



# The private sector role in the supply of antimalarial drugs:

## *Evidence from ACTwatch & implications for initiatives to improve ACT access*

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# Background

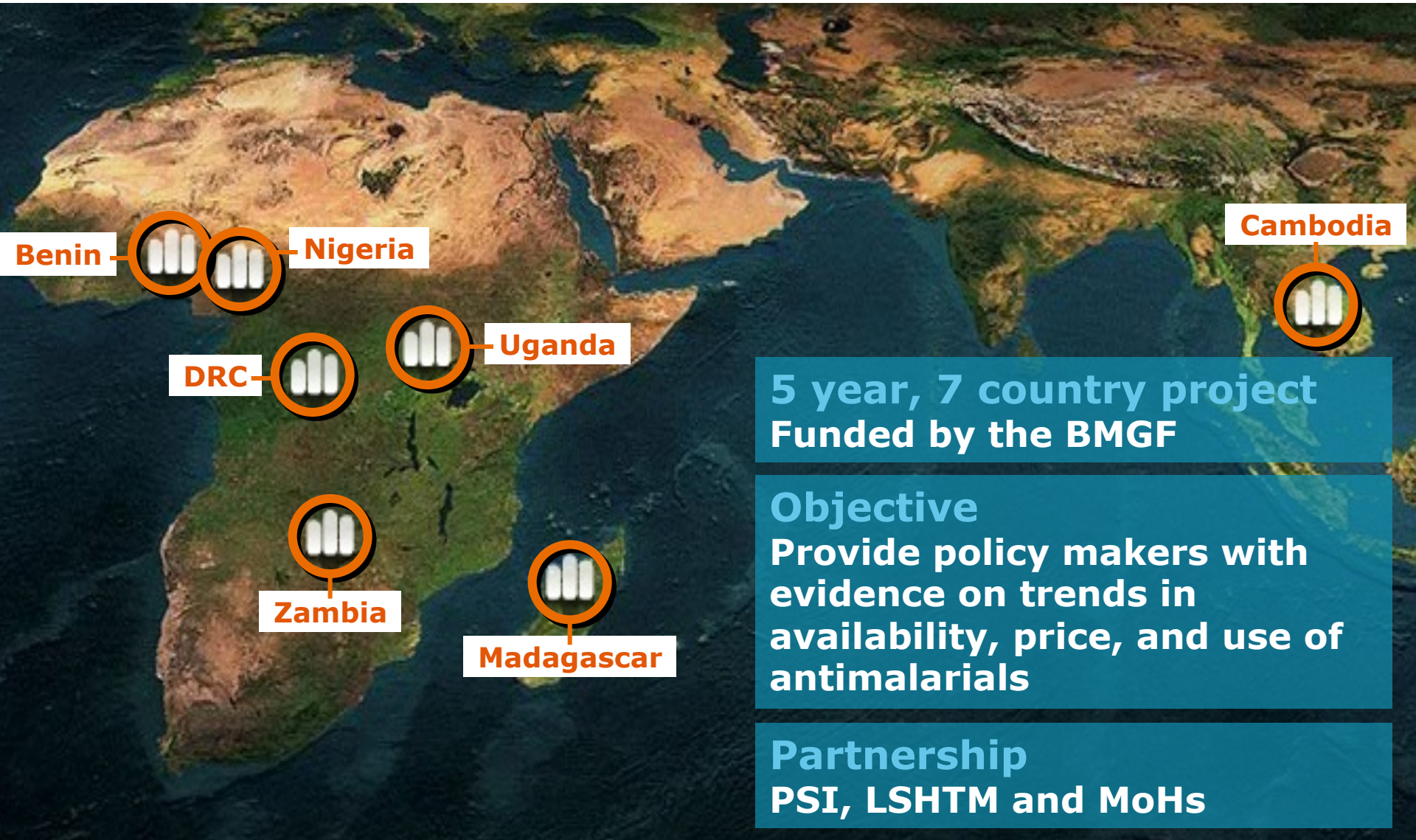
- Artemisinin-based combination therapies (ACTs)
  - highly effective, recommended treatment for *Pf* malaria
  - 228 million doses are needed to treat *Pf* cases; approx. 100 million doses distributed per annum (2010 RBM)
- Despite free or highly subsidised provision, limited access and availability of ACTs in public sector has resulted in poor coverage
  - 3%-21% of febrile children in Africa receive ACT (2008/10 ACTwatch)
- Many seek treatment from private sector retailers
  - Retail prices for ACT are 4-22 times higher than those of older, less effective antimalarials (e.g. CQ, SP)
  - Most retail customers purchase less effective antimalarials, artemisinin monotherapies (AMTs), or just painkillers

# Outline

- Introduction to *ACTwatch*
- Retail-level availability and prices of ACTs and other antimalarials in 7 countries
- Wholesale-level availability of ACTs and other antimalarials in 5 countries
- Wholesale- and retail-level mark-ups on antimalarials
- Discuss improving access in the private sector, including the Affordable Medicines Facility–malaria



# What is ACTwatch?



**5 year, 7 country project  
Funded by the BMGF**

**Objective**  
Provide policy makers with evidence on trends in availability, price, and use of antimalarials

**Partnership**  
PSI, LSHTM and MoHs

# Research Studies - a complete picture of the market



**Household Survey (PSI):** What are the trends in the levels of use of different antimalarials. What are the determinants of use?  
- Two times (baseline & endline)



**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 is the structure of the supply chain, and what characteristics (including mark-up, business practices, etc.) determine price and availability at different levels of the supply chain?  
- Once over life of project

# Outlet & Supply Chain Survey Methods:

- Clusters were randomly selected with probability proportional to population size
- Census conducted of all outlets with the potential to stock antimalarials
- Over sampling of public health facilities and pharmacies
- Audit conducted of all antimalarials in stock
  - Product details, price, volumes
- Sampling frame of wholesalers created by tracing the distribution chain starting from the bottom and working up
  - All outlets asked for the name & address of top 2 antimalarial suppliers (terminal wholesalers)
  - Terminal wholesalers asked for their suppliers (intermediate wholesalers), and so on, till top of the chain is reached

# Survey Overview 2009-2010

## Outlet surveys conducted in 7 countries

**33,781**  
Outlets with potential to stock antimalarials screened

**10,044**  
Eligible Outlets Interviewed

**53,435**  
Antimalarials Audited

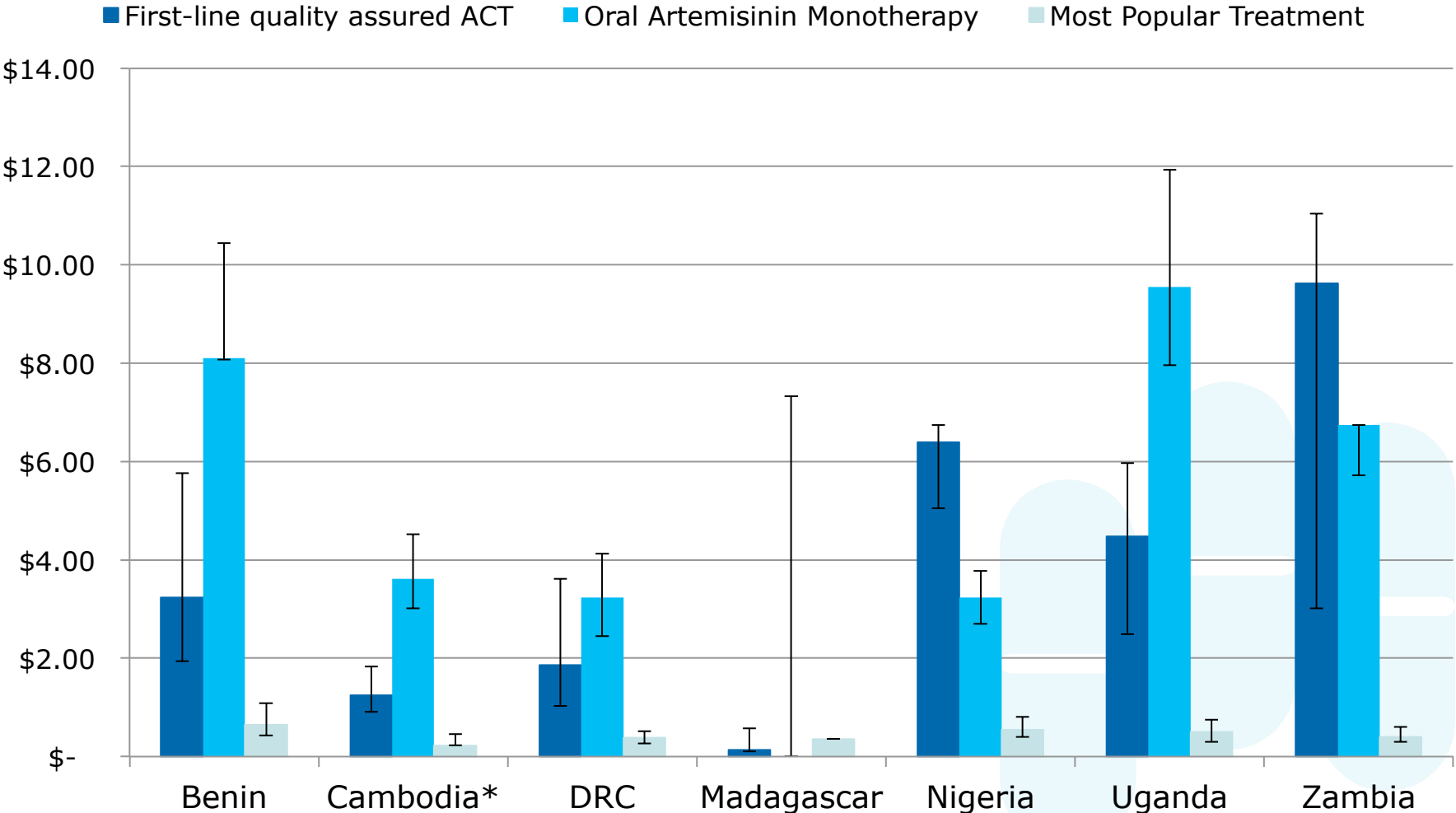
## Supply chain surveys conducted in 6 countries

**834**  
Wholesalers with potential to stock antimalarials screened

**753**  
Eligible Wholesalers Interviewed

**7,813**  
Antimalarials Audited

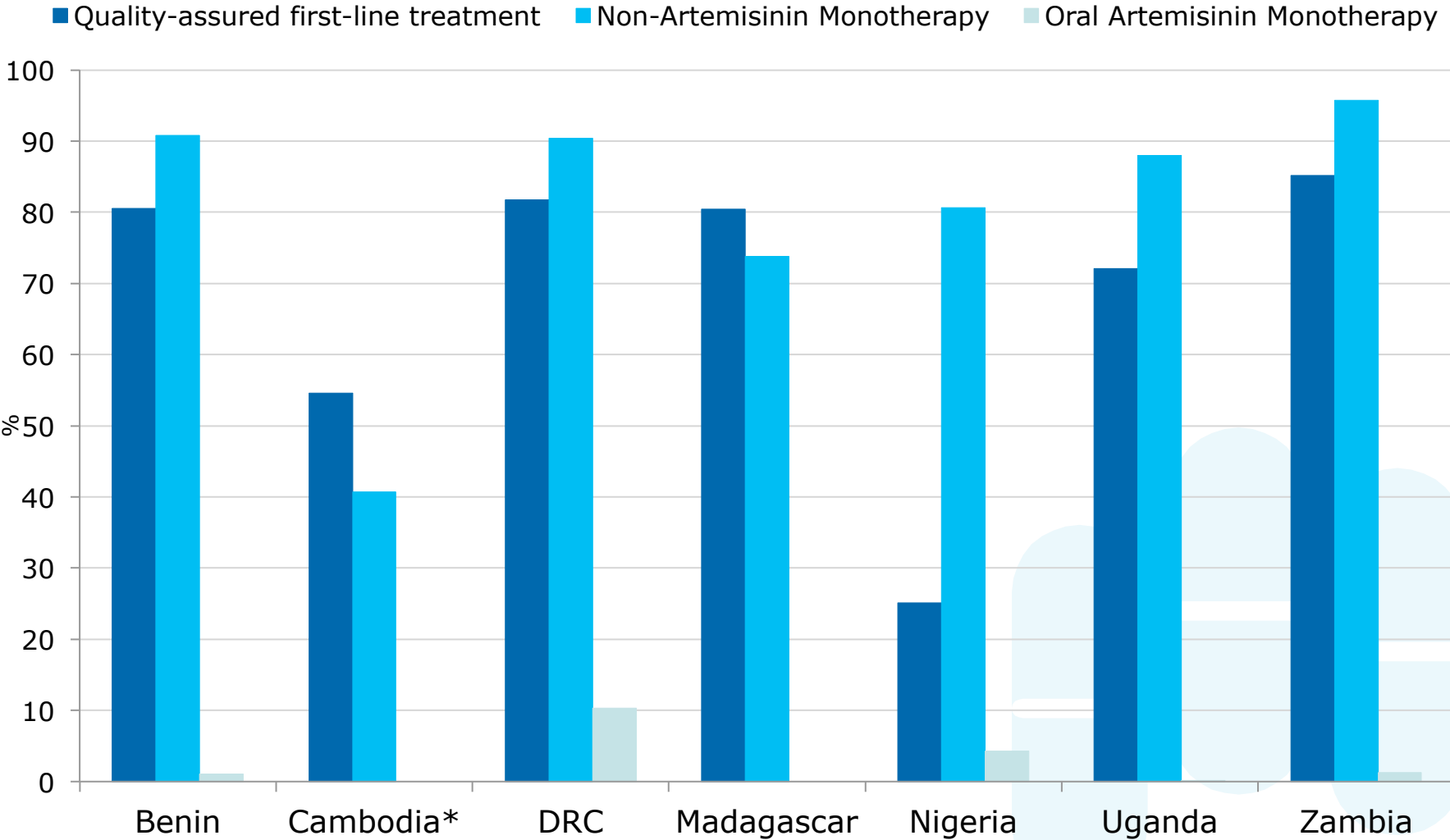
# Median Price (IQR) of full adult equivalent antimalarial treatments in the Private Sector



\* Unweighted data and also for any artesunate+mefloquine product in Cambodia (as there is no quality assured first-line ACT of artesunate+mefloquine)

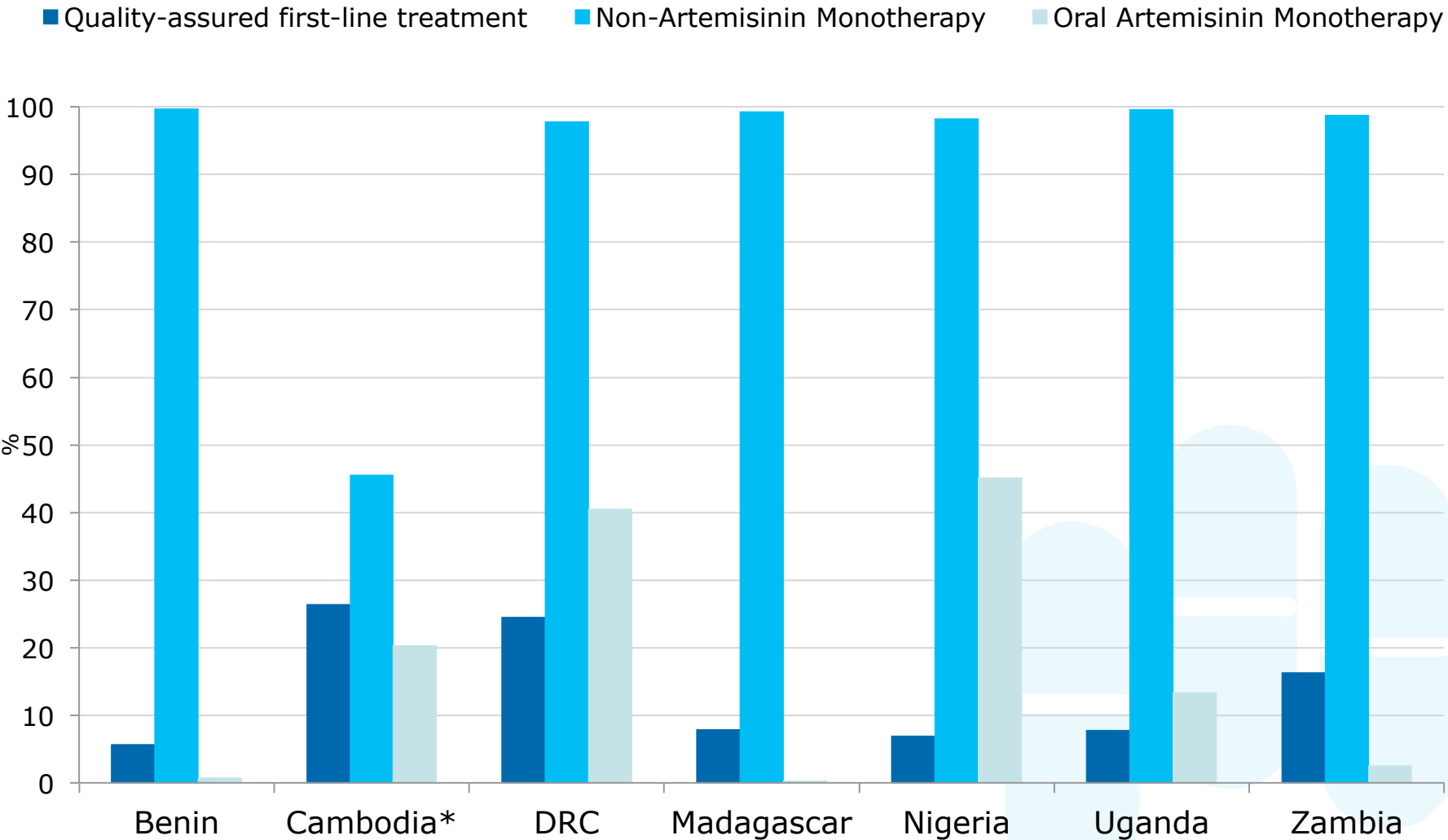


# Availability of antimalarials among all Public HFs



\* For any artesunate+mefloquine product in Cambodia (as there is no quality assured first-line ACT of artesunate+mefloquine)

# Availability of antimalarials: Private sector<sup>+</sup>



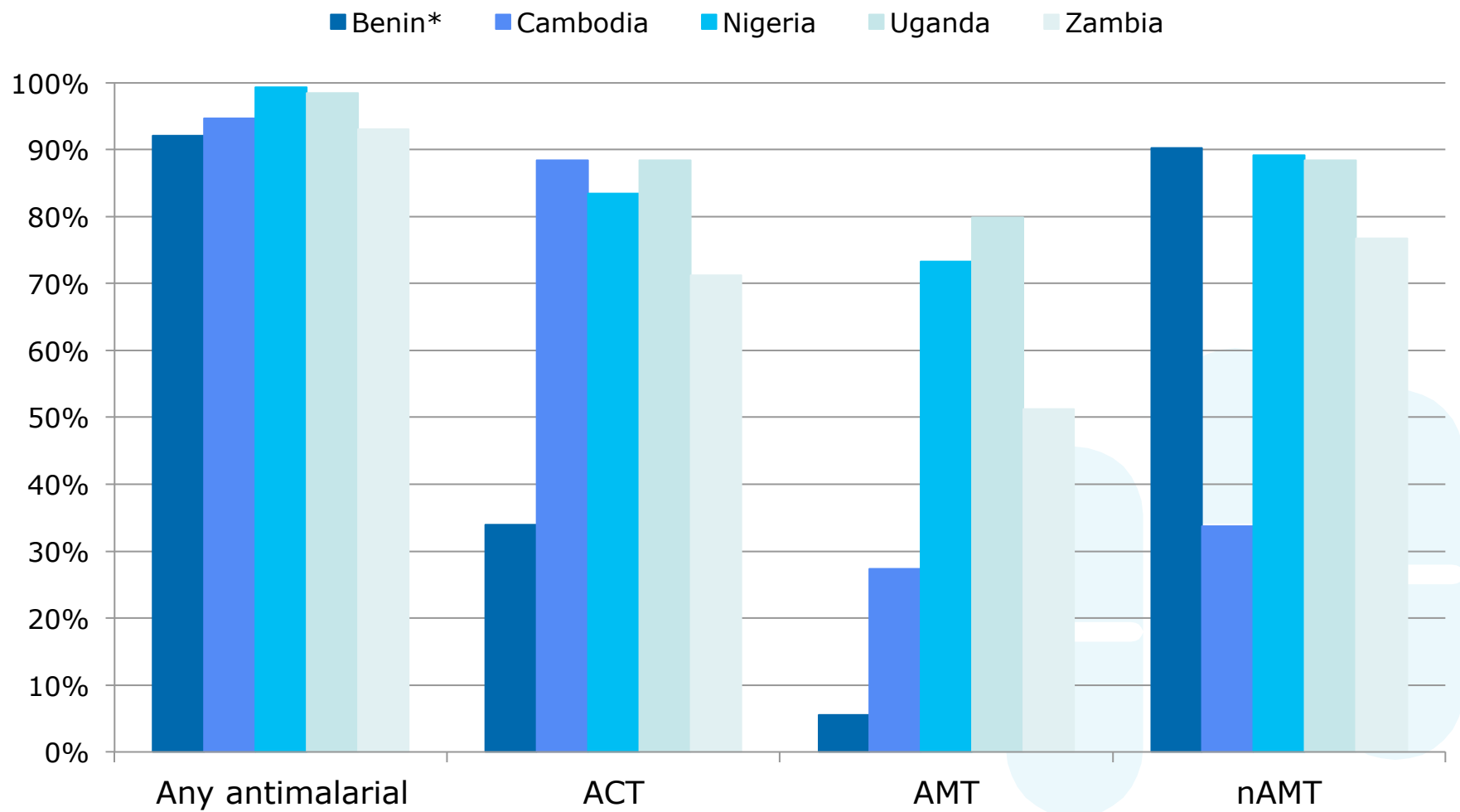
<sup>+</sup> Of those stocking at least one antimalarial drug; \* For any artesunate+mefloquine product in Cambodia (as there is no quality assured first-line ACT of artesunate+mefloquine)

# Supply Chain Study Results from Benin, Cambodia, Nigeria, Uganda & Zambia

- Hypothesis: Price & availability of antimalarials in the private retail sector are expected to be strongly influenced by wholesalers at higher levels of the distribution chain, as well as by market level factors

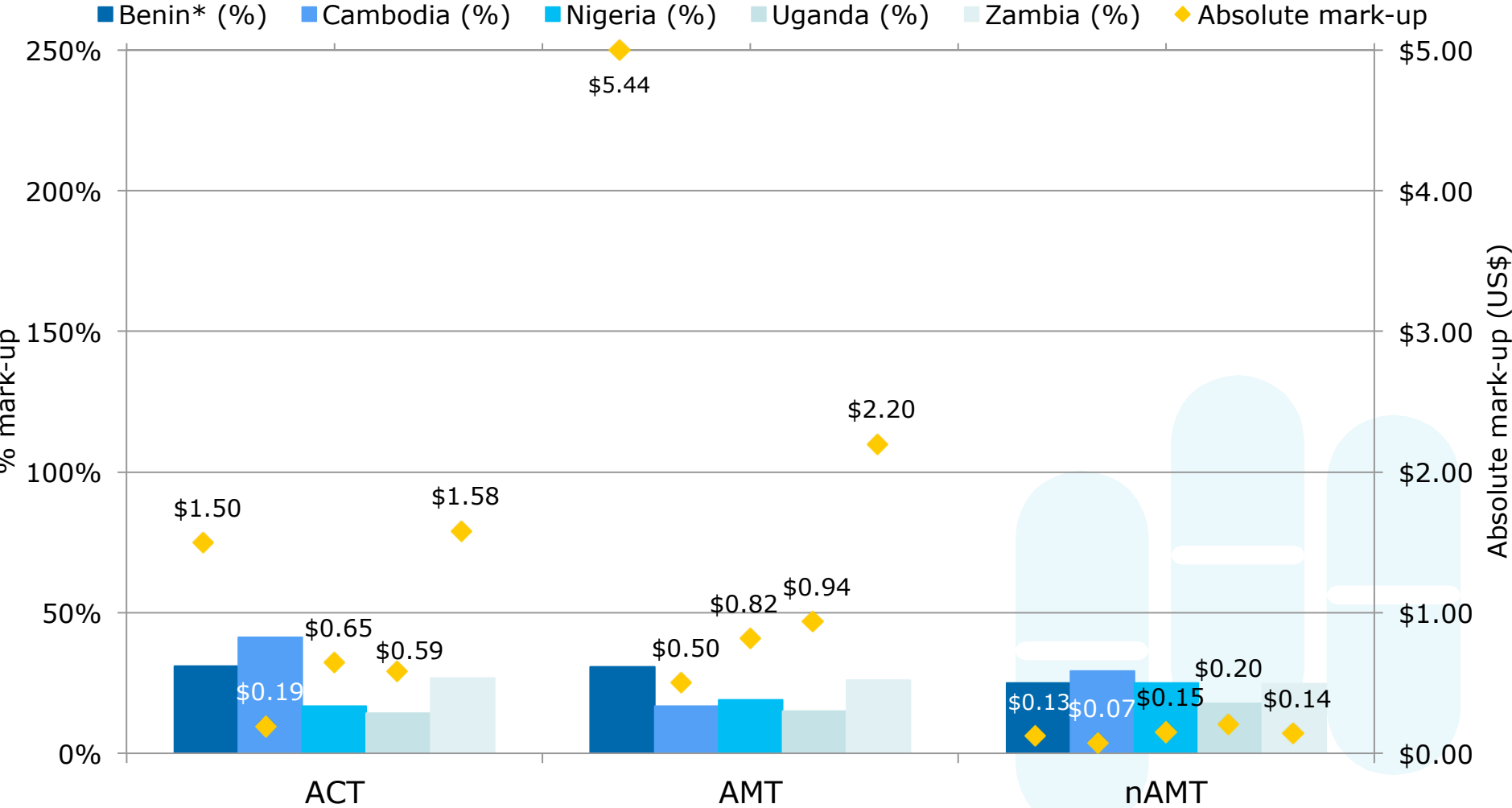


# Wholesaler availability of any antimalarial, ACTs, artemisinin monotherapies (AMTs), non-artemisinin monotherapies (nAMTs)



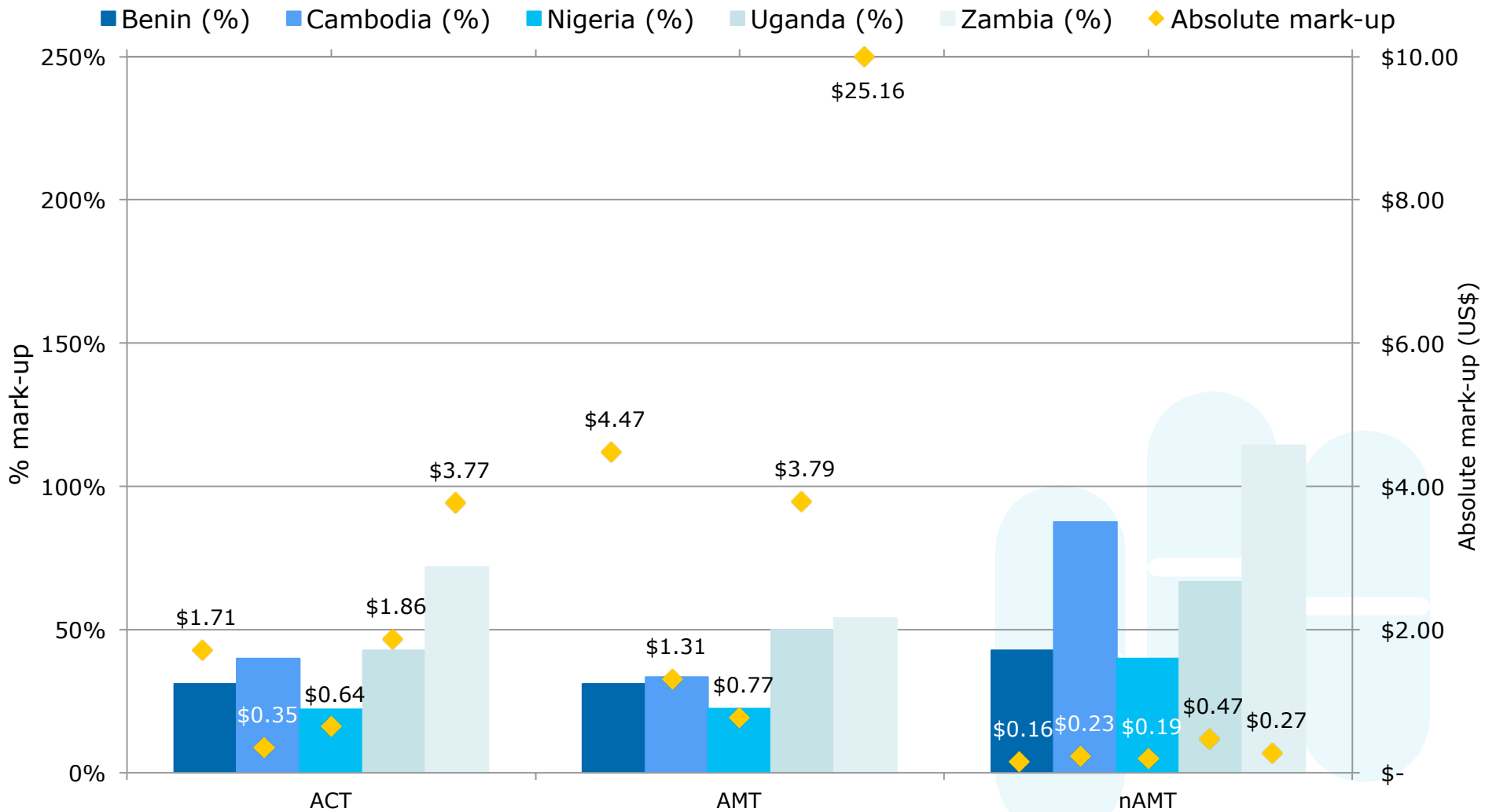
\* Unweighted data

# Median Wholesaler Mark-Ups (% & absolute) by Antimalarial Type



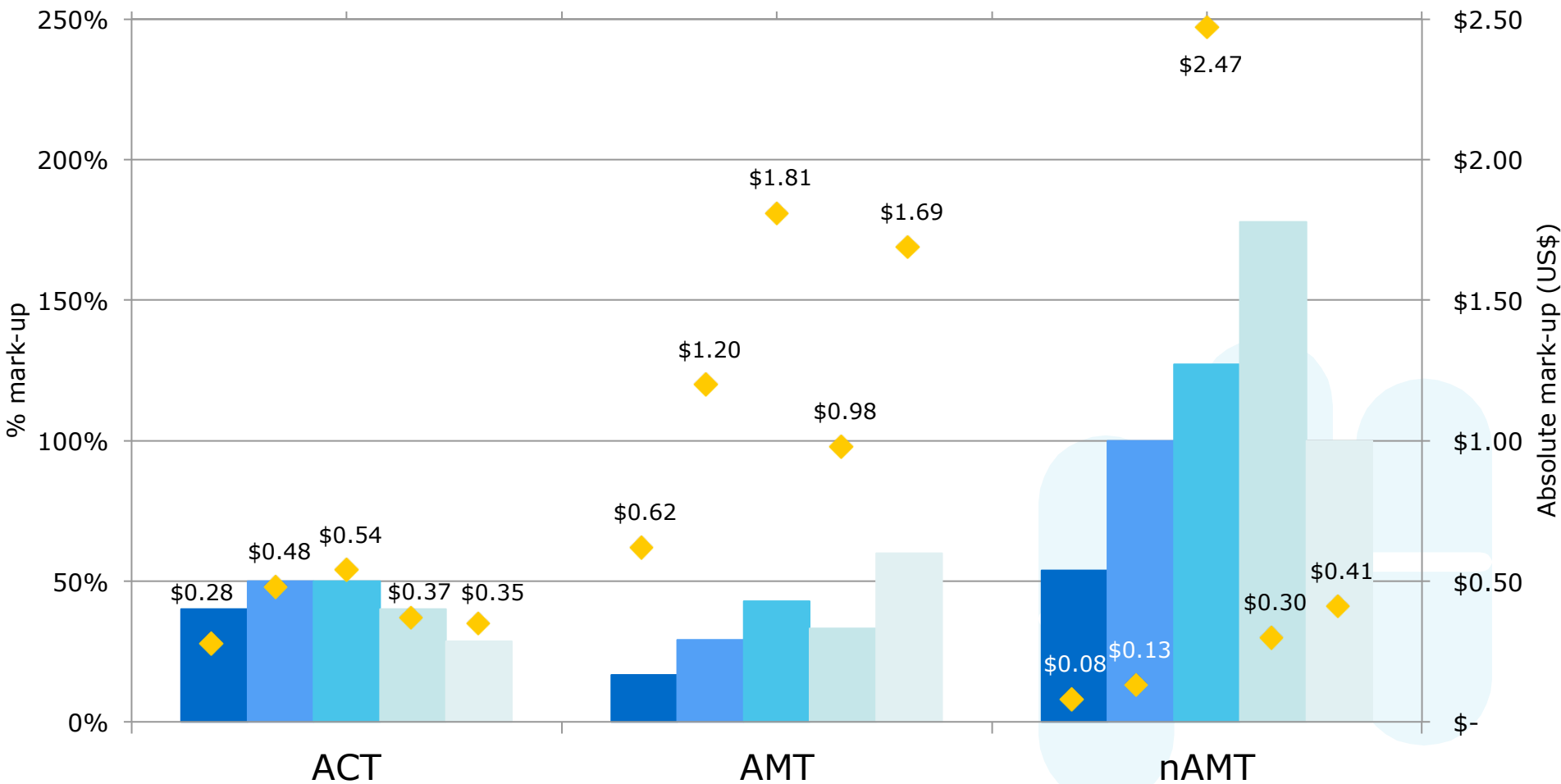
\* Unweighted data

# Median Retail Mark-Ups (% & absolute) by Antimalarial Type

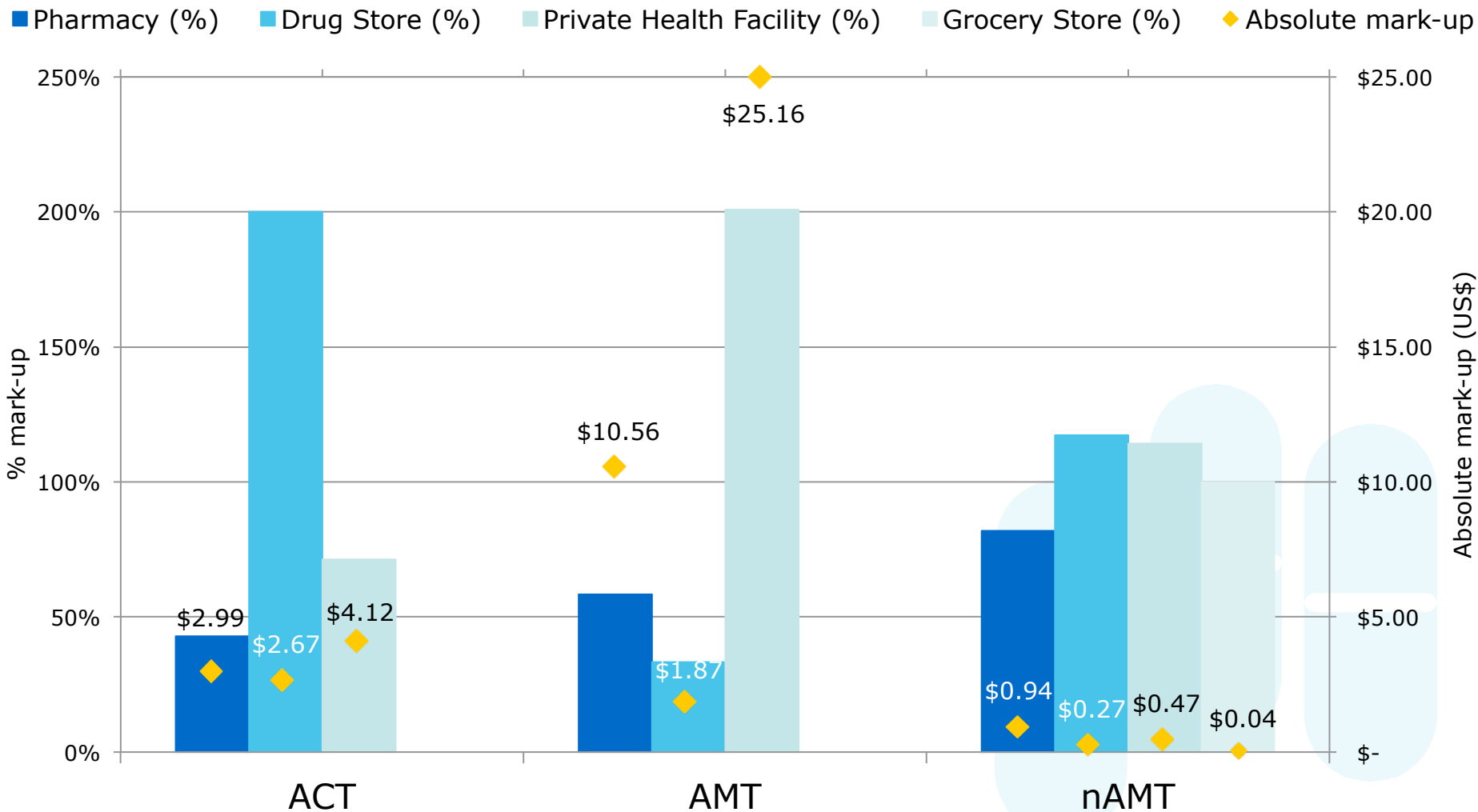


# Cambodia: Median Retail Mark-Ups (% & absolute) by Antimalarial Type & Outlet Type

■ Pharmacy (%) ■ Drug Store (%) ■ Mobile Provider (%) ■ Grocery Store (%) ■ Village Shop (%) ◆ Absolute mark-up



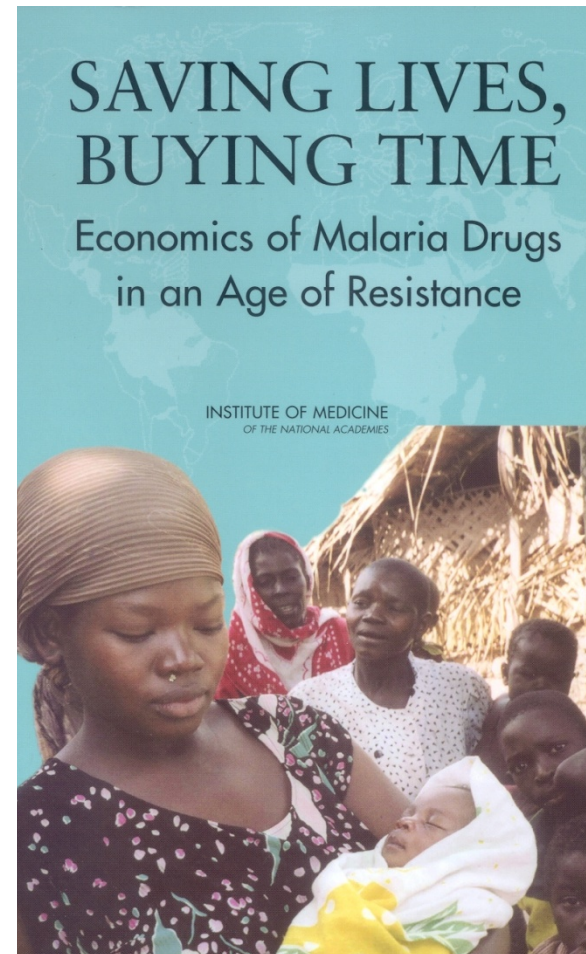
# Zambia: Median Retail Mark-Ups (% & absolute) by Antimalarial Type & Outlet Type



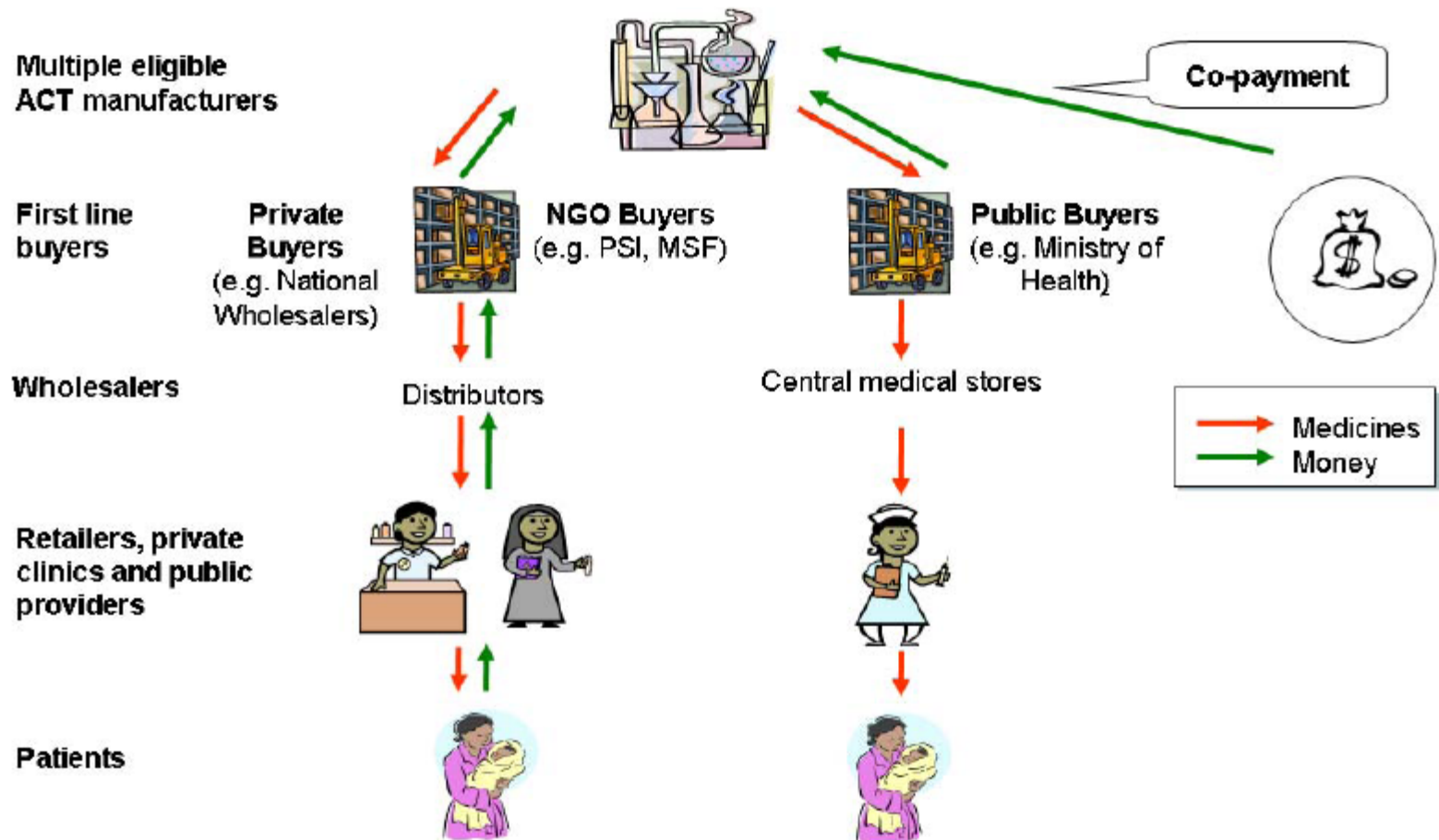


# Affordable Medicines Facility for Malaria

- Innovative financing mechanism
- 3 main features
  - Reduce prices through price negotiations
  - First line buyer copayment, private, NGO and public agencies eligible
  - Supporting interventions (SIs) to ensure safe and effective scale-up (marketing, provider training, IEC, etc)
- Financed through copayment fund of \$216 million (BMGF, DFID, UNITAID) + \$127 million for SIs (Global Fund)
- Phase 1 implemented in 8 countries



**Figure 1: Flow of co-paid ACTs under the AMFm**



Source: AMFm FAQs 29 March 2010

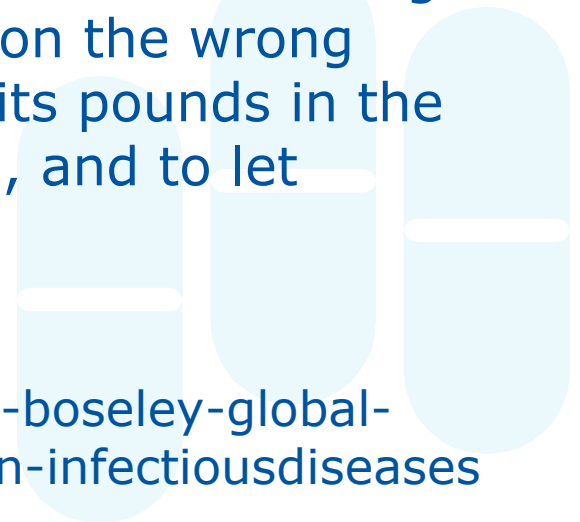
# Challenges / controversies

- Will the subsidy be passed to consumers?
  - First line buyers commit to a “reasonable margin” (no more than for similarly priced AMs)
  - Packaging marked with AMFm logo
  - Tanzania pilot did not find price gauging
- Will the subsidy reach the poor?
  - What is the counterfactual?
- How will access to confirmed diagnosis be expanded?
  - Countries encouraged to include measures to expand access to RDTs in their GF SI grants, including OR about how to introduce in private sector



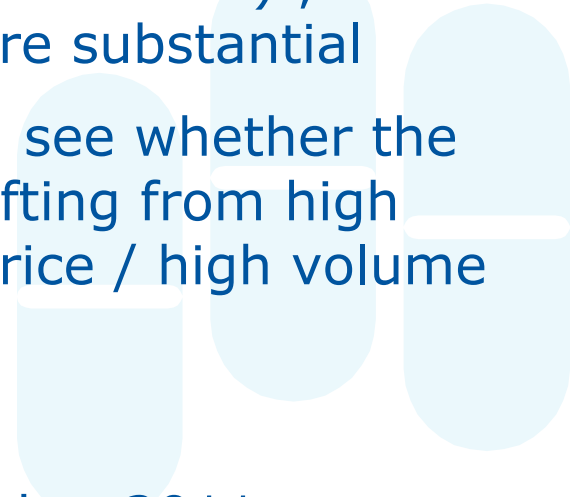
# What others are saying about AMFm

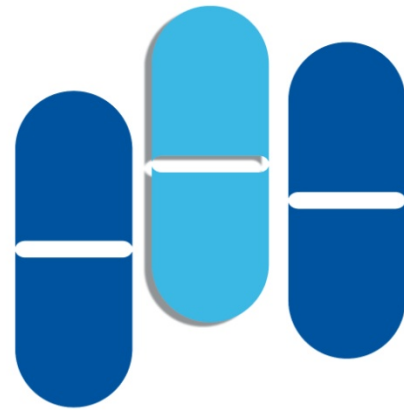
- “The biggest faith-based initiative in the world of malaria”
  - Bernard Nahlen, US President’s Malaria Initiative
- “Supporters of AMFm seem to be content with wasting precious donor and household money on the wrong medicines...the UK has chosen to put its pounds in the Affordable Medicines Facility – malaria, and to let children down”
  - Mohga Kamal-Yanni , Oxfam
  - <http://www.guardian.co.uk/society/sarah-boseley-global-health/2010/aug/17/malaria-prevention-infectiousdiseases>



# Discussion: What do our results imply for AMFm?

- Reasonable availability of ACTs in the wholesale supply chain
- ACT % markups are no higher than for “most popular” antimalarials
- But ACT prices are high - exceptions are settings with subsidy programmes (Madagascar, Cambodia) ; and with high prices, absolute markups are substantial
- Independent Evaluation of AMFm will see whether the high level subsidy is successful in shifting from high price / low volume market to a low price / high volume one
- 
- Endlines scheduled for Sept - December 2011





# ACTwatch

Evidence for Malaria Medicine Policy



Healthy lives. Measurable results.



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