



**Islamic Republic of Afghanistan
Ministry of Public Health
General Directorate of Preventive Medicine
Communicable Disease Directorate
National Malaria and Leishmaniasis Control Programme**

National Monitoring and Evaluation Plan



2018-2022

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Introduction

1. Overview of Health Care Service in Afghanistan

1.1. General Description of Health System

The Ministry of Public Health (MoPH) is one of the leading Ministries in the Government of the Islamic Republic of Afghanistan (GoIRA). Health care is provided on equitable basis to the people of Afghanistan under the auspices of said ministry. Positive reforms in the health care services delivery system and evolving mechanisms of implementation and controlling resulted in a drastic improvement in the health of women and children in Afghanistan. The country still faces high infant, children under five and maternal mortality figures. In addition, Afghanistan suffers from the burden of communicable and no communicable diseases with regional variations and between rural and urban settings.

In 2003, the MoPH made the decision with the support of donors, to change its role to a stewardship role. That decision resulted in the development and implementation of a Basic Package of Health Services (BPHS). Provision primary health care services based on this package has been contracted out to nongovernmental organizations (NGOs). “The goal in developing the BPHS was to provide a standardized package of basic health services that would form the core of service delivery in all health care facilities. The BPHS was further revised in 2010. Currently, contracting out by NGOs to deliver health services has been implemented in 31 provinces, with the support of the European Union (EU), United States Agency for International Development (USAID) and World Bank (WB). Three provinces are “contracting in”; where MoPH staffs are contracted, similar to NGOs, to deliver the services. For secondary

and tertiary care services, An Essential Package of Hospital Services (EPHS) was later added, focusing on hospitals, improving their facilities and equipment, staff training and development and enhancing the referrals between different levels of the health system.

Contracting out to NGOs has worked well in Afghanistan and has proven to be enormously successful in expanding service coverage and improving quality of care. Currently 85% of the entire population lives in districts where primary health care services are being provided by NGOs either under contract with the MoPH or through direct grants from donors and through the MoPH Strengthening Mechanism (“contracting in”). The MoPH has used the contracts with NGOs to ensure that all providers are implementing the BPHS and EPHS in accordance with technical guidelines and that all providers are clearly responsible and held accountable for defined geographical areas and populations. Resultantly, health indicators for Afghanistan have dramatically improved since the introduction of the BPHS and EPHS. The standardized classifications of health facilities that provide the basic health services now include the following:

- Health Posts (HPs)
- Health Sub-centers (HSCs)
- Basic Health Centers (BHCs)
- Mobile Health Teams (MHTs)
- Comprehensive Health Centers (CHCs)
- District Hospitals (DHs)

1.2. Overview and Structure of Health Information System

Malaria diagnosis and treatment is integrated with BPHS and EPHS services, malaria diagnosis and treatment are provided from health post level up to regional hospital.

HMIS collects data on priority disease including malaria in pretested standard form (Annex-1)

The services and interventions that are monitored through the HMIS are limited to those that focus on the priority target groups and conditions of the BPHS and EPHS.

They are:

- Nutritional status of children
- Family planning
- Pre- and Post-natal care
- Obstetric care
- Neonatal care
- Essential drugs and supplies
- Immunizations
- Laboratory for tuberculosis, malaria and HIV
- Community health
- Mental health
- Surgical interventions
- Blood transfusion

The current HMIS provides some portion of required data (uncomplicated confirmed and clinical malaria). To determine malaria specific indicators and to continue to gather with the reports from all BPHS/EPHS implementing partners, NMLCP and the HMIS taskforce agreed and developed Malaria and Leishmaniasis Information System (MLIS) which has standardized malaria and leishmaniasis registration and reporting forms and this will be used by all healthcare providers in the public health sector (Partial vertical malaria surveillance for those indicators which are not captured in current HMIS).

The following indicators are included in the HMIS:

1. Reported malaria incidence (total number of cases by age and sex)
2. Malaria mortality (suspected cases only)
3. Number of inpatient malaria cases (not reported as severe/ or complicated malaria cases)
4. Stock out of anti-malaria drugs except Quinine and Primaquine
5. Laboratory confirmed cases (By sex not by age)

NMLCP proposed to add following indicators and variables in Malaria and Leishmaniasis Information System (MLIS):

1. Number of malaria patients treated with first line anti-malarial drug
2. Age and gender specific incidence rates
3. Severe and complicated cases
4. Number of cases among pregnant women
5. Number of cases confirmed by RDT
6. Number of cases with G6PD deficiency

Type and number of health facilities in Afghanistan (National HMIS 2017)

Facility Type	Total
Basic Health Center (BHC)	847
Comprehensive Health Center (CHC)	413
DIC Community	18
DIC Prison	10
District Hospital (H3)	81
Drug Addicted Treatment Center	40
Eye Clinic / Hospital	3
Mobile Health Team (MHT)	159
Other	310
Provincial Hospital (H2)	28
Regional / National Hospital (H1)	7
Rehabilitation Center (RH)	3
Special Hospital (SH)	29
Sub Health Center (SHC)	639
Grand Total	2587

1.3. Key Health Indicators and Achievements:

Since 2001, the health sector of Afghanistan, with strong support from various donors and development partners, has made remarkable progress in improving the health status of the population. This is particularly so in access, coverage, and quality of health services. These key achievements were made possible through improved and effective strategic, institutional, and operational performance of the relatively newly rebuilt health system.

The new system has improved the health and life expectancy at birth from 42 years in 2002 to 64 years in 2012. Only 9 percent of Afghans lived within a one hour walk of a health facility. By 2014, 57 percent of the population had access to a health facility less than one hour from their home, and nearly 87 percent had access to health services within a two-hour distance by any means of transportation. “National Health strategy 2016-2020”

Actual access to basic preventive and treatment services increased from 9 percent in 2002 to 57 percent in 2012. Supported by other key additional factors, this improved access and expansion of coverage has led to some impressive results—the infant mortality ratio (IMR) has declined from 66 in 2005 to 45 deaths per 1,000 live births today; during the same period, neonatal mortality has dropped from 31 to 22 and under-five mortality from 87 to 55 per 1,000 live births, and skilled birth attendance has increased from 14 percent in 2003 to more than 40 percent today.

The decline in MMR also has been dramatic, falling from 1,600 to 396 per 100,000 live births - see table. There has also been a significant increase in the coverage of key maternal and child health service indicators - antenatal coverage increased from 16 to 59 percent, the contraceptive prevalence rate rose from 10 to 23 percent, institutional deliveries from under 15

to 48 percent, and DPT3/Penta 3 coverage for children ages 0–23 months increased from 30 to 58 percent.

Health Indicators, 2010-2015	
MMR	396/100,000
IMR	45/1,000
NMR	22/1,000
Under-5 mortality rate	55/1,000
Pregnant women w/skilled antenatal care (1visit)	59%
Births w/skilled attendant	50.5%
Breast feeding at aged 2	54%
Couples using modern FP method	20%
Total fertility rate	5.3

The development and implementation of the BPHS and EPHS packages have proven to be two of the most successful and effective achievements of the key strategic plans and decisions made by the health sector and the MoPH over the last decade. Since 2003, the BPHS clearly has served as the strongest foundation for the country’s primary health care system; it also has proven to be a major engine behind most of the success achieved. As a standardized package, the BPHS also has catalyzed and provided a unique platform for all stakeholders to use when focusing on a common strategy and goal, and has minimized the de facto inefficiencies and duplications throughout the health system.

The MoPH also has successfully launched other interventions to strengthen health services and public health interventions, particularly training community midwives and nurses, developing information and education materials, and strengthening health infrastructures. In addition to public sector efforts, private sector engagement in health, including of national NGOs, also has been increasing progressively. As the ANDS 2008–2013 assessment conducted in June 2014 noted, about 88 percent of the targets set were achieved during the last ANDS implementation period, making health the most successful sector in Afghanistan’s development efforts.

1.4. Monitoring & Evaluation system of MoPH

Monitoring and Evaluation Directorate within the General Directorate of EHIS of the MoPH is the departmental body responsible for implementing the Monitoring and Evaluation Strategic Plan of MoPH. The M&E Directorate oversees the coordination of monitoring and evaluation within the Ministry of Public Health (MoPH), and attempts to ensure that the MoPH has the information it needs to exercise effective stewardship based on evidence from the field in meeting the targets of the Health and Nutrition Sector (HNS), which are in accordance with the goals and objectives outlined by the Government of Afghanistan.

The M&E Directorate is closely linked to HMIS and Information Technology (IT) departments. M&E department coordinates guides and compare all M&E activities among the various departments in MoPH, Provincial Public Health Directorate and NGOs. Strong coordination is required between the M&E Directorate and other ministerial bodies such as the Health Management Information System (HMIS), the Disease Early Warning System (DEWS), the Human Resources Database, the Research and Informatics Department.

The monitoring and evaluation unit of MoPH has M&E plan which issued as a benchmark against which to measure progress in implementing the M&E system. The Monitoring and

Evaluation Department reports on two sets of priority indicators for the Government of Afghanistan and its partners:

- The National Priority Health Indicators (updated on a quarterly basis in Hamal (April), Saraton (July), Mizan (Oct), Jeddi (Jan of the next year))
- Afghanistan Health Fact Sheet {updated each year in Hamal (April)}

The National Priority Health Indicators focus on those health indicators which highlighted the progress of the Ministry of Public Health's main programs. These indicators feature the major Millennium Development Goal's indicators, including malaria incidence and long lasting insecticidal net utilization.

The goal of the Monitoring and Evaluation Department is to provide high quality, relevant and timely information to the MoPH leadership and programme managers to take evidence-based management, policy and strategic decisions in fulfilment of their management and stewardship roles.

The department is responsible for the provision of:

- Regular reports on the performance of the healthcare delivery system and dissemination of these reports
- Timely evidence for effective policy, management and programme related decision making
- Well trained staff capable of fulfilling their roles in the monitoring and evaluation of health service delivery and health status in Afghanistan
- Evidence for rational distribution of resources in the health sector
- Identification of emerging public health concerns in a timely manner and assistance to other departments and programmes within the MoPH

Monitoring and Evaluation unit of the NMLCP has been established in the lights of National M&E plan to coordinate M&E related activities of Malaria and Leishmaniasis among all PR/SRs and Partners and also to oversee the implementation of national malaria strategies.

2. Overview of National Malaria and Leishmaniasis Control Programme

2.1. Description of the program, specific interventions and framework

NMLCP is the one of CDC Department of the General Directorate of Preventive Medicine in MoPH. NMLCP has 34 PMLCP units operating in 34 provinces. Key functions of them are to provide coordination with NMLCP, facilitate capacity building of the health staff, monitoring and evaluation of malaria activities such as surveillance, diagnosis treatment etc. National malaria control efforts are mainly supported by the external donors with major funding support from the GFATM.

Despite these recent advances, however, malaria remains a major public health issue in the country. NSP 2018-2022 will serve as a guide for Provinces in rolling out specific interventions for containing ongoing outbreaks and moving progressively from malaria control to elimination across Afghanistan.

Malaria is public health problem associated with slow socio-economic development and poverty and the most frequently reported disease at both public and private health facilities in Afghanistan.

Planned Activities:

- Vector control:
 - Long-lasting insecticidal nets (LLINs) mass campaign and through ANC to pregnant women.
 - Insecticide monitoring.
 - Focal IRS during malaria outbreak.
- Case management:
 - Diagnosis by microscopy or RDT at all level, health facility and community
 - Treatment of malaria cases according to NTG at all level.
 - Private sector involvement in malaria case management.
- Malaria Reporting System and M&E :
 - Routine reporting through HMIS
 - Vertical reporting system for vector control (LLINs) through National program and partners.
 - M&E Routine reporting, periodic Surveys, program review.
- Program management: Grant Management, coordination and routine program management

Vision

Afghanistan is free from malaria by 2030.

Mission

The NMLCP of the MoPH of Afghanistan aims to reduce the burden of malaria and achieve malaria elimination by ensuring equitable and universal access to effective curative and preventive services to everyone at risk of malaria in close coordination with the efforts of the all communities, national and international non-government organizations, private sector stakeholders, United Nations agencies and financial partners. Achieving the vision of “Afghanistan is free from malaria” will contribute significantly to poverty alleviation as malaria is most prevalent in the poorest segment of the population.

Goal

To ensure that Afghanistan is on track to eliminate malaria by 2030 – contributing towards country development and the Sustainable Development Goals.

Specific Objectives

- Reducing the reported malaria incidence by 73% at the national level compared with 2016;
- Interrupting indigenous transmission of malaria, specifically Pf, in 23 Provinces (Badghis, Baghlan, Farah, Ghor, Hirat, Jawzjan, Kabul, Kunduz, Nimroz, Parwan, Samangan, Balkh, Bamyan, Dykundi, Kapisa, Panjsher, Sar-e-Pul, Takhar, Urozgan, Badakhshan, Faryab, Logar & Zabul) by 2022;
- Preventing the re-establishment of local malaria transmission due to importation in all areas where it has been eliminated.

Target Group/Beneficiaries:

Total population with priority on high and medium risk (strata 1 & 2 respectively) provinces. Major focus will be on:

- Pregnant women;
- Children under five age group; and
- Other key vulnerable population such as Returnees, Internally Displaced People (IDPs) and Nomads.

2.2. Structure of Malaria M&E system

2.2.1. Objectives of monitoring and evaluation in Malaria control program

At present, M&E is a fundamental component of the National Strategic Plan for Malaria Control and Elimination 2018-2022. Through M&E, programme impact, outcome, output and input indicators are measured to provide the basis for accountability and informed decision making at both programme and policy level.

M&E Directorate within the General Directorate for EHS of the MoPH is the departmental body responsible for implementing the M&E Strategic Plan of MoPH. The M&E Directorate is closely linked to HMIS, DEWS, Research and Informatics departments and Human Resource Database. M&E department coordinates and guides all M&E activities among the various departments in MoPH, Provincial Public Health Directorate and NGOs.

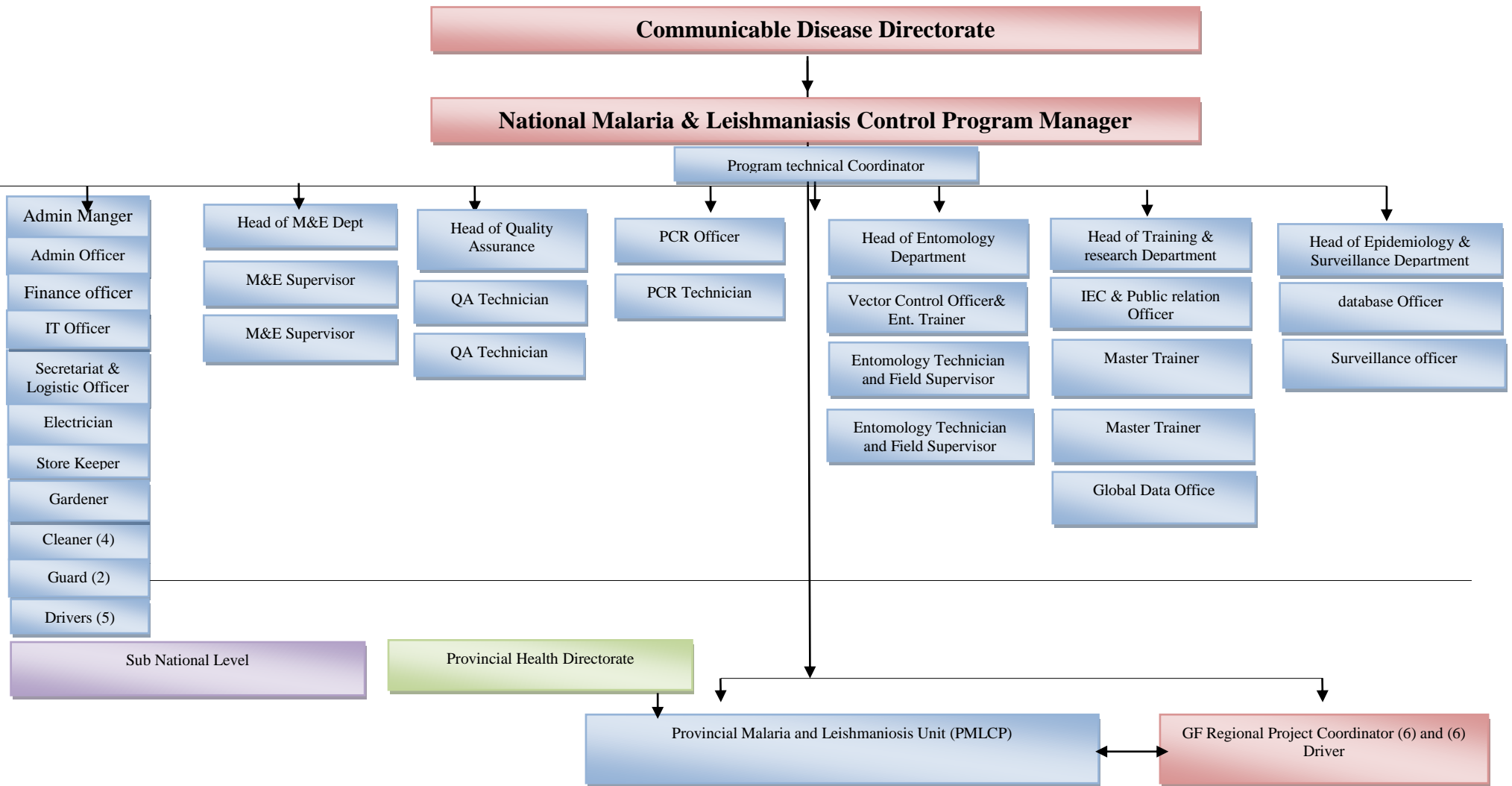
NMLCP is responsible for monitoring and evaluation of all malaria related activities by M&E department of NMLCP at central level and PMLCPs at provincial level. There is lack of adequate technical capacity for data analysis and interpretation, particularly at the provincial level. Besides the M&E department of NMLCP, which is responsible for M&E in the field of malaria,

WHO and PR (UNDP) also have M&E system to monitor and evaluate their related malaria activities. All partners will submit their M&E finding to NMLCP.

Monitoring is carried out by the NMLCP at the following two levels:

- The central level (NMLCP staffs) monitors and supervised the provincial level program activities
- The provincial level (PMLCP staffs) monitors and supervised malaria program activities at the health facility level

Organogram of National Malaria Leishmaniasis control Program



National malaria programme should be evaluated at regular intervals for compliance with set targets and stated objectives. Information should be collected through a national information system for malaria surveillance and health management. Parameters should be established to monitor and evaluate all programme areas.

A malaria elimination database should be established when a decision has been made to go for elimination. Ideally, management and maintenance of the malaria elimination database would be the responsibility of a national committee that is independent of the malaria programme. This database will serve as the national repository of all information related to malaria elimination

M&E department is responsible to oversee the performance of programme implementation and regularly conducts supervisory visits to provinces to monitor the programme performance, detect problems/constraints and provide on job training, if needed. In cooperation with NMLCP M&E department, provincial malaria officers are responsible for all M&E malaria-related activities at their respective provinces. The PR conduct joint supportive supervisory visits to improve quality of malaria interventions and fill the gaps.

The central M&E departments on quarterly bases monitor all 34 provinces to visit HFs and SRs Activities; moreover, the program focus is on high risk provinces.

2.2.2. Indicators definition and measurement

The definition and measurement of malaria indicators that will be used for the national strategic plan in the country are explained in the below table:

M&E Framework: National Strategic Plan “From Malaria Control to Elimination in Afghanistan” 2018-2022

No	Indicator Name	Indicator Level	Numerator/ Denominator/ %	Baseline 2016	Annual Targets						Source / collection data method	Freque ncy of Reporti ng	Entity responsi ble
					2017	2018	2019	2020	2021	2022			
Projected Population				33,794,703	34,484,115	35,187,591	35,905,418	36,637,888	37,381,637	38,140,485			
Impact and outcome indicators (to be assessed every one to three years)													
Disease trends													
1	Reported malaria cases (presumed and confirmed)	Impact	Numerator	385,015	366,620	306,081	234,244	187,468	120,432	104,768	HMIS & Malaria Information System	Annual	MoPH/N MLCP
			Denominator										
			Rate										
2	Confirmed malaria cases (microscopy or RDT) per 1000 persons per year	Impact	Numerator	190,231	219,972	214,257	187,395	159,348	108,389	99,530	HMIS & Malaria Information System	Annual	MoPH/N MLCP
			Denominator	33,794,703	34,484,115	35,187,591	35,905,418	36,637,888	37,381,637	38,140,485			
			Rate	5.6	6.4	6.1	5.2	4.3	2.9	2.6			
3	Confirmed Pf malaria cases (microscopy or RDT) per 1000 persons per year	Impact	Numerator	9,502	11,824	11,702	10,578	9,407	7,450	3,968	HMIS & Malaria Information System	Annual	MoPH/N MLCP
			Denominator	33,794,703	34,484,115	35,187,591	35,905,418	36,637,888	37,381,637	38,140,485			
			Rate	0.28	0.34	0.33	0.29	0.26	0.20	0.10			
4	Malaria test positivity rate	Impact	Numerator	190,231	219,972	214,257	187,395	159,348	108,389	99,530	HMIS & Malaria Information System	Annual	MoPH/N MLCP
			Denominator	847,761	999,872	1,020,269	1,041,083	1,062,321	1,083,886	1,105,889			
			Rate	22%	22%	21%	18%	15%	10%	9%			
5	In-patient malaria deaths per 100,000 persons per year	Impact	Numerator	47	40	35	30	20	10	0	HMIS & Malaria Information System	Annual	MoPH/N MLCP
			Denominator	338	345	352	359	366	374	381			
			Rate	0.14	0.12	0.10	0.08	0.05	0.03	0.00			
6	Annual parasite incidence: Confirmed malaria cases (microscopy or RDT): rate per 1000 persons per	Impact	Numerator	2018 data will be considered as baseline							NMLCP/PM LCP (Investigation team)	Annual	MoPH/N MLCP
			Denominator										
			Rate										

No	Indicator Name	Indicator Level	Numerator/ Denominator/ %	Baseline 2016	Annual Targets						Source / collection data method	Freque ncy of Reporti ng	Entity responsi ble
					2017	2018	2019	2020	2021	2022			
	year (Elimination settings)												
Malaria Prevention													
6	Proportion of households with at least one insecticide-treated net for every two people	outcome		2.9% (2015)				90%			Demographic and Health Survey	Every 3-5 years	MoPH/Partners
7	Proportion of children under five years old who slept under an insecticide-treated net the previous night in targeted areas	outcome		16.8% (2015)				85%			Demographic and Health Survey	Every 3-5 years	MoPH/Partners
8	Proportion of pregnant women who slept under an insecticide-treated net the previous night in targeted areas	outcome		14.9% (2015)				85%			Demographic and Health Survey	Every 3-5 years	MoPH/Partners
9	Proportion of population using an insecticide-treated net among those with access to an insecticide-treated net	outcome		NA				80%			Demographic and Health Survey	Every 3-5 years	MoPH/Partners
10	Proportion of population that slept under an insecticide-treated net the previous night	outcome		14.6% (2015)				75%			Demographic and Health Survey	Every 3-5 years	MoPH/Partners

No	Indicator Name	Indicator Level	Numerator/ Denominator/ %	Baseline 2016	Annual Targets						Source / collection data method	Freque ncy of Reporti ng	Entity responsi ble
					2017	2018	2019	2020	2021	2022			
11	Malaria O-7(M): Percentage of existing ITNs used the previous night	outcome		21.4(2015)				75%			Demographic and Health Survey	Every 3-5 years	MoPH/P artners
IEC/BCC													
11	Proportion of Individual know where to seek malaria diagnoses, and Treatment	outcome		NA	95%			95%			Household surveys such as periodic malaria indicator survey	Every 2-5 years	NMLCP/ Partners
12	Proportion of Individual know ways of preventing malaria	outcome		NA	95%			95%			Household surveys such as periodic malaria indicator survey	Every 2-5 years	NMLCP/ Partners
Coverage and output indicators (to be used for performance rating six to 12 months)													
Case management													
13	Proportion of confirmed malaria cases that received first-line antimalarial treatment according to national policy at public sector health facilities	Coverage/ Output	Numerator	46,172	99%	99%	99%	99%	99%	99%	Health facility survey	Annual and every six months	MoPH/N MLCP
			Denominator	46,891									
			%	98%									
14	Proportion of confirmed malaria cases that received first-line antimalarial treatment according to national policy in	Coverage/ Output	Numerator	434	90%	90%	95%	95%	95%	95%	Health facility survey	Annual and every six months	MoPH/N MLCP
			Denominator	435									
			%	99.8%									

No	Indicator Name	Indicator Level	Numerator/ Denominator/ %	Baseline 2016	Annual Targets					Source / collection data method	Freque ncy of Reporti ng	Entity responsi ble	
					2017	2018	2019	2020	2021				2022
	the community												
15	Proportion of suspected malaria cases that receive a parasitological test at public sector health facilities	Coverage/ Output	Numerator	613,108	90%	90%	95%	95%	95%	95%	HMIS & Malaria Information System	Annual and every six months	MoPH/N MLCP
			Denominator	701,497									
			%	87%									
16	Proportion of suspected malaria cases that receive a parasitological test in the community	Coverage/ Output	Numerator	249,205	80%	90%	95%	95%	95%	95%	HMIS & Malaria Information System	Annual and every six months	MoPH/N MLCP
			Denominator	341,048								%	
			%	73%									
17	Proportion of confirmed malaria cases among total reported malaria cases (presumed and confirmed)	Coverage/ Output	Numerator	190,231							HMIS & Malaria Information System	Annual and every six months	MoPH/N MLCP
			Denominator	385,015									
			Rate	49.4%	60%	70%	80%	85%	90%	95%			

Malaria Prevention

No	Indicator Name	Indicator Level	Numerator/Denominator/%	Baseline 2016	Annual Targets						Source / collection data method	Frequency of Reporting	Entity responsible
					2017	2018	2019	2020	2021	2022			
18	Number of long-lasting insecticidal nets distributed to at-risk populations through mass campaigns and continues distribution	Coverage/Output		992,319 (2016)	1,145,565	1,788,631	1,768,966	1,879,736			Program records of ITN distribution at specific sites	Annual and every six months	NMLCP/ Partners
Detection and control of malaria epidemics													
19	Proportion of epidemics detected within two weeks of onset	Coverage/Output		100% (2016)	100%	100%	100%	100%	100%	100%	Outbreak investigation reports	Weekly and Monthly	DEWS/ NMLCP
20	Proportion of epidemics controlled within two weeks of onset	Coverage/Output		NA	100%	100%	100%	100%	100%	100%	Outbreak investigation reports	Yearly	DEWS/ NMLCP
Private sector													
21	Proportion of private sector health facilities/practitioners engaged in malaria diagnosis and treatment in targeted area as per the standard	Coverage/Output		191 (2016)	50%	55%	60%	65%	70%	75%	NMCP programme report	Annual and every six months	NMLCP/ Partner
22	Proportion of private health facilities/practitioners reporting malaria cases in targeted areas	Coverage/Output		NA	50%	55%	60%	65%	70%	75%	NMCP programme report	Annual and every six months	NMLCP/ Partner

No	Indicator Name	Indicator Level	Numerator/Denominator/%	Baseline 2016	Annual Targets						Source / collection data method	Frequency of Reporting	Entity responsible
					2017	2018	2019	2020	2021	2022			
23	Proportion of suspected malaria cases that receive a parasitological test at private sector sites	Coverage /Output		NA							NMCP programme report	Annual and every six months	NMLC P/Partner
Surveillance of elimination													
24	Percentage of HFs with lab participated in microscopy quality assurance assessments			NA	100%	100%	100%	100%	100%	100%	Quality Assurance database	Quarterly and every six months	NMLCP
25	Percentage of cases notified within 24 h of detection			NA	100%	100%	100%	100%	100%	100%	Case management database	Quarterly and every six months	NMLCP
26	Percentage of cases full investigated with completed case investigation form			NA	100%	100%	100%	100%	100%	100%	Case management database	Quarterly and every six months	NMLCP
27	Percentage of foci fully investigated with completed investigation form			NA	100%	100%	100%	100%	100%	100%	Foci database	Quarterly and every six months	NMLCP
28	Percentage of active and residual non-active foci covered / protected by IRS, by year			NA	100%	100%	100%	100%	100%	100%	Foci database	Quarterly and every six months	NMLCP

No	Indicator Name	Indicator Level	Numerator/ Denominator/ %	Baseline 2016	Annual Targets						Source / collection data method	Freque ncy of Reporti ng	Entity responsi ble
					2017	2018	2019	2020	2021	2022			
29	Percentage of microscopy results cross-checked by national reference laboratory (Positives results)			NA	100%	100%	100%	100%	100%	100%	Quality Assurance database	Quarterly and every six months	NMLCP
30	Percentage of microscopy results cross-checked by national reference laboratory (Negative results)			NA	10%	10%	10%	10%	10%	10%	Quality Assurance database	Quarterly and every six months	NMLCP
Health Management Information System and monitoring and evaluation													
31	Proportion of HMIS or other routine reporting units submitting timely reports according to national guidelines	Coverage/ Output		88.8% (2016)	90%	92%	94%	95%	95%	95%	Numerator: HMIS, program records Denominator : HMIS, program records	Annual and every six months	MoPH/NMLCP

2.2.3. Routine data collection and reporting system

NMLCP relies on different sources of information for provision of data and its reporting mechanism which include routine and integrated data from health facilities through HMIS and programmatic vertical data through NMLCP departments and Partners. Various measures have been undertaken by each reporting entity to ensure a high standard of reporting. These measures are summarized for each reporting mechanism as follows:

a) At health facility level:

- Standardized pretested HMIS reporting forms have been provided to all health facilities across the country
- Intensive initial training has been conducted at health facilities targeting the relevant staff members
- Refresher and on job training opportunities are provided for the staff when required
- Regular supportive supervision is carried out to all health facilities to ensure compliance with national health guidelines and minimum reporting requirements, The M&E Directorate of MoPH has developed the National Monitoring Checklist (NMC), which has been used as a tool to monitor all health facilities on quarterly basis
- The HPs and BPHS health facilities without microscopy services provided with RDTs and ACTs with standard reporting tools by PR/SRs and program under the NFM grants of Global Fund. The program implemented through BPHS implementers and malaria SRs, the reports collected through respected health facilities and HPs that submitted to the provincial HMIS and SRs. The CBMM will be integrated into HMIS as separate module. The MLIS will be piloted into four provinces which then will scale up country wide.

b) At the provincial level:

- Unique database has been introduced to all provinces
- Comprehensive training has been provided to HMIS staff working at the provincial level
- In order to minimize data entry errors various checks have been put on each data field of different variables
- Regular supportive supervision from central level to provinces and on job training for provincial staff if needed
- Supervisory checklists (Health facility, LLIN, quality assurance) developed by NMLCP and shared with provincial team.
- The provincial level is responsible to submit the CBMM and LLINs reports to the National level.

c) At central level:

- Comprehensive training has been provided to HMIS staff working at the National level
- In order to minimize data entry errors various checks have been put on each data field of different variables
- The National level is responsible to collect, compile analysis and provide feedback on HMIS, CBMM, and LLINs reports in close coordination of concerned relevant partners from the provincial level on regular basis.

d) Sentinel sites:

- Standardized pretested registration and reporting forms have been provided to all sentinel sites across the country. There are two types of sentinel sites: a) Sentinel sites for drug efficacy monitoring. b) DEWS Sentinel site to detect epidemics/outbreaks
- Intensive initial training has been conducted to the relevant staff of each sentinel site
- Frequent refresher and on job training opportunity is provided for the staff working in each sentinel site as needed
- Regular supportive supervision is carried out to all sentinel sites to ensure compliance

e) Records of sub-national offices:

All sub-national offices (SNO /PMLCP) and SRs provincial offices follow standard procedures for reporting required data. Standard reporting formats have been developed and provided to sub-national offices. In order to ensure compliance, regular supervisions are carried out to all sub-national offices.

2.2.4. Data collection, data reporting tools and supervisory checklists:

Data collection/reporting tools and supervisory checklists that are used by NMLCP and PMLCP for systematic collection of malaria data are attached as Annex 3:

3. Data Management

3.1. Data flow and diagram (data flow and feedback system between NMLCP, PR, partner and HMIS)

Currently, the routine reporting the data is generated from the health facilities during interactions with the clients/patients and from the community through outreach, mobile and the interaction of community health workers with their clients. The routine data collected at health facilities and community level in standard HMIS forms through BPHS implementers, HMIS officer of BPHS implementer analysis the reported data and enter data to HMIS database, hard and soft copy of collected data share with PPHD HMIS team at monthly basis. The HMIS officer of PPHD review and compiled the data and reported to national level (HMIS) on quarterly basis, at national level data imported to national HMIS database, data are analysed and feedback provided to BPHS implementers on quarterly basis, at the end analysed version of HMIS database is shared with all MoPH leadership, NMLCP and partners. The HMIS unit of MoPH aggregates the data and submits it to NMLCP and to other stakeholders for their utilization. Both NMLCP and HMIS units of MoPH provide the written and oral feedback to all the levels in the same way. Externally, NMLCP reports multiple national indicators to EMRO/WHO at regular basis.

UNDP assumed Principle Recipient's role for the 'Strengthening and Scaling-up Malaria Prevention and Case Management to Improve Health Status in Afghanistan' grant that is implemented under the Global Fund New Funding Model in Afghanistan. The Grant Agreement covers the implementation period from 1 October 2015 to 31 December 2017 which is a continuation of the previous malaria grants.

The malaria NFM grant sought to contribute to the improvement of the health status in Afghanistan through reduction of morbidity and mortality associated with malaria.

Currently, 17 NGOs are working as SRs for Malaria grant activities; and implementing grant activities as per signed grant agreement.

Additionally, the NMMCP and WHO is also providing technical support for implementation of grant activities. The program implementation facilitated through a range of activities including monitoring and evaluation. The programme consists of following four core modules; Case Management, Vector Control and health information system, M&E and program management. The details of SRs with geographical coverage and interventions are provided in below table.

SRs and intervention provinces for NFM Malaria Grant, 2016

S/O	Name of Organization	Provinces	Intervention
1	Agency for Assistance and Development of Afghanistan (AADA)	Nangarhar, Takhar, Samanagan & Faryab	1. Case Management: <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians, private sector health practitioners and lab technicians (Nangarhar only). - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF. 2. Vector Control. <ul style="list-style-type: none"> - Provision of safe warehousing of LLINs at provincial. - LLINs distribution through campaign in the target areas. - Continuous distribution of LLIN to pregnant women.
2	Afghanistan Centre for Training and Development (ACTD)	Ghor & Helmand	1. Case Management: <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians, - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF. 2. Vector Control. <ul style="list-style-type: none"> - Provision of safe warehousing of LLINs at provincial. - LLINs distribution through campaign in the target areas. - Continuous distribution of LLIN to pregnant women.
3	Afghan Health and Development Services (AHDS)	Uruzgan	1. Case Management: <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians, - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF. 2. Vector Control. <ul style="list-style-type: none"> - Provision of safe warehousing of LLINs at provincial. - LLINs distribution through campaign in the target areas. - Continuous distribution of LLIN to pregnant women.

4	Aga Khan Foundation(AKF)	Badakhshan C2	<p>1. Case Management:</p> <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians, - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF. <p>2. Vector Control.</p> <ul style="list-style-type: none"> - Provision of safe warehousing of LLINs at provincial. - LLINs distribution through campaign in the target areas. - Continuous distribution of LLIN to pregnant women.
5	Bakhtar Development Network (BDN)	Saripule, Balkh, Baghlan & Hirat	<p>1. Case Management:</p> <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians, - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF. <p>2. Vector Control.</p> <ul style="list-style-type: none"> - Provision of safe warehousing of LLINs at provincial. - Continuous distribution of LLIN to pregnant women.
6	Humanitarian Assistance and Development Association for Afghanistan (HADAAF)	Zabul	<p>1. Case Management:</p> <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians, - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF. <p>2. Vector Control.</p> <ul style="list-style-type: none"> - Provision of safe warehousing of LLINs at provincial. - LLINs distribution through campaign in the target areas. - Continuous distribution of LLIN to pregnant women.
7	International Medical Corps UK (IMC)	Nuristan	<p>1. Case Management:</p> <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians, - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF. <p>2. Vector Control.</p> <ul style="list-style-type: none"> - Provision of safe warehousing of LLINs at provincial. - Continuous distribution of LLIN to pregnant women.
8	MOVE Welfare Organisation	Kabul & Badghis	<p>1. Case Management:</p> <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians, - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF. <p>2. Vector Control.</p> <ul style="list-style-type: none"> - Provision of safe warehousing of LLINs at provincial. - LLINs distribution through campaign in the target areas. - Continuous distribution of LLIN to pregnant women.

9	Solidarity for Afghan Families (SAF)	Jawzjan & Nimroz	<p>1. Case Management:</p> <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians, - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF. <p>2. Vector Control.</p> <ul style="list-style-type: none"> - Provision of safe warehousing of LLINs at provincial. - Continuous distribution of LLIN to pregnant women.
10	Medical Refresher Courses for Afghans (MRCA)	Paktia	<p>1. Case Management:</p> <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians, private sector health practitioners and lab technicians (Nangarhar only). - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF. <p>2. Vector Control.</p> <ul style="list-style-type: none"> - Provision of safe warehousing of LLINs at provincial. - LLINs distribution through campaign in the target areas. - Continuous distribution of LLIN to pregnant women.
11	Care of Afghan Families (CAF)	Logar, Kundoz & Badakhshan C1	<p>1. Case Management:</p> <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians, - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF. <p>2. Vector Control.</p> <ul style="list-style-type: none"> - Provision of safe warehousing of LLINs at provincial. - LLINs distribution through campaign in the target areas. - Continuous distribution of LLIN to pregnant women.
12	Medical Management and Research Course Afghanistan (MMRCA)	Ghazni	<p>1. Case Management:</p> <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians, - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF. <p>2. Vector Control.</p> <ul style="list-style-type: none"> - Provision of safe warehousing of LLINs at provincial. - LLINs distribution through campaign in the target areas. - Continuous distribution of LLIN to pregnant women.
13	Coordination Humanitarian of Assistance (CHA)	Farah	<p>1. Case Management:</p> <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians, - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF.

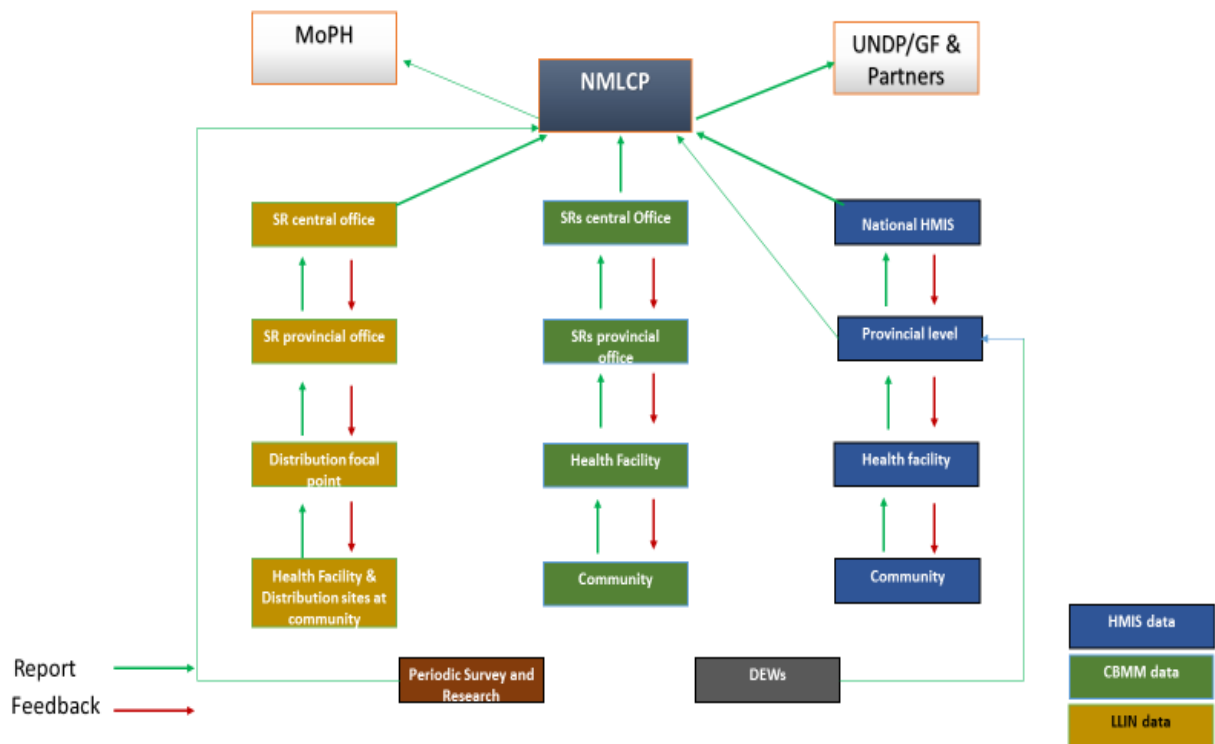
14	BRAC	Kapisa, Parwan & Punjshir	<p>1. Case Management:</p> <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians, - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF. <p>2. Vector Control.</p> <ul style="list-style-type: none"> - Provision of safe warehousing of LLINs at provincial. - LLINs distribution through campaign in the target areas. - Continuous distribution of LLIN to pregnant women.
15	BARAN	Bamyan & Kandahar	<p>1. Case Management:</p> <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians, - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF. <p>2. Vector Control.</p> <ul style="list-style-type: none"> - Provision of safe warehousing of LLINs at provincial. - Continuous distribution of LLIN to pregnant women.
16	HN TPO	Laghman, Kunar, Wardak & Diakundi	<p>1. Case Management:</p> <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians. - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF. <p>2. Vector Control.</p> <ul style="list-style-type: none"> - Provision of safe warehousing of LLINs at provincial. - LLINs distribution through campaign in the target areas. - Continuous distribution of LLIN to pregnant women.
17	OHPM	Khost & Paktika	<p>1. Case Management:</p> <ul style="list-style-type: none"> - Conducting initial and refresher training for health facilities in charges, CHS, CHW and HF lab technicians, - Distribution of ACTs and RDTs to HFs to target Health Facilities. - Collection of malaria CBMM monthly reports from HP and HF. <p>2. Vector Control.</p> <ul style="list-style-type: none"> - Provision of safe warehousing of LLINs at provincial. - LLINs distribution through campaign in the target areas. - Continuous distribution of LLIN to pregnant women.
18	NMLCP, National Malaria and Lashmania Control Program	All Provinces	Supporting implementation of grant activities
19	WHO, World Health Organization	All Provinces	Provision of technical support for implementation of grant activities

Additionally, NMLCP and PR has established vertical data collection system for Community Based Malaria Management (CBMM) and LLIN. Currently, CBMM data from HF and community level (community health workers) and LLINs are reported to those health facilities or directly to provincial levels. Both CBMM and LLIN data are collected by selected SRs and reported on monthly basis to NMLCP and PR (UNDP). The provincial malaria teams check the quality of data such as consistency, accuracy and completeness and prepare quarterly aggregated provincial reports for their provincial use. Moreover, the NMLCP surveillance department along with involved partners reviewed and compiled the collected data and provides feedback via same channel.

Also, the PR with collaboration of NMLCP, HMIS and WHO supported the development of Malaria & Leishmaniasis Information System (MLIS), revision of existing recording and reporting forms and MLIS database has been finalized and the new system will be piloted in four provinces in 2017. The revised system covered both, HMIS and CBMM and the new system will be scaled up nationwide after result of pilot is emerged.

Revised reporting forms are attached as Annex 4.

Data flow and feedback system between NMLCP, PRs, partner and HMIS



3.2. Data cleaning

NMLCP ensures that at health facilities, NGOs, HMIS and provincial malaria officers are involved in the data cleaning process to maximize the malaria data quality. NMCLP has

established surveillance monitoring & evaluation strengthening committee with technical support of WHO, the committee is responsible to review all collected data and provide feedback to the health facility staffs, BPHS, HMIS and SRs to increase the quality of malaria data to acceptable rang.

During the process the different elements of data will be reviewed; such as completeness of malaria reports, checks for consistency and comparing of various variables, and check for plausibility like looking for an acceptable value range of various variables, duplicates and outliers using frequency or average values for various variables.

3.3. Data analysis

The malaria data analysis conducted on monthly and quarterly basis at national and provincial levels. At the end of each quarter, the NMLCP surveillance and M&E departments analyzes malaria key indicators. Additionally, NMLCP is responsible for the annual analysis of malaria data. Survey and research analysis and report writing is done at the national level by the research department and collaborative partners. Moreover, provincial teams do the data analysis in preparation for coordination meetings during which the information is reviewed and feedback provided to health facility staff and BPHS implementers through PHCC and monthly staffs meetings.

The main objective of the data analysis is to know if malaria program is on track, thus, it needs to look at malaria program targets and compare them to the actual program performance. In addition, NMLCP needs the interpretation of the data/information as well for further understand findings and the implications for malaria program. For this purpose, NMLCP encourages the staff at all levels to use common analysis aspects which include comparing actual performance (of specific indicators) against targets, comparing current performance to prior year, compare performance between health facilities of the same province or comparing the performances among of various provinces. Also, NMLCP encourages to analysis combinations of multiple indicators. For example, to understand problems regarding malaria case notification, trends of all related indictors such as number of OPD cases, number of malaria suspects. Additionally, the NMLCP quality assurance department will analyzed the performance of EQA on quarterly basis.

3.4. Data dissemination and feedback

NMCP ensures to share the data to all stakeholders from health facility and community to provincial, national and global levels. The aim of data sharing is to provide feedback and track the progress toward the outcomes that NMCP is pledged in its strategic plan for 2018-2022 to achieve.

NMCP ensures that feedback is reached to health facility staff and communities (CHWs, CHS) through BPHS monthly staffs meeting in all 34 provinces. Moreover, NMLCP disseminates information to stakeholders through annual report and malaria annual review workshop.

The feedback mechanism for NMLCP data at national and provincial levels is through malaria coordination meetings, communicable disease control coordination committee meetings, provincial public health coordination committee (PHCC) meetings, Vector Borne Disease Control Task Force, and annual review meeting. NMLCP provides feedback to provincial levels including BPHS implementers and health facilities mainly during the BPHS coordination and monthly staff meetings.

All levels must document the feedback to ensure that the information is disseminated to all those who need it. This will improve the coordination; motivate staff, clients and the community to be cooperative; as well as strengthen the overall program. However, at this moment, written feedback mechanism is available at national and provincial levels.

3.5. Information use and users

NMLCP uses information for the evidence-based decision making process, supervision, monitoring, evaluation, and malaria program review MPR. At the central level, the information is used to provide evidence for adopting and revising policies and guidelines and to ensure that proper funding is available. Provincial levels use information to ensure that the malaria program is implemented properly at provincial level so that malaria clients get the appropriate care in line with MoPH/NMLCP policies and guidelines. Information is also used to facilitate and improve supervision and monitoring and as the basis for feedback to program staff and service providers to ensure appropriate malaria program implementation.

Health facilities use the information to monitor the malaria trends at their target communities and to take appropriate action and planning at both the facility and community levels.

Communities use the information to increase awareness and enhance care seeking behavior and for better planning.

3.6. Information storage

The data is stored at different levels for further use and as back up. The NMLCP central unit stores all the data from all over the country utilizing HMIS/MMIS database.

Provinces store the data of their own provinces in appropriate NMLCP and HMIS approved standard formats both soft HMIS and MMIS database) and hard copies.

Health facilities store the data in line with HMIS and NMLCP procedures and ensuring confidentiality for the facility planning and future use.

3.7. Data security

Data security is important to maintain both confidentiality and the integrity of the data. There is no information which can identify individuals in all reports, except patient register records in health facilities. NMLCP also ensures that access to data are restricted using a password and paper documents kept in a secured/locked location by the data clerk. The surveillance and M&E unit will ensure to maximize the data security and avoid any lose or deliberate manipulation through regular quarterly back up back up and keep it in CDs and online.

4. Data Quality Assurance

A functional data quality assurance (DQA) system will not only allow program managers and decision makers to verify the quality of the reported data, but also provide periodic information on the underlying data management and reporting systems at program-level and output indicators. Furthermore, if fully implemented a DQA system will allow stakeholders to develop action plans to remedy discovered data quality issues and, if developed correctly, will only marginally burden on-going program supervision systems. Typically, as data flows up through the data management and reporting system from service delivery points, to the intermediate aggregation level (provinces), and finally to the central monitoring and evaluation

(M&E) units, it should undergo several checks for its quality. DQA has the objective to minimize common data errors and to maximize validity, accuracy, and reliability of data.

Four main departments (Epidemiology/surveillance, M&E, Entomology and Quality Assurance) of NMLCP at national level and (Epidemiology/surveillance, M&E, Entomology and Quality Assurance) officers of PMLCP at provincial level are responsible for malaria Data Quality Assurance in the country. Epidemiology/surveillance department is responsible to collect routine data of malaria from BPHS/EPHS through HMIS and SRs and provide feedback to BPHS/EPHS implementers and health facilities through the same channel, as well as, this department is responsible to collect all programmatic data like LLIN distribution, RDT, ACT, trainings, from SRs and partners and provide feedback to them, at the end information shared with MoPH, WHO, Partner and those need it. Provincial PMLCP and Epidemiology officers are responsible to collect data and provide feedback to BPHS/EPHS at province level.

M&E department is responsible to oversee the performance of program implementation, they regularly conduct supportive supervision from central to province, health facilities and community to see the existed system, find gaps and provide on job training if needed, provincial PMLCP officer is responsible to oversee malaria activities at provincial level and link with NMLCP M&E department.

Quality assurance department in NMLCP and quality assurance officer in PMLCP is responsible for quality of malaria diagnosis, they regularly cross check malaria slides and conduct supportive supervision to health facilities and provide on job training for lab technician, provide feedback to related health facility and provincial QA unit.

NMLCP Entomology department is responsible to monitor LLINs distribution and insecticide resistance. They conduct regular supervisory visit to community to monitor the LLINs distribution and conduct quality test in entomology sentinel site to monitor insecticide resistance. UNDP as PR have its own M&E system to monitor and evaluate the malaria related activities which are implemented by selected SR in the country.

NMLCP and provincial team are conducting supportive supervisory visit from health facilities and community based activities which cover all aspect of malaria program in Afghanistan like LLINs distribution and CBMM strategy implementation at community level and malaria case management at health facility level. The main purpose of supervision is to improve quality of malaria interventions and fill the gaps.

NMLCP continue to gather more malaria specific information through MIS, sentinel sites and administrative records for analysis, mapping and integration with other health data. Quarterly malaria updates on epidemiological profile and progress in malaria control are disseminated at both national and provincial levels. feedback is given to the BPHS/EPHS and partners at provincial level on malaria program.

4.1. Period Surveys and Researches

NMLCP plans to undertake surveys and surveillance for malaria information, both in case management and vector control surveys & surveillance in different target groups in collaboration with various partners. Health facility assessment is conducted regularly to obtain information which cannot be obtained through the routine program M&E and surveillance system. The protocols for the surveys are based on international recommendations. NMLCP will continuously endeavor to undertake research using the operational data generated to use data already existing to inform policy designs and monitoring the implementation of strategies and interventions.

Examples of specific tailored measures (MIS, MPR, TES, etc.) are taken to generate outcome and impact level data include the following:

4.1.1. Malaria Indicator Survey (MIS)

The Afghanistan malaria indicator survey (MIS) is to track the progress in key malaria interventions and changes in malaria prevalence. Progress in these indicators is to be assessed within the framework of the targets set in the national malaria strategic plan of NMLCP and as compared to the baseline data obtained during the previous rounds. The key indicators that the survey aimed to track are those in relation to malaria vector control, case management, information-education-communication and the prevalence of infections.

The aim of the survey is to provide precise estimates of the key indicators at the national level, between urban and rural areas, malaria strata and where possible by province. To achieve this, a national sample of households is required.

4.1.2. Malaria Program Review (MPR)

Based on WHO recommendation, the MPR should be conducted every 3–5 years as part of the mid-term and end-of-term evaluations before the strategic plans are revised and updated and, if possible, as part of the evaluation preceding a new GF proposal. Consequently, the NMLCP of the MoPH and partners planned to conduct to evaluate the performance of the national malaria control programme and recommend priority areas for revision of the existing national strategic plan. Moreover, this MPR is an in-depth assessment of the GF NFM grant for the malaria control program in Afghanistan. Under this review the national response to malaria in Afghanistan will be evaluated in a comprehensive manner by external and internal experts who have extensive expertise in different areas of malaria control and elimination, order to identify the existing gaps/challenges and advise on possible solutions with the aim to improve the performance of the national malaria programme, revise the existing national strategic plan on malaria control and elimination and assist NMLCP in resource mobilization.

4.1.3. Therapeutic Efficacy Surveillance Study (TES)

This surveillance study is one-arm evaluation of clinical and parasitological responses to directly observed treatment with first line anti-malarial for uncomplicated *P. falciparum* malaria and chloroquine for *P. vivax* malaria. People with uncomplicated malaria who meet the study inclusion criteria will be enrolled, treated on site with first line anti-malarial for uncomplicated *P.falciparum* and *P.vivax* malaria and monitored during the period of study accordingly. The follow-up will consist of a fixed schedule of check-up visits and corresponding clinical and laboratory examinations. On the basis of the results of these assessments, the patients will be classified as having therapeutic failure (early or late) or an adequate response. The proportion of patients experiencing therapeutic failure during the follow-up period will be used to estimate the efficacy of the study drug(s). PCR analysis will be used to distinguish between a true recrudescence due to treatment failure and episodes of reinfection.

The general objective of this study is to assess the therapeutic efficacy and safety of first line anti-malarial for the treatment of uncomplicated *P. falciparum* and *P.vivax* malaria in specific malaria endemic provinces.

4.2. Routine supervision and Monitoring & Evaluation

NMLCP relies on a diverse range of sources for provision of data and its reporting mechanism which include routine and integrated data from health facilities through HMIS and programmatic vertical data through NMLCP departments and Partners. Various measures will be undertaken to ensure quality in the malaria services as well as data and reporting system.

Central NMLCP monitoring and program staff will conduct regular supervision and monitoring visits to the provincial offices and warehouses to oversee the progress of LLINs free house to house distribution at targeted provinces, and to ensure that program implementation is going on in accordance with the plan. In case of any deviation in the implementation of the program, they will take corrective actions to bring the implementation into the right track and guide the provincial office staff on proper implementation of the program. Monitoring staff will use M&E checklist for Central Level during each monitoring visit from provincial office. The filled checklist and information generated from the checklist and will be recorded into M&E database in the M&E Department at the central level. Face to face feedback during each monitoring visit as well as written feedback after each monitoring visit will be provided to provincial staff. In addition, country staff will provide feedback to provincial focal points during annual Performance Review Meetings. In addition to M&E staff, NMLCP program staff may also conduct monitoring visits to the provincial offices on an ad hoc basis to oversee progress of program implementation.

The NMLCP will ensure that the routine supervisory visits include data quality assurance for malaria services.

NMLCP will coordinate the M&E activities with relevant stakeholders through following forums as well:

- A. Quarterly BPHS coordination meeting: MOPH/GCMU conducts quarterly coordination meeting with all BPHS implementers in the country. The aim is to review the trend of health indicators in the Afghanistan and identify challenges and prepare action plan to overcome it.
- B. Quarterly HMIS task force meetings: HMIS unit of MOPH conducts quarterly meetings aiming at organizing health data collection provision of feedback and improvements of data quality. The participants are BPHS NGOs, NMLCP, MOPH/GCMU and other development partners.
- C. Country coordination mechanism (CCM) and oversight coordination committee meeting: The CCM and oversight meetings on regular basis aiming at monitoring the progress of the GF projects in the country. The participants are member of parliaments, MOPH, development partners, donors, other ministries such as ministry of women affairs, ministry of education etc.
- D. Review meetings of Malaria: NMLCP conducts bi-annual review meeting in central level aiming at review of the malaria epidemiological data and provide feedback to malaria SRs and provincial NMLCP colleagues and develop action plan to address the challenges.

NMLCP will develop the strong system by utilizing provincial review meetings at some specific high burden malaria provinces. During provincial review meetings, all health facilities bring all filled reporting forms (monthly/quarterly report on malaria cases management and LLIN) and present their data.

During the event PMLCP officer carefully review their data and compare it with their reporting forms to find out any discordance between them, errors or missing data. Feedback is done instantly in the meetings and errors are corrected before the final submission.

5. M&E budget

For the budget to conduct M&E activities NMLCP relies on partners, especially on GF-ATM and necessary activities such as conducting review meetings, supervisions and trainings are covered through GF-ATM grants. Also, some activities are covered by the support of WHO. The M& E costs have been calculated based on NMLCP strategic plan 2018-2022, Annex-5 (M&E budget).

6. M&E capacity building

The NMLCP has continued to develop its capacity for M&E through technical assistance and support provided by GF-ATM, WHO and various partners through the following aspects:

- Training and on-the-job-training activities for SNO/PMLCP officers and HMIS staff respectively: training sessions and on-the-job-training will take place to improve the capacity of all personnel working involved in M&E activities from the MoPH and malaria implementing entities respectively. The training topics will vary from data management, analysis, utilization and report writing.
- Information sessions on indicators definitions and reporting on national malaria indicators
- Another capacity building approach is the continuous feedback mechanisms and information sharing culture that the NMLCP will instate which represents a form of continuous training.
- Regular follow-up meetings with relevant partners to discuss M&E findings and achieved results in specific period. During these meetings, detailed discussions malaria-related M&E interventions/issues will take place which will enrich the participants' knowledge in this field and improves their M&E capacity overall.
- Capacity building activities to strengthen the feedback mechanisms to the provincial HMIS, SNO/PMLCP officer and CDC and SRs staff during PR and SR coordination meetings.

The M&E activities of malaria control program is carried out by M&E department of NMLCP at central level and the PMLCPs at provincial level, as well as the M&E system of PR are responsible for monitoring and evaluation of their own malaria related activities. The human resource of M&E NMLCP department is summarized in the below table:

No	Position	No of positions	Capacity	Additional Trainings Required
M&E staff of NMLCP and PRs				
1	Head of M&E department of NMLCP	1	Medical doctor, received basic Malaria training	Fundamental M&E, Data management (data analysis and

			courses inside the country and training course on counter measures of communicable disease in Japan	reporting writing) and Operational Research. Training on new software like SPSS, Epi info
2	NMLCP	2	Received M&E training inside the country	Fundamental M&E, Data management and Operational Research
3	PMLCP officers	29	Received basic M&E training inside the country	Fundamental M&E, Data management and Operational Research
Additional staff carry out M&E activities				
1	Head of QA department of NMLCP	1	Technologist, received malaria lab training inside the county	Advance Malaria laboratory training courses specifically laboratory quality assurance system and management.
2	QA technician of NMLCP	3	Lab technicians, received lab QA training in Oman and inside the country	Advance Malaria laboratory training courses specifically laboratory quality assurance system and management.
3	QA technician of PMLCP	29	Lab technicians, received Lab training inside the country	Advance Malaria laboratory training courses specifically laboratory quality assurance system and management.
4	Head of Epidemiology and surveillance department of NMLCP	1	Medical doctor, received Malaria Management training course in China	Advance training courses on Surveillance and Epidemiology, statistic and Research
5	Surveillance and EPR officer of NMLCP	2	Medical doctor, received training inside the country	Basic training courses on Surveillance and Epidemiology
6	Epidemiology and surveillance officer of PMLCP	29	High school graduated, received training inside the country	Basic training courses on Surveillance and Epidemiology
7	Head of Entomology department of NMLCP	1	Bachelor of science, received Master in Entomology from Sudan, different entomology trainings outside the country	Refresher training on Entomology new technique and recent update
8	Entomology officer of NMLCP	1	Bachelor of science, received Master in Entomology from Sudan, different entomology trainings outside the country	Refresher training on Entomology new technique and recent update, Monitoring and Evaluation
9	Entomology technician of NMLCP	4	Entomology technician, received training inside the country	Basic M&E and Entomology training
10	Entomology technician of NMLCP	14	Entomology technician, received training inside the country	Basic M&E and Entomology training

7. Annexes:

7.1. *Annex 1: HMIS reporting forms*

7.2. *Annex 2: NMLCP supervisory checklist*

7.3. *Annex 3: MLIS reporting and recording forms*

7.4. *Annex 4: Work Plan with Budget - NMLCP National Strategic Plan 2018-2022*

7.5. *Annex 5: National Monitoring Checklist (NMC)*

7.6. *Annex 6: Malaria Indicators Reference Sheet*