



TRENDS IN PUBLIC AND PRIVATE SECTOR READINESS TO MANAGE MALARIA IN MADAGASCAR, 2010-2015



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BACKGROUND

Key strategies have been implemented in Madagascar to ensure access to confirmatory testing and Artemisinin Combination Therapy (ACT) for malaria cases. These include public sector scale-up and a private sector copayment mechanism (PSCM), first implemented as the Affordable Medicines Facility-malaria (AMFm) pilot from 2010-2011 and subsequently the Global Fund's PSCM.

METHODS

Nationally-representative malaria outlet surveys were conducted in 2010, 2011, 2013 and 2015. A census of public and private outlets with potential to distribute malaria testing and/or treatment was conducted among a representative sample of administrative units. An audit was completed for all antimalarials, malaria rapid diagnostic tests and microscopy.

RESULTS

Has readiness to treat with quality-assured ACT improved over time in the public and private sectors? Availability of quality-assured artemisinin combination therapy (QA ACT) has remained above 80% in the public sector since 2010. However, a decline was observed in the most recent survey round to 84% in 2015 compared with 97% in 2013. In the private sector, QA ACT availability increased between 2011 (9%) and 2014 (28%), but declined in 2015 to 11%. The declines were observed across private sector outlet types, with the exception of pharmacies, with a particularly notable drop in availability among drug stores from greater than 50% in 2010, 2011 and 2013 to 17% in 2015.

Has the relative market share for QA ACT increased over time? The private sector was responsible for the majority of antimalarial distribution (>60%) at each survey round. QA ACT market share was similar in 2010 (12%) and 2011 (19%), increased to 44% in 2013, and decreased to 16% in 2015. The majority of antimalarials distributed at each survey round were non-artemisinin therapies including sulphadoxine-pyrimethamine (SP) and chloroquine. During the most recent survey round, non-artemisinin therapies were the most commonly distributed antimalarial in both the public and private sectors. Non-artemisinin therapy market share was greater than 80% during each survey round with the exception of a notable decline in 2013 to 56%. In 2015, half of all antimalarials distributed were SP treatments. Other non-artemisinin therapies, namely chloroquine, accounted for another 34% of all antimalarials distributed (Figure 2).

How much does QA ACT cost relative to other popular antimalarials? The private sector price of QA ACT increased between 2013 and 2015, while the price of SP and chloroquine remained similar over time. In 2015, QA ACT was 2.8 times more expensive than SP, and 1.9 times more expensive than chloroquine (Figure 3).

Where antimalarials are distributed, is confirmatory testing available? Availability of confirmatory testing, either by malaria rapid diagnostic test (RDT) or microscopy, was previously high in public health facilities at approximately 90%. However, in 2015 availability in public health facilities declined to 75%. In the private sector, availability of confirmatory testing has improved since 2010/2011, however in 2015 only 10% of private sector antimalarial-stocking outlets had testing available (Figure 4).

CONCLUSION

The 2015 findings suggest that in the vast majority of cases, people seeking malaria treatment in both public and private sectors of Madagascar are treated with non-artemisinin therapies including SP and chloroquine. The majority of antimalarials in Madagascar are distributed in the private sector. Private sector QA ACT availability has remained low despite interventions since 2010 to improve access to affordable QA ACT, first through the AMFm pilot and subsequently the Global Fund private sector co-payment mechanism. Although low availability is the primary barrier to QA ACT access in the private sector, where available, QA ACT price relative to SP and CQ is high and may be a barrier to uptake. Finally, low availability of private sector confirmatory testing suggests that presumptive treatment remains common. There is need to strengthen private sector strategies to improve malaria case management in Madagascar. 2015 findings also highlight widening gaps in public sector readiness and performance for appropriate malaria treatment.

Figure 1: Availability of quality-assured ACT Among outlets with at least one antimalarial in stock

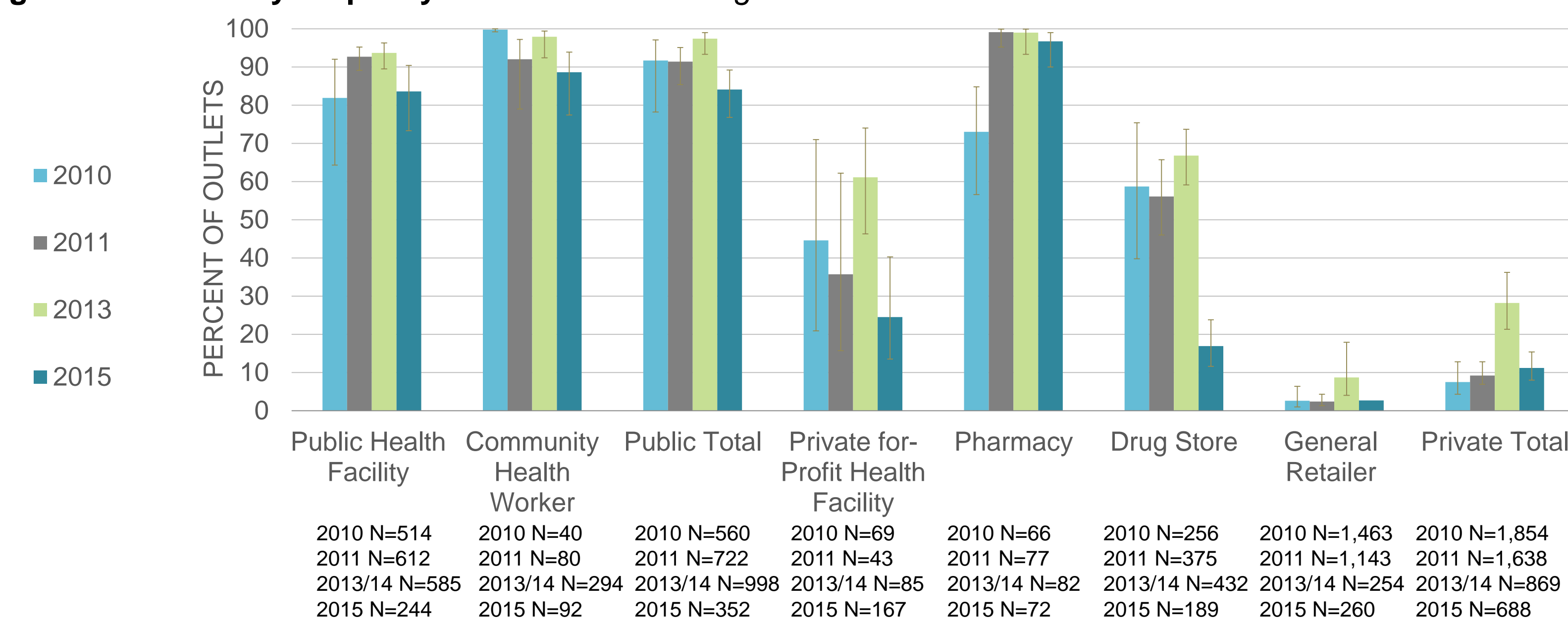


Figure 2: Antimalarial market share Relative market volume (sale/distribution) of antimalarials

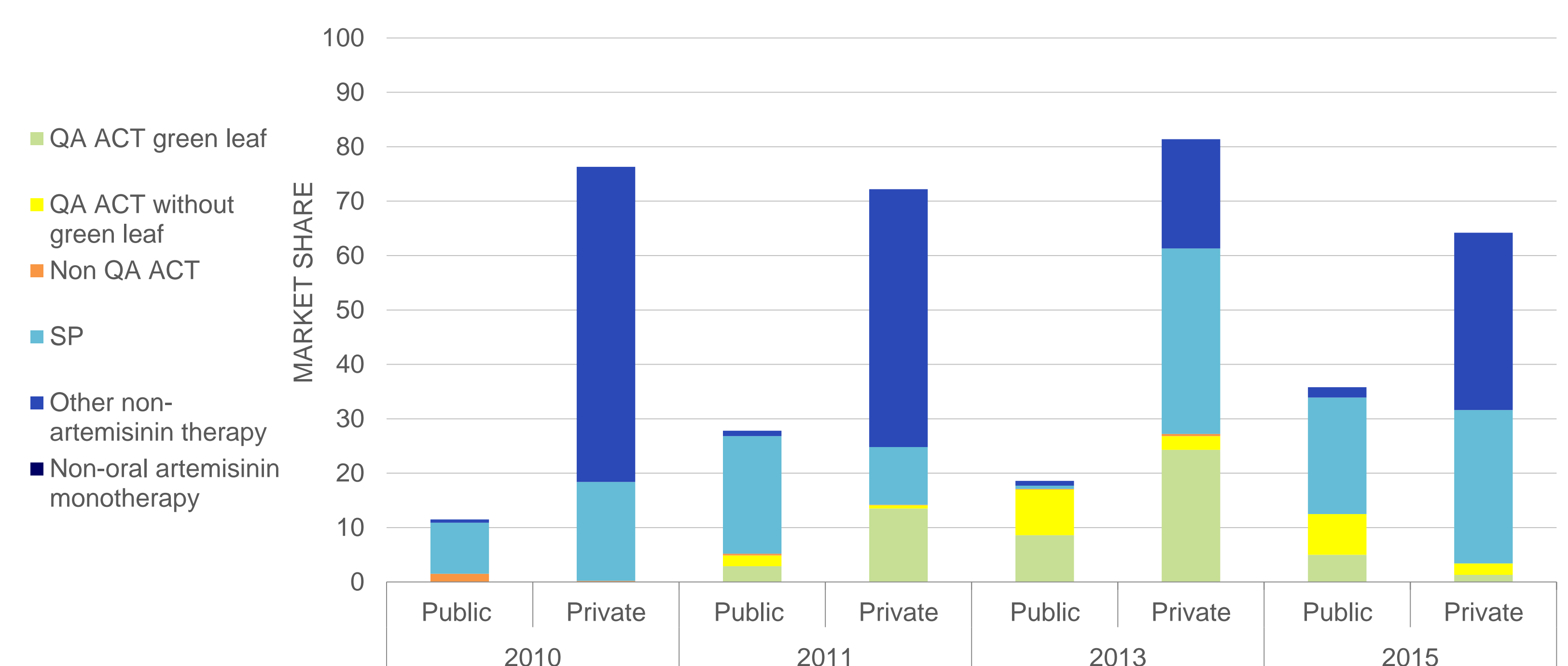


Figure 3: Median private sector price of QA ACT and popular non-artemisinin therapies, SP and chloroquine. Retail price for one adult equivalent treatment dose (tablet formulation) deflated to 2010 US Dollars

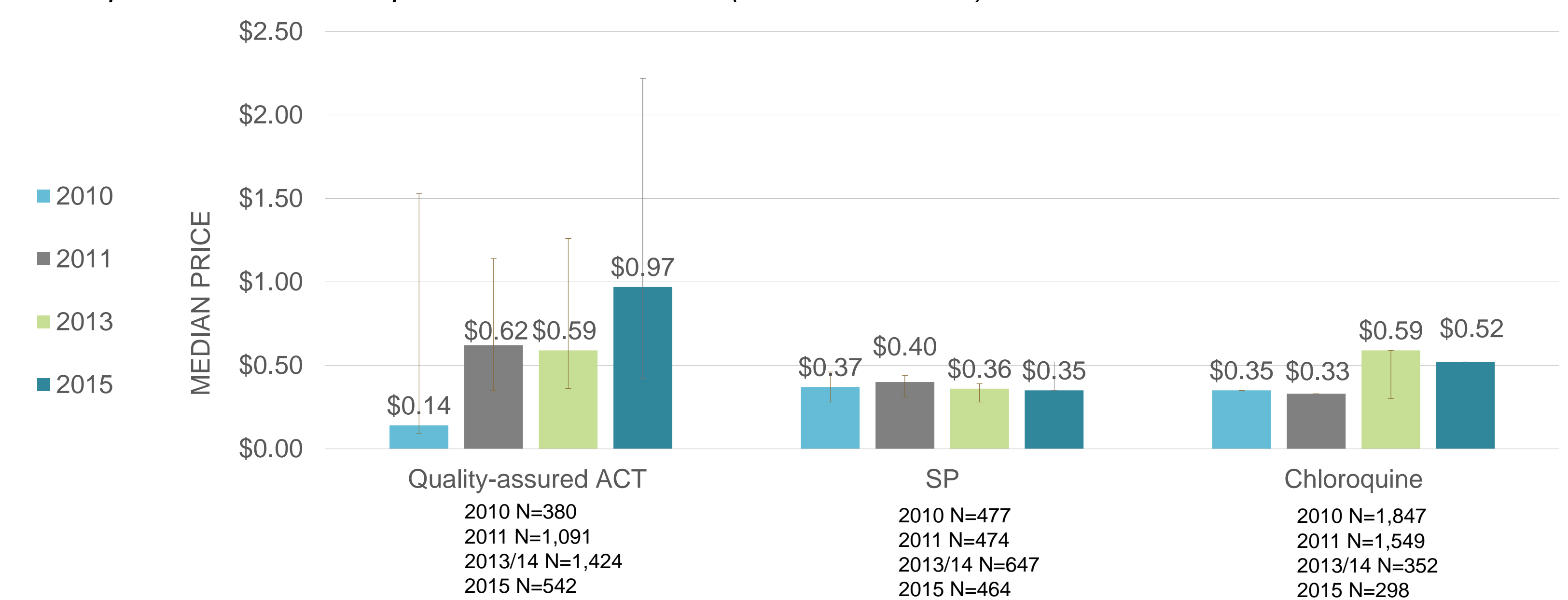


Figure 4: Availability of malaria blood testing Among outlets stocking antimalarials on the day of the survey or in the past 3 months

