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Prospective Country Evaluation

Democratic Republic of the Congo

2019 ANNUAL COUNTRY REPORT

Commissioned by the Global Fund's Technical Evaluation Reference Group (TERG)

PATH IHME

DISCLAIMER

Views expressed in this report are those of the author. The author has been commissioned by the Technical Evaluation Reference Group (TERG) of the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund) to conduct an assessment to provide input into TERG's recommendations or observations, where relevant and applicable, to the Global Fund. This assessment does not necessarily reflect the views of the Global Fund or the TERG.

Contents

Acronyms and Abbreviations

ACT	Artemisinin-based combination therapy
AGYW	Adolescent girls and young women
AL	Artemether-lumefantrine
ANC	Antenatal care
ART	Antiretroviral therapy
ARV	Antiretroviral drug
ASAQ	Artesunate-amodiaquine
BCC	Behavior change communication
BCZS	Bureau Central De La Zone De Santé
CAG	Cellule d'Appui et de Gestion
CCM	Country Coordinating Mechanism
CDR	Regional distribution centers
CEP	Country evaluation partner
CHW	Community health worker
COE	Challenging operating environment
CORDAID	Catholic Organization for Relief and Development Aid
CSO	Civil society organizations
CSW	Commercial sex worker
CT	Country Team
DFID	Department for International Development (UK)
DHIS	District Health Information Software
DPS	Division Provinciale de la Santé
DRC	Democratic Republic of the Congo
EGMC	Executive Grant Management Committee
GBV	Gender-based violence
GEP	Global evaluation partner
GIBS	Le Groupe Inter-Bailleurs Santé
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GOS	Grant Operating System
HIV	Human immunodeficiency virus
HLAP	High-Level Advisory Panel
HMIS	Health management information systems
HZ	Health zone (zone de santé)
iCCM	Integrated community case management
IHME	Institute for Health Metrics and Evaluation
IPS	Inspection Provinciales de la Santé
IPT	Isoniazid preventive therapy
IPTp	Intermittent preventive treatment in pregnancy
IQR	Interquartile range
IRS	Indoor residual spraying
ITN	Insecticide-treated net
KII	Key informant interview
KPI	Key performance indicator
KVPs	Key and vulnerable populations
LFA	Local Fund Agent
LLIN	Long-lasting insecticide-treated net
M&E	Monitoring and evaluation
MDR TB	Multidrug-resistant tuberculosis
MoH	Ministry of Health
MOPH	Ministry of Public Health
MOU	Memorandum of understanding

MSM	Men who have sex with men
NFM	New funding model
NGO	Non-governmental organization
ODA	Official development assistance
PBF	Performance-based financing
PCE	Prospective Country Evaluation
PEPFAR	President's Emergency Plan for AIDS Relief (U.S.)
PESS	Projet d'équipement des structures sanitaires
PfPR	*Plasmodium falciparum* parasite rate
PLHIV	People living with HIV
PMI	President's Malaria Initiative
PMTCT	Prevention of mother-to-child transmission
PNLP	National Malaria Control Program (Programme National de Lutte contre le Paludisme)
PNLS	National HIV Control Program (Programme National de Lutte contre le Sida)
PNLT	National TB Control Program (Programme National de Lutte contre le Tuberculose)
PPM	Pooled Procurement Mechanism
PR	Principal Recipient
PSI	Population Services International
PSSP	Progrès Santé Sans Prix (SR)
PU/DR	Progress update/disbursement request
PWID	People who inject drugs
RCA	Root cause analysis
RDT	Rapid diagnostic test
RENADEF	Réseau National des ONG pour le Développement de la Femme (SR)
RR-TB	Rifampicin-resistant tuberculosis
RSSH	Resilient and sustainable systems for health
SNIS	National Health Information System (Système National d'Information Sanitaire)
SO	Strategic objectives
SP	Sulfadoxine-pyrimethamine
SR	Sub-recipient
STC	Sustainability, transition, and co-financing
TB	Tuberculosis
TERG	Technical Evaluation Reference Group
ToC	Theory of Change
TRP	Technical Review Panel
UCOP+	Union Congolaise des organisations des PvVIH
VfM	Value for money
WiB	Warehouse in Box

Executive Summary

The Prospective Country Evaluation (PCE) is an independent evaluation of the Global Fund commissioned by the Global Fund's Technical Evaluation Reference Group (TERG). The Democratic Republic of the Congo is classified as a high impact portfolio and challenging operating environment (COE), with the HIV burden designated as high, the tuberculosis burden as severe, and the malaria burden as extreme. The Global Fund is a key player in funding activities in DRC. Throughout 2018, the PCE has been evaluating the trends and distribution of Global Fund resources and how they compare with need to develop findings and recommendations that will provide high quality, actionable, timely information to national program implementers and Global Fund policymakers.

The PCE has drawn upon process evaluation methods utilizing multiple primary data sources including Key Informant Interviews (KIIs), fact checking interviews, process tracking, document review, and non-participant observation of various meetings. This data has been triangulated with secondary quantitative analyses, including from the Health Management Information System and programmatic data. The evaluation has focused on looking closely at the grant allocations compared with expenditure (grant analysis and resource tracking), tracing inputs to outputs and outcomes (following the results chain framework), and analyzing thematic areas including partnership and risk, among others.

We found that implementation of the 2018-2020 grants started as scheduled on 1 January 2018. Principal Recipients (PR) received their first disbursements on time, but faced significant delays in finalizing contracts, budgets and harmonizing activities with Secondary recipients (SR). The lengthy amount of time required by the SR contracting process was considered a major challenge by DRC stakeholders; most SRs did not receive their first disbursement of funds until April 2018 and some did not occur until June 2018. In anticipation of this, the Country Team (CT) facilitated a three-month extension of the previous SR contracts to avoid a significant lapse in implementation. Nonetheless, delays resulted in low rates of absorption across grants in the first six months (52.4%), and several activities falling outside routine national program activities, including those targeting key and vulnerable populations and addressing gender and other human rights-related barriers to service, were delayed. The delays also impacted the commodity supply chain due to the interruption in SR reimbursements to health facilities for commodity transport and SR verification of monthly reporting by health facilities.

DRC has been involved in a number of innovative implementation strategies, including a unique shift toward transversal SRs and grouped commodity storage and transportation by Regional Distribution Centers (CDRs). These changes were designed to improve coordination between disease components and increase efficiency of commodity distribution, activities and services. However, these changes proved challenging to operationalize. PRs remained disease focused (e.g., one for malaria and one for TB/HIV), requiring significant involvement of all stakeholders to address difficulties associated with coordination and harmonization between disease-focused PRs, and between PRs and transversal SRs who had budgets unevenly split between diseases, leading to cash flow challenges for the SRs.

Another innovate approach to program implementation and oversight is the Provincial Approach, intended to foster a more direct connection between provinces and the CT, and address implementation challenges in a more direct and timely manner. Our findings to date suggest that enhanced presence of the CT at the provincial level has already helped to resolve implementation bottlenecks. However, the Provincial Approach has also been slow to define a clear set of activities, and there have been challenges mobilizing sufficient Country Team staff resources during the launch period to cover all five of the originally planned provinces. For the time being, implementation has been scaled back to just two provinces, but future rollout to other provinces may require fewer staff resources once the approach is better defined.

In addition to innovative implementation strategies, DRC has also utilized a variety of policies intended to promote achievement of Global Fund strategic objectives. Key among these for DRC is the COE policy. The PCE found evidence that the COE policy principles of flexibility, partnership and innovation are being put in practice. Interestingly, we note that this often occurs without overt

knowledge of the COE policy. Stakeholders cited examples of administrative procedures that have been lightened to better facilitate implementation.

Partnerships, another key strategic enabler of the Global Fund's strategy, were noted to be abundant in DRC. We found a very strong partner environment, composed of numerous partnerships between Global Fund and multi-lateral and bi-lateral donors. These partnerships are helping to improve coordination between donors, national stakeholders, and implementing partners, and to better harmonize interventions and implementation approaches for maximum reach. However, we found mixed evidence regarding whether partnerships are being effectively leveraged to address implementation weaknesses. On the one hand, there are examples of how Technical Assistance (TA) provided to the CCM helped support elections of new members in 2018 and helped strengthen the functionality of the strategic oversight committee. On the other hand, we also observed numerous weaknesses in financial management capacity, data collection and reporting practices, supply chain management and M&E capacity that require stronger TA and capacity building.

We also found evidence of changes in the new grant cycle that show promise toward increasing sustainability, another strategic objective, particularly through the alignment and implementation of Global Fund programs within country systems. Investments in RSSH are reinforcing critical health system building blocks, including the national health information system and supply chain management system. In addition, the new models for grant implementation and service delivery, procurement and supply chain management, and geographic rationalization of donor investments are being implemented with the intention of improving the efficiency and effectiveness of interventions.

Value for Money (VfM) is another rapidly emerging priority for the Global Fund. The concepts of economy, efficiency, effectiveness and equity are core to the Global Fund mission. We found that these same concepts resonate in DRC, but the degree to which they are considered and/or achieved has been mixed. We do note some key improvements in outputs per dollar, a measure of effectiveness, as they relate to cost of malaria case treated, but more work can be done to advance these principles.

The multinational nature of the PCE provides a unique opportunity for synthesis. Findings across all eight PCE countries, including DRC, were reported to the Global Fund Board (and its Strategy Committee), which highly values the TERG's independent evaluation of implementation of Global Fund strategy. Preliminary synthesis findings were presented at the 37th TERG meeting in Geneva, Switzerland and subsequently finalized to share with the Global Fund Strategy Committee and Board.

Finally, the findings of 2018 will lay the foundation for the PCE in 2019. Although there will be continued attention on the Global Fund business model, key thematic areas and strategic objectives, there will also be increased attention towards impact. Processes examined in 2018 will be reconsidered as they pertain to achieving the ultimate goal of reducing and eliminating, HIV, TB and malaria. The findings and recommendations outlined in this report have been developed in collaboration with the PCE High Level Advisory Panel and DRC stakeholders to ensure their relevance and implementation. Based on our findings from 2018, each of which is described in detail in the body of this report, the PCE in DRC developed several strategic considerations. These include the following:

Early grant implementation

- The Global Fund should examine options for differentiating early grant implementation so that the benefits of the differentiated funding request process extend into implementation.
- Ongoing monitoring and evaluation of the new grant architecture such as the transversal SR/disease-specific PR model is essential to determine if it is effectively structured to deliver results.

Challenging Operating Environment (COE) Policy in Practice

- The Global Fund Secretariat should review opportunities with country stakeholders for broader application.

Provincial approach

- Ongoing assessment of increased effectiveness and efficiency of the provincial approach, both from an implementation and CT perspective, is essential to determine the role of this implementation model moving forward.
- As the Global Fund continues to move toward consolidating activities at the province level, it should examine the efficiency and effectiveness of the current Country Team structure to respond to the portfolio changes.

Optimizing Partnerships to Address Implementation Weaknesses

- Global Fund should work with financial and technical partners to devise strategies capable of better leveraging partner support to address weaknesses in implementation capacity.
- Technical assistance provided to the CCM has already demonstrated utility. Future work (such as the CCM Evolution project) will need to focus on building institutional capacity, knowledge and supporting good governance.

Sustainability, Transition and Co-Financing and RSSH

- Global Fund should continue on the same course of aligning with country systems where possible.
- Global Fund should ensure that investments in data are comprehensively targeting all levels of the health system engaged in collecting, reviewing, and validating data (e.g., facilities, health zones, and provinces).
- Global Fund should advocate for better harmonization of human resource investments with other donors and strengthen investments in building health worker capacity through approaches that reinforce the health system more broadly.
- A focus on more clearly delineating where new funds are being spent, with a focus on increased spending on core investments that will improve sustainability and ownership should be encouraged.

Value for Money

- If value for money is to be a key benchmark for Global Fund investments moving forward, CT, CCM and implementing partners will need to better understand the framework for this approach, and how to monitor progress and success.

Addressing Key and Vulnerable Populations, Gender and Human Rights-related barriers to accessing services

- Global Fund should consider how to better incorporate SRs in planning at an earlier stage of the process, or how to bring these processes closer to the operational level for better coordination.

Over the next month, the findings and strategic considerations outlined in this report will be solidified and clarified through feedback mechanisms with country and global stakeholders and data verification. Further, plans for 2019 will continue to be specified, including on measuring impact in DRC for all three diseases.

1. Overview of PCE in 2018

The Prospective Country Evaluation (PCE) is an independent evaluation of the Global Fund commissioned by the Global Fund's Technical Evaluation Reference Group (TERG). The PCE evaluates how Global Fund policies and processes play out in country in real time and provide high quality, actionable, timely information to national program implementers and Global Fund policymakers. IHME-PATH are with PATH DRC in-country as evaluation partners.

The Global Fund classifies DRC as a High Impact Portfolio and a challenging operating environment (COE), with the HIV burden designated as high, the tuberculosis (TB) burden as severe, and the malaria burden as extreme.(1) The 2017-2019 total grant allocation decreased 24.9% to US$527m from US$701.5m in the 2014-2016 cycle. However, it remains the highest allocation of all eight PCE countries, and third highest Global Fund allocation, just after Nigeria (US$660.7m) and Tanzania (US$579.6m) in the current grant cycle. The Global Fund has five active grants across five Principal Recipients (PR), with the Ministry of Health's (MoH) Cellule d'Appui et de Gestion (CAG) implementing the malaria grant through the National Malaria Control Program (PNLP; Programme National de Lutte contre le Paludisme), the National HIV Control Program (PNLS; Programme National de Lutte contre le Sida) and the National TB Control Program (PNLT; Programme National de Lutte contre la Tuberculose); and grants with two civil society organizations (CSO): Cordaid (HIV/TB) and SANRU (Malaria).

Table 1. Summary of 2018-2020 grant allocations

Ministry of Health/ CAG	TB/HIV	HIV (PNLS)	US$23.9m
		TB (PNLT)	US$18.7m
	Malaria (PNLP)		US$74.9m
Cordaid	HIV/TB		US$149.7m
SANRU	Malaria		US$275.7m

The Evaluation Phase of the PCE began in October 2017. The 2018 Annual Report detailed the establishment of the PCE platform during the Inception Phase (March to September 2017), and the progress and findings related to the Funding Request and Grant-Making process from the first six months of the Evaluation Phase (October 2017 to March 2018). This report details the PCE progress and findings related to early grant implementation from January to November 2018, and ongoing evaluation plans (extending until March 2020).

The DRC evaluation questions were developed in consultation with a wide range of stakeholders, including country stakeholders, Global Fund Secretariat, and TERG Secretariat members, following an in-depth review of the key implementation bottlenecks and country evaluation priorities. Disease-specific results chains for HIV, TB, and malaria were created in consultation with all PCE consortia and are used to facilitate data collection and analysis from inputs to impact. Indicators linked to specific program activities were identified, shared, and agreed upon across consortia. PATH-DRC then identified priority indicators to measure based on the country's grant activities and data availability. Evaluation frameworks specific to key strategic and thematic areas (e.g., resilient and sustainable systems for health (RSSH), gender, human rights, key and vulnerable populations, and partnership) were developed across the consortium and adapted to the DRC country context.

As part of the process evaluation, the PCE is evaluating whether grants are being implemented on time and as designed, including tracking key grant milestones such as disbursement to PRs, contracting to Sub-recipients (SRs), subsequent disbursements to SRs, and implementation of grant activities. Further, the PCE is analyzing the extent to which Global Fund resources contribute to improvements in health outputs and outcomes for HIV, TB, and malaria, including barriers and facilitators to achieving national targets. Additionally, the PCE is examining how reforms in country-

level implementation models and strategies are contributing to improving program efficiency and effectiveness. Finally, the PCE is evaluating the trends and distribution of Global Fund resources and how they compare with need. In relation to the Global Fund Strategic Objectives (SOs), particular attention is given to how investments in RSSH, programs for adolescents and young women (AGYW), key and vulnerable populations (KVP), programs for addressing human rights related barriers to services, and considerations such as value for money (VfM) are contributing to results. The relationship between Global Fund policies in DRC and early implementation, including the COE policy and the sustainability, transition and co-financing (STC) policy are also being explored.

Building on the extensive stakeholder mapping and consultations that took place during the Inception Phase, both PATH DRC and IHME-PATH have remained engaged and responsive to stakeholder needs. The 2018 Annual Report, which covers the second half of 2017, was disseminated to stakeholders during a workshop on 18 April 2018. The meeting was attended by more than 60 stakeholders, including the General Secretary for Health and the Cabinet Director of the Health Minister's Office, the head of the Country Coordinating Mechanism (CCM) Proposal Development Committee, and the CCM President. The Country Team (CT) Fund Portfolio Manager, Nicolas Farcy, attended the workshop, responded to stakeholder questions and concerns, and disseminated the 2018 DRC PCE Annual Report to identified stakeholders.

Before disseminating the report, PATH-DRC convened their second High-Level Advisory Panel (HLAP) meeting on 15 March 2018 to solicit feedback on the draft. Key feedback from the HLAP included increasing the PCE's focus on key and vulnerable populations; exploring how differentiated policies, such as the provincial approach, could improve the functionality of health zones; demonstrating the role of the CCM in the institutional set-up, monitoring, and control of Global Fund interventions; and categorizing recommendations based on the target audience. Since the last meeting, Dr. Makamba Audace, a member of the PCE Advisory panel, has passed away. The team is actively seeking a replacement member, as well as an additional member from civil society, as recommended by the TERG Secretariat.

PATH-DRC continues to work on building strong relationships and feedback mechanisms with country stakeholders, and attends key stakeholder meetings as non-participant observers. To facilitate stakeholder engagement in the provinces and evaluation of the provincial approach, a Provincial Technical Officer of the PATH-DRC team relocated to Tshopo in early May 2018. During Q3 of 2018, PATH-DRC travelled to Maniema and, in September 2018, another Provincial Technical Officer relocated to Maniema. Both Provincial Technical Officers engage in the process evaluation activities (e.g., meeting observation, key informant interviews, and document review) targeted at provincial level stakeholders while also maintaining strong lines of communication and collaboration with the national team based in Kinshasa.

Additionally, PATH-DRC is observing meetings and conducting interviews to better understand the context surrounding health information systems in DRC in order to identify and address challenges with data quality. PATH-DRC met with the Director and Data Manager of PNLP to facilitate data sharing and shared findings from a data quality assessment of the 2010-2017 data PNLP had provided to the PCE. This was an important opportunity to share details of missing data trends and answer questions related to analytic findings.

2. Methods, analytical approach, data sources

Disease results chains and thematic evaluation frameworks

The PCE is using a mixed methods approach for process evaluation, resource tracking, and impact assessment. Annex I shows the evaluation framework, which includes a suite of analytic tools and methods that are applied at different stages of the results chain, as we move from inputs to process, and from outputs to outcomes, and eventually from outcomes to impact. This report will mainly focus on inputs, process, and outputs for HIV/TB and malaria, with some findings, trends and extrapolations related to outcomes and impact as available during the early implementation phase. Annex V outlines the malaria results chain from Inputs to Impact.

Country-specific Evaluation Questions

The DRC PCE evaluation questions were developed in consultation with country stakeholders, the Global Fund Secretariat, and the Global Fund TERG Secretariat. The evaluation questions considered key bottlenecks associated with the implementation of Global Fund grants and the evaluation priorities of the Global Fund and country stakeholders. The evaluation questions were further prioritized based on stakeholder buy-in, feasibility of actionable results and data availability. A comprehensive list of the DRC-specific evaluation questions for the early implementation phase, as well as the tools and methodologies used to address them, can be found in Annex II.

Qualitative data collection and analysis methods

Primary qualitative data were collected through (1) the review of documents on Global Fund policies, national programs, and documents specific to Global Fund grant implementation in DRC; (2) observation of meetings held by Global Fund stakeholders; (3) key informant interviews (KIIs), which were used to explore issues in-depth, and (4) fact checking interviews, which were used to fill gaps in information (Table 2). KIIs were guided by semi-structured interview guides tailored for different stakeholder groups, and were conducted by two members of the PATH-DRC, one as a lead interviewer and one as a note taker. All qualitative data, including documents, meeting notes, and notes from KIIs were coded by the DRC PCE evaluators using the collaborative qualitative data analysis software platform, Dedoose. Data was coded according to a codebook that was developed jointly by PATH and PATH-DRC and organized according to the evaluation questions and their associated themes. Codes were extracted and exported into evidence tables, where the data was jointly analyzed by the evaluators around key findings and supporting evidence.

Table 2. Process evaluation data sources in the early implementation phase of the PCE (January -November 2018)

Data Source	#	Description of Data	
Meeting Observations	25	• Bi-annual program reviews • CCM general assembly meetings • Grant management meetings	• CT meeting with programs (HIV, TB, PNLP) and PRs (MoH, Cordaid and SANRU)
Document Review	57	• Allocation letter and associated memos • Funding request and related materials • Technical Review Panel (TRP) reviews • Challenging operating environment Manual • Additional Safeguard Policy • Operational Policy Manual • Global Fund Annual Report • Performance-based financing manual	• PR-SR annual financing agreement • Progress Updates • TB PATI 5 management guide • Memoranda of Understanding • Current grant documents • Newspaper articles • National strategic plans • Meeting minutes • Global Fund audit • DPS, SR, and CDR contracts • Allocation letters
KIIs	46	• MoH program managers • CCM members • Local Fund Agent • Representatives from key and vulnerable populations • Members of the Global Fund Secretariat	• Principal Recipients • Sub-recipients • Technical partners • Global Fund Secretariat • Civil society organizations

Process evaluation analytic tools

The PCE used analytic tools such as process maps and root cause analysis (RCA) for process evaluation. Process mapping was used to assess the fidelity and quality of process implementation. PATH-DRC created implementation process maps to compare observed processes to theorized processes as described in the PCE's Theory of Change (ToC) and as described in Global Fund policies and procedures manuals. Implementation process maps helped visually represent complex processes that are not well understood at the country level and pinpoint the source of process bottlenecks that affect implementation. RCA was used to further understand the root causes underlying observed challenges (bottlenecks) or successes (facilitators) identified through various triangulated data sources (KIIs, meeting observations, document reviews, secondary data analyses, etc.).

Dashboard visualizations

Given the complexity of the grant budgets, the PCE team built dashboard visualizations in Tableau server using official grant budget data to display Global Fund grant investments from 2012 through 2020. Using data filters for time, disease, module, intervention, and grant number, resources can be displayed using a tree map to highlight areas of greatest investment and show changes in investments over time. The dashboard has been an essential interactive tool that enables the PCE team to explore the key activities funded within the grants.

Quantitative analysis of secondary data

The PCE triangulates process findings through secondary data analysis of quantitative data sources, including national program data and health facility reporting through the National Health Information System (Système National d'Information Sanitaire; SNIS) DHIS2 system. The SNIS system is available online and includes information on health outputs, including inventory, and facility-based outcomes for HIV, TB, and malaria from all levels of the health system. SNIS data were analyzed and visualized monthly in Tableau and *R* statistical programming software at the facility level and reported at the health zone and provincial level to generate high-level recommendations for national stakeholders. Due to low SNIS reporting by the National TB program (PNLT), the PCE used internal program data provided by PNLT to estimate outputs and outcomes for TB. Baseline impact estimates of malaria prevalence, treatment coverage with ACT, HIV prevalence, and the number of people living with HIV (PLHIV) are obtained from the Malaria Atlas Project and IHME. Estimates from 2016 are forecasted using statistical modelling techniques.

Resource tracking

The PCE continuously monitors financial information on Global Fund budgets and expenditure through several major data sources stratified by PR, including: Global Fund detailed budgets, detailed disbursement records from progress update/disbursement requests (PU/DRs), grant spending reports from PRs and SRs and records from the Global Fund Grant Operating System (GOS). By combining multiple quantitative data sources, the PCE is able to connect financial inputs to outputs and outcomes at a sub-national level. The list of secondary data and resource tracking sources obtained and analyzed to date can be found in Annex III.

Assessing the strength of evidence

Used in conjunction, multiple data sources and analytic techniques lead to findings that are more robust. Triangulation, in many ways the crux of PCE mixed methods, involves assessing the ways in which multiple standalone analyses agree or contradict one another.

The robustness of evidence in support of each finding statement was rated according to the level of triangulation and quality of the data. Triangulation refers to the breadth of qualitative and quantitative data sources that support the finding. Greater triangulation across multiple sources equates to findings that are more robust. The quality of the qualitative data was evaluated according to several indicators, including recentness with regards to the timing of the KIIs relative to the topics discussed to minimize recall bias and the degree of proximity to topic or event in question (first-hand

observations vs. second-hand information). The conditions of the interview or group discussion were also taken into account, including the rapport with the respondent, pacing, interruptions, the level of privacy for the interview, and how balanced as opposed to one-sided the discussion was. The quality of quantitative data was evaluated based on the completeness of the data, internal consistency checks, and the level of data recorded. Evaluating where data is missing and how much data is missing is important to ensure there are not underlying reasons for missing data that could result in bias. Internal consistency checks ensure that numerical relationships between variables are compatible (for example, tests that are positive should always be less than the number of tests completed). After considering these parameters, a strength of evidence rating was assigned using a four-point scale (Table 3).

PCE analysis workshops were held in Kinshasa in August and October 2018 to review and assess the strength of evidence for emerging findings. During the workshop in August 2018, preliminary findings and supporting evidence were organized in the evidence tables and the evidence ranking process was used to identify which findings needed additional triangulation and validation, specifically those rated as a "3" or lower. Between the August and October 2018 workshops, additional data was gathered to fill gaps in evidence. This included additional KIIs with country stakeholders and KIIs with CT members to discuss and triangulate preliminary findings, meeting observations, and document review and additional quantitative analyses.

Table 3. Strength of evidence (robustness) for process findings on a 4-point scale.

Rank	Rationale
1	The finding is supported by multiple data sources (good triangulation) which are generally of strong quality.
2	The finding is supported by multiple data sources (moderate triangulation) of lesser quality, or the finding is supported by fewer data sources of higher quality.
3	The finding is supported by few data sources (limited triangulation) of lesser quality.
4	The finding is supported by very limited evidence (single source) or by incomplete or unreliable evidence. In the context of this prospective evaluation, findings with this ranking may be preliminary or emerging, with active and ongoing data collection to follow-up.

3. Early Implementation of Global Fund grants

3.1 Grants approved for start-up in 2018

3.1.1 Original funding request type and size

DRC submitted a program continuation funding request for malaria and a tailored review request for HIV/TB for the 2018-2020 funding cycle. (Table 4 lists the size of each grant.) As it is too early in the current grant cycle to directly measure impact, the evaluation has focused on measuring the early phases of the results chain (inputs through outputs), and that information has been used to assess if the grants are meeting targets for outcomes and impact.

Table 4. Global Fund investments in DRC in NFM2 compared to NFM1.

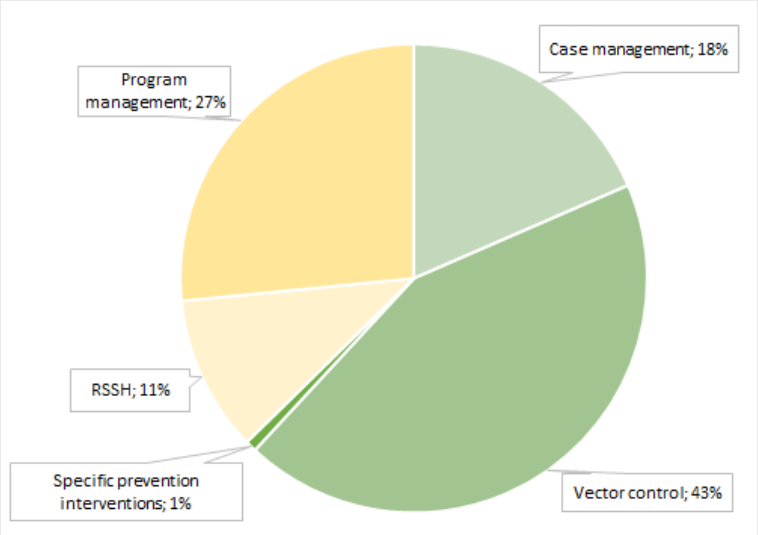
	HIV	TB	Malaria	Total
2015-2017	US$164,660,722	US$74,976,804	US$461,841,352	US$701,478,878
2018-2020*	US$192,335,076		US$350,626,048**	US$542,961,124

* Includes catalytic investments of US$10m for finding missing TB cases, US$3m for removing human rights-related barriers to HIV services, and US$3m for data systems, data generation, and data use
** Includes funding for RSSH

3.1.2 Malaria

Two malaria grants were approved for the 2018-2020 grant period following the approval of the DRC's program continuation funding request for malaria: one with the CAG and one with a local non-governmental organization (NGO) SANRU. The NGO Population Services International (PSI) was originally intended to receive a continuation grant but, because of an internal conflict within the organization and its local implementing partner, the Global Fund decided not to sign PSI's continuation grant. In July 2018, following a competitive process, SANRU was selected to take on the activities previously implemented by PSI, namely mass campaigns for the distribution of long-lasting insecticide-treated nets (LLINs). Combined, these malaria grants allocated the largest proportion of their budgets to vector control (US$152.2m), program management (US$93m), and case management (US$64.9m). Among these modules, mass LLIN distribution campaigns planned for 2018 and 2019 comprised the largest intervention, totaling US$112.6m. Facility-based treatment of malaria was the third largest intervention after grant management, totaling US$43.7m.

Figure 1. 2018-2020 Malaria budget by module
Total grant allocation US$350.6 million



The 2018-2020 budgets reflect stable overall funding from the Global Fund, with the malaria budget in 2015-2017 totaling US$361.6m (not including embedded RSSH funding), compared to US$350.6min in 2018-2020. By module, notable changes between the two grants include a decrease in overall vector control budgeting by US$35.6m (US$187.8 to US$152.2m), a decrease in case management by US$9.2m (US$74.1 to US$64.9m) and an increase in program management by US$26.1m, which includes US$10m for the implementation of performance-based financing (US$66.9 to US$93m). The new modules incorporated in the 2018-2020 grants are human resource and health workers (US$9.6m), integrated service delivery and quality improvement (US$4.4m), and specific prevention interventions (US$2.7m). Figure 1 displays the breakdown of the malaria budgets by module and Annex V includes additional details on malaria inputs in DRC.

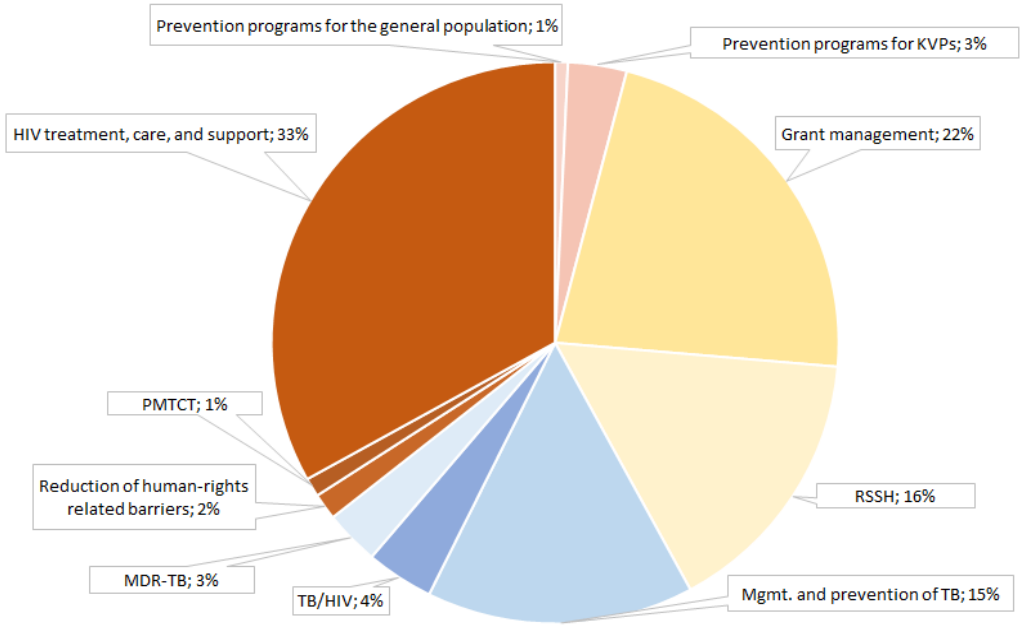
3.1.3 HIV/TB combined grant

The Global Fund is providing support for HIV-related services in 354 health zones across 24 provinces, including HIV prevention activities, testing, treatment and supportive services for PLHIV. For the 2018-2020 grant period, two PRs were selected: CAG (MoH) and Cordaid, an international NGO. Cordaid is responsible for the management of the HIV/TB combined grant; having previously managed the HIV grant for the 2015-2017 grant period, they were selected again through a competitive process coordinated by the CCM. These two grants together sum to a total budget of US$192,335,076, with US$149.7m allocated to Cordaid, where US$23.9m and US$18.7m are allocated to the CAG for HIV and TB, respectively. The largest portions of the overall HIV/TB grant budget are allocated to treatment, care and support interventions at US$63,595,552 (33% of total spending), grant management (23%), and case management and prevention for tuberculosis disease (12%). HIV prevention interventions comprise 3.73% and prevention of mother-to-child transmission (PMTCT) comprises 1.15%.

Global Fund investments in DRC for HIV/TB decreased by US$47,302,520. The total budget for 2018-2020 was US$192,335,076 compared to a US$239,637,596 for 2015-2017. With a consolidated HIV/TB request, notable changes in the grant modules include: increased focus on TB prevention and

less on HIV prevention, significant allocations towards HIV/TB coinfection and MDR-TB interventions and increased funds allocated to RSSH.

Figure 2. 2018-2020 TB/HIV budget by module; total grant allocation US$192.3m



3.1.4 TB

Grant activities for TB are split between Cordaid (US$30.4m; 20.3% of Cordaid's total grant allocation) and PNLT (US$18.7m). Of the TB grant allocation to Cordaid, 87.2% is for the management and prevention of TB, of which 68.8% is for treatment, and 12.8% is for MDR-TB. Of the total grant allocation of to PNLT, 35.6% is composed of RSSH activities, including health management information systems (HMIS) and monitoring and evaluation (M&E) (18.0% of total; US$3.4m) and human resources for health (17.6% of total; US$3.3m). Grant management represents an additional 19.4% (US$3.6m), followed by 14.9% for TB case management and prevention (US$2.8m; includes commodity procurement for testing and treatment and prevention activities for key populations) and 11.3% to address MDR-TB (US$2.1m).

3.2 Global Fund grant arrangements in place

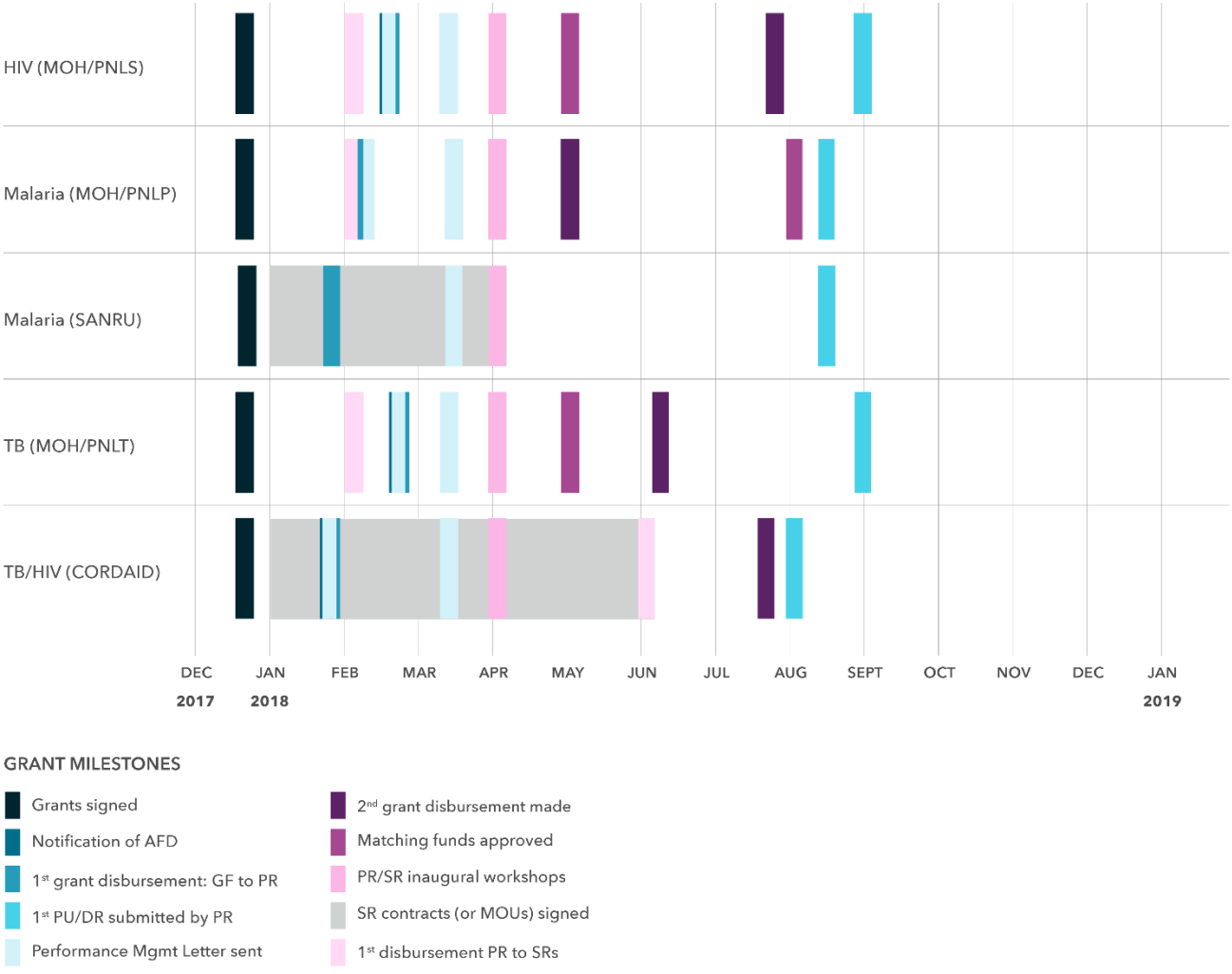
Aspects of the grant architecture have been changed for the 2018-2020 grant period in DRC, with the intention to improve coordination between disease components and increase operational efficiency. These include consolidating HIV and TB activities under a single PR, and contracting a single "transversal" SR to implement activities for all three diseases in 16 of the 24 provinces in which the Global Fund finances activities. Four "specific" SRs have been contracted to implement activities for key populations (PSSP and PASCO), one for gender and human rights (RENADEF), and one for adherence to treatment (UCOP+). In addition, health commodities are now acquired through the Global Fund's Pooled Procurement Mechanism (PPM), meaning all drugs and other supplies will be procured in line with the Guide to Global Fund Policies on Procurement and Supply Management of Health Products. Commodity acquisition and distribution for all three diseases have been pooled in order to improve quality with respect for pharmaceutical standards, optimize resources in terms of expenditure, time and human resources, and contribute to strengthening the health system supply chain. Improvements in supply chain management include building capacity for storage and distribution at the regional level and optimizing coordination of "last mile" distribution arrangements. In addition to storage, regional distribution centers (CDR) are now responsible for distribution of health commodities (including medications and test kits) to health zone central offices. These initial

improvements will continue alongside the progressive integration of the procurement function into the national system.

3.3 Timeline to map key grant management milestones

The new grants were signed in late December 2017, and the first disbursements from the Global Fund to PRs were completed 1-2 months later. The provincial health divisions (DPS), which are SRs to the MoH/CAG PRs, received their first disbursement in February. The selection process for civil society SRs was launched in October 2017, well in advance of PR contract signing, and by the end of January 2018, SRs were selected. However, the process for negotiating contracts between the civil society PRs and SRs took longer than expected and extended into April 2018 for SANRU (malaria) and into June 2018 for Cordaid (HIV/TB). The reasons for the delays in signing the new SR contracts are discussed further in Chapter 4. To avoid disruption of program activities, the DRC Country Team (CT) authorized the PRs to grant the previous SRs a three-month extension pending finalization of the new SR contracts. As a result, the first SR disbursements and certain activities were delayed while a number of routine activities proceeded without funding until the grant disbursements.

Figure 3. Grant milestones in 2018



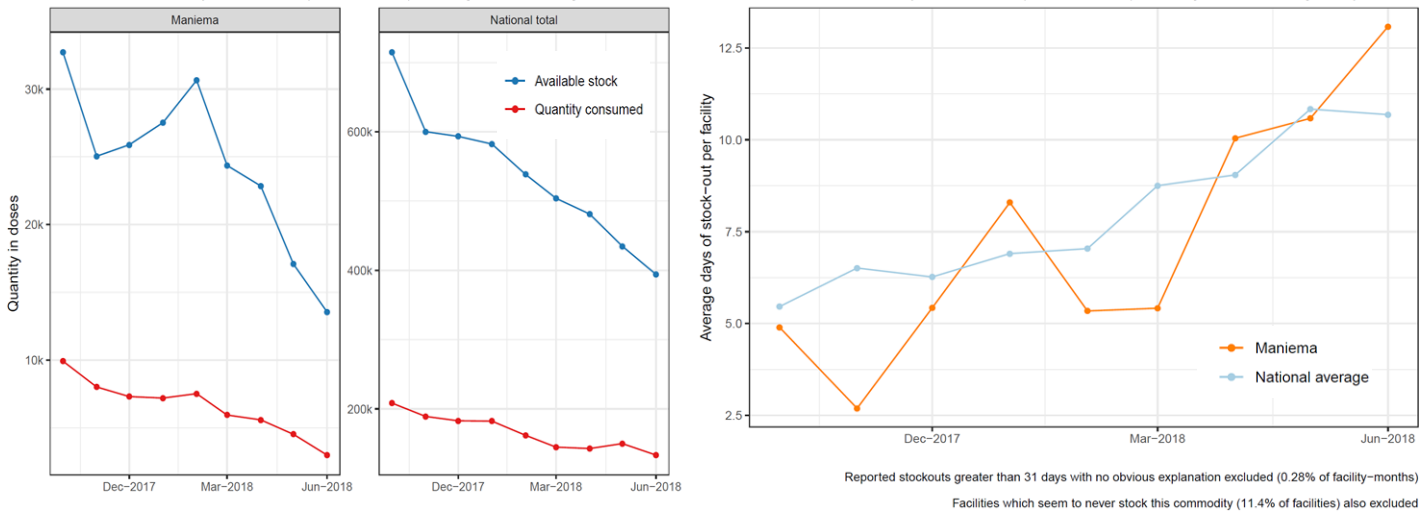
3.4 Descriptive analysis of grant activities and outputs

3.4.1 Malaria

Most early activities under the grants have just begun at the time of writing this report. Although some activities such LLIN mass distribution campaigns were able to proceed in early 2018, other activities,

including those supported by SRs, such as commodity transport, data collection and validation, are experiencing delays. Barriers related to early grant implementation are discussed in greater detail in Chapter 4 and further results chains analyses tracing inputs to impact are found in Annex V. Activities within the national program continue nevertheless, but reports indicate that current trends may not be sustainable for much longer. For example, available stock of antimalarial drugs has declined nationally since October 2017, without evidence of replenishment, which has been verified through June 2018 using SNIS, as shown in the blue line in Figure 4A.

Figure 4. A) ASAQ stock (infant dose); B) average days of ASAQ (infant dose) stockout per month per facility



Despite declining overall buffer stock, stakeholders report that there are some regions with stockouts and others with overstock. KIIs from Maniema confirm the DPS has seen significant stockout of Artesunate–amodiaquine (ASAQ). A moderate increase in the average days of stockout per facility has been noted in ASAQ regimens during the first half of 2018 (infant doses shown in Figure 4B above). However, this trend is not apparent for stockouts of other antimalarials. It is too early to identify causality behind the increase in ASAQ stockouts seen between October 2017-June 2018 (Figure 4B), and certain DPS have more noticeable trends than others, e.g. Maniema as shown above. PATH-DRC is exploring the root cause behind declining buffer trends and increasing stockouts and will continue examining the data.

Despite some challenges with supply chains, PNLP has made progress testing and treating patients, as well as distributing LLINs. During the early implementation of the 2018-2020 grant period, the malaria program successfully distributed LLINs, performing at better than 97% of the targets for provinces Ituri, Tshopo and Haut-Uele. There was noted improvement in the administration of sulfadoxine-pyrimethamine (SP) to pregnant women for prevention of malaria compared to 2017, and the programs exceeded 80% of their target for distribution of LLINs to pregnant women and children under-5. The number of first-line antimalarial doses prescribed and the percentage of confirmed or presumed cases treated have increased noticeably in recent years (see Annex IV for figures). According to the Local Fund Agent (LFA)-verified PU/DRs for the first half of 2018, 95% of confirmed malaria cases received antimalarial treatment in the first semester of the grant, though the proportion of suspected malaria cases tested was less than 85% (in public facilities).

3.4.2 HIV/TB

HIV/AIDS

During the first quarter of the 2018-2020 grant cycle, activities focused on continuing enrollment of HIV-positive patients onto anti-retroviral therapy (ART), PMTCT, scale up of tier.net, a facility-based

electronic patient management system, integration of epidemiological data into the SNIS/DHIS2 system, and improvements in HIV/TB service integration.

According to the PU/DRs, only 59% of TB/HIV activities on the 2015-2017 Road Map were implemented, with especially poor service quality for TB prevention and treatment among PLHIV. During the 2015 – 2017 grant cycle, 33% of PLHIV were unable to access isoniazid preventive therapy (IPT), and 36% of TB patients did not receive a HIV test. These challenges resulted from a lack of technical and logistical support, an irregular supply chain, limited surveillance, and poor coordination among implementing partners. As a result, the 2018 Funding Requests for TB and HIV focused on integration of TB and HIV services, including US$7.5m to address co-infection, 37.0% of which was allocated to CORDAID, 16.3% to PNLS, and 46.6% to PNLT.

During Q1 of the 2018-2020 grant cycle, TB/HIV service integration increased, including improvements in monitoring and evaluation, and early implementation of the "One Stop Shop," a model of care that offers HIV and TB services simultaneously at a single clinical site. This integration is especially important given the high rates of co-morbidity among PLHIV in DRC. Stakeholders expect that the "One Stop Shop" strategy will improve coordination between healthcare service providers at distinct levels of the health system and increase case identification for TB/HIV. Early findings indicate that screening for TB among PLHIV has increased from a mean of 41,711 people screened per month during 2017 to 60,752 people screened per month for the same facilities in Q1 of 2018.

TB

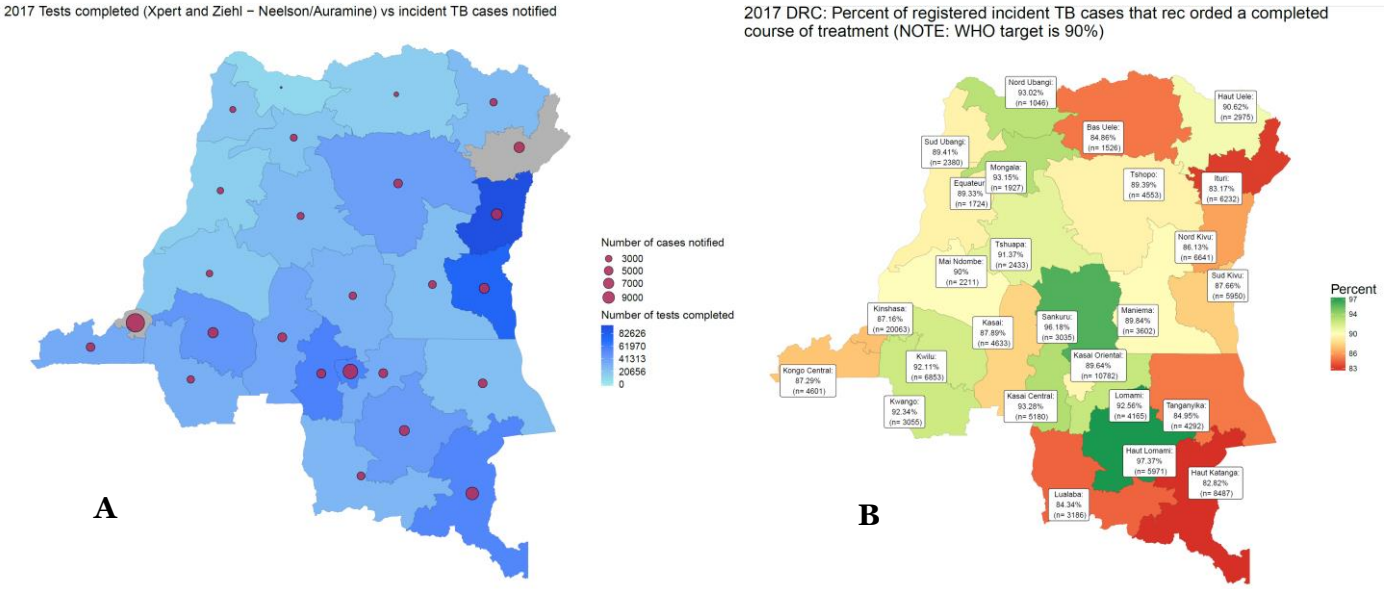
Investments in HMIS in the 2018-2020 cycle include integrating data from PNLT into the SNIS/DHIS2 system. As of Q1 in 2018, 1018 facilities in 319 health zones were reporting to SNIS/DHIS2, which was similar to reporting in the previous year. Integration of reporting systems will allow for improved sub-national TB surveillance and facility-level monitoring; however, implementation challenges for DHIS2 integration remain. These challenges include setting validation guidelines, clarifying indicator definitions among clinical and data entry personnel, and training HMIS managers at the central and provincial levels in order to improve data quality and reporting completeness.

During the early implementation period of the 2018-2020 grants, the Global Fund supported high-quality, early detection services for TB, including improvements in case detection, pediatric case finding, detection of rifampicin resistance, and screening for signs and symptoms of TB among PLHIV. Case management for MDR-TB includes supportive services for patients such as nutritional supplementation. Biological monitoring of patients in care occurs in 1277 health facilities located in 411 health zones in the 17 DPS in which the Global Fund finances TB activities.

Xpert® MTB/RIF is available in select facilities (that are defined as high-burden sites), with the remainder of TB diagnostic centers using sputum smear microscopy. Nationwide stockouts of Xpert cartridges from May-August of 2018 prevented confirmatory testing of MDR-TB in a number of health facilities. However, case notification results for drug-susceptible TB exceeded targets for Jan-June 2018. Despite improvements, case reporting in 2017 remained low relative to international estimates of incident cases. The 150,085 cases reported by PNLT represents of 57% of the 262,000 incident cases estimated by WHO and 38% of the 381,841 cases estimated by the Global Burden of Disease Study in 2017 (Figure 5A).(2), (3) In spite of these challenges, treatment completion rates among notified incident cases remain high, though demonstrate subnational variation (Figure 5B). In 2017, a mean of 88.8% of people diagnosed with TB completed a full course of treatment (range: 88.2% in

Q4 to 89.6% in Q2), approaching the WHO and KPI-TCP-2(M)[1] target of 90% treatment completion by 2025.

Figure 5. A) TB tests completed and TB cases notified by DPS in 2017; B) TB Treatment completion proportion by DPS in 2017



Grant Performance Indicators and Targets

At this time, none of the grants are reporting on impact Key Performance Indicators (KPIs) or their progress towards the targets. Corroborating our own analysis, PRs are reporting coverage KPIs exceeding their targets for the grants. Across the five grants, most KPIs are reaching a high achievement ratio relative to their predefined targets, with many indicators exceeding 100% achievement in the first PU/DR. For example, the performance indicator TCS-1(M), "percentage of people living with HIV currently receiving antiretroviral therapy (ART)", was reported at 42%, which is 64% higher than the target. Other over-performing indicators include CM-1b(M) and CM1c(M), measuring "Proportion of suspected malaria cases that receive a parasitological test" in community (95% coverage) and private sector sites (98% coverage), respectively. Both are reporting higher than their targets. In fact, almost half of reported performance indicators across the five grants were met, with the median indicator reaching 99% target achievement and mean of 172% achievement (IQR: 74% - 122%). Nonetheless, there are areas that currently under-perform compared to targets, specifically MDR TB 2(M), "Number of TB cases with Rifampicin-resistant TB (RR-TB) and/or MDR-TB notified" and "MDR TB-3 (M) Number of cases with RR-TB and/or MDR-TB that began second-line treatment" reporting 55% and 50%[2] achievement ratios, respectively. The PCE will be exploring targets further in 2019.

[1] TCP-2(M): Treatment success rate- all forms: Percentage of TB cases, all forms, bacteriologically confirmed plus clinically diagnosed, successfully treated (cured plus treatment completed) among all TB cases registered for treatment during a specified period, new and relapse cases.

[2] Coverage of second-line treatment out of the number of cases notified is 91%. This 50% figure reflects second-line treatment relative to the original target set by the PR

4. Global Fund business model in practice

This section describes the Global Fund's business model in practice through its policies, themes and strategic objectives, focusing on how they facilitate or hinder progress towards impact. Not all aspects of the investment model can be addressed in a single, limited-scope chapter. The aspects of the investment model that the PCE has chosen to focus on have been selected based on: a) the importance in the DRC according to consultations with country stakeholders, and b) the areas of interest identified through consultations with the TERG and the other PCE consortium.

4.1 Early grant implementation

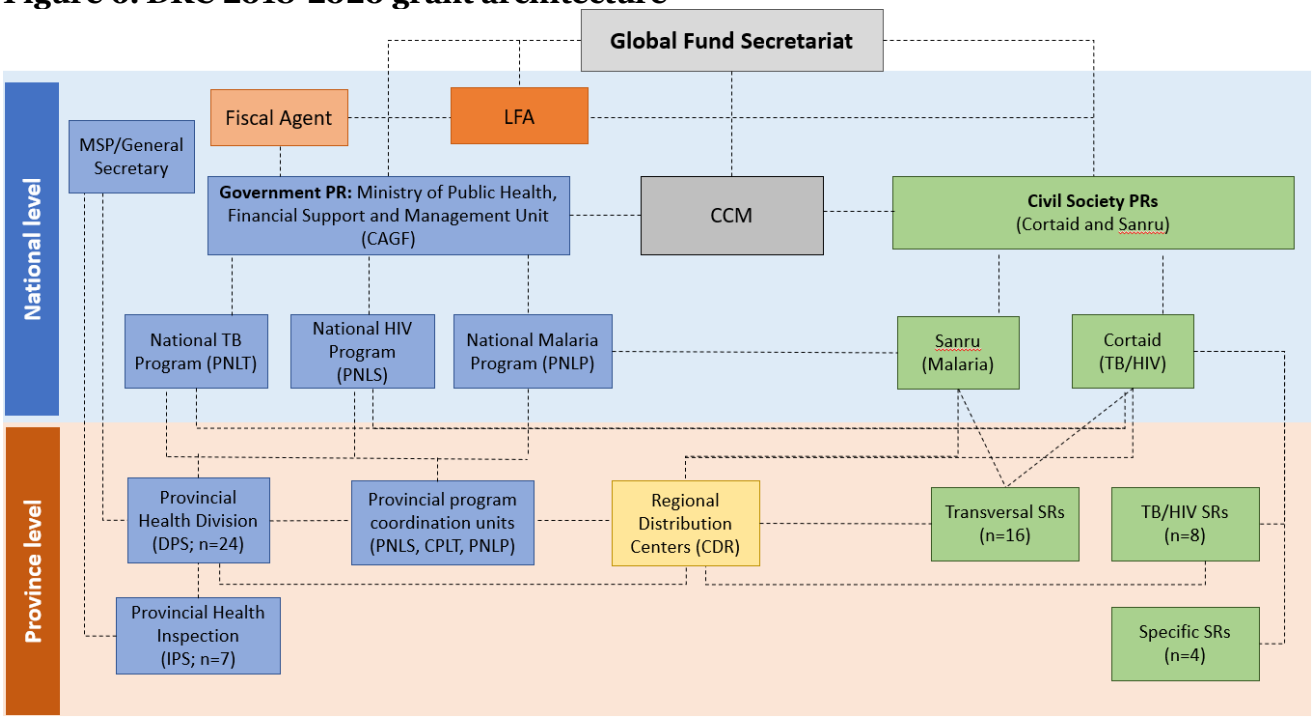
Key Finding 1: Despite faster grant processing, the differentiated funding request process did not result in increased time for implementation because of unanticipated delays associated with changes in the NFM2 grant architecture.

Robustness: (Ranking = 1) The conclusion is corroborated by triangulation across multiple sources of data, including high quality key informant data and evidence from document review (including dates when key grant milestones were achieved). KIIs indicate a convergence of opinions across stakeholders.

For the 2018-2020 grant cycle, the Global Fund put in place the differentiated Funding Request process with the intention of streamlining the process so that grants would be signed earlier, allowing increased time for implementation. In last year's report, we found that the DRC's Program Continuation and Tailored Review funding requests were one of several factors that contributed to overall faster grant processing. Nonetheless, in 2018 we found that this success did not automatically translate into increased time for implementation. Certain program milestones occurred in a timely manner. For example, the first disbursements to PRs and the first disbursement for the PPM were completed by the end of February 2018, and the first disbursements from MOPH/CAG to the DPS SRs also occurred in February 2018. However, disbursements to transversal SRs were delayed until April and June 2018 because it took longer than anticipated for the PRs to finalize and sign the SR contracts. As it became evident to the DRC CT and country stakeholders that the SR contracts would not be completed by January 2018, the CT authorized the PRs to provide a three-month extension to the old SRs. The extension was part of a transition plan developed by the CCM and PRs, in consultation with the CT, to ensure smooth continuation of activities between NFM1 and NFM2 grants. Despite these efforts, a certain number of SR activities were still impacted or delayed during the transition. For example, SRs are responsible for reimbursing health facilities for the transportation cost they incur to retrieve their commodities from the health zone level; because of delayed disbursements, health facilities in certain regions could not access health commodities in a timely manner. Another SR responsibility is monitoring and overseeing data collection which involves ensuring that health facilities have appropriate reporting tools and that they are submitting monthly reports; the delayed SR disbursements, as well as the transition to reporting in DHIS2, impacted the completeness and quality of data reported in Q1 and Q2 of 2018. Disbursements to specific SRs were also delayed until June, which similarly affected the start-up of activities implemented by SRs to address key and vulnerable populations, gender, and human right barriers to health services. The cumulative result of these delays is also evident in the low overall absorption rate for the first semester (54.2% across all grants).

The primary reason for why SR contracts took a long time to finalize was the change to transversal SRs (instead of disease-specific SRs) as part of the new grant architecture. Normally, we would have expected minimal changes to the SR contracts, given the Program Continuation and Tailored Review funding requests, but shifting to a single, transversal, SR in each province signified a major change in the overall grant architecture compared to previous grant cycles. Figure 6 shows the grant architecture for the 2018-2020 grants.

Figure 6. DRC 2018-2020 grant architecture



Document review indicates that the SR recruitment process was launched in October 2017, even before the PR contracts were signed. SR selections were made in January 2018 and then it took between three and five months to negotiate and sign the SR contracts. Contracts had to be signed with 29 SRs, including 16 transversal SRs and 4 specific SRs. Among the 29 SRs, 10 were new SRs with no prior Global Fund experience meaning that they were subject to additional requirements such as capacity evaluations. During KIIs, many stakeholders commented that they had not anticipated the length of time that was involved in finalizing SR contracts. Cordaid and SANRU had to jointly develop terms of reference and performance indicators, harmonize implementation strategies and operational procedures, align on timelines and then communicate those procedures to the SRs. For specific SRs, contracts were signed in June 2018 and the first disbursements were issued shortly after. KIIs indicate that a major bottleneck in the start-up of activities was harmonizing between the PRs and SRs on the scope of activities to be implemented. This finding is discussed in greater detail in the section below on key and vulnerable populations, gender, and human rights. Table 5 below summarizes other key helping and hindering factors of early grant implementation, and whether they are related to the Global Fund business model or country context.

Table 5. Key helping and hindering factors of early grant implementation

	Helping Factors	Hindering Factors
Global Fund business model factors	· Three-month extension of previous SR grants facilitated transition to new grants · Memorandum of understanding (MOU) signed with other TB/HIV and malaria stakeholders for "interchangeability" of health products allowed TB/HIV PRs to borrow from PEPFAR to avoid stock-outs · CT engagement at both the national and provincial level helped resolve implementation bottlenecks	· New Grant Architecture was intended to simplify and streamline grant management but has taken the first 6-8 months of 2018 for PRs and SRs to adapt

Contextual Factors	· Orientation workshops and training conducted by PRs for SRs on the new grants and implementation strategies · Pre-financing of certain activities by some SRs while they waited for their contracts to be signed	· Weak coordination at the provincial-level despite efforts to harmonize activities · Communication challenges between national and operational levels (and between PRs and SRs) resulting in activities that are not well understood at the operational level · Weak ownership at the provincial-level; however, reinforcing the role of the provincial health authority (DPS) is meant to address this

Most of the activities planned for Q1 and Q2 that were not completed have been rescheduled for Q3. Budget revisions were also made in August 2018, following the approval of matching funds, for addressing human rights barriers to services, finding missing TB cases, and strengthening data systems, along with other revisions such as inclusion of the budget for LLIN mass distribution campaigns within SANRU's budget. PRs are able to make budget revisions without seeking Global Fund approval for revisions that do not exceed 15% of the budget (for the activity concerned) and changes over 15% requires a formal budget reprogramming process. The first official reprogramming was underway as of November 2018 and involved savings incurred under the MoH/HIV grant. Since a number of the provincial coordination offices are not yet functional, funds originally budgeted for staff salary incentives will be reprogrammed for other activities. In particular, the decision was made between PNLS and the Global Fund to use the cost savings to finance a study to verify the actual number of patients on ART. The decision was in response to lack of confidence in the figures currently reported and concerns about inflated numbers.

Key Finding 2: Changes in the grant architecture, including the consolidation of disease components under transversal SRs and mutualized distribution of health products were designed to increase operational efficiency and alignment with national systems, but have been difficult to operationalize with disease-specific PRs.

Robustness: (Ranking = 2) The conclusion is corroborated by multiple data sources of good quality, including KIIs at the national and provincial levels, document review, and process mapping of operational aspects (such as commodity distribution) to understand bottlenecks.

The shift to a transversal SR model is a major reform in the DRC grant architecture that is intended to improve results through stronger coordination and greater operational efficiency at the provincial-level, and stronger alignment with national systems. While this shift is recognized as a positive change, there have been challenges with executing the model. One key challenge is the fact that the PR grants remained disease-focused, which has required substantial coordination and harmonization between the PRs so that transversal SRs can support all the three diseases in a coordinated and joint manner. As part of this model, the SR budgets are split between PRs; Cordaid (TB/HIV PR) covers 30% and SANRU (malaria PR) covers 70% of each SR budget. This was the most frequently cited challenge among SRs interviewed because it caused difficulties when the PR disbursements were not synchronized. For example, Cordaid was unable to sign its contracts with the transversal SRs and disburse funds until June 2018, which was approximately two months after SANRU. SRs then had to implement joint activities despite having insufficient funds.

> *"There is perception of a lack of consultation between the two PRs (Cordaid and SANRU). For example, SANRU says they provided their 70% but Cordaid says they don't have enough money to cover their 30%." (Quote from a key informant)*

In addition to the shift to a transversal SR, other changes in the grant architecture included consolidation of TB and HIV activities under a single PR as well as shifts in how health commodities

are handled. Under the new grants, transportation of commodities is mutualized for all three diseases so that distributions to health zones are carried out jointly by the Regional Distribution Centers (CDRs). The process for negotiating these contracts between the PRs and CDRs was also lengthy due to the complexity of sorting out transportation cost details between the malaria and HIV/TB PRs, which delayed the transport of health commodities to the health zones.

> *"The shared cost remains a problem in terms of input storage at the health zone level (BCZS and FOSA); essentially, the payment for the storage of (health commodity) inputs is covered with 70% of the budget from SANRU, but it's considered as though it were meant to cover 100% of the funds expected by the health zones." (Quote from a key informant)*

It has taken time for stakeholders to adapt to the changes in procedures necessitated by the new grant architecture, which is understandable given the broad extent of these reforms. In April 2018, Cordaid and SANRU coordinated orientation workshops with the SRs to train and orient them to the new grant architecture. As of Q4 of 2018, preliminary evidence suggests that implementation of the new grant architecture is already improving. Nonetheless, PRs and SRs continue to cite operational challenges that will require additional work going forward.

> *"We want to have transparent exchanges between the 2 PRs. This would facilitate overall work to ensure joint support. Unfortunately, we do not share the same concerns because we do not have the same organizational structure." (Quote from a key informant)*

Alternative grant architecture models, such as the consolidation of disease components at the PR level (as suggested elsewhere), were considered by the CCM and ultimately the decision was made to retain one civil society PR for malaria and one for TB/HIV.(4) Going forward, the Global Fund should continue to examine the implementation of the new grant architecture and whether it is an optimal model for delivering results in DRC.

4.2 Challenging Operating Environment (COE) Policy in Practice

The Global Fund's 2017-2022 strategy recognizes that successful implementation requires differentiated approaches for diverse country contexts. In this vein, the COE policy, approved by the Global Fund Board in April 2016, responds to this need for differentiated approaches in countries like the DRC that experience heightened programmatic and implementation challenges (5). The policy calls for improving effectiveness in COEs through three key principles: 1) **flexibility** in the grant management approach, 2) optimization of **partnerships** to address implementation weaknesses, and 3) **innovations** to maximize results.

Key Finding 3: There is evidence that the COE principles of flexibility, partnership, and innovation are being put into practice, therefore contributing to an approach that is better tailored to the country context.

Robustness: (Ranking = 2) The conclusion is corroborated by multiple data sources of high quality, including key informant interviews, meeting observations, and documented evidence.

The COE policy provides examples of many ways in which differentiated approaches and flexibilities may be applied in a COE, however the overall approach for a given country is ultimately determined by the CT based on a thorough portfolio and operational strategy analysis. Among Global Fund countries, DRC is recognized as one of the most innovative portfolios. Many unique and differentiated approaches were already introduced or underway before the COE policy was formalized. In many ways, the DRC can serve as a model for other COE countries by testing new approaches and sharing lessons learned. In terms of portfolio management flexibilities, the DRC CT has yet to formally request flexibilities for the DRC portfolio through the official channels outlined in the COE policy (e.g., EGMC approval).(6) Instead, the CT has been able to leverage the DRC's classification as a COE through informal mechanisms to obtain management approval for specific requests.

> *"The fact of being a COE country, according to the Global Fund categorization, certainly allowed us to engage on different levels with the management to support this or that request,*

flexibility or decision. The COE policy will certainly evolve and maybe tomorrow we will formally have some flexibility that we can use." (Quote from key informant)

Most country stakeholders were not familiar with the COE policy but pointed out examples of flexibilities that already exist. They also noted that as a "High Impact" country, DRC already has access to extensive resources for addressing implementation bottlenecks. For example, the comparatively large CT is able to provide focused and timely support, ensuring rapid responses to country needs and portfolio management.

"The DRC is like a privileged child of the Global Fund, meaning that if there is a meeting, you get immediate attention from the Global Fund." (Quote from key informant)

Although they are implemented independent of the COE policy, we found evidence of flexibilities in how grants are managed in relation to procurement rules and the release of funds. In the new grants, the number of quotes required before approval of the procurement of equipment or a service provider contract (e.g., such as venues or meal services for workshops, trainings, and so on) has been reduced from three to two. Also, under previous grant cycles, funds could only be disbursed from PRs to SRs once the money spent from the previous disbursement had been fully verified/justified. The current grant cycle allows for the release of funds without complete justification for up to two consecutive payment periods.

Another flexibility afforded to both High Impact and COE portfolios is the option to request program revisions at any time during grant implementation. In the first ten months of implementation of the new grants, DRC did not undergo a formal reprogramming process but the implementation plans and timelines for activities that did not take place in Q1 or Q2, as planned, were shifted to Q3 and Q4. Given that such flexibilities are intended to reduce grant-management related administrative burdens, we would expect to see improved absorption rates as it becomes easier to spend the grant budgets. While more flexible grant management is only one of many potential factors driving absorption rates, absorption across all grants in the first half of 2018 was 54.2%, which is not a significant improvement compared to early absorption rates from the previous cycle (50.4% across grants in the first half of 2015). As noted earlier, at the time of report writing (November 2018) the first official reprogramming was underway; the PCE team will be assessing the reprogramming process through the lens of flexibility in responding to new priorities.

Another aspect of the COE policy principle of flexibility is the ability to rapidly respond to changing environments, such as during periods of instability or in crisis situations. This flexibility is especially relevant given the fragile political situation, continuing civil unrest and the current Ebola outbreak. A workshop was organized by the Global Fund's COE team in Kinshasa with Global Fund stakeholders and humanitarian response organizations in October 2018 to develop a contingency plan with adapted responses to ensure continued access to services by populations affected by HIV, TB, and malaria, which could be implemented if circumstances were to deteriorate in conflict regions. Although it is too early to evaluate the outcomes of this planning exercise, the process was highly participatory and represents an important step in bringing together key Global Fund stakeholders and humanitarian actors to ensure better planning and coordination. The PCE will continue to examine how the contingency plan and its related strategies and flexibilities are applied to facilitate more effective service delivery in the event of changing circumstances.

We also found evidence of differentiated portfolio management approaches in DRC under the new grants, which is recognized by the COE policy as necessary where capacities and systems are weak. For example, financial management of grants awarded to the MoH is handled by the fiscal agent, GIZ, a private accounting firm that is responsible for overseeing and verifying grant expenditures. In the new grants, improvements have been made in the process for obtaining the fiscal agent's approval of expenditures. Previously, all the receipts and paperwork required to verify expenditures had to be submitted to the fiscal agent in Kinshasa. As was the case under the previous grants, two fiscal agents are assigned to the DPS in 14 of the 24 provinces covered by the Global Fund, meaning that the review and approval of all expenditure paperwork can take place at the province level, which has already

showed signs of faster and more efficient processing. The 14 provinces chosen were considered to have the highest financial risk.

> *"In the past, GIZ carried out one-off visits to the provinces to analyze and validate accounting documents. Now, the Fiscal Agents have been based locally in the province and this allows the processing of supporting documents in real time." (Quote from key informant)*

In terms of addressing weaknesses in financial management, the fiscal agent is also intended to build the capacity of the national disease programs and DPS, however this role is secondary and is often superseded by their primary responsibility to mitigate financial risk.

> *"Up until today, the CAG hasn't been reinforced. The fiscal agent was created to channel state funding and support accounting, but do they have too much work focused on validating expenses? Capacity building they have failed." (Quote from key informant)*

Our interviews with stakeholders suggest that this model has done little to improve the financial management capacity of the DPS or national programs. In later sections of this chapter we discuss further the extent to which partnerships are being effectively leveraged to improve technical assistance (TA) for addressing implementation weaknesses.

We also found evidence in 2018 of innovations in program design and grant management approaches. In particular, the provincial approach pilot, discussed further in the next section, is helping to bring more hands-on support by the CT to the province level. This is in line with recommendations from the 2014 Thematic Review of the Global Fund in Fragile States to develop a more "in-country" model for CT engagement.(4) Other innovations already discussed include the consolidation of disease components under the HIV/TB single PR and provincial level transversal SRs. This is a model suggested by the COE Operational Policy Note to improve grant synergy and efficiency in situations where the recipient has strong capacity to coordinate activities across multiple components.

Key Finding 4: The provincial approach is an innovative model that has already led to increased engagement at the provincial level and has helped to resolve implementation bottlenecks. However, launching the new model has been resource-intense and mobilizing sufficient Country Team staff resources has proven challenging.

Robustness: (Ranking = 2) The finding is corroborated by several data sources (KIIs at the global, national, and provincial levels, along with meeting observation) and the data is considered to be of good quality given the proximity of key informants to this topic.

In last year's report, the PCE found preliminary evidence to suggest that the new provincial approach had been positively received by country stakeholders, but there were questions around how the approach would be operationalized. During 2018, there were additional visits by the Provincial Portfolio Manager, including for the provincial level program reviews in October. At the time of this report, activity plans were still under development. For this reason, many of the stakeholders interviewed continued to point to a lack of specificity regarding how the budget allocation for the provincial approach would be utilized and what kinds of activities would be implemented.

> *"The funds are available for the provincial approach but we do not know exactly what to do with them, what activities to support." (Quote from key informant)*

> *"Although many questions remain unanswered about the exact content of this approach, the Country Team, with the health and political authorities of the province on one side and with all the technical, financial and implementation partners on the other side, will focus on implementing this approach in the coming months to improve the impact of Global Fund grants in this province." (Quote from key informant)*

Nonetheless, we found evidence that the increased CT presence at the province level in Kinshasa and Maniema has helped bring more awareness to implementation bottlenecks and helped identify quicker solutions. For example, since the beginning of 2018, there have been at least seven visits to

Maniema by CT members. Some stakeholders interviewed thought that this increased presence has resulted in more timely support from the Country Team, and more streamlined processes.

> *"The support has gotten closer to the end users whereas before, to carry out the activities, it was necessary to pass first through the national level. The time for obtaining funds is now reasonable." (Quote from key informant)*

There are other examples of how the Country Team's increased presence at the province level has helped resolve implementation bottlenecks. In one case, the CT helped the Maniema DPS revise the budget for the mother mentors activity (mentors provided to pregnant HIV-positive women) since the detailed assumptions in the budget did not respond to needs. This made it possible to program a re-training of all mother mentors in all HIV provinces (including Maniema) for a more robust roll out of the mother mentor approach, which aims to improve PMTCT results. In another example, the CT helped identify gaps in communication and information sharing between the provincial health inspection (Inspection Provinciales de la Sante; IPS) and the DPS due to the absence of an accountability framework between the two institutions. Through the Provincial Approach, the CT is now supporting discussions on the development of a protocol for communication and a formal mechanism for exchanging information to enhance collaboration between the two institutions; the issue has also been elevated to the national health inspector general and secretary-general for health.

We also observed the CT providing hands-on support to the Maniema DPS in how to analyze their HIV program data for better program management. As part of the Provincial Approach, the CT is tracking 15 key performance indicators in Maniema and Kinshasa to monitor performance in these two provinces and how it compares to national level performance. They are also sharing these analyses with the PRs and SRs in both provinces with the intention of building their capacity to analyze and use performance data to identify and address problems in low performing health zones. For example, closer examination of the Maniema and Kinshasa performance indicators has shown particularly weak performance on PMTCT indicators (PMTCT-2 and PMTCT-3), for which the Provincial Approach is planning specific actions to help improve the results. Also, for the first time, Global Fund program reviews were held at the province level in Maniema and Kinshasa in October 2018 with support from the CT. During these reviews, program performance during the first six months of grant implementation was discussed, and potential activities for the provincial approach budget allocation were identified. A detailed work plan and budget were drafted for implementation of the provincial approach in 2019 and 2020 by each of the two provinces and were under review at the time of writing this report.

Although the DRC portfolio is one of the highest staffed County Teams, the Global Fund Secretariat has had challenges mobilizing staff to cover all the provinces selected for the Provincial Approach. Originally, five provinces (Ituri, Kinshasa, Kongo Central, Kwilu and Maniema) were selected for the new approach and received visits from the Country Team in late 2017. But to-date, implementation has mostly moved forward in Kinshasa and Maniema. The other three provinces have received support for reinforcing the DPS financial management systems, but full rollout of the Provincial Approach in these three provinces has been put on hold given other competing portfolio priorities and insufficient staff time. Kinshasa and Maniema were assigned a Provincial Portfolio Manager who oversees province-level activities. This new arrangement is in line with one of the recommendations of the Thematic Review of the Global Fund in Fragile States, which suggested subdividing the DRC CT Program Officer responsibilities to oversee grant implementation at the province level.(4) Early experience with rolling out the Provincial Approach has shown that it is a resource-intense model. Launching the model has necessarily required more up-front investment of staff time to lay the groundwork, such as defining the model, introducing it to country stakeholders, and generating buy-in. Once this groundwork is in place, replicating the model in other provinces may require fewer resources, but could still require additional staff to achieve the type of enhanced engagement that is envisioned by the approach, absent any changes to the overall Country Team structure.

While the Global Fund's DRC investment portfolio covers 24 provinces, the CT remains largely subdivided by disease components and cross-cutting domains such as supply chain management, M&E, health product management, and financial management. Both the Provincial Approach and

reforms in the grant architecture have expanded the orientation of the DRC portfolio in a way that consolidates activities at the province level and aims to better align with national systems.

> *"There is clearly a tension or tradeoff between central and provincial level. This tension is also and present in country. I think it is positive because it can be seen as the beginning of a change process at the CT level but also at country level." (Quote from key informant)*

As these new approaches evolve, the Global Fund should examine the efficiency and effectiveness of the current Country Team structure to respond to the portfolio changes. This includes examining the value for money of the Provincial Approach which would help inform the feasibility of broader rollout in DRC as well as in other countries. The PCE will continue to follow implementation of the Provincial Approach and the benefits and challenges of the new model.

4.3 Optimizing Partnerships to Address Implementation Weaknesses

The Global Fund's 2017-2022 strategy considers support for mutually accountable partnerships to be a key strategic enabler of the strategy's successful implementation. Given that the Global Fund does not have in-country presence, collaboration with development, humanitarian, private sector and non-traditional partners is essential for impact in COEs, to address implementation weaknesses and strengthen grant performance, as outlined in the COE operational policy note.(5) The CT plays a key role in examining existing in-country partners and identifying ways in which these partnerships can be further leveraged. The Global Fund business model expects partnerships to increase the effectiveness and efficiency of grant implementation by **strengthening in-country governance** (e.g., stronger CCM functionality), **enhancing service delivery**, and **improving technical assistance.** The PCE examined these three areas and the extent to which partnerships are contributing to these goals.

Key Finding 5: In the DRC, the partnership model is ensuring that different stakeholder interventions and implementation approaches are harmonized and well-coordinated, but weaknesses in implementation capacity remain (e.g., financial management, data collection and reporting, supply chain management, and M&E).

Robustness: (Ranking = 1) The conclusion is corroborated by multiple sources of data, including key informant data and documented evidence. KIIs indicate a convergence of opinions across stakeholders and the data was considered of high quality.

There are many signs that the partnership model in DRC is working to ensure coordination between donors, national stakeholders, and implementing partners. This has helped to better harmonize interventions and implementation approaches so that investments by various stakeholders have maximum reach and can avoid duplicating efforts. To begin with, the rationalization of geographic coverage between Global Fund, PEPFAR, PMI, and DFID, which began in 2016, has helped simplify and streamline service delivery for HIV, TB, and malaria in each province, thereby reducing some of the complexities that were previously associated with having multiple donors intervening in a single province or health zone. The Global Fund participates in the Inter-Donor Health Group (*Le groupe inter-bailleurs sante, GIBS*), a national level platform that is tasked with harmonizing and aligning all health sector interventions, including donor investments, implementation approaches, and addressing operational challenges.

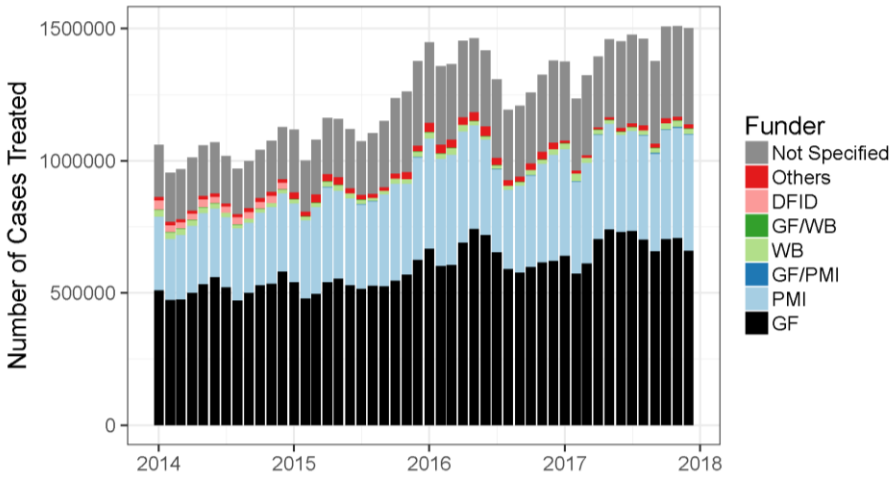
In terms of addressing supply chain related challenges, a formal agreement for the interchangeability of health products was established in late 2017 with the primary partners intervening in the three disease areas so that health products could be exchanged between facilities and health zone to avoid stock-outs and stock expiration. In the past, there was limited cooperation and information sharing between partners regarding supply plans, however, in 2018, the PCE noted instances in which Global Fund exchanged health products with PEPFAR to prevent stock-outs of HIV commodities. Another way in which these partnerships have been leveraged has been to harmonize operational details related to service delivery such as assigning common rates for commodity transport and fuel reimbursement, joint financing of routine meetings, monitoring trips, and trainings (as outlined in a

January 2016 memo issued by GIBS). Nonetheless, it was noted that there are still differences in implementation approaches that have an impact on service delivery. For example, differences in how salary incentives are allocated to health care workers contributes to inconsistencies in performance across geographies and between vertical programs. This issue is discussed in greater detail in the RSSH section below.

Various other agreements exist between the Global Fund and partners that formalize the terms of cooperation among organizations, and which are ultimately expected to enhance service delivery effectiveness as well as provide access to a more complete package of services. There are various memoranda of understanding (MOUs), including one with UNICEF for integrated community case management (iCCM) of malaria and one with the World Bank on Performance-Based Financing (PBF); multi-donor MOUs exist between the World Bank, USAID, UNFPA, UNICEF, and GAVI on a framework for collaboration on a joint package of health service interventions; one with the World Bank, UNICEF, and GAVI on the development of a single-donor trust fund for the Partnership for Health System Strengthening for Better Child and Maternal Health Results; and one with the World Bank, GAVI, and DFID for supporting DHIS2. We have noted examples of enhanced service delivery because of these partnerships, such as through MOUs with technical partners to provide CD4 and viral load monitoring for patients on ARVs, strengthening national laboratory systems, counseling and voluntary testing activities, and sentinel surveillance sites for malaria, for example.

The separation of external malaria funding along provincial lines allows some examination of differences between funders. As shown in Figure 7, approximately half of malaria cases treated have been in health zones supported by the Global Fund (47.9% in 2017), with the remaining 50% mostly occurring in PMI health zones or health zones with an unspecified funder. Despite gradual reorganization of funder support and through geographic rationalization of activities between donors, this fraction has remained essentially unchanged in recent years, but has increased in absolute number of cases.

Figure 7. Malaria cases treated with ACTs by funder



Source: PNLP national program data

While these partnerships are useful in terms of leveraging each partner's contributions in a coordinated fashion and filling gaps in service delivery, the Global Fund's expectations for partnerships are much broader. For example, when it comes to addressing implementation weaknesses (which Global Fund expects partnerships to play a role in addressing, especially in COEs), we found mixed evidence of the partnership model's success.(5) On the one hand, we found that some TA has resulted in more effective monitoring capacity of the CCM's strategic oversight committee (discussed further below). On the other hand, we observed numerous capacity gaps that have contributed to implementation bottlenecks, such as weak financial management, data collection and reporting, supply chain management, and monitoring and evaluation. For example, we found that poor quality data is contributing to supply chain management issues (e.g., stock-outs) and appears to have contributed to ineffective geographic allocation of health products (discussed further in the VfM section). The root causes of poor-quality data are discussed more in the section on RSSH but include

low motivation and weak capacity among the health care workers who collect and record the data, inadequate supervision of health care workers at the health facility level, and inadequate data analysis at all levels. Weak data analysis capacity is a well-known gap that has been recognized by the CT.

> *"There is a tendency to reproduce the data to send to the partners, without them even taking the time to analyze it to improve the program." (Quote from key informant)*

> *"The data is there, it passes up the chain, but there is no analysis." (Quote from key informant)*

> *"The DPS multidisciplinary supervisors [les encadreurs polyvalents] are not trained in the analysis of data from DHIS2, which results in the weak ability to provide data analysis support during their supervision visits to the health zones." (Quote from key informant)*

Certain stakeholders felt that partnership is not well defined, which could point to a gap in expectations between the Global Fund and technical partners. It has also been cited elsewhere that obtaining high-quality, French-speaking, technical assistance providers is a particular challenge for the DRC and other francophone countries. The PCE will continue to examine how partnerships are leveraged and their effectiveness at helping implementers build stronger capacity.

Key Finding 6: There is evidence that efforts to reform the CCM and strengthen its capacity are leading to stronger CCM functionality and greater involvement in important strategic decisions.

Robustness: (Ranking = 1) The conclusion is corroborated by multiple data sources, including key informant, documented evidence, and direct observation. There was strong convergence of opinions between stakeholders and data was considered of high quality.

Last year we reported on preliminary evidence that the CCM reforms initiated in 2015, such as replacement of the Permanent Secretary, renewing and downsizing the number of CCM members, and instituting a system of automatic renewal, had contributed to improvements in CCM functionality. We have collected additional evidence that further supports the finding and suggests that continued capacity building in 2018 has helped ensure the full realization of the benefits of these reforms. In particular, the CCM received TA to support the election process for replacing CCM members who had fulfilled their three-year term. The new CCM bylaws, established under the CCM reforms, call for elections every three years to replace at least one third of the oldest members. The elections held in October 2018 therefore marked the first renewal of CCM members since the reforms were put in place. In addition to successfully electing 10 new members, the total number of members was further reduced from 27 to 21 members in a move to reduce bureaucratic burdens and increase the responsiveness of the CCM platform. In KIIs, stakeholders reported that the consultant recruited to support the process was able to intervene and address resistance among old members who wanted to continue despite having reached their term limit.

The CCM also received specific TA from March-May 2018 that involved strengthening the capacity of the strategic oversight committee (*comite de suivi strategique*). The strategic oversight committee has long been criticized as particularly weak in fulfilling its role of providing oversight of grant implementation, which is considered an essential CCM function.(7) The consultant that was recruited helped the committee develop stronger monitoring tools and processes and create a monitoring plan and procedures manual to guide the committee's work. In 2018, we observed evidence that this support contributed to improvements in the oversight committee's capacity. For example, in July 2018 the committee conducted monitoring visits in four provinces to assess grant implementation and presented their findings and recommendations to the CCM during a general assembly meeting in August. The committee also held meetings with the PRs to debrief and will be following up on the recommendations made.

> *"The CCM is increasingly involved in important strategic decisions." (Quote from key informant)*

The DRC is also one of 18 countries selected by the Global Fund to participate in the CCM Evolution project, decided by the Global Fund Board in May 2018. The evolution approach aims to strengthen CCMs to better carry out their functions. Over the next ten months, the consultants chosen to support the DRC CCM will spend five days per month in Kinshasa. The first phase, currently underway (during the month of November 2018), includes a baseline assessment that will be used to develop a capacity reinforcement plan. Going into 2019, the PCE will continue to observe efforts to improve in-country governance through enhancing CCM functionality, including the role of technical assistance.

4.4 Sustainability, Transition and Co-Financing and Resilient and Sustainable Systems for Health

Sustainability, transition and co-financing (STC) is central to the Global Fund Strategy 2017-2022. It provides guidelines for supporting sustainable responses, using existing resources more efficiently, and increasing domestic resource mobilization in an effort to support transition toward full domestic financing. It is based on four key principles: (1) **differentiation** of policies and processes based on a country's place along the development continuum; (2) **alignment** of Global Fund programs to country processes and systems, including building RSSH and integrating parallel systems; (3) **predictability** by giving countries enough notice, time and associated resources to plan for disease transition; and (4) **flexibility** to adapt certain aspects of the STC policy to country and regional contexts. Our key findings in this section relate to progress made in building programmatic sustainability by bringing Global Fund investments in alignment with country processes and systems, and in strengthening RSSH. Also, we report on progress made in building financial sustainability through enhancing domestic financing for the three diseases.

Key Finding 7: There is evidence of progress toward increased sustainability with the alignment and implementation of Global Fund financed programs through country systems.

Robustness: (Ranking = 1) The conclusion is corroborated by multiple sources of data, including key informant data and documented evidence. Convergence of opinions between stakeholders and data was considered of high quality.

A number of changes have been made under the new grant cycle that show progress toward better alignment of Global Fund grants with country systems. To begin with, the Provincial Approach, as discussed previously, entails a significant commitment to supporting the decentralization of DRC's health system by strengthening the capacity and functioning of the Provincial Health Division (DPS). This is in line with health sector reforms and the National Health System Strengthening Strategy, which calls for strengthening leadership at the health district level and harmonizing donor investments for greater complementarity and synergy.(8) Global Fund has further contributed to these efforts through its participation in the single contract (contrat unique). Through this mechanism, the single contract for each DPS outlines the financial contributions of financial partners, national and provincial government, and details on how the funds will be used and monitored. At the time of writing this report, not all single contracts had been finalized; contracts in 12 of 19 DPS had been signed. The provincial approach was crucial in mobilizing Maniema's partners to share their funding figures with the DPS in 2018, thus enabling the drafting of the single contract. Although Maniema experienced some delays in finalizing its contract, it was due to be signed in the fourth quarter of 2018. Kinshasa is not on the list of priority provinces for 2018, however it is planned for 2019. These efforts signify important milestones in realizing the goals set out under the health sector reforms and the PCE will continue to assess how they contribute to reducing fragmentation and increasing sustainability.

Other important changes include consolidating responsibility for the storage and transportation of health commodities under the Regional Distribution Centers (CDRs). In the previous grant cycle, CDRs only stored health commodities while disease-specific SRs handled transportation to the health facilities. Global Fund and GAVI jointly invested in increasing the warehouse storage capacity of CDRs and, during this grant cycle, entrusting them with transportation responsibilities, which is meant to

both increase efficiencies (through "grouped distribution" of health products for all three diseases) and reinforce country systems.

Finally, starting in the second semester of 2018, Global Fund will be requiring all PRs to use DHIS2 for reporting on KPIs. Global Fund has invested heavily in the deployment of DHIS2 and this change is an ambitious move to eliminate the use of parallel systems and strengthen national systems. Nonetheless, there are still many known data quality issues affecting the completeness and validity of data in DHIS2. Historically, the parallel systems established by PRs have been able to ensure higher quality data since they have the staff resources to collect and extract data from health facility reports. During the transition period, Global Fund will necessarily have to adjust its expectations regarding the level of data quality to be expected. It will be important for Global Fund to ensure that its investments are comprehensively targeting all levels of the health system engaged in collecting, reviewing, and validating data (e.g., facilities, health zones, and provinces) in order to strengthen the quality of data in DHIS2.

Key Finding 8: Global Fund investments in RSSH show evidence of contributing to building the capacity of national systems and improving health system integration, such as through the national health information system.

Robustness: (Ranking = 1) The conclusion is corroborated by multiple data sources, including key informant data, documented evidence, and quantitative data.

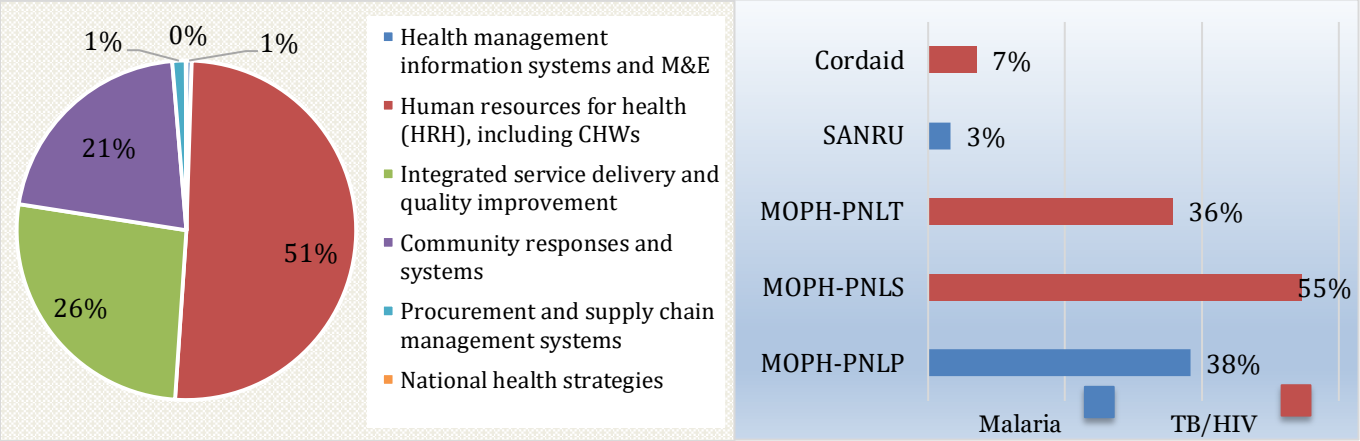
Building RSSH is one of four strategic objectives of the Strategy 2017-2022. In DRC, 2018-2020 grant investments in RSSH total US$68 million, which includes US$2.9 million in matching funds for strengthening HMIS, data generation and data use. These figures reflect the latest revisions to the malaria PR budgets (revised in August 2018). In terms of "direct" investments in RSSH, 12.5% of the overall DRC budget is directly dedicated to RSSH, a decrease compared to the previous grant cycle despite guidance provided in the country allocation letter that encouraged the country to "maintain or increase" RSSH investments relative to the 2014-2016 RSSH level (which was US$120.8 million, representing 19% of the signed grants). Direct investments in RSSH refer to interventions and activities that are attributed in the budgets to one of the seven RSSH modules and does not include "contributory" RSSH investments that may be captured under different module names. Another US$32 million in contributory RSSH investments from within the disease interventions were identified in an analysis conducted by the Global Fund for the DRC RSSH dashboard.[3] In addition, US$29.5 million (including US$25.3 million for malaria and US$4.2 million for TB/HIV) in RSSH activities was approved in the Prioritized Above Allocation Request (PAAR) and may be implemented if funds become available through reprogramming or other means. Around 92% of RSSH investments budgeted in the 2018-2020 grants are concentrated in three of the seven operational objective modules (Table 6).

[3] The Global Fund. DRC Country Results Profile, Health System Dashboard.

Table 6: 2018-2020 RSSH investments by RSSH operational objective and Q1-Q2 absorption rates

RSSH Operational Objectives	2018-2020 Budget		Absorption Q1-Q2 2018
	$USD	% of total RSSH budget	
1. Strengthen data systems for health and countries' capacities for analysis and use	$ 34,386,844	51%	11.3%
2. Leverage critical investments in human resources for health	$ 17,948,274	26%	48.6%
3. Support reproductive, women's, children's, and adolescent health, and platforms for integrated service delivery	$ 14,413,103	21%	0.0%
4. Strengthen global and in-country procurement and supply chain systems	$ 873,307	1%	0.0%
5. Strengthen community responses and systems	$ 342,435	1%	0.0%
6. Strengthen and align to robust national health strategies and national disease-specific strategic plans	$ 39,032	0%	0.0%
7. Strengthen financial management and oversight	$ -	-	-
TOTAL:	**$ 68,002,995**		**17.8%**

Figure 8. 2018-2020 RSSH investments by RSSH category and as a percent of total grant budget



Source: Revised 2018-2020 grant budgets (August 2018)

The largest portion of the RSSH budget, representing 51%, is invested in strengthening health information systems and monitoring and evaluation (US$34.4m). This includes approximately US$17 million for HMIS, of which US$2.9 million was approved through the matching funds request. In a desk review conducted by the Technical Review Panel (TRP), DRC's investment in HMIS was rated as being designed to "strengthen" systems, which was more favorable than ratings found in the other seven PCE countries. The review, which analyzed the RSSH investments in the funding requests submitted by the eight PCE countries, found that on average 64% of RSSH investments were rated as "supporting" while only 36% were rated as "strengthening" health systems. The analysis considered where RSSH investments landed along the health systems development continuum; that is whether the proposed activities were contributing to systems *establishment*, *supporting* systems, *strengthening* systems, or contributing to *sustaining* health systems.(9)

The RSSH funding dedicated to strengthening HMIS is focused on replacing parallel reporting systems maintained by national programs and PRs with a unified HMIS system administered via DHIS2. Since the launch of DHIS2 in DRC, reporting into the system has increased substantially,

from only 66 health facilities reporting on primary healthcare services in December 2016 to a mean of 11,792 facilities reporting monthly by Q1 of 2018. However, there were differences in reporting between the national programs. The S1 2018 PU/DR reports 60% and 91% reporting completeness for PNLS and PNLP respectively, but only 44% for PNLT. In addition, quarterly reporting from PNLT has declined, with 1,092 facilities reporting in Q1 of 2017 to only 1,018 reporting in 2018. The poor integration of PNLT data in DHIS2 is primarily due to the ongoing development of data collection tools. In addition, data collection tools are printed only at the central level and distributed to health facilities by SRs. The delayed start of SR activities led to delays in distribution of the tools to health facilities. Also, S1 absorption was low (17.8%) across all RSSH intervention areas (see Table 6); low budget absorption for strengthening data systems (11.3%) may have been affected in part by the fact that the MOH/PNLP budget revision for the matching funds request was not approved until August 2018.

Starting in 2018, Global Fund is requiring that all reporting on performance indicators come from DHIS2, which is a major step in support of alignment with national systems. However, due to the delayed distribution of data collection tools, Cordaid and SANRU were allowed to continue using their internal reporting system through Q2 but are expected to achieve full integration by Q3 of 2018. While the shift away from parallel reporting systems, along with investments in HMIS, is expected to improve data availability, many challenges remain, especially with regards to ensuring the quality and use of data for improving program management. Key challenges identified by stakeholders that undermine data quality include a lack of training and motivation among healthcare workers for data entry, loss of skilled personnel to other sectors, unrealistic targets for training human resources, and infrastructure challenges at the health facility and health zone level, including a lack of internet connectivity (although a new strategy is expected from the MOH to improve connectivity in VSAT zones). The Global Fund recognizes inadequate data quality as a key programmatic risk; in 2017 staff in all provinces were trained in data analysis and use, and mitigating actions such as data quality assurance plans were required. In addition, the shift to PBF will create a link between health zone financial support and performance indicators including data quality, supply chain management, financial management and facility-level supervision. Many of the above-mentioned factors leading to poor quality data are also closely related to inadequate human resources and capacity (discussed further in the next section), which are a persistent challenge in DRC, as illustrated by the following quote from a key informant.

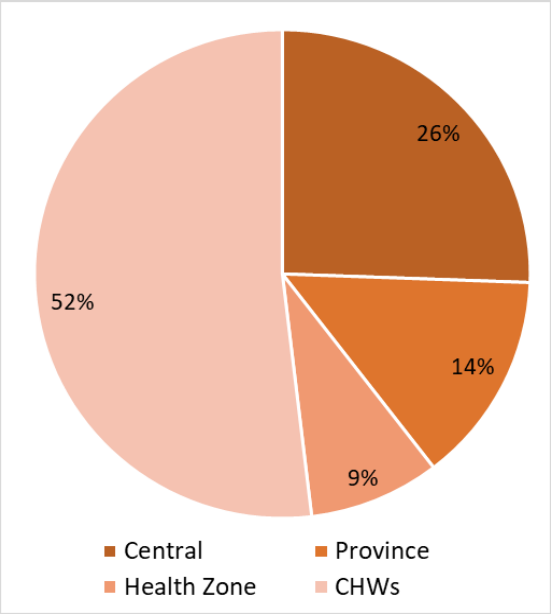
> *"The Global Fund invests in the long term by training providers, but the problem is that, once trained and experienced, they seek the highest paying jobs and leave their posts, causing a brain drain." (Quote from a key informant)*

The effects of poor quality data have been observed by the PCE in areas such as weak inventory management capacity, which has led to inaccurate reporting on the consumption of commodities by health facilities, such that some facilities are unable to order and maintain adequate supplies. Stronger, multi-component investments that target all levels of the health system engaged in collecting, reviewing, and validating data (e.g., facility, health zone, and provincial levels) are likely to be necessary to make a meaningful contribution to improving data quality and healthcare professionals' capacity to analyze and use data for program management and higher-quality service delivery.

Key Finding 9: Investments in human resources for health are primarily dedicated to the retention and scale-up of health workers, but weak harmonization across donors and few strategies for building health worker capacity minimize the potential for lasting impact

Robustness: (Ranking = 2) The finding is corroborated by several data sources (KIIs at the national and provincial levels and document review) and the data is considered to be of good quality given the proximity of key informants to this topic.

Figure 9. Allocation of RSSH budget for salary incentives across health system levels



The second largest portion of the RSSH budget, representing 26%, is invested in strengthening human resources for health (US$17.9m). Over 99% of the funding for this category is dedicated to the retention and scale-up of health workers through the provision of salary incentives. The salary incentives are spread across the three disease categories in support of government health workers at all levels of the health system, with the largest proportion of the budget (52%) dedicated to community health workers (CHWs) (Figure 9). In many cases, the salary incentives are tied to performance indicators and service contracts with the health structures participating in the PBF initiative that Global Fund is undertaking in partnership with the World Bank, Gavi, UNFPA, USAID, and UNICEF. Through this initiative, Global Fund aims to address human resource challenges that contribute to poor quality service delivery. The PCE has not yet had the opportunity to examine the extent to which PBF is delivering upon these objectives, however to a broader extent, stakeholders pointed out that the way in which the salary incentives are applied is inconsistent across donors and reinforces verticalization of the health system. There have been attempts through the GIBS platform to harmonize how support for government salaries and salary incentives are applied, although to-date the only agreements that have been reached concern costs related to organizing workshops, trainings, and per diems. The DRC was not alone with regards to this challenge; the TRP RSSH desk review found across countries large requests for workforce incentives and salaries for government workers that were often inconsistent within the country and among donors.(10) In DRC, there are also concerns about the unintended consequences of channeling salary incentives through the vertical disease programs and their associated structures, especially at provincial and lower levels of the health system. Stakeholders at the sub-national level cited weak performance and demotivation among health workers that do not receive salary incentives as a challenge, and particularly concerning for health structures (e.g., the DPS or HZ) that do not benefit from other sources of funding or donor support. The single contract, a mechanism through which each DPS outlines the financial contributions of financial partners, national and provincial government, was meant to resolve the issue but gaps and inconsistencies appear to remain. Going forward, Global Fund should consider advocating more strongly for harmonization of human resource investments with other donors and explore mechanisms for channeling salary incentives and support in a way that reinforces the health system more broadly.

In addition to investments in the retention and scale-up of health workers, addressing the gaps in human resources for health will also require more robust strategies for building health worker capacity. Currently less than 1% of the human resources for health budget includes activities to build health worker capacity. This is despite the fact that processes for regular capacity building is a well-acknowledged gap by the CT and reflected in the portfolio risk analysis. The country requested US$1.5m for strengthening the skills of health care workers in the malaria PAAR, but the TRP did not approve the request because it found no strong justification for how the requested course in malariology would improve malaria control skills. This was triangulated with findings from the TRP RSSH desk review, which cited a heavy reliance on traditional, classroom-based, in-service training across countries supported by Global Fund.(10) The TRP considered these approaches, which also contribute to staff absences from health care facilities during training, both costly and inefficient compared to alternatives (such as training through e-Technology). The Global Fund should consider supporting capacity building approaches that reinforce the health system, such as strengthening supportive supervision and feedback mechanisms at all levels of the health system. This includes both reinforcing institutional mechanisms and building the capacity of supervisors to provide high-quality supervision. There is already evidence of PRs supporting health workers at the health zone level to

validate and check the quality of data entered in DHIS2. Similar approaches could be expanded to improve health worker performance and capacity to deliver higher quality health services.

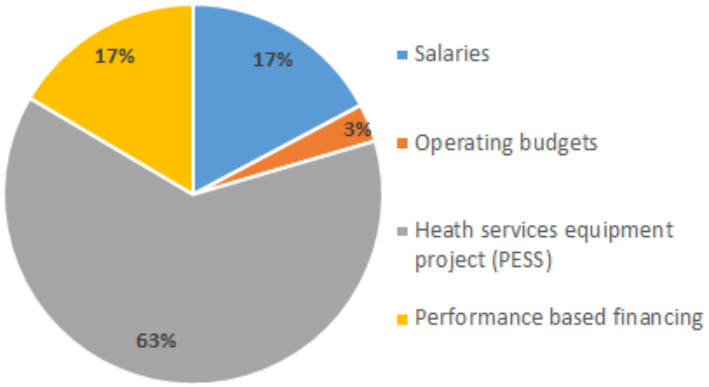
Key Finding 10: The government has reported increasing its co-financing commitment under the current grant cycle, meeting its obligations. However, it remains a challenge to verify that this is a substantial increase or change in resource allocation, and it is unclear if this translates into increased ownership.

Robustness: (Ranking = 1) The conclusion is corroborated by multiple data sources, including key informant data and documented evidence (including the co-financing letter, NHA data).

The DRC is heavily reliant on donor support; results from the National Health Accounts in DRC show that over a third of health funding comes from external sources, and is primarily provided via bilateral and multilateral partnerships, and international NGOs and foundations. This funding amounted to US$574,379,175, or 40% of current health expenditure in 2014, 15% of which came from bilateral partnerships and 25% from multilateral partnerships.

For the 2017-2019 allocation period, the government committed to a co-financing contribution of US$98.8m, which represents a 67% increase over the 2014-2016 allocation period commitment of US$59.2m. Per the co-financing commitment letter, over half of the investment will go toward the national health services equipment project (PESS) which is funding the renovation and construction of new health centers (see Figure 10). Other areas include salaries for government personnel, performance-based financing, and operating budgets.

Figure 10. DRC Co-financing commitment for the 2017-2019 allocation period



We note that at this stage of implementation, the government commitment is strong but data on health expenditure is not up-to-date, making it difficult to interpret actual progress made by the government in meeting its commitment. The commission that was established to monitor government co-financing commitments is not yet functional. Since the co-financing commitment letter was signed, there has been no meeting convened for commission members. There was a change in the committee's membership in October, which is anticipated to increase the its functionality and improve monitoring. Other factors such as the current political context (with elections scheduled for December 2018), different regions suffering from armed conflict, and the Ebola outbreak may place a strain on the government's ability to meet its co-financing commitment. Going forward there is a need for more transparency around co-financing and demonstration that the country is actually taking ownership of specific programs.

4.5 Value for Money

Key Finding 11: Activities are being implemented with the intention of streamlining grant architecture, improving efficiency, and enhancing the effectiveness of interventions. Early indications suggest there is greater attention on a strategic approach that considers value for money.

Robustness: (Ranking = 1) The conclusion is corroborated by multiple sources of data, including key informant data and documented evidence (A toolkit for health facilities: Differentiated Care for HIV and Tuberculosis). There is a strong convergence of opinions between stakeholders and data was considered of high quality.

There is evidence to suggest that numerous changes were either already underway or further solidified under the current 2018-2020 grant cycle that show promise for achieving greater value for money. Broadly, these include new models for grant implementation and service delivery, improvements to procurement and supply management, and nation-wide geographic rationalization of donor investments.

New models for grant implementation and service delivery include transversal SRs, the One-Stop-Shop for HIV and TB services, and the differentiated care model. Transversal SRs are expected to gain efficiencies from economies of scale and reductions in administrative and financial costs as a result of consolidating disease components. For example, SRs will save on human resources by using a single supervisory team across all three diseases. Integration of HIV and TB services via the One Stop Shop is expected to reduce wait times and loss-to-follow-up. Pooled trainings of instructors (in Kinshasa and Tshopo, Lubumbashi) have already been conducted.

Changes to **procurement and supply chain management**, including "pooling" inventory orders at the national and sub-national level, have resulted in improved efficiency, effectiveness and economy. These changes include placing orders through the PPM and "bundling" inventory orders across diseases in health facilities. As a result, stakeholders expect that orders placed through the PPM will increase market leverage by generating large pharmaceutical orders across disease areas and PRs (economy) and limit delays in procurement and distribution through a single inventory process (efficiency).

> *"Buying large quantities at the same place saves money by negotiating prices and ensures product quality and traceability." (Quote from a key informant)*

Other examples include pharmaceutical warehousing. A new Warehouse in Box (WiB), for the Federation of centralized supply of essential drugs is under construction. In this project, the Global Fund will be responsible for the construction of the foundation, and USAID for the prefabricated assembly, and European Union and the Belgian Development Agency for initial operation, once complete. In conjunction, commodity storage and distribution is being transitioned to CDRs, which stakeholders perceive this to be an effective response to weaknesses of the past grants, as it reduces delivery time to health zones, improves storage quality that SRs lacked, and ensures delivery tracking.

> *"The SRs did not have a repository that met the standards for input storage, and the distribution was done through intermediaries with no notion of input management from where the products could be found on the ground." (Quote from a key informant)*

> *"Group distribution encourages the partner to be prompt, that is, to make PR products available, otherwise there is a shortfall." (Quote from a key informant)*

It is early to quantify the value-add of group distributions for a variety of early factors however, including (1) prolonged negotiation of underestimated distribution unit costs; (2) road conditions and remoteness of some health zones; and (3) the sequential arrival of inputs to the CDR. In Q3, this situation has been corrected and its benefits are anticipated for Q4.

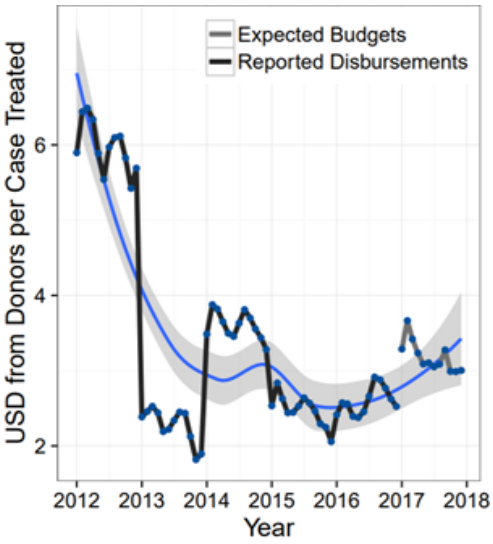
Finally, the **geographic rationalization of donor investments** (i.e. consolidation of international donors by province) has been underway since 2016 and is expected to enhance efficiency and effectiveness as well. By all reports, rationalization has minimized waste of resources, reduced fragmentation of support, strengthened intervention partnerships among technical and financial partners, and improved service provision coverage. Rationalization has increased value for money in the sense that the funds are more focused, double counting of patients has reduced, and a single route of communication for quantification, purchase, storage, and distribution has been established.

Separately, stakeholders are in an ongoing process of adopting the DHIS2 software to manage data, supported by investments from the Global Fund and other donors, as discussed earlier in the report. Policymakers are convinced of the effectiveness of the tool as a single source of data for the country in decision-making; guaranteeing more sustainable management of the health information system.

"From now on, for malaria data, you should refer to DHIS2 as these are the same data we use ourselves for planning and decision-making. Completeness is around 80%." (Quote from a key informant)

Key Finding 12: There is evidence that PRs and the national programs are increasing outputs per dollar, but opportunities remain to improve efficiency.

Robustness: (ranking=2) The finding is supported by multiple data sources (moderate triangulation) of lesser quality.



The intended result of program efforts to increase efficiency has been detected by the PCE. One example has been the national malaria program. As highlighted in Chapter 3, more confirmed malaria cases were treated in 2017 than prior years, mirroring trends in other program outputs. Importantly, the increase in output has come in spite of a generally stable trend in funding of those activities, for example case management (see Chapter 3 and Annex V). As a consequence, the cost per case treated has declined. As shown in Figure 11, US dollars per case of malaria treated has fallen from approximately US$6 to US$3 since 2012. Note, however that these financial figures are based on donor spending on malaria case management only, and do not account for changes in government spending (for which data were unavailable).

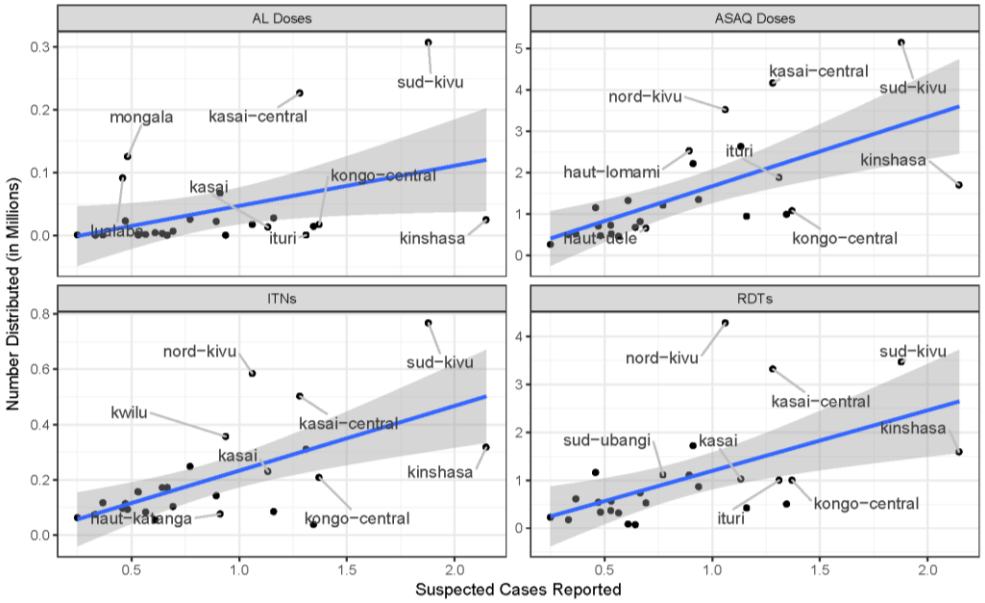
Figure 11. Donor investment for malaria treatment compared to confirmed cases treated

Resource Allocation

One opportunity for enhanced efficiency of PRs and national programs may be in resource allocation. In Figure 12, we show the number of individual rapid diagnostic tests (RDTs) distributed to each DPS, compared to reported cases of suspected malaria in each DPS. The blue line in Figure 12 represents a linear regression fit to the data. From this figure, it is apparent that provinces with higher burden of disease (i.e. higher need for tests, ACTs and LLINs) are typically allocated more resources in the form of commodities. However, certain provinces fall far above and below the line. Kongo Central, for example, is estimated to experience a particularly high burden of disease (approximately 1.3 million cases reported in 2017), yet systematically receives a relatively lower number of commodities; the province received approximately 1 million ASAQ doses in 2017, which was low compared to many lower-incidence provinces, which received over 2 million doses (some receiving over 3 million). On the other hand, some provinces such as Kasai Central and South Kivu appeared to receive more RDTs and other commodities than is typical for a burden of disease of their magnitude[4].

[4] North Kivu did as well, but the current local context in this provinces may warrant special circumstances

Figure 12. Commodity distribution compared to reported number of suspected malaria cases

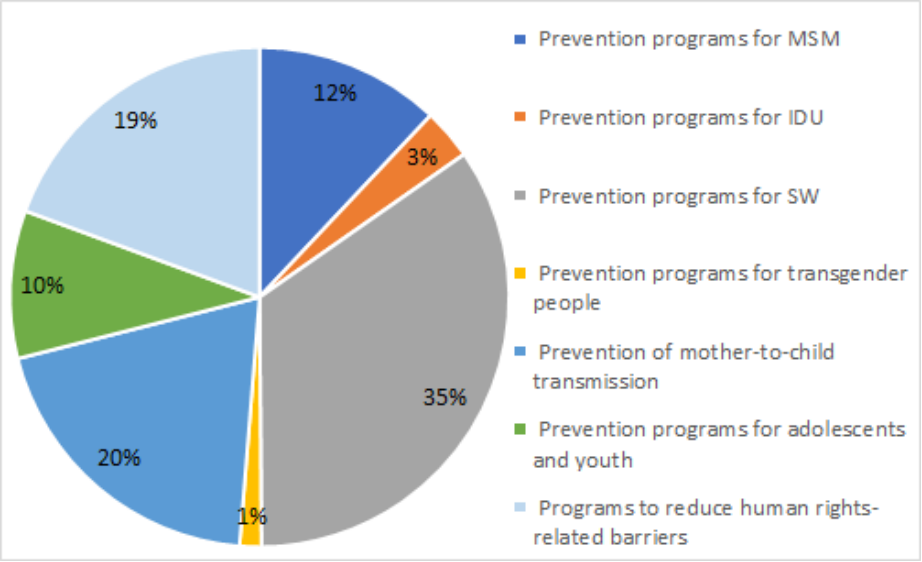


Interpretation: Commodities may be under-allocated to certain provinces. Kongo Central and Ituri for example, received fewer RDTs than is typical for their burden of disease, and Haute Katanga and Kongo Central received fewer LLINs than is typical as well. Allocative efficiency may improve if resources are distributed in closer alignment to need. The opposite observation should be cautiously interpreted however. Provinces with high allocation relative to need (such as North Kivu and Kasai Central) may still have valid justification for this beyond what has been identified by the PCE.

4.6 Addressing Key and Vulnerable Populations, Gender and Human Rights-related barriers to accessing services

The 2018-2020 grants budgeted approximately US$10.5m (representing 5.5% of the budget for HIV/TB) for activities that target key and vulnerable populations, address gender disparities, and mitigate human rights-related barriers to accessing services. This includes US$3m in matching funds awarded to the MoH HIV program and Cordaid for removing human rights-related barriers to HIV services. Figure 13 shows how the US$10.5m budget is allocated across specific modules.

Figure 13. Proportion of the total budget (US$10.5 million) for KVP, gender, human rights allocated to specific activities.



Four "specific" SRs were selected to implement these activities:

UCOP+ implements treatment adherence activities among PLHIV, including counseling and provision of mentors for pregnant women, monitoring service integration for HIV/TB co-infection and other HIV-related services, and legal services for victims of sexual violence.

PSSP implements activities for key populations, including mobile counselling and testing, counselling and testing at user-friendly centers, training peer educators, capacity building for care providers for key population, self-help groups, and promotion of human rights and advocacy for key populations.

RENADEF implements activities to reduce gender and human rights-related barriers to services, including legal support for victims of sexual violence and other key populations, mapping legal clinics, and awareness (e.g., "know your rights") trainings. RENADEF Also implements the SASA! pilot program aimed at reducing the vulnerability of adolescents and young women to HIV and gender-based violence (GBV), which includes training trainers on the SASA! approach, building the awareness of HIV and GBV in schools, and supporting school-based advocacy (e.g., principals, teachers, parents and students) to denounce violence.

PASCO implements activities targeting KVPs and addressing human rights-related barriers to services, including supporting key populations through user-friendly centers, training providers at user-friendly centers, HIV prevention and screening awareness, psychosocial support, home visits for commercial sex workers (CSW), people who inject drugs (PWID), and men who have sex with men (MSM), establishment of self-help groups, and training lawyers on HIV, human rights and stigma-reduction.

Gender is understood to entail the socially constructed roles and relationships between men and women, girls and boys, based on the relative power and influence ascribed to males and females by society. The PCE Gender Framework outlines four main questions to explore:

1. To what extent and how is gender-responsive programming being addressed through the implementation of Global Fund grants?
2. Is gender-responsive programming being implemented as designed/ intended?
3. What are the challenges/ barriers to implementing gender-responsive programming?
4. To what extent are systematic improvements to promote the sustainability of gender-equitable outcomes and impact institutionalized within in the three disease areas?

Given delays in implementation of the NFM2 grants, in 2018, the PCE has not been able to observe much related to the implementation of programs targeting key and vulnerable populations, human rights, or those that are gender- responsive. Gender-responsive program planning and implementation is meant to be operationalized through two primary means, including the integration of gender considerations into general aspects of national HIV, TB, and malaria programs, and through dedicated funding for specific gender-related activities. In 2019, the PCE team will undertake a much deeper examination of not only the implementation of the human rights matching funds, but also the broader questions identified above throughout the HIV, TB, and malaria portfolios.

Key Finding 13: PRs and SRs had challenges harmonizing activities and budgets for programs targeting key and vulnerable populations, and addressing gender and human rights barriers to services, which led to delays in implementation.

Robustness: (Ranking = 2) The conclusion is corroborated by few data sources and is mainly based on KII evidence which is deemed to be of good quality given the proximity of key informants to this topic.

Due to the delays in contracting specific SRs, most activities planned under the 2018-2020 grants for KVPs and for addressing gender and human rights barriers had only just started during the second half of 2018. Our evidence collected to-date suggests that one of the primary reasons for delays was related to drawn-out negotiations between PRs and specific SRs, and the associated challenges with harmonizing the budgets and exact set of activities to be implemented. In theory, the process for

finalizing SR contracts should have been faster because all four SRs were previous recipients of Global Fund financing, which meant requirements such as the SR capacity evaluation were waived. Our evidence also suggests that drawn-out negotiations could be a result of the absence of SR participation in the formulation of activities and associated budgets during grant making. In KIIs, SRs reported that they were not involved in developing the budgets and defining the scope of activities. These conversations took place during grant-making, which typically only involves the Global Fund and PRs.

> *"Although the specific SRs are technical experts in their field, they sometimes agree to programming that is proposed by the PR, without the possibility to make a change." (Quote from key informant)*

> *"When developing the PTB (Budgeted Work Plan), the activities were not distributed according to a logical and specific sequence." (Quote from key informant)*

Some stakeholders pointed to reductions in the 2018-2020 activity budgets for key populations and voiced concerns about this will impact their ability to achieve programmatic results. Although the specific activities remained largely the same, PRs had to prioritize activities and adjust targets based on the available budgets. For example, the budget for prevention programs for adolescents and young women was reduced to US$1m in the current grants, down from US$4m in the previous grants. Also, mobile voluntary counseling and testing were reduced to five sessions per quarter, down from seven per quarter in the previous grants.

> *"We have a fear that the activities retained in NFM2 may not have an impact because the big activities are not aligned: sensitization, activities related to viral load and searching for patients lost to care." (Quote from key informant)*

It is possible that involving the specific SRs in the grant making negotiations between PRs and the Global Fund could have helped to avoid downstream delays. Going forward, Global Fund should consider how to better incorporate SRs in planning at an earlier stage of the process, or how to bring these processes closer to the operational level for better coordination.

4.7 Risk Assurance

Across the four risk categories, a total of 15 risks were identified in DRC's most recent risk assessment from December 2018, as summarized in Table 7.

Table 7. DRC Key Risks

Risk category	No. risks identified	Summary of risk types
Financial & Fiduciary	2	Inadequate: policies, procedures, trained staff, and monitoring of controls related to the preparation, approval and posting of transactions, leger reconciliation, and other related administrative activities.
Health Product Management & Supply Chain	2	Limited quality monitoring, no defined supply chain performance monitoring framework, inadequate information management systems (LMIS) and warehouse and distribution systems. Poorly managed forecasting / quantification process, lacking controls and oversight leading to ineffective supply planning.
Programmatic and M&E	3	Guidelines to review quality of services provided are not available. Inadequate mechanisms and monitoring systems for integrated services. Incomplete and poor-quality data, poor interoperability between community and national

		routine data systems. Inadequate mechanisms to ensure data quality. Limited processes for regular capacity building, supply management, supervision and feedback.

Through the PCE, there are opportunities to provide an additional layer of assurance by reviewing and assessing the effectiveness of mitigation actions and assurance activities put in place to address certain risks. Specifically, we identified opportunities in the **Governance, Oversight & Management** and **Programmatic and M&E risk categories**. Some examples of mitigation actions that are planned for DRC that could be examined by the PCE include:

Assurance mechanisms for reviewing the quality of data reported by community health workers,

- Assurance mechanisms to address ineffective donor coordination of supervision and tools for all three levels of the health pyramid,
- Assurance mechanisms to strengthen retention of HIV and TB patients through systems such as TierNet for HIV and TB patients monitoring

In addition, we will build on our analyses from early grant implementation and continue to examine the extent to which partnerships are effectively leveraged to address implementation weaknesses. For example, multiple TAs are planned during the current implementation period to improve human resource capacities in M&E, malaria, TB/HIV, MDR-TB, which can be assessed for quality and effectiveness.

4.8 Limitations

An overarching limitation of the PCE has been the reliance on existing secondary data sources such as HMIS, program data and surveys, which are subject to availability and data quality of underlying data sources. Limitations in data quality from the SNIS DHIS2 include data entry errors by clinical and data entry personnel, inconsistent understanding of variable definitions and clinical guidelines, and incomplete reporting. These limitations are addressed through data verification processes conducted by the MoH, and internal data quality checks by the evaluators including documentation and removal of outliers. In addition, DHIS2 provides the number of facilities reporting on a monthly basis, allowing for detailed assessments of reporting completeness. Secondary data from DHIS2 are compared to additional data sources whenever possible, and mean and multiple imputation are used to correct reporting bias.

Process evaluation data was heavily reliant on KIIs, which can be subject to both recall and respondent bias. To minimize these potential biases, at the national and provincial levels the PCE team sought out key informant stakeholders with the greatest involvement in the early grant implementation processes (i.e. closest proximity) and/or those considered to have the most in-depth knowledge of the key thematic areas of interest. As some Global Fund topics can be sensitive or uncomfortable to discuss in KIIs, the PCE team tried to address this challenge through reassuring respondents of the confidentiality of their responses and that any ideas on recommendations for strengthening Global Fund implementation would ultimately serve in achieving greater impact in DRC. While interview data can be subject to the aforementioned recall and respondent biases, triangulation of interview data with evidence from meeting observations, document review, and routine quantitative data helps to ensure robustness.

5. Conclusions and Strategic Considerations

5.1 Conclusions

Implementation of the 2018-2020 grants started as scheduled on 1 January 2018. PRs received their first disbursements on time and started activities, but faced significant delays in finalizing contracts with SRs. A three-month extension of the previous SR contracts was granted to avoid a significant lapse in implementation. Nonetheless, the delays affected a number of SR activities and is reflected

in the weak rate of absorption across grants in the first six months of 2018 (52.4%). The lengthy amount of time required by the SR contracting process was considered a major challenge by DRC stakeholders; most SRs did not receive their first disbursement of funds until April 2018 and some did not occur until June 2018. There were similar delays in finalizing the contracts for specific SRs who are responsible for implementing activities targeting key and vulnerable populations and addressing the gender and human rights related barriers to services. However, in the case of the specific SRs, we found that the delays stemmed largely from the challenges between PRs and SRs in harmonizing activities and budgets.

The shift toward transversal SRs and grouped commodity storage and transportation by CDRs was much more complicated and challenging to operationalize that initially anticipated. Although the shift was designed to improve coordination between disease components and increase operational efficiency, the fact that PRs remained disease focused (e.g., one for malaria and one for TB/HIV) required a significant amount of coordination and harmonization between the two PRs. It also created additional complexities for transversal SRs whose budgets are respectively split 70%/30% between the malaria and HIV/TB PRs when funds were not disbursed by PRs at the same time.

In terms of the influence of Global Fund policies and strategic objectives on early grant implementation, we found evidence that the COE policy principles of flexibility, partnership and innovation are being put in practice (even though the COE policy itself is not necessarily the driving factor). Stakeholders cited examples of administrative procedures that have been lightened to better facilitate implementation. Innovative new approaches, such as the Provincial Approach have been slow to define a clear set of activities, but our findings indicate that the enhanced presence of Country Team members at the province level has already helped to resolve implementation bottlenecks. Nonetheless, there have been challenges mobilizing sufficient Country Team staff resources during the launch period to cover all five of the originally planned provinces. For the time being, implementation has been scaled back to just two provinces, but future rollout to other provinces may require fewer staff resources once the approach is better defined. In terms of partnerships, a key strategic enabler of the Global Fund's strategy, we found that DRC has a very strong partner environment, composed of numerous partnerships between Global Fund and multi-lateral and bi-lateral donors. Our findings suggest that these partnerships are helping to improve coordination between donors, national stakeholders, and implementing partners, and to better harmonize interventions and implementation approaches for maximum reach. However, regarding whether partnerships are being effectively leveraged to address implementation weaknesses, we found mixed evidence. On the one hand, there are examples of how TA provided to the CCM helped support elections of new members in 2018 and helped strengthen the functionality of the strategic oversight committee. On the other hand, we also observed numerous weaknesses in financial management capacity, data collection and reporting practices, supply chain management and M&E capacity that require stronger TA and capacity building.

We also found evidence of changes in the new grant cycle that show promise toward increasing sustainability, particularly through the alignment and implementation of Global Fund programs through country systems. At the same time, investments in RSSH are reinforcing critical health system building blocks, including the national health information system and supply chain management system. In addition, the new models for grant implementation and service delivery, procurement and supply chain management, and geographic rationalization of donor investments are being implemented with the intention of improving the efficiency and effectiveness of interventions.

The recommendations provided in this report have been developed in collaboration with country stakeholders and the High Level Advisory Panel (HLAP) in order to ensure that the recommendations are relevant and attainable. Preliminary findings and strategic considerations were first reviewed in consultation with the HLAP on March 21, 2019, and then presented to stakeholders at the PCE dissemination workshop held on 3 April 2019 in Kinshasa. During the workshop, participants were divided into five groups and each group worked to review and enrich the recommendations in response to the evaluation findings. The PCE team then analyzed the recommendations, taking into account their relevance, specificity and the extent to which they can be activated. Based on this analysis, the PCE team made additional changes and proposed the following recommendations:

5.2 Strategic Considerations

Table 8. Strategic considerations based on key findings

Key Findings	Strategic Considerations	Operational recommendations
Key Finding 1: Despite faster grant processing, the differentiated funding request process did not result in increased time for implementation because of unanticipated delays associated with changes in the NFM2 grant architecture.	• The Global Fund should examine options for differentiating early grant implementation so that the benefits of the differentiated funding request process extend into implementation.	• The Global Fund should anticipate the start-up process by granting approval 6 months before the end of the current grants or by granting contract extensions. • PRs should evaluate SR performance 3 months before the end of the grants to provide the opportunity to renew well performing SRs and reduce the time to identify new SRs, if needed.
Key Finding 2: Changes in the grant architecture, including the consolidation of disease components under transversal SRs and mutualized distribution of health products were designed to increase operational efficiency and alignment with national systems, but have been difficult to operationalize with disease-specific PRs.	• Ongoing monitoring and evaluation of the new grant architecture such as the transversal SR/disease-specific PR model is essential to determine if it is effectively structured to deliver results.	• Stakeholders must fulfill the different existing MOUs (between PRs, PR and SR): ✓ Ordering commodities ✓ Pooled procurement between PRs ✓ Anticipating subcontracts with CDR for commodity transportation
Key Finding 3: There is evidence that the COE principles of flexibility, partnership, and innovation are being put into practice, therefore contributing to an approach that is better tailored to the country context.	• The Global Fund Secretariat should review with country stakeholders opportunities for broader application.	• Disseminate and clarify the principles of COE at all stages of implementation • Identify the specific concerns for each entity
Key Findings 4: The provincial approach is an innovative model that has already led to increased communication at the provincial level and has helped to resolve implementation bottlenecks. However, launching the new model has been resource-intense and mobilizing sufficient Country Team staff resources has proven challenging.	• Ongoing assessment of increased effectiveness and efficiency of the provincial approach, both from an implementation and CT perspective is essential to determine the role of this implementation model moving forward. • As the Global Fund continues to move toward consolidating activities at the	• Define a clear and simple grant architecture for a better implementation of the approach at the province-level • Take operational level needs into account when developing provincial operational action plans

	province level, it should examine the efficiency and effectiveness of the current Country Team structure to respond to the portfolio changes.	
Key Finding 5: In the DRC, the partnership model is ensuring that different stakeholder interventions and implementation approaches are harmonized and well-coordinated, but weaknesses in implementation capacity remain (e.g., financial management, data collection and reporting, supply chain management, and M&E).	• Global Fund, in collaboration with other partners, should ensure that it has clearly defined expectations for partnerships and the role they play in addressing weaknesses in implementation capacity, in addition to continuing to evaluate and pursue the most effective models for TA provision.	• Develop, in coordination with other development partners, a plan for technical assistance with CCM support and backing
Key Finding 6: There is evidence that efforts to reform the CCM and strengthen its capacity are leading to stronger CCM functionality and greater involvement in important strategic decisions.	• TA provided to the CCM has already demonstrated utility. Future work (such as the CCM Evolution project) will need to focus on building institutional capacity, knowledge and supporting good governance.	
Key Finding 7: There is evidence of progress toward increased sustainability with the alignment and implementation of Global Fund financed programs through country systems.	• Global Fund should continue on the same course of aligning with country systems where possible.	
Key Finding 8: Global Fund investments in RSSH show evidence of contributing to building the capacity of national systems and improving health system integration, such as through the national health information system.	• Global Fund should ensure that investments in data are comprehensively targeting all levels of the health system engaged in collecting, reviewing, and validating data (e.g., facilities, health zones, and provinces).	• The Ministry of Public Health should strengthen coordination of all investments in SNIS and take the lead in implementing SNIS (DHIS2) at all levels.
Key Finding 9: Investments in human resources for health are primarily dedicated to the retention and scale-up of health workers, but weak harmonization across donors and few strategies for building health	• Global Fund should advocate for better harmonization of human resource investments with other donors and strengthen investments in building health	• In collaboration with other partners, the Global Fund should advocate to the government to pay new health facility units (currently unpaid providers).

worker capacity minimize the potential for lasting impact	worker capacity through approaches that reinforce the health system more broadly.	
Key Finding 10: The government has reported increasing its co-financing commitment under the current grant cycle, meeting its obligations. However, it remains a challenge to verify that this is a substantial increase or change in resource allocation, and it is unclear if this translates into increased ownership.	• A focus on more clearly delineating where new funds are being spent, with a focus on increased spending on core investments that will improve sustainability and ownership should be encouraged.	• A budget line in grants should be added for activities relating to collecting financial information on catalytic funds.
Key Finding 11: Activities are being implemented with the intention of streamlining grant architecture, improving efficiency, and enhancing the effectiveness of interventions. Early indications suggest there is greater attention on a strategic approach that considers value for money. **Key Finding 12:** There is evidence that PRs and the national programs are increasing outputs per dollar, but opportunities remain to improve efficiency.	• Implementing partners, CCM, and the Global Fund secretariat need to better understand and master the Global Fund's approach to value for money in order to track progress and success.	
Key Finding 13: PRs and SRs had challenges harmonizing activities and budgets for programs targeting key and vulnerable populations, and addressing gender and human rights barriers to services, which led to delays in implementation.	• Global Fund should consider how to better incorporate SRs in planning at an earlier stage of the process, or how to bring these processes closer to the operational level for better coordination.	• Civil society organizations specific to gender, human rights and key populations should be involved in the funding request development and grant-making process, as well as in the implementation of grants.

6. Dissemination

Use of findings and country feedback

The PCE sought opportunities to add value in DRC by sharing timely feedback with national programs and key stakeholders. PATH-DRC met with the Director and Data Manager of PNLP to present findings from a data quality assessment conducted and was able to shed some light on data quality trends. The team also coordinated with the other disease programs on analyses conducted with programmatic data and from SNIS DHIS2. These were opportunities to share strengths and weaknesses in order to improve the quality of the data.

PATH-DRC held a stakeholder dissemination workshop on April 3, 2019 to present the 2018 Annual Report, which was attended by more than 60 stakeholders, including high-level individuals such as the General Secretary for Health (Dr. Yuma), the CCM second Vice President (Christian Luzombe) and Dr Jackson Ukila, M&E specialist for the CCM). Nicolas Farcy, Fund Portfolio Manager of the CT also attended the dissemination workshop. Findings were positively received and attendees were engaged and active participants.

PATH-DRC has built a strong relationship with the DRC Country team through regular contact and feedback. This has included semi-monthly calls with the Fund Portfolio Manager, attending CT missions in-country, as well as Key Informant Interviews and Data Validation Interviews with CT members. There is a regular and consistent CT presence in DRC, which has helped facilitate a strong relationship with PATH-DRC.

PCE cross country coordination and learning

During June 2018, the PCE held a Multi Partner Meeting in Seattle, providing an opportunity for members of teams from DRC, Uganda, and Guatemala to learn, collaborate, and share the different ways in which the Global Fund operates in their respective countries. Other opportunities to collaborate have included building a strong relationship between PCE teams in Uganda and DRC and sharing tools for evaluation analysis

7. Plans for 2019

Over the first phases of the evaluation, the PCE in DRC focused on the analysis of grant proposals preparation, and then early grant implementation. Utilizing the results chain framework, the PCE has begun to measure inputs, outputs, and outcomes for the three diseases, focusing heavily on malaria for the first analyses of impact pathways.

For 2019, the PCE will move to the analysis of how outputs from Global Fund investments are translating into impacts in the three diseases, including geospatial analysis of burden of disease. Taking advantage of its prospective nature, we aim to understand what aspects of the Global Fund business model, or which contextual factors are facilitating or hindering the implementation of activities and their final impact. Considering the results obtained so far, several areas call our attention for further review in 2019:

- Evaluation of the process for target-setting and its consequences
- Further exploration into gender and human rights, including the extent to which activities are appropriately defined and effectively carried out in grants
- Further analysis of risk mitigation strategies and their consequences
- Deeper evaluation of partnerships and the ways in which they are helping or hindering grant implementation
- Monitoring of the CCM Evolution project and the successes and challenges faced therein
- Analysis that may assist PRs in reprogramming
- Continued monitoring of many of the activities introduced in this report, including RSSH, VfM strategies, and the provincial approach

So far, the PCE has relied on primary information for qualitative analysis and secondary data analysis of quantitative data. The support from all stakeholders in providing information for the PCE has key for success, including the country team, government program officers and civil society organizations. However, an important risk for 2019 may be the availability of information, as limitations in the health information systems have been identified. We aim to mitigate this risk by continuing to collaborate with stakeholders, but the need for primary data collection in some specific areas should be considered.

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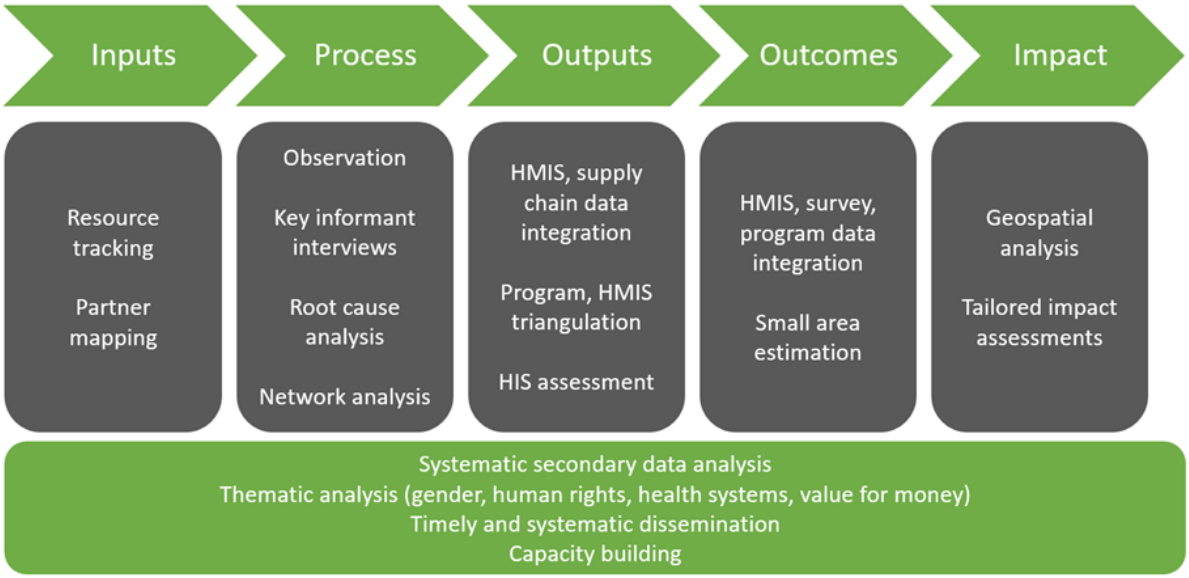
Annex I: Key evaluation components across the results chain.



Annex II: DRC-specific evaluation questions for implementation phase and associated tools and methodologies.

Evaluation Question	Tools and methodologies
Are grants being implemented on time and as designed?	KIIs Meeting observation Document review Process tracking Root-cause analysis
What are the trends and distribution (geographic, demographic and socio-economic) of HIV, TB and malaria-related health outputs and outcomes?	KIIs Meeting observation Document review Resource tracking
To what extent do Global Fund resources contribute to improvement in health outputs and outcomes for HIV, TB and malaria? How does that contribution vary geographically and demographically, and what are the barriers and facilitators to achieving outputs and outcomes?	KIIs Meeting observation Document review Process tracking Resource tracking
How effective and efficient are Global Fund risk management and oversight mechanisms at enabling program results?	KIIs Meeting observation Document review
In COEs, how do partnerships and increased flexibilities in Global Fund processes contribute to greater effectiveness and impact?	KIIs Meeting observation Document review
How have reforms in country-level implementation models and strategies contributed to improving program efficiency and effectiveness?	KIIs Meeting observation Document review Resource tracking
How effectively and efficiently does Global Fund money move from global to national to sub-national levels?	KIIs Meeting observation Document review Resource tracking
How do Global Fund investments contribute to building resilient and sustainable systems for health?	KIIs Meeting observation Document review Resource tracking
How has the Global Fund supported the government's decentralization of health administration to the provincial level?	KIIs Meeting observation Document review Resource tracking
Are Global Fund investments in programs to reduce human rights and gender-related barriers to HIV, TB and malaria services of sufficient amount, quality, and effectiveness?	KIIs Meeting observation Document review Resource tracking
What are the trends and distribution of Global Fund resources (inputs), and how do they compare with need?	KIIs Resource tracking
What are the drivers of consistently low rates of absorption (financial execution) of Global Fund investments?	KIIs Meeting observation

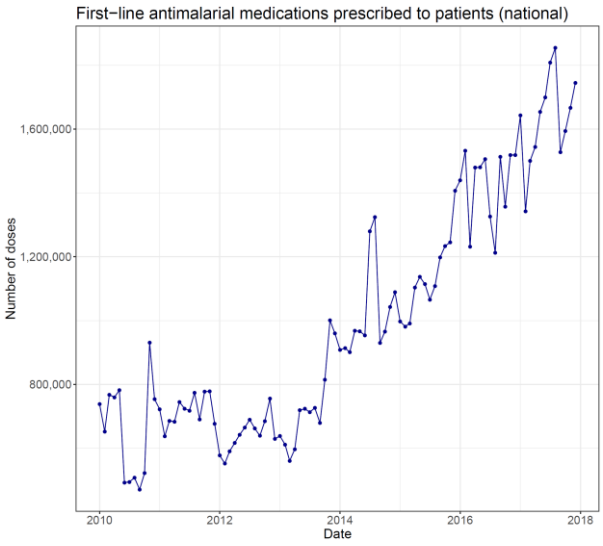
	Document review Resource tracking
How are government resources (including co-financing) allocated and utilized to complement Global Fund investments in the three diseases?	KIIs Document review
What are the facilitators and barriers to the CCM functioning effectively within the standards/scope as defined by the Global Fund business model?	KIIs Meeting observation Document review

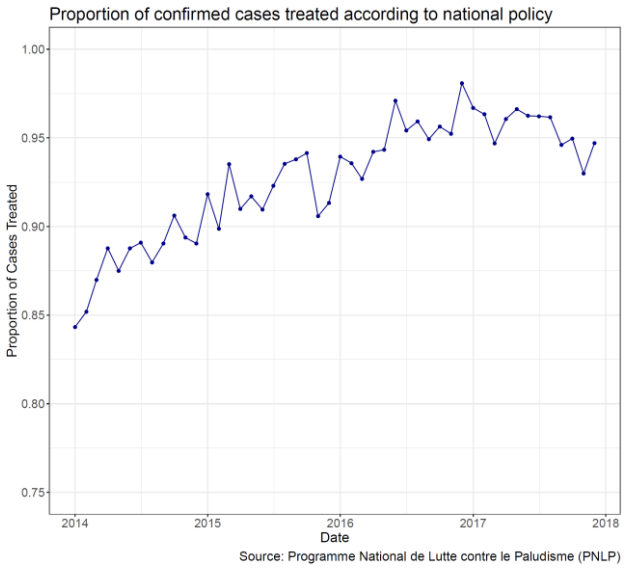
Annex III: Secondary data sources obtained and analyzed to date.

Data Source	Available dates	Description of Data
Resource tracking data		Approved grant budgets Level of detail includes: Specific activity descriptions Quarterly budget totals Recipient Progress Update and Disbursement Requests (PU/DR) Level of detail includes: Module and intervention Quarterly budget and expenditure Recipient Global Fund Grant Operating System (GOS) Level of detail includes: Module and intervention Semester budget and expenditure
Système National d'Information Sanitaire (SNIS) DHIS2		· Facility level data · Over 700 separate data elements including basic services, supply chain and HIV services · Data updated monthly, available through June 2018 · Key indicators include outputs such as tests performed, drugs available or consumed, viral load, and denominators such as confirmed cases detected · Data quality concerns include completeness, coverage and reporting errors
Programme National de Lutte contre le Paludisme (PNLP): program data	2010 – 2017; monthly	· Health zone-level data · Indicators measured: suspected cases of malaria, presumed cases of malaria, confirmed cases of uncomplicated malaria, hospitalized cases of malaria, and malaria deaths, all for two age groups (under 5 and 5 and older) and pregnant women · Activities and outputs measured: antimalarial medications, LLINs, and rapid diagnostic tests and blood smear tests (both completed and positive tests) · Other measures include: stock outs, number of health facilities reporting, number of employees on the health zone team, and data from community health work
Programme National de Lutte contre la Tuberculose (PNLT): program data	2017 – 2018; quarterly	· Province-level data ·Case notifications of bacteriologically confirmed tuberculosis, clinically diagnosed tuberculosis, and extra-pulmonary tuberculosis, and multi-drug resistant tuberculosis · Tests completed · Case outcomes (treatment completed, treatment successful, treatment failure, lost to follow-up, death)

Malaria Atlas Project (MAP)	2000-2016 (with projections to 2020)	· 5x5 km grid · Modeled estimates of LLIN coverage, ACT coverage, incidence (count and rate), prevalence and mortality rate · Estimates based on household survey data, with statistical models and geospatial covariates to interpolate for geographic areas with no data
Local Burden of Disease HIV Estimates	2000-2016 (with projections to 2020)	· 5x5 km grid · Modeled estimates of condom usage, male circumcision prevalence, number of sexual partners in previous year, HIV prevalence · Estimates based on household survey data, with statistical models and geospatial covariates to interpolate for geographic areas with no data

Annex IV: Antimalarial medications prescribed; confirmed cases treated



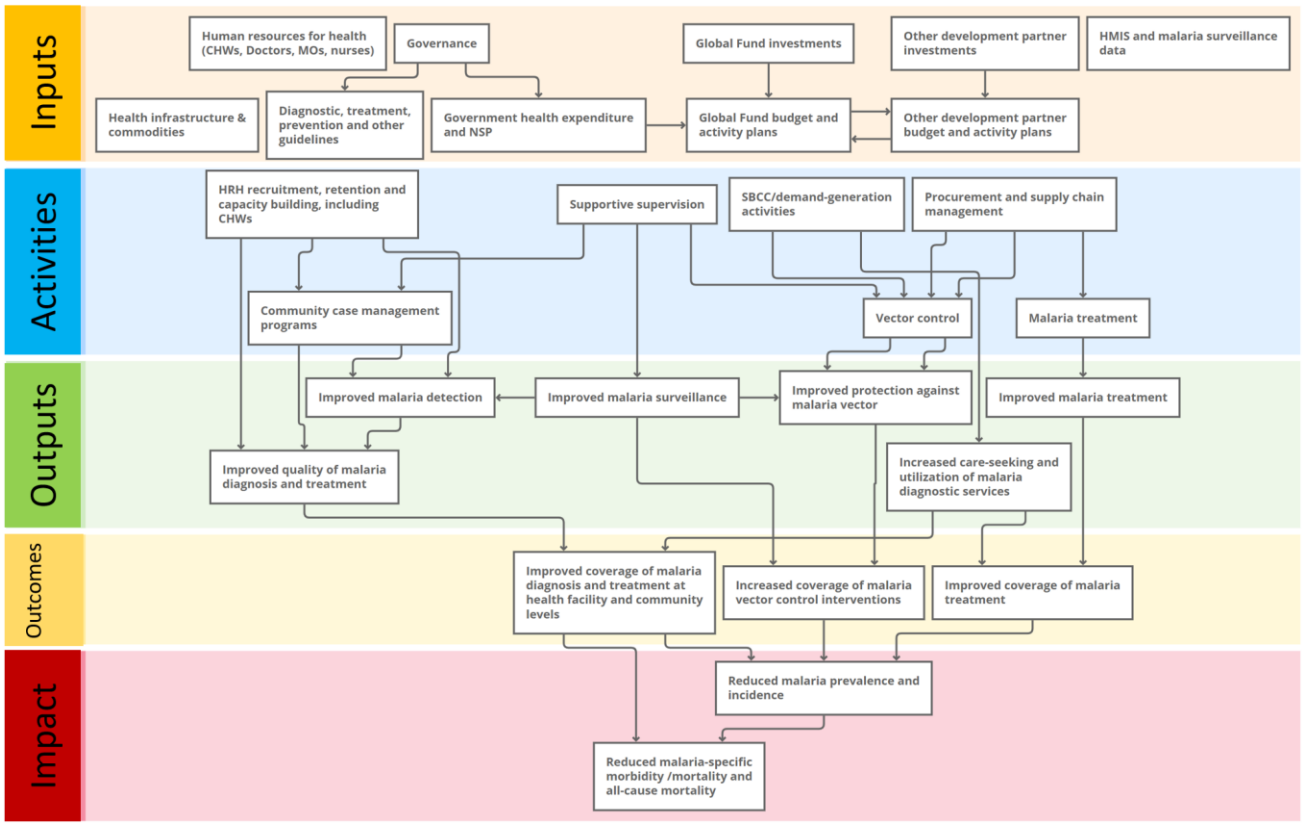


Annex V: Malaria results chain

Introduction

The Prospective Country Evaluation (PCE) developed the three disease-specific results chains as an analytic framework to explain how Global Fund investments connect to health outputs, outcomes and impact for HIV, TB and malaria. The boxes within the results chains are primarily measured using quantitative data sources; the arrows connecting the boxes explain the relationships between them and are evaluated primarily using qualitative data sources. We define a "pathway" through the results chain as a logical sequence of indicators starting from inputs, such as the case management pathway.

An interactive version of the malaria results chain is hosted here:
https://evaluationplanningtool.org/model/mokdbjaebjaabkdhagb



Based on data availability and the interventions of largest overall budget in the current grants, the pathways emphasized herein are mainly those related to treatment, testing, vector control and (to a lesser extent) preventive therapy during pregnancy. Others, such as program management, behavior change communication (BCC) and health system strengthening are less quantifiable and thus discussed more thoroughly in the main body of this report. We follow these selected pathways along each section of the results chain. Each section provides a descriptive overview of the levels, trends and distribution in all available data under analysis by the PCE, followed by interpretation of the data and the Global Fund's role (where possible), and summary of limitations of the data as well.

Context

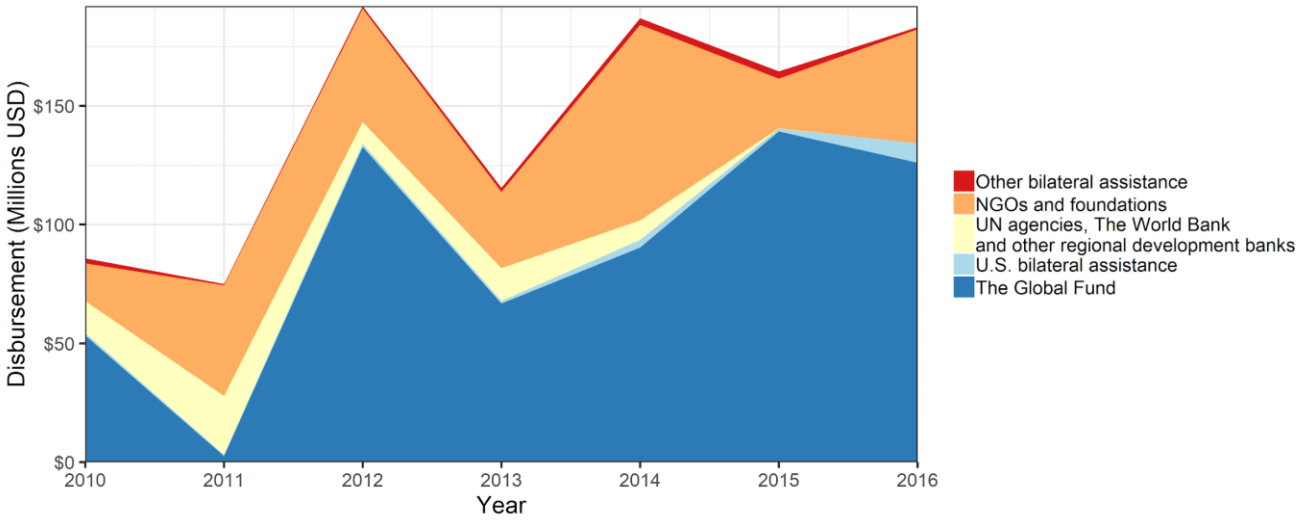
Of the 209 million estimated new cases of malaria in 2017, approximately 11.4% (23.7 million) occurred in the DRC.(11) This share of global malaria burden is second only to Nigeria (21.3%), and is predominantly *Plasmodium falciparum* transmitted by *Anopheles gambiae* mosquitoes. The Global Fund has so far disbursed approximately US$862 million to DRC for malaria, making it the second largest Global Fund country by malaria disbursement as well.(12)

DRC's malaria program is geographically "rationalized", meaning different funders support different provinces. Nationwide however, the DRC malaria control effort is centered around LLINs, facility-based treatment (primarily with ASAQ) and biological confirmation, with additional components for entomological monitoring (some permethrin resistance has been observed), prevention of malaria in pregnancy and community interventions such as case detection, case management and BCC.(13) DRC currently conducts no (or very limited) indoor residual spraying (IRS) or preventive therapy during infancy, though IRS is slated to be piloted in 2019 or 2020. The strategy supported by the Global Fund and President's Malaria Initiative (PMI) in DRC mirrors these major focus areas. See the main body of this report for more details about the DRC context.

Inputs

To track inputs, we analyze data on budget, disbursement and expenditure over time, by financing source and by module/intervention based on the Global Fund Modular Framework.(14) Not all quantities are available for every financing source and module however, meaning some indicators are tracked in terms of budget, while others are tracked in terms of disbursement or expenditure. Figure 1 displays the contributions of the Global fund and other external funders to overall spending on malaria in DRC.

Figure 1. Landscape of malaria funding in DRC, 2010-2016



Source: Financing Global Health 2017 study

Among sources of official development assistance (ODA) for malaria, the Global Fund has historically been a majority contributor.(15) Disbursement from the Global Fund totaled US$126 million in 2016, compared to US$48.0 million channeled through NGOs and foundations and US$8.2 million from US bilateral agencies (mainly PMI). A small amount of ODA was channeled through other bilateral agencies (US$898 thousand) and UN agencies/development banks (US$55 thousand). In 2017, Global Fund disbursements declined to US$85 million. 2017 data (not shown in Figure 1) for other financing sources are still forthcoming. The 2018 Global Fund budget totaled US$134.8 million, though actual disbursement will likely be lower (see Activity section below for discussion on absorption).

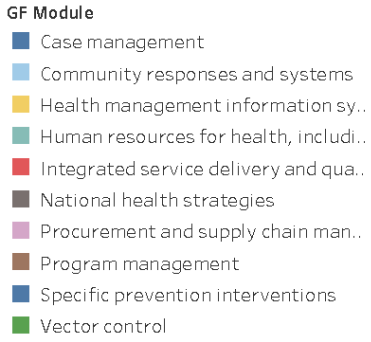
The proportion of malaria ODA accounted for by the Global Fund has remained relatively stable over time, with annual fluctuation due to grant cycle and implementation cycles (such as mass campaigns for bet nets). In 2010 for example, the Global Fund accounted for 62.1% of all ODA, and peaked at 84.6% in 2015. These numbers do not include government health expenditure on malaria, which was last estimated to be US$1.5 million in 2016.(16)

All data in this figure were compiled by the Financing Global Health 2017 study, which reflects disbursement data directly from the Global Fund website or from the OECD DAC and CRS

databases.(12), (17) This figure displays resources disbursed by each organization as an international *channel*, not *source*. In other words, resources from US bilateral agencies (i.e. any part of the US government) that are ultimately disbursed by the Global Fund (which, in 2016 amounted to over US$28 million) are not counted as US bilateral assistance in this figure. It also reflects actual disbursement of funds rather than budget, and may differ from PMI operational plans for that reason as well. In some cases, grant-level data were ametorized to reflect calendar years and may not perfectly match to annual reports from each source. See the Financing Global Health 2017 report for methodological details.

Figure 2 displays the Global Fund budget for 2018-2022, broken down by module and intervention, pooling together both PRs (Ministry of Health: US$74.9 million and SANRU: US$275.7 million). The largest intervention category in the current grants is mass campaigns for LLINs with US$112.6 million (32.1%) budgeted for 2018 and 2019. Grant management comprises the second largest intervention category, with US$89.8 million (25.6%) budgeted over the three years, though this includes US$10 million budgeted for PBF continuation, which does not have its own module in the Modular Framework Handbook. Facility-based treatment comprises the third largest intervention in the current grants, with US$43.7 million budgeted (12.5%), and an additional US$4.4 million (1.3%) budgeted for management of severe malaria specifically. Although smaller, other noteworthy budget items include US$2.8 million (0.8%) for intermittent preventive treatment in pregnancy (IPTp). The budgets are planned such that the largest spend (US$166.1 million) will occur in 2019, US$134.8 million is planned for 2018, and only US$49.8 million is planned for 2020.

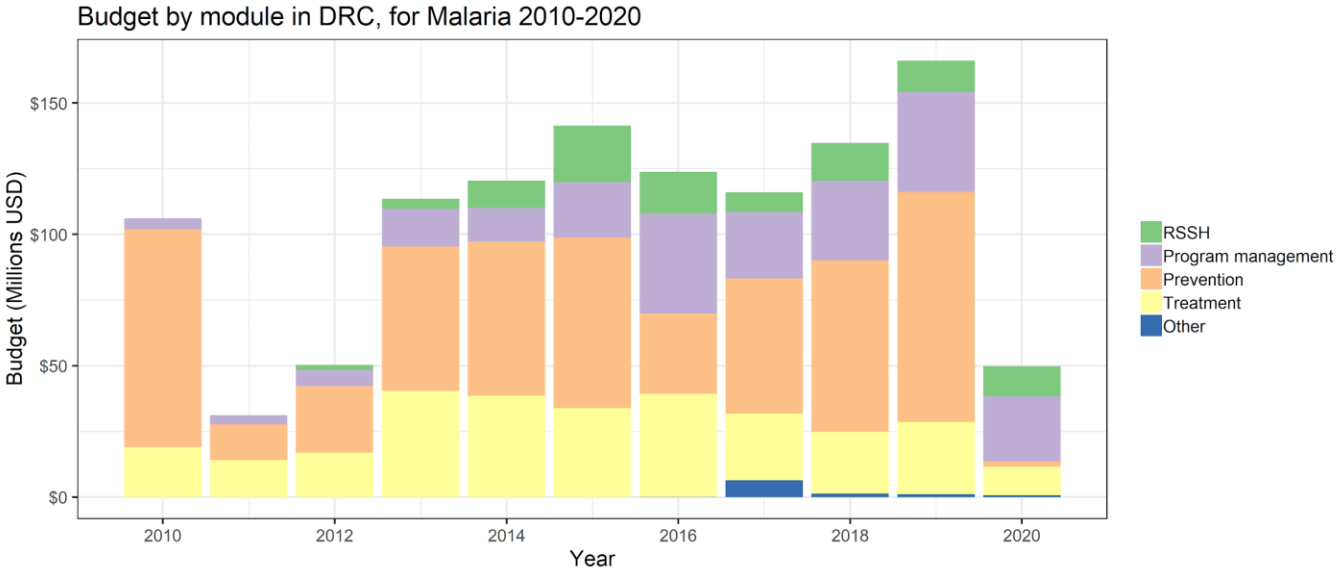
Figure 2: Budget categories for Global Fund malaria grants in DRC (two grants combined).



Source: Approved Global Fund budgets

This figure is based on approved budgets submitted to the Global Fund July 2018 (SANRU) and August 2018 (MoH), and may not reflect reallocation, reprogramming or actual expenditure since then. The PCE is also tracking budgets from previous grant cycles as well, in order to assess longer-term trends in Global Fund contribution to program outputs. Figure 3 displays these trends aggregated into broader categories (see Annex VI for full table categorizing modules/interventions into these five categories).

Figure 3. Trends in Global Fund budgets for malaria in DRC



Source: Approved Global Fund budgets

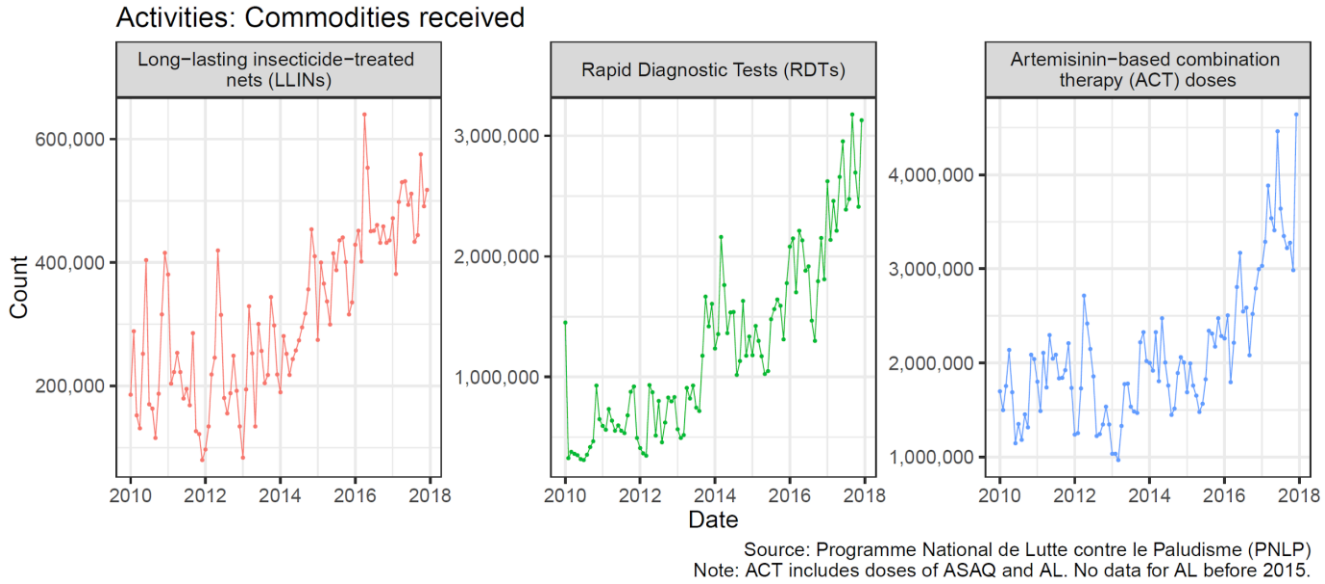
Since 2010, the Global Fund has provided a large stream of funds for case management (treatment), which peaked at US$40.4 million in 2013, and has declined only slightly since, with US$28.5 million budgeted for 2019. Prevention (vector control, IPTp and BCC) support from the Global Fund has varied more, dropping US$67.1 million between 2010-2011 and US$34.9 million between 2015-2016 due to the periodic nature of mass campaigns. However, more recent years have seen more consistent growth in prevention budgeting, which grew from US$30.0 million in 2016, to US$86.0 million in 2019. Global Fund support has remained a substantial fraction of ODA for both treatment and prevention of malaria, averaging from 66.5% of total treatment ODA annually, and 63.8% of total prevention ODA in the period with available data on all sources (2010 to 2016).

Activities

This sustained high level of input from the Global Fund and others is resulting in observable improvement in activities and output from the national malaria control program. Following the results chain from inputs to activities, the most proximal indicator to track the translation of financial resources into program activity is through commodity distribution. Figure 4 displays the quantity of

LLINs, rapid diagnostic tests (RDTs) and Artemisinin-based combination therapy (ACTs) of any type distributed from the central level to the local level (health zones).

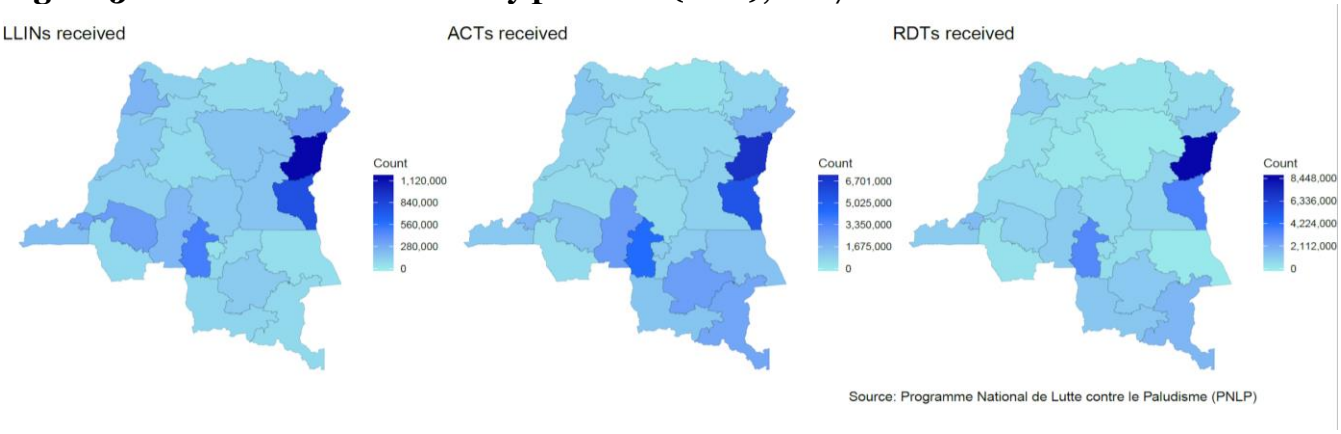
Figure 4. Number of commodities distributed from national level to health zones.



The number of LLINs, RDTs and ACTs distributed has increased substantially since 2010, with a continuous increase beginning in 2014. Between 2010 and 2014, an average of 220,000 LLINs were distributed each month, along with 696,000 RDTs and 1.7 million ACT doses nationwide. By 2017, these numbers had increased to a monthly average of 490,000 LLINs, 2.6 million RDTs and 3.6 million ACTs. All three commodities appear to be continuously scaling up over the last four years, at a rate of 3,600 additional LLINs, 23,000 additional RDTs and 18,000 additional ACT doses per month on average[5].

Commodity distribution varied geographically as well. As shown in Figure 5, North Kivu consistently received the most commodities: as many as 1.2 million LLINs, 7.0 million ACTs and 8.5 million RDTs in 2017. South Kivu and Kasai Central received the next most ACTs (5.5 million and 4.4 million, respectively) and RDTs (3.5 million and 3.3 million, respectively) in 2017. The lowest commodity distribution went to Kasai Oriental for LLINs (37,000 in 2017), Bas-Uele for ACTs (269,000 in 2017) and Tshopo for RDTs (70,000 in 2017).

Figure 5. Commodities received by province (DPS), 2017.



[5] Estimated using ordinary least squares. Other methods may yield somewhat different estimates.

Sustained financing is one of several explanations for this improvement in malaria treatment and prevention activity. As described in the main body of this report, steps taken to enhance efficiency are believed to be achieving greater production of goods and services per dollar. Along with consistent investment from the Global Fund and others, such improvements as the pooled procurement mechanism, transversal SRs, geographic rationalization and others all share some responsibility for these positive trends in recent years. At this point, the PCE is unable to disentangle the exact contribution of each driving factor to increases in program activity, but further details on each of these contributors is provided in the main body.

These figures reflect data from the national malaria control program (PNLP) and have been corrected for data quality issues including outliers (implausibly-high values relative to other health zones and other time points) and missing data (multiply-imputed using accepted best practices: the expectation-maximization algorithm).(18) It is also important to note that data to track artemether lumefantrine distribution was only available starting in 2015. Although we have estimated projections for these quantities into the past, the above figures do not reflect them. Despite our efforts to correct data quality concerns, it is still possible that changes in reporting completeness (number of facilities per health zone, not number of non-missing data points) during this time period could explain some of these trends.

Although these figures only extend to the end of 2017, early progress implementing the current grants can be tracked through financial execution, i.e. absorption. From January to June of 2018 (the time frame for which PR progress update data are available), 69.9% of the planned budget across both grants (US$25.6 out of US$36.6 million) was spent. This is largely due to larger-than-planned spending on vector control in the SANRU grant (although only US$960,000 was budgeted for the first two quarters, US$14.8 million was actually spent, with the explanation provided being that LLIN procurement for the upcoming mass campaign occurred ahead of schedule). Apart from that, many modules of the budgets were implemented behind schedule in the first half of 2018. For example, none of the US$1.1 million budgeted for procurement and supply chain management, integrated service delivery and quality improvement and national health strategies has been spent so far, and only 4% of the US$1.1 million allocated to HMIS and monitoring and evaluation by the MoH had been spent. Case management, for which US$18.1 million were budgeted has progressed to some extent, spending 24% of its budget from the SANRU grant. This spending is expected to contribute to the continued growth of LLIN distribution in 2018, and to a lesser extent the growth of RDT and ACT distribution.

Outputs

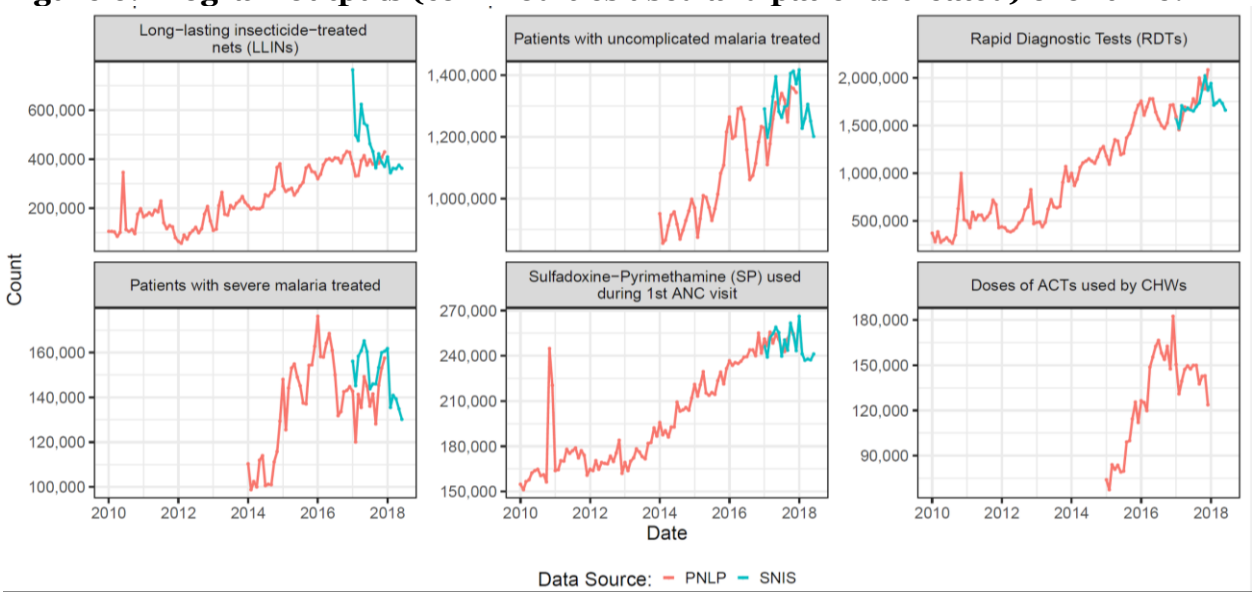
Increasing trends in activities tracked in the previous section (in terms of commodities distributed) have subsequently translated into program outputs increases as well, however with varying success.

As shown in Figure 6, increases in activities at the national level have translated into increases in the number RDTs conducted (upper-right panel), doses of sulfadoxine pyrimethamine (SP) distributed to patients during antenatal care (ANC, only first visit displayed, lower-middle panel) and patients with uncomplicated malaria treated with ACTs (upper-middle panel). LLINs distributed to patients (upper-left panel) have increased as well, with the trend beginning somewhat earlier and plateauing in recent years. Patients with severe malaria (lower-left panel) and patients treated by community health workers (CHWs, lower-right panel) tended to increase during 2015 and 2016, but have appeared to decline since then.

RDTs conducted increased from a monthly average of 536,000 between 2010 and 2014 to 1.8 million in 2017 nationally. Doses of SP increased from 172,000 per month to 250,000 per month in the same time frame. LLINs distributed to patients have increased as well, with the trend beginning somewhat earlier and levelling off in recent years at nearly 400,000 LLINs distributed to patients monthly (384,000 per month in 2017). However, severe malaria patients and patients treated by CHWs seem

to have peaked in early 2016, each indicator showing outputs as high as 160,000 patients per month, but have fallen off slightly to 140,000 and 150,000 patients per month respectively by the start of 2018.

Figure 6. Program outputs (commodities used and patients treated) over time.



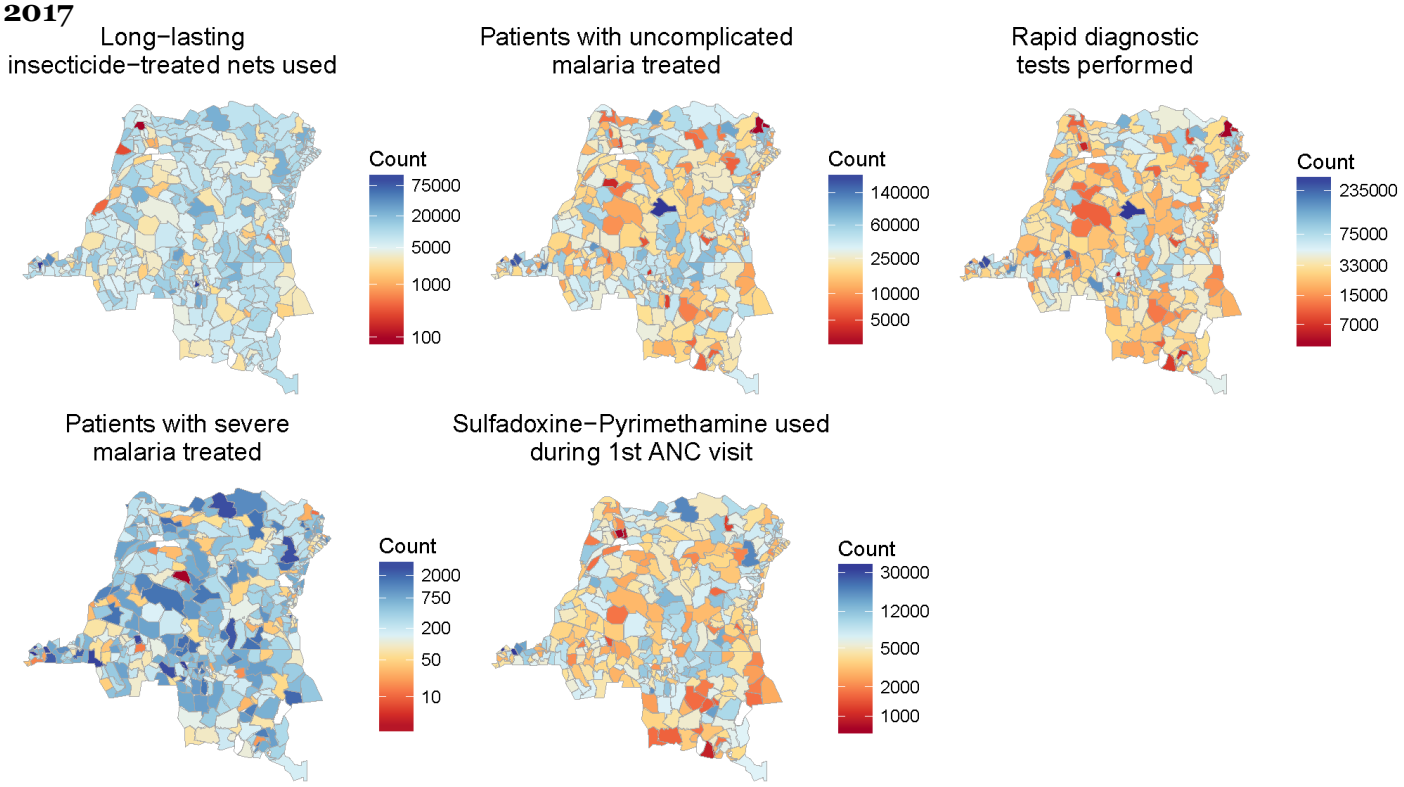
The drivers of these trends are likely even more diverse than the trends in activities. Notably, the shift in SP outputs coincides more closely in time with the upturn in national program activity (shown in the previous section) than with the 2012 shift in WHO recommendations for IPTp.(19) Increases in RDTs conducted have corresponded with greater funding for and availability of RDTs, but also with progressing national case management guidelines that have reinforced the international recommendation of biological confirmation prior to treatment. These increases in testing outputs do not appear to be simply reflective of trends in the underlying burden of disease, which is demonstrated in the following two sections to be declining. Likewise, increasing trends in treatment outputs appear to be positive gains in treatment coverage as well. Rather than mirroring underlying burden of disease, the larger numbers of patients treated are likely related to increases in biological confirmation, but may also be the result of greater treatment-seeking behavior. However, behavior change communication was only incorporated into Global Fund grants in DRC this year. Recent apparent declines in severe cases treated and patients treated by CHWs are more difficult to explain. However, their trends may be directly related to funding, as neither severe malaria case management nor integrated community case management were included in Global Fund grants until the current cycle. In the coming year, these indicators will be monitored to assess whether new investment in them reverses the current downward trend.

The graphs in Figure 6 represent two separate data sources, as shown by the different colored lines. As the national malaria control program transitions from parallel data systems to HMIS, PCE analysis has done the same, simultaneously analyzing both data sources to assemble the most complete possible time series. Although managing two data sources on this topic presents an analytical challenge, the HMIS data has the advantage of containing health facility-level numbers, as well as timely and automated monthly updates. The PCE is in the process of making full use of HMIS to track indicators presented in the Activities section as well, by inferring quantity distributed from quantity consumed and quantity available.

In addition to enhancing data quality and comparability, the PCE is working to be able to map HMIS data (from SNIS) at the lowest administrative level possible, in order to assess the spatial distribution of program outputs more finely than just by province. Figure 7 displays the same output indicators as

Figure 6 (except community health worker output, which is presently not available in DHIS2) at the health zone level for 2017.

Figure 7. Output indicators (commodities used and patients treated) by health zone, 2017



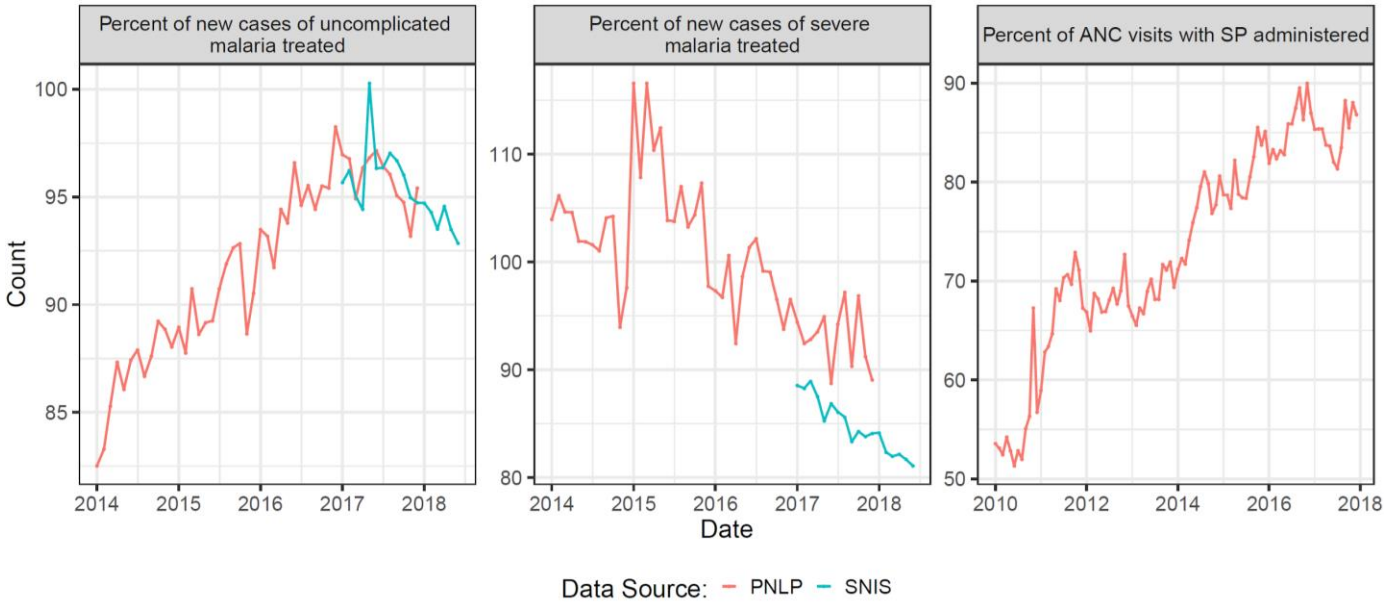
Source: SNIS

From these figures, it is apparent that there are spatial trends in addition to temporal trends. LLIN distribution (upper-left map) appears to have been very uniform geographically in 2017, with only a few anomalous health zones reportedly receiving very few or very many bed nets, and the majority of health zones falling in the same range between 5,000 and 20,000 nets distributed. Treatment of uncomplicated malaria and RDTs performed (upper-middle and upper-right maps) appeared to take a very different spatial pattern, however. Although the variance from health zone to health zone of these outputs was high (ranging from below 5,000 to above 140,000 cases treated and 7,000 to 235,000 RDTs performed), a pattern of more outputs in some regions compared to others is detectable. For example, central provinces such as Lomami and Sankuru and northern provinces such as Bas-Uele have higher numbers of outputs, while western provinces such as Tshuapa and Mai-Ndombe and southern provinces such as Lualaba and Haut Lomami have had lower output. Treatment outputs for severe malaria were more similar spatially to LLIN distribution: they appeared to occur in comparable numbers distributed more or less uniformly nationwide (albeit much lower numbers all around), while SP used during ANC reflected a similar spatial pattern to RDTs performed.

Outcomes

While trends in inputs, activities and outputs offer a useful description of the functioning and efficiency of program implementation, we continue our analysis along the results chains to track more epidemiologically-relevant indicators relative to burden of disease. As alluded in the previous section, trends in program output may simply be reflective of changing underlying incidence and prevalence if not properly accounted for. Figure 8 displays the number of uncomplicated cases and severe cases treated as a percentage of the number of cases reported (the first two panels), as well as the number of doses of SP administered during ANC as a percentage of the total number of ANC visits recorded (the third panel).

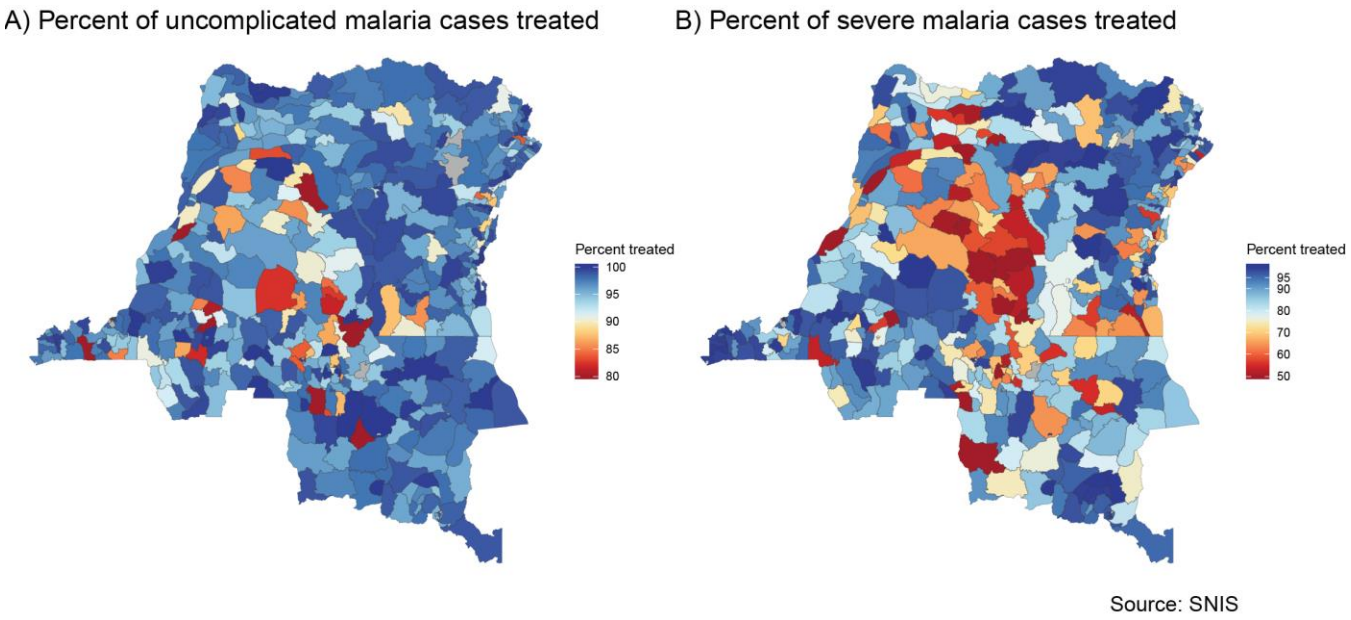
Figure 8. Percentage of reported cases treated (uncomplicated and severe) and ANC visits with SP administered at national level.



These indicators of coverage (outcomes) show somewhat different trends than outputs. While treatment of uncomplicated cases has also generally increased since 2014, there is a notable trend in recent years that this percentage is levelling off. Reported coverage increased from 83% at the start of 2014 to a peak of 100% in 2017 (98% according to the program data), but declined to 92% by July 2018. SP administered during ANC (the third panel) has increased in percentage terms throughout the entire time series however. From 2010 to 2017, the number of SP doses as a fraction of the number of ANC visits has climbed from a low of 51% to 91%, at an average rate of 0.4 percentage points per month. On the other hand, the percentage of reported severe cases who were treated (the second panel) appears to have continually declined since 2014. This mirrors trends in outputs that highlighted severe malaria case management as trending differently than other indicators. For most of 2014 and 2015, treatment coverage for severe malaria was reportedly actually higher than 100%, likely reflecting under-counting of the denominator. Throughout the available time frame however, this fraction has continued downward at an average rate of 0.5 percentage points per month.

Subnational mapping of outcomes offers greater detail into their distribution. Most regions are treating similar proportions of uncomplicated malaria to the national total, but some, such as certain health zones in Tshuapa, Sankuru, Kasai and Lulua (in the central region of the map below) are lagging behind. Treatment of severe malaria has a strikingly different pattern. Although some of the central provinces (much of Tshuapa and Sankuru for example) also have a pattern of low treatment coverage reported through program data, fewer provinces appear to be treating large proportions of severe cases widespread across all health zones. Tanganyika and Haut Katanga for example (both in the South East) are reporting a high variance between health zones in terms of severe malaria treatment coverage, despite near-universal coverage of uncomplicated malaria (among reported cases).

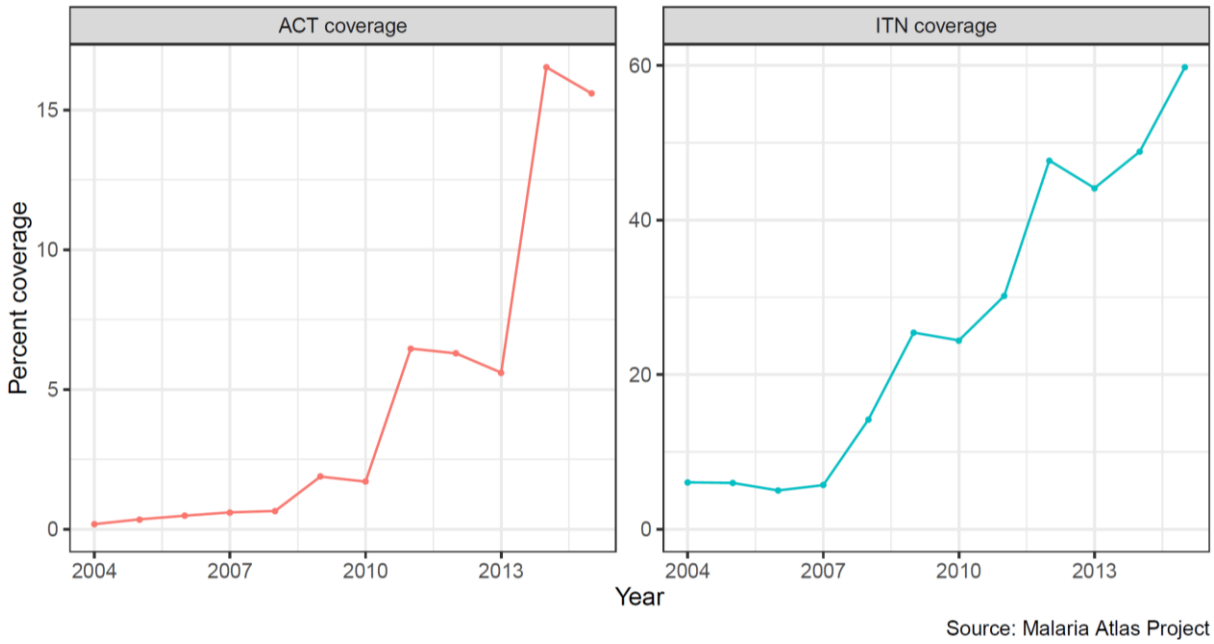
Figure 9. Percentage of reported cases of uncomplicated and severe malaria treated in 2017. *(Note: Where the percent was greater than 100, it has been set to 100 for the purpose of visualization. In Figure 9A, where the percent was less than 80, it has been set to 80 and in Figure 9B, where it is less than 50 it has been set to 50.)*



Each of these coverage indicators is based only on reported data however, so changing levels of reporting completeness, and differential changes in the numerators and denominators are as important of drivers in the trends as program activity and output. The most obvious example is that the percentage of severe patients treated exceeded 100% for most of 2014 and 2015. The declining trend throughout the whole time series may equally be declining "true" coverage or increasing case detection and reporting of severe malaria. As another example, the increasing trend in SP as a fraction of ANC visits does not ideally represent IPTp coverage, as both the numerator and denominator are aggregate counts. In other words, this fraction is simply the total SP doses divided by the total ANC visits, not necessary the percentage of individual ANC visits in which a dose was administered. Although the PCE has corrected for data quality where possible (described previously), these sources of bias warrant further scrutiny and skepticism about whether these data sources reflect the population-level trends they are intended to reflect. Furthermore, non-clinical outcomes such as actual usage of LLINs is difficult, if not impossible to track through facility-based data sources.

All of these limitations highlight the importance of survey-based model estimates in addition to facility-based reports. The below figures display national aggregates of LLIN coverage and ACT coverage from the Malaria Atlas Project (MAP).(20) According to these models, which include data from the 2007 Demographic Health Survey, 2010 Multiple Indicator Cluster Survey, 2013-2014 Demographic Health Survey and several spatial covariates, coverage of ACTs is much lower than the program data reports. Although MAP only models the percentage of fever cases under age five treated with any ACTs (not confirmed cases of any age treated according to national guidelines), their estimates indicate recent ACT coverage of approximately 16%. This is substantially lower than PNLP, which counted approximately 11.3 million suspected cases under age five in 2017, 62.6% of whom were reportedly treated. Both sources however reflect a similar trend of increasing coverage over the last decade, with the MAP estimates increasing from approximately 4% in 2010 and the PNLP data estimating 44.8% in 2010. The difference between the two sources is likely explained by treatment-seeking bias. The model estimates are based on population-level surveys which capture cases that do not present in a health facility, while the program data is only facility-based.

Figure 10. Model estimates of ACT coverage (cases of fever under age 5 treated) and LLIN (ITN) coverage (percentage of population who slept under LLINs in the night prior to survey) at national level, 2004-2016

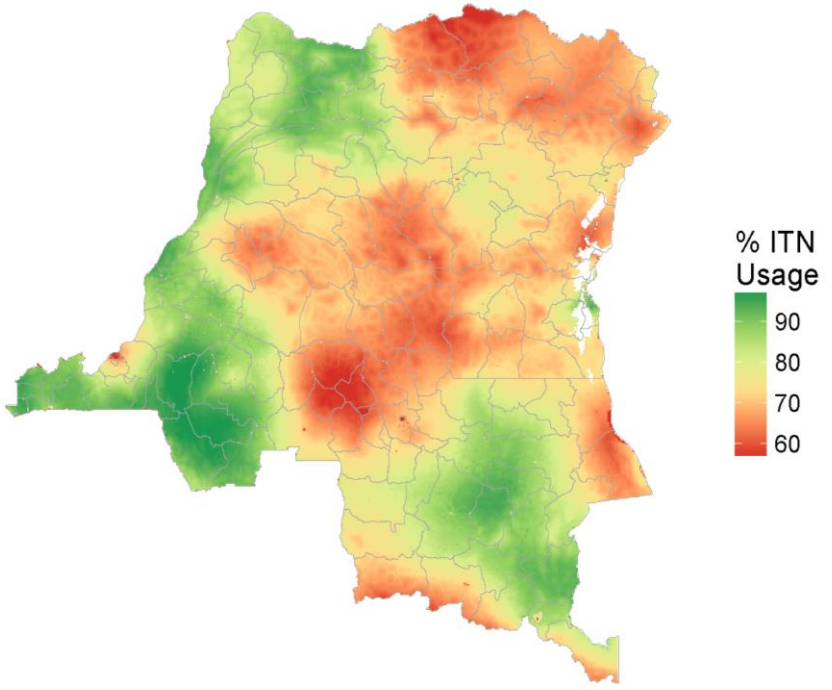


A similar increasing trend can be noted for the proportion of the population who were protected by LLINs (the second panel). Since 2004, LLIN coverage has increased from below 10% to 60% nationwide, according to MAP and the previously-mentioned surveys. This compliments the increasing trend in program outputs, which increased the number of LLINs distributed in each year.

A more complex picture of both ACT coverage and LLIN coverage is notable at the subnational level however. According to the same MAP estimates, LLIN coverage ranges from below 60% in parts of Bas-Uele, Haut-Uele and Kasai (the North, North East and South Central areas in red respectively) to over 90% in much of the Western regions and the South East (roughly Kongo Central, Kwilu, Kwango, North Ubangi, South Ubangi, Haut Lomami and Kaut Katanga). This is actually in contrast to the patient distribution of LLINs themselves, which (as shown in the previous section) was fairly uniform in 2017. What is implied by this contrast is that patterns of LLIN coverage are driven more by behavioral factors than volume of distribution alone[6].

[6] Differences in population density may also drive the divergence between ITN distribution volume and ITN usage, however the western regions with high usage despite moderate distribution are also known to have higher population density

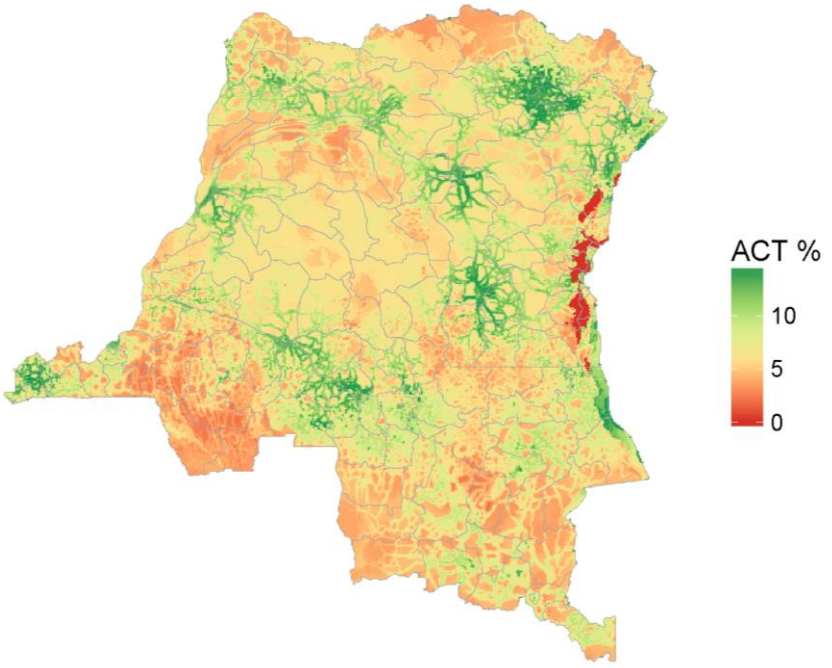
Figure 11. Model estimates of LLIN (ITN) coverage (percentage of population who slept under LLINs in the night prior to survey) at 5km level, 2016.



Source: Malaria Atlas Project

Model estimates of ACT coverage also vary widely at the subnational level, with substantially different geographic patterns than LLIN coverage. For the percentage of children under five treated when suspected of malaria, areas with access to major cities tend to have the highest coverage, especially following along the road network as shown in the figure below. Broadly speaking, these patterns more closely mirror the spatial distribution of program outputs, with higher coverage around the Kasai province and parts of Bas-Uele, though some contrast is also apparent.

Figure 12. Model estimates of ACT coverage (cases of fever under age 5 treated) at 5km level, 2016.



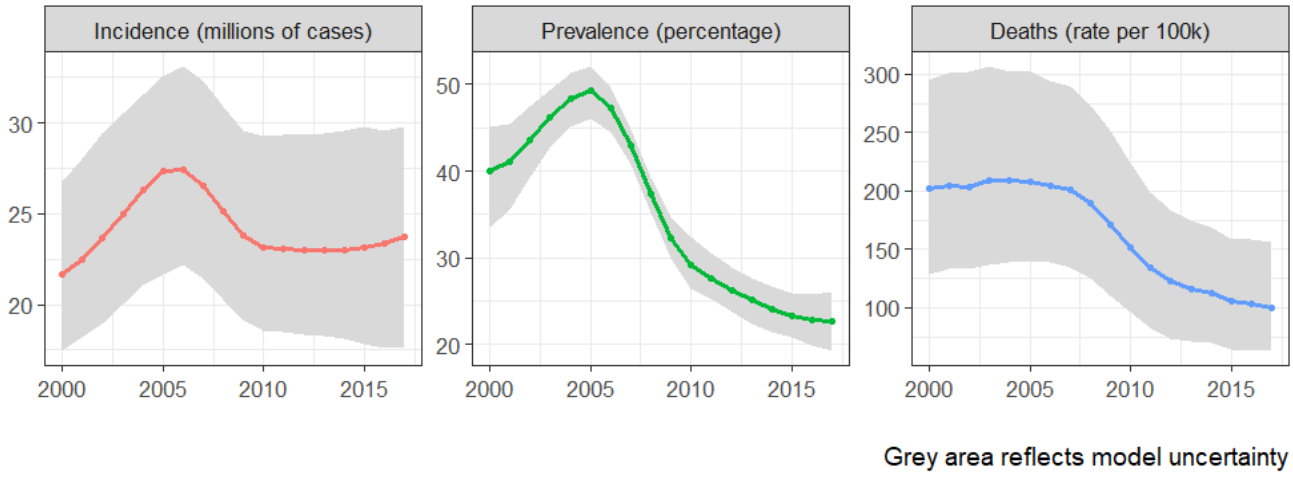
Source: Malaria Atlas Project

These estimates are not without their own limitations however. As survey-based estimates, they are limited in terms of the definition of indicators they can track. For example, while the program data allow detailed information about treatment among confirmed, presumed and suspected cases of all ages, surveys are limited to suspected cases (fever) among children.

Impact

There were an estimated 23.7 million new cases of malaria in 2017 (see Figure 13 below). This amounts to an estimated 22.6% prevalence (*Plasmodium falciparum* parasite rate), or an incidence rate (not shown in figure) of 29.4 per 1,000 population in 2017.(11) While prevalence has fallen dramatically since the early 2000's (from a peak of 49% in 2005 to 23% in 2017), incidence counts have remained essentially unchanged since 2010 (23.1 million new cases in 2010), and incidence rates have stagnated since 2012 (only declining by 2.3 per 1,000 between 2013 and 2017, as opposed to a decline of 7.4 per 1,000 in the five years prior). On the other hand, mortality rates have continued declining in recent years, falling from 202 per 100,000 population in 2000 to 152 per 100,000 in 2010, to 100 per 100,000 population in 2017. This implies a population-level case fatality (aggregate deaths per aggregate cases, not individual-level case fatality ratio) that has declined from 0.44% to 0.34% between 2010 and 2017.

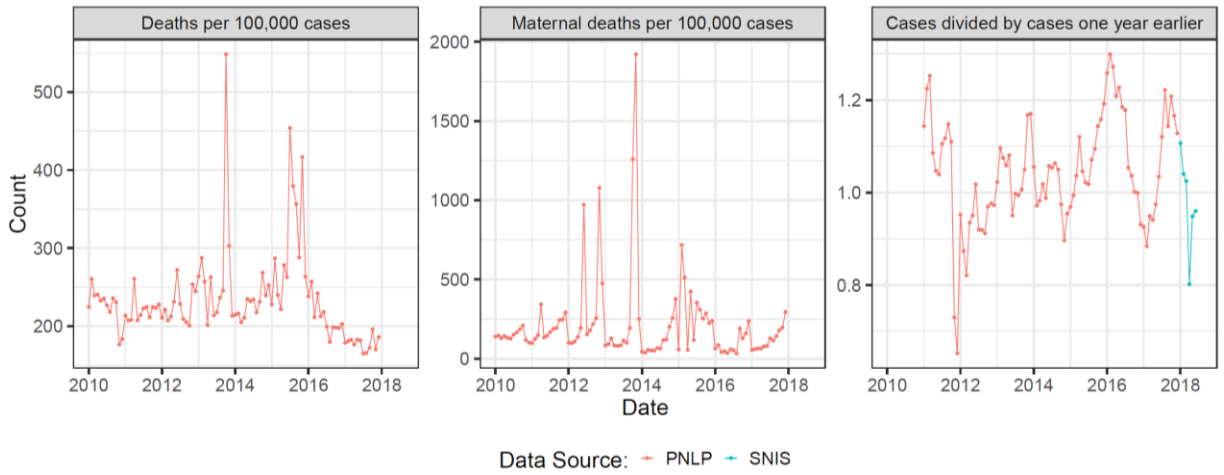
Figure 13. Model estimates of incidence, prevalence and mortality, 2000-2017.



Source: Global Burden of Disease 2017 study

The positive trend in population-level case fatality is corroborated by reported program data, which indicate that deaths per 100,000 *notified* cases have fallen from 224 at the start of 2010, to 186 by the end of 2017 (Figure 14). Malaria mortality among pregnant women (the second panel) has followed a more erratic trend since 2010, with large swings from month to month potentially reflective of weaker data quality. On the whole however, maternal deaths per 100,000 cases have declined from a monthly median of 142 in 2010, to 97 in 2017, with a 2015 being a notable year with much higher maternal mortality. While little about the trends in outputs or outcomes of SP administered during ANC explains the sudden increases, the continued increases in these indicators do coincide with the overall declines in mortality in the long run. Further investigation is warranted to explain the high variance in this indicator however. Finally, the year-over-year change in new cases reported by the national program (the third panel) supports the plateau of incidence described in model estimates. Between 2016 and 2018, more months actually saw increases in new cases compared to the same month in the previous year than was typical in the preceding years.

Figure 14. Reported program data of deaths per 100,000 cases, maternal deaths per 100,000 cases and year-over-year change in number of cases.

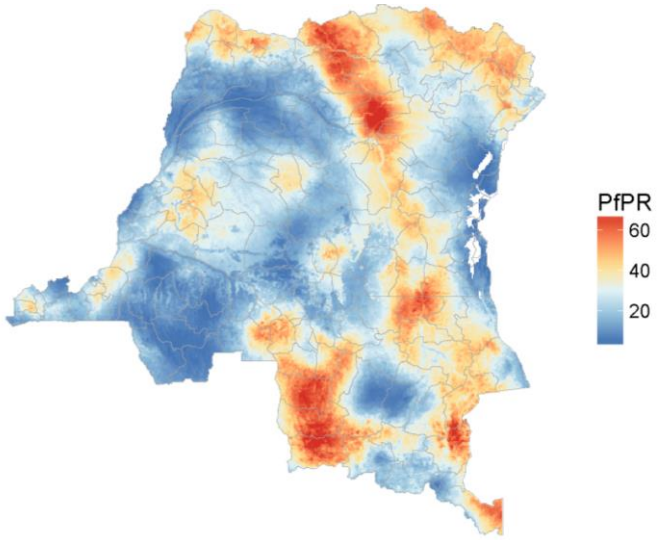


In short, incidence has remained constant in recent years, while case fatality has declined. These trends are especially important to relate back to trends in outcomes. While both prevention and treatment efforts have continued to increase coverage in recent years, only the treatment efforts appear to be producing immediate benefit. Although the driving forces behind this observation are surely numerous, the immediate clinical benefit of treatment compared to the more gradual and long term benefit of prevention efforts must be noted.

These estimates of burden of disease are actually somewhat more optimistic than alternative sources. The 2018 World Malaria Report, although reporting stable global incidence, estimated that incidence rates in DRC actually increased since 2010 by nearly 100%.(21) The World Malaria Report reported similar declines in case fatality ratios however, from 0.26% to 0.18% between 2010 and 2017 (a change of 0.08 percentage points, compared to 0.10 percentage points according to GBD).

Subnationally, burden of disease varies by region as well. As shown in Figure 15 below, prevalence, (*Plasmodium falciparum* parasite rate, or PfPR) ranges from less than 20% in many western areas (e.g. Kwango, Kwilu, Mongala), to greater than 60% in some areas like Bas-Uele and Tshopo (North Central) and Lualaba and parts of Haut Katanga (South). Juxtaposing this map with the LLIN and ACT coverage maps above, it is apparent than many of the lowest-prevalence areas are the same as the areas with high LLIN usage (e.g. Kwilu and Kwango in the South West).

Figure 15. Malaria prevalence at 5km level.



Source: Malaria Atlas Project

Summary and Conclusion

The Global Fund has contributed sustained investment in the national malaria program in DRC, especially consistently for case management, and more periodically toward prevention (although in more consistent quantities in recent years), as the largest external source of resources in the last decade. Through this sustained funding (and the investment from other organizations including the Government of DRC), program activities have seen dramatic expansion since 2014. As a result, program output has continued to increase as well, though LLIN distribution to individuals appears to be levelling off in recent years, and treatment of severe malaria and community case management may be as well. These trends in outputs have translated into dramatic increases in the percentage of uncomplicated cases of malaria treated, as well as SP distributed during ANC, though treatment of severe malaria appears to be trending in the opposite direction (perhaps due to changes in underlying data quality). As population-based estimates, models mirror the program data's upward trend in ACT coverage, and also indicate positive trends in LLIN usage. These trends have thus translated into shifting metrics of burden of disease, which experienced dramatic declines in the early and mid-2000's and which continue into recent years for case fatality. Declines in new cases appear to be slowing in recent years however, despite continuation in prevention outcomes, and will be monitored in the coming years.

Annex VI: Classification of modules and interventions into five broad budget categories

For visualization and summary purposes, we display some budget figures aggregated into five broad categories. This table indicates exactly what modules and interventions (from the Global Fund Modular Framework Handbook) are classified as each category.

Module	Intervention	Category
Vector control	Long lasting insecticidal nets: Mass campaign	Prevention
Vector control	Long lasting insecticidal nets: Continuous distribution	Prevention
Vector control	Indoor residual spraying	Prevention
Vector control	Other vector control measures	Prevention
Vector control	Entomological monitoring	Prevention
Vector control	Information, education, communication/Behavior change communications (vector control)	Prevention
Vector control	Removing human rights- and gender-related barriers to vector control programs	Prevention
Case management	Facility-based treatment	Treatment
Case management	Epidemic preparedness	Other
Case management	Integrated community case management (iCCM)	Treatment
Case management	Active case detection and investigation (elimination phase)	Treatment
Case management	Therapeutic efficacy surveillance	Other
Case management	Severe malaria	Treatment
Case management	Private sector case management	Treatment
Case management	Ensuring drug and other health product quality	Other
Case management	Information, education, communication/behavior change communication (case management)	Treatment
Case management	Removing human rights- and gender- related barriers to case management	Treatment
Case management	Other case management intervention(s)	Treatment
Specific prevention interventions	Intermittent preventive treatment – In pregnancy	Prevention
Specific prevention interventions	Intermittent preventive treatment – In infancy	Prevention

Specific prevention interventions	Seasonal malaria chemoprevention	Prevention
Specific prevention interventions	Mass drug administration	Prevention
Specific prevention interventions	Information, education, communication/Behavior change communications (specific prevention interventions)	Prevention
Specific prevention interventions	Removing human rights- and gender-related barriers to specific prevention interventions	Prevention
Specific prevention interventions	Other specific prevention intervention(s)	Prevention
Program management	Policy, planning, coordination and management of national disease control programs	Program management
Program management	Grant management	Program management
Program management	Other program management intervention(s)	Program management
Procurement and supply chain management systems	National costed supply chain master plan, and implementation	RSSH
Procurement and supply chain management systems	Procurement strategy	RSSH
Procurement and supply chain management systems	Supply chain infrastructure and development of tools	RSSH
Procurement and supply chain management systems	National product selection, registration and quality monitoring	RSSH
Procurement and supply chain management systems	Other procurement and supply chain management intervention(s)	RSSH
Health management information system and monitoring and evaluation	Routine reporting	RSSH
Health management information system and monitoring and evaluation	Program and data quality	RSSH
Health management information system and monitoring and evaluation	Analysis, review and transparency	RSSH
Health management information system and monitoring and evaluation	Surveys	RSSH

Health management information system and monitoring and evaluation	Administrative and financial data sources	RSSH
Health management information system and monitoring and evaluation	Vital registration system	RSSH
Health management information system and monitoring and evaluation	Other health information systems and monitoring and evaluation intervention(s)	RSSH
Human resources for health, including community health workers	Capacity building for health workers, including those at community level	RSSH
Human resources for health, including community health workers	Retention and scale-up of health workers, including for community health workers	RSSH
Human resources for health, including community health workers	Other health and community workforce intervention(s)	RSSH
Integrated service delivery and quality improvement	Supportive policy and programmatic environment	RSSH
Integrated service delivery and quality improvement	Service organization and facility management	RSSH
Integrated service delivery and quality improvement	Laboratory systems for disease prevention, control, treatment and disease surveillance	RSSH
Integrated service delivery and quality improvement	Improving service delivery infrastructure	RSSH
Integrated service delivery and quality improvement	Provider-initiated feedback mechanisms	RSSH
Integrated service delivery and quality improvement	Other service delivery intervention(s)	RSSH
Financial management systems	Public financial management strengthening	RSSH
Financial management systems	Routine financial management improvement (non-public financial management)	RSSH
Financial management systems	Other financial management intervention(s)	RSSH
National health strategies	National health strategies, alignment with disease-specific plans, health sector governance and financing	RSSH
National health strategies	Other policy and governance intervention(s)	RSSH

Community responses and systems	Community-based monitoring	RSSH
Community responses and systems	Community-led advocacy	RSSH
Community responses and systems	Social mobilization, building community linkages, collaboration and coordination	RSSH
Community responses and systems	Institutional capacity building, planning and leadership development	RSSH
Community responses and systems	Other community responses and systems intervention(s)	RSSH