INSTALLATION AND SETUP GUIDE FOR THE CCM SUMMARY—ANNEXES 1-6

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Management tools for the whole-of-country approach

CCM Summary
Regional Dashboard
Principal Recipient Management Dashboard
Subrecipient Management Tool

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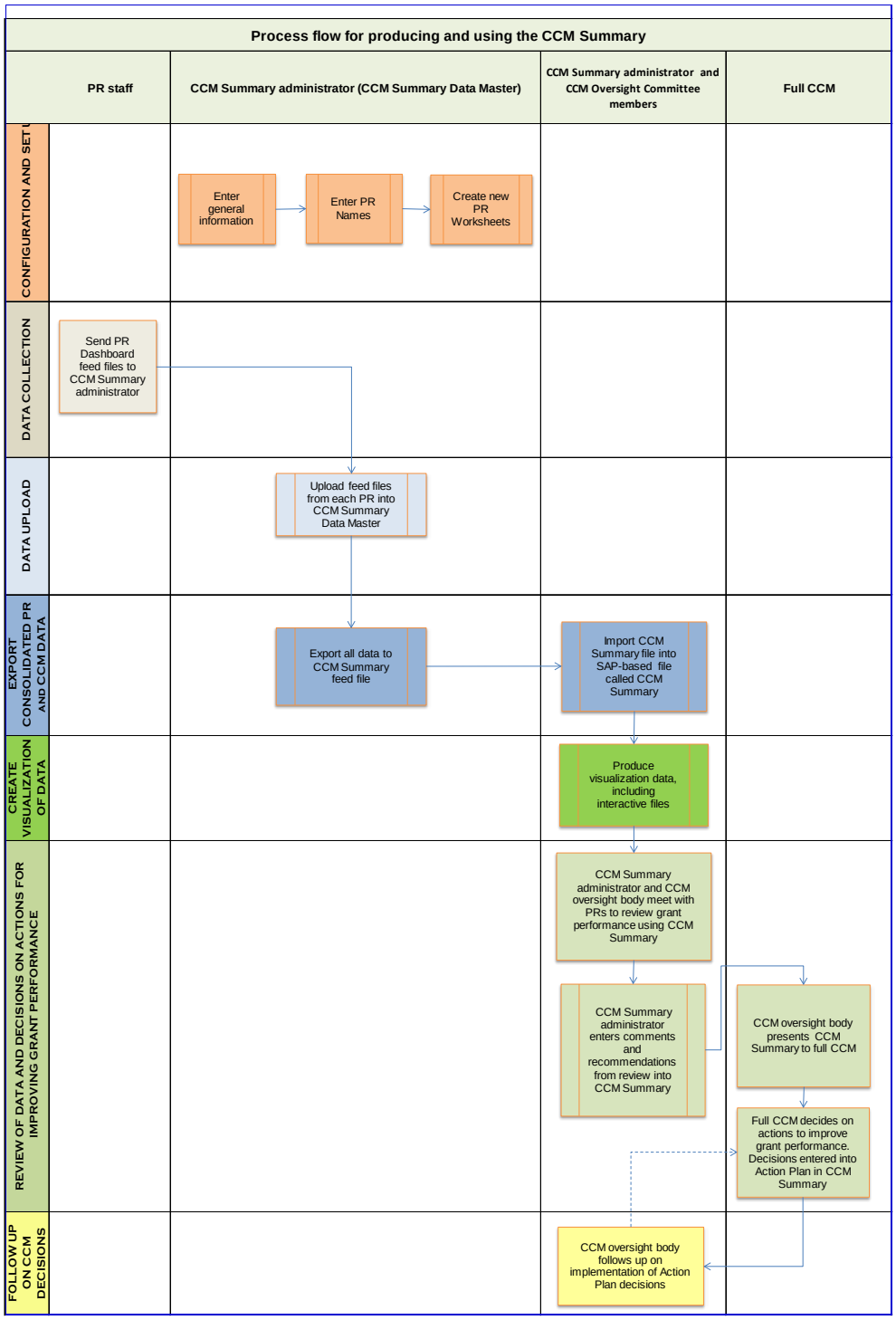
ABBREVIATIONS AND ACRONYMS

ACTs		artemisinin- based combination therapies
ART		antiretroviral treatment
AS/AQ		Artesunate Amodiaquine
CCM		country coordinating mechanism
CHW		community health workers
CSS		community systems strengthening
DST		drug-susceptibility testing
Global Fund		Global Fund to Fight AIDS, Tuberculosis and Malaria
HMIS		health management information system
IPT		intermittent presumptive treatment
IRS		indoor residual spraying
KPs		key populations
LLIN		long lasting insecticidal nets
MDR		multidrug-disease resistant
MSH		Management Sciences for Health
MSM		men who have sex with men
PMTCT		prevention of mother-to-child transmission
PPM		pooled procurement mechanism
PR		principal recipient
PSM		procurement and supply management
PWID		people living with the diseases
RR-TB		Rifampicin resistant TB
SR		subrecipient
SSR		sub-SR
TG		transgender

ANNEX 1. PROCESS FLOW



ANNEX 2. FINANCIAL MANAGEMENT INDICATORS

Indicator Name	Indicator label in CCM Summary	What does the indicator seek to measure or monitor?	Calculation	Data source
Budget	Budget	Shows the total approved budget for all the PRs with active grants in each component.	Sum of all PRs budgets for the component.	Budget figures are from the approved grant agreement. The individual budget for each active grant is included among the data in the feed files sent by the principal recipient (PR) to the country coordinating mechanism (CCM).
Disbursement vs. budget	Disbursement	Shows the total disbursement for all the PRs in each component. Compares the disbursement for all PRs with their budget for each component.	**Numerator:** $ Cumulative disbursements made by the Global Fund to the PRs for the component. **Denominator**: $ Cumulative budget for all grants for the component. **Explanation of alert colors**: Red: less than 80% Yellow: greater than or equal to 80% and less than 100% Green: greater than or equal to 100%	PR records and bank records. Disbursements from the Global Fund will be shown when they are recorded in the PR bank account. Disbursements by the Global Fund on behalf of the PR to voluntary pooled procurement (now known as pooled procurement) will be shown as of the date advised by the Global Fund. The disbursements made to date for each active grant is

Indicator Name	Indicator label in CCM Summary	What does the indicator seek to measure or monitor?	Calculation	Data source
				included among the data in the feed files sent by the PR to the CCM.
Expenditure vs budget	Expenditure	Shows the total expenditures for all the PRs in each component. Compares the expenditures for all PRs with their budget for each component.	**Numerator:** $ Cumulative expenditures for all the PRs for each component **Denominator**: $ Cumulative budget for all the PRS for each component **Alerts:** this rate shows an alert in 3 different colors: Red: less than 60% Yellow: greater than or equal to 60% and less than 90% Green: greater than or equal to 90%	PR records and bank records. Expenditure to pooled procurement mechanism (PPM) will be shown as of the date advised by the Global Fund. Expenditure for the grant will be the sum of PR expenditure and subrecipient (SR) expenditures (including disbursements by the SRs to sub-SRs (SSRs). The expenditures made to date by each active grant are included among the data in the feed files sent by the PR to the CCM.

Indicator Name	Indicator label in CCM Summary	What does the indicator seek to measure or monitor?	Calculation	Data source
Financial chart cumulative per period for each PR	See Chart	Shows a comparative chart between the disbursement, budget and the expenditures for the component for all PRs	Sum of all the disbursements, budget and the expenditures for all PRs.	The expenditures made to date by each active grant are included among the data in the feed files sent by the PR to the CCM

ANNEX 3. PR RATING

Indicator Name	Indicator label in CCM Summary	What does the indicator seek to measure?	Data elements used to calculate the indicator	Data source
Global Fund rating for each PR	Rating	This indicator reflects both the PRs programmatic achievements against targets and additional factors related to management of the grant which may affect grant performance.	The Global Fund uses a rating methodology that considers the PRs programmatic achievements against targets. The Global Fund can increase or downgrade the rating based on consideration of various management factors. The CCM Summary uses the same thresholds as the Global Fund to determine the color of the alert	Documentation sent to PR by Global Fund when disbursements are issued The most recent performance rating given by the Global Fund for

Indicator Name	Indicator label in CCM Summary	What does the indicator seek to measure?	Data elements used to calculate the indicator	Data source
			appearing in the dashboard. See the explanation of the color scheme below. Red: Unacceptable performance Orange: Performance inadequate but potential demonstrated Yellow: Adequate performance Green: Performance meets expectations Blue: Performance exceeds expectations	each active grant is included among the data in the feed files sent by the PR to the CCM.

ANNEX 4. STANDARD OUTPUT AND COVERAGE PROGRAMMATIC INDICATORS OF THE GLOBAL FUND

(As of October 2014)[1]

HIV/AIDS

Indicator no. from Global Fund website	Treatment, care and support (for people living with HIV/AIDs)
TCS-1	Number of adults and children currently receiving antiretroviral therapy among all adults and children living with HIV (Number & %)
TCS-2	Number of people living with HIV that initiated antiretroviral treatment (ART) with CD4 count of <200 cells/mm³
TCS-3	Number of people that initiated ART, with an undetectable viral load at 12 months (<1000 copies/ml)
TCS-4	Number of health facilities with stock-outs of at least one required antiretroviral drug (Number & %)
TCS-5	Proportion of undernourished people living with HIV/AIDS that received therapeutic or supplementary food at any point during the reporting period
Indicator no. from Global Fund website	**TB/HIV**
TB/HIV -1	Number of TB patients with known HIV status (Number & %)
TB/HIV-2	Number of HIV-positive TB patients given anti-retroviral therapy during TB treatment (Number & %)

[1] Please note that the Global Fund also has outcome and impact indicators in its standard indicators. However, these indicators are not measured as often (usually every 1-3 years), and as such, are not included in this list of standard indicators. The standard output and coverage indicators in this Annex are more conducive to routine program monitoring than are impact or outcome indicators. Should the PR wish to substitute a few of its outcome or impact indicators for the list of output or coverage indicators, it may do so by adding these indicators to the data-entry application by following the instructions in the manual.

TB/HIV-3	Number of HIV-positive patients who were screened for TB in HIV care or treatment settings (Number & %)
TB/HIV-4	Number of HIV-positive patients newly enrolled in HIV care settings starting intermittent presumptive treatment (IPT) (Number & %)
Indicator no. from Global Fund website	**Prevention of mother-to-child transmission (PMTCT)**
PMTCT-1	Number of pregnant women who know their HIV status (Number & %)
PMTCT-2	Number of HIV-positive pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission (Number & %)
PMTCT-3	Number of infants born to HIV-positive women receiving a virological test for HIV within 2 months of birth (Number & %)
Indicator no. from Global Fund website	**Prevention among Key Populations (KPs)**
KP-1a-e	Number of key populations reached with HIV prevention programmes- defined package of services (sex workers/men who have sex with men (MSM)/transgender (TG)/PWID/ others) (Number & %)
KP-2a-e	Number of KPs reached with HIV prevention programmes- individual and/or smaller group level interventions (Number & %)
KP-3a-e	Number of KPs that received an HIV test during the reporting period and who know their results (MSM/TG/sex workers/PWID/others) (Number & %)
KP-4	Number of needles and syringes distributed per person who inject drugs per year by needle and syringe programmes (Number)
KP-5	Number of individuals receiving opioid substitution therapy who received treatment for at least 6 months (Number & %)

	Prevention among general populations
GP-1	Number of women and men aged 15+ who received an HIV test and know their results (Number)
GP-2	Number of Individuals from targeted population reached through community outreach with standardized HIV prevention interventions
GP-3	Number of new individuals who test positive for HIV, enrolled in care (pre-ART or ART) services (Number & %)
GP-4	Number of antenatal care attendees tested for syphilis at first antenatal care visit (Number & %)
GP-5	Number of male circumcisions performed according to national standards (Number)
Indicator no. from Global Fund website	**Adolescents and Youth**
YP-1	Number of young people aged 10–24 years reached by life skills–based HIV education in schools (Number & %)
	Health Information System and M&E
M&E-1	Number of health management information system (HMIS) or other routine reporting units submitting timely reports according to national guidelines (Number & %)
Indicator no. from Global Fund website	**Development synergies**
GP-6-	Number of orphaned and vulnerable children aged 0–17 years whose households received free basic external support in caring for the child according to national guidelines (Number & %)

TUBERCULOSIS

Indicator no. from Global Fund website	TB Care and Prevention
DOTS-1a	Number of notified cases of all forms of TB (i.e., bacteriologically confirmed plus clinically diagnosed)
DOTS-1b	Number of notified cases of bacteriologically confirmed TB
DOTS-2a	Treatment success rate for all forms of TB (Number & %)
DOTS-2b	Treatment success rate for bacteriologically confirmed TB cases (Number & %)
DOTS-3	Number of laboratories performing smear microscopy that show adequate performance on external quality assurance (Number & %)
DOTS-4	Number of reporting units reporting no stock-outs of anti-TB drugs on the last day of the quarter (Number & %)
DOTS-5	Number of children <5 in contact with TB patients who began IPT
DOTS-6	Number of TB cases (all forms) notified among key affected populations/high risk groups
DOTS-7a-c	Notified TB cases (all forms) contributed by non- national TB program providers (Number & %)
Indicator no. from Global Fund website	**Multidrug-resistant (MDR) TB**
MDR-TB-1	Number of previously treated TB patients receiving drug-susceptibility testing (DST) (bacteriologically positive cases only) (Number & %)
MDR-TB-2	Number of bacteriologically confirmed, drug resistant TB cases (Rifampicin resistant TB (RR-TB) and/or MDR-TB) notified
MDR-TB-3	Number of cases with drug resistant TB (RR-TB and/or MDR-TB) that began second-line treatment (bacteriologically confirmed) Number of cases with drug resistant TB (RR-TB and/or MDR-TB) that began second-line treatment (presumptive cases)
MDR-TB-4	Number of cases with drug resistant TB (RR-TB and/or MDR-TB) started on treatment for MDR-TB who were lost to follow up at six months

	(Number & %)
MDR-TB-5	Number of DST laboratories showing adequate performance on External Quality Assurance (Number & %)
Indicator no. from Global Fund website	**TB/HIV**
TB/HIV-1	Number of TB patients with known HIV status
TB/HIV-	Number of HIV-positive TB patients given anti-retroviral therapy during TB treatment (Number & %)
TB/HIV-3	Number of HIV-positive patients who were screened for TB in HIV care or treatment settings (Number & %)
TB/HIV-4	Number of HIV-positive patients newly enrolled in HIV care settings starting IPT (Number & %)
M&E-1	Number of HMIS or other routine reporting units submitting timely reports according to national guidelines (Number & %)

MALARIA

Indicator no. from Global Fund website	**Malaria Prevention**
VC-4	Proportion of targeted risk groups receiving ITNs (pregnant women) Proportion of targeted risk groups receiving ITNs (children<5 yrs) Proportion of targeted risk groups receiving ITNs (other risk groups)
VC-2	Proportion of population at risk potentially covered by long lasting insecticidal nets (LLINs) distributed (Number & %)
VC-1	Number of LLINs distributed - mass campaigns and continuous distribution (Number & %)

VC-5	Number of households in targeted areas that received indoor residual spraying (IRS) during the reporting period (Number & %)
VC-6	Proportion of population protected by IRS within the last 12 months
Indicator no. from Global Fund website	**Case Management**
CM-1a	Number of suspected malaria cases that receive a parasitological test (by public sector health facilities) (Number & %) Number of suspected malaria cases that receive a parasitological test (by private sector sites) (Number & %) Number of suspected malaria cases that receive a parasitological test (in the community) (Number & %)
CM-2a-c	Number of confirmed malaria cases that received first-line antimalarial treatment according to national policy (by public sector health facilities) (Number & %) Number of confirmed malaria cases that received first-line antimalarial treatment according to national policy (by private sector sites) (Number & %) Number of confirmed malaria cases that received first-line antimalarial treatment according to national policy (in the community) (Number & %)
CM-3	Number of estimated malaria cases (presumed and confirmed) that received first line antimalarial treatment (by public sector health facilities) (Number & %) Number of estimated malaria cases (presumed and confirmed) that received first line antimalarial treatment (by private sector sites) (Number & %) Number of estimated malaria cases (presumed and confirmed) that received first line antimalarial treatment (in the community) (Number & %)
CM-4	Number of health facilities without stock-outs of key commodities (Number & %) Number of community health workers (CHW) without stock outs of key commodities (Number & %)

Indicator no. from Global Fund website	**Prevention of Malaria in pregnancy**
SPI-1	Number of women attending antenatal clinics who received three or more doses of IPT for malaria (Number & %)
Indicator no. from Global Fund website	**Surveillance in elimination setting**
CM-5	Number of confirmed cases fully investigated (including case investigation form, focus investigation form and active case detection)
	Number of malaria foci fully investigated (malaria focus investigation form completed, including data from an entomological investigation) and registered (on register, with maps of each focus) (Number & %)
Indicator no. from Global Fund website	**Health Information System and Monitoring and evaluation (M&E)**
M&E-1	Number of HMIS or other routine reporting units submitting timely reports according to national guidelines (Number & %)
Does not appear in the Global Fund application	Number of reports received over the reports expected (Number & %)

HEALTH SYSTEMS STRENGTHENING

Indicator no. from Global Fund website	Service Delivery
SD-1	Number & distribution of health facilities per 10,000 population
SD-2	Number of outpatients visits per 10,000 population
Indicator no. from Global Fund website	**Health Workforce**
HW-1	Number of health workers per 10,000 population (report on community health workers as applicable) Number of community health workers per 10,000
HW-2	Distribution of health workers (by specialization) Distribution of health workers (by region) Distribution of health workers (by place of work) Distribution of health workers (by sex)
HW-3	Number of health workers newly recruited at primary health care facilities in the past 12 months, expressed as a percentage of planned recruitment targets
HW-4	Annual rate of retention of service providers at primary health care facilities

Indicator no. from Global Fund website	Procurement and Supply chain management
PSM-1	Percentage of health facilities reporting no stock-outs of essential medicines
Indicator no. from Global Fund website	**Monitoring and Evaluation**
M&E-1	Percentage of HMIS or other routine reporting units submitting timely reports according to national guidelines
M&E-3	Percentage of deaths registered (as reported by civil or sample registration systems, hospitals, community-based reporting systems) among the total deaths for the same period and geographical region
Indicator no. from Global Fund website	**Healthcare Financing**
HF-1	Government expenditure on health as percentage of general government expenditure

	Community Systems Strengthening[2]
	Number of new CHW recruited in past 12 month (Number)
	Annual retention rate community-based organization service providers

ANNEX 5. PROCUREMENT AND SUPPLY MANAGEMENT INDICATORS

Indicator Name	Indicator label in CCM Summary	What does the indicator seek to measure or monitor?	Data elements used to calculate the indicator	Data source
Total PSM budget compared with PSM expenditures and commitments (aggregated for all grants – grouped by disease)	PSM budget Exp + Comt	This indicator shows whether the PR is on track with expenditures on procurement and supply management that have been planned to date.	**Numerator:** $ Cumulative PSM expenditures + commitments. **Denominator**: $ Cumulative PSM budget. In the chart, the blue bar represents the total PSM budget for all grants; the green bar represents the PSM expenditures plus commitments	PR/SR financial reports The results for this indicator for each active grant are included among the data in the feed files sent by the PR to the CCM.

[2] The Global Fund is working on an M&E framework for grants that include community systems strengthening (CSS), human rights and similar areas for which coverage indicators are difficult to measure over a short period. The CSS indicators in this list are illustrative only; PRs will work with Global Fund country teams to agree on CSS indicators suitable for their context.

Indicator Name	Indicator label in CCM Summary	What does the indicator seek to measure or monitor?	Data elements used to calculate the indicator	Data source
			for all grants for that disease	
Difference between current stock and safety stock for health products at national level	Stocks (see button)	Provides data for determining whether PSM products are available in sufficient quantity to keep program implementation on track; also indicates whether program implementation eventually be at risk due to impending stock outs or impending expiry of health products.	See detailed explanation under Annex 6 in the section that follows. . **Explanation of alert colors:** Red: When current stock is equal to or less than the level of safety stock. Yellow: When current stock is greater than the safety stock but less twice the amount of safety stock. Green: When the current stock equals between twice and four times the amount of safety stock. **Purple:** When the current stock equals greater than four times the amount of safety stock.	Central Medical Stores; Logistics Management Information System if functional The results for this indicator for each active grant are included among the data in the feed files sent by the PR to the CCM.
Number of sites that experienced stock outs of key	Sites with stock-outs	Availability of health products	Actual: Number of facilities providing treatment that	Documentation of products received at treatment site level

Indicator Name	Indicator label in CCM Summary	What does the indicator seek to measure or monitor?	Data elements used to calculate the indicator	Data source
products during a given period			experienced a stock out of any key health product **Denominator:** All health facilities which stock health products.	The results for this indicator for each active grant are included among the data in the feed files sent by the PR to the CCM.

ANNEX 6. ADDITIONAL INFORMATION ON CALCULATING INDICATOR P6 ON AVAILABILITY OF STOCKS

This indicator is a comparison of the current stock[3] of a specific product (medicine in single, fixed-dose combination, bed nets, diagnostic kits, etc., expressed in number of months of treatment available), with the safety or buffer stock[4] (in months) established in the PSM plan approved by the Global Fund for the same product.

This indicator will be calculated for the respective disease or component to which the grant is related (tuberculosis, HIV/AIDS, TB/HIV, malaria, health systems strengthening). The "products" selected for each disease component may include medicines, condoms, bed nets, and rapid diagnostic tests necessary for program implementation. The PR may select up to 20 products that are purchased with the particular grant. It is strongly recommended that international nonproprietary names be used for each product rather than brand names. Pediatric products should be presented and calculated separately than adult products.

Two examples are provided below on how to calculate this indicator—one is a regimen of antiretroviral treatment, and the second is a regimen of malaria treatment. Note that for tuberculosis (TB) grants, if the PR is not the national TB program, it will need to coordinate with the national TB program to determine the products to be displayed in the dashboard for DOTS programs, MDR TB treatment programs and for treatment of adverse drug reactions.

STEPS TO CALCULATING INDICATOR P6 FOR HIV/AIDS PRODUCTS

In the case of HIV/AIDS, products are managed by number of units, e.g., tablets. If the grant is not purchasing antiretroviral drugs but is procuring other products to be used in the program (e.g., diagnostic tests for HIV, medicines to treat sexually transmitted diseases, medicines for opportunistic infections or medicines to treat adverse drug reactions), the PR should prioritize selection of medicines likely to have problems with stock outs or overstocks, as the list of medicines could exceed the twenty spaces provided in the PR Management Dashboard.

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[3] **"Current stock" is defined** as the physical stock on hand that does not expire within the next three months.

[4] **"Safety stock" is defined** as "the amount of stock kept in reserve in case an item is unavailable from the supplier or for a sudden increase in demand. MSH [Management Sciences for Health]/WHO, Managing Drug Supply, 2012, Chapter 20, p. 11.

Calculation by disease area	
HIV/AIDS	
Product example: (AZT/3TC/NVP) fixed dose combination	
Step A: Calculate monthly need. In this case, the daily need per patient for this product is 2 tablets per day. One month's supply per patient = 2 tablets x 30 days = 60 tablets.	**Explanation:** This is the conversion of the number of units/tablets/pills needed per day into the units/tablets/pills needed per month for one patient. It is obtained by multiplying the number of pills/units of product needed per day by 30 for a single patient. The estimate of number of pills/kits needs to consider the dosage in which the product is purchased (for example, if a patient needs 500 mg/day, but pills are purchased in formulations of 250 mg, the number of pills needed per patient will be 2/day). If the entire treatment comes in one package (e.g., Coartem or TB kits), then this conversion is not necessary and one kit or package will be allocated per patient as a full treatment. **Data source:** The number of pills/kits/units of the product needed for a patient in one day are obtained from the Standard Treatment Guidelines for the disease. Standard treatment guidelines indicate the medicine (or medicines) to be used as first-line treatment, doses of each medicine (in individual presentation, co-packaged, or fixed-dose combination), or the number of kits when the full treatment comes in one single pack (e.g., artemisinin- based combination therapies (ACTs), or TB kits).
Step B: Define number of patients under the given protocol or regimen. In this case we have 1,000 patients on this antiretroviral treatment (ART) regimen.	**Explanation:** The number used is the total number of patients in treatment at present or the number of patients expected to require treatment per month. It is not the intention that this estimate account for incremental increases in the number of patients per month (for chronic diseases) that could result from increases in detection rate that will add patients to the ones currently in treatment if the disease is chronic. **Data source:** National disease program or national quantification committee to provide number of patients for each treatment protocol.
Step C: Calculate total monthly needs as (A) x (B) = 60 x 1,000 = 60,000 tablets	**Note:** This is the total number of units (in this case tablets) that the program needs to have on hand each month in order to serve the total number of patients in the program. This number is obtained by multiplying the results of steps A and B described above.
Step D: Define current stock level. The current stock level is found to be 280,000 pills.	**Note:** Current stock in the central warehouse (or at the highest level of the system) is defined as physical stock on hand that does not expire within the next three months.

	Data sources: The information on how many units are still available are obtained from the central warehouse of the Central Medical Stores. The data should be obtained periodically, if not monthly. The decision to set up this indicator at the highest level of the system is because it is uncertain that there will be information at other levels. At least knowing what remains at central level allows decision makers to reorder the product as soon as possible. If products are delivered directly to regions, however, the data for this number should be obtained from regional warehouses. In general, if the PR is the entity doing the procurement, it should know when the products arrived and will have the information on hand. Also, the PR is expected to have information on which products have been distributed according to a distribution plan, which should allow the PR to estimate how much product remains at the central level warehouse. If the warehouse maintains an electronic inventory system, the information will be readily available through reports produced by the system. If the electronic inventory system cannot produce reports, the PR could visit the warehouse with the list of the products that are purchased and determine current stock levels from the following data sources: — I Inventory cards, usually located in the shelves where the boxes of products are kept — Entry and exit records in the warehouse that usually contain the balance of these activities — A count of the boxes (accounting for the units or packages in each box) of the products The PR should verify that only batches that still have at least three months of shelf life remaining are counted as current stock. Products with three months or less of shelf life should be used immediately. The Essential Medicines Program of the country and the national disease program shall determine the number of months of shelf life to ensure drug availability if the three month minimum shelf life default amount is not applicable. The three month default may not apply for example, when the product has a long lead time. Lead time is the interval required to complete a full procurement cycle. What if it takes three months to distribute the product from central to regional warehouses? Products arriving in country with three months of shelf life are as good as useless, as they will expire by the time they reach the regional level. Therefore using a default minimum expiration of six months for current stock would be more logical.

Step E: Calculate available months of stock as (D)/(C) = 280,000 pills/60,000 pills per month = 4.7 months of stock available. **This number is entered for each product into the PR master data sheet of the data-entry application.**	**Note:** This is obtained by dividing the current stock by the quantities of the product needed to serve all patients on treatment. **This number is entered for each product into the PR master data sheet of the data-entry application.**
Step F: Determine the safety stock. For this product, the National HIV/AIDS program has agreed with the National Essential Medicines program and the Central Medical Stores that the safety stock for this product is 2 months. The 2-month safety stock level for this product was written into the grant's PSM plan that was approved by the Global Fund. **This number is entered for each product in the data-entry application at the set-up phase—when the dashboard is**	**Note:** Safety stock is measured in months of stock. As mentioned above, safety stock is the amount of stock that is held in reserve in case the supplier is not able to resupply the item on time, or to cater for unanticipated increases in demand for the product. Safety stock is determined by multiplying the average monthly consumption of the product (adjusted for stock outs) by the lead time in months (for the projected supplier or for the worst case scenario). It is important to note that each product mentioned in a PSM plan that is submitted to the Global Fund for approval must have a stated safety stock. **Once the PSM plan is approved, the safety stock stated in the approved PSM plan is the number that should be entered for that product into the data-entry application at configuration.** **Data source:** PSM plan approved by the Global Fund, National HIV/AIDS program, Central Medical Stores, National Essential Medicines program.

being configured for the grant.	
Step G: Enter the current stock for the product into the data-entry application. The dashboard application automates the comparison of the current stock with the safety stock for the respective product. In this example, we can compare current stock to the safety stock by dividing (E) by (F)—4.7 divided by 2—which gives 2.35. This result would show as a green alert in the dashboard. This is because the PR currently has between two and four times the amount of safety stock available. The dashboard will therefore show the color green for this product.	**Note: The comparison between current stock and safety stock is obtained by comparing the current stock (in months) to the safety stock (in months) entered for each respective product at configuration of the data-entry application.** When the current stock entered in the data-entry application is sent to the dashboard application, the dashboard application compares the two numbers. If the current stock is less than or equal the safety stock, an alert will show in the dashboard (red). If the current stock is no more than twice the level of safety stock, the dashboard shows a yellow alert. If the current stock is at least twice the level of safety stock but less than four times the safety stock, this is considered to be a desirable result and a green alert will appear. When the current stock exceeds four times the safety stock, a purple alert shows, indicating overstock and, hence, risk of product expiry. Below is a summary of how to interpret the four possible colors that appear beside each product whose data is entered into the PR Management Dashboard. **Red** :When current stock is equal to or less than the level of safety stock Yellow : When current stock is greater than the safety stock but less than twice the amount of safety stock Green : When current stock equals between twice and four times the amount of safety stock **Purple** : When current stock equals greater than four times the amount of safety stock. *What should be PR do in response to dashboard results?*

	When the dashboard shows red, this should be interpreted as meaning that the number of treatments in stock in the central warehouse is below the level considered safe to ensure continuation of treatment without interruption. In this situation, the PR may want to request information from lower levels of the supply chain to ensure that there is product available until the central level gets the next shipment. If insufficient product is available to last until the next order, the PR would need to place an emergency shipment. If the dashboard shows yellow, the PR should accelerate arrival of the next shipment of the product if possible, or place an order if none is in the pipeline. If the dashboard shows purple:, the PR should first ensure that sufficient stock levels are available at lower levels of the supply chain and that there are no regional imbalances in availability of the product before deciding to delay further shipments from arriving in country.

STEPS TO CALCULATING INDICATOR P6 LEVEL FOR MALARIA PRODUCTS

Malaria programs manage products by number of treatments, not by individual units/pills. The table below summarizes how to determine the difference between current stock and safety stock for artesunate amodiaquine, an artemisinin combination treatment.

Calculation by disease area	
Malaria	
Product example: Artesunate Amodiaquine (AS/AQ)	
Step A: Calculate current stock. In this case, we will use a current stock level of 1, 200 AS/AQ treatments.	**Note:** Current stock in central warehouse (or at the highest level of the system) is defined as physical stock on hand that does not expire within the next three months. **Data sources:** The information on how many units are still available are obtained from the central warehouse of the Central Medical Stores. The data should be obtained periodically, if not monthly. The decision to set up this indicator at the highest level of the system is because it is uncertain that there will be information at other levels. At least knowing what remains at central level allows decision-making to reorder the product as soon as possible. If products are delivered directly to regions, however, the data for this number should be obtained from regional warehouses. In general, if the PR is the entity doing the procurement, it should know when the products arrived and will have the information on hand. Also, the PR is expected to have information on which products have been distributed according to a distribution plan, which should allow the PR to estimate how much product remains at the central level warehouse. If the warehouse maintains an electronic inventory system, the information will be readily available through reports produced by the system. If the electronic inventory system cannot produce reports, the PR could visit the warehouse with the list of the products that are purchased and determine current stock levels from the following data sources:

	• Inventory cards, usually located in the shelves where the boxes of products are kept • Entry and exit records in the warehouse that usually contain the balance of these activities • A count of the boxes (accounting for the units or packages in each box) of the products The PR should verify that only batches that still have at least three months of shelf life remaining are counted as current stock. Products with three months or less of shelf life should be used immediately. The Essential Medicines Program of the country and the national disease program shall determine the number of months of shelf life to ensure drug availability if the three month minimum shelf life default amount is not applicable. The three month default may not apply for example, when the product has a long lead time. Lead time is the interval required to complete a full procurement cycle. What if it takes three months to distribute the product from central to regional warehouses? Products arriving in country with three months of shelf life are as good as useless, since they will expire by the time they reach the regional level. Therefore using a default minimum expiration of six months for current stock would be more logical.
Step B: Determine expected monthly use. In this case we will assume an expected monthly use of 300 treatments. Expected number of patients for one month = Number of treatments Please note that this number reflects the average monthly consumption (AMC)	**Note:** Because malaria is an acute illness, the "expected monthly use" is an estimation of how many malaria cases are expected each month, which is normally based on historical epidemiological data. Total quantities of the product needed for the number of patients expected per month is equal to the expected number of patients for one month, since 1 patient = 1 treatment.

Step C: Calculate number of months of stock available as (A)/(B) = 1,200/300 = 4 months **This number is entered for each product into the PR master data sheet of the data-entry application. Data can be entered for up to 20 products.**	**Note:** This is obtained by dividing the current stock by the quantities of the product needed to treat patients in one month. **This number is entered for each product into the PR master data sheet of the data-entry application. Data can be entered for up to 20 products.**
Step D: Establish the safety stock for AS/AQ. In this case, the National Malaria Program has decided that the safety stock for AS/AQ equals 2 months of stock. **This number is entered for each product in the data-entry application when the dashboard is being configured.**	**Note:** Safety stock is measured in months of stock. As mentioned above, safety stock is the amount of stock that is held in reserve in case the supplier is not able to resupply the item on time, or to cater for unanticipated increases in demand for the product. Safety stock is determined by multiplying the average monthly consumption of the product (adjusted for stock outs) by the lead time in months (for the projected supplier or for the worst case scenario). **This number is entered for each product in the data-entry application when the dashboard is being configured.** **Data source:** The entity within the health system responsible for supply chain management (e.g., the Central Medical Stores) coordinates with the national disease program and the national essential medicines program to define the safety stock for various products. In many countries, the safety stock is measured in units of the product, so it is necessary to convert these units into equivalent months of treatment by converting the level of safety stock into months of treatment which is done by dividing the safety stock in units by the amount needed for one month of treatment.
Step E: Enter the current stock for the product into the data-entry application. The dashboard application automates the comparison of the current stock with the safety stock for the respective	**Note: The comparison between current and safety stock is obtained by comparing the current stock to the safety stock entered for each respective product at configuration of the data-entry application.** When the current stock entered in the data-entry application is sent to the dashboard application, the dashboard application compares the two numbers. If the current stock is less than or equal to the safety stock, an alert will show in the dashboard (red). If the current stock is no more than twice the level of safety stock, the dashboard shows a yellow alert. If the current stock is at least twice the level of safety stock but less than four times the safety stock, this is considered to be a desirable result and a green alert will appear. When the current stock

product. In this example, we can compare current stock to the safety stock by dividing (C) by (D)–4 divided by 2—which gives us 2. This result would show as a green alert in the dashboard. This is because the PR currently has between two and four months of safety stock available. The dashboard will therefore show the colour green for this product.	exceed four times the safety stock, a purple alert shows, indicating overstock and hence, risk of product expiry. **Red**: When current stock is equal to or less than the level of safety stock **Yellow**: When current stock is greater than the safety stock but less than twice the amount of safety stock **Green**: When current stock equals between twice and four times the amount of safety stock Purple: When current stock equals greater than four times the amount of safety stock. *What should be PR do in response to dashboard results?* When the dashboard shows red, this should be interpreted as meaning that the number of treatments in stock in the central warehouse is below the level considered safe to ensure continuation of treatment without interruption. In this situation, the PR may want to request information from lower levels of the supply chain to ensure that there is product available until the central level gets the next shipment. If insufficient product is available to last until the next order, the PR would need to place an emergency shipment. If the dashboard shows yellow, the PR should accelerate arrival of the next shipment of the product if possible, or place an order if none is in the pipeline. If the dashboard shows purple:, the PR should first ensure that sufficient stock levels are available at lower levels of the supply chain and that there are no regional imbalances in availability of the product before deciding to delay further shipments from arriving in country.