Transforming the market for quality-assured ACT (QAACT) in Kinshasa: results from a representative outlet survey in support of large-scale market development activities

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BACKGROUND

The government of the Democratic Republic of the Congo (DRC) has set targets of 80% suspected malaria cases tested and 100% confirmed cases appropriately treated by 2020, in line with WHO recommendations. The private health sector in Kinshasa is a critical partner in delivering quality malaria care to achieve these targets as it serves 70% of childhood fevers and has 86% antimalarial market share in the city. However, ACTwatch results from 2015 show QAACT availability was only 19% in drug shops, the most popular antimalarial source. The median private sector adult-equivalent (AE) QAACT course cost \$5.04 and QAACT market share was just 2.2%.

These indicators are markers of critical constraints to a functional and sustainable quality malaria case management market:

- Despite a vibrant private antimalarial market, quality-assured ACTs (QAACTs) have historically been unavailable
- When QAACTs are available, they are much more expensive than blister strips of SP and quinine, the most commonly purchased non-artemisinin therapies
- Diagnostic testing is non-existent in drug shops, the most common antimalarial source

Beginning in December 2015 PSI, in partnership with the National Malaria Control Program (NMCP), negotiated QAACT price reductions with manufacturers, introduced co-payments for importers, conducted large-scale promotion of a Green Leaf quality logo, and supported medical detailing. Additional supporting interventions included the provision of free RDTs to qualified pharmacists and MOH-led supervision.



METHODS

A city-wide representative outlet survey across 34 randomly selected clusters was conducted in February 2017. Standard ACTwatch sampling, fieldwork and analysis methods were used. The study objective was to assess the availability, affordability and market share of QAACTs, and the study was powered to detect a difference of at least 20 %-points in QAACT availability in drug shops between 2015 and 2017. 841 private and public outlets were screened for availability of malaria testing and treatment, 831 outlets were interviewed, and 4,929 antimalarial products and 246 RDTs were audited.



RESULTS

Between Feb 2016 and Feb 2017 manufacturers sold 1.4 million QAACTs to local importers and 4 QAACT brands new to DRC were brought to market. Availability of QAACT increased to 58.8% in drug shops in 2017 and was 93.8% among registered pharmacies. Total private sector QAACT availability increased from 22.4% in 2015 to 55.2% in 2017 (**Figure 1**).

The median retail price for an AE QAACT course was \$1.80, \$3 cheaper than in 2015, while the cost of sulfadoxine-pyrimethamine (SP) and quinine tablets - popular alternative treatments – remained static (**Table 1**). Private sector QAACT market share increased to 14.4%, while the total QAACT market share (including public sector distribution) stood at 16.5%. Across the private sector, QAACT gained share from ineffective non-artemisinin therapies such as SP and quinine (Figure 2).

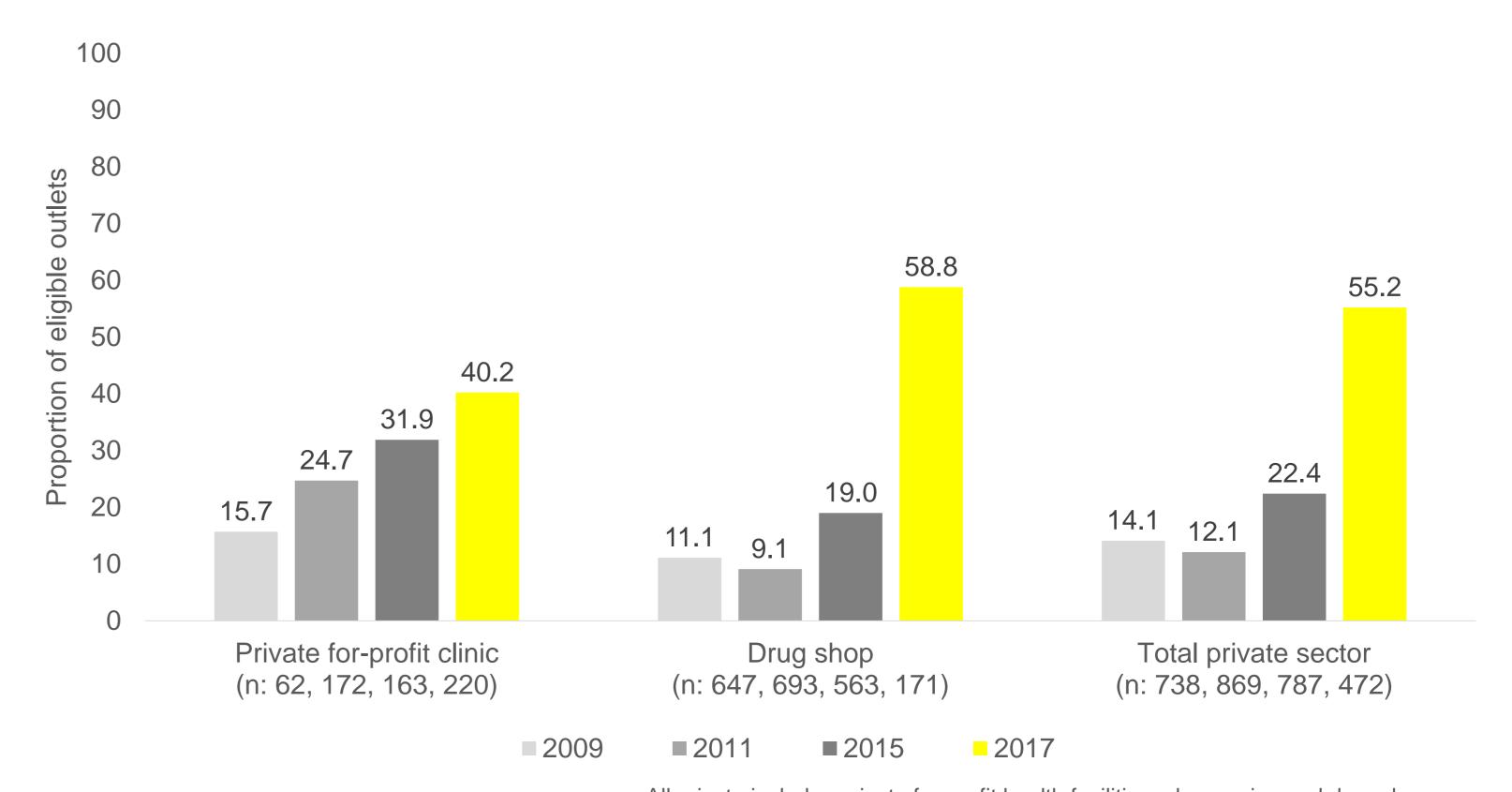


CONCLUSIONS

These data suggest that subsidized QAACT have been embraced by private providers. After 1 year, this intervention met the AMFm benchmarks for success for availability and market share, and greatly reduced the price differential between QAACTs and common non-artemisinin therapies.

There is widespread recognition that the private healthcare sector plays an important role in delivering case management in high-burden countries. NMCPs, and the global malaria community, can achieve a major step towards universal health coverage by continuing to invest in market development approaches to identify context-relevant interventions to ensure functioning and sustainable quality case management markets. Priority for this investment should be given to high-burden countries in which the private sector plays a large role in meeting existing care seeking needs.

Figure 1. Availability of any QAACT among outlets with any antimalarials in stock in Kinshasa, DRC, selected years 2009 to 2017



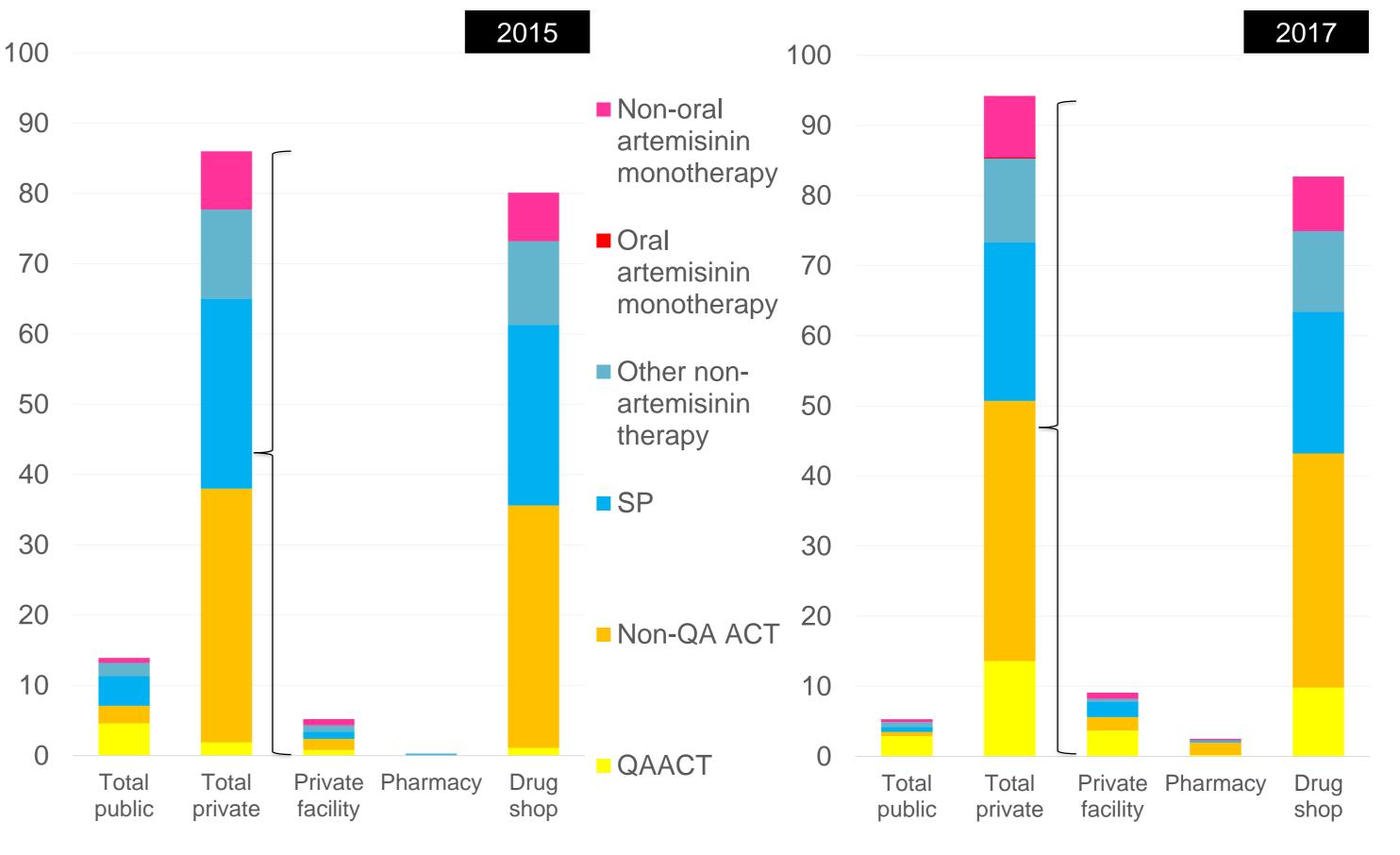
All private includes private for-profit health facilities, pharmacies and drug shops Source: 2009, 2011 and 2015 ACTwatch; 2017 Outlet survey

Table 1. Median [IQR] private sector price in USD for one tablet formulation adult-equivalent treatment dose in Kinshasa, DRC, 2015 and 2017

	2015			2017		
	Pharmacy	Drug shop	All private	Pharmacy	Drug shop	All private
QAACT	\$7.67	\$6.47	\$5.04	\$2.70	\$1.88	\$1.80
	[5.59-10.96]	[4.93-8.77]	[0.00-7.40]	[1.80-5.56]	[1.58-3.76]	[1.50-3.01]
	(n=53)	(n=134)	(n=279)	(n=213)	(n=179)	(n=576)
Non-QA ACT	\$4.82	\$3.84	\$3.84	\$3.83	\$3.46	\$3.46
	[3.73-7.13]	[3.07-4.93]	[3.07-4.93]	[3.01-5.41]	[2.82-4.51]	[2.82-4.51]
	(n=728)	(n=3,252)	(n=4,063)	(n=868)	(n=877)	(n=1,835)
SP tablets	\$1.64	\$0.44	\$0.44	\$0.38	\$0.38	\$0.38
	[0.44-2.47]	[0.33-0.55]	[0.33-0.55]	[0.38-1.88]	[0.30-0.45]	[0.30-0.45]
	(n=68)	(n=761)	(n=873)	(n=57)	(n=218)	(n=317)
Quinine tablets	\$4.42	\$3.31	\$3.31	\$3.16	\$3.03	\$3.03
	[3.59-7.67]	[3.22-3.87]	[3.22-3.87]	[2.84-13.38]	[2.84-3.41]	[2.84-3.41]
	(n=122)	(n=971)	(n=1,189)	(n=123)	(n=273)	(n=482)

Price shown in USD at the exchange rate at the time of data collection All private includes private for-profit health facilities, pharmacies and drug shops Source: 2015 ACTwatch; 2017 Outlet survey

Figure 2. Relative antimalarial market volume based on reported sales/distribution of antimalarial AETDs, 2015 and 2017



Source: 2015 ACTwatch; 2017 Outlet survey

















