

Management of COPD Primary Healthcare¹

List of indicators

General care indicators:

1. Availability of PHC organizations that currently provide preventive services
2. Availability of testing for COPD management in primary care
3. COPD prevalence
4. COPD incidence
5. COPD coverage

Process indicators:

1. COPD symptoms assessed based on CAT and mMRC tests;
2. COPD Diagnosis and pulmonary function monitoring based on Pulmonary Function Test;
3. COPD patients who are smokers and were offered specific help or information to quit smoking.
4. COPD treatment adjusted/reviewed based on disease assessment using ABCD tool;
5. Support for Self-Management and education of patients with COPD

Outcome indicators:

6. COPD exacerbations
7. Acute Health Services Use—Hospitalizations for COPD exacerbations.

General structure indicators

Indicator 1		
Description/Definition	Name of indicator	Availability of PHC organizations that currently provide preventive services
	Description of Indicator	Percentage of primary health care (PHC) organizations that currently provide a range of PHC services
Data elements	Which elements of data needed?	PHC Center Survey, Health facility database
	Are data items collected/used currently?	No
Calculation	Nominator	Number of organizations in the denominator that report currently offering the following services: <ul style="list-style-type: none"> × Management of care for an emergent but minor health problem; × Non-urgent routine care; × Prevention and health promotion and/or education services; × Rehabilitation services; × Care for chronic conditions (Diabetes, CVD, Hypertension, Asthma, COPD) × Having Patients registers (general and for chronic conditions) Inclusions <ul style="list-style-type: none"> × Organization is in the denominator × Organization respondent reported currently providing follow-up for management of care for an emergent but minor health problem

		<ul style="list-style-type: none"> × Organization respondent reported currently providing follow-up for non-urgent routine care × Organization respondent reported currently providing follow-up for prevention and health promotion and/or education services × Organization respondent reported currently having rehabilitation services × Organization respondent reported currently having Care for chronic conditions (Diabetes, CVD, Hypertension, Asthma, COPD) × Organization respondent reported currently having Patients registers (general and for chronic conditions) × Organization respondent reported currently having guidelines and protocols for providing range of PHC services
	Denominator	Number of PHC organization respondents. Inclusions <ul style="list-style-type: none"> × PHC organization Exclusions None

Indicator 2

Description/Definition	Name of indicator	Availability of testing for COPD management in primary care
		Description of Indicator
Data elements	Which elements of data needed?	PHC Center Survey, Health facility database
	Are data items collected/used currently?	No
Calculation	Nominator	Number of facilities in the denominator that have available and functional the medical equipment on-site or the specimen can be collected at the facility and sent out by the staff: <ul style="list-style-type: none"> × Lung finction measurement (spirometry, peak-flowmetry) × Blood eosinophile testing × ECG testing × COPD assessment questionnaires
	Denominator	Number of PHC organization respondents. Inclusions <ul style="list-style-type: none"> × PHC organization Exclusions None

Indicator 3

Description/Definition	Name of indicator	COPD prevalence
------------------------	-------------------	-----------------

	Description of Indicator	Percentage of population, age 18 and older, who have currently COPD
Data elements	Which elements of data needed?	PHC Center Patients' data registry
	Are data items collected/used currently?	No
Calculation	Nominator	Number of individuals in the denominator who have the diagnosis of COPD
	Denominator	Patients aged 18 and older Inclusions × PHC client/patient × Age of individual is at least 18 years Exclusion None
Indicator 4		
Description/Definition	Name of indicator	COPD incidence
	Description of Indicator	Percentage of population, age 18 and older with newly diagnosed COPD
Data elements	Which elements of data needed?	PHC Center Patients' data registry
	Are data items collected/used currently?	No
Calculation	Nominator	Number of individuals in the denominator in whom COPD is diagnosed within past 12 months
	Denominator	Patients aged 18 and older Inclusions × PHC client/patient × Age of individual is at least 18 years Exclusion None
Indicator 5		
Description/Definition	Name of indicator	COPD coverage
	Description of Indicator	Percentage of population, age 18 and older with COPD who were seen by their PHC provider
Data elements	Which elements of data needed?	PHC Center Patients' data registry, EMR, Reporting Forms, Outpatient and Home Visit Registration Journals, Specific Flowsheets
	Are data items collected/used currently?	No
Calculation	Nominator	Number of individuals in the denominator who were seen by their PHC provider within past 12 months
	Denominator	Patients aged 18 and older Inclusions × PHC client/patient × Age of individual is at least 18 years × Patient diagnosed with COPD Exclusion None
Note	Definition of terms × A PHC client/patient is an individual who has had contact with the provider at least once in the past year and has a record with the provider dating back at least two years.	
Disaggregation	What levels of disaggregation (separation) are needed (if needed)?	By individual Family Doctor; Man/Women; Age: 18-39; 40-49; 50-59; 60-69; 70-79; 80+

Data source	Name of data source	Medical records, Reporting Forms, Outpatient and Home Visit Registration Journals, Specific Flowsheets, Health database surveys
	Format of data source	Paper based, or electronic medical record (EMR)
	Limitation of data source (e.g. could be used only after several years)	Use of EMR only after implementation of HMIS system locally
	Is data source used currently?	Medical records, outpatient and home visit registration journals are approved by the Ministry Order №01-41/n and are maintained uniformly by all outpatient service providers in accordance with this Order
Data quality	Limitations of data used (e.g. based on age, diagnosis etc.)	Patients aged 18 years and older with diagnosis of COPD
	Checking of data quality	By the Quality Improvement team of the medical facility
Monitoring	Date of creation	-
	Date of updating	-
Organizations/Departments/Staff involved	Organization who owns/creates the data	Name of Medical Organization
	Organization submitting indicator report	Quality Improvement team of the medical facility, Family doctors/Nurses/Managers

Process/outcome indicators

Indicator 1		
Description/Definition	Name of indicator	COPD symptoms assessed based on CAT and mMRC tests
	Description of Indicator	Percentage of patient population with diagnosis of COPD whose symptoms were assessed based on validated test (CAT and mMRC)
Data elements	Which elements of data needed?	Surveillance data of patients with the diagnosis of COPD
	Are data items collected/used currently?	No
Calculation	Nominator	Number of primary health care (PHC) clients/patients with the diagnosis of COPD whose symptoms were assessed using COPD Assessment Test and breathlessness assessed based on mMRC test within the past 12 months. Inclusions × Individual is in the denominator × Individual has CAT and mMRC tests performed within the past 12 months Exclusions None
	Denominator	Number of PHC clients/patients with COPD Inclusions × PHC client/patient × Individual has a diagnosis of COPD

		Exclusions None
Indicator 2		
Description/Definition	Name of indicator	COPD Diagnosis and pulmonary function monitoring based on Pulmonary Function Test
	Description of Indicator	Percentage of population, with diagnosis of COPD who had measured pulmonary function for COPD diagnosis and disease monitoring
Data elements	Which elements of data needed?	Surveillance data of patients with the diagnosis of COPD
	Are data items collected/used currently?	No
Calculation	Nominator	Number of individuals with diagnosis of COPD who had measured FEV1 within the past 12 months Inclusions × Individual has a diagnosis of COPD × Individual has been measured pulmonary function within the past 12 months Exclusions None
	Denominator	Number of primary health care (PHC) clients/ Patients who have diagnosis of COPD Inclusions × PHC client/patient × Patient is diagnosed with COPD Exclusions None
Indicator 3		
Description/Definition	Name of indicator	COPD patients who are smokers and were offered specific help or information to quit smoking
	Description of Indicator	Percentage of patient population with diagnosis of COPD who are smokers, who were offered specific help or information to quit smoking.
Data elements	Which elements of data needed?	Surveillance data of patients with the diagnosis of COPD
	Are data items collected/used currently?	No
Calculation	Nominator	Number of individuals in the denominator who were offered specific help or information to quit smoking within the past 12 months. Inclusions × Individual is in the denominator × Individual was offered smoking cessation education within the past 12 months Exclusions None
	Denominator	Number of primary health care (PHC) clients/ Patients who have diagnosis of COPD. Inclusions × PHC client/patient × Patient is diagnosed with COPD × Patient is smoker Exclusions

		None
Indicator 4		
Description/Definition	Name of indicator	COPD treatment adjusted/reviewed based on disease assessment using ABCD tool
	Description of Indicator	Percentage of population, with diagnosis of COPD whose medications have been adequately adjusted/reviewed based on disease assessment using ABCD tool
Data elements	Which elements of data needed?	Surveillance data of patients with the diagnosis of COPD
	Are data items collected/used currently?	No
Calculation	Nominator	Number of individuals with diagnosis of COPD who have been prescribed Evidence based treatment (ICS, LABA/LAMA, PD4-inhibitors) based on disease severity combined assessment (ABCD tool) Inclusions × Individual is in denominator × Individual has a diagnosis of COPD × Individual has been prescribed/reviewed medication treatment based on ABCD assessment Exclusions None
	Denominator	Number of primary health care (PHC) clients/ Patients who have diagnosis of COPD Inclusions × PHC client/patient × Patient is diagnosed with COPD Exclusions None
Indicator 5		
Description/Definition	Name of indicator	Support for Self-Management and education of patients with COPD
	Description of Indicator	Percentage of patient population, age 18 years and older, with COPD who received at least one of the following types of self-management support from their primary health care (PHC) provider: × Provided with a treatment plan; × Encouraged to use self-help groups or COPD education programs.
Data elements	Which elements of data needed?	Surveillance data of patients with COPD, COPD patients' survey
	Are data items collected/used currently?	No
Calculation	Nominator	Number of individuals in the denominator who reported receiving at least one of the following types of self-management support from their PHC provider over the past 12 months: × Provided with a treatment plan; and/or × Encouraged to use self-help groups or COPD education programs.

		<p>Inclusions</p> <ul style="list-style-type: none"> × Individual is in the denominator × Individual reported at least one of the following over the past 12 months: <ul style="list-style-type: none"> ! Was helped in making a treatment plan ! Was encouraged to go to a specific group or class to help to cope with COPD ! Was encouraged to attend programs in the community that could help him or her care for his or her chronic condition(s) <p>Exclusions</p> <p>None</p>
	Denominator	<p>Number of patients aged 18 years and older with diagnosis of COPD</p> <p>Inclusions</p> <ul style="list-style-type: none"> × PHC client/patient × Age of individual is at least 18 years × Individual is diagnosed with COPD <p>Exclusion</p> <ul style="list-style-type: none"> × None

Indicator 6

Description/Definition	Name of indicator	COPD exacerbations
		Description of Indicator
Data elements	Which elements of data needed?	Surveillance data of patients with the diagnosis of COPD
	Are data items collected/used currently?	No
Calculation	Nominator	<p>Number of individuals with diagnosis of COPD who had exacerbations within the past 12 months.</p> <p>Inclusions</p> <ul style="list-style-type: none"> × Individual is in denominator × Individual has a diagnosis of COPD × Individual had COPD exacerbation within the past 12 months <p>Exclusions</p> <p>None</p>
	Denominator	<p>Number of primary health care (PHC) clients/ Patients who have diagnosis of COPD</p> <p>Inclusions</p> <ul style="list-style-type: none"> × PHC client/patient × Patient is diagnosed with COPD <p>Exclusions</p> <p>None</p>

Indicator 7

Description/Definition	Name of indicator	Acute Health Services Use—Hospitalizations for COPD exacerbation

	Description of Indicator	Percentage of population, with diagnosis of COPD who have been hospitalized due to COPD exacerbation
Data elements	Which elements of data needed?	Surveillance data of patients with the diagnosis of COPD
	Are data items collected/used currently?	No
Calculation	Nominator	Number of individuals with diagnosis of COPD who have been hospitalized due to COPD exacerbation within the past 12 months. Inclusions × Individual is in denominator × Individual has a diagnosis of COPD × Individual has been hospitalized due to COPD exacerbation within the past 12 months Exclusions None
	Denominator	Number of primary health care (PHC) clients/ Patients who have diagnosis of COPD Inclusions × PHC client/patient × Patient is diagnosed with COPD Exclusions None
Note	Definitions of terms × A PHC client/patient is an individual who has had contact with the provider at least once in the past year and has a record with the provider dating back at least two years.	
Disaggregation	What levels of disaggregation (separation) are needed (if needed)?	By individual Family Doctor; Man/Women; Age: 18-39; 40-49; 50-59; 60-69; 70-79; 80+
Data source	Name of data source	Medical records, Reporting Forms, Outpatient and Home Visit Registration Journals, Specific Flowsheets
	Format of data source	Paper based, or electronic medical record (EMR)
	Limitation of data source (e.g. could be used only after several years)	Use of EMR only after implementation of HMIS system locally
	Is data source used currently?	Medical records, outpatient and home visit registration journals are approved by the Ministry Order №01-41/n and are maintained uniformly by all outpatient service providers in accordance with this Order
Data quality	Limitations of data used (e.g. based on age, diagnosis etc.)	Patients aged 18 years and older with diagnosis of COPD
	Checking of data quality	By the Quality Improvement team of the medical facility
Monitoring	Date of creation	-
	Date of updating	-
Organizations/Departments/Staff involved	Organization who owns/creates the data	Name of Medical Organization
	Organization submitting indicator report	Quality Improvement team of the medical facility, Family doctors/Nurses/Managers

Evidence source:

¹ Global Initiative for Chronic Obstructive Lung Disease, 2021: <https://goldcopd.org/>