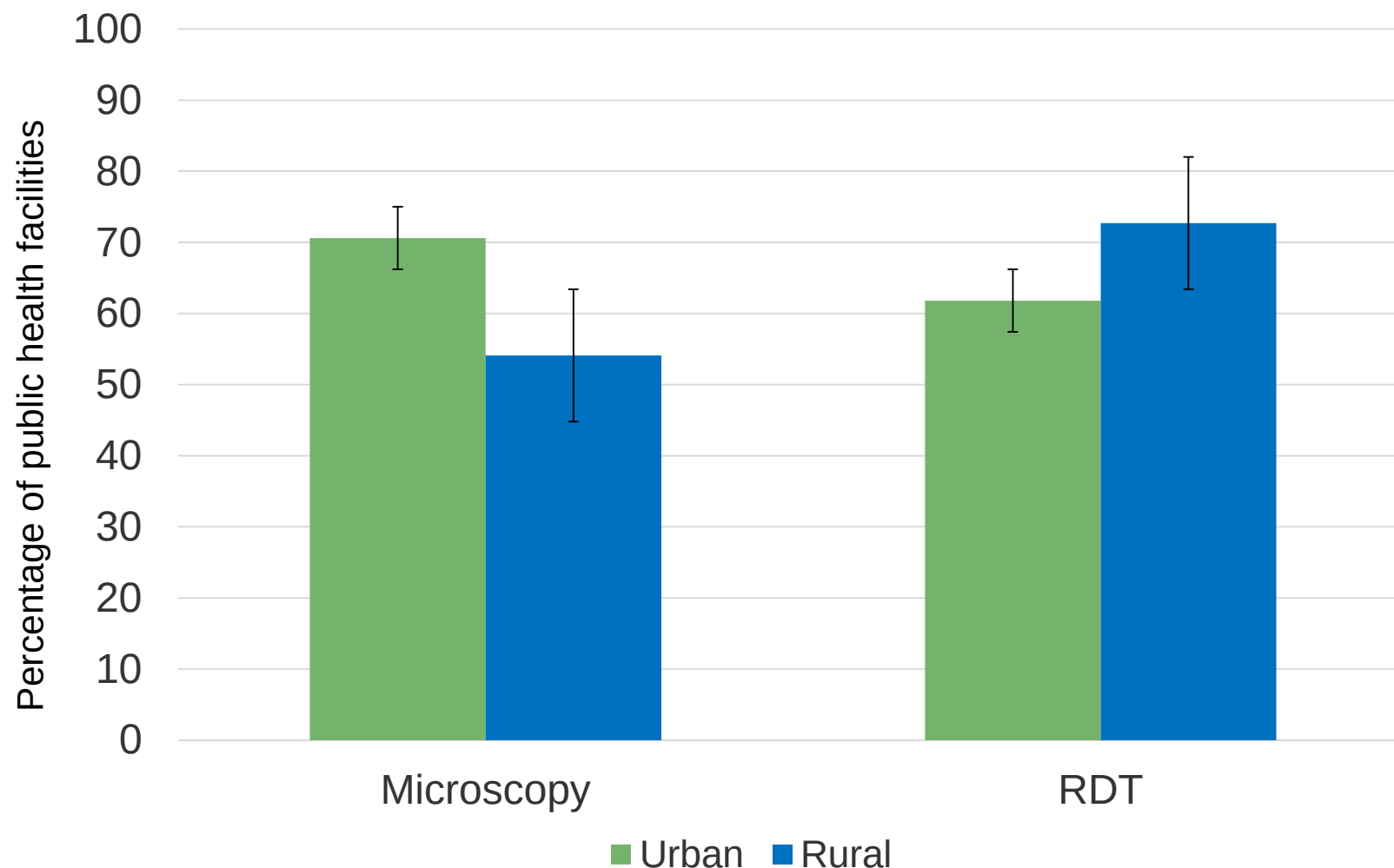
Relative market volume (sale/distribution) of antimalarial AETDs, by sector and drug class, 2014



Is the availability of malaria blood testing
different in urban and rural areas?

Malaria MST and RDT availability, urban/rural

Among public health facilities stocking antimalarials, 2014





Summary: National Trends

Summary of National Trends – 2014

1. High readiness of public health facilities to appropriately manage malaria cases:
 - ✓ QA ACTs are available in >75% of public health facilities across all survey rounds
 - This is a decline from nearly 100% in 2011
 - ✓ Access to malaria diagnostics in public health facilities has increased from 46% in 2010 to >90% in 2014
 - ✓ 80% of public health facilities had treatment for severe malaria in stock, 50% had artesunate injection (firstline treatment for severe malaria)
 - Half of all public health facilities in IPTp-targeted areas had SP available

Summary of National Trends – 2014

2. The role of the private sector in malaria case management:

- The private sector is responsible for nearly 90% of all antimalarial distribution.
 - 40% by registered pharmacies, 30% by unregistered pharmacies
 - fewer than 25% of antimalarial-stocking pharmacies had malaria blood testing available
- QA ACT availability in 2014 remained high following the end of the AMFm pilot period in 2011, particularly among private health facilities and registered and unregistered pharmacies (>80%).
- Private sector price of QA ACT increased from \$0.52 in 2011 (same price as SP) to \$1.75 in 2014 – a nearly 4 fold increase, and 3x as expensive as SP

Summary of National Trends – 2014

2. The role of the private sector in malaria case management:

- About half of all antimalarials distributed in Kenya were QA ACT, most through the private sector
- 1 in 5 antimalarials were Non QA ACT, almost exclusively through the private sector
- 1 in 4 antimalarials distributed were SP, most through the private sector
- SP is commonly available and distributed by the private sector
 - Most SP products audited were manufactured in Kenya

Summary of National Trends – 2014

3. Urban/rural comparisons:

- Availability of QA ACT in the public and private sector was similar across urban and rural areas
- Most antimalarials in urban areas were distributed through the private sector, compared with about 75% in rural areas Availability and distribution of non-quality assured ACTs among private sector outlets is higher in urban versus rural areas.
- Availability of malaria blood testing in public health facilities is similar in urban versus rural areas
- Among private sector outlets, malaria blood testing is more commonly available in urban as compared to rural areas.



Progress Against National Malaria Strategic Plan 2011-2018

Kenya Malaria Strategy 2009-2017

1. Increase capacity for malaria diagnosis and treatment
2. Increase access to affordable ACTs and diagnostics in private sector
3. Expand access to Community Health Workers
4. Secure commodities of antimalarials and diagnostics in the public sector

Progress: Kenya Malaria Strategy 2009-2011

Indicator	Public Sector	Private Sector
ACTs	✓	✓
Blood Testing	✓	✗
Increase CHWs	✗	--

Acknowledgements

- Ministry of Health
- National Malaria Control Program
- Kenya Pharmacy and Poisons Board
- Ipsos Kenya
- Fieldwork Team
- ACTwatch Team



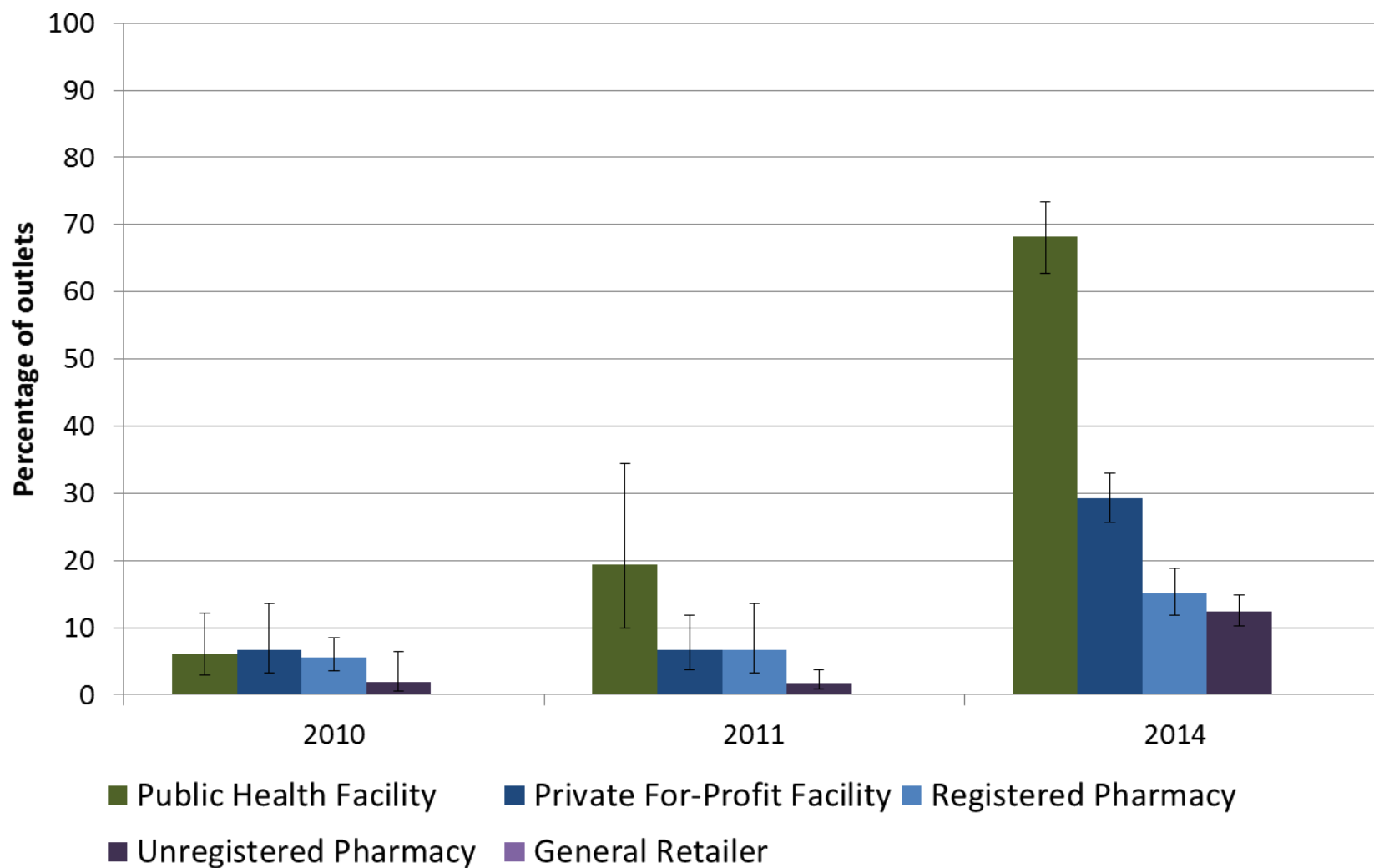


Thank you!

Annex

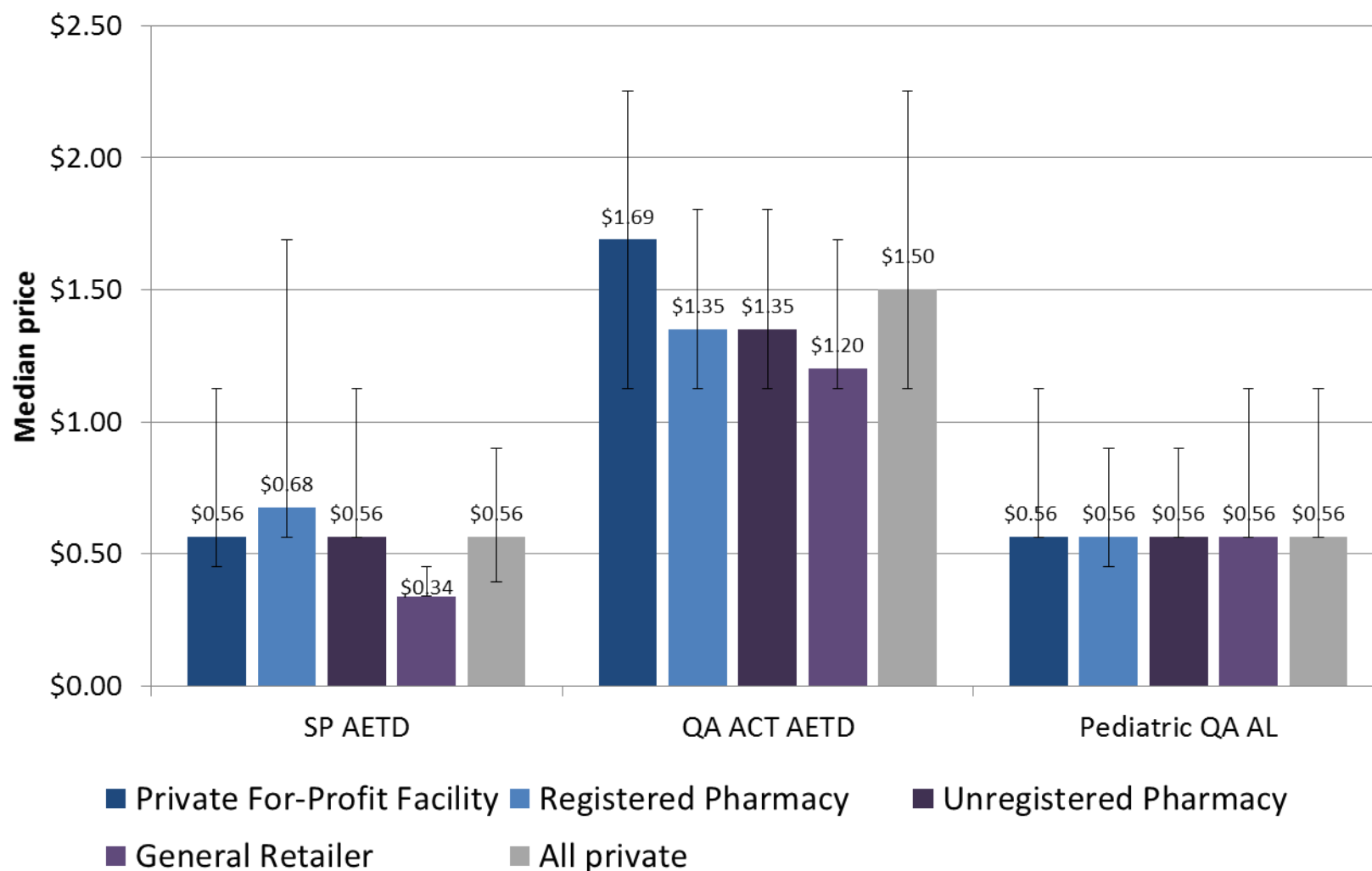
Rapid Diagnostic Test Availability (RDT)

Among outlets stocking antimalarials, 2010-2014



Private sector median price of antimalarials

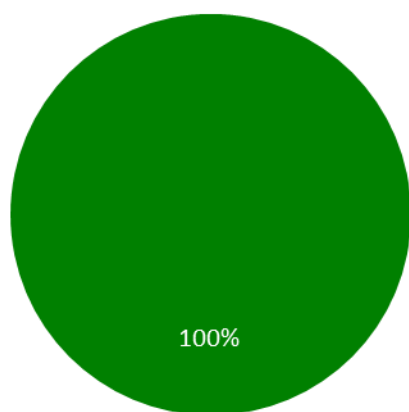
Includes SP, QA ACT adult equivalent doses (AETD) and pre-packaged pediatric QA AL, 2014



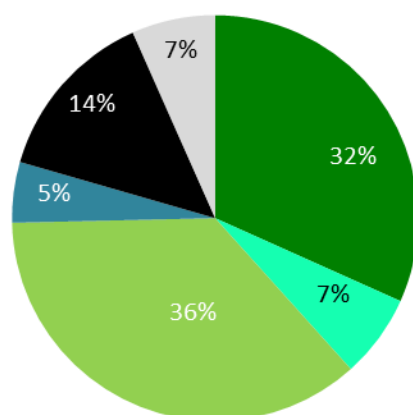
Types of ACT found among private and public outlets

Among all AM medicines audited, across sector, 2014

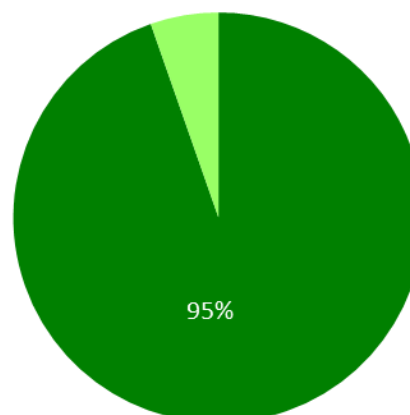
QA ACT Public
N=979



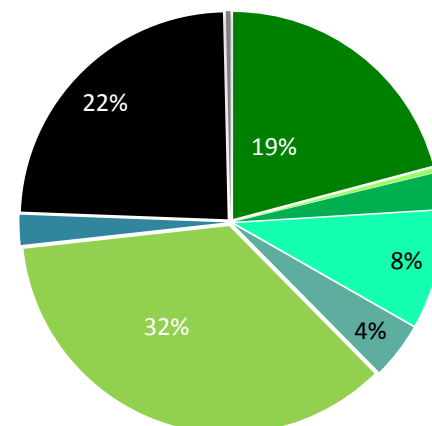
Non-QA ACT Public
N=62



QA ACT Private
N=2,245



Non-QA ACT Private
N=3,093



■ AL tablet

■ A PPQ tablet

■ AN tablet

■ DHA PPQ non-tablet

■ ASAQ tablet

■ AS SP tablet

■ AL non-tablet

■ ASMQ tablet

■ DHA PPQ tablet

■ ASMQ non-tablet