





Executive Summary

Global progress against malaria has stalled and there is renewed urgency to expand access to core malaria interventions in high-burden countries. Private sector providers have a crucial role to play in case management across the malaria elimination continuum. Almost 50% of the global malaria burden falls in 6 countries in sub-Saharan Africa where the majority of care-seeking for fever occurs in the private sector. Private sector engagement is key to improving access to quality malaria case management in such settings.

Between 2014 and 2017 PSI employed a Market Development Approach to transform the private sector malaria case management market in Kinshasa, DRC. A data driven market review led to the identification of key constraints to sustainable market performance and informed the design of tailored supply and demand interventions that were executed by an actively managed forum of direct and indirect market actors. Four new quality assured artemisinin-based combination therapy (QAACT) brands were successfully registered and brought to market, QAACT availability increased from 22% to 55%, prices dropped by over \$3 USD and QAACT market share increased from 2% to 14%. Supporting interventions led to a change in policy widening access to RDTs through pharmacies and a government-owned plan to reduce taxes and tariffs on malaria commodities.

NMCPs, and the global malaria community, can achieve a major step towards universal health coverage by continuing to invest in market development approaches to ensure functioning and sustainable quality case management markets. We call on the malaria community to engage the private sector, using proven market development approaches, to improve quality case management in other high-burden settings.

Background

After a decade of sustained progress against malaria, global advances have recently stalled.¹ There is renewed urgency to find effective solutions to continue expanding access to core malaria interventions in high-burden countries. The global malaria community now agrees that private sector providers have a crucial role to play in case management across the malaria elimination continuum, but questions of how to effectively engage this diverse sector remain. In low burden settings, such as the Greater Mekong Subregion, malaria elimination will fail without the private sector providing quality case management and surveillance data. Similarly, in high-burden settings public facility-based services alone do not provide adequate access to care. This challenge for malaria comes amidst growing political support for universal health care to provide efficient and equitable care for all. Almost 50% of the global malaria burden currently falls in 6 countries in sub-Saharan Africa where over half of care-seeking

for fever occurs in the private sector.¹ Private sector engagement is key to improving access to quality malaria case management in such settings. Furthermore, successful private sector engagement for malaria can support a country's commitments to and journey towards universal health coverage.

PSI has recent experience supporting private sector malaria case management in 3 of these 6 countries, including Nigeria and the Democratic Republic of Congo, which together account for 40% of global malaria burden and where private sector care seeking represents up to 70% of health care visits. This Learning Brief describes the process employed, and outcomes achieved, in support of high-quality malaria case management in one of these settings, Kinshasa DRC, as an example of a successful private sector engagement approach that can be replicated in other high-burden countries.

Framework for private sector engagement

December 2018 marks 6 years since the end of the Affordable Medicine Facility-malaria (AMFm) pilot and the subsequent integration of the co-payment mechanism for quality assured artemisinin-based combination therapy (QAACT) into the core Global Fund to Fight AIDS, Tuberculosis and Malaria grant process. Evaluation of the AMFm pilot confirmed that financing mechanisms can rapidly improve private-sector availability, price and market share of QAACT.² ACTwatch results have since shown these gains were sustained or grew in most countries through subsequent years, but not universally.³ In some settings QAACT availability and market share plateaued or decreased, in others QAACT prices

rose after the pilot ended. In all settings, insufficient attention was paid to identifying and addressing other critical constraints to quality private sector case management, including the policy on outlets providing QAACTs, the supply and demand of diagnostic tests, and alignment between treatment guidelines and medicine regulation bodies. The diversity of private sector markets means that any 'one size fits all' approach will fail to replicate success across settings. Instead, tailored approaches grounded in an understanding of each market context are required to identify winning private sector engagement strategies for quality malaria care.

Market Development Approach

PSI applies a Market Development Approach to better understand and influence health markets and systems with the aim of improving market performance towards achieving universal health coverage. We partner with governments, non-profits, commercial players and other actors across the value chain to identify constraints to the market's core functions, supporting functions and rule-setting. A nuanced understanding of the root causes of these constraints informs the design of targeted interventions to help support equitable and sustainable market performance. The goal is to embed sustainability into the market system by ensuring that the actors performing each market function have the capacity and incentives to fulfill their role.

Figure 1 illustrates the interplay of market actors and functions in a health market system. Market actors and stakeholders from the public (blue box) and private (orange box) sectors are linked to three key health system functions: the core supply/demand function, supporting functions and rule setting. Ultimately, the government has overall

responsibility for the stewardship of these functions, which work together to meet the health needs of the patient or consumer.

For fever case management, this ideal market state is characterized by high levels of consumer demand for accessible diagnosis and treatment met by consistent supply of affordable commodities and appropriate quality services from providers. Supporting functions in the market ensure there is cost-effective routine quality assurance of fever case management services and underpin expanded access to care through an enabling policy and regulatory environment.

Applied to malaria case management markets, PSI's conceptual approach is grounded in evidence from AMFm and internal sources, informed by direct implementation experience in challenging operating environments, and supported by shared tools and materials to enable replication of the approach across settings. National Malaria Control Programs (NMCP), and the global malaria community, can achieve a major step towards universal health coverage by continuing to invest in market development approaches to ensure functioning and sustainable quality case management markets.

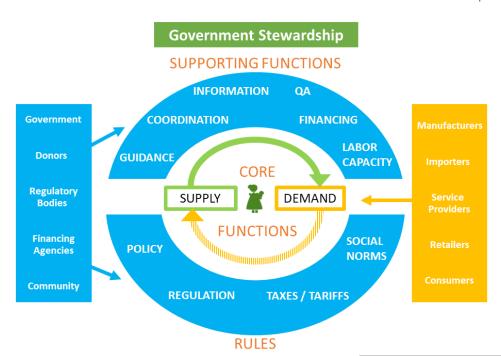


Figure 1. Structural elements of a health market system - adapted from the M4P Operational Guide.⁴

Case study: Private sector engagement in Kinshasa, DRC

Applying PSI's Market Development Approach

DRC has the world's second-highest malaria burden, with an estimated 22.6 million cases and 60,500 deaths attributed to malaria in 2016. The capital, Kinshasa, is home to over 10 million people and the average malaria prevalence in the wet season is 17%, rising to over 30% in the populous peri-urban city edges. The private healthcare sector in Kinshasa is a critical partner in delivering quality malaria care to the local population. Private sector providers serve 70% of childhood fevers and command 86% antimalarial market share in the city. The sector comprises approximately 3,500 for-profit and non-profit doctors, clinics and hospitals, 98 accredited pharmacies and over 5,000 unaccredited pharmacies, or drug shops.

Despite relatively high treatment seeking behaviors for fevers, the case management market can be characterized as one in which uninformed clients get partial treatments of ineffective therapy from untrained and unregulated providers. Beginning in 2014, with strong collaboration from the NMCP and with support from DFID, PSI and its local partner set about transforming the market to one of improved quality malaria care: where informed clients get diagnosis and full treatments of quality therapy at an affordable price from trained providers. We followed a three-step data driven process to address key market constraints inhibiting the development of a functional and sustainable private sector market for quality malaria case management in Kinshasa (**Figure 2**).

Six market constraints were prioritized by the program team and market actors: high ex-factory QAACT price for first-line buyers, low consumer demand for QAACT, poor coordination across the local pharmaceutical supply chain, high taxes and tariffs on ACTs both absolutely and relative to non-artemisinin therapies, a sub-optimal enabling environment with misalignments between treatment policies and drug regulation and restrictions on the use of RDTs, and poor quality malaria case management among private providers.

Figure 2. Process steps in the Market Development Approach.

Market

- Describe the performance of the case management market from the perspective of the patient through secondary data review and primary data collection.
- Map the value chain to identify actors involved in delivering services and products at each level and define their roles and relationships.
- Analyze key market functions to understand the capacities and incentives of direct (e.g. manufacturers) and indirect (e.g. regulators) market players to serve the patient.

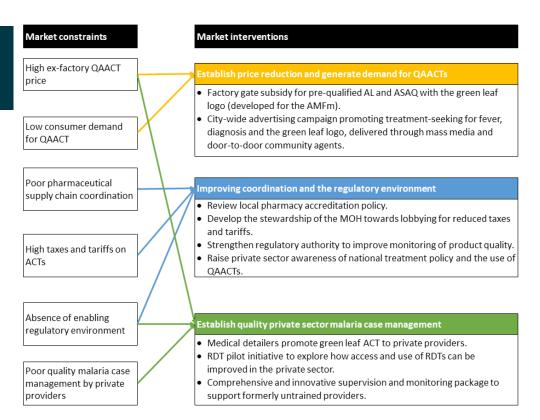
Constraints Analysis

- Identify areas in the market where a function is inadequate, mismatched or absent and determine the underlying constraints that give rise to each underperformance.
- Prioritize constraints for action based on potential scale for impact, feasibility of success, and noting any required sequencing.
- Conduct a root cause analysis to identify interrelationships between prioritized constraints an ensure solutions address causes of market failures not the symptoms.

Intervention Design

- Articulate the vision for a functioning, sustainable, equitable health market by identifying who performs and who pays for key functions presently and how these roles and responsibilities transition over time to ensure sustainability.
- Define interventions, metrics for success and the approach to monitoring, evaluation and learning.

Figure 3. Constraints and interventions for the private sector malaria case management market in Kinshsa, DRC.



In response, a coordinated package of targeted interventions was designed to establish price reductions for QAACT and generate demand for confirmatory malaria diagnostic testing and QAACT, to improve coordination in the market and strengthen the regulatory environment, and to pilot approaches for improving quality private sector malaria case management (**Figure 3**).

The project engaged with QAACT manufacturers to negotiate price reductions for first-line buyers. Manufacturers new to DRC were supported in bringing their products to market through assistance with regulatory procedures and by addressing other barriers to entry. The Global Fund green leaf logo was licensed for use on subsidized QAACT packaging to identify high-quality, effective antimalarial products. The logo was included in all promotional materials, allowing the team to promote effective case management without favoring one QAACT brand over another. High-level government engagement sought to

review the policy on pharmacy accreditation and use of RDTs, while work with parliamentarians and the National Assembly aimed to introduce regulation to reduce taxes and tariffs on antimalarial commodities from 69% to 9%. RDTs were made available to private sector providers with support from the Global Fund, and staff from government and the pharmacists' professional body were trained to conduct routine supervision visits to private providers using standardized checklists aligned with public sector tools (Figure 3).

PSI coordinated these multiple actions through a private sector forum, which met quarterly and comprised representatives from the Ministry of Health, QAACT manufacturers, first-line buyers, wholesalers and retailers. Participation in the forum by a broad range of collaborators fostered buy-in for the interventions and the coordinated delivery approach while mitigating the risks of unintended consequences and key partners defaulting to a narrow focus on "their" part of the market.

Market successes

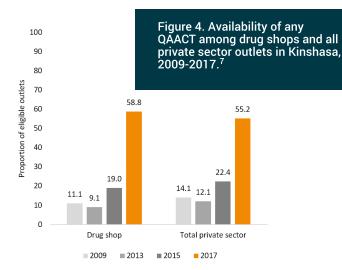
Monitoring, evaluation and learning

Implementation was supported by a rigorous monitoring and evaluation plan that included routine provider reporting, supervision and representative surveys. Quarterly mystery shopper visits to 200 sentinel drug shops provided rapid evidence on QAACT availability and price as new products were introduced to market at the top of the supply chain. A retail survey in 2017 provided representative data on RDT and antimalarial availability, price and market share using comparable methods to the pre-intervention 2015 ACTwatch survey. Annual client exit interviews and mystery client visits to clinics and pharmacies were used to assess the quality of malaria case management from providers supported with RDTs. We documented the following positive QAACT and RDT market changes between January 2015 and December 2017.

New QAACT brands brought to market and widely available at lower prices

Contracts were negotiated and signed with 6 manufacturers to supply QAACT at preferential ex-factory prices and 4 QAACT brands were brought to market for the first time in DRC via 4 local first-line buyers. Between February 2016 and June 2017 manufacturers sold 1.4 million QAACTs to local private sector importers, and provider-reported sales reached 922,000.

Availability of QAACT across the private sector and in the most common channel, drug shops, had historically peaked at only 22%. In February 2017, 12 months after the first consignment of QAACT entered the market, availability was 59% in drug shops and 55% across all private sector providers stocking any antimalarials (**Figure 4**). The average private sector price of QAACT fell by over \$3 US during the same period, from \$5.04 USD to \$1.80 USD for an adult equivalent dose, while the cost of SP and quinine tablets – popular alternative treatments – remained static (**Table 1**).



Medical detailers visited 240 health facilities and pharmacies a week, discussing appropriate fever case management practices and promoting green leaf QAACT brands. Medical detailer costs were met by manufacturers and their first-line buyers. Over 200 product ambassadors made door-to-door visits to 20,000 people per week, discussing appropriate case management with patients and consumers.

Private sector QAACT market share increased from 2.2% in 2015 to 14.4% in February 2017, 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.

Table 1. Median private sector price [IQR] for one AETD tablet formulation of antimalarial treatment.⁸

	2015	2017
QAACT	\$5.04	\$1.80
(n=279, 576)	[0.00-7.40]	[1.50-3.01]
Non-QA ACT	\$3.84	\$3.46
(n=4063, 1835)	[3.07-4.93]	[2.82-4.51]
SP tablets	\$0.44	\$0.38
(n=873, 317)	[0.33-0.55]	[0.30-0.45]
Quinine tablets (n=1189, 482)	\$3.31 [3.22-3.87]	\$3.03 [2.84-3.41]

Expanded targeted access to RDTs and improved case management

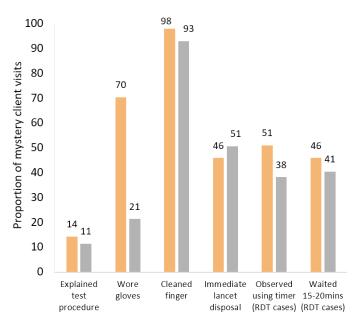
Under the leadership of the NMCP and the Direction de Pharmacies et Médicaments, PSI supported improved malaria case management among private providers through training, supportive supervision and the provision of malaria RDTs (and accessories including gloves and waste bins) to clinics and accredited pharmacies. Accredited pharmacies are staffed by a registered pharmacist and permitted to perform RDTs. However, Kinshasa has less than 100 officially accredited pharmacies due to an administratively burdensome and costly accreditation process. To take advantage of the hundreds of qualified and registered pharmacists owning and running their own drug shops in the city, in November 2015 the program successfully supported a policy change expanding RDT use in DRC to any outlet run by a registered pharmacist.

This change widened access to malaria diagnostic testing in channels where patients were already (presumptively) seeking treatment. Beginning in October 2015, one million RDTs were distributed to targeted private clinics and pharmacies with support from The Global Fund and over 700 private providers were trained on fever case management and the use of RDTs and QAACTS using material adapted from public sector training modules. Monthly supervision was conducted by staff from the Association of Pharmacists, overseen by the NMCP and national-level Association staff.

Patient exit interviews showed a rapid uptake of diagnostic testing in pharmacies, from no testing before the RDT component began to 24% of clients tested after just 12 months. A presumption of malaria – on the part of the provider and/or the patient – was the most commonly cited reason for not receiving a diagnostic test. Treatment practices

for untested clients remained unchanged over time, with 35-40% of untested clients receiving any antimalarial.

Mystery client visits to pharmacies and drug shops run by registered pharmacists and to health facilities were conducted in February 2018. Pharmacist outcomes were similar for accredited pharmacy sites and drug shop sites. Pharmacists typically showed comparable or higher levels of provider adherence to key RDT steps than qualified health facility staff, supporting the decision to expand testing to pharmacist-run sites. Pharmacists wore clean gloves for 70% of client visits compared to 21% of visits to health facilities, though observed performance of some key testing steps was sub-optimal across both channels (**Figure 5**).



■ Outlet with registered pharmacist ■ Private health facilities

Figure 5. Proportion of mystery client visits to sites in Feb 2018 at which the provider performed key steps.⁹

Private sector engagement is key to improving access to quality malaria case management.

Photo: Benjamin Schilling



Engaging the private health care sector for quality case management

There is widespread recognition that the private healthcare sector plays an important role in delivering case management in high-burden countries. Almost 50% of the global malaria burden in 2016 fell in 6 countries in sub-Saharan Africa where the majority of care-seeking for fever occurs in the private sector. To date, private sector case management interventions have either used large-scale financial mechanisms to lower access barriers to ACTs or focused on small-scale and pilot interventions to improve case management, often in one channel. A holistic view of the market on a large scale – incorporating consumers, providers, local and international supply chain actors and government – has often been missed as the community has lacked a standard framework for taking such a view. Despite some small-scale successes, practical and effective guidance on how to engage the private sector health market in sustainable interventions are currently lacking. This brief describes one such approach – the Market Development Approach – and outlines remarkable results achieved within 24 months within the complicated operating environment of Kinshasa, DRC. Process materials and toolkits described in this brief are being prepared for public release to support adoption and replication in new settings.

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. We call on the malaria community to join with us to test how this approach can work more broadly in high-burden settings.



About PSI

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Endnotes

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 The DFID-funded "Support to malaria control in the DRC" project had a total value of £39.5 million, of which £14.6 million supported the improved availability and accessibility of QAACT in Kinshasa.
- 6. Project design included a QAACT subsidy, to be reduced and withdrawn over time while monitoring the effect on the QAACT market. Due to factors outside the project's control, the intervention ended before the subsidy was reduced.
- 7. Sources: 2009, 2013 and 2015 ACTwatch; 2017 Representative outlet survey using ACTwatch methods.
- 8. AETD: Adult-equivalent treatment dose; Prices shown in USD at the exchange rate at the time of data collection.
- 9. Sample size for pharmacist channel is N=98 and for health facilities is N=140 except for timer and wait time (N=89).

More Information