

Monitoring and Evaluation Indicators to be Used within The President's Malaria Initiative

14 April 2009

Indicators for Use in PMI - This table includes the full set of indicators to be used for monitoring and evaluation of PMI. To adapt the table for a country, please delete full rows associated with indicators that will *not* be for PMI purposes in that country. When selecting indicators it will be useful to consider not only how information will be collected but also how the information will be used to improve program activities, who would be interested in this information and what decisions could be made based on this information. M&E advisors will work with teams to select indicators and to adapt the table. The four right-hand columns now offer suggested data sources, dates for data collection, frequency of reporting and designated parties responsible, but these should be adapted according to country-specific M&E plans and timelines.

USAID Malaria Indicators - Eleven of these malaria program indicators (designated as coming from PMP) are recommended to come from the Mission's Performance Monitoring Plan (PMP). Six of these PMP indicators (designated as coming from PMP & OP) will be included as OP indicators in FY 08 for reporting within the FACTS system.

Evaluation Indicators – Impact		Definition	Data source	Dates for data collection	Frequency of reporting	Responsible Party
Impact 1	All-cause under-five mortality rate	All-cause child mortality rate, ages 0–4 years, expressed as deaths per 1000 live births, or ${}_5q_0$	DHS survey, MICS survey or census	<i>Give dates for planned surveys</i>	<i>Baseline and follow-up</i>	
Impact 2	Proportion of deaths attributed to malaria among children under five nationally	Number of deaths to children under five attributed to malaria through verbal autopsy for the period three years prior to survey/Deaths to children under five reported for the period three years before survey	<i>Nationally representative VA survey as part of surveys large enough to estimate ${}_5q_0$</i>	<i>Give dates for planned VA surveys</i>	<i>Baseline, follow-up</i>	
Impact 3	Proportion of deaths attributed to malaria among children under five in a demographic surveillance site <i>In a case where this indicator is selected, we suggest that a full MIS be implemented in DSS populations.</i>	Number of deaths to children under five attributed to malaria through verbal autopsy according to DSS protocol/Deaths to children under five within a demographic surveillance site	<i>DSS</i>	<i>Discuss with DSS</i>	<i>Discuss with DSS</i>	

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Evaluation Indicators – Impact		Definition	Data source	Dates for data collection	Frequency of reporting	Responsible party
Impact 4	Proportion of children 6–59 months old with moderate or severe anemia (<8g/dL)	Number of children aged 6-59 months with a hemoglobin measurement of <8g/dL/Total number of children aged 6-59 months who had hemoglobin measurements obtained during household survey.	<i>DHS survey, MIS survey Note: the DHS uses a <7g/dL cutoff for severe anemia as a nutrition measurement – data can be tabulated to produce <8g/dL figure for malaria.</i>	<i>Give dates for planned coverage surveys</i>	<i>Baseline, (midpoint) and follow-up</i>	
Impact 5	Proportion of children 6-59 months with malaria infection	Number of children aged 6-59 months with malaria infection detected by microscopy/Total number of children aged 6-59 months tested for malaria parasites by microscopy	<i>MIS survey</i>	<i>Give dates for planned coverage surveys</i>	<i>Baseline, (midpoint) and follow-up</i>	
Evaluation Indicators – Outcome		Definition	Data source	Dates for data collection	Frequency of reporting	Responsible party
Outcome 1	Proportion of households with at least one ITN	Number of households that own at least one ITN/Number of households surveyed	<i>DHS survey, MIS survey, MICS survey</i>	<i>Give dates for planned coverage surveys</i>	<i>Baseline, (midpoint) and follow-up</i>	
Outcome 2 Will come from PMP	Proportion of households with a pregnant woman or children under 5 with at least one ITN	Number of households with a pregnant woman or child < 5 that own at least one ITN/Number of households with a pregnant woman or child <5 surveyed	<i>DHS survey, MIS survey, MICS survey</i>	<i>Give dates for planned coverage surveys</i>	<i>Baseline, (midpoint) and follow-up</i>	MISSION

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Evaluation Indicators – Outcome		Definition	Data source	Dates for data collection	Frequency of reporting	Responsible party
Outcome 3	Proportion of population of all ages who slept under an ITN the previous night	Number of household residents and visitors who slept under an ITN the previous night/Total number of residents and visitors who slept in surveyed households the previous night	<i>DHS survey, MIS survey</i>	<i>Give dates for planned coverage surveys</i>	<i>Baseline, (midpoint) and follow-up</i>	
Outcome 4 Will come from PMP	Proportion of children under five years old who slept under an ITN the previous night	Number of children under 5 years old who slept under an ITN the previous night/Total number of children under 5 years who slept in surveyed households the previous night	<i>DHS survey, MIS survey, MICS survey</i>	<i>Give dates for planned coverage surveys</i>	<i>Baseline, (midpoint) and follow-up</i>	MISSION
Outcome 5	Proportion of pregnant women who slept under an ITN the previous night	Number of pregnant women who slept under an ITN the previous night/Total number of pregnant women who slept in surveyed households the previous night	<i>DHS survey, MIS survey</i>	<i>Give dates for planned coverage surveys</i>	<i>Baseline, (midpoint) and follow-up</i>	
Outcome 6	Proportion of households which received spraying through an IRS campaign within the last 12 months.	Number of households that were sprayed with a residual insecticide during an IRS campaign in the last 12 months/ Total number of households sprayed.	<i>DHS survey, MIS survey,</i>	<i>Give dates for planned coverage surveys</i>	<i>Baseline, (midpoint) and follow-up</i>	

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Evaluation Indicators – Outcome		Definition	Data source	Dates for data collection	Frequency of reporting	Responsible party
Outcome 7	Proportion of targeted houses adequately sprayed with a residual insecticide in the last 12 months <i>(adequately to be defined according to MERG criteria)</i>	Number of occupied houses in the IRS program target area adequately sprayed with a residual insecticide in the last 12 months/Total number of occupied houses in target area	<i>Activity reports</i>	On-going	Annually	
Outcome 8	Proportion of children under 5 who slept under an ITN the previous night or in a house sprayed with IRS in the last 12 months	Number of children under 5 years old who spent the previous night under an ITN or in a house that was sprayed with IRS in the last 12 months/Total number of children under 5 years who slept in surveyed households the previous night	<i>DHS survey, MIS survey, MICS survey</i>	<i>Give dates for planned coverage surveys</i>	<i>Baseline, (midpoint) and follow-up</i>	
Outcome 9	Proportion of pregnant women who slept under an ITN the previous night or in a house sprayed with IRS in the last 12 months	Number of pregnant women who spent the previous night under an ITN or in a house that was sprayed with IRS in the last 12 months/Total number of pregnant women who slept in surveyed households the previous night	<i>DHS survey, MIS survey</i>	<i>Give dates for planned coverage surveys</i>	<i>Baseline, (midpoint) and follow-up</i>	

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Evaluation Indicators – Outcome		Definition	Data source	Dates for data collection	Frequency of reporting	Responsible party
Outcome 10	Proportion of households with at least one ITN and/or sprayed by IRS in the last 12 months	Number of households that have at least one ITN and/or have been sprayed by IRS in the last 12 months/Total number of households surveyed.	<i>DHS survey, MIS survey, MICS survey</i>	<i>Give dates for planned coverage surveys</i>	<i>Baseline, (midpoint) and follow-up</i>	
Outcome 11 Will come from PMP	Proportion of women who received intermittent preventive treatment during antenatal care (ANC) visits during their last pregnancy	Number of women who received two or more doses of a recommended antimalarial drug treatment during ANC visits to prevent malaria during their last pregnancy that led to a live birth within the last two years/Total number of women surveyed who had a live birth in the last two years	<i>DHS survey, MIS survey, MICS survey</i>	<i>Give dates for planned coverage surveys</i>	<i>Baseline, (midpoint) and follow-up</i>	MISSION
Outcome 12 Will come from PMP	Proportion of children under five years old with fever in the last two weeks who received treatment with ACTs within 24 hours of onset of fever	Number of children under five who had a fever in the two weeks prior to a survey who received ACTs for treatment within 24 hours of onset of fever/ Total number of children under five who had a fever reported for the two weeks prior to a survey	<i>DHS survey, MIS survey, MICS survey</i>	<i>Give dates for planned coverage surveys</i>	<i>Baseline, (midpoint) and follow-up</i>	MISSION
Outcome 13	Proportion of children under five years old with fever in the last two weeks who received treatment with an antimalarial according to national policy within 24 hours of onset of fever	Number of children under five who had a fever in the two weeks prior to a survey who received an antimalarial according to national policy at the time of survey for treatment	<i>DHS survey, MIS survey, MICS survey</i>	<i>Give dates for planned coverage surveys</i>	<i>Baseline, (midpoint) and follow-up</i>	

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		within 24 hours of onset of fever/ Total number of children under five who had a fever reported for the two weeks prior to a survey				
Outcome 14	Proportion of children under five years old with fever in the last two weeks who received any antimalarial treatment	Number of children under five who had a fever in the two weeks prior to a survey who received any antimalarial treatment / Total number of children under five who had a fever reported for the two weeks prior to a survey	<i>DHS survey, MIS survey, MICS survey</i>	<i>Give dates for planned coverage surveys</i>	<i>Baseline, (midpoint) and follow-up</i>	
Outcome 15	Proportion of Children under 5-years old with fever in the last 2 weeks who had a finger or heel stick	Number of children under 5 years old who had a fever in the previous 2 weeks who had a finger/heel stick / Total number of children under 5 years old who had a fever in the previous 2 weeks.	<i>DHS survey, MIS survey, MICS survey</i>	<i>Give dates for planned coverage surveys</i>	<i>Baseline, (midpoint) and follow-up</i>	

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Sentinel Site Indicators – Outpatients		Definition	Data source	Dates for data collection	Frequency of reporting	Responsible party
Sentinel Site 1	Number of outpatients	Total number of outpatients, for <5 and 5+ separately	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 2	Number of clinical outpatient cases of malaria	Number of clinical outpatient cases of malaria, for <5 and 5+ separately	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 3	Number of blood slides examined for malaria from outpatients	Total number of blood slides examined for malaria from outpatients, for <5 and 5+ separately	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 4	Number of slide-confirmed outpatient cases of malaria	Number of slide-confirmed outpatient cases of malaria, for <5 and 5+ separately	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 5	Number of RDTs examined for malaria from outpatients	Total number of RDTs, for <5 and 5+ separately	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 6	Number of RDT-confirmed outpatient cases of malaria	Number of RDT – confirmed outpatient cases of malaria, for <5 and 5+ separately	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site Indicators – Inpatients		Definition	Data source	Dates for data collection	Frequency of reporting	Responsible party
Sentinel Site 7	Number of inpatients	Total number of inpatients, for <5 and 5+ separately	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 8	Number of clinical inpatient cases of malaria	Number of clinical inpatient cases of malaria, for <5 and 5+ separately	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 9	Number of blood slides examined for malaria from inpatients	Total number of blood slides examined for malaria from inpatients, for <5 and 5+ separately	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	

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Sentinel Site Indicators – Inpatients		Definition	Data source	Dates for data collection	Frequency of reporting	Responsible party
Sentinel Site 10	Number of slide-confirmed inpatient cases of malaria	Number of slide-confirmed inpatient cases of malaria, for <5 and 5+ separately	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 11	Total number of RDTs examined for malaria from inpatients	Total number of RDTs examined for malaria from inpatients, for <5 and 5+ separately	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 12	Number of RDT-confirmed inpatient cases of malaria	Number of RDT – confirmed inpatient cases of malaria, for <5 and 5+ separately	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 13	Number of inpatient anemia cases <5	Number of anemia cases among inpatients <5	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 14	Number of inpatient deaths	Number of inpatient deaths, for <5 and 5+ separately	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 15	Number of inpatient slide-confirmed malaria deaths	Number of inpatient slide-confirmed malaria deaths, for <5 and 5+ separately	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 16	Number of inpatient RDT confirmed malaria deaths	Number of inpatient RDT confirmed malaria deaths, for <5 and 5+ separately	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site Indicators – IPTp		Definition	Data source	Dates for data collection	Frequency of reporting	Responsible party
Sentinel Site 17	Number of pregnant women who received IPTp-1	Number of pregnant women who received IPTp-1	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 18	Number of pregnant women who received IPTp-2	Number of pregnant women who received IPTp-2	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 19	Total number of pregnant women who attended first ANC visit	Total number of pregnant women who attended first ANC visit	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	

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Sentinel Site Indicators – Treatment		Definition	Data source	Dates for data collection	Frequency of reporting	Responsible party
Sentinel Site 20	Number of antimalarial treatments	Number of antimalarial treatments prescribed by drug, for <5 and 5+	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 21	Number of days out of stock in the last month for each antimalarial	Number of days out of stock in the last month for each antimalarial	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Sentinel Site 22	Number of children <5 receiving a blood transfusion	Number of children <5 receiving a blood transfusion	<i>Sentinel sites</i>	<i>On-going</i>	<i>Monthly</i>	
Monitoring Indicators - Process and Output		Definition	Data source	Dates for data collection	Frequency of reporting	Responsible party
Monitoring ITN 1 Will come from PMP, same as OP	Number of ITNs purchased with USG funds	Number of ITNs purchased with USG funds	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	MISSION
Monitoring ITN 2	Number of ITNs distributed or sold nationally	Number of ITNs distributed or sold nationally	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	
Monitoring ITN 3 Will come from PMP, same as OP	Number of ITNs distributed or sold nationally with USG funds	Number of ITNs distributed or sold nationally with USG funds	<i>Activity reports</i>			MISSION
Monitoring ITN 4	BCC/IEC activities to promote ITN use	<i>Country team should develop a useful indicator to monitor community health education or information activities that specifically promote sleeping under ITNs</i>	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	
Monitoring ITN 5	Number of nets retreated	Number of bednets retreated	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	
Monitoring IRS 1 Will come from PMP, same as OP	Number of people trained to deliver IRS	Number of people who have been trained with USG funds to deliver IRS according to protocol	<i>Activity reports</i>	<i>On-going</i>	<i>Annually</i>	MISSION

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Monitoring Indicators - Process and Output		Definition	Data source	Dates for data collection	Frequency of reporting	Responsible party
Monitoring IRS 2 Will come from PMP, same as OP	Number of houses sprayed with IRS with USG funds	Number of occupied houses in the IRS program target area sprayed with a residual insecticide in the most recent round with USG funds	<i>Activity reports</i>	<i>On-going</i>	<i>Annually</i>	MISSION
Monitoring IRS 3	Proportion of targeted houses sprayed with a residual insecticide	Number of occupied houses in the IRS program target area sprayed with a residual insecticide/ Total number of occupied houses in the IRS program target area	<i>Activity reports</i>	<i>Each spray round</i>	<i>Each spray round</i>	
Monitoring IRS 4	BCC/IEC activities to promote IRS participation	Country team should develop a useful indicator to monitor community health education or information activities that specifically promote IRS participation	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	
Monitoring IPTp 1 Will come from PMP	Number of SP tablets purchased with USG funds	Number of SP tablets purchased with USG funds	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	MISSION
Monitoring IPTp 2	Number of pregnant women receiving IPTp 2	Number of women who received second dose of recommended antimalarial drug treatment as IPTp	<i>HMIS or other</i>	<i>Quarterly</i>	<i>Annually</i>	
Monitoring IPTp 3 Will be reported in Monitoring Training 1	Number of ANC health workers trained in IPTp	Number of ANC health workers trained with USG funds in intermittent prevention of malaria in pregnancy	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	

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Monitoring Indicators - Process and Output		Definition	Data source	Dates for data collection	Frequency of reporting	Responsible Party
Monitoring IPTp 4	BCC/IEC activities to promote IPTp	<i>Country team should develop a useful indicator to monitor community health education or information activities that specifically promote antenatal care use</i>	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	
Monitoring IPTp 5	BCC/IEC activities to promote antenatal care use	<i>Country team should develop a useful indicator to monitor community health education or information activities that specifically promote antenatal care use</i>	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	
Monitoring ACT 1 Will come from PMP, same as OP	Number of ACT treatments purchased with USG funds	Number of ACT treatments purchased with USG funds	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	MISSION
Monitoring ACT 2	Number of treatment courses for severe malaria purchased	Number of treatments w/ drugs for severe malaria purchased with USG funds	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	
Monitoring ACT 3	Proportion of government health facilities with ACTs available for treatment of uncomplicated malaria	Number of health facilities with no reported stockouts of nationally recommended ACTs lasting one week or longer at any time during the past three months/total number of government health facilities	<i>Facility records</i>	<i>Quarterly</i>	<i>Annually</i>	

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Monitoring Indicators - Process and Output		Definition	Data source	Dates for data collection	Frequency of reporting	Responsible party
Monitoring ACT 4	Number of children under five receiving ACTs	Number of children under five years old who received ACTs for treatment of uncomplicated malaria	<i>HMIS or other</i>	<i>Quarterly</i>	<i>Annually</i>	
Monitoring ACT 5	Number of people aged 5+ receiving ACTs	Number of people aged 5 or over who received ACTs for treatment of uncomplicated malaria	<i>HMIS or other</i>	<i>Quarterly</i>	<i>Annually</i>	
Monitoring ACT 6 Will be reported in Monitoring Training 1	Number of health workers trained in case management with ACTs	Number of health workers trained with USG funds in case management with ACTs	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	
Monitoring Treatment 1	BCC/IEC activities to promote prompt care seeking for fever and recognition of severe malaria by caregivers	<i>Country team should develop a useful indicator to monitor community health education or information activities that specifically promote prompt care seeking for fever and severe malaria for under 5s</i>	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	
Monitoring Treatment 2 Will be reported in Monitoring Training 1	Number of health workers trained in home-based management of fever	Number of health workers trained with USG funds in home-based management of fever	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	

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Monitoring Indicators - Process and Output		Definition	Data source	Dates for data collection	Frequency of reporting	Responsible party
Monitoring Treatment 3	Proportion of planned malaria-related supervisions conducted	Number of planned malaria case management or prevention supervision visits that were conducted in a quarter/Number of planned malaria case management or prevention supervision visits for that quarter	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	
Monitoring Diagnosis 1	Number of RDTs purchased	Number of RDTs purchased with USG funds	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	
Monitoring Diagnosis 2	Proportion of government mid-level health centers capable of laboratory diagnosis of malaria	Number of government mid-level health centers with trained and equipped staff to perform laboratory diagnosis of malaria/Total number of government mid-level health centers	<i>Facility survey</i>	<i>Annually</i>	<i>Annually</i>	
Monitoring Diagnosis 3	Number of health workers trained in laboratory diagnostics	Number of health workers trained with USG funds in diagnosis with RDTs or microscopy	<i>Activity reports</i>	<i>Quarterly</i>	<i>Annually</i>	
	Will be reported in Monitoring Training 1					
Monitoring Diagnosis 4	Proportion of malaria cases confirmed with laboratory diagnostics	Number of malaria cases to all ages confirmed with RDTs or microscopy/Total number of malaria cases to all ages	<i>HMIS or other</i>	<i>Annually</i>	<i>Annually</i>	
Monitoring Training 1	Number of people (medical personnel, health workers, community workers, etc.) trained with USG funds in malaria treatment or prev	Sum of indicators: Monitoring IPTp 3, Monitoring ACT 6, Monitoring Treatment 2 & Monitoring Diagnosis 3				MISSION
	Will come from PMP, same as OP					

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