

# Indicator Data Dictionary

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\*Developed by the Access Observatory team at the Boston University School of Public Health. Members of Access Accelerated companies provided input and feedback during the development process.

## Introduction

The Indicator Data Dictionary is organized by program strategy starting with “Community Awareness and Linkage to Care”. The list of indicators that correspond to each strategy can be found in the overview table in the beginning of the Indicator Data Dictionary. Since there are many common indicators shared between strategies, the overview table includes a reference to the place where the indicator has been mentioned for the first time.

Each indicator in this dictionary is described in the following format:

Item	Description
Indicator name	Name of the indicator, e.g. staff time spent planning
Indicator type	Statement of whether the indicator is an input, output, outcome, or impact
Strategies that use indicator	Strategies in the Taxonomy of Strategies that use the indicator
Definition	Definition of the indicator in detail and explanation of what might be included or excluded as part of the indicator
Method of measurement	How data for the indicator can be collected or measured and/or how the indicator can be calculated from collected data
Recommended disaggregation	Set of recommendations on how the data can be disaggregated and reported. For example program data can be disaggregated and reported by country, region, and target population
Frequency of reporting*	Suggested frequency in which the data is to be reported in the Access Observatory, e.g. annually unless otherwise stated
Recommended data sources	Recommended source of data for the indicator such as routine program data, non-routine program data (e.g. surveys), external non-public data (e.g. hospital records), and external public data (e.g. Demographic and Health Survey)
Further information	Title and URLs of resources where further information about the indicator can be found

\*Indicators are meant to be reported annually unless otherwise specified.

This document will be revised on the basis of the data availability and feedback from submitting program teams. More indicators may become available over time. Others may be modified.

## Overview of Indicators

Area	Name of the strategy	Strategy No.	Section No.	Indicator No.	Name of the indicator
Community	Community Awareness and linkage to care	1	I	1	<a href="#">Value of resources</a>
				2	<a href="#">Staff time</a>
			II	1	<a href="#">Staff time spent planning</a>
				2	<a href="#">Population exposed by community communication activities</a>
				3	<a href="#">Population exposed by community awareness campaign out of total target population</a>
				4	<a href="#">Buildings/equipment in use</a>
				5	<a href="#">Percentage of buildings/equipment in use out of total buildings/equipment planned</a>
				6	<a href="#">tools in use</a>
				7	<a href="#">Community groups supported</a>
				8	<a href="#">Value of funding provided</a>
			III	1	<a href="#">Knowledge of disease symptoms</a>
				2	<a href="#">Knowledge of treatment options</a>
				3	<a href="#">Adoption of preventive health behaviors</a>
				4	<a href="#">Patients properly diagnosed</a>
				5	<a href="#">Patients on appropriate treatment</a>
				6	<a href="#">Patients retained in care</a>
				7	<a href="#">Time between first symptoms and diagnosis</a>
				8	<a href="#">Time from diagnosis to receiving treatment initiation</a>
				9	<a href="#">Time from treatment initiation to lost-to-follow-up</a>
				10	<a href="#">Volume of health service</a>
			IV	1	<a href="#">Population Health [Disease specific Mortality Rate]</a>
				2	<a href="#">Population Satisfaction [Number of patient satisfaction reports]</a>
				3	<a href="#">Household financial risk protection</a>
Health system	Health service delivery	2	I	1	<a href="#">Value of resources</a>
				2	<a href="#">Staff time</a>
			II	1	<a href="#">Population screened</a>
				2	<a href="#">Patients properly diagnosed</a>
				3	<a href="#">Patients on appropriate treatment</a>
				4	<a href="#">Patients retained in care</a>
				1	<a href="#">Patients properly diagnosed</a>
			III		
				2	<a href="#">Time between first symptoms and diagnosis</a>
				3	<a href="#">Patients adherent to treatment</a>
				4	<a href="#">Patients on appropriate treatment</a>
				5	<a href="#">Time from diagnosis to receiving treatment initiation</a>
				6	<a href="#">Patients retained in care</a>
				7	<a href="#">Time from treatment initiation to lost-to-follow-up</a>
				8	<a href="#">Cost per health service unit delivery</a>

Area	Name of the strategy	Strategy No.	Section No.	Indicator No.	Name of the indicator
Health System	Health Service Strengthening		IV	1	<a href="#">Population Health [Disease specific Mortality Rate]</a>
				2	<a href="#">Population Satisfaction [Number of patient satisfaction reports]</a>
				3	<a href="#">Household financial risk protection</a>
		3	I	1	<a href="#">Value of resources</a>
				2	<a href="#">Staff time</a>
			II	1	<a href="#">Staff time spent planning</a>
				2	<a href="#">Number of people trained</a>
				3	Percentage of professionals trained out of total number targeted
				4	<a href="#">Buildings/equipment in use</a>
				5	Percentage of buildings/equipment in use out of total buildings/equipment planned
				6	<a href="#">Tools in use</a>
				7	<a href="#">Management procedures in use</a>
				8	<a href="#">Value of funding provided</a>
			III	1	<a href="#">Health provider knowledge</a>
				2	<a href="#">Population access to non-communicable disease (NCD) health service utilization rate</a>
				3	<a href="#">Patients properly diagnosed</a>
				4	<a href="#">Patients on appropriate treatment</a>
				5	<a href="#">Patients retained in care</a>
				6	<a href="#">Cost per health service unit delivery</a>
			IV	1	Population Health [Disease specific Mortality Rate]
				2	Population Satisfaction [Number of patient satisfaction reports]
				3	<a href="#">Household financial risk protection</a>
Health systems	Supply chain	4	I	1	<a href="#">Value of resources</a>
				2	<a href="#">Staff time</a>
			II	1	<a href="#">Staff time spent planning</a>
				2	<a href="#">Number of people trained</a>
				3	Percentage of professionals trained out of total number targeted
				4	<a href="#">Buildings/equipment in use</a>
				5	Percentage of buildings/equipment in use out of total buildings/equipment planned
				6	<a href="#">Tools in use</a>
				7	<a href="#">Management procedures in use</a>
				8	<a href="#">Value of funding provided</a>
			III	1	<a href="#">Order fulfillment rate</a>
				2	<a href="#">Forecast accuracy</a>
				3	<a href="#">Availability of medicines at outlets</a>
				4	<a href="#">Volume of expired medicines</a>
				5	<a href="#">Medicines expiry rate</a>
				6	<a href="#">Stock accuracy rate</a>
				7	<a href="#">Value of Medicines Expired</a>
			IV	1	Population Health [Disease specific Mortality Rate]
				2	Population Satisfaction [Number of patient satisfaction reports]



Area	Name of the strategy	Strategy No.	Section No.	Indicator No.	Name of the indicator
Health System	Financing	5	I	3	Household financial risk protection
				1	Value of resources
				2	Staff time
			II	1	Staff time spent planning
				2	Number of people trained
				3	Percentage of professionals trained out of total number targeted
				4	Buildings/equipment in use
				4	Percentage of buildings/equipment in use out of total buildings/equipment planned
				5	Tools in use
				6	Management procedures in use
				7	Value of funding provided
			III	1	Treatment and services covered by financing scheme
				2	Population eligible to enroll into a financing scheme
				3	Patients properly diagnosed
				4	Patients on appropriate treatment
				5	Patients retained in care
				6	Population enrolled in health financing scheme for medicines
				7	Household out-of-pocket expenditure: total health
				8	Household out-of-pocket expenditure: medicines/treatment
				9	Administrative cost per beneficiary
			IV	1	Population Health [Disease specific Mortality Rate]
				2	Patient Population [Number of patient satisfaction reports]
				3	Household financial risk protection-
Health system	Regulation and Legislation	6	I	1	Value of resources
				2	Staff time
			II	1	Staff time spent planning
				2	Number of people trained
				3	Percentage of professionals trained out of total number targeted
				4	Buildings/equipment in use
				5	Percentage of buildings/equipment in use out of total buildings/equipment planned
				6	Tools in use
				7	Management procedures in use
				8	Value of funding provided
			III	1	Harmonization of regulatory processes
				2	Registration process duration
				3	Medicines registered
				4	Medicines withdrawn
				5	Quality of registered medicines
				6	Safety of registered medicines
				7	Regulator knowledge

Area	Name of the strategy	Strategy No.	Section No.	Indicator No.	Name of the indicator
			IV	8	<a href="#">Percentage of applications meeting MRA performance standards</a>
				9	<a href="#">Stakeholder awareness of program</a>
				1	<a href="#">Population Health [Disease specific Mortality Rate]</a>
				2	<a href="#">Population Satisfaction [Number of patient satisfaction reports]</a>
				3	<a href="#">Household financial risk protection</a>
Production	Manufacturing	7	I	1	<a href="#">Value of resources</a>
				2	<a href="#">Staff time</a>
			II	1	<a href="#">Staff time spent planning</a>
				2	<a href="#">Number of people trained</a>
				3	<a href="#">Percentage of professionals trained out of total number targeted</a>
				4	<a href="#">Buildings/equipment in use</a>
				4	<a href="#">Percentage of buildings/equipment in use out of total buildings/equipment planned</a>
				6	<a href="#">Tools in use</a>
				7	<a href="#">Management procedures in use</a>
				8	<a href="#">Value of funding provided</a>
			III	1	<a href="#">Medicines approved and reaching market</a>
				2	<a href="#">Volume of medicines sold</a>
				3	<a href="#">Safety of registered medicines</a>
				4	<a href="#">Price ratio of medicines at outlets</a>
				5	<a href="#">Availability of medicines at outlets</a>
				6	<a href="#">Patients on appropriate treatment</a>
				7	<a href="#">Number of manufacturers participating in national tenders</a>
				8	<a href="#">Median tender price ration</a>
			IV	1	<a href="#">Population Health [Disease specific Mortality Rate]</a>
				2	<a href="#">Population Satisfaction [Number of patient satisfaction reports]</a>
				3	<a href="#">Household financial risk protection</a>
Production	Product Development Research	8	I	1	<a href="#">Value of resources</a>
				2	<a href="#">Staff time</a>
			II	1	<a href="#">Staff time spent planning</a>
				2	<a href="#">Number of people trained</a>
				3	<a href="#">Percentage of professionals trained out of total number targeted</a>
				4	<a href="#">Buildings/equipment in use</a>
				5	<a href="#">Percentage of buildings/equipment in use out of total buildings/equipment planned</a>
				6	<a href="#">Tools in use</a>
				7	<a href="#">Management procedures in use</a>
				8	<a href="#">Value of funding provided</a>
			III	1	<a href="#">Researchers trained</a>
				2	<a href="#">Researchers affiliated</a>
				3	<a href="#">Institutions affiliated</a>
				4	<a href="#">Local and international research funding by external partners</a>
				5	<a href="#">Actual versus budgeted research funding</a>

Area	Name of the strategy	Strategy No.	Section No.	Indicator No.	Name of the indicator
				5	<a href="#">New evidence on drug safety, efficacy and effectiveness</a>
				6	<a href="#">New medicines/products</a>
				7	<a href="#">Medicines registered</a>
			IV	8	Researcher knowledge
				1	<a href="#">Population Health [Disease specific Mortality Rate]</a>
				2	<a href="#">Population Satisfaction [Number of patient satisfaction reports]</a>
				3	<a href="#">Household financial risk protection</a>
Production	Licensing agreement	9	I	1	<a href="#">Value of resources- See Definition 1.I.1</a>
				2	<a href="#">Staff time- See Definition 1.I.2</a>
			II	1	<a href="#">Number of licenses granted</a>
				2	<a href="#">Patents not enforced</a>
				3	<a href="#">Companies benefiting from technology sharing</a>
			III	1	<a href="#">Medicines approved and reaching market</a>
				2	<a href="#">Volume of medicines sold</a>
				3	<a href="#">Quality of registered medicine</a>
				4	<a href="#">Price ratio of medicines at outlets</a>
				5	<a href="#">Availability of medicines at outlets</a>
				6	<a href="#">Patients on appropriate treatment</a>
			IV	1	<a href="#">Population Health [Disease specific Mortality Rate]</a>
				2	<a href="#">Population Satisfaction [Number of patient satisfaction reports]</a>
				3	<a href="#">Household financial risk protection</a>
Pricing	Pricing scheme	10	I	1	<a href="#">Value of resources</a>
				2	<a href="#">Staff time</a>
			II	1	<a href="#">Volume of medicines sold</a>
				2	<a href="#">Number of patients reached with pricing scheme</a>
				3	<a href="#">Population exposed to communication activities about the price scheme</a>
			III	1	<a href="#">Price ratio of medicines at outlets</a>
				2	<a href="#">Availability of medicines at outlets</a>
				3	<a href="#">Provider and patient awareness of program</a>
				4	<a href="#">Household out-of-pocket expenditure: total health</a>
				5	<a href="#">Household out-of-pocket expenditure: medicines/treatment</a>
				6	<a href="#">Patients on appropriate treatment</a>
				7	<a href="#">Patients receiving program medicines from intermediaries</a>
			IV	1	<a href="#">Population Health [Disease specific Mortality Rate]</a>
				2	<a href="#">Population Satisfaction [Number of patient satisfaction reports]</a>
				3	<a href="#">Household financial risk protection- See Definition 1.IV.3</a>
Pricing	Medicine Donation	11	I	1	<a href="#">Value of resources</a>
				2	<a href="#">Staff time</a>

Area	Name of the strategy	Strategy No.	Section No.	Indicator No.	Name of the indicator
			II	1	<a href="#">Volume of medicines donated</a>
				2	<a href="#">Value of medicines donation</a>
				3	<a href="#">Number of individuals receiving the donated medicines</a>
				4	Percentage of individuals receiving donated medicines out of target population
				5	<a href="#">Population exposed to communication activities</a> about the price scheme
			III	1	<a href="#">Price ratio of medicines at outlet</a>
				2	<a href="#">Availability of medicines at outlets</a>
				3	<a href="#">Provider and patient awareness of program</a>
				4	<a href="#">Household out-of-pocket expenditure: total health</a>
				5	<a href="#">Household out-of-pocket expenditure: medicines/treatment</a>
				6	<a href="#">Patients on appropriate treatment</a>
			IV	1	<a href="#">Population Health [Disease specific Mortality Rate]</a>
				2	<a href="#">Population Satisfaction [Number of patient satisfaction reports]</a>
				3	<a href="#">Household financial risk protection</a>

# Section I

## Input Indicators

Item	Description
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Indicator name	<i>Value of resources</i>
Indicator type	Input
Strategies that use indicator	All 11 strategies
Definition	Total expenditure by company to operate program, including all expenditures that can reasonably be defined as necessary to operate the program.
Method of measurement	<p>Program administrative records or accounting or tax records provide details in the expenditures on the program in a defined period of time.</p> <p><b>Calculation:</b> Sum of expenditures (e.g., staff, materials) on program in US\$</p>
Recommended disaggregation	Type of expenditure (e.g. staff, materials, donated medicines).
Frequency of reporting	Annually unless otherwise stated
Recommended data sources	<p>Routine program data</p> <p>Accounting records</p> <p>Tax records</p>

Item	Description
Indicator name	<i>Staff time</i>
Indicator type	Input
Strategies that use indicator	All 11 strategies
Definition	The ratio of the total number of paid hours during a year by the number of working hours in that period. This indicator excludes the time of volunteers or staff time for external partners.
Method of measurement	<p>The ratio is also called Full Time Equivalent (FTE).</p> <p><b>Calculation:</b></p> $\frac{\text{Sum of the number of paid hours per year}}{\text{Total number of working hours per year}}$
Recommended disaggregation	Type of staff
Frequency of reporting	Annually unless otherwise stated
Recommended data sources	Company human resource records
Further information	Adapted from: <a href="https://stats.oecd.org/glossary/detail.asp?ID=1068">https://stats.oecd.org/glossary/detail.asp?ID=1068</a>

# Section II

## Output Indicators

Item	Description
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Indicator name	<i>Staff time spent planning</i>
Indicator type	Output
Strategies that use indicator	(1) Community awareness and linkage to care; (2) Product development research; (3) Financing; (4) Health service strengthening; (5) Manufacturing; (6) Supply chain; (7) Regulation & Legislation
Definition	The total amount of time in hours that program staff dedicated to <i>plan</i> the program activities related to the overall strategy. This indicator excludes volunteers.
Method of measurement	<p>The number of program staff hours is often registered via time sheets that employees to their supervisor to account for their time spent on different activities.</p> <p><b>Calculation:</b> Sum of the program staff hours dedicated to the planning activities related to the overall program strategy</p>
Recommended disaggregation	Type of planning activities (e.g. meetings, site visits)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data
Further info	

Item	Description
Indicator name	<i>Population exposed to community communication activities</i>
Indicator type	Output
Strategies that use indicator	Community awareness and linkage to care
Definition	Number of population reached through a community awareness campaign
Method of measurement	Counting of participants that attend campaign meetings or reached by media messaged disseminated  <b>Calculation:</b> Number of people/participants in the target audience segment participated/attended the community awareness campaign recorded in a given period of time
Recommended disaggregation	Disease, intervention type, target audience
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data Non-routine program data (e.g. target audience survey) Community-based awareness events
Further info	<a href="https://www.knightfoundation.org/media/uploads/publication_pdfs/Impact-a-guide-to-Evaluating_Community_Info_Projects.pdf">https://www.knightfoundation.org/media/uploads/publication_pdfs/Impact-a-guide-to-Evaluating_Community_Info_Projects.pdf</a> page 9-11

Item	Description
Indicator name	<i>Population exposed by community awareness campaign out of total target population</i>
Indicator type	<b>Output</b>
Strategies that use indicator	Community awareness and linkage to care
Definition	Percentage of population reached through a community awareness campaign out of total population targeted
Method of measurement	<p>Counting of participants that attend campaign meetings or reached by media messaged disseminated and number of people in the target population.</p> <p><b>Calculation:</b>  Sum of people/participants in the target audience segment participated/attended the community awareness campaign recorded divided by the number of people targeted by the campaign</p>
Recommended disaggregation	Disease, intervention type, target audience
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data Non-routine program data (e.g. target audience survey)
Further info	<a href="https://www.knightfoundation.org/media/uploads/publication_pdfs/Impact-a-guide-to-Evaluating_Community_Info_Projects.pdf">https://www.knightfoundation.org/media/uploads/publication_pdfs/Impact-a-guide-to-Evaluating_Community_Info_Projects.pdf</a> page 9-11

Item	Description
Indicator name	<i>Buildings/equipment in use</i>
Indicator type	Output
Strategies that use indicator	(1) Community awareness and linkage to care; (2) Product development research; (3) Health service strengthening; (4) Manufacturing; (5) Regulation & Legislation; (6) Supply chain; (7) Financing
Definition	Number of infrastructure units (eg. Buildings) finalized and in use
Method of measurement	<p>The number of facilities or infrastructure units which are in use and where services are offered.</p> <p><b>Calculation:</b> Sum of the numerical count of facilities or infrastructure units constructed and in use.</p>
Recommended disaggregation	Type of facility Geographic region
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data
Further info	<p>Monitoring the building blocks of health systems_ a handbook of indicators and their measurement strategies</p> <p>Page number -8</p> <p><a href="http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf">http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf</a></p>

Item	Description
Indicator name	<i>Percentage of buildings/equipment in use out of total buildings/equipment planned</i>
Indicator type	Output
Strategies that use indicator	(1) Community awareness and linkage to care; (2) Product development research; (3) Health service strengthening; (4) Manufacturing; (5) Regulation & Legislation; (6) Supply chain
Definition	Percentage of the number of infrastructure units (e.g. buildings) completed and in use out of the total number of infrastructure planned
Method of measurement	<p>Sum of the total number of facilities or infrastructure units constructed and in use divided by the total number of infrastructure planned</p> <p><b>Calculation:</b>            Number of facilities or infrastructure units which are in use and where services are offered.  <hr/>           Number of facilities or infrastructure units which are planned to be constructed</p>
Recommended disaggregation	Type of facility
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data
Further info	<p>Monitoring the building blocks of health systems_ a handbook of indicators and their measurement strategies</p> <p>Page number -8</p> <p><a href="http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf">http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf</a></p>

Item	Description
Indicator name	<i>Tools in use</i>
Indicator type	Output
Strategies that use indicator	(1) Community awareness and linkage to care; (2) Product development research; (3) Health service strengthening; (4) Manufacturing; (5) Regulation & Legislation; (6) Supply chain; (7) Financing
Definition	Number of tools (e.g., mHealth, EMR, etc.) introduced and in use by the program (please distinguish from “ <a href="#">Management Procedures in Use</a> ” indicator)
Method of measurement	Counting the number of tools created and in use by the program  <b>Calculation:</b> Sum of number of tools created by the program
Recommended disaggregation	Type of tool (e.g. mobile health, electronic) Location of use in terms of level of care (primary/secondary/tertiary)
Frequency of reporting	Annually unless otherwise stated Please upload the detailed description of the tool as a pdf appendix.
Recommended data source	Routine program data
Further info	Not applicable

Item	Description
Indicator name	<i>Community groups supported</i>
Indicator type	Output
Strategies that use indicator	Community awareness and linkage to care
Definition	The number of community groups supported by the company program or its implementing partners. Support is defined as any financial or in kind transaction that is aimed to provide money, goods or services to facility the activities of community groups. A community group can be defined as "An association of individuals from the same community, especially one formed to advance a particular cause or interest."
Method of measurement	Counting of the number of community groups that are supported by the program or its implementing partners. The program administrative records contain information on the community groups that received funding, goods or services.  <b>Calculation:</b> Sum of the community groups that are supported by the program or its implementing partners
Recommended disaggregation	Type of community group (e.g. women, adolescents, patient advocacy groups)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data
Further info	<a href="https://www.knightfoundation.org/media/uploads/publication_pdfs/Impact-a-guide-to-Evaluating_Community_Info_Projects.pdf">https://www.knightfoundation.org/media/uploads/publication_pdfs/Impact-a-guide-to-Evaluating_Community_Info_Projects.pdf</a> page 9-11 <a href="https://en.oxforddictionaries.com/definition/community_group">https://en.oxforddictionaries.com/definition/community_group</a>

Item	Description
Indicator name	<i>Value of Funding Provided</i>
Indicator type	Output
Strategies that use indicator	(1) Community awareness and linkage to care; (2) Product development research; (3) Health service strengthening; (4) Manufacturing; (5) Regulation & Legislation; (6) Supply chain; (7) Financing
Definition	Total amount of awards disbursed by the company for a specific activity which form part of the program. This is distinct from the total amount invested in the program (see Input Expenditure).
Method of measurement	Total amount of money disbursed through funding activities  <b>Calculation:</b> Sum of the total amount of money disbursed to implementing partner
Recommended disaggregation	Disease Population group affected by the program Country
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data
Further info	Adapted from: <a href="https://www.treasury.gov/about/budget-performance/annual-performance-plan/Documents/FY%202015%20Treasury%20Performance%20Validation%20and%20Verification%20Appendix.pdf">https://www.treasury.gov/about/budget-performance/annual-performance-plan/Documents/FY%202015%20Treasury%20Performance%20Validation%20and%20Verification%20Appendix.pdf</a>  <a href="http://www.theglobalfund.org/media/5198/me_monitoringandevaluation_brochure_en.pdf">http://www.theglobalfund.org/media/5198/me_monitoringandevaluation_brochure_en.pdf</a> Page 6



Item	Description
Indicator name	<i>Population Screened</i>
Indicator type	Output
Strategies that use indicator	Health service delivery
Definition	<p>Number of individuals screened for disease as a result of the screening test or procedure being provided by the program.</p> <p>Screening activities could include any screening procedures (mammogram, cholesterol measurement, colonoscopy, etc.) delivered directly to a specified population, by the program. Screening activities are often preventive in nature and aim to look for diseases or conditions prior to symptoms developing.</p>
Method of measurement	<p>Counting of people who were screened for disease in the program</p> <p><b>Calculation:</b> Sum of the number of people screened</p>
Recommended disaggregation	By disease, sex, country
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data
Further info	

Item	Description
Indicator name	<i>Number of People Trained</i>
Indicator type	<b>Output</b>
Strategies that use indicator	(1) Product development research; (2) Financing; (3) Health service strengthening; (4) Manufacturing; (5) Regulation & Legislation; (6) Supply chain
Definition	Number of trainees
Method of measurement	Counting of people who completed all training requirements  <b>Calculation:</b> Sum of the number of people trained
Recommended disaggregation	By institution, sex, geographical region, by cadre
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Training organization records
Other possible source	Routine program data
Further info	Adapted from: Indicator-Based Pharmacovigilance Assessment Tool_Manual for Conducting Assessments in Developing Countries. Page 40 <a href="http://pdf.usaid.gov/pdf_docs/PNADS167.pdf">http://pdf.usaid.gov/pdf_docs/PNADS167.pdf</a>

Item	Description
Indicator name	<i>Percentage of professionals trained out of total number targeted</i>
Indicator type	Output
Strategies that use indicator	(1) Product development research; (2) Financing; (3) Health service strengthening; (4) Manufacturing; (5) Regulation & Legislation; (6) Supply chain
Definition	Percentage of professionals that completed the required requisites of the training out of total number of professionals targeted
Method of measurement	<p>Sum of professionals who completed all training requirements divided by the total number of professionals targeted by the program to be trained</p> <p><b>Calculation:</b></p> $\frac{\text{Number of professionals trained in a defined period}}{\text{Total number of professionals targeted by the program to be trained}}$
Recommended disaggregation	By institution, sex, geographical region
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Training organization records
Other possible source	Routine program data
Further info	<p>Adapted from: Indicator-Based Pharmacovigilance Assessment Tool_Manual for Conducting Assessments in Developing Countries. Page 40</p> <p><a href="http://pdf.usaid.gov/pdf_docs/PNADS167.pdf">http://pdf.usaid.gov/pdf_docs/PNADS167.pdf</a></p>

Item	Description
Indicator name	<i>Management procedures in use</i>
Indicator type	<b>Output</b>
Strategies that use indicator	(1) Product development research; (2) Health service strengthening; (3) Manufacturing; (4) Regulation & Legislation; (5) Supply chain; (6) Financing
Definition	Number of management procedures development and implemented through the program activity e.g. appointment systems for patients (please distinguish from “ <u>Tools in Use</u> ” indicator).
Method of measurement	<p>Counting of the number of management procedures in use that have been developed and implemented through the program activity. The management procedures in use can be obtained from the facility supervisor or documents on standard operating procedures.</p> <p><b>Calculation:</b> Sum of the number of management procedures in use that have been developed and implemented through the program activity</p>
Recommended disaggregation	Level of facility (primary, secondary, tertiary)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	<p>Routine program data</p> <p>Non-routine program data e.g. facility survey</p>

Item	Description
Indicator name	<i>Number of Licenses Granted</i>
Indicator type	Output
Strategies that use indicator	Licensing agreement
Definition	Number of voluntary licenses granted by the patent holder. Patent holders may at their discretion, license to other parties, on an exclusive or nonexclusive basis, the right to manufacture, import, and/or distribute a pharmaceutical product. In addition, please report whether there is a licensing fee.*
Method of measurement	Counting the number of licenses according to records.  <b>Calculation:</b> Sum of the number of voluntary licenses granted
Recommended disaggregation	Therapeutic group using Anatomical Therapeutic Chemical (ATC) classification system (preferably at level 4)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data, Medicines Patent Pool Reports (Please provide copy of the actual license if available.)
Further info	Some voluntary licenses can be found at: <a href="http://www.medicinespatentpool.org/patent-data/patent-status-of-arvs/">http://www.medicinespatentpool.org/patent-data/patent-status-of-arvs/</a> More information on the Anatomical Therapeutic Chemical (ATC) classification system can be found at: <a href="https://www.whooc.no/atc/structure_and_principles/">https://www.whooc.no/atc/structure_and_principles/</a>

\* Licensing fee: the percentage royalty rate(s) and/or development-based milestone payments, if any, if any, of gross and net sales of any product that is covered by any license negotiated as part of the access program

Item	Description
Indicator name	<i>Patents not enforced</i>
Indicator type	Output
Strategies that use indicator	Licensing agreement
Definition	Number of countries where the patent is subject to one or more of the following conditions: 1. The patent has not been filed; 2. The patent has been filed and not yet issued; 3. The patent has issued but the patent owner agrees not to assert it against third parties; 4. The patent has expired
Method of measurement	Counting the number of countries where the patent owner decides not to file or enforce a patent. This excludes countries in which the patent owner decided not to market the product or where the patent owner has not made a specific decision.  <b>Calculation:</b> Sum of number of countries where the patent is not enforced
Recommended disaggregation	Country income level Please provide a list of countries where the patents is not enforced
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data, Company reports
Further info	

Item	Description
Indicator name	<i>Companies benefiting from technology sharing</i>
Indicator type	Output
Strategies that use indicator	Licensing agreement
Definition	The number of companies benefiting of the shared technology related to the program activity. Benefitting includes the use or sales of the technology.
Method of measurement	<p><i>Counting the number of companies use of the shared technology related to the program activity</i></p> <p><b>Calculation:</b> Sum of the number of companies that made use of the shared technology related to the program activity</p>
Recommended disaggregation	Country income category where the companies are located
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data Reports from companies confirming the benefit from shared technology
Further info	<u>Country income category</u>

Item	Description
Indicator name	<i>Patients receiving program medicines from intermediaries</i>
Indicator type	Outcome
Strategies that use indicator	Pricing scheme
Definition	Total number of patients receiving program medicines from intermediaries. Intermediaries are defined as people who are not directly involved in the program.
Method of measurement	Routine program data on the number of patients receiving the program medicines from intermediaries.  <b>Calculation:</b> number of patients receiving program medicines from intermediaries
Recommended disaggregation	Age Gender Disease severity [if applicable] Geographical location Ethnicity
Frequency of reporting	Annually
Recommended data sources	Routine program data



Item	Description
Indicator name	<i>Researcher knowledge</i>
Indicator type	Outcome
Strategies that use indicator	Product development research
Definition	Percentage of researchers that pass the assessment examining their skills or knowledge. The exam should be designed to assess the possession of the skills and knowledge to be <i>able</i> to comply with predefined standards.
Method of measurement	<p>The assessment of possession of skills and knowledge occurs through a written, oral, or observational assessment that all researchers have to undergo.</p> <p><b>Calculation:</b></p> $\frac{\text{Number of researchers who pass the assessment}}{\text{Number of researchers sampled}}$
Recommended disaggregation	Gender Length of being in the profession Education
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Non-routine program data such as knowledge or skill test

Item	Description
Indicator name	<i>Median tender price ratio</i>
Indicator type	Outcome
Strategies that use indicator	Manufacturing
Definition	The ratio of the median tender price of the medicines related to the program activity divided by the median international reference price for same medicine
Method of measurement	<p>This indicators is a ratio and is calculated as follows:  Median tender price per unit charged in local currency* converted into US\$ dollars of reference year divided by Median price per unit charged internationally according to the International Drug Price Indicator Guide (<a href="http://mshpriceguide.org/en/home/">http://mshpriceguide.org/en/home/</a>)  The unit is determined by the dosage form. Use the following units for the respective dosage forms:  — “millilitre” for orally administered liquids, suspensions, topical solutions, eye drops, and injections in liquid form  — “gram” for powder for injection, eye ointments, topical creams and ointments.  — “dose” for medicines administered through inhalers or nebulizers.  — “MR tab” for modified release tablets, “MR cap” for modified release capsules  — “pessary” or “suppository”</p> <p><b>Calculation:</b>  Median tender price per unit of the medicine related to the program activity in local currency converted into US\$ dollars of reference year  <hr/> Median supplier price per unit charged internationally according to the International Drug Price Indicator Guide  <a href="http://mshpriceguide.org/en/home/">http://mshpriceguide.org/en/home/</a></p>
Recommended disaggregation	Type of provider (government, social insurance)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Tender price paid by organization carrying out tender The median international reference prices for the essential medicines (as price per tablet or therapeutic unit) are available through

	Management Sciences for Health ( <a href="http://mshpriceguide.org/en/home/">http://mshpriceguide.org/en/home/</a> )
Further info	Health Action International, WHO. Medicine prices, availability, affordability and price components. 2008. <a href="http://www.haiweb.org/medicineprices/">http://www.haiweb.org/medicineprices/</a> <i>International Medical Products Price Guide</i> <a href="http://mshpriceguide.org/en/home/">http://mshpriceguide.org/en/home/</a>

Item	Description
Indicator name	<i>Number of manufacturers participating in national tenders</i>
Indicator type	Outcome
Strategies that use indicator	Manufacturing
Definition	Number of manufacturers participating in national tenders of main health provider organization (e.g. government, social insurance)
Method of measurement	Counting the number of manufacturers that participate in national tenders of main health provide organization <b>Calculation:</b> Counting the number of manufacturers.
Recommended disaggregation	Domestic manufacturers International manufacturers
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Main health provider (e.g. government, social insurance)

Item	Description
Indicator name	<i>Stakeholder awareness of program</i>
Indicator type	Outcome
Strategies that use indicator	Regulation & Legislation
Definition	Percentage of stakeholders who are aware of the program out of the total number of stakeholders exposed to the program
Method of measurement	<p>Program administrative data counting the number of stakeholders exposed to the program. Survey data of stakeholders to identify the number aware of the program.</p> <p><b>Calculation:</b> number of stakeholders who are aware of the program divided by the total number of stakeholders exposed to the program</p>
Recommended disaggregation	Type of stakeholder (e.g. government, insurance personnel, health care provider)
Frequency of reporting	Annually
Recommended data sources	Routine program data

Item	Description
Indicator name	<i>Percentage of applications meeting MRA performance standards</i>
Indicator type	Outcome
Strategies that use indicator	Regulation & Legislation
Definition	Percentage of submitted applications to the Medicine Regulatory Authority that are meeting performance standards
Method of measurement	<p>Counting the total number of applications submitted to the Medicine Regulatory Authority. Counting the number of applications submitted that are meeting the performance standard.</p> <p><b>Calculation:</b></p> $\frac{\text{Number of applications submitted to MRA that are meeting the performance standard}}{\text{Total number of applications submitted to the MRA}}$
Recommended disaggregation	By type of medicines [under patent protection, generic, biosimilar]
Frequency of reporting	Annually
Recommended data sources	Administrative data provided by the medicine regulatory authority

Item	Description
Indicator name	<i>Regulator knowledge</i>
Indicator type	Outcome
Strategies that use indicator	Regulation & Legislation
Definition	Percentage of regulators that pass the assessment examining their skills or knowledge. The exam should be designed to assess the possession of the skills and knowledge to be <i>able</i> to comply with predefined standards.
Method of measurement	<p>The assessment of possession of skills and knowledge occurs through a written, oral, or observational assessment that all regulators have to undergo.</p> <p><b>Calculation:</b></p> $\frac{\text{Number of regulators who pass the assessment}}{\text{Number of regulators sampled}}$
Recommended disaggregation	Gender Length of being in the profession Education
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Non-routine program data such as knowledge or skill test

Item	Description
Indicator name	<i>Administrative cost per beneficiary</i>
Indicator type	Outcome
Strategies that use indicator	Financing
Definition	The cost that is spent per beneficiary on administering the financing scheme.
Method of measurement	<p>Sum of administrative costs of the financing scheme divided by the sum of all beneficiaries of the financing scheme.</p> <p><b>Calculation:</b></p> $\frac{\text{Sum of administrative costs of the financing scheme}}{\text{Total number of beneficiaries of the financing scheme}}$
Recommended disaggregation	None
Frequency of reporting	Annually
Recommended data sources	Administrative records of the financing scheme



Item	Description
Indicator name	<i>Volume of Medicines Sold</i>
Indicator type	Output/Outcome <sup>1</sup>
Strategies that use indicator	(1) Licensing agreement; (2) Manufacturing; (3) Pricing scheme
Definition	Volume of medicines affected by the pricing scheme sold by the company
Method of measurement	<p>Volume is expressed in Defined daily doses (DDDs) of each product sold during a defined period of time. If DDD are not defined by WHO Collaborating Center, please define your own value.</p> <p><b>Calculation:</b> Sum of all volume of medicines included in the pricing scheme that was received by intended recipient</p>
Recommended disaggregation	<p>Therapeutic group using Anatomical Therapeutic Chemical (ATC) classification system</p> <p>Geographical region</p> <p>Country</p> <p>Type of recipient (e.g. multilateral organization, government, NGO)</p>
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data, such as delivery records
Other possible source	Import records
Further info	<p><u><a href="https://www.whooc.no/atc_ddd_index/">More information about the</a></u> Daily Defined Dose (DDD) can be found at: <a href="https://www.whooc.no/atc_ddd_index/">https://www.whooc.no/atc_ddd_index/</a></p> <p>More information on the Anatomical Therapeutic Chemical (ATC) classification system can be found at: <a href="https://www.whooc.no/atc/structure_and_principles/">https://www.whooc.no/atc/structure_and_principles/</a></p>

<sup>1</sup> Volume of medicines sold is an output in pricing scheme strategy, but an outcome in licensing agreement and manufacturing strategies.

Item	Description
Indicator name	<i>Number of patients reached with pricing scheme</i>
Indicator type	Output
Strategies that use indicator	Pricing scheme
Definition	Number of individuals that received medicines included in <i>the price scheme</i>
Method of measurement	Counting the number of individuals that received medicines included in <i>the price scheme</i>  <b>Calculation:</b> Sum of the number of individuals that received medicines included in <i>the price scheme</i>
Recommended disaggregation	Type of target audience (e.g. women, adolescents, patients affected by specific disease)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data Non-routine program data such as target audience survey
Further info	Adapted from: <a href="https://www.knightfoundation.org/media/uploads/publication_pdfs/Impact-a-guide-to-Evaluating_Community_Info_Projects.pdf">https://www.knightfoundation.org/media/uploads/publication_pdfs/Impact-a-guide-to-Evaluating_Community_Info_Projects.pdf</a> page 9-11

Item	Description
Indicator name	<i>Population exposed to communication activities about the price scheme</i>
Indicator type	Output
Strategies that use indicator	(1) Pricing scheme; (2) Medicine Donation
Definition	Number of population reached by communication activities informing them about the price scheme
Method of measurement	Counting the participants that received information about the price scheme.  <b>Calculation:</b> Sum of the number of people/participants in the target audience segment participated/attended campaign meetings or received media messages about the price schemes.
Recommended disaggregation	Type of target audience (e.g. women, adolescents, patients affected by specific disease)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data Non-routine program data such as target audience survey
Further info	Adapted from: <a href="https://www.knightfoundation.org/media/uploads/publication_pdfs/Impact-a-guide-to-Evaluating_Community_Info_Projects.pdf">https://www.knightfoundation.org/media/uploads/publication_pdfs/Impact-a-guide-to-Evaluating_Community_Info_Projects.pdf</a> page 9-11

Item	Description
Indicator name	<i>Volume of Medicines Donated</i>
Indicator type	Output
Strategies that use indicator	Medicine donation
Definition	Volume of donated medicines received by the intended recipient
Method of measurement	<p>Volume is expressed in Defined Daily Doses (DDD) of each product donated during a defined period of time. If DDD are not defined by WHO Collaborating Center, please define your own value in terms of the defined daily dose to patients.</p> <p><b>Calculation:</b> Sum of all volume of donated medicines that was received by intended recipient</p>
Recommended disaggregation	<p>Therapeutic group using Anatomical Therapeutic Chemical (ATC) classification system</p> <p>Geographical region</p> <p>Country</p> <p>Type of recipient (e.g. multilateral organization, government, NGO)</p>
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data such as delivery records (e.g. waybills, issue/receipt vouchers, bills of lading)
Other possible source	Import records
Further info	<p><u>More information about</u> the Daily Defined Dose (DDD) can be found at: <a href="https://www.whooc.no/atc_ddd_index/">https://www.whooc.no/atc_ddd_index/</a></p> <p>More information on the Anatomical Therapeutic Chemical (ATC) classification system can be found at: <a href="https://www.whooc.no/atc/structure_and_principles/">https://www.whooc.no/atc/structure_and_principles/</a></p>

Item	Description
Indicator name	<i>Value of medicines donation</i>
Indicator type	Output
Strategies that use indicator	Medicine donation
Definition	Sum of the volume of the medicines multiplied by the international reference price per unit of donated medicine
Method of measurement	<p>To estimate the value of the medicines donated the median supplier drug price per unit is obtained from the International Drug Price Indicator Guide. If there is no information on the supplier price the buyer price can be used.</p> <p><b>Calculation:</b> Median international supplier drug price per unit x sum of units of medicines donated</p>
Recommended disaggregation	<p>Therapeutic group using Anatomical Therapeutic Chemical (ATC) classification system</p> <p>Geographical region</p> <p>Country</p> <p>Type of recipient (e.g. multilateral organization, government, NGO)</p>
Frequency of reporting	Annually unless otherwise stated
Recommended data source	International reference price. If the International drug price indicator guide does not publish a price on their database define the unit price used for the calculation in US\$ of a specific date.
Further info	<p>International Drug Price Indicator Guide is available at <a href="http://mshpriceguide.org/en/home/">http://mshpriceguide.org/en/home/</a></p> <p>More information on the Anatomical Therapeutic Chemical (ATC) classification system can be found at: <a href="https://www.whooc.no/atc/structure_and_principles/">https://www.whooc.no/atc/structure_and_principles/</a></p>

Item	Description
Indicator name	<i>Number of individuals receiving donated medicines</i>
Indicator type	Output*
Strategies that use indicator	Medicine donation
Definition	Number of patients receiving donated medicines.
Method of measurement	Counting the patients who received the donated medicines  <b>Calculation:</b> Sum of all patients who received the donated medicines
Recommended disaggregation	Type of target audience (e.g. women, adolescents, patients affected by specific disease)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data Non-routine program data such as target audience survey

\*This indicator should only be reported when the company leading the program is in charge of distributing the medicines.

Item	Description
Indicator name	Percentage of individuals receiving donated medicines out of target population
Indicator type	Output*
Strategies that use indicator	Medicine donation
Definition	Percentage of individuals receiving donated medicines out of the total target population
Method of measurement	Counting the patients who received the donated medicines. The target population needs to be defined.  <b>Calculation:</b> Sum of all individuals who received the donated medicines Number of individuals in the target population
Recommended disaggregation	Type of target audience (e.g. women, adolescents, patients affected by specific disease)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data Non-routine program data such as target audience survey

\*This indicator should only be reported in case the company leading the program is in charge of distributing the medicines.

# Section III

## Outcome Indicators

Item	Description
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Indicator name	<i>Knowledge of disease symptoms</i>
Indicator type	<b>Outcome</b>
Strategies that use indicator	Community awareness and linkage to care
Definition	Percentage of population that correctly identified disease symptoms or warning signs out of total target population. Along with the indicator value the target population needs to be described.
Method of measurement	<p>The target population is asked to identify the symptoms or warning signs of the disease or health condition under consideration.</p> <p><b>Calculation:</b></p> $\frac{\text{Number of survey responders that correctly identified the disease symptoms or warning signs}}{\text{Number of people surveyed}}$
Recommended disaggregation	Age category Sex Educational group/category Geographic location
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Non-routine program data such as population survey

Item	Description
Indicator name	<i>Knowledge of treatment options</i>
Indicator type	Outcome
Strategies that use indicator	Community awareness and linkage to care
Definition	The percentage of individuals that correctly identified the therapeutic options to treat the disease related to the program activity out of the total target population. Along with the indicator value the target population needs to be described.
Method of measurement	<p>The target population is asked to identify treatment options of the disease or health condition related to the program activity.</p> <p><b>Calculation:</b></p> $\frac{\text{Number of survey responders that correctly identified the treatment options}}{\text{Number of people surveyed}}$
Recommended disaggregation	Age Category Sex Educational category Geographic location
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Non-routine program data such as population survey

Item	Description
Indicator name	<i>Adoption of preventive health behaviors</i>
Indicator type	Outcome
Strategies that use indicator	(1) Community awareness and linkage to care; (2) Financing
Definition	Percentage of population that reports carrying out preventive health behavior out of total target population
Method of measurement	<p>The target population is asked to report on preventive health behaviors related to the program activity.</p> <p><b>Calculation:</b></p> $\frac{\text{Number of survey responders that report carrying out preventive health behaviors}}{\text{Number of people surveyed}}$
Recommended disaggregation	Age category Sex Education category Geographic location
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Non-routine program data such as survey

Item	Description
Indicator name	<i>Volume of health service</i>
Indicator type	Outcome
Strategies that use indicator	Community Awareness & Linkage to Care
Definition	Volume of specific health service delivered (e.g. number of vaccinations provided; number of diagnostic tests carried out)
Method of measurement	Counting the units of specific health services delivered  <b>Calculation:</b> sum of the total units of specific health services delivered
Recommended disaggregation	Type of health service Age group
Frequency of reporting	Annually
Recommended data sources	Health service administrative records (District Health Information System)

Item	Description
Indicator name	<i>Patients properly diagnosed</i>
Indicator type	Output/Outcome <sup>2</sup>
Strategies that use indicator	(1) Community awareness and linkage to care; (2) Financing; (3) Health service delivery; (4) Health service strengthening
Definition	Number of individuals correctly diagnosed with the disease out of the total number of individuals with the condition.
Method of measurement	<p>Correct diagnosis can be measured in different ways depending on the local standard for diagnosis. For instance, evaluators collect data through observing and interviewing providers at selected health care facilities offering the diagnostic services. Providers are assessed on history taking and examination. To assess correct diagnosis the evaluators confirm whether the provider arrived at the right diagnosis based on history and examination according to national standard treatment guidelines (STG). In case national STG are not available international guidelines can be an appropriate benchmark. For other diseases a biometric measure may be taken to confirm whether the clinical diagnosis without biometric measure was correct.</p> <p><b>Calculation:</b></p> $\frac{\text{Number of individuals correctly diagnosed with the disease}}{\text{Number of individuals with the disease}}$
Recommended disaggregation	Facility level (primary, secondary, tertiary) Provider type (public, private, faith-based)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Non-routine program data such as observation
Other possible source	Laboratory results
Further info	Adopted from: <a href="https://www.measureevaluation.org/prh/rh_indicators/specific/stis-hiv-aids/percent-of-sti-patients-appropriately-diagnosed">https://www.measureevaluation.org/prh/rh_indicators/specific/stis-hiv-aids/percent-of-sti-patients-appropriately-diagnosed</a>

<sup>2</sup> This indicator is an output and an outcome for Health Service Delivery and an outcome only for the other three strategies listed

Item	Description
Indicator name	<i>Patients on appropriate treatment</i>
Indicator type	Output/Outcome <sup>3</sup>
Strategies that use indicator	(1) Community awareness and linkage to care; (2) Financing; (3) Health service strengthening; (4) Licensing agreement; (5) Manufacturing; (6) Medicine donation; (6) Regulation & legislation; (7) Health Service Delivery; (8) Price Scheme
Definition	Percentage patients on appropriate treatment (according to standard treatment guidelines related to NCDs) among the total number of patients with NCDs visiting the facility.
Numerator	<p>This information may be obtained from facilities, prescriptions data and medical records and then compared to national Standard Treatment Guidelines.</p> <p>National Standard Treatment Guidelines (STG) may be defined as 'systematically developed statements to help practitioners or prescribers make decisions about appropriate treatments for specific clinical conditions'. At a minimum, they should contain information on clinical features, diagnostic criteria, non-medicine and medicine treatments (first-, second-, third-line), and referral criteria. If national STG are not available international guidelines can provide parameters, however, a justification should be added.</p> <p><b>Calculation:</b></p> $\frac{\text{Number of patients treated according to standard treatment guidelines related to NCDs visiting the facility}}{\text{Total number of patients with NCDs visiting the facility}}$
Recommended level of disaggregation	Level of facility (primary/secondary/tertiary) Geographical region (urban/rural) Sector (public, private, faith-based) Sex Insurance status Ethnicity Provider (e.g. nurse, medical doctor)

<sup>3</sup> This indicator is an output and an outcome for Health Service Delivery and an outcome only for the other seven strategies.

<b>Frequency of reporting</b>	Annually unless otherwise stated
<b>Recommended data source</b>	Non-routine program data such as facility surveys
<b>Other possible source(s)</b>	Prescription data, Electronic databases, Medical records
<b>Further info</b>	World Health Organization. How to investigate drug use in health facilities. Geneva: WHO, 1993. Annex. Available at: <a href="http://apps.who.int/medicinedocs/en/d/Js2289e/8.5.html#Js2289e.8.5">http://apps.who.int/medicinedocs/en/d/Js2289e/8.5.html#Js2289e.8.5</a>

Item	Description
Indicator name	<i>Cost per health service unit delivered</i>
Indicator type	Outcome
Strategies that use indicator	(1) Health Service Strengthening; (2) Health Service Delivery
Definition	Costs per specific health service unit delivered (e.g. cost per diagnostic test carried out)
Method of measurement	<p>Counting the total number of health service units delivered. Multiplying the total number of health service units delivered by the cost per unit of health service expressed in US\$ dollar of the corresponding year.</p> <p><b>Calculation:</b> sum of the units of specific health service delivered multiplied by the cost per unit of specific health service delivered (e.g. 10 diagnostics tests * US\$15/diagnostic test = US\$150) OR  <math display="block">\frac{\text{Sum of the costs of the health services delivered}}{\text{Total number of beneficiaries of the health service}}</math></p>
Recommended disaggregation	Type of health service
Frequency of reporting	Annually
Recommended data sources	Health service administrative records (District Health Information System)



Item	Description
Indicator name	<i>Patients adherent to treatment</i>
Indicator type	Outcome
Strategies that use indicator	Health service delivery
Definition	<p>Percentage of patients that are taking their treatment as prescribed by their health care provider. Adherence to treatment is defined as “the extent to which a person’s behavior – taking medication, following a diet, and/or executing lifestyle changes, corresponds with agreed recommendations from a health care provider”.</p> <p>Adherence measurement could be subjective or objective. Subjective measurement include patient interview or patient administered questionnaire on adherence. Objective rating of adherence could be process-oriented or outcome-oriented. Process-oriented adherence rating make use of variables such as appointment-keeping, pill counts, or pharmacy records on prescription filling to measure adherence. Outcome-oriented rating use the end-result of treatment, e.g. controlled blood glucose level, as an indicator of adherence.</p>
Numerator	<p><b>Calculation:</b>  Number of patients taking their treatment as prescribed by their health care provider</p> <hr/> Total number of patients with NCDs visiting the facility
Recommended level of disaggregation	Level of facility (primary/secondary/tertiary) Geographical region (urban/rural) Sex Provider (e.g. nurse, medical doctor)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data Non-routine program data such as medical records
Other possible source(s)	Patient administered questionnaires, Pharmacy database
Further info	1. Osterberg L, Blaschke T. Adherence to medication. New England Journal of Medicine. 2005 Aug 4;353(5):487-97.

	<p>2. World Health Organization. Adherence to Long-Term Therapies - Evidence for Action. Geneva: WHO, 2003. Annex. Available at: <a href="http://apps.who.int/medicinedocs/pdf/s4883e/s4883e.pdf">http://apps.who.int/medicinedocs/pdf/s4883e/s4883e.pdf</a></p> <p>3. Urquhart J. Patient non-compliance with drug regimens: measurement, clinical correlates, economic impact. European heart journal. 1996 Mar 1;17(suppl_A):8-15.</p>
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Item	Description
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Indicator name	<i>Value of medicines expired</i>
Indicator type	Outcome
Strategies that use indicator	Supply chain
Definition	Total costs of expired medicines
Method of measurement	<p>Multiplying the total number of expired units by the cost per unit expressed in US\$ dollar of the corresponding year.</p> <p><b>Calculation:</b> sum of the units of expired medicines multiplied by the cost per unit of expired medicines (e.g. 100,000 tablets * US\$3/per tablet = US\$300,000)</p>
Recommended disaggregation	Therapeutic group of medicines
Frequency of reporting	Annually
Recommended data sources	Administrative supply chain records



Item	Description
Indicator name	<i>Patients retained in care</i>
Indicator type	Output/Outcome <sup>4</sup>
Strategies that use indicator	(1) Community awareness and linkage to care; (2) Financing; (3) Health service delivery; (4) Health service strengthening
Definition	Percentage of registered patients who had a facility visit out of total number of registered patients expected to receive treatment for a specific condition within that time period (e.g. month)
Method of measurement	<p>The health facility patient registry should provide information on the number of patient registered with the health facility.</p> <p><b>Calculation:</b></p> $\frac{\text{Number of registered patients attending the point of care}}{\text{Number of registered patients expected to attend within that time period}}$
Recommended disaggregation	Sex Income or household assets Insurance status Ethnicity Geographical location
Frequency of reporting	Usually monthly if patients are expected to have a facility visit every month.
Recommended data source	External Non-Public Data data such as facility records
Other possible source	Patient exit interviews
Further info	Adapted from: Giordano TP, Gifford AL, White AC, Almazor ME, Rabeneck L, Hartman C, Backus LI, Mole LA, Morgan RO. Retention in care: a challenge to survival with HIV infection. <i>Clinical infectious diseases</i> . 2007 Jun 1;44(11):1493-9. <a href="http://www.jstor.org.ezproxy.bu.edu/stable/pdf/4485427.pdf">http://www.jstor.org.ezproxy.bu.edu/stable/pdf/4485427.pdf</a>

<sup>4</sup> This indicator is an output and an outcome for Health Service Delivery and an Outcome only for the other three strategies.

Item	Description
Indicator name	<i>Time between first symptoms and diagnosis</i>
Indicator type	Outcome
Strategies that use indicator	(1) Community awareness and linkage to care; (2) Health service delivery
Definition	Median time between the first symptoms of the medical condition reported by the patients and the diagnosis by a trained health care professional
Method of measurement	<p>The health facility patient medical recorders should provide the information on the time reported by the patients between the first symptoms and the clinical diagnosis. The measurement should be taken in a representative sample of the patients with the medical condition under study.</p> <p><b>Calculation:</b> Median number of days between the first symptoms of the medical condition and its diagnosis by a trained health care professional for all patients with symptoms and then diagnosed</p>
Recommended disaggregation	Sex Income or household assets Insurance status Ethnicity Geographical location
Frequency of reporting	Annually unless otherwise stated
Recommended data source	External Non-Public Data such as Health facility records
Other possible source	Patient exit interviews

Item	Description
Indicator name	<i>Time from diagnosis to receiving treatment initiation</i>
Indicator type	<b>Outcome</b>
Strategies that use indicator	(1) Community awareness and linkage to care; (2) Health service delivery
Definition	Median time between the diagnosis and receiving treatment initiation
Method of measurement	<p>The health facility patient medical recorders should provide the information on the time between the clinical diagnosis by a trained health care providers and the initiation of treatment. Pharmacy or drug dispensing records are often used to confirm the date when the patients receives the prescribed medicine for the first time.</p> <p><b>Calculation:</b> Median number of days between the clinical diagnosis by a trained health care professional and the first dispensing of the treatment prescribed for all patients diagnosed and receiving treatment</p>
Recommended disaggregation	Sex Income or household assets Insurance status Ethnicity Geographical location
Frequency of reporting	Annually unless otherwise stated
Recommended data source	External Non-Public Data such as Health facility records, Drug dispensing records, and Pharmacy records
Other possible source	Non-routine program data such as patient exit interviews

Item	Description
Indicator name	<i>Time from treatment initiation to lost-to-follow-up</i>
Indicator type	<b>Outcome</b>
Strategies that use indicator	(1) Community awareness and linkage to care; (2) Health service delivery
Definition	Median time between the treatment initiation and the lost-to-follow-up
Method of measurement	<p>The health facility patient medical recorders should provide the information on the initiation of treatment (first prescription). Pharmacy or drug dispensing records are often used to confirm the date when the patients receives the prescribed medicine for the first time. Pharmacy records are also used to identify the date when the patient is supposed to come back but does not collect the medicine. Loss-to-follow up is defined as whose treatment was interrupted for 2 consecutive months or more.</p> <p><b>Calculation:</b> Median number of days between the first dispensing of the treatment prescribed and not collecting the prescribed medicines for all patients that were lost to follow-up.</p>
Recommended disaggregation	Sex Income or household assets Insurance status Ethnicity Geographical location
Frequency of reporting	Annually unless otherwise stated
Recommended data source	External Non-Public Data such as Health facility records, Drug dispensing records, and Pharmacy records



Item	Description
Indicator name	<i>Health provider knowledge</i>
Indicator type	Outcome
Strategies that use indicator	Health service strengthening
Definition	Percentage of providers that pass the assessment examining their skills or knowledge. The exam should be designed to assess the possession of the skills and knowledge to be <i>able</i> to comply with predefined standards.
Method of measurement	<p>The assessment of possession of skills and knowledge occurs through a written, oral, or observational assessment that all providers have to undergo.</p> <p><b>Calculation:</b></p> $\frac{\text{Number of providers who pass the assessment}}{\text{Number of providers trained}}$
Recommended disaggregation	Age Sex Length of being in the profession Education
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Non-routine program data such as knowledge or skill test

Item	Description
Indicator name	<i>Population access to non-communicable disease (NCD) health service utilization rate</i>
Indicator type	Outcome
Strategies that use indicator	Health service strengthening
Definition	Percentage of population accessing NCD related health services at least once (per year) out of total population in need of these services
Method of measurement	<p>This indicator is a measure of primary health care or outpatient or inpatient utilization of health services by a defined population. This is obtained from health services statistics properly designed to record individuals over a time period such as a year who used particular services.</p> <p><b>Calculation:</b></p> $\frac{\text{Number of patients who used NCD health services at least once (per year)}}{\text{Total population in need of NCD related health services}}$
Recommended disaggregation	Geographical location (urban, rural) Providence, county or state, Country
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Non-routine program data such as household surveys
Other possible source	Health service statistics
Further info	<p>Adapted from: Page 193 Health Systems 20/20. 2012. <i>The Health System Assessment Approach: A How-To Manual. Version 2.0.</i> <a href="http://www.healthsystemassessment.org">www.healthsystemassessment.org</a> Page-57 <a href="http://apps.who.int/iris/bitstream/10665/40672/1/9241800046.pdf">http://apps.who.int/iris/bitstream/10665/40672/1/9241800046.pdf</a></p>

Item	Description
Indicator name	<i>Order Fulfillment Rate</i>
Indicator type	Outcome
Strategies that use indicator	Supply chain
Definition	The percentage of all requested orders that were filled/delivered.
Method of measurement	<p>Administrative records are used to verify the dates of shipment delivery. For each of the shipments the corresponding date of order is recorded. The number of shipments delivered is counted.</p> <p><b>Calculation:</b></p> $\frac{\text{Number of orders filled/delivered}}{\text{Number of orders made during a defined period time}}$
Recommended disaggregation	Level of distribution facility (e.g. central or district warehouse, facility)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	External non-public data such as administrative records of facilities
Other possible source	
Further info	Jesper Lillelund. Key Performance Indicators For The Supply Chain. <a href="https://www.mbtmag.com/article/2015/02/key-performance-indicators-supply-chain">https://www.mbtmag.com/article/2015/02/key-performance-indicators-supply-chain</a>

Item	Description
Indicator name	<i>On-time medicine stock delivery</i>
Indicator type	Outcome
Strategies that use indicator	Supply chain
Definition	The percentage of all orders delivered by the requested delivery date, as indicated in the PO/contract during a defined period of time.
Method of measurement	<p>Calculation:</p> $\frac{\text{Number of orders delivered by requested date}}{\text{Total number of orders delivered}}$
Recommended disaggregation	Level of distribution facility (e.g. central or district warehouse, facility)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data such as procurement records, receipt records, customs records
Other possible source	
Further info	Aronovich, Dana, Marie Tien, Ethan Collins, Adriano Sommerlatte, and Linda Allain. 2010. <i>Measuring Supply Chain Performance: Guide to Key Performance Indicators for Public Health Managers</i> . Arlington, Va.: USAID   DELIVER PROJECT, Task Order 1. P.8

Item	Description
Indicator name	<i>Forecast Accuracy</i>
Indicator type	Outcome
Strategies that use indicator	Supply chain
Definition	<p>For all products that the program has committed to supplying, this indicator measures the percentage of difference between forecasts previously made for a year and the actual consumption or issues data for that year.</p> <p>Evaluators should calculate the indicator for each product for which a forecast is made.</p>
Method of measurement	<p>The forecast is obtained from contract between distributor and funder. The total volume of actual consumption is derived from administrative records (e.g. dispensing records or delivery records). This indicator assumes no stock piling.</p> <p>Calculation:</p> $  - \frac{\text{forecasted consumption} - \text{actual consumption}}{\text{actual consumption}} * 100$
Recommended disaggregation	Level of distribution facility (e.g. central or district warehouse, facility)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Distribution contract Warehouse or facility records
Other possible source	
Further info	<p><a href="http://jsi.com/JSIInternet/Inc/Common/_download_pub.cfm?id=11153&amp;lid=3">http://jsi.com/JSIInternet/Inc/Common/_download_pub.cfm?id=11153&amp;lid=3</a></p> <p>Aronovich, Dana, Marie Tien, Ethan Collins, Adriano Sommerlatte, and Linda Allain. 2010. <i>Measuring Supply Chain Performance: Guide to Key Performance Indicators for Public Health Managers</i>. Arlington, Va.: USAID   DELIVER PROJECT, Task Order 1. P.8</p>

Item	Description
Indicator name	<i>Availability of medicines at outlets</i>
Indicator type	<b>Outcome</b>
Strategies that use indicator	(1) Licensing agreement; (2) Manufacturing; (3) Medicine donation; (4) Price scheme; (5) Regulation & legislation; (6) Supply chain
Definition	Percentage of outlets with medicine related to specific program activity available at the time of visit
Method of measurement	<p>Data on the availability of a certain medicine are collected from a survey of a sample of facilities. Availability is reported as the percentage of medicine outlets where a particular medicine was found on the day of the survey. Health facility reports may also include stockouts indicators but require regular independent verification.</p> <p><b>Calculation:</b>  <math display="block">\frac{\text{Number of facilities that have medicine in stock at the time of visit}}{\text{Number of facilities visited}}</math></p>
Recommended disaggregation	Level of facility (primary/secondary/tertiary) Geographical region (urban/rural) Sector (public, private, faith-based)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Non-routine program data such as facility surveys
Other possible source	Facility information systems
Further info	Health Action International, WHO. Medicine prices, availability, affordability and price components. 2008. <a href="http://www.haiweb.org/medicineprices/">http://www.haiweb.org/medicineprices/</a>

Item	Description
Indicator name	<i>Volume of Expired Medicine</i>
Indicator type	Outcome
Strategies that use indicator	Supply chain
Definition	Number of medicine units expired
Method of measurement	<p>The number of expired medicine units is identified through the inspection of expiry dates of medicines in stock. Counting the number of expired medicines units is required to calculate the indicator.</p> <p>Calculation: Sum of number of medicines units expired</p>
Recommended disaggregation	<p>Level of storage facility (district, central level)</p> <p>Type of institution to which storage facility belongs (MoH, Social Security, NGO, etc.)</p> <p>Sector (public, private, faith-based)</p>
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Stock availability records, audit reports, registers
Other possible source	Routine inventory information systems, facility survey visits, Physical counts
Further info	Adapted from: Aronovich, Dana, Marie Tien, Ethan Collins, Adriano Sommerlatte, and Linda Allain. 2010. <i>Measuring Supply Chain Performance: Guide to Key Performance Indicators for Public Health Managers</i> . Arlington, Va.: USAID   DELIVER PROJECT, Task Order 1. - Page -35

	Description
Indicator name	<i>Medicines expiry rate</i>
Indicator type	Outcome
Strategies that use indicator	Supply chain
Definition	Percentage of medicines units expired out of total medicines in stock.
Method of measurement	<p>The number of expired medicine units is identified through the inspection of expiry dates of medicines in stock. Counting the number of expired and not expired medicines units is required to calculate the indicator.</p> <p><b>Calculation:</b></p> $\frac{\text{Volume of medicines units expired}}{\text{Total quantity of medicines units expired and not expired}}$
Recommended disaggregation	<p>Level of storage facility (district, central level)</p> <p>Type of institution to which storage facility belongs (MoH, Social Security, NGO, etc.)</p> <p>Sector (public, private, faith-based)</p>
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Stock availability records, audit reports, registers
Other possible source	Routine inventory information systems, facility survey visits, Physical counts
Further info	Adapted from: Aronovich, Dana, Marie Tien, Ethan Collins, Adriano Sommerlatte, and Linda Allain. 2010. <i>Measuring Supply Chain Performance: Guide to Key Performance Indicators for Public Health Managers</i> . Arlington, Va.: USAID   DELIVER PROJECT, Task Order 1. - Page -35



Item	Description
Indicator name	<i>Stock accuracy rate</i>
Indicator type	Outcome
Strategies that use indicator	Supply chain
Definition	The percentage of items where the stock record counts equals physical stock counts.
Method of measurement	<p><b>Calculation:</b></p> $\frac{\text{Number of items where stock record count equals physical stock}}{100}$ <p>Total number of items counted</p>
Recommended disaggregation	Level of distribution facility (e.g. central or district warehouse, facility)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	<p>Routine program data such as stock ledger, bin card, or other inventory management instrument</p> <p>Physical count of items in the facility</p>
Further info	Aronovich, Dana, Marie Tien, Ethan Collins, Adriano Sommerlatte, and Linda Allain. 2010. <i>Measuring Supply Chain Performance: Guide to Key Performance Indicators for Public Health Managers</i> . Arlington, Va.: USAID   DELIVER PROJECT, Task Order 1. P.8

Item	Description
Indicator name	<i>Treatment and services covered by the financing scheme</i>
Indicator type	Outcome
Strategies that use indicator	Financing
Definition	Percentage of national health expenditure covered by the financing scheme
Method of measurement	<b>Calculation:</b> $\frac{\text{Financing scheme health expenditure}}{\text{Total national health expenditure}}$
Recommended disaggregation	Monthly or quarterly  Type of expenditure (e.g. non-communicable disease medicines, medicines for acute diseases)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program financial data External public data such as National Health Accounts and World Bank data
Further info	

Item	Description
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Indicator name	<i>Population eligible to enroll into a financing scheme</i>
Indicator type	<b>Outcome</b>
Strategies that use indicator	Financing
Definition	Percentage of population who are eligible to enroll in a financing scheme out of the total target population
Method of measurement	<p>The requirements for enrollment in a financing scheme are stipulated by the public or private insurer.</p> <p><b>Calculation:</b></p> $\frac{\text{Number of individuals who are eligible to enroll in a financing scheme}}{\text{Total target population}}$
Recommended disaggregation	Sex Education Wealth Geographic location Ethnicity
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Non-routine program data such as household survey

Item	Description
Indicator name	<i>Population enrolled in health financing scheme for medicines</i>
Indicator type	Outcome
Strategies that use indicator	Financing
Definition	Percentage of population enrolled in financing scheme which cover medicines expenses
Method of measurement	<p>Membership in risk pooling adds financial protection against high costs of health care at the time of use and over time, compared with paying user fees to a provider whenever the need for health care arises. It thus improves financial access and reduces the financial barriers to use of the health care services that the insurance covers. Generally, social and private health insurance schemes cover primarily urban populations working in the formal sector for wages. CBHI is often developed by rural and urban informal sector populations who join together to help cover the costs of user fees in the public sector, the private sector, or both.</p> <p>The percentage of population covered by insurance indicates the proportion of the population with risk pooling that shares the costs of healthcare across the healthy and the sick. If any of the types of voluntary insurance have existed for several years, exploring their evolution over time is useful to see if population coverage has expanded. Note that some health insurance schemes do not cover medicines. This indicator refers only to those that do.</p> <p><b>Calculation:</b></p> $\frac{\text{The number of people enrolled in a health insurance scheme that covers medicines costs}}{\text{Total number of population}}$
Recommended disaggregation	Geographical region, household wealth, ethnicity, employment status
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Non-routine program data such as household survey
Other possible source	Insurance records

Further info	USAID. The Health System Assessment Approach. A How-To Manual Version 2.0. Arlington, VA, USIAD, 2012. . <a href="http://apps.who.int/medicinedocs/documents/s19838en/s19838en.pdf">http://apps.who.int/medicinedocs/documents/s19838en/s19838en.pdf</a> - Page 37
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Item	Description
Indicator name	<i>Household out-of-pocket expenditure: total health</i>
Indicator type	Outcome
Strategies that use indicator	(1) Financing; (2) Price Scheme; (3) Medicine donation
Definition	The median household out-of-pocket (OOP) expenditure on health (monthly, quarterly, annually)
Method of measurement	<p>This information may be obtained through household surveys. The sum of all health related expenditure that a household occurs is defined as household OOP on health. The total household expenditure on health converted into US\$ dollars.</p> <p><b>Calculation:</b> The median out-of-pocket (OOP) expenditure of households on health</p>
Recommended disaggregation	<p>Monthly or quarterly</p> <p>Type of expenditure (e.g. non-communicable disease versus for acute conditions) in which case the calculation is sum of all health related expenditure on NCDs</p>
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Non-routine program data such as household survey
Other possible source	National Health Accounts, World Bank data
Further info	<p>Adapted from: Manual for the Household Survey to Measure Access and Use of Medicines. Draft. Available at: <a href="http://www.who.int/medicines/areas/coordination/household_manual_february_2008.pdf">www.who.int/medicines/areas/coordination/household_manual_february_2008.pdf</a></p> <p>Country data available at <a href="http://apps.who.int/nha/database/ViewData/Indicators/en">http://apps.who.int/nha/database/ViewData/Indicators/en</a></p>

Item	Description
Indicator name	<i>Household out-of-pocket expenditure: medicines/treatment</i>
Indicator type	Outcome
Strategies that use indicator	(1) Financing; (2) Price Scheme; (3) Medicine donation
Definition	The median household out-of-pocket (OOP) expenditure on medicines (monthly, quarterly, annually)
Method of measurement	<p>This information may be obtained through household surveys. The sum of all medicine related expenditure that a household occurs is defined as household OOP on medicines. The total household expenditure on medicines is converted into US\$ dollars.</p> <p><b>Calculation:</b> The median household out-of-pocket expenditure on medicines</p>
Recommended disaggregation	<p>Monthly or quarterly</p> <p>Type of expenditure (e.g. non-communicable disease medicines, medicines for acute diseases)</p>
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Non-routine program data such as household survey
Other possible source	National Health Accounts, World Bank data
Further info	<p>Adapted from: Manual for the Household Survey to Measure Access and Use of Medicines. Draft. Available at: <a href="http://www.who.int/medicines/areas/coordination/household_manual_february_2008.pdf">www.who.int/medicines/areas/coordination/household_manual_february_2008.pdf</a></p> <p>Country data available at <a href="http://apps.who.int/nha/database/ViewData/Indicators/en">http://apps.who.int/nha/database/ViewData/Indicators/en</a></p>

Item	Description
Indicator name	<i>Harmonization of regulatory processes</i>
Indicator type	Outcome*
Strategies that use indicator	Regulation & legislation
Definition	Number of Medicine Regulatory Authorities that revised their regulatory processes to harmonize these regulations and practices with other countries
Method of measurement	<p>Medicine Regulatory Authorities reports can be used to access the processes that have been revised. If these processes have been harmonized with other Medicine Regulatory Authorities it would count towards this indicator.</p> <p><b>Calculation:</b> Sum of Medicine Regulatory Authorities that have revised their regulatory processes to harmonize there regulations and practices with other countries</p>
Recommended disaggregation	Therapeutic group
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Medicine Regulatory Authority
Other possible sources	World Bank, Harmonization of Regulatory Processes
Further info	Adapted from: Papathanasiou P et al. Transparency in drug regulation: public assessment reports in Europe and Australia. <i>Drug Discovery Today</i> 2016; 21(11), 1806-1813.

\*This indicator has been developed to monitor and evaluate Access Accelerated programs implemented by the World Bank.



Item	Description
Indicator name	<i>Registration Process Duration</i>
Indicator type	Outcome
Strategies that use indicator	Regulation & legislation
Definition	The time elapsed between the first Drug Application submission to medicine market approval, which is the sum of National Medicine Regulatory Authority (NMRA) review time for the first submission of a Drug Application to the NMRA, minus any time during which a pharmaceutical sponsor addresses deficiencies in the NMRA and resubmits the application.
Method of measurement	<p>The National Medicine Regulatory Authority has the responsibility to record the first Drug Application submission date as well as the market approval date. The time that the pharmaceutical sponsor takes to addresses deficiencies in the NMRA and resubmits the application should be deducted from the duration of the registration process.</p> <p><b>Calculation:</b> Counting the number of calendar days between the original application date and the marketing approval date minus the calendar days during which a pharmaceutical sponsor addresses deficiencies in the NMRA and resubmits the application.</p>
Recommended disaggregation	Innovator medicines, generic medicines Local and international companies
Frequency of reporting	Annually unless otherwise stated
Recommended data source	National Medicine Regulatory Authority
Other possible source	World Bank programmatic indicators
Further info	Rawson NS, Kaitin KI. Canadian and US drug approval times and safety considerations. <i>Ann Pharmacother</i> . 2003 Oct;37(10):1403-8.

Item	Description
Indicator name	<i>Medicines Registered</i>
Indicator type	Outcome
Strategies that use indicator	(1) Regulation & legislation; (2) Product development research
Definition	Number of medicines related to the program activity registered per time period
Method of measurement	<p>Registered products should be determined by molecule or INN. Products may be registered more than once based on formulation, so it is important to exclude duplicate registered products.</p> <p><b>Calculation:</b> Counting the number of medicines registered related to the program activity</p>
Recommended disaggregation	By type of medicines [under patent protection, generic, biosimilar]
Frequency of reporting	Annually unless otherwise stated
Recommended data source	National Medicines Regulatory Authority
Other data source	Routine program data
Further info	<p>Rapid Pharmaceutical Management Assessment</p> <p><a href="http://apps.who.int/medicinedocs/documents/s18650en/s18650en.pdf">http://apps.who.int/medicinedocs/documents/s18650en/s18650en.pdf</a></p>

Item	Description
Indicator name	<i>Medicines Withdrawn</i>
Indicator type	Outcome
Strategies that use indicator	Regulation & legislation
Definition	Percentage of medicines related to the program activity withdrawn from the market due to safety concerns per time period
Method of measurement	<p>Registered products should be determined by molecule or INN. Products may be registered more than once based on formulation, so it is important to exclude duplicate registered products.</p> <p><b>Calculation:</b></p> $\frac{\text{Number of medicines withdrawn from the market due to safety concerns}}{\text{Total number of medicines registered related to the program}}$
Recommended disaggregation	By type of medicines [under patent protection, generic, biosimilar]
Frequency of reporting	Annually unless otherwise stated
Recommended data source	National Medicines Regulatory Authority
Other data source	Company data
Further info	<p>Rapid Pharmaceutical Management Assessment</p> <p><a href="http://apps.who.int/medicinedocs/documents/s18650en/s18650en.pdf">http://apps.who.int/medicinedocs/documents/s18650en/s18650en.pdf</a></p>

Item	Description
Indicator name	<i>Quality of Registered Medicine</i>
Indicator type	Outcome
Strategies that use indicator	(1) Licensing agreement; (2) Regulation & legislation
Definition	Percentage of medicine samples failing quality tests out of total number of samples tested
Method of measurement	<p>A definition of a substandard or falsified medicine is needed at country level to effectively calculate the number of medicines which failed quality control. The report of this indicator should specify whether the samples tested were randomly or purposively selected.</p> <p><b>Calculation:</b></p> $\frac{\text{Number of medicines samples that failed quality control testing}}{\text{Total number of medicines samples tested}}$
Recommended disaggregation	By wholesaler, public versus private pharmacy sellers, diseases
Frequency of reporting	Annually unless otherwise stated
Recommended data source	National Medicines Regulatory Authority
Other possible source	World Health Organization Medical Product Alert System
Further info	<p>Indicators for Monitoring National Drug Policies</p> <p><a href="http://apps.who.int/medicinedocs/pdf/whozip14e/whozip14e.pdf">http://apps.who.int/medicinedocs/pdf/whozip14e/whozip14e.pdf</a></p> <p>More information about the World Health Organization Medical Product Alert System is available at:</p> <p><a href="http://www.who.int/medicines/publications/drugalerts/en/">http://www.who.int/medicines/publications/drugalerts/en/</a></p>

Item	Description
Indicator name	<i>Safety of Registered Medicines</i>
Indicator type	Outcome
Strategies that use indicator	Regulation & legislation
Definition	Number of reports of adverse effects received by a pharmacovigilance center for a particular medicine related to the program activity
Method of measurement	<p>The Adverse Drug Reaction reports related to the program activity can be retrieved from the respective pharmacovigilance center.</p> <p><b>Calculation:</b> Counting the number of Adverse Drug Reaction reports related to the program activity received by a pharmacovigilance center</p>
Recommended disaggregation	Facility type, Provider type (public, private, faith-based)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Ministry of Health
Other possible sources	Pharmacovigilance Center, Uppsala Monitoring Center (UMC)
Further info	<p>Indicator-Based Pharmacovigilance Assessment Tool_Manual for Conducting Assessments in Developing Countries. Page 52 <a href="http://pdf.usaid.gov/pdf_docs/PNADS167.pdf">http://pdf.usaid.gov/pdf_docs/PNADS167.pdf</a></p>

Item	Description
Indicator name	<i>Transparency in the regulatory process</i>
Indicator type	Outcome*
Strategies that use indicator	Regulation & legislation
Definition	Percentage of medicine market authorization decision in which the Medicine Regulatory Authority published information about the considerations that led the regulator to approve or refuse the application. The reports summarize assessments by each regulator of the information provided on the quality, safety, and efficacy of the medicine under evaluation.
Method of measurement	<p>The reports for each medicines market authorization are counted as well as the total number of medicine market authorization.</p> <p><b>Calculation:</b></p> $\frac{\text{Number of medicine market authorizations where information about the considerations that led the regulator to approve or refuse the application are available (decisions)}}{\text{Number of medicine market authorizations}}$
Recommended disaggregation	Therapeutic group
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Medicine Regulatory Authority
Other possible sources	World Bank, Harmonization of Regulatory Processes
Further info	Adapted from: Papathanasiou P et al. Transparency in drug regulation: public assessment reports in Europe and Australia. <i>Drug Discovery Today</i> 2016; 21(11), 1806–1813.

\*This indicator has been developed to monitor and evaluate Access Accelerated programs implemented by the World Bank.

Item	Description
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Indicator name	<i>Medicines approved and reaching market</i>
Indicator type	Outcome
Strategies that use indicator	(1) Licensing agreement; (2) Manufacturing
Definition	Sales volume in DDD of the product(s) related to the program activity
Method of measurement	<p>Volume is expressed in Defined Daily Doses (DDD) of the product(s) related to the program activity. If DDD are not defined by WHO Collaborating Center, please define your own value in terms of the defined daily dose to patients.</p> <p><b>Calculation:</b> Sum of volume of all sold products related to the program activity expressed in DDDs</p>
Recommended disaggregation	Therapeutic group by Anatomical Therapeutic Chemical (ATC)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Sales records of large retailers/wholesalers
Other possible sources	Individual retailers
Further info	<p>More information about the Daily Defined Dose (DDD) can be found at:  <a href="https://www.whooc.no/atc_ddd_index/">https://www.whooc.no/atc_ddd_index/</a></p> <p>More information on the Anatomical Therapeutic Chemical (ATC) classification system can be found at:  <a href="https://www.whooc.no/atc/structure_and_principles/">https://www.whooc.no/atc/structure_and_principles/</a></p>

## Manufacturing

Item	Description
Indicator name	<i>Price ratio of medicines at outlets</i>
Indicator type	Outcome
Strategies that use indicator	(1) Licensing agreement; (2) Manufacturing; (3) Medicine donation; (4) Price scheme
Definition	The ratio of the median consumer price of the medicines related to the program activity at outlets divided by the median international reference price for same medicine
Method of measurement	<p>This indicators is a ratio and is calculated as follows:  Median consumer price per unit charged in local currency* converted into US\$ dollars of reference year divided by Median price per unit charged internationally according to the International Drug Price Indicator Guide (<a href="http://mshpriceguide.org/en/home/">http://mshpriceguide.org/en/home/</a>)  The unit is determined by the dosage form. Use the following units for the respective dosage forms:  — “millilitre” for orally administered liquids, suspensions, topical solutions, eye drops, and injections in liquid form  — “gram” for powder for injection, eye ointments, topical creams and ointments.  — “dose” for medicines administered through inhalers or nebulizers.  — “MR tab” for modified release tablets, “MR cap” for modified release capsules  — “pessary” or “suppository”</p> <p><b>Calculation:</b>  Median consumer price per unit of the medicine related to the program activity in local currency converted into US\$ dollars of reference year</p> <hr/> <p>Median supplier price per unit charged internationally according to the International Drug Price Indicator Guide  <a href="http://mshpriceguide.org/en/home/">http://mshpriceguide.org/en/home/</a></p>
Recommended disaggregation	Level of facility (primary/secondary/tertiary) Geographical region (urban/rural) Sector (public, private, faith-based) Therapeutic group using Anatomical Therapeutic Chemical (ATC) classification system
Frequency of reporting	Annually unless otherwise stated



<b>Recommended data source</b>	Price paid by consumer is available from facility survey The median international reference prices for the essential medicines (as price per tablet or therapeutic unit) are available through Management Sciences for Health ( <a href="http://mshpriceguide.org/en/home/">http://mshpriceguide.org/en/home/</a> )
<b>Further info</b>	Health Action International, WHO. Medicine prices, availability, affordability and price components. 2008. <a href="http://www.haiweb.org/medicineprices/">http://www.haiweb.org/medicineprices/</a> International Drug Price Indicator Guide is available at <a href="http://mshpriceguide.org/en/home/">http://mshpriceguide.org/en/home/</a> More information on the Anatomical Therapeutic Chemical (ATC) classification system can be found at: <a href="https://www.whooc.no/atc/structure_and_principles/">https://www.whooc.no/atc/structure_and_principles/</a>

\*The median consumer price and the median supplier price per unit charged internationally according to the International Drug Price Indicator Guide should be reported separately before calculating the ratio

Item	Description
Indicator name	<i>Researchers trained</i>
Indicator type	Outcome
Strategies that use indicator	Product Development Research
Definition	Number of researchers trained related to the specific program
Method of measurement	Counting the total number of researchers trained  <b>Calculation:</b> Sum of the total number of researchers trained
Recommended disaggregation	By institution, sex, geographical region, by cadre
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data Accounting system of funding organizations
Other possible source	Government reporting system
Further info	None

Item	Description
Indicator name	<i>Researchers affiliated</i>
Indicator type	Outcome
Strategies that use indicator	Product development research
Definition	Number of researchers affiliated with the program activity
Method of measurement	Counting the number of researchers who are principal investigators or co-investigators of the program.  <b>Calculation:</b> Sum of the number of researcher affiliated with the program activity
Recommended disaggregation	Final academic degree of researchers affiliated Sex Age
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data External non-public data such as administrative record of the institution where the researcher is affiliated.

Item	Description
Indicator name	<i>Institutions affiliated</i>
Indicator type	Outcome
Strategies that use indicator	Product development research
Definition	Number of research institutions affiliated with the program activity
Method of measurement	Counting the number of institutions which are part of the program activity.  <b>Calculation:</b> Sum of the number of institutions affiliated
Recommended disaggregation	Sector to which the institutions belong (private, public) Type of institution (research, teaching) For-profit Non-profit Academic or consulting
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data External non-public data such as administrative record of the institution where the researcher is affiliated.

Item	Description
Indicator name	<i>Local and international research funding by external partners</i>
Indicator type	Outcome
Strategies that use indicator	Product development research
Definition	Amount of disbursement on research related to the program by entities different than the company/companies funding the program
Method of measurement	<p>Total amount of expenditure allocated to research related to the program other than the company/companies funding the program</p> <p><b>Calculation:</b> Sum of all disbursement designated to research related to the program by entities different than the company/companies funding the program</p>
Recommended disaggregation	<p>Disease, by research funding recipient</p> <p>By major funders</p>
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Accounting system of funding organizations
Other possible source	Government or institutional reporting system
Further info	This indicator aims to collect information to measure "Leverage". i.e. for each dollar of company investment how many dollars were provided by other funders or national governments

Item	Description
Indicator name	<i>Actual versus budgeted research funding</i>
Indicator type	Outcome
Strategies that use indicator	Product development research
Definition	Percentage of amount of disbursement on research out of total research funding budgeted
Method of measurement	<div>The total amount disbursed on research divided by the total amount budgeted for research.</div> <div>Calculation:</div> <div><div>Total amount disbursed on research</div><div>Total amount budgeted for research</div></div>
Recommended disaggregation	Disease
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data such as accounting system of company
Other possible source	Government reporting system research institutions
Further info	None

Item	Description
Indicator name	<i>New evidence on drug safety, efficacy, effectiveness</i>
Indicator type	<b>Outcome</b>
Strategies that use indicator	Product development research
Definition	Number of peer-reviewed manuscripts published related to the program
Method of measurement	Counting the number of peer-reviewed manuscript published  <b>Calculation:</b> Sum of the number of peer-reviewed publications
Recommended disaggregation	Disease, population group, type of intervention
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Web of science
Other possible source(s)	PubMed, Google scholar
Further info	None

Item	Description
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Indicator name	<i>New medicines/products</i>
Indicator type	Outcome
Strategies that use indicator	Product development research
Definition	Number of new molecules, medicines or products receiving market authorization
Method of measurement	Counting the number of new molecules, medicines or products receiving market authorization  <b>Calculation:</b> Sum of the number of new molecules, medicines or products receiving market authorization
Recommended disaggregation	Disease
Frequency of reporting	Annually unless otherwise stated
Recommended data source	National medicines regulatory authority Routine program data
Other possible source(s)	
Further info	None



Item	Description
Indicator name	<i>Provider and patient awareness of program</i>
Indicator type	Outcome
Strategies that use indicator	(1) Medicine donation; (2) Price scheme
Definition	Percentage of providers and patients aware of the pricing scheme out of the total target population
Method of measurement	<p>The data would be collected through a survey with a representative sample of providers and patients who are part of the target group.</p> <p><b>Calculation:</b>            Number of providers and participants in target audience that are aware of the pricing scheme  <hr/>           Total number of providers and patients who are in the target audience</p>
Recommended disaggregation	Only providers or only patients
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Non-routine program data such as target audience survey
Further info	<a href="https://www.knightfoundation.org/media/uploads/publication_pdfs/Impact-a-guide-to-Evaluating_Community_Info_Projects.pdf">https://www.knightfoundation.org/media/uploads/publication_pdfs/Impact-a-guide-to-Evaluating_Community_Info_Projects.pdf</a> page 9-11

Item	Description
Indicator name	<i>Number of individuals receiving the medicines or treatment included in the pricing scheme</i>
Indicator type	Outcome
Strategies that use indicator	Price scheme
Definition	Number of patients receiving the medicines included in the pricing scheme.
Method of measurement	Counting the patients who received the medicines included in the pricing scheme  <b>Calculation:</b> Sum of all patients who received the medicines included in the pricing scheme
Recommended disaggregation	Type of target audience (e.g. women, adolescents, patients affected by specific disease)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Routine program data Non-routine program data such as target audience survey

Item	Description
Indicator name	<i>Household out-of-pocket expenditure: medicines/treatment (provided under the pricing scheme)</i>
Indicator type	<b>Outcome</b>
Strategies that use indicator	Price scheme
Definition	The median household out-of-pocket (OOP) expenditure on medicines (monthly, quarterly, annually)
Method of measurement	<p>This information may be obtained through household surveys. The sum of all medicine related expenditure that a household occurs is defined as household OOP on medicines. The total household expenditure on medicines is converted into US\$ dollars.</p> <p><b>Calculation:</b> The median household out-of-pocket expenditure on the medicine provided under to the pricing scheme</p>
Recommended disaggregation	<p>Monthly or quarterly</p> <p>Type of expenditure (e.g. non-communicable disease medicines, medicines for acute diseases)</p>
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Non-routine program data such as household surveys
Other possible source	National Health Accounts, World Bank data
Further info	<p>Adapted from: Manual for the Household Survey to Measure Access and Use of Medicines. Draft. Available at: <a href="http://www.who.int/medicines/areas/coordination/household_manual_february_2008.pdf">www.who.int/medicines/areas/coordination/household_manual_february_2008.pdf</a></p> <p>Country data available at <a href="http://apps.who.int/nha/database/ViewData/Indicators/en">http://apps.who.int/nha/database/ViewData/Indicators/en</a></p>

# Section IV

## Impact Indicators

Item	Description
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Indicator name	<i>Population Health [Disease specific Mortality Rate]</i>
Indicator type	<b>Impact</b>
Strategies that use indicator	All 11 strategies
Definition	Unconditional probability of dying between the exact ages of 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases, defined as the per cent of 30-year-old-people who would die before their 70th birthday from any of cardiovascular disease, cancer, diabetes, or chronic respiratory disease, assuming that s/he would experience current mortality rates at every age and s/he would not die from any other cause of death (e.g., injuries or HIV/AIDS).
Method of measurement	Death registration with medical certification of cause of death, coded using the international classification of diseases (ICD).  <b>Calculation:</b> Number of deaths between ages 30 and 70 years from the four causes in a synthetic life-table population.* Population at exact age 30 in the synthetic life-table population.*
Recommended disaggregation	Geographical location (urban/rural), sex
Frequency of reporting	Annual if death registration data are available; every 3-5 years using other sources of information
Recommended data source	Death registration systems with complete coverage and medical certification of the cause of death
Other possible source	Household surveys with verbal autopsy; sample or sentinel registration systems
Further info	Draft comprehensive global monitoring framework and targets for the prevention and control of noncommunicable diseases, including a set of indicators. Agenda item A66/8, Sixty-sixth World Health Assembly, 20–28 May 2013. Geneva: World Health Organization; 2013 ( <a href="http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_8-en.pdf?ua=1">http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_8-en.pdf?ua=1</a> , accessed 29 March 2015). Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 ( <a href="https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf">https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf</a> , accessed 19 August 2014). WHO methods and data sources for global causes of death, 2000–2012 (available online at: <a href="http://www.who.int/healthinfo/global_burden_disease/GlobalCOD_method_2000_2012.pdf?ua=1">http://www.who.int/healthinfo/global_burden_disease/GlobalCOD_method_2000_2012.pdf?ua=1</a> ) NCD mortality rate indicator and measurement registry entry, available online at: <a href="http://apps.who.int/gho/indicatorregistry/App_Main/view_indicator.aspx?id=3354">http://apps.who.int/gho/indicatorregistry/App_Main/view_indicator.aspx?id=3354</a> )

A table of statistics relating to life expectancy and mortality for a given category of people. The data are available from statistical offices in most countries.

Item	Description
Indicator name	<i>Population Satisfaction [Number of patient satisfaction reports]</i>
Indicator type	Impact
Strategies that use indicator	All 11 strategies
Definition	Existence of mechanism to solicit and publish user satisfaction of health services
Method of measurement	Counting the number of user satisfaction reports published.  <b>Calculation:</b> Sum of the number of user satisfaction reports published.
Recommended disaggregation	Type of provider (public, private, faith-based)
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Provider organizations or public or private insurances
Other possible source	Facility Surveys

Item	Description
Indicator name	<i>Household financial risk protection</i>
Indicator type	Impact
Strategies that use indicator	All 11 strategies
Definition	Percentage of household health expenditure out of the non-subsistence effective income of the household.
Method of measurement	<p>Household consumption expenditure comprises both monetary and in-kind payment on all goods and services, and the money value of the consumption of home-made products.</p> <p><b>Calculation:</b> Total household health expenditure in US\$ dollar Household consumption expenditure minus subsistent expenditure</p>
Recommended disaggregation	Place of residence Household assets or income Ethnicity
Frequency of reporting	Annually unless otherwise stated
Recommended data source	Household Surveys
Other possible source	National Health Accounts, World Bank data
Further info	<p>Adapted from: Manual for the Household Survey to Measure Access and Use of Medicines. Draft. Available at: <a href="http://www.who.int/medicines/areas/coordination/household_manual_february_2008.pdf">www.who.int/medicines/areas/coordination/household_manual_february_2008.pdf</a></p> <p><a href="http://www.who.int/medicines/areas/coordination/household_manual_february_2008.pdf">http://www.who.int/medicines/areas/coordination/household_manual_february_2008.pdf</a> page 20</p> <p>Xu K. <i>Distribution of health payments and catastrophic expenditures methodology</i>. Geneva: Department of Health System Financing, World Health Organization; 2005. <a href="http://www.who.int/health_financing/catastrophic/en/index1.html">http://www.who.int/health_financing/catastrophic/en/index1.html</a></p>