

# ACTwatch

Evidence for Malaria Medicine Policy

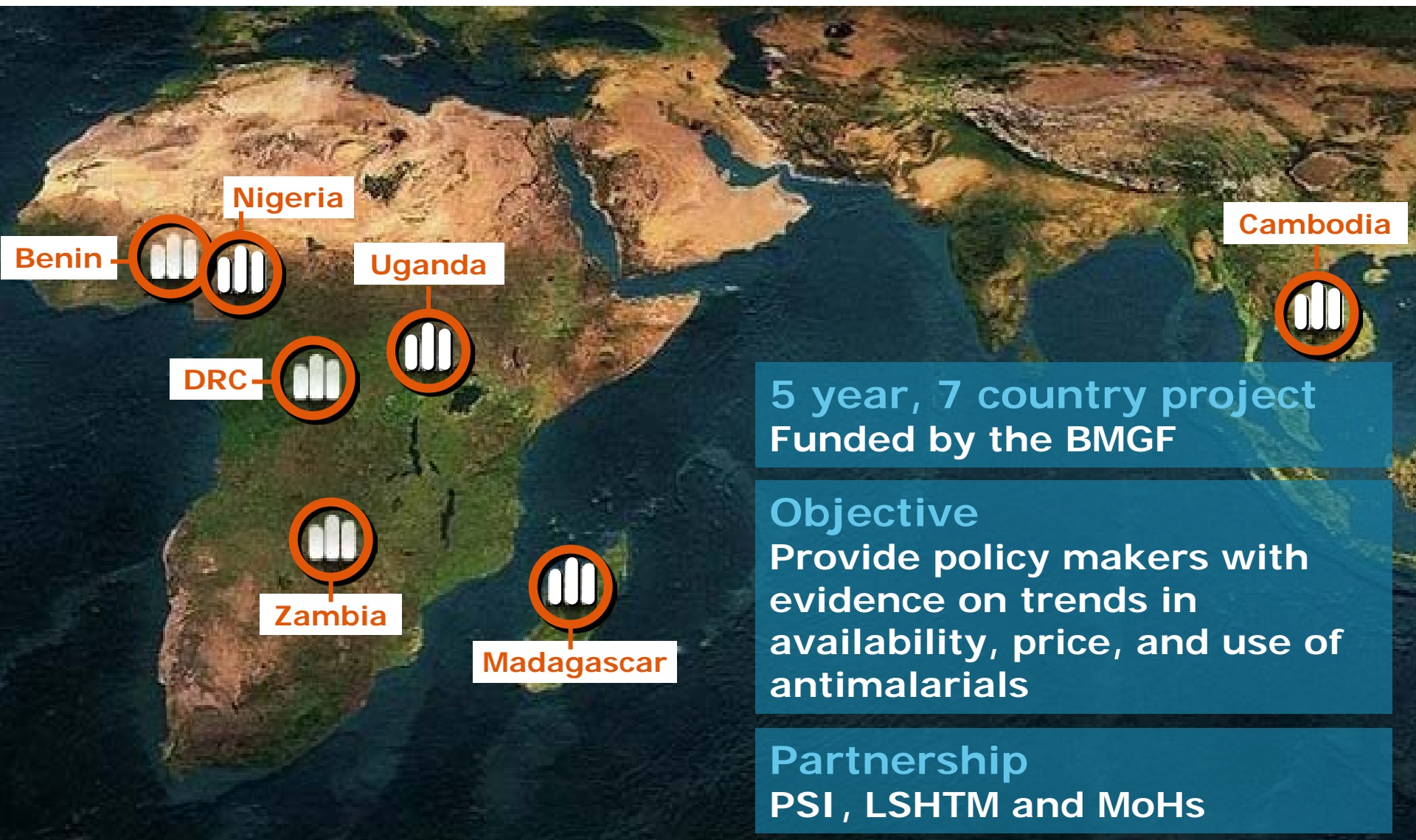
## Treatment seeking for fever: Uganda, Nigeria, Madagascar



Data sourced from:  
ACTwatch Household Survey Trends 2008/2009- 2012 (Draft report).  
Washington DC: Population Services International; 2012.



# ACTwatch: the original countries



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

# Household questionnaire

- 1) **Screening module:** to identify households that were eligible for the survey;
- 2) **Household listing:** to list all the usual members in the selected households.
- 3) **Household questionnaire module:** modelled after the Demographic and Health Survey (DHS)
- 4) **Treatment seeking module:** which included questions documenting the type, timing, source and cost of treatments acquired for the child's fever.
- 5) **[AT endline] AMFM awareness section:** which included questions on caregiver exposure and awareness of the AMFM interventions and activities.

\* Full questionnaire available at: [http://www.actwatch.info/research/study\\_designs.php](http://www.actwatch.info/research/study_designs.php)

# Data Collection



# Dates of Data Collection

Country	Baseline	Endline
Uganda	Mar-Apr, 2009	Apr-May, 2012
Madagascar	Dec-Jan, 2009	Apr-Jun, 2012
Nigeria	Aug-Sep, 2009	Jun-Jul, 2012

# Sample

Country	Baseline (n)		Endline (n)	
	Eligible households	Number of children <5	Eligible households	Number of children <5
Uganda	1,528	1,752	1,832	2,273
Madagascar	1,961	2,120	2,176	2,388
Nigeria	2,860	3,273	1,312	1,551

# RESULTS



# Success metrics: Summary

Benchmark	Ghana	Kenya	Madagascar	Niger	Nigeria	Tanzania mainland	Uganda	Zanzibar
1. 20 percentage point increase in QAACT availability	52 (p<0.01)	35 (p<0.01)	4.6 (p=0.99)	10 (p=0.99)	26 (p=0.14)	44 (p<0.01)	46 (p<0.01)	39
2. Median price of QAACTs with AMFm logo is < 3 times the median price of the most popular antimalarial in tablet form that is not a QAACT (ratio)	3.0 (p=0.81)	1.0 (p<0.01)	1.6 (p<0.01)	2.5 (p<0.01)	3.1 (p=0.99)	1.0 (p<0.01)	3.3 (p=0.99)	1.5
3. Median price of QAACTs with AMFm logo is less than the median price of AMT tablets (difference, QAACT – AMT)	-0.94 (p<0.01)				-1.17 (p<0.01)			-6.3
5. 10 percentage point increase in market share of QAACTs	40 (p<0.01)	31 (p=0.01)	8.6 (p=0.61)	-8.8 (p=0.99)	18 (p<0.01)	16 (p=0.23)	17 (p=0.08)	48
6. Decrease in market share of oral AMTs (percentage point change)					-3.9 (p=0.03)			-12

Note that the outlet survey was not powered to detect a 10% change in market share in Madagascar, Tanzania mainland and Uganda

# Uganda - Context

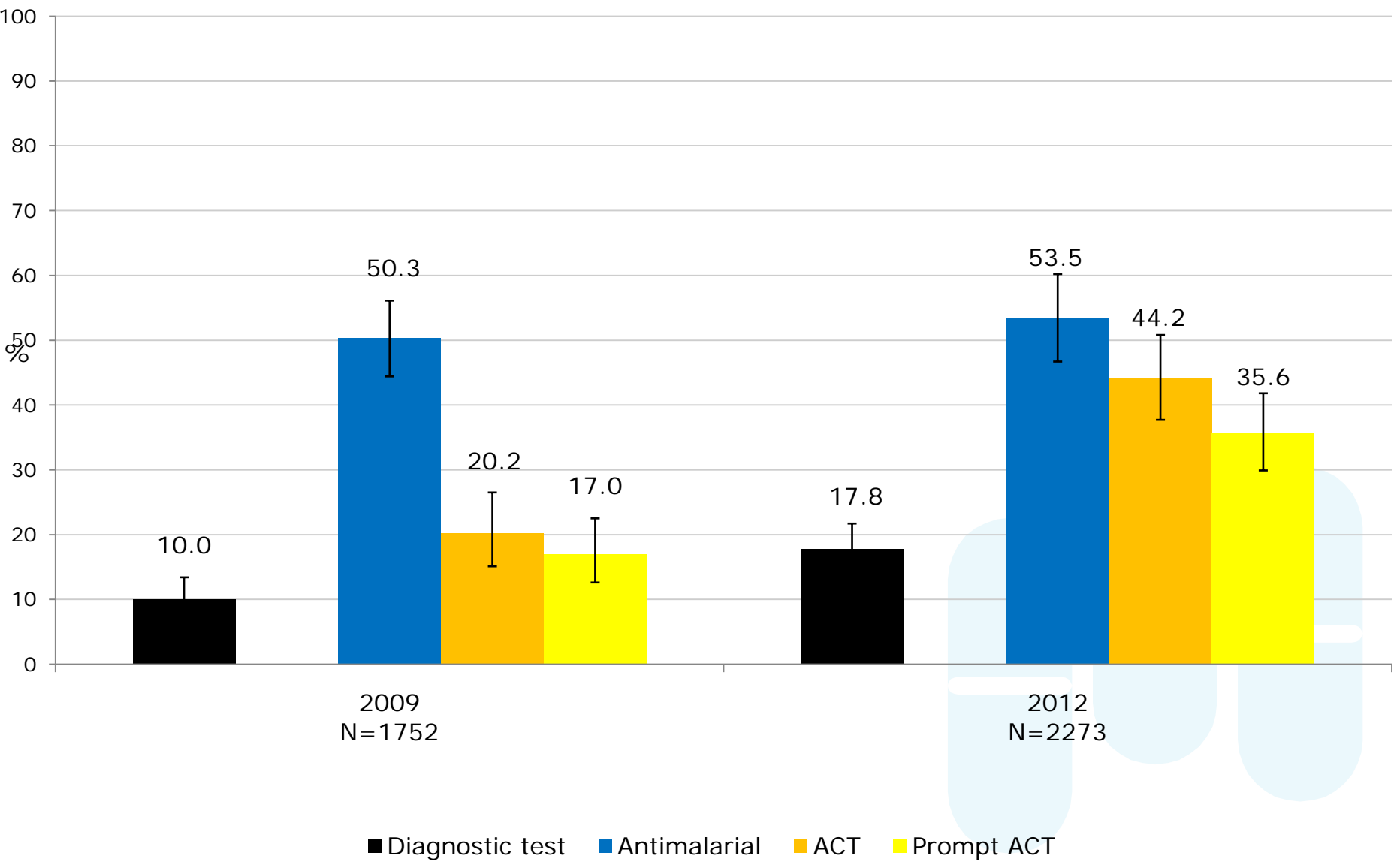
- LLIN distribution - national (7.2million, 2010/2011)
- Net use from 11% (MIS, 2009) to 43% (DHS, 2011)
- IRS continuous in four high-transmission districts
- ACTs - stocks from AMFm, PMI and DfID
  - AL subsidy to private sector in four districts (CAPSS, 2008-2010)
  - distribution through ICM by community medicine distributors in rural areas
- Signed AMFm grant in Feb 2011; first order delivered in April (FLB; private for-profit sector) and July (NMS; public sector) 2011
- SI for promotion of AMFm drugs not begun as of August 2012





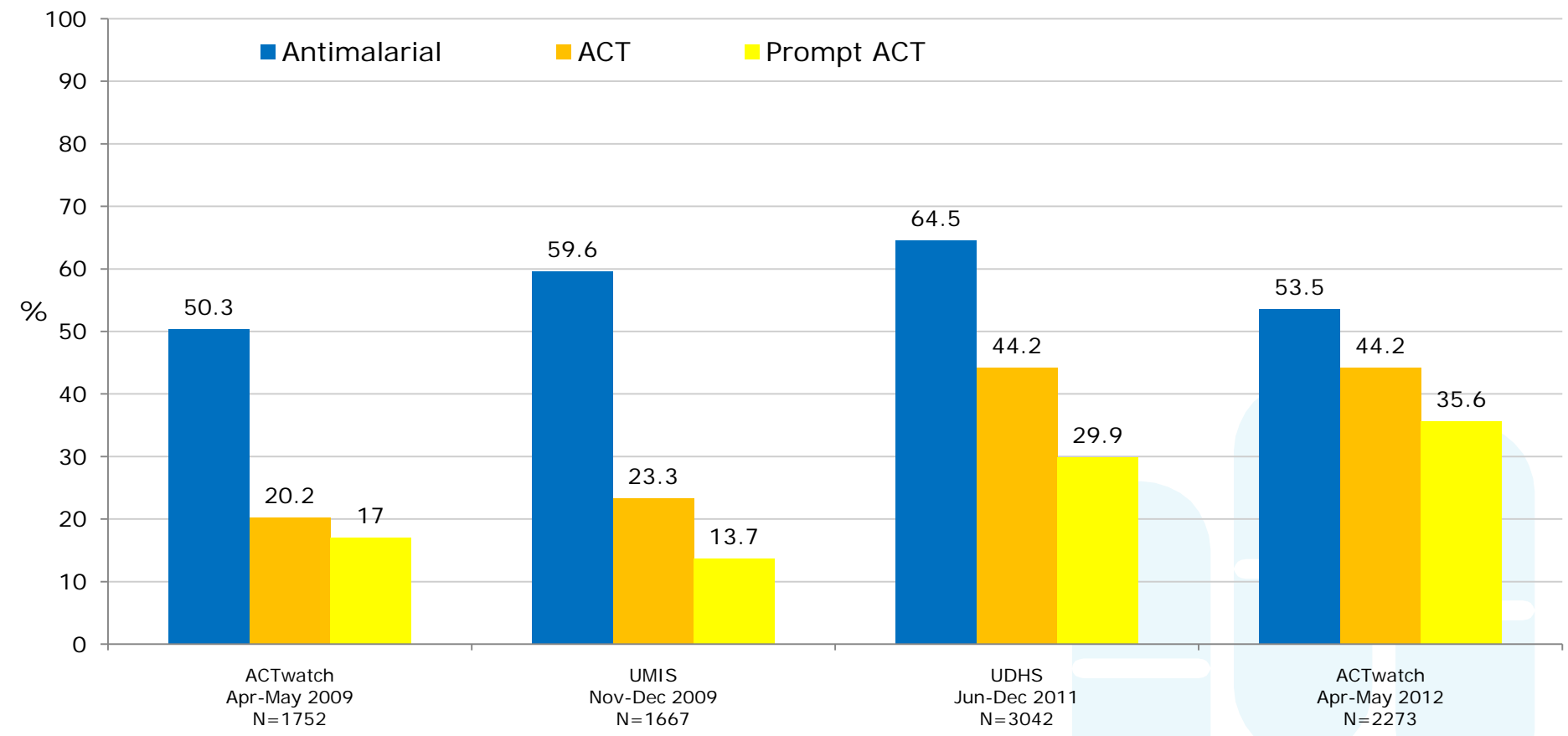


# Treatment of children with fever, Uganda





# Treatment of children with fever: ACTwatch alongside DHS\* and MIS\* findings: Uganda

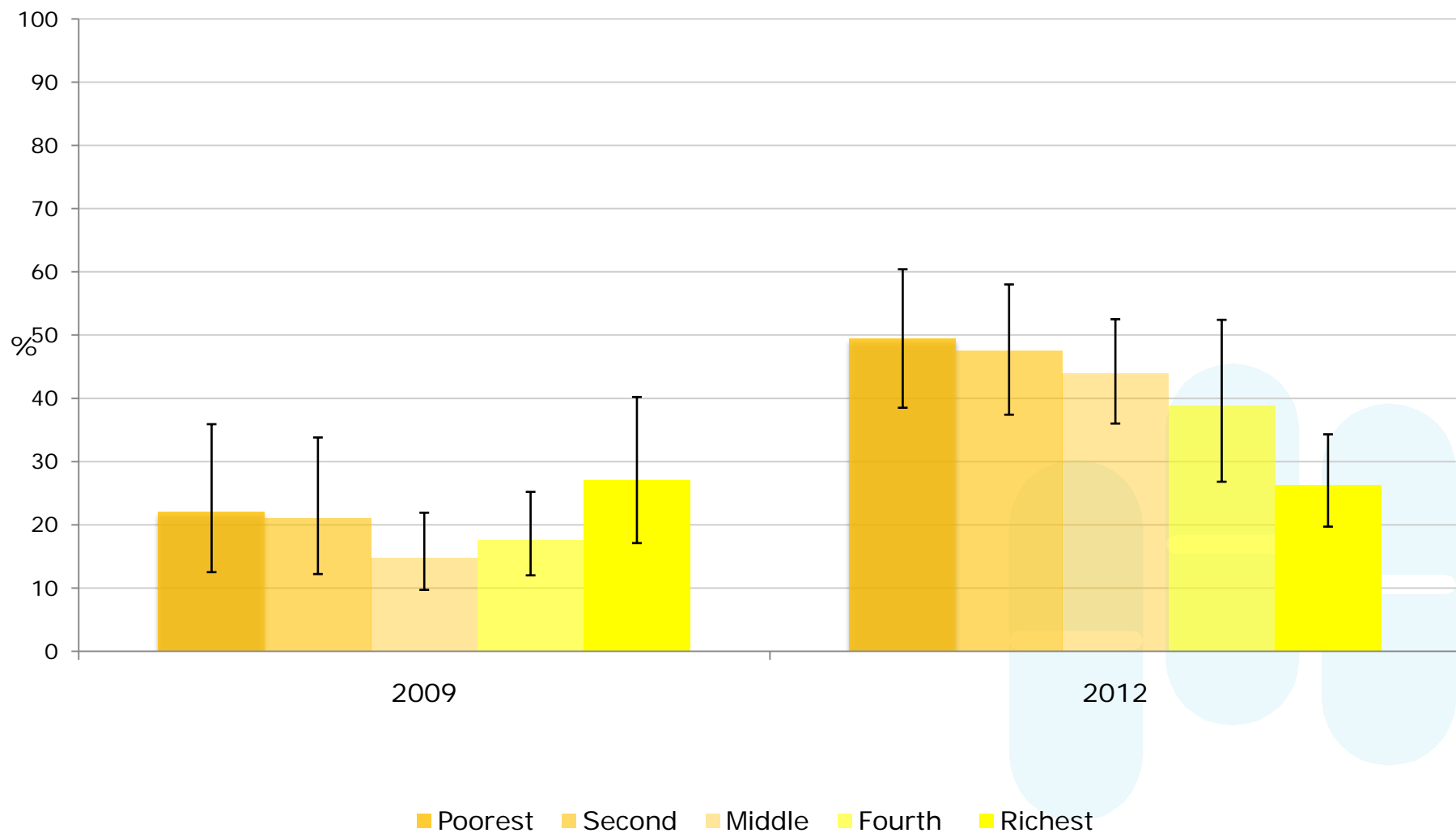


*Of children with fever in the two weeks prior to the survey, the percentage that received: an antimalarial, an ACT, an ACT within <48 hours*

\*Source: [www.measuredhs.com](http://www.measuredhs.com)  
ICF Macro (2012)  
ICF Macro (2009)

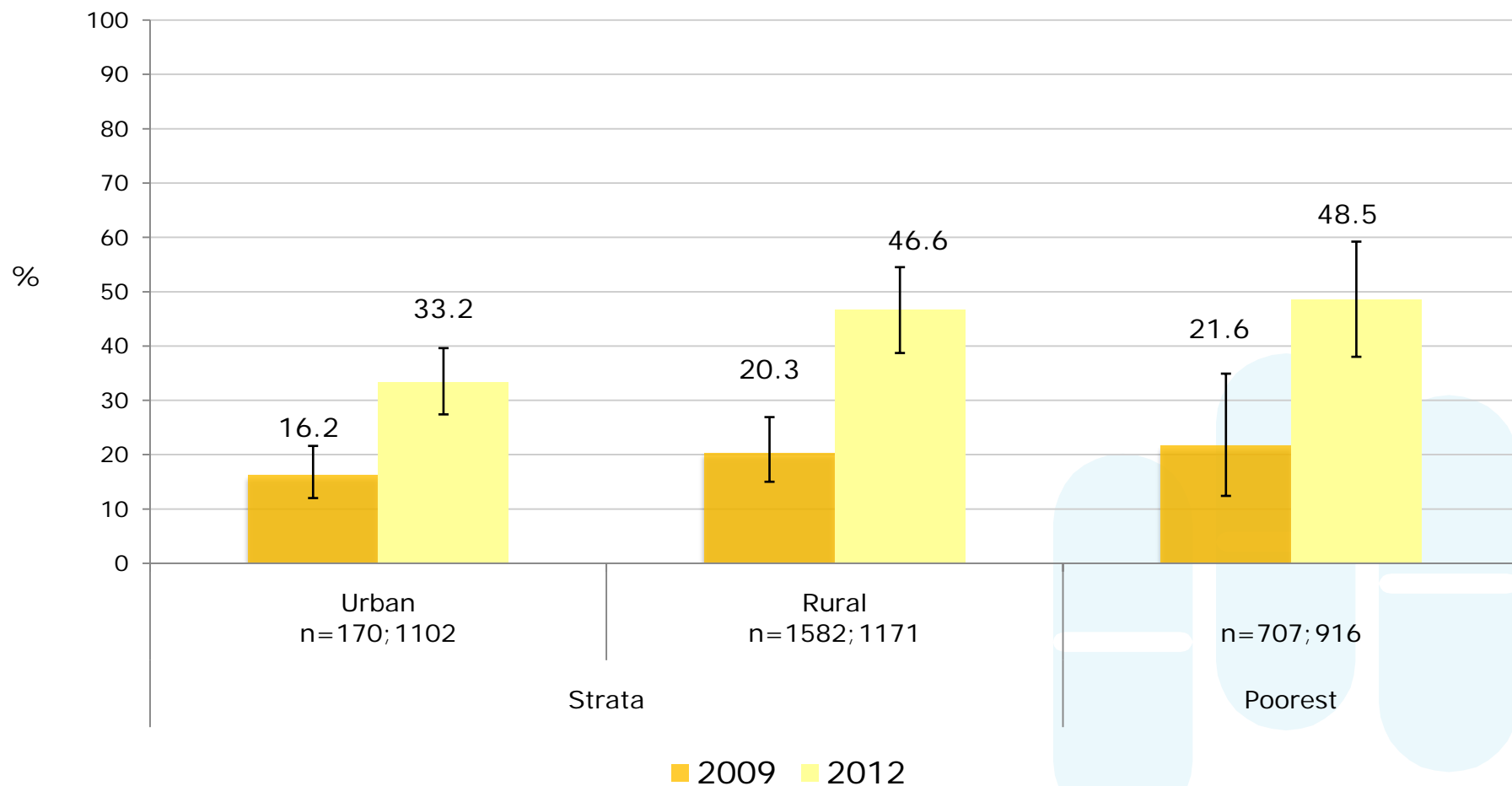


# Proportion of children that received an ACT, across household wealth quintiles, Uganda





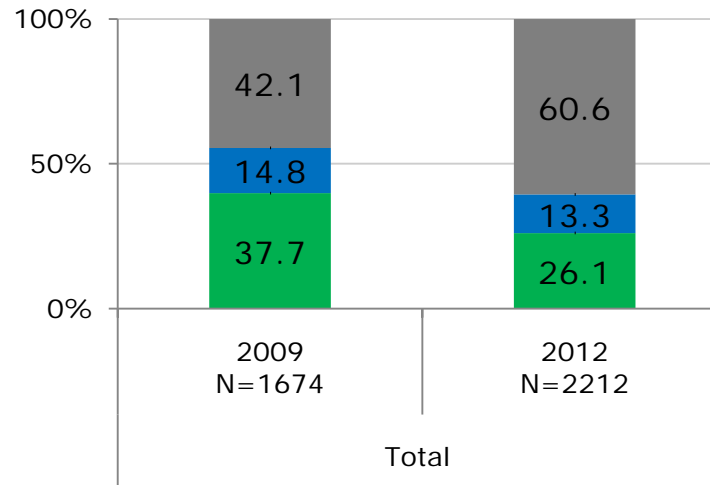
# Treatment of children with fever with an ACT, by strata and among the poorest, Uganda



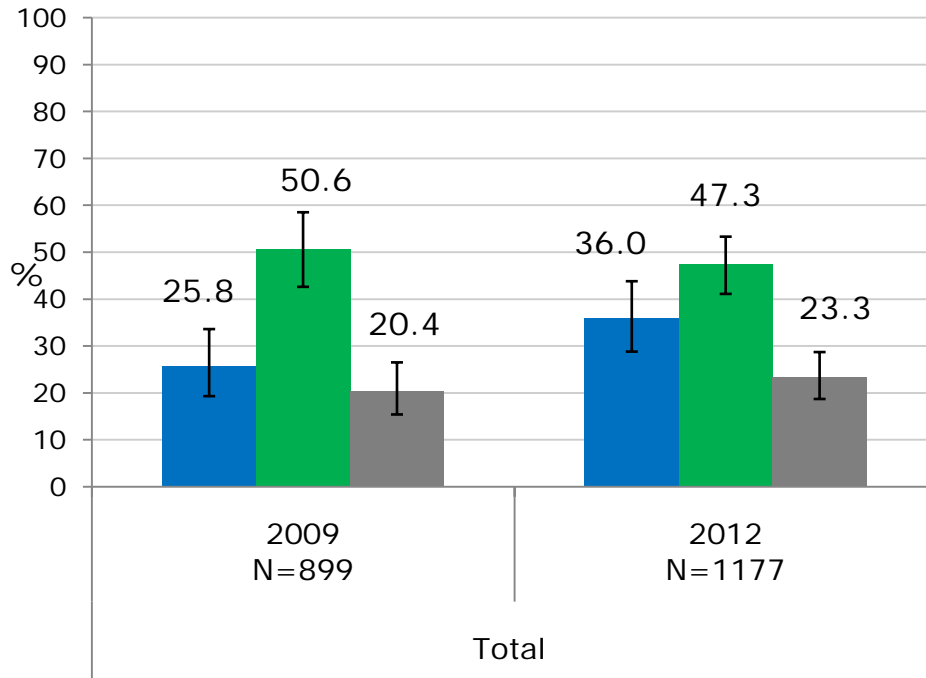
# Initial source of advice/treatment

## Uganda

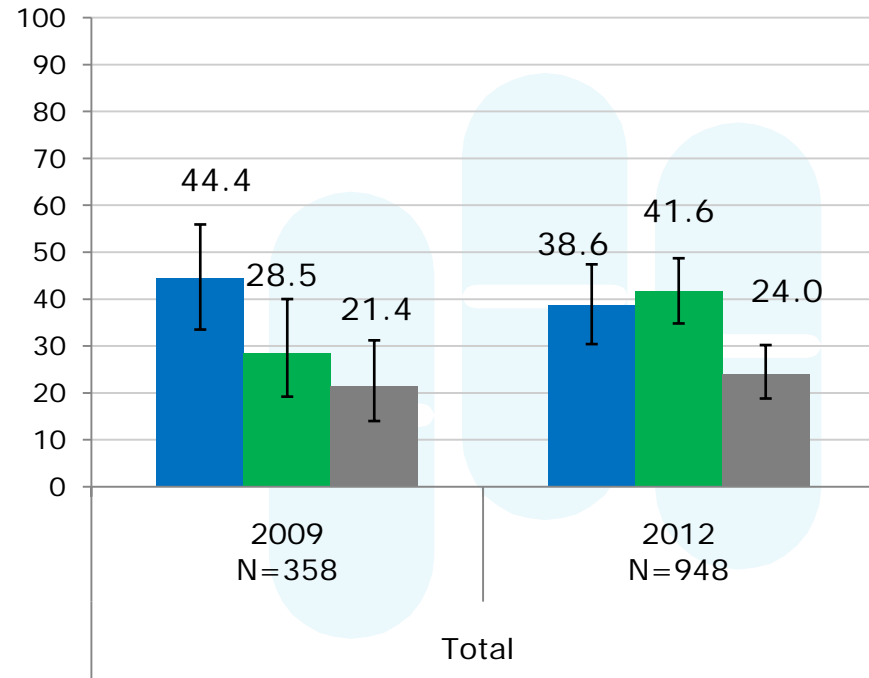
- At home
- Public/Not for Profit Sector
- Private Sector



## Source of antimalarials



## Source of ACTs



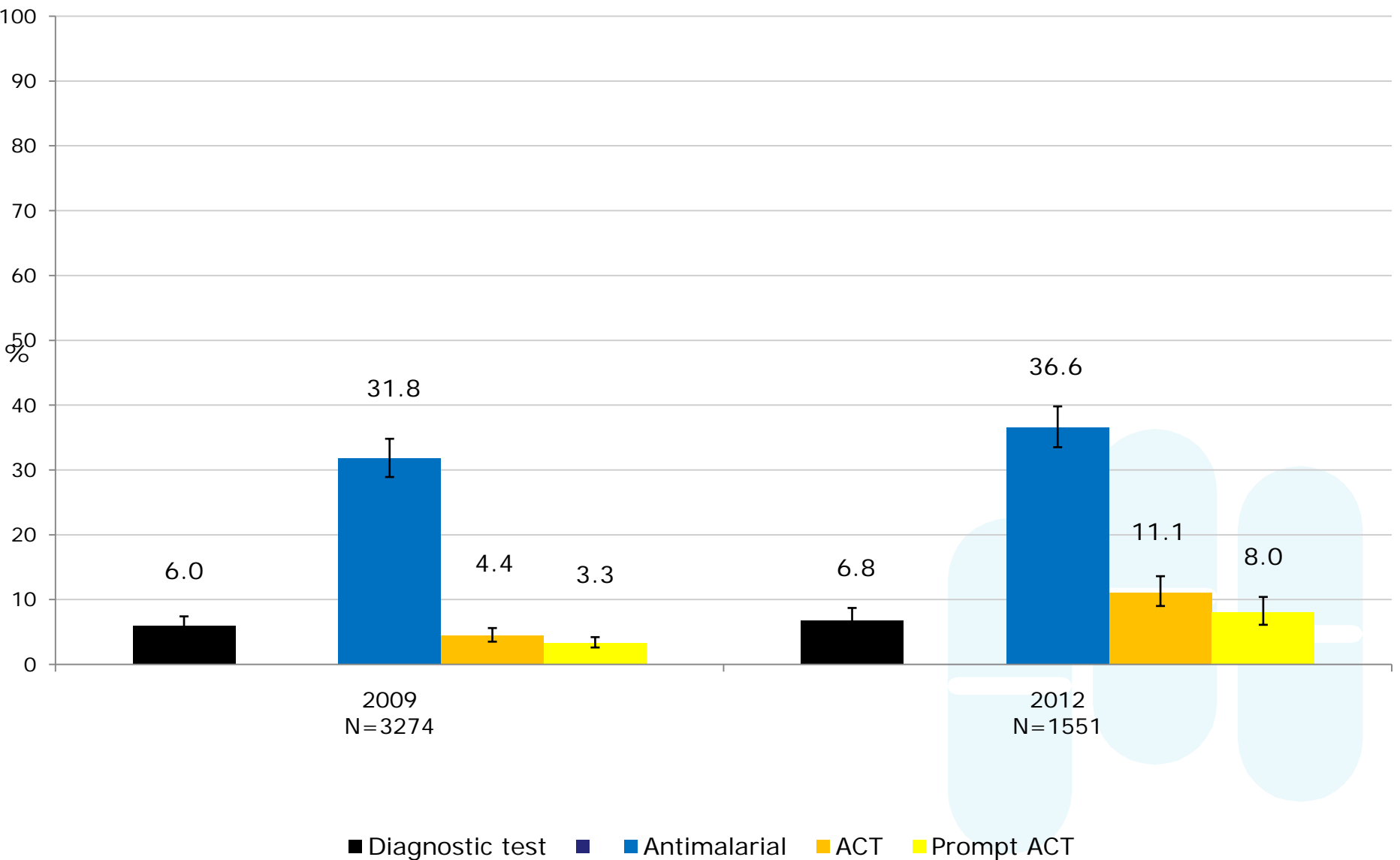
# Nigeria - Context

- LLIN distribution – mass campaign in 22 states (34million, 2011)
- Net use from 6% (DHS, 2008) to 29% (MIS, 2010)
- Targeted IRS in 7 states – 15% (250,000 HHs)
- ACTs - stocks from World Bank , PMI and Global Fund
  - abundant local pharmaceutical manufacturing – not eligible for the subsidy
- Signed AMFm grant in Sep 2010; first order delivered in Jan (private sector) and May (public sector) 2011
- Successful advocacy and promotion efforts in 2011

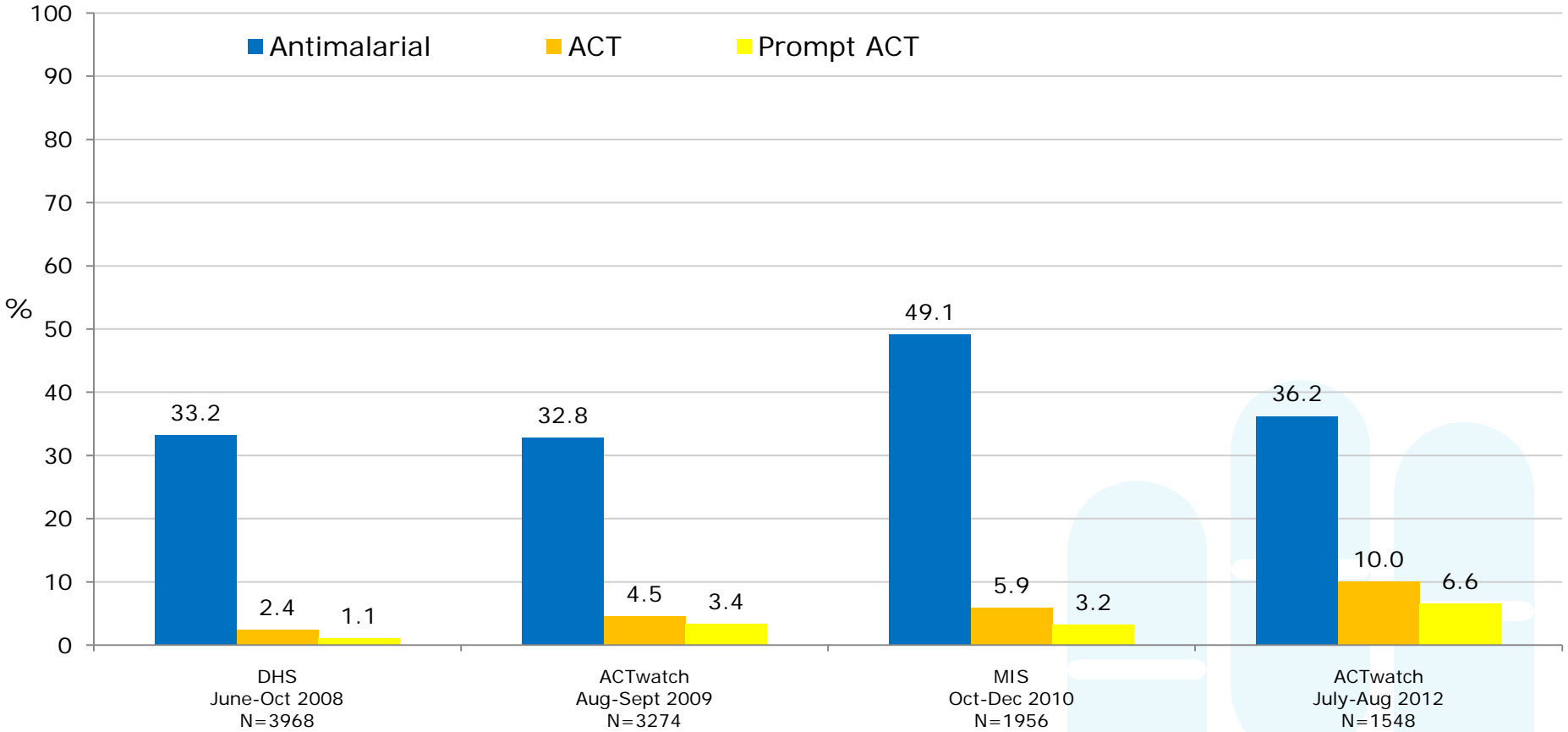




# Treatment of children with fever, Nigeria



# Treatment of children with fever: ACTwatch alongside DHS\* and MIS\* findings: Nigeria



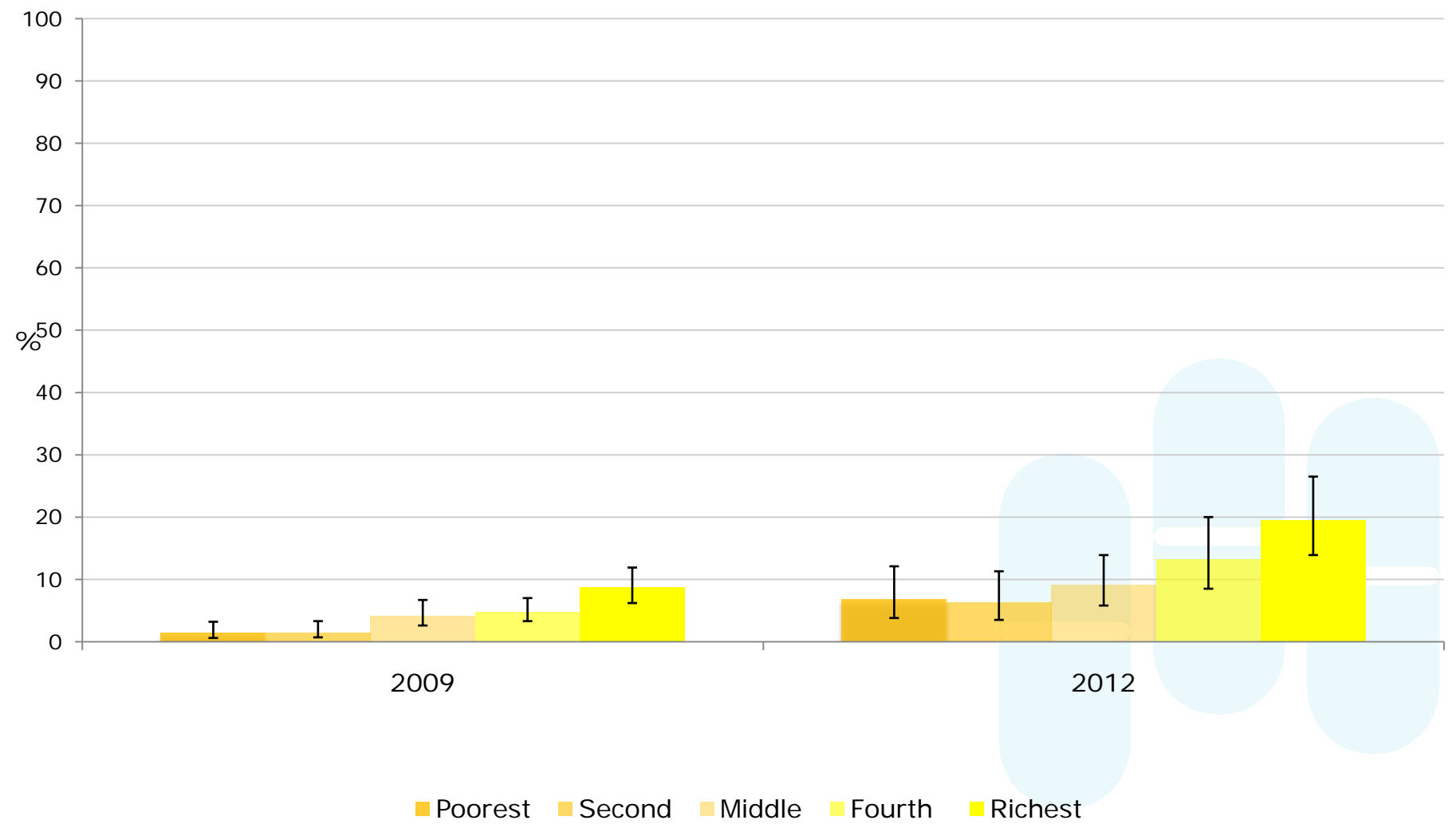
*Of children with fever in the two weeks prior to the survey, the percentage that received: an antimalarial, an ACT, an ACT within <48 hours*

\*Source: [www.measuredhs.com](http://www.measuredhs.com)  
 ICF Macro (2012)  
 ICF Macro (2009)



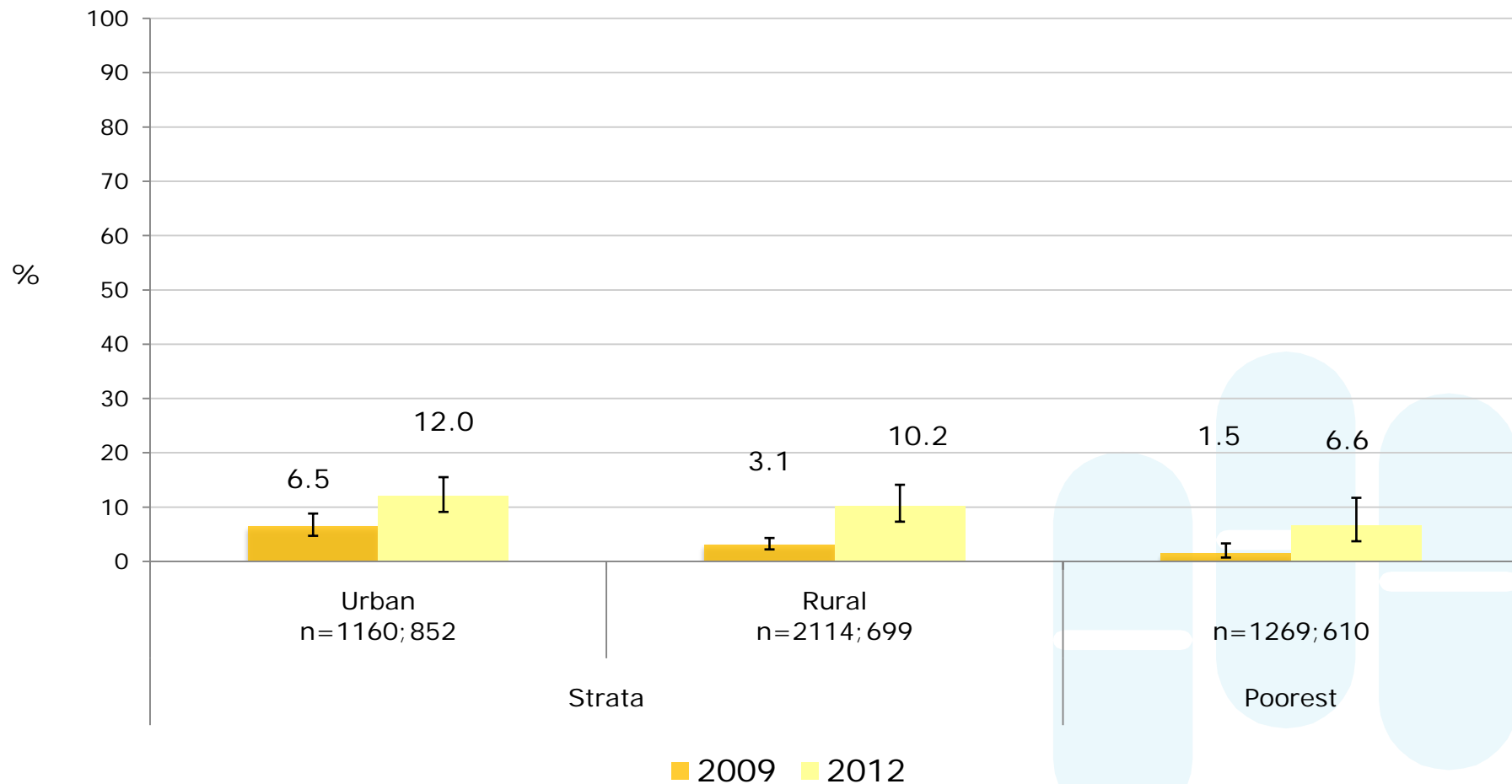


# Proportion of children that received an ACT, across household wealth quintiles, Nigeria





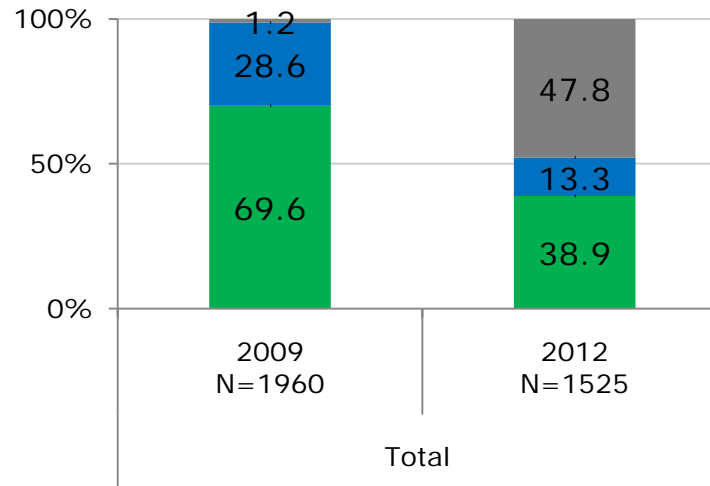
# Treatment of children with fever with an ACT, by urban and rural strata; poorest, Nigeria



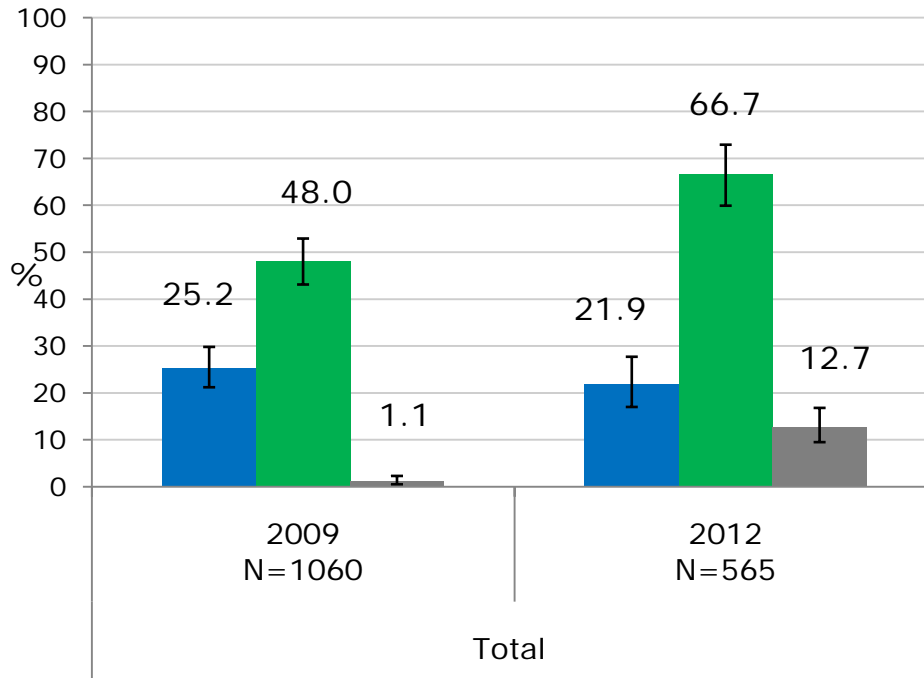
# Initial source of advice/treatment

## Nigeria

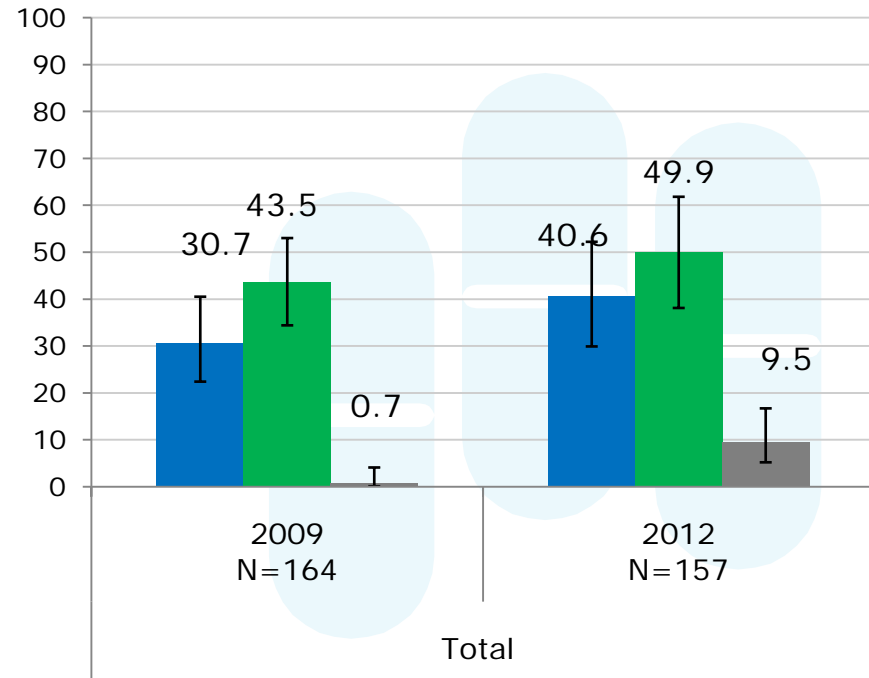
- At home
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- Private Sector



## Source of antimalarials

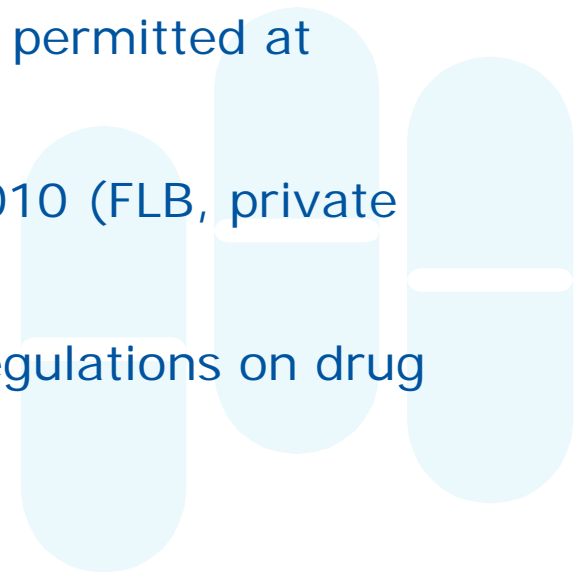


## Source of ACTs



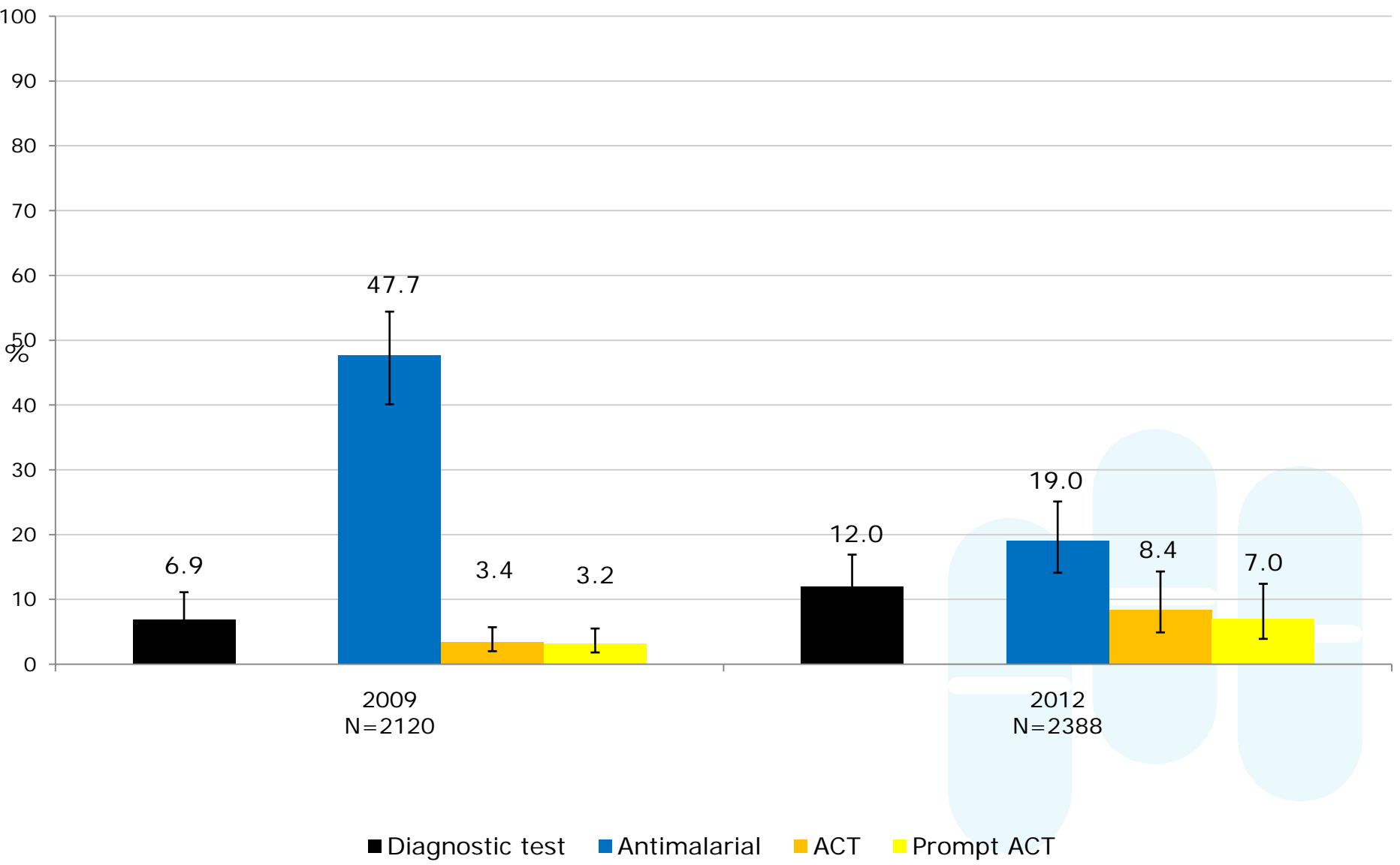
# Madagascar - Context

- Prevention strategies - LLIN distribution & targeted IRS
- Net use from 58% (DHS, 2008/09) to 94% (MIS, 2011)
- ACTs - stocks from PMI
  - ASAO (ACTipal) subsidy through CHWs, pharmacies & drug stores since 2008
  - distribution by CHWs since 2008; RDTs permitted at community level in 2010
- First order for copaid ACTs delivered in Oct 2010 (FLB, private sector) and Feb (public sector) 2011
- AMFm SI limited by enforcement of national regulations on drug advertising
- Political instability and economic challenges



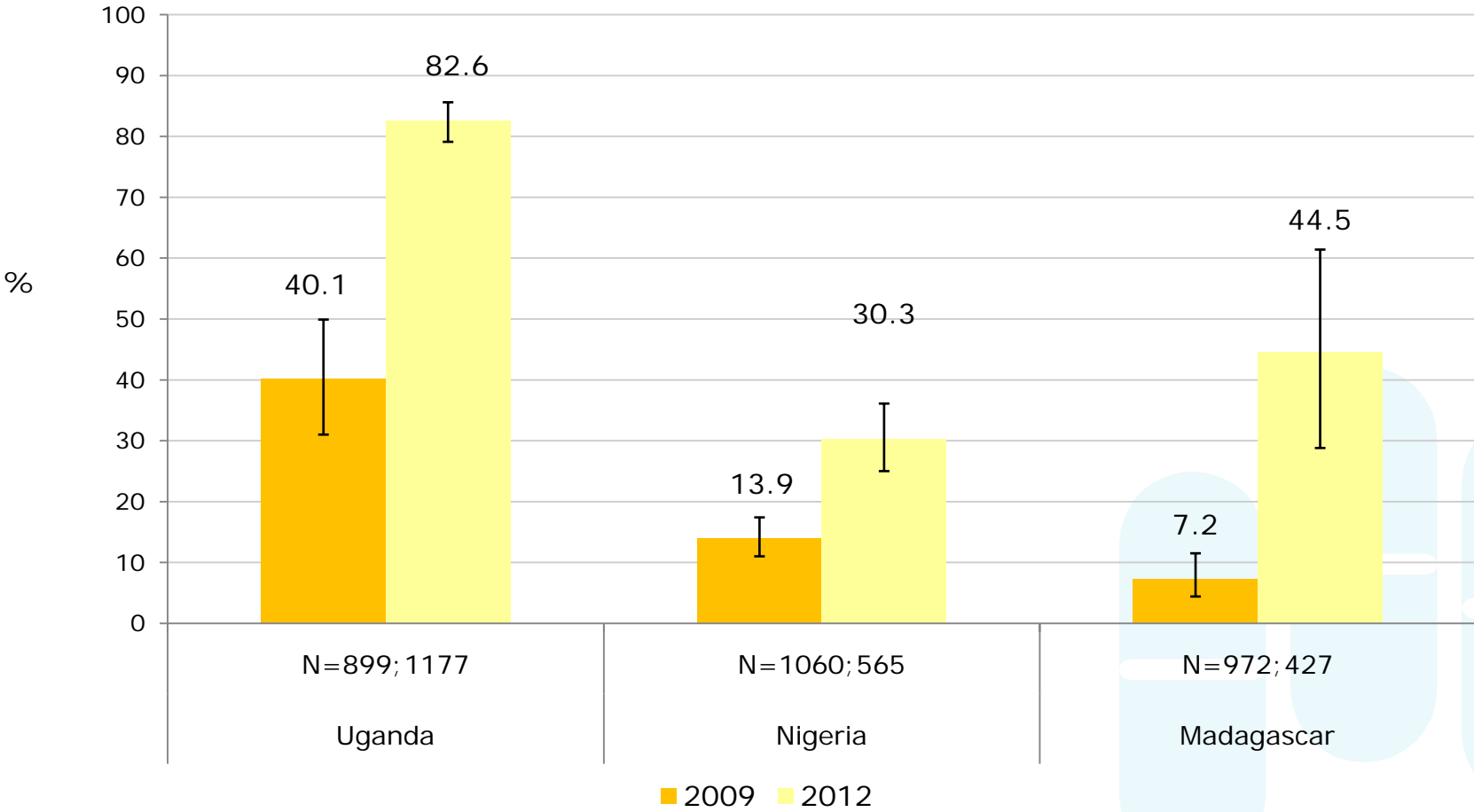


# Treatment of children with fever, Madagascar



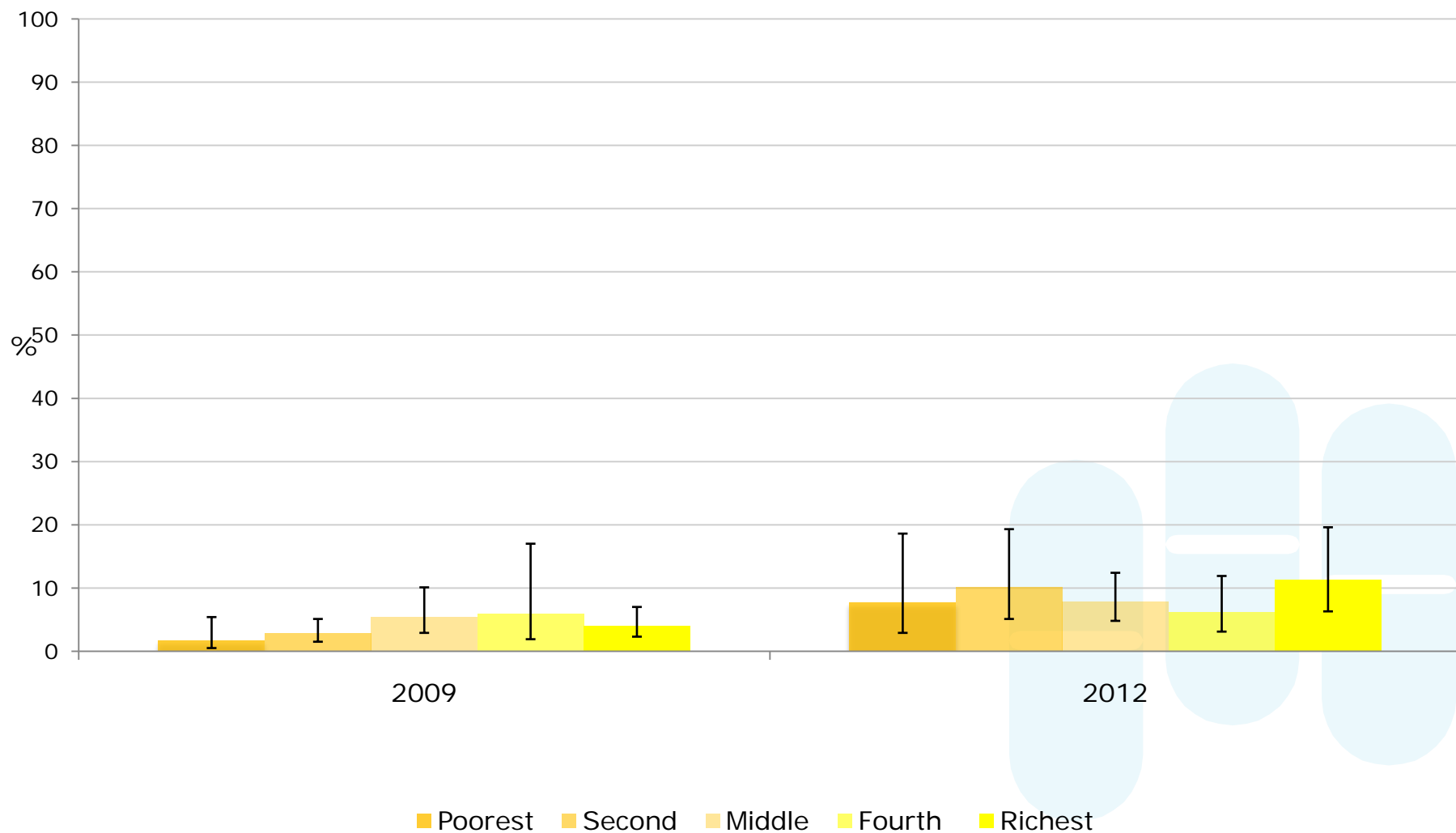


# ACT treatment among those who received an antimalarial



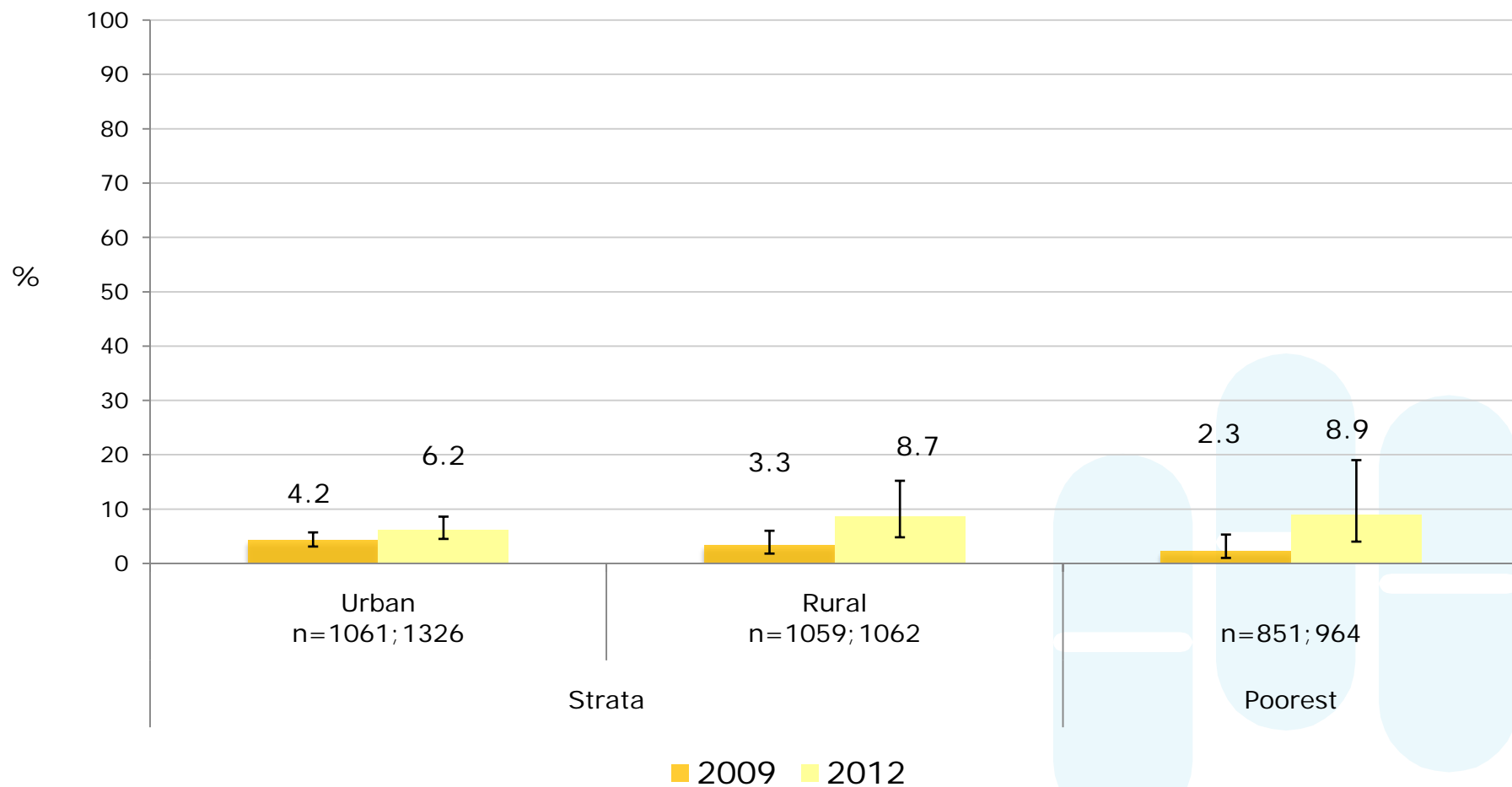


# Proportion of children that received an ACT, across household wealth quintiles, Madagascar





# Treatment of children with fever with an ACT, by urban and rural strata; poorest, Madagascar

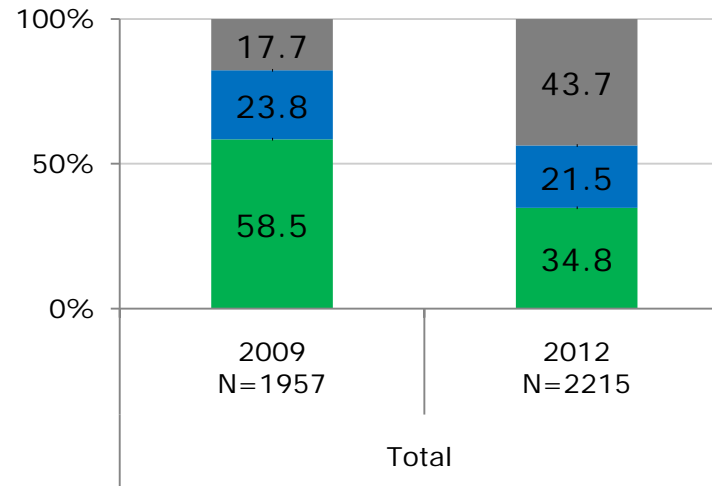




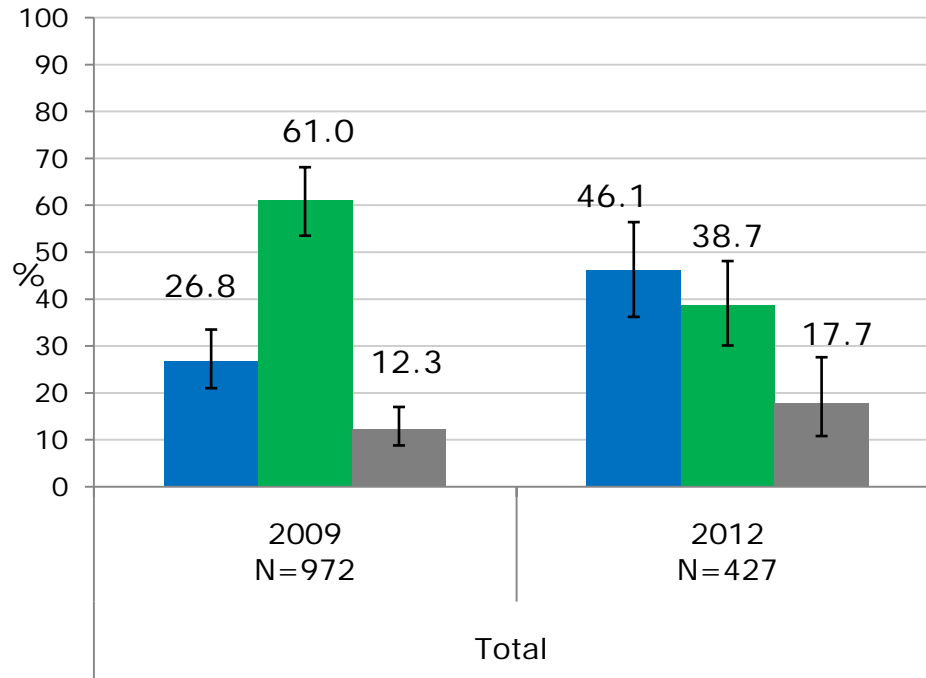
# Initial source of advice/treatment

## Madagascar

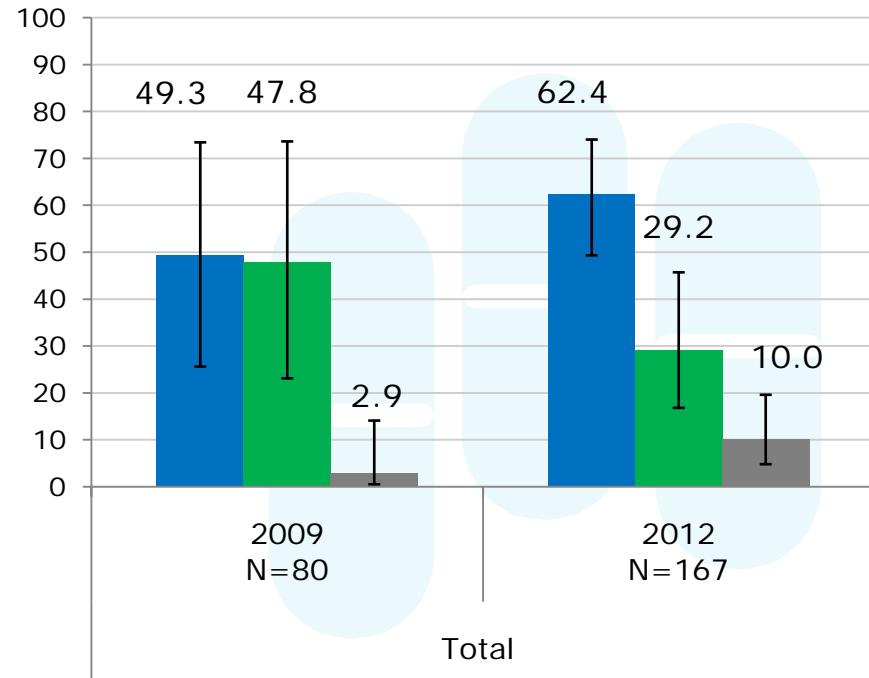
- At home
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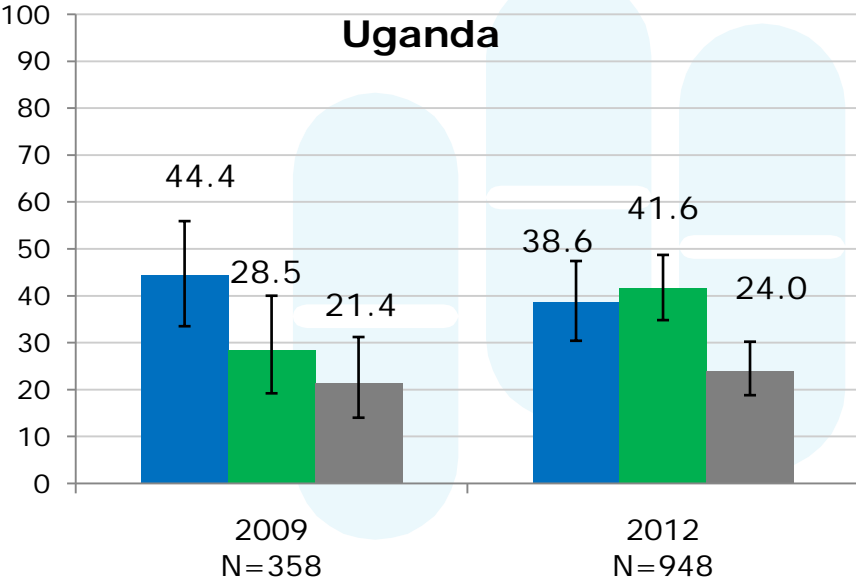
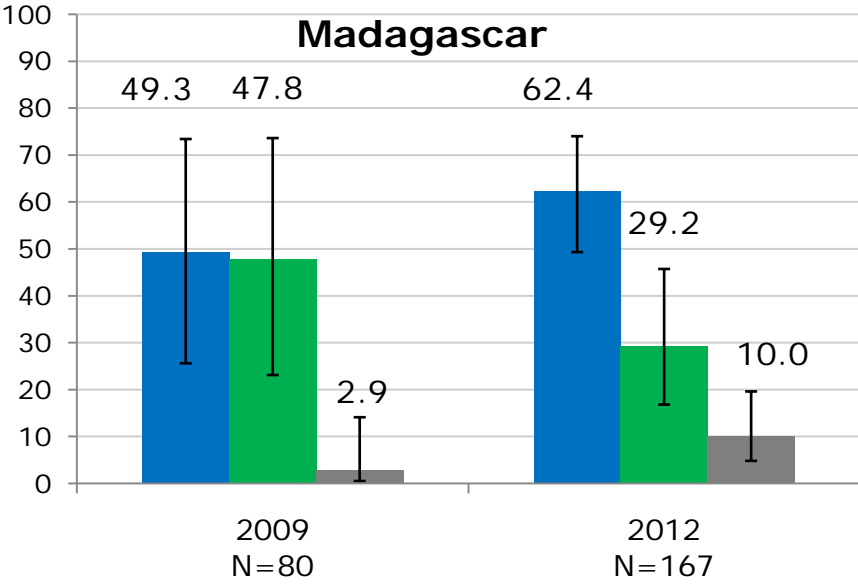
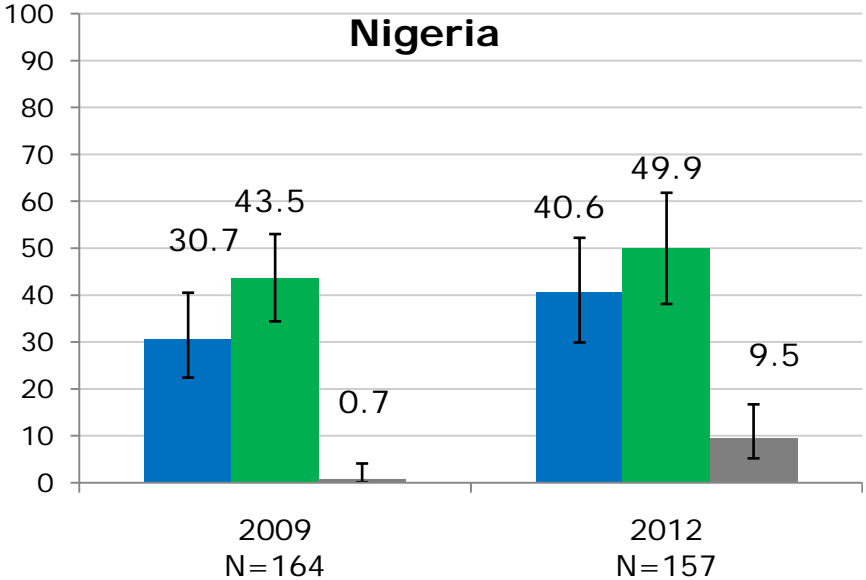
## Source of antimalarials



## Source of ACTs

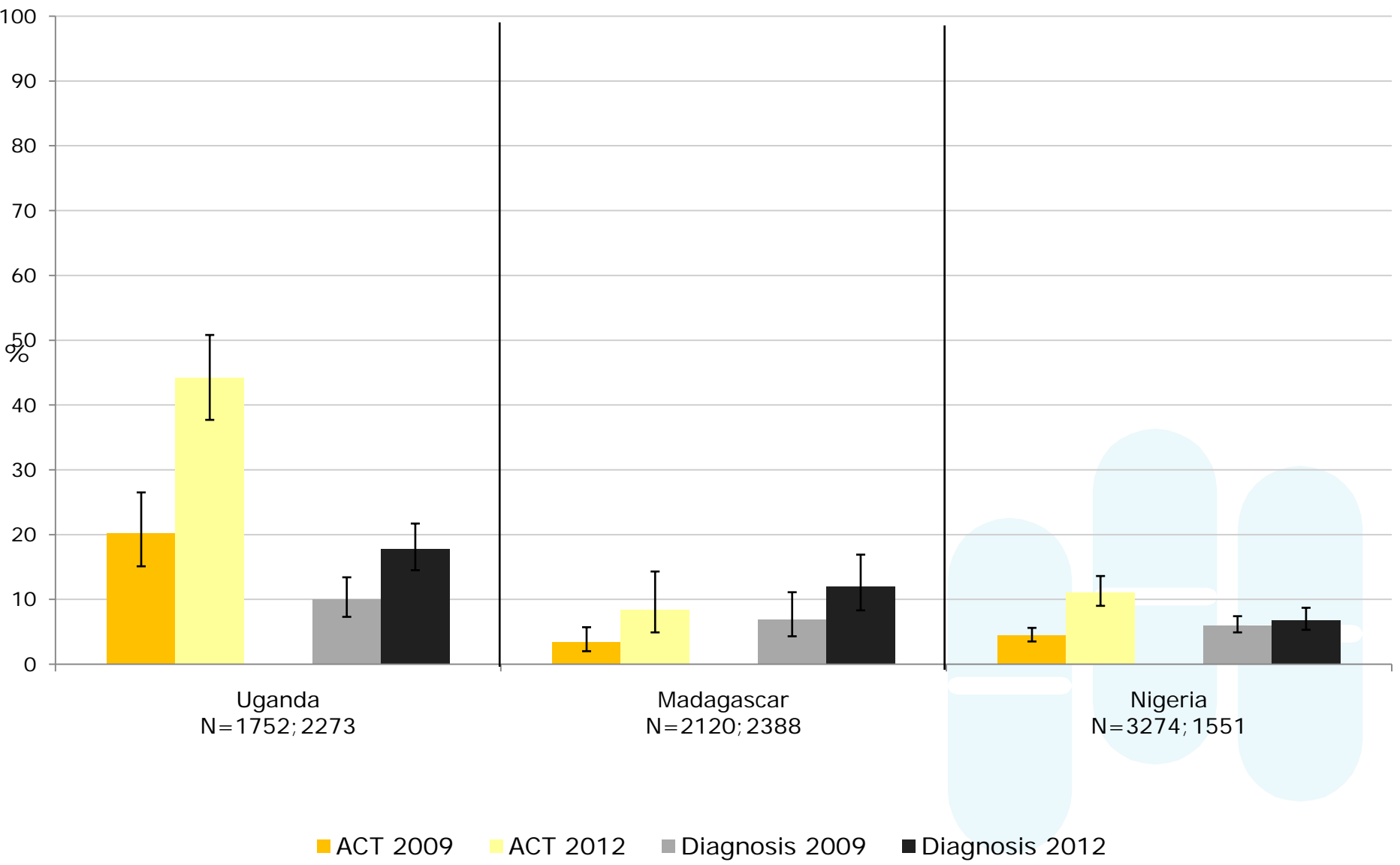


# Summary – source of ACTs





# Summary - Treatment of children with fever



# Awareness of the AMFm

**For Oral use**

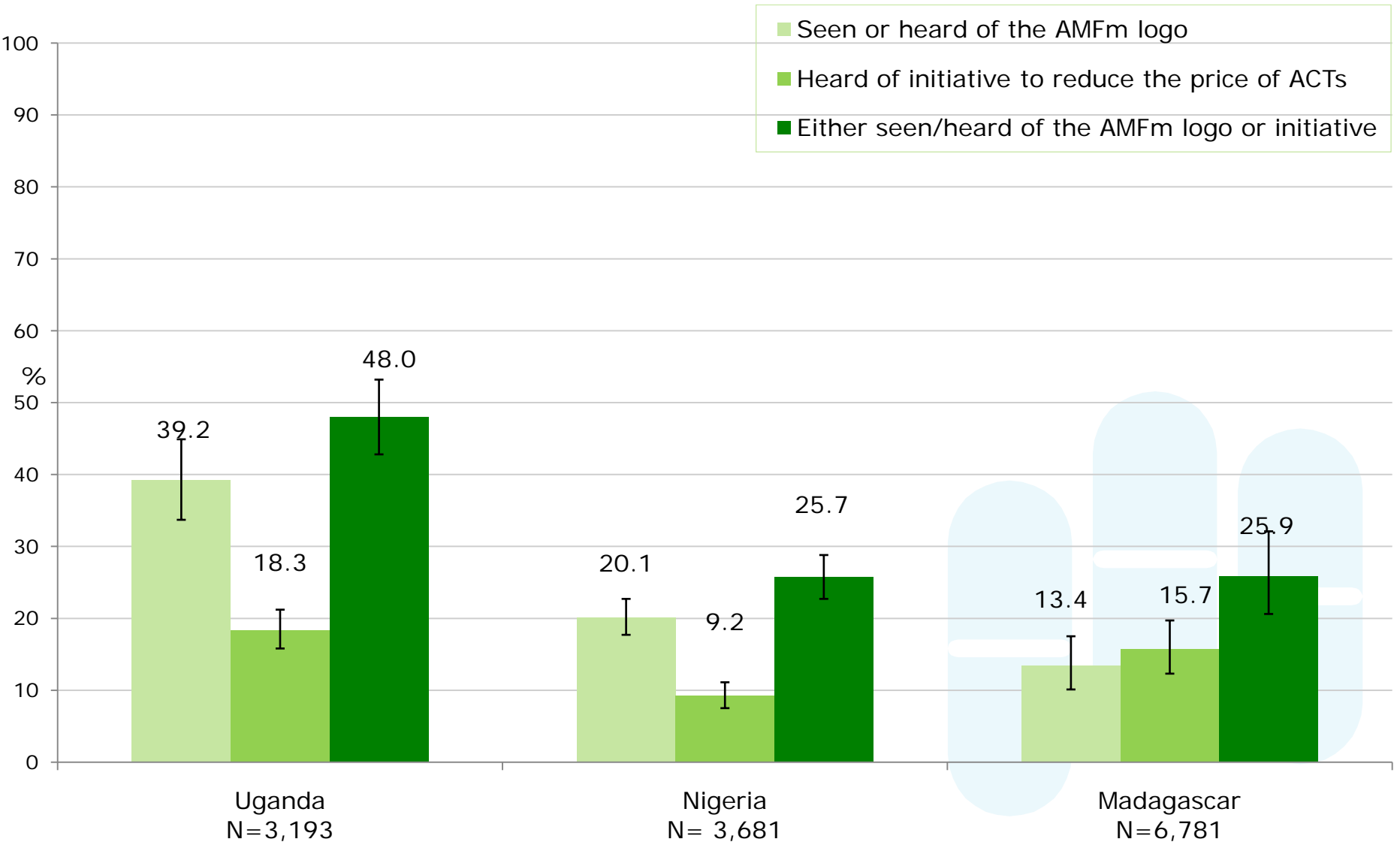
**ACTm**

**FOR CHILDREN**  
**Weight:**  
 5 kg to less than 10 kg  
 (6 months to 5 years)  
 Federal Ministry of Health

<p>NOVARTIS</p> <p>EXP MAY 2012 MFD JUN 2010          LOT F0231 5002529</p>	<p>Artemether/Lumefantrine</p> <p>NOVARTIS</p> <p>EXP MAY 2012 MFD JUN 2010          LOT F0231 5002529</p>
<p>Coartem® Dispersible <b>ACTm</b></p> <p>20 mg/120 mg          Artemether/Lumefantrine</p> <p>NOVARTIS</p> <p>EXP MAY 2012 MFD JUN 2010          LOT F0231 5002529</p>	<p>Coartem® Dispersible <b>ACTm</b></p> <p>20 mg/120 mg          Artemether/Lumefantrine</p> <p>NOVARTIS</p> <p>EXP MAY 2012 MFD JUN 2010          LOT F0231 5002529</p>
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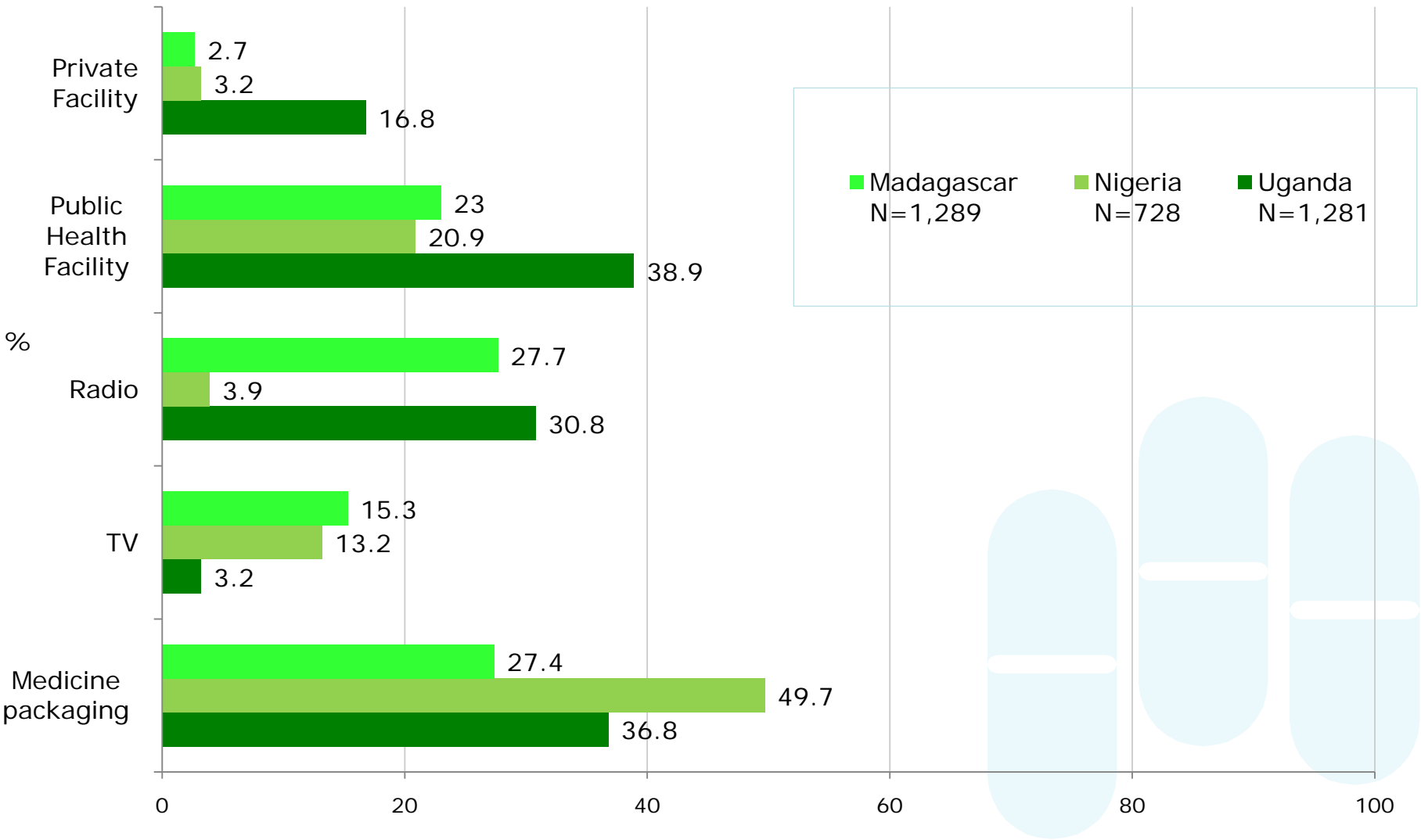


# Caregiver awareness and exposure to the AMFm



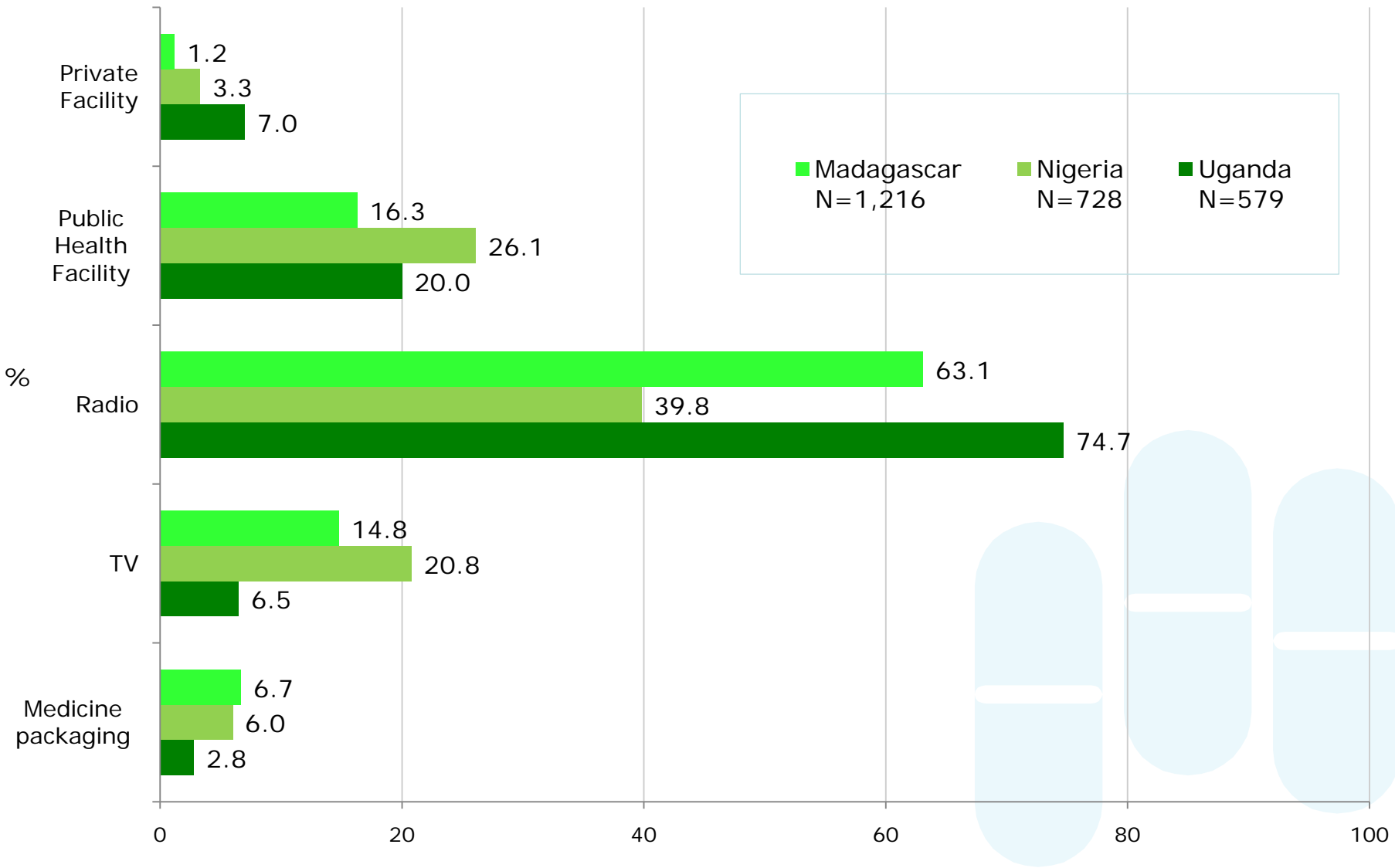


# Common sources of exposure to the AMFm logo



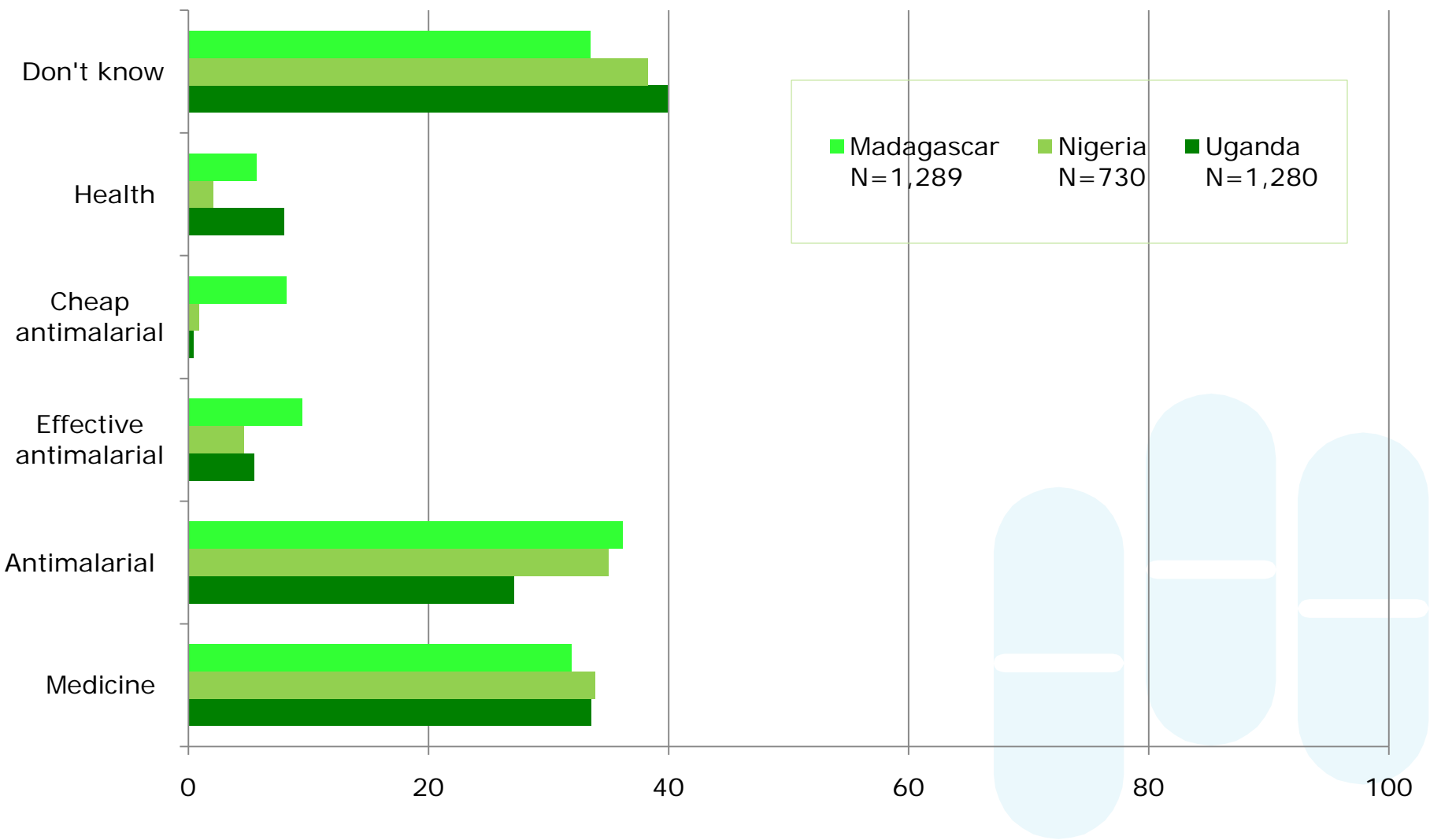


# Common sources of exposure to the AMFm initiative





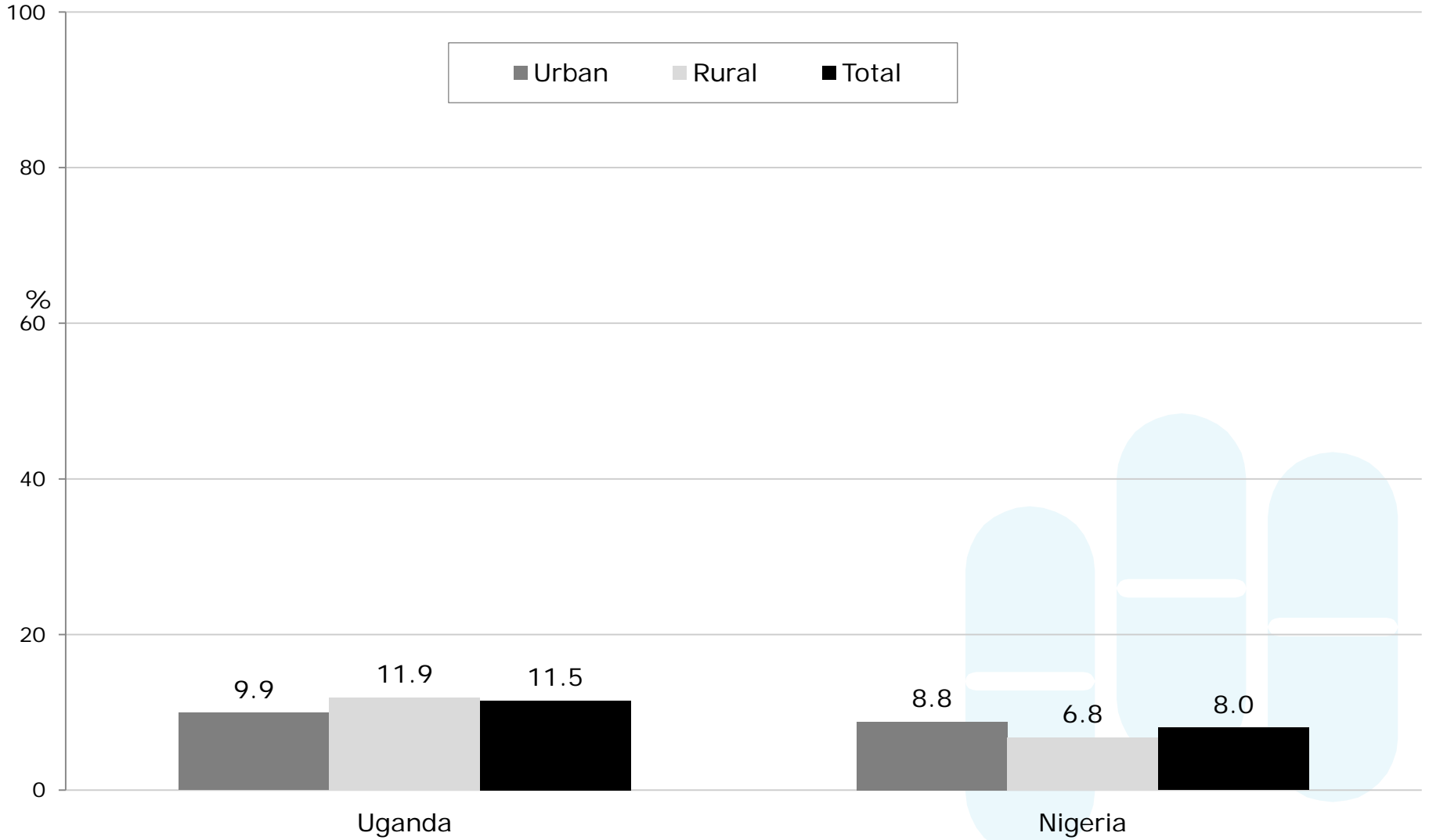
# Meaning of the AMFm logo (n=1289)







# Knowledge of the Recommended Price\*



\*There was no recommended retail price for the AMFm medicine in Madagascar

# Acknowledgements

## *Bill & Melinda Gates Foundation*

## *ACTwatch Advisory Committee*

- Mr. Suprotik Basu
- Mr. Rik Bosman
- Ms Renia Coghlan
- Dr. Thom Eisele
- Mr. Louis Da Gama
- Dr. Paul Lalvani
- Dr. Ramanan Laxminaravan
- Dr. Matthew Lynch
- Dr. Bernard Nahlen
- Dr. Jayesh M. Pandit
- Dr. Melanie Renshaw
- Mr. Oliver Sabot
- Ms Rima Shretta
- Dr. Rick Stekete
- Dr. Warren Stevens
- Dr. Gladys Tetteh
- Dr. Nick White
- Dr. Prashant Yadav
- Dr. Shunmay Yeung

