



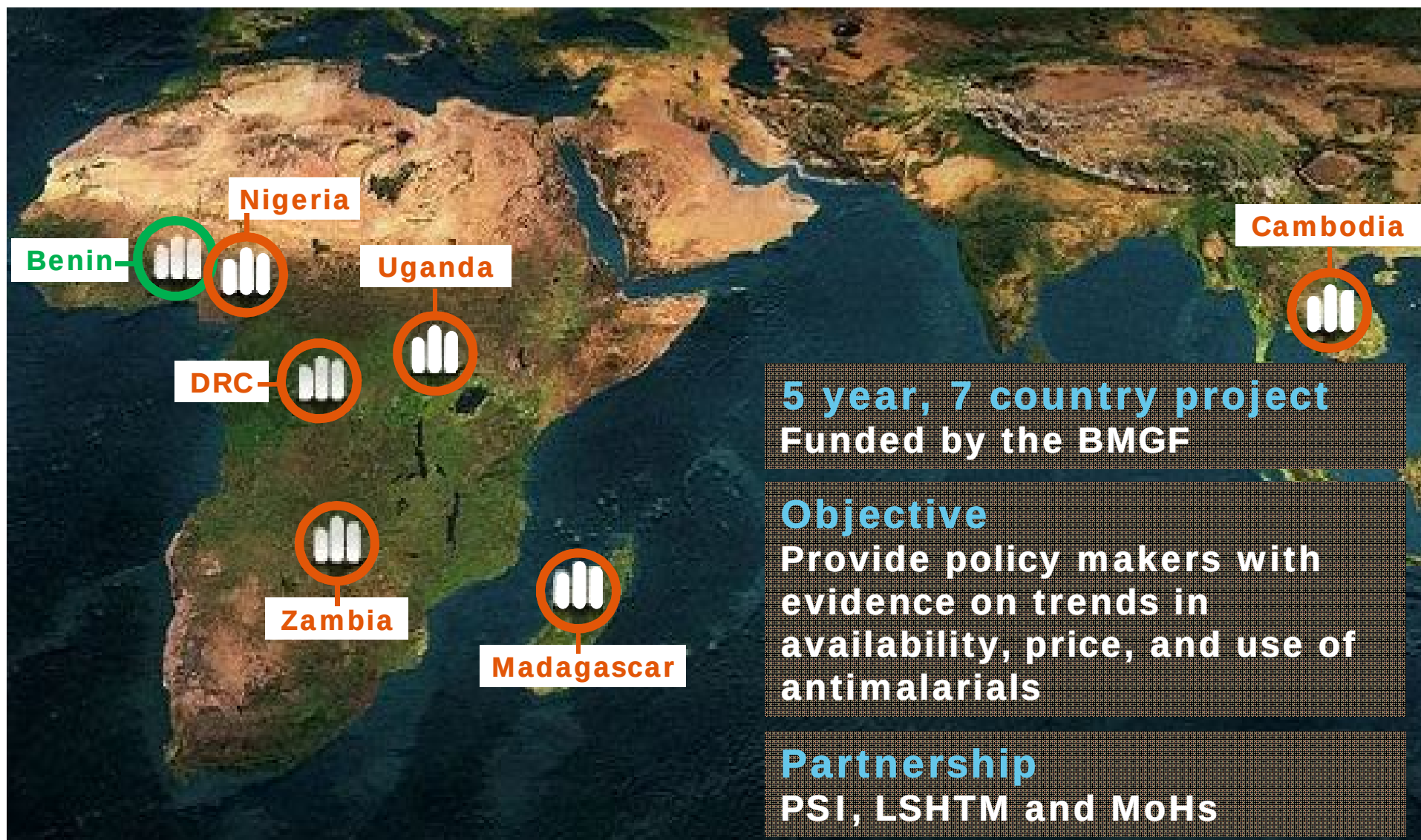
Evidence for Malaria Medicine Policy

The antimalarial retail market in Benin: results from OS3 (2011)

Stephen Poyer
on behalf of the *ACTwatch* Group



What is ACTwatch?



Research Studies - a complete picture of the market



Outlet Survey (PSI):

What are the trends in the availability, volumes and price of antimalarials?

- Three times over the life of project.



Supply Chain Research (LSHTM):

What are the determinants of the price and availability at different levels of the supply chain?

- Once over life of project

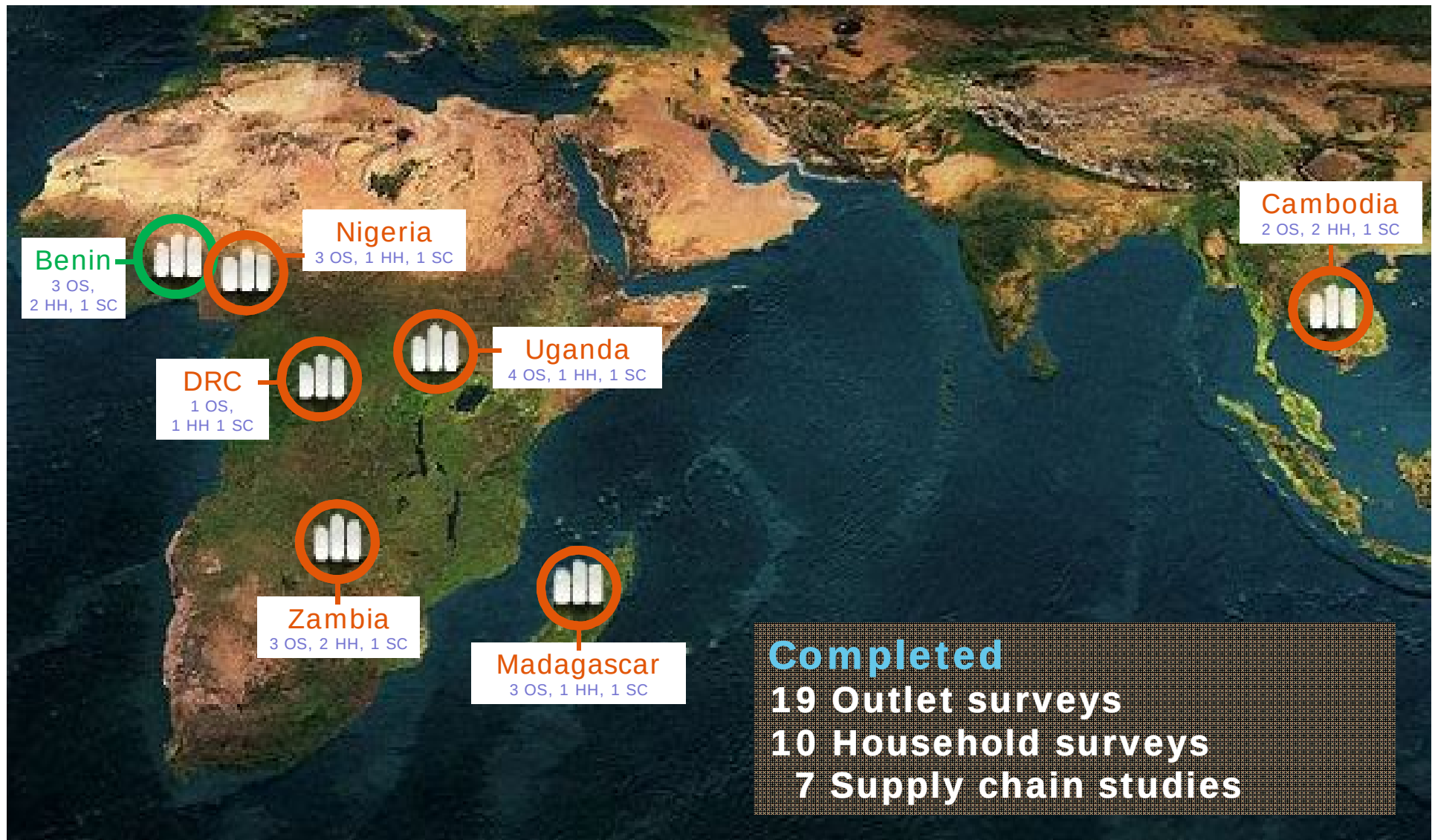


Household Survey (PSI):

What are the trends in the levels of use of different antimalarials. What are the determinants of use?

- Two times over the life of project.

What have we done to date?



Benin Country Background

Adopted AL as first-line treatment in March 2004
Implemented at scale by mid-2008.

Oral artemisinin monotherapy banned in 2008.

At the time of data collection:

Receiving funding for national-scale up of CHWs through Global Fund Round 7 and RCC:

ACT used at the community level;
RDTs not used.

Policy of presumptive treatment.

RDTs free in the public sector.

ACT not free in the public sector ($\approx \$0.33$ per 6 tabs AL).



Benin Survey Details

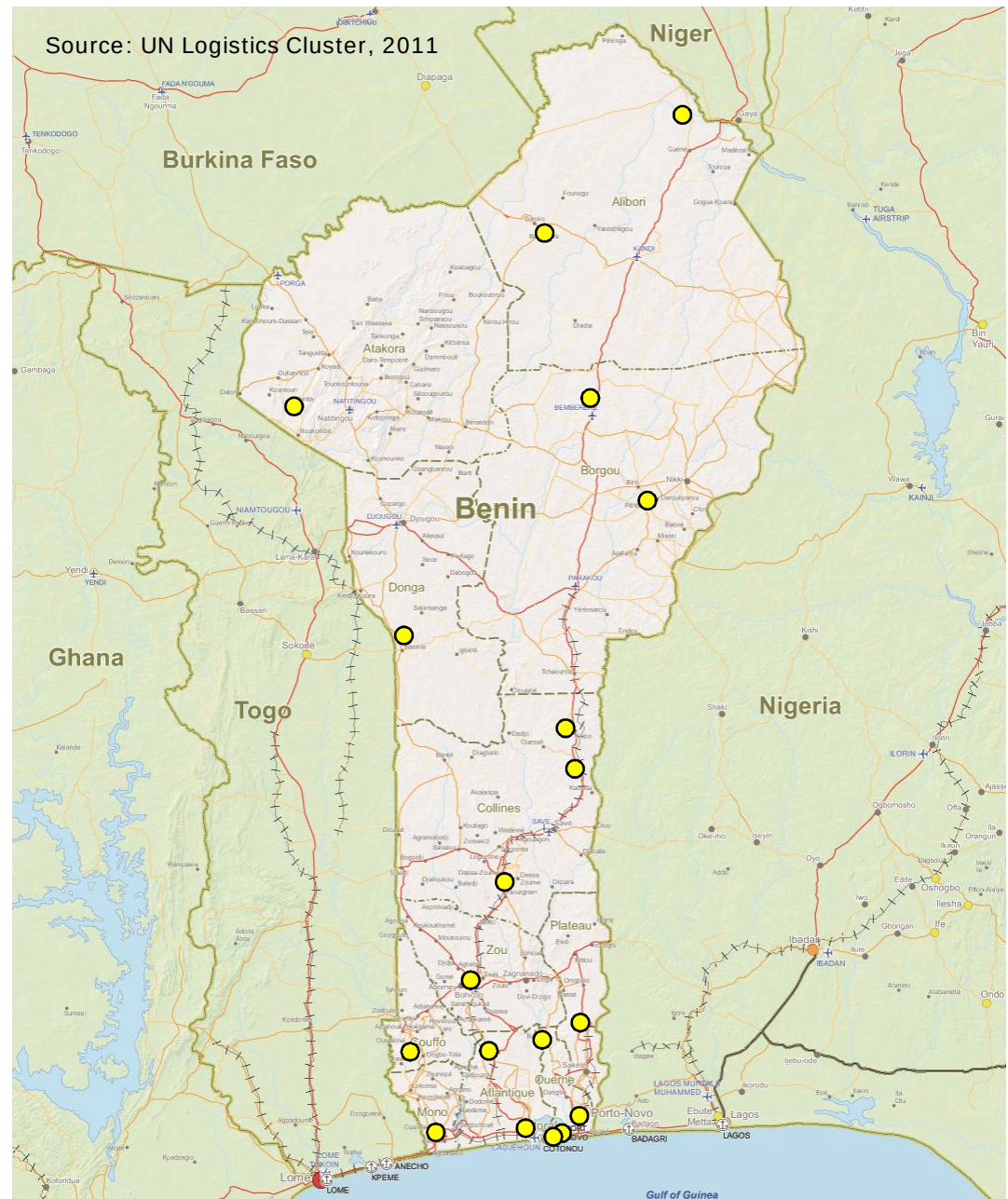
19 *Arrondissements* selected PPS on population size.

PHFs and Pharmacies were over-sampled.

Census of all outlets with the potential to stock antimalarials.

Audit sheet used to record brand, generics, strengths, formulation, price and volumes sold.

Provider questionnaire.



Data Analysis

Indicators presented at the national-level

Accounting for the survey design during analysis

- Sample weights applied

- Clustering effect on standard errors

Classification of antimalarials

- First-line quality assured ACTs (FAACTs)

- Non-artemisinin therapies (nAT)

- Oral artemisinin monotherapies

- Also look at some specific non-artemisinin therapies

Price and volume calculations based on an **Adult Equivalent Treatment Dose** (AETD)

OS3 RESULTS



Data collection in Godomey

Survey Sample

Data collection: 8th – 30th April, 2011

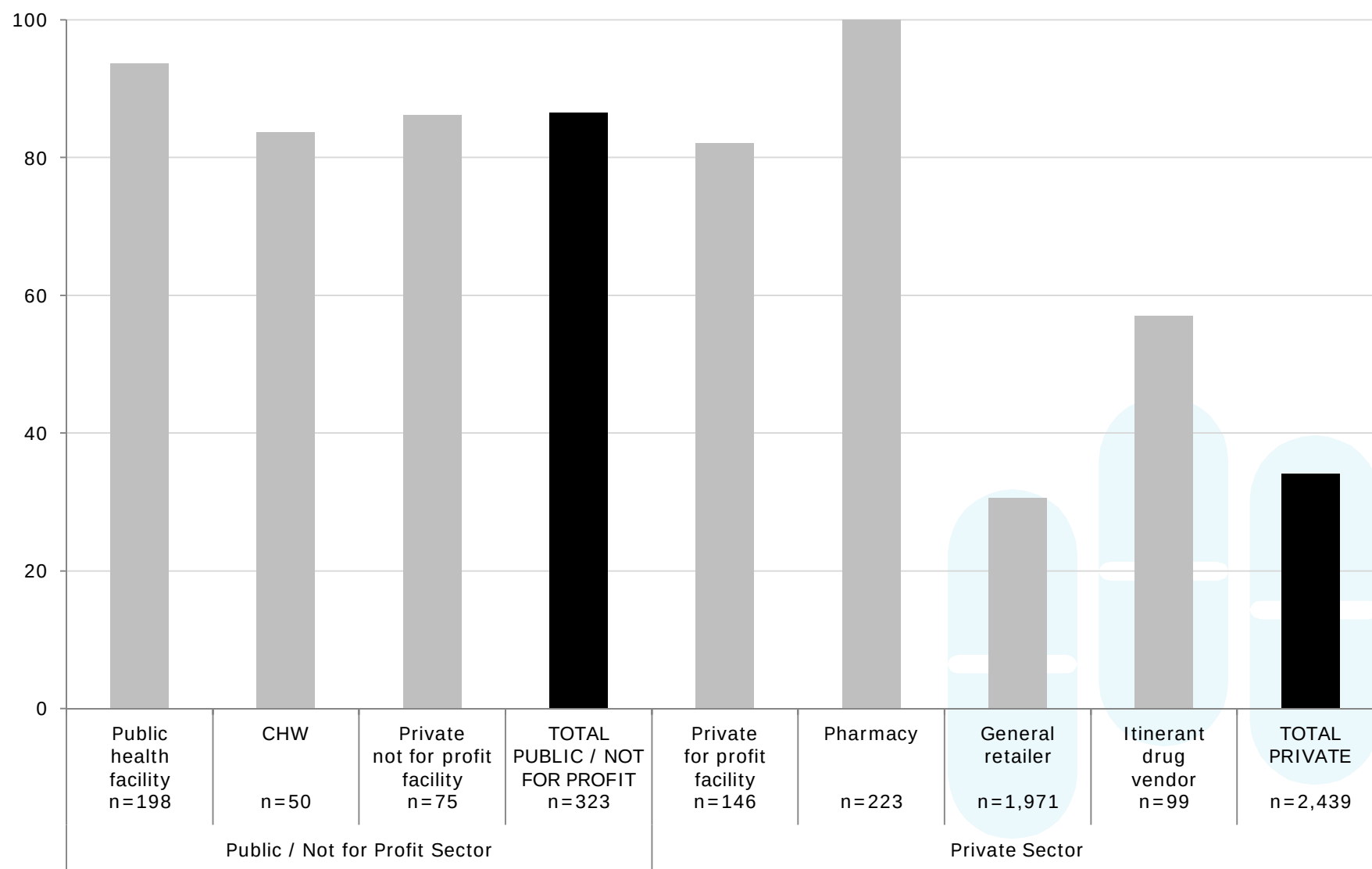
Enumerated	Screened	Met screening criteria	Interviewed	With AMs in stock at time of visit
2,999	2,897	1,549	1,420	1,242

8,990 antimalarials audited

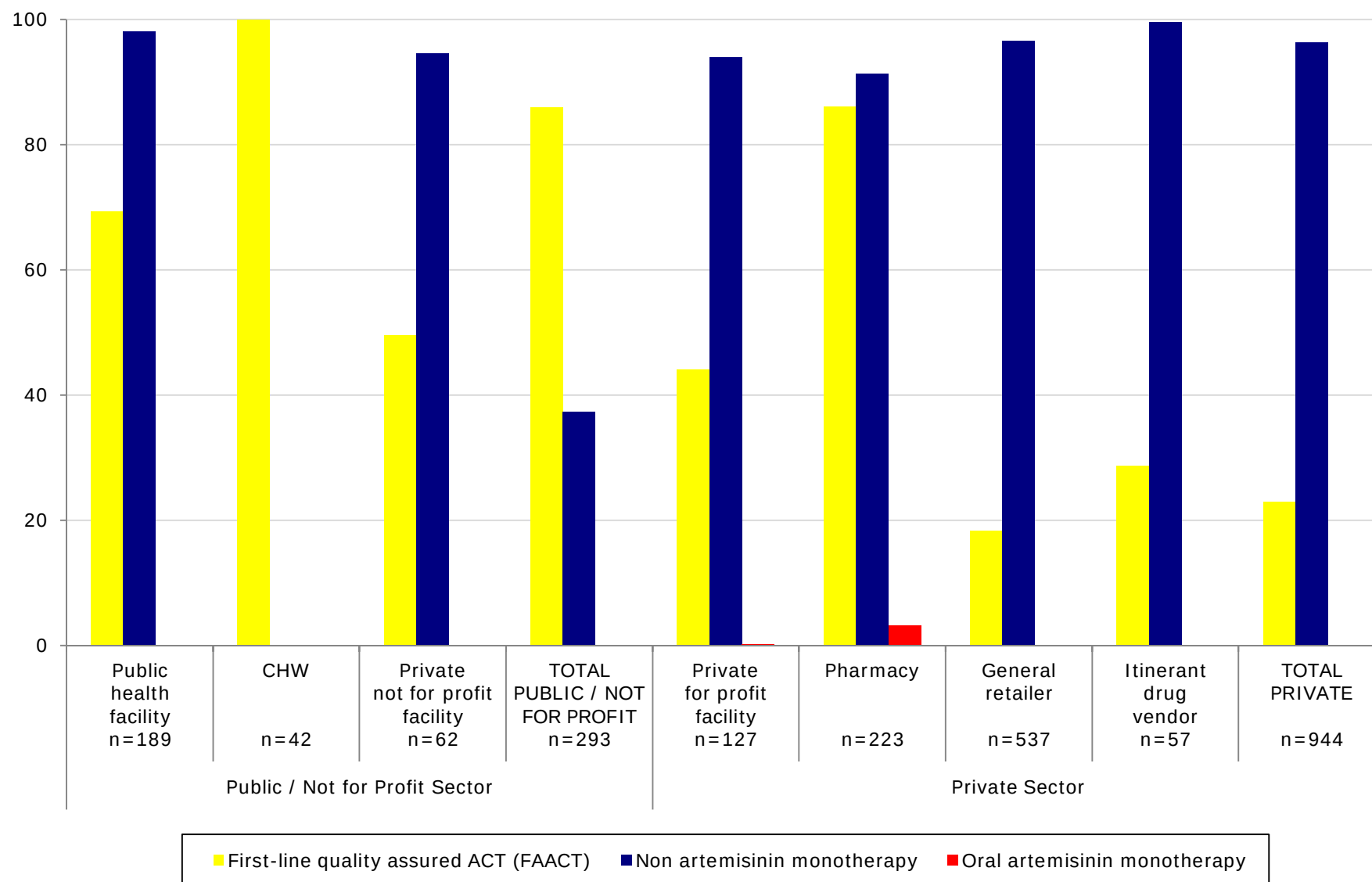
Number of outlets with antimalarials in stock

	Number of outlets	Number of AMs audited
Public health facilities	189	1,017
CHWs	42	53
Private not-for-profit facilities	62	271
Private for-profit facilities	127	465
Pharmacies	223	5,881
General Retailers	540	1,167
Hawkers	57	133
<i>Total</i>	1,240*	8,987*

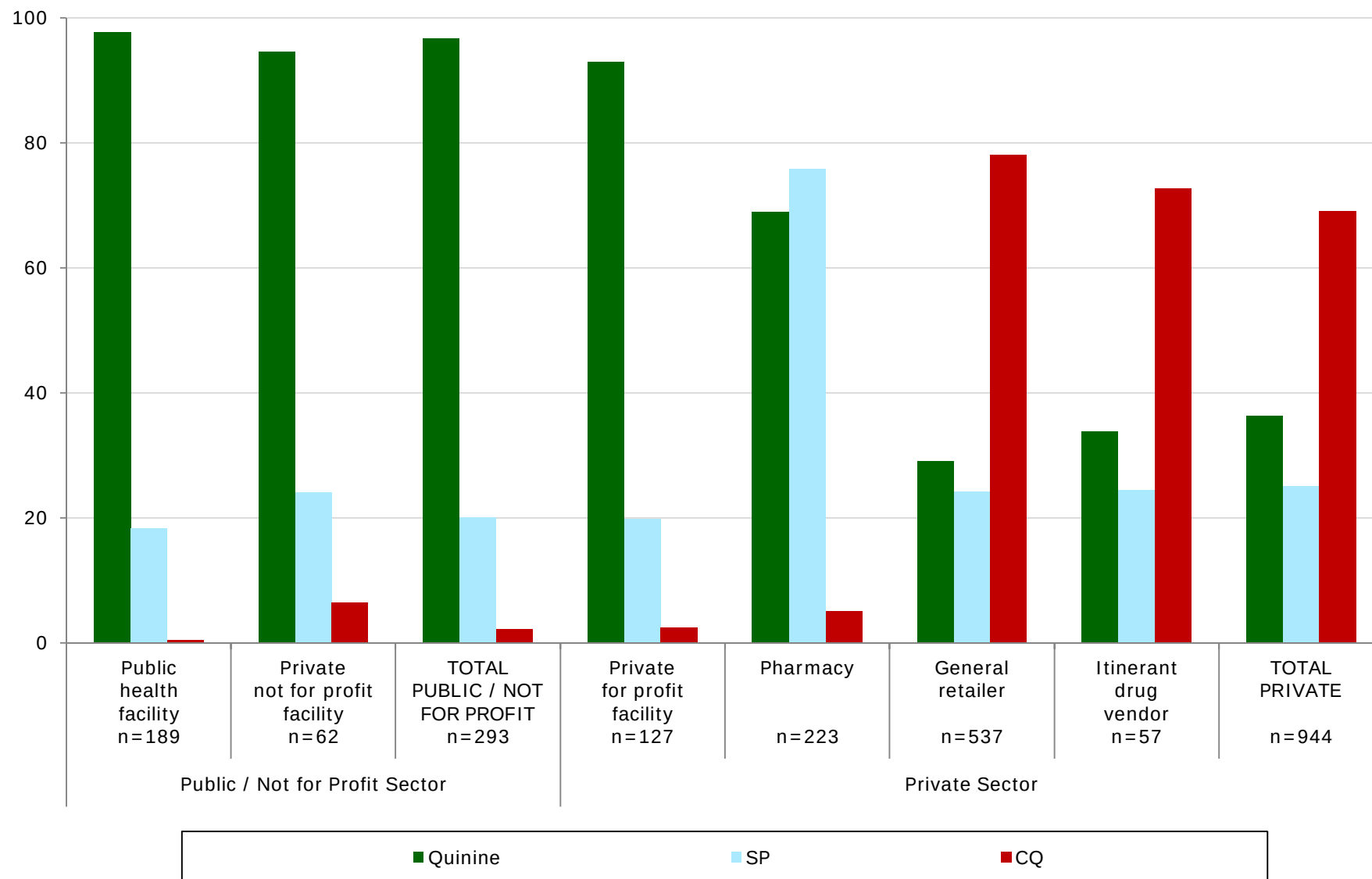
Availability of antimalarials (among all screened outlets)



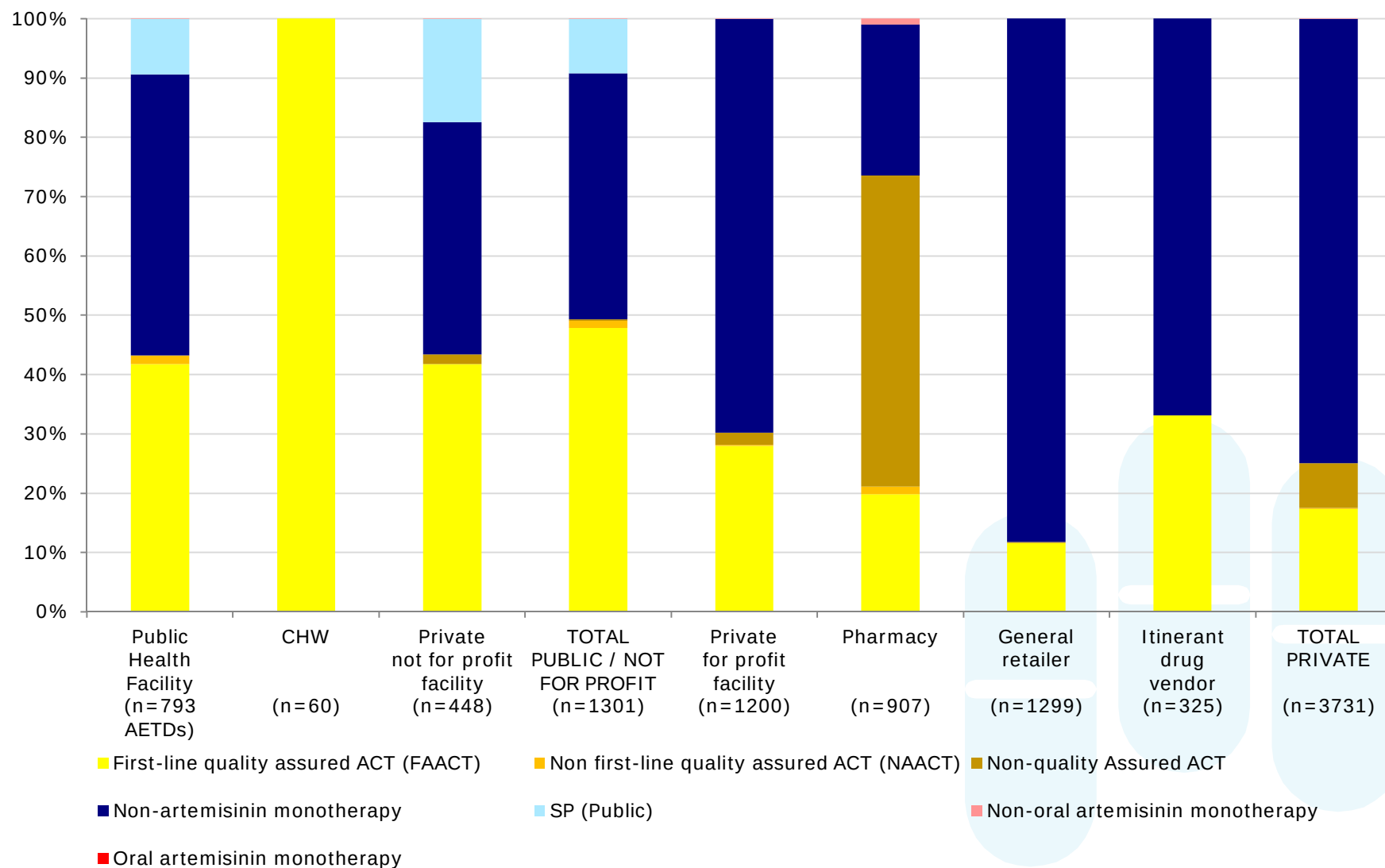
Availability of key classes of antimalarials (among outlets stocking at least one antimalarial)



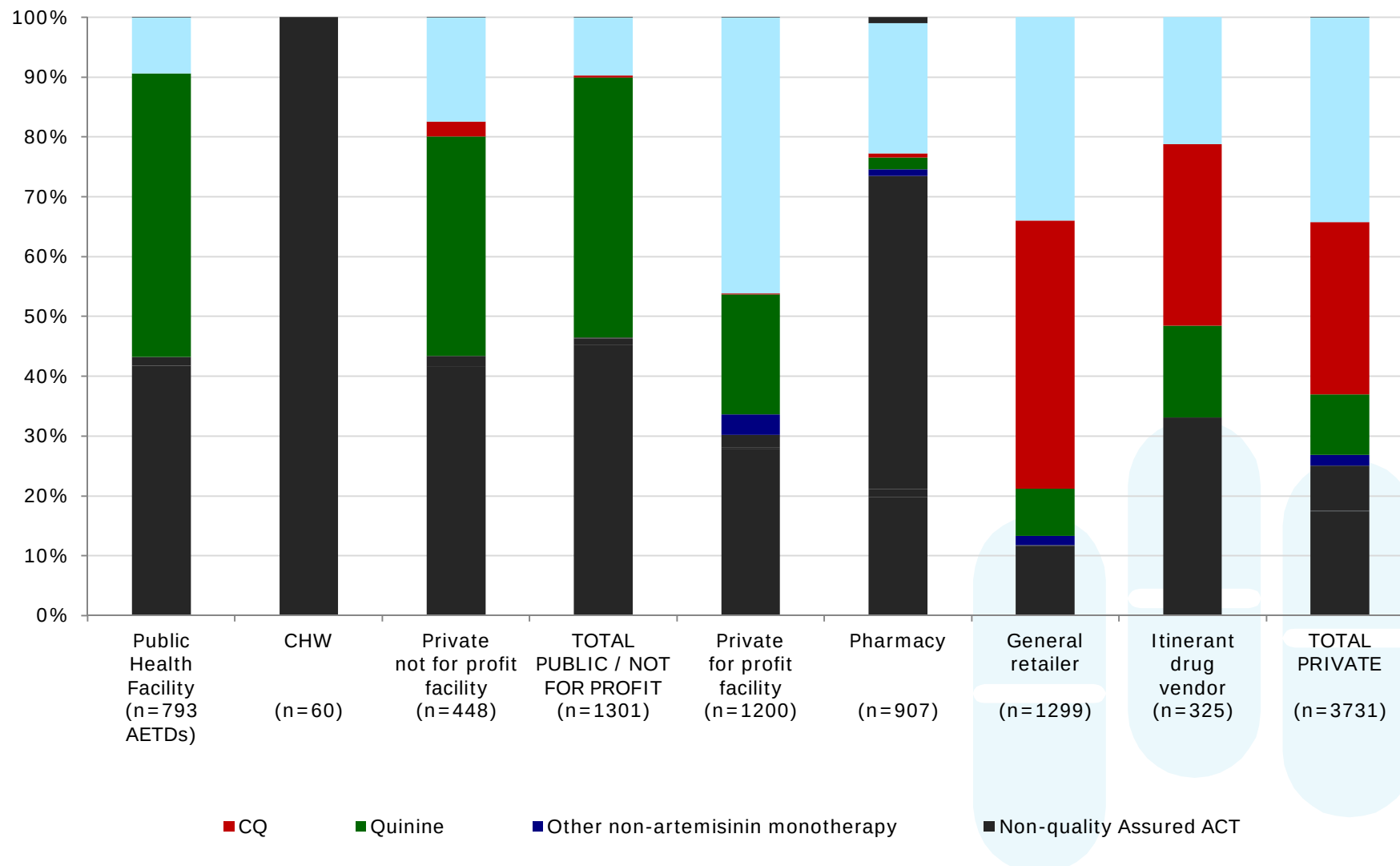
Availability of different non-artemisinin therapies (among outlets stocking at least one antimalarial, ex CHWs)



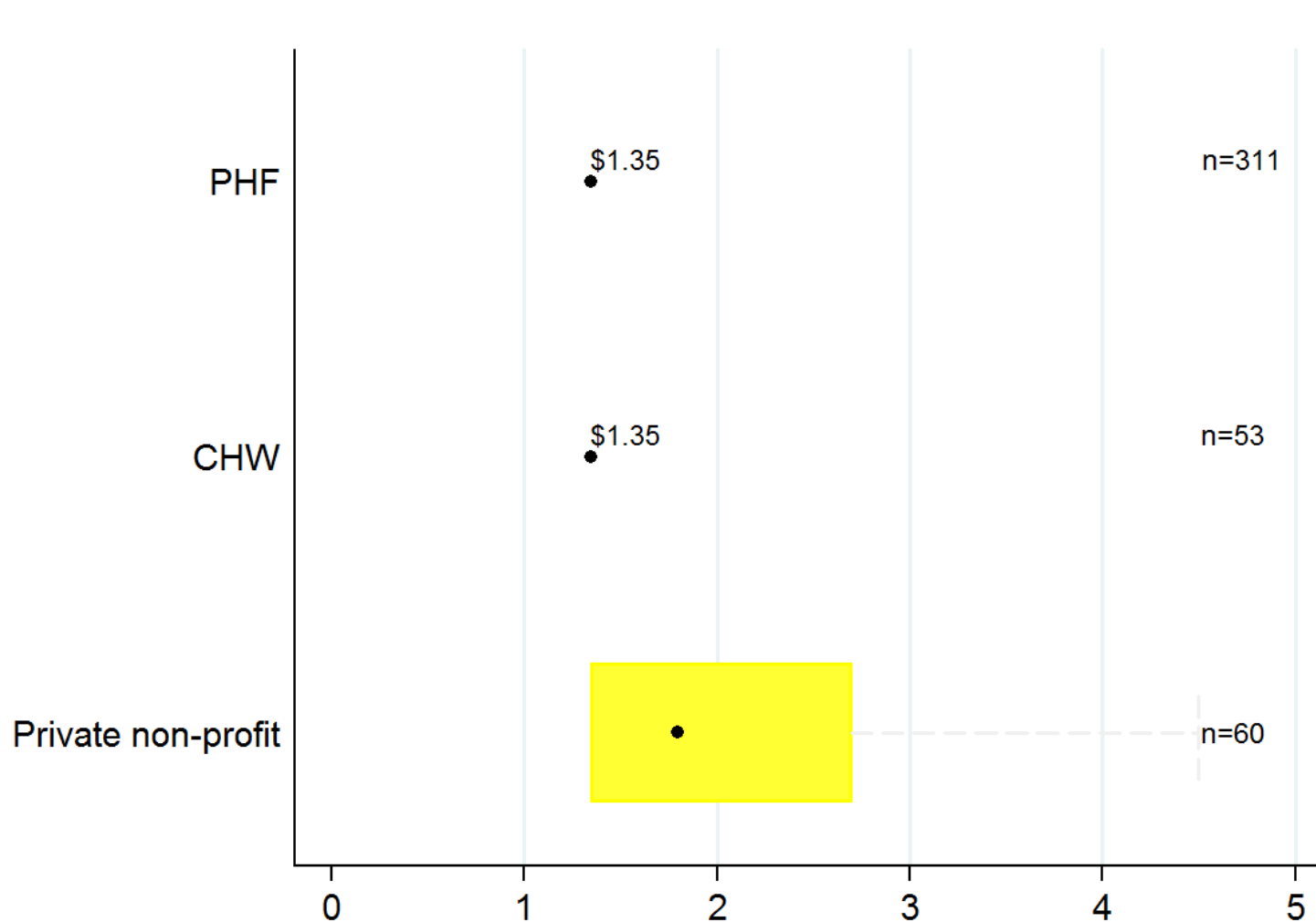
Market share within outlet type



Market share within outlet type – focus on nAT

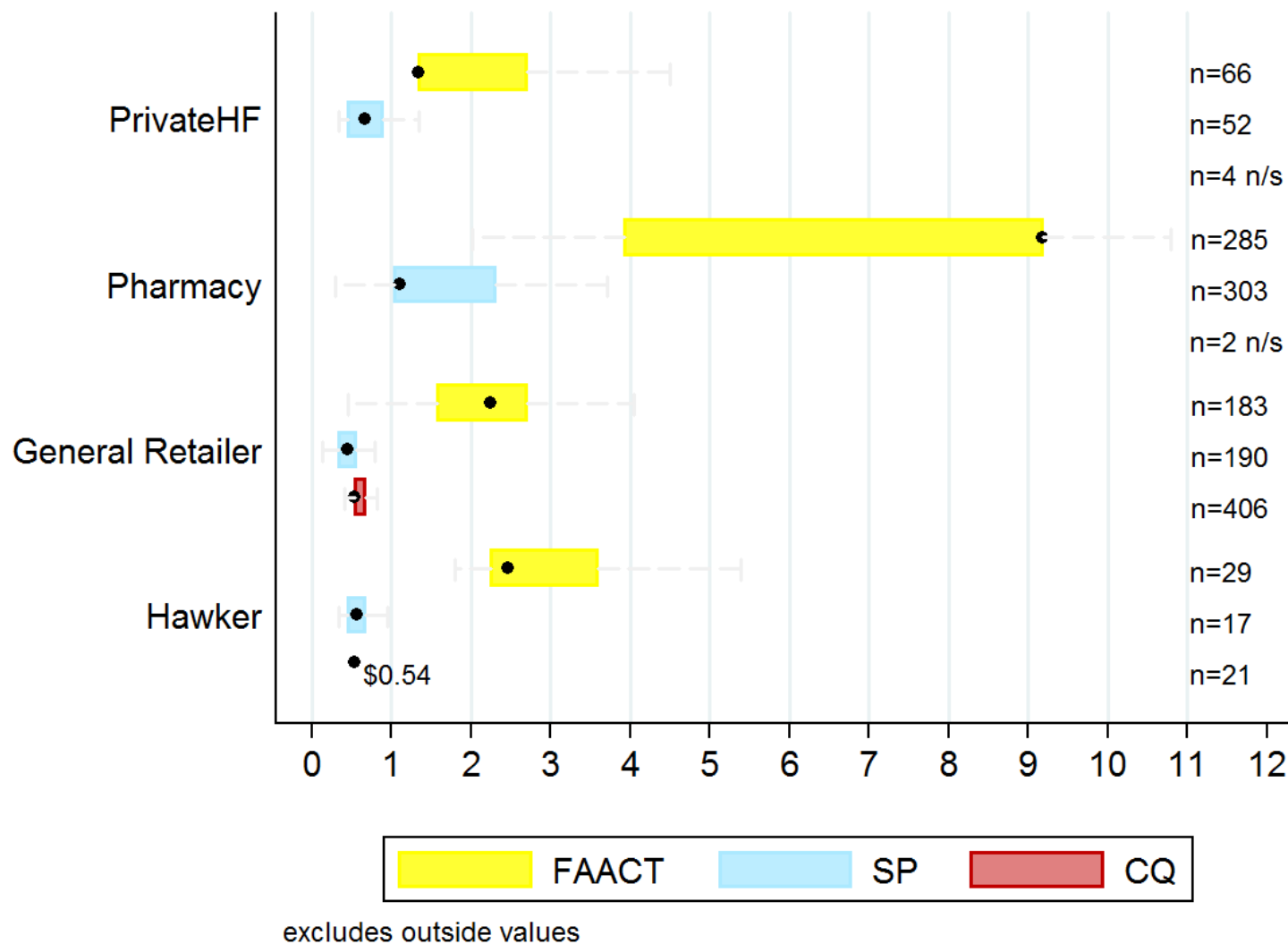


Price of FAACT in the public/not-for-profit sector (US\$)



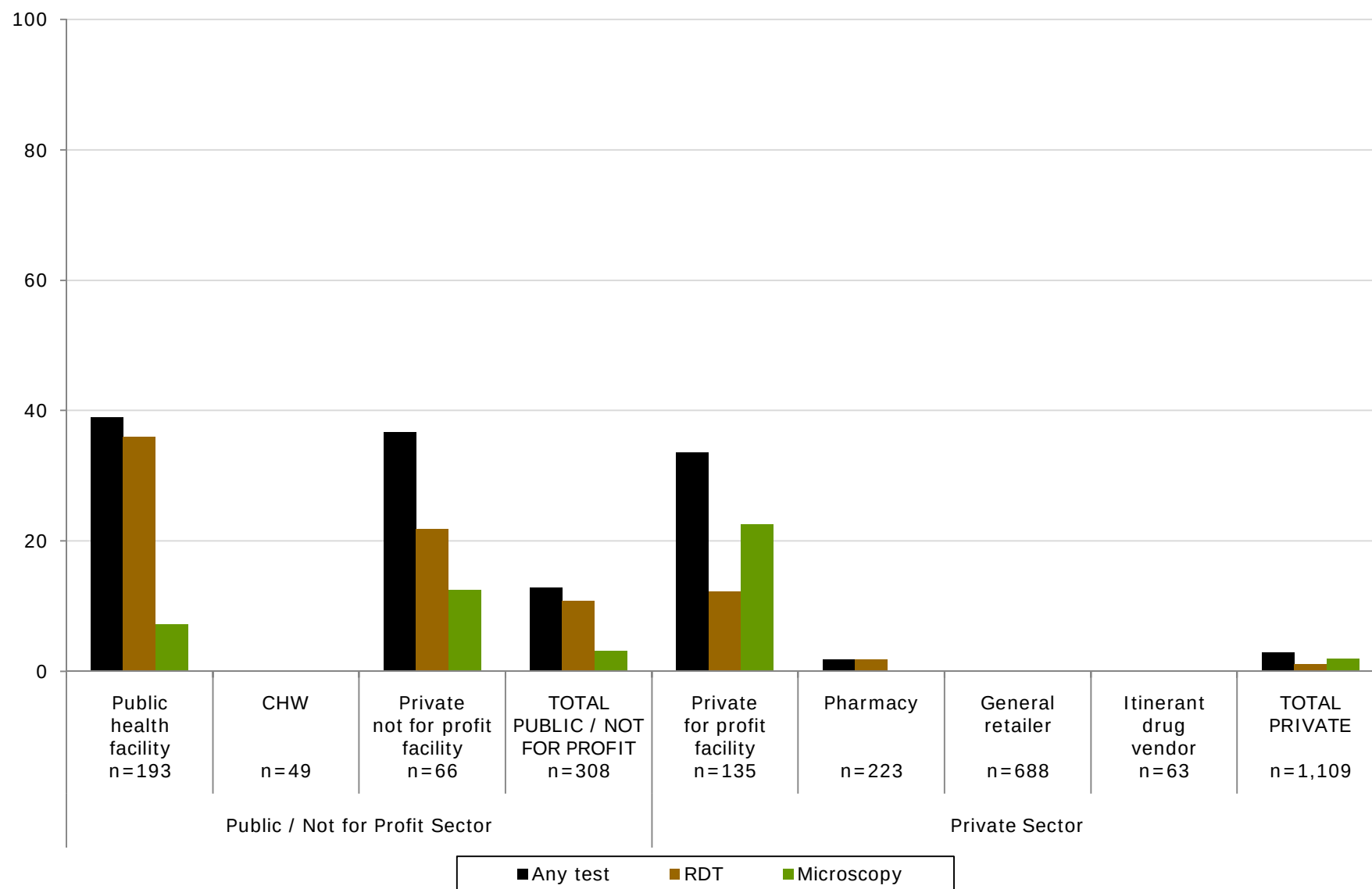
Prices converted to US\$ using average exchange rate for data collection period.

Price of FAACT and nAT in the private sector (US\$)

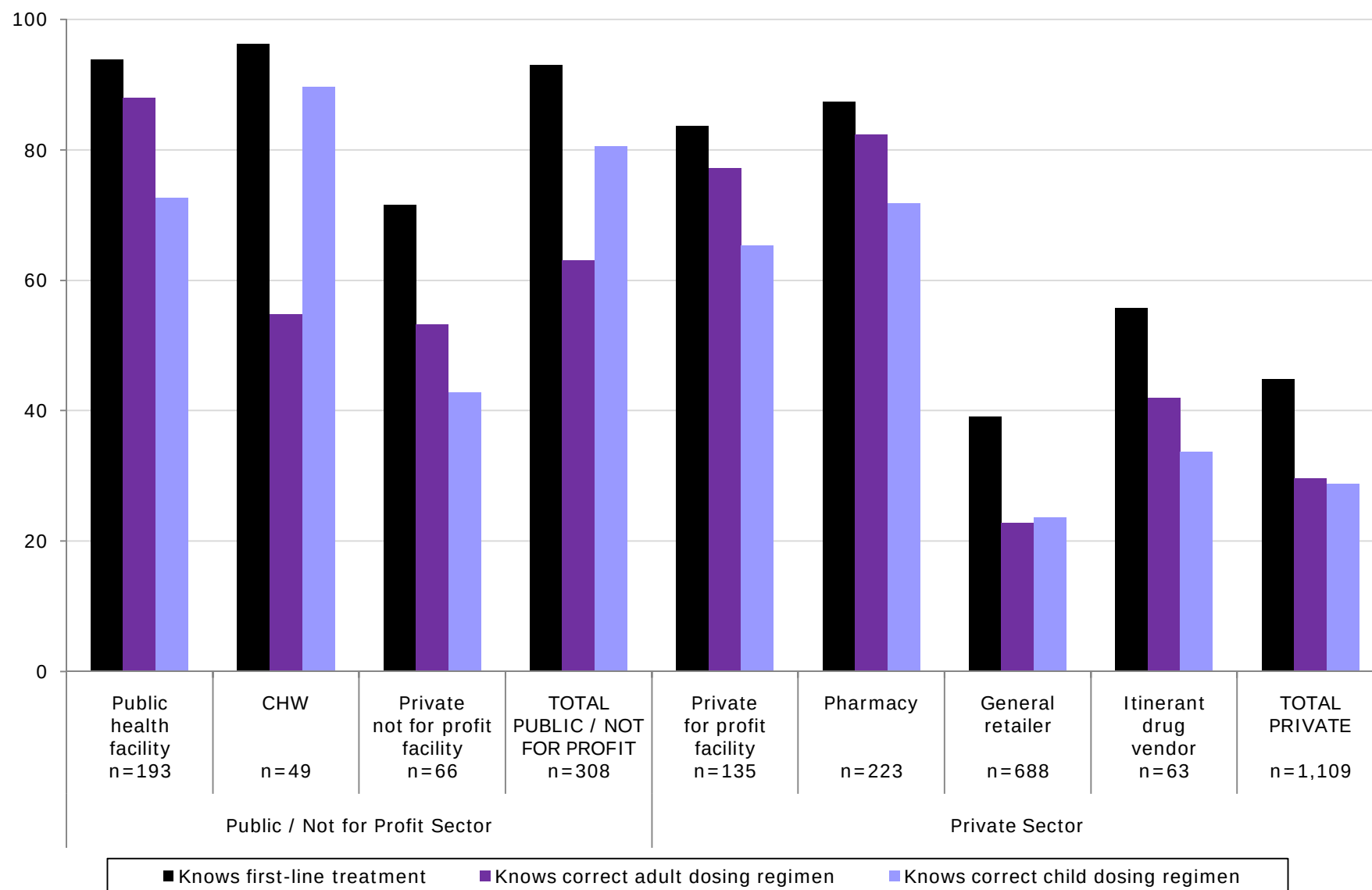


Prices converted to US\$ using average exchange rate for data collection period.

Availability of testing (among recent antimalarial stockists)



Provider knowledge (among recent antimalarial stockists)

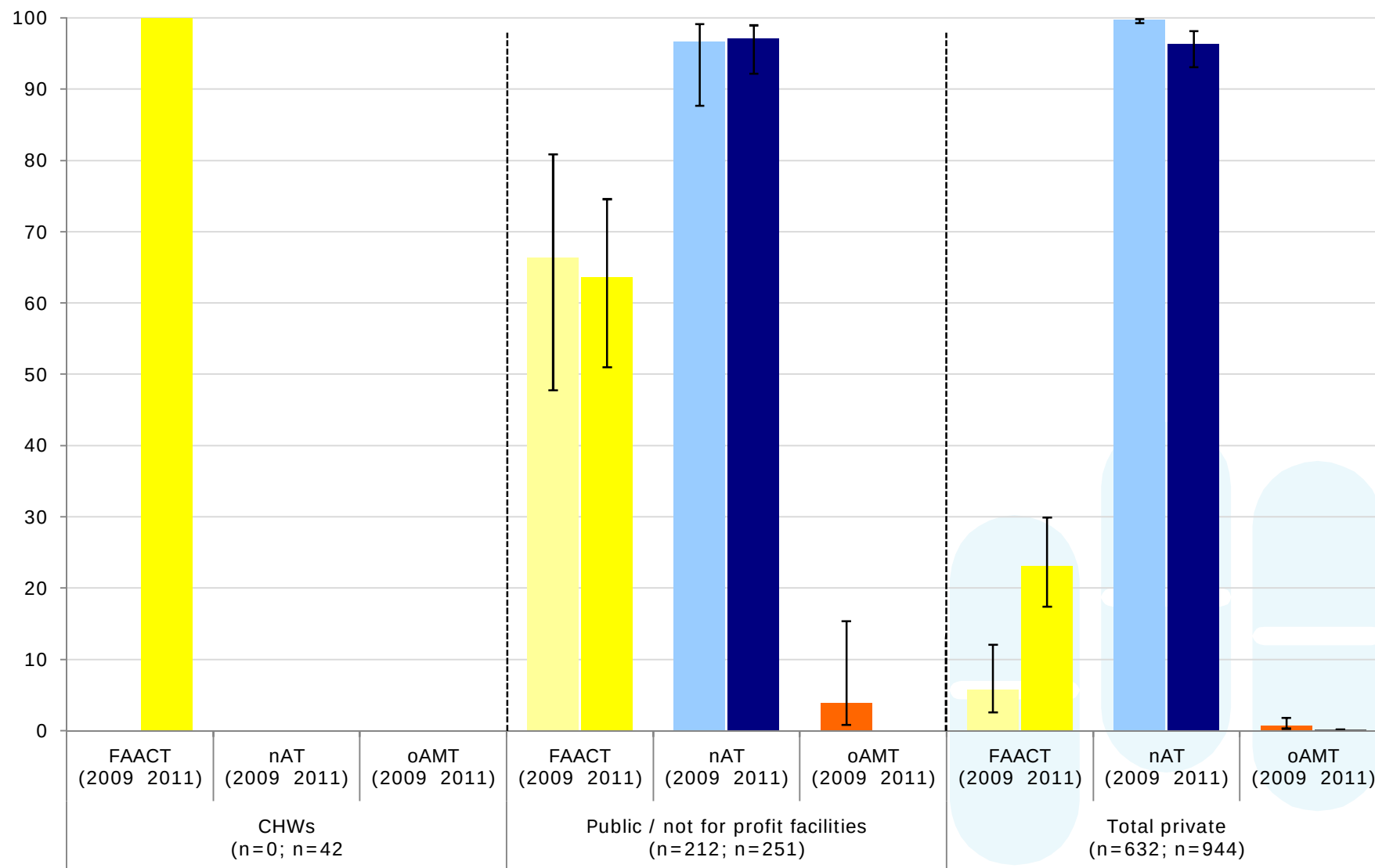


OS2 - OS3 TRENDS

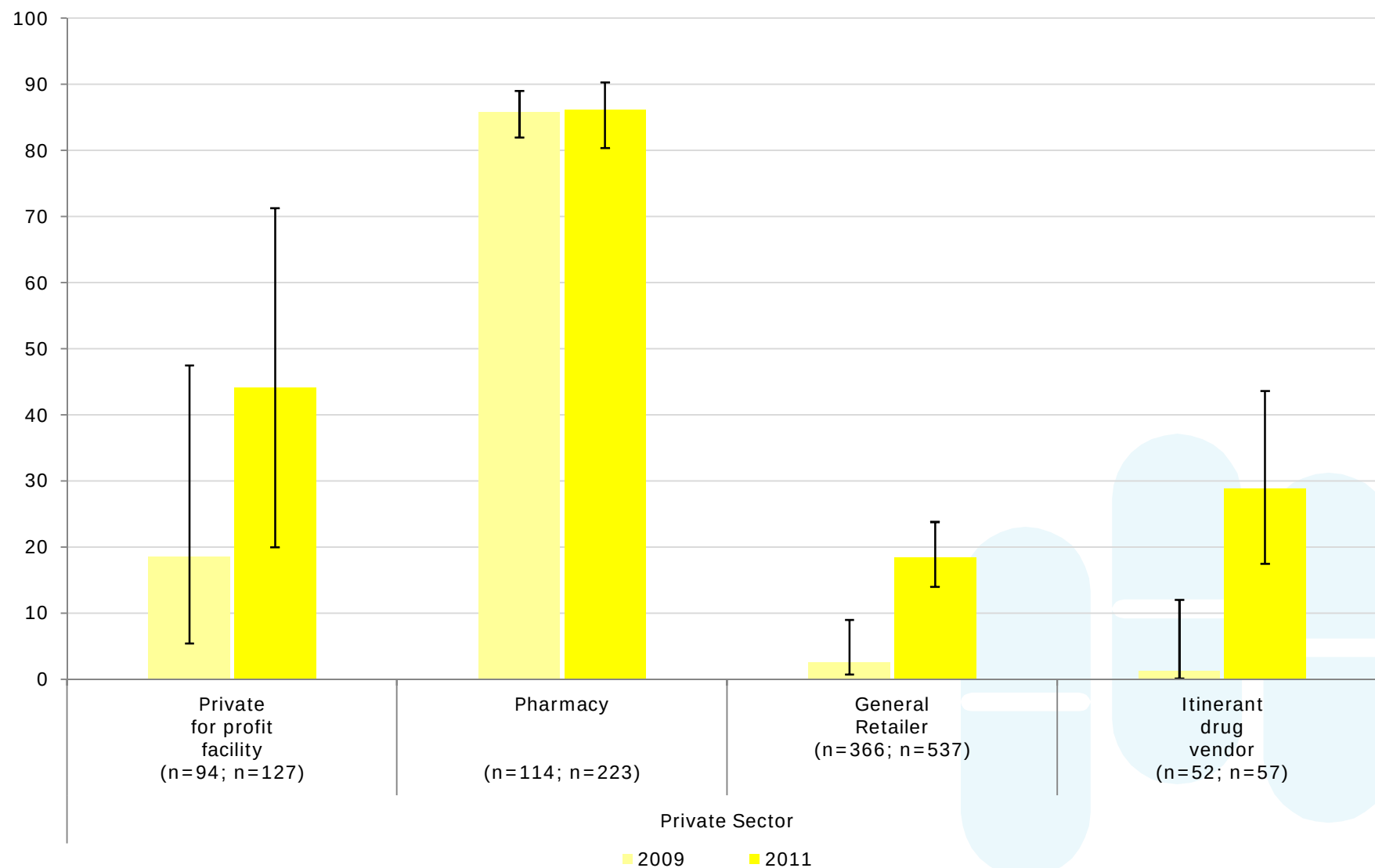


NGO Health Facility, field practice

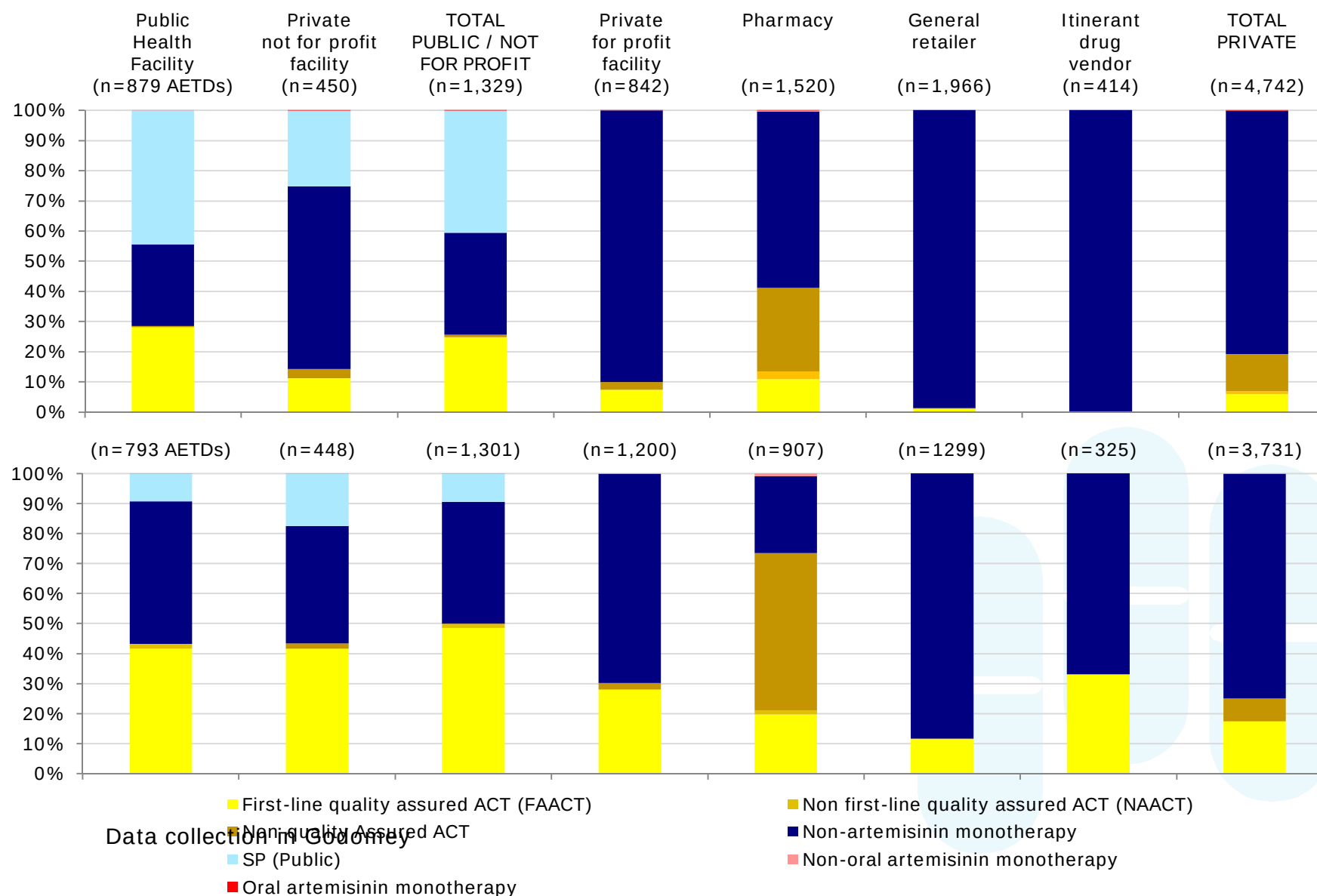
Availability of key classes of antimalarials by sector and survey round



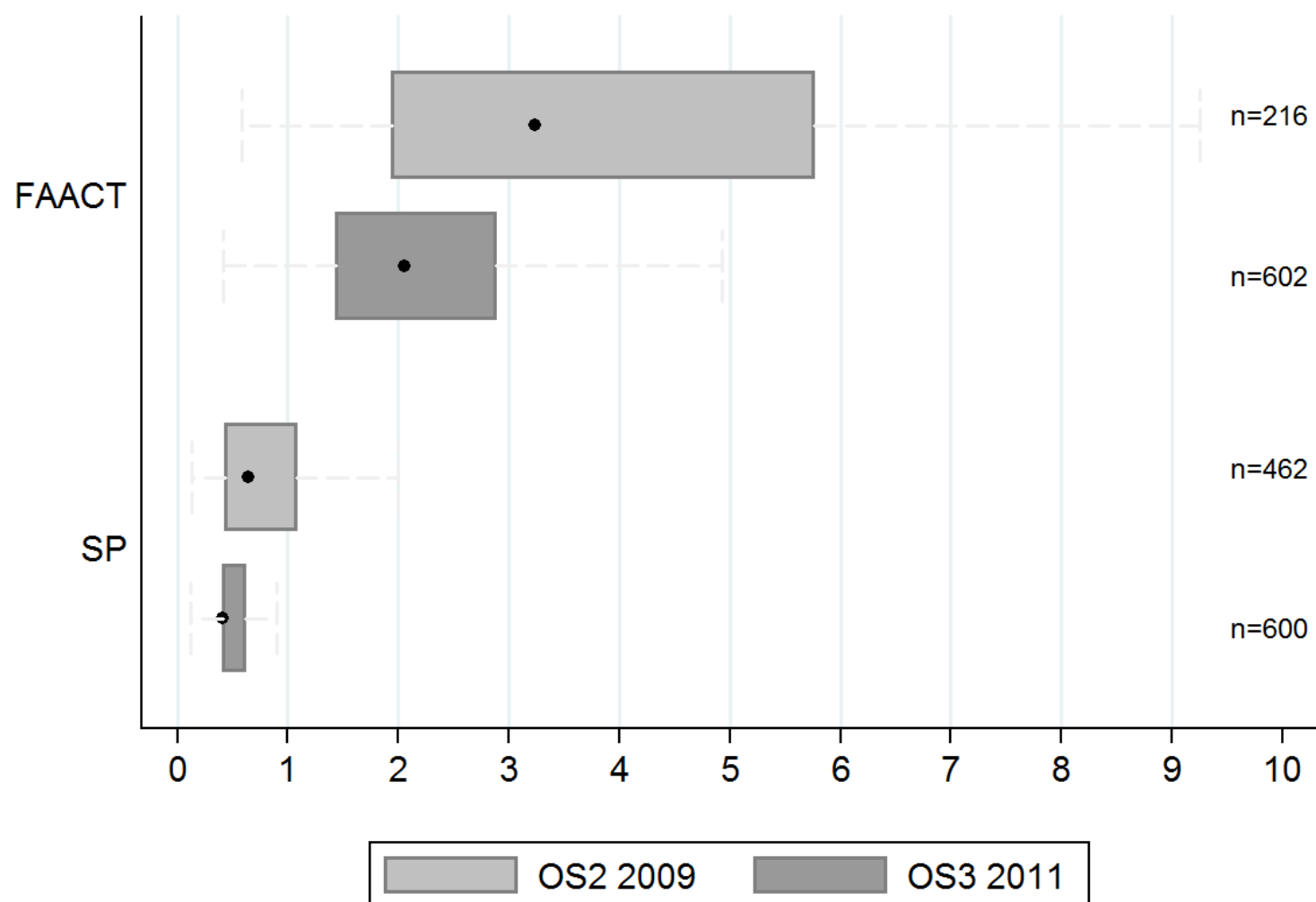
Availability of FAACT by private sector outlet and survey round



Market share within outlet type by survey round

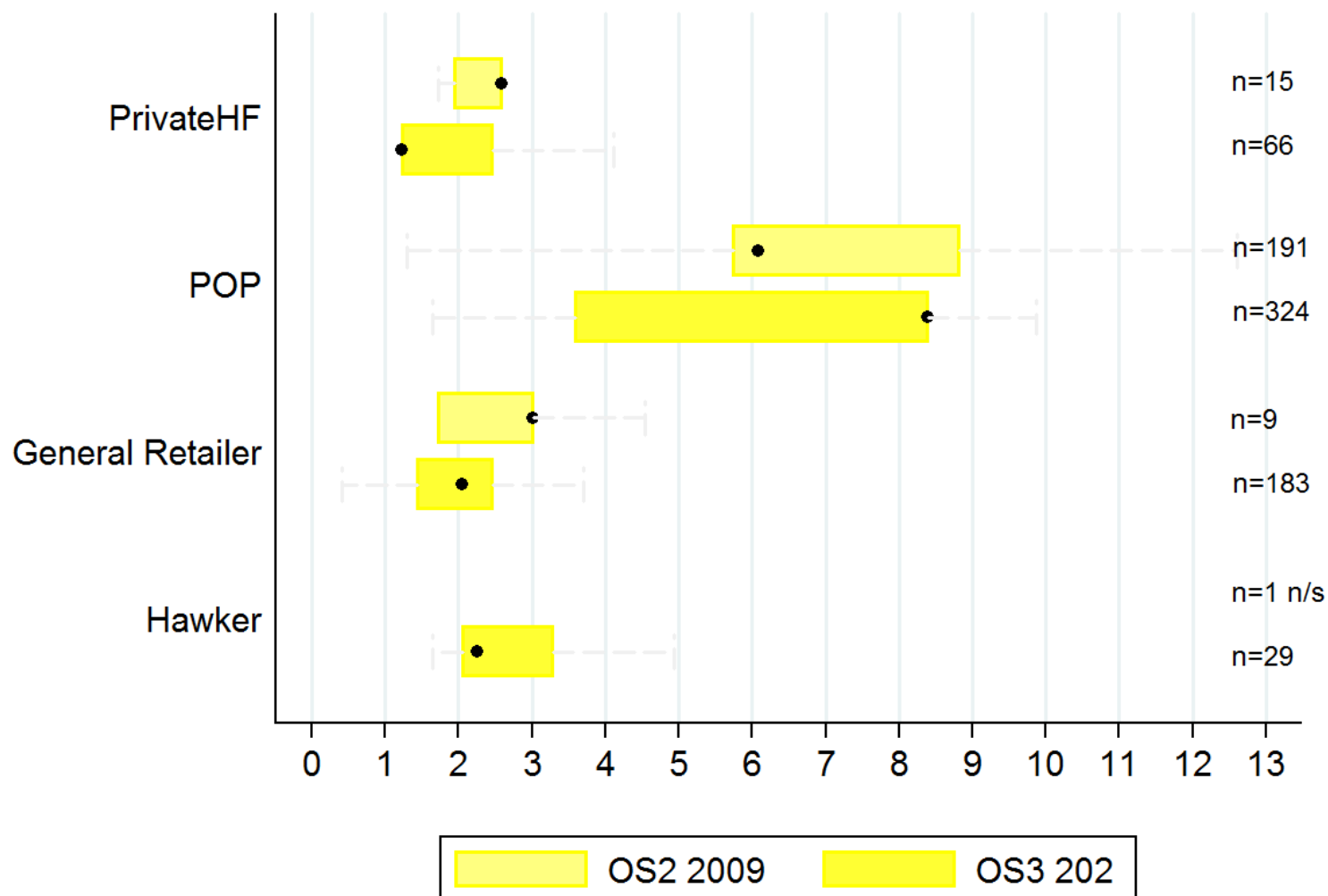


Private sector price of FAACT and SP by survey round (US\$)



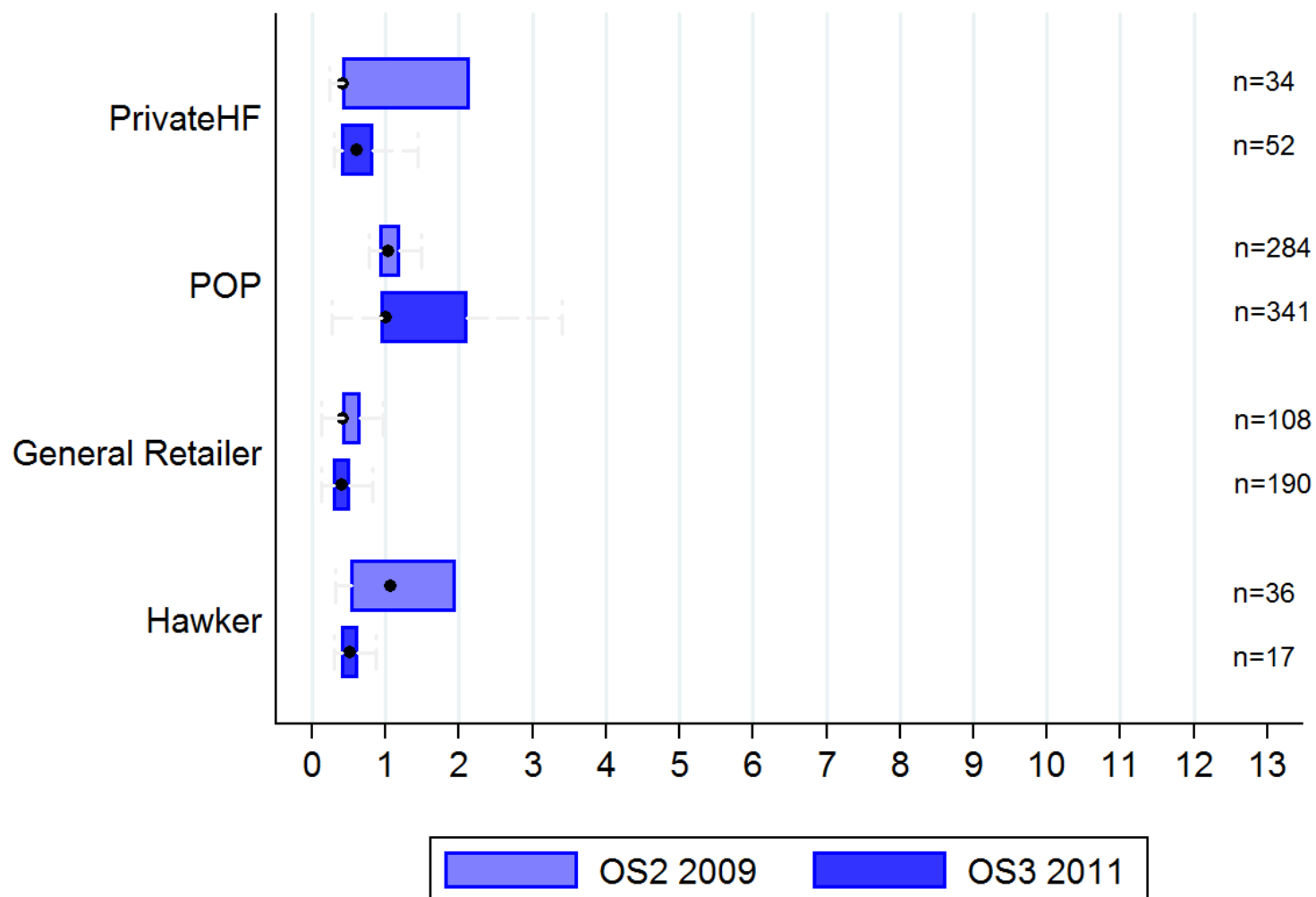
Prices in constant 2009 US\$

Private sector price of FAACT by outlet type and survey round (US\$)



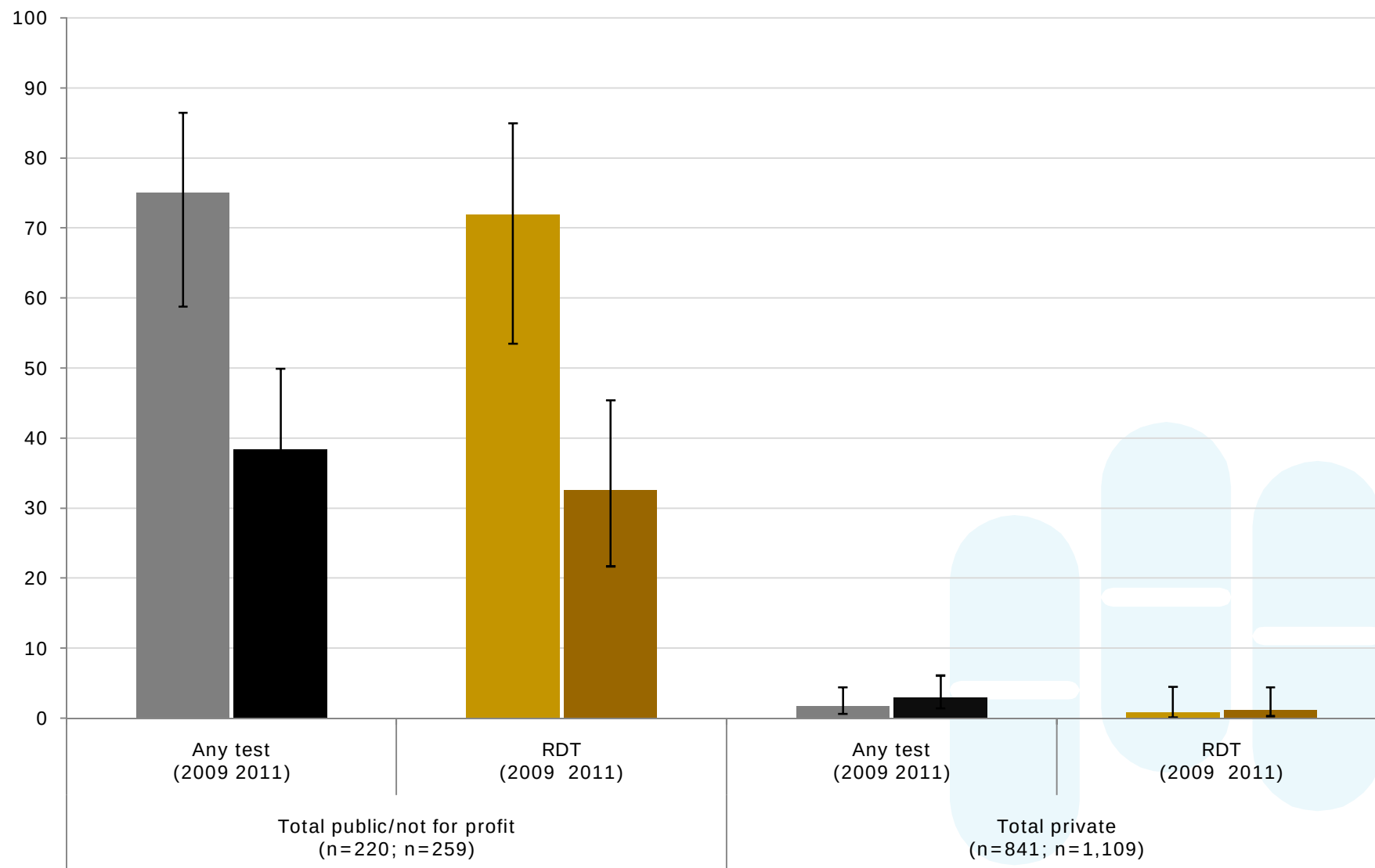
Prices in constant 2009 US\$

Private sector price of SP by outlet type and survey round (US\$)

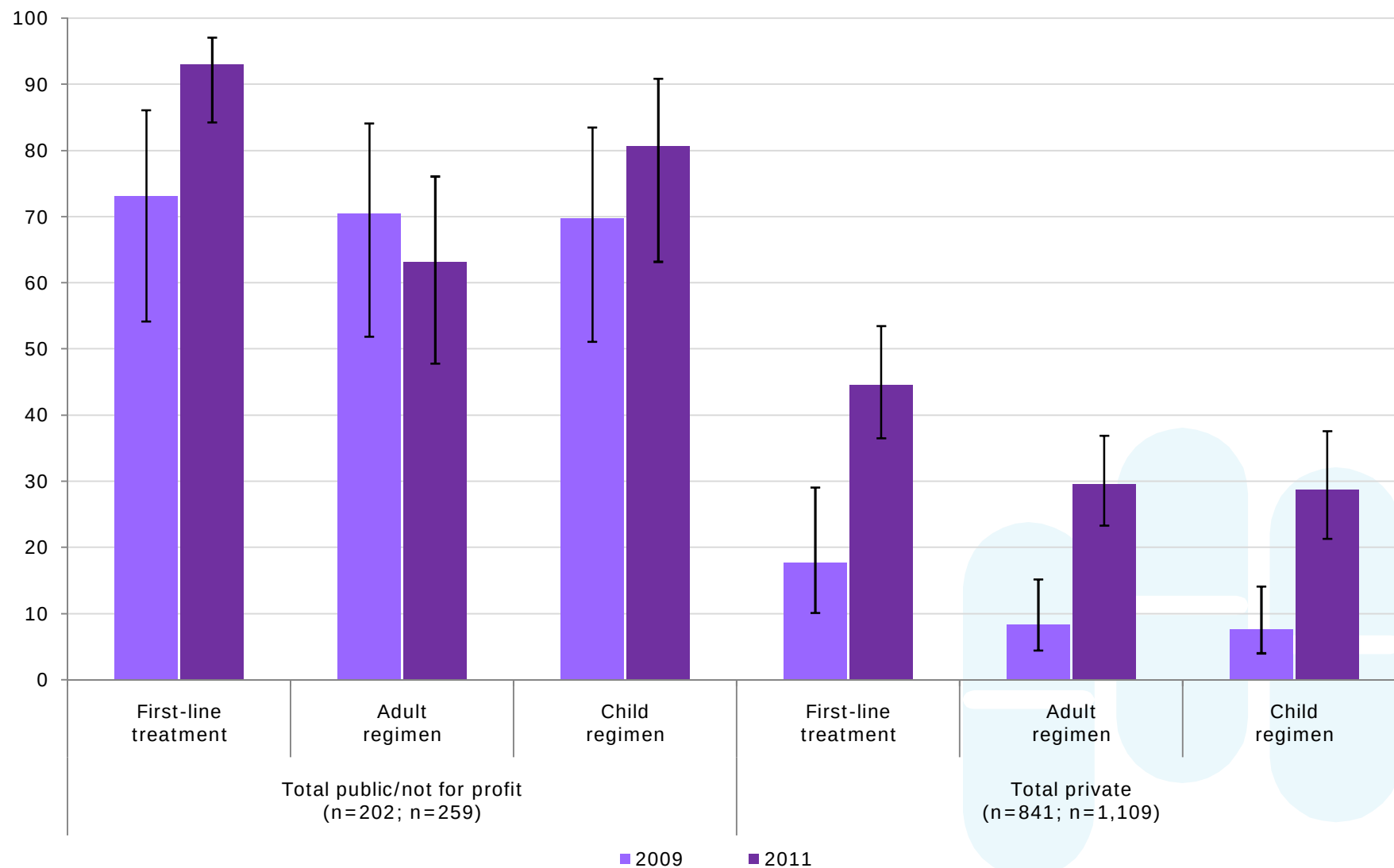


Prices in constant 2009 US\$

Availability of testing (among recent antimalarial stockists, excluding CHWs)



Provider knowledge by sector and survey round (among recent antimalarials stockists)



Conclusions

Increase in market share of FAACTs across all outlet types

Increase in FAACT availability in informal private sector

Private sector FAACT price decreases of approx 33 %

Significant increase in knowledge in private sector
(though still low)

But! CQ still fairly common in the informal sector
Being distributed (likely around 10-20% of market share)

We have captured SP stockout that we know existed

RDTs unavailable, unused and expired

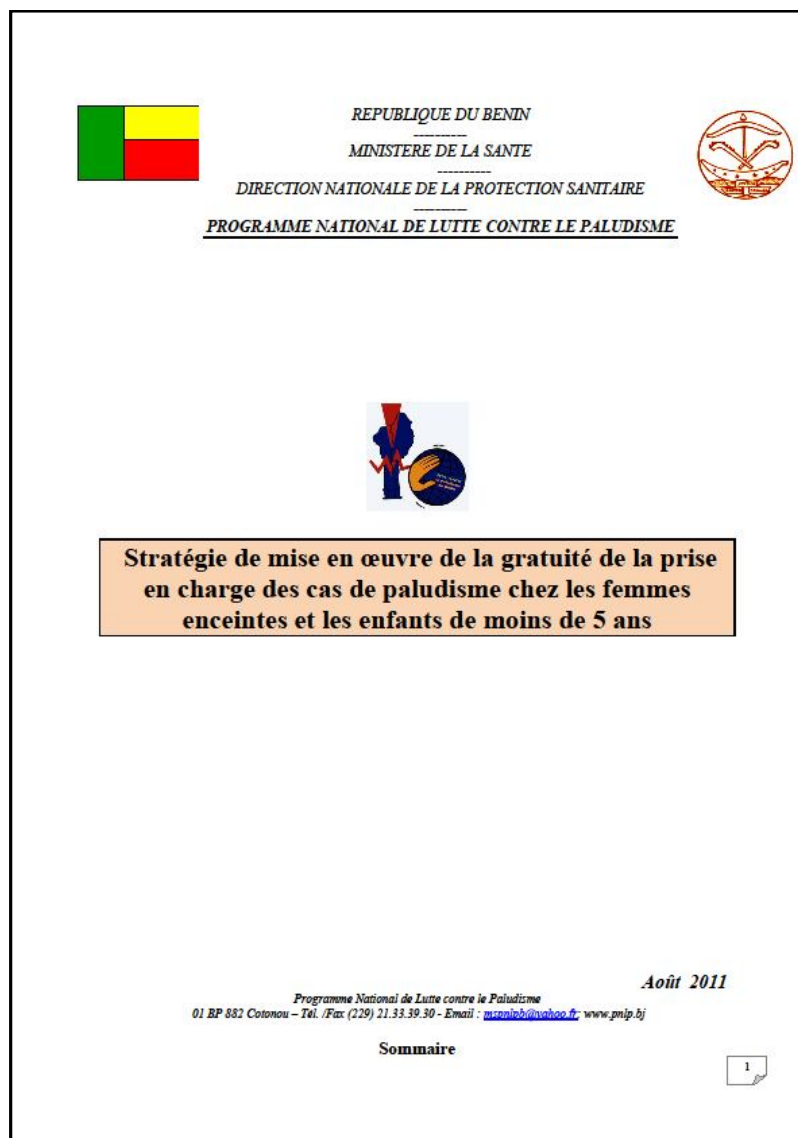
WHAT NEXT?

Benin

ACTwatch



Free diagnosis and treatment for at-risk groups



Action against informal sellers

Benin makes headway in attempt to reduce deaths from malaria

Last year Benin announced free treatment for malaria, and has now followed up by cracking down on fake drugs and recruiting an army of outreach health workers



In a market in Porto Novo, Benin, a trader sells medicines – including prescription drugs – of uncertain provenance. Photograph: Alex Duval Smith

In the markets of west Africa, malaria drugs are on sale as openly as oranges and bananas. Trader Simone Adechinan claims to know her stuff. "With these," she says, producing a beige box marked Chloroquine Phosphate, "you want to take six tablets a day for a week, then pause for a week and take paracetamol, then start again." She issues the dubious advice without seeing the patient or referring to a doctor's prescription. And she sells the box of 100 tablets – which has no manufacturer's name – for 1,000 CFA francs (\$2).

Source: The Guardian, 10th Feb 2012

AMFm antimalarials leaking from Nigeria



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Evidence for Malaria Medicine Policy

**Thank you. Hope you at least enjoyed
the pizza!**

