



Republic of the Philippines
PHILIPPINE HEALTH INSURANCE CORPORATION
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PHILHEALTH CIRCULAR
No. 11011 - 0015

TO : ALL ACCREDITED HEALTH CARE PROVIDERS,
PHILHEALTH MEMBERS, PHILHEALTH OFFICES
(HEAD OFFICE AND REGIONAL OFFICES) AND ALL
OTHERS CONCERNED

SUBJECT : Quality Policy on the Diagnosis and Management of Asthma in
Adults as Reference of the Corporation (Revision 1)

I. RATIONALE

PhilHealth recognizes that safety and quality in health care is an integral aspect of a successful universal health coverage. RA 11223 otherwise known as the Universal Health Care Act provides that the Corporation shall support the implementation of standards for clinical care set forth by the Department of Health (DOH) based on approved clinical practice guidelines. Further, Section 51 of the revised Implementing Rules and Regulations of the National Health Insurance Act of 2013 (RA 7875 as amended by RA 9241 and RA 10606) provides the implementation of quality assurance standards as reference for ensuring quality of health care services.

Compliance to clinical practice guidelines (CPGs) shall be one of the strategies in the implementation of quality assurance standards. The CPG recommendations based on best available evidence shall be translated into policy statements and used primarily to provide guidance to doctors, hospitals and patients as to what tests, medicines, and procedures are strongly recommended if benefits clearly outweigh the harms. It shall also be used by the Corporation as one of its references in assessing the quality of care rendered by PhilHealth accredited health care providers to members during performance monitoring and other activities as deemed necessary.

Asthma remains to be a major cause of chronic morbidity and mortality in the Philippines. In the Philippine Consensus Report on Asthma Diagnosis and Management (PCRADM) 2019, it mentioned that the overall prevalence of asthma based on wheezing for the past 12 months was estimated at 8.7%, based on a study survey. In PhilHealth, the condition is still considered as one of the top illnesses in claims reimbursement. This document incorporates revisions of certain policy statements on asthma published in PC no. 2016-004. The policy statements in this document are updates largely based from PCRADM by the Philippine College of Chest Physician (PCCP) and expert opinion from the PCCP's Council on Asthma. Further, the policy recommendations were approved by the PhilHealth Quality Assurance Committee (QAC) as reference in ensuring quality of care.



II. OBJECTIVES

This PhilHealth Circular aims to establish the guidelines for the implementation of the benefit package for the diagnosis and management of asthma in adults in ensuring quality of care.

III. SCOPE

This policy pertains to standards of care on the diagnosis and management of asthma in adults. It shall serve as guide to health care practitioners. However, specific provisions may be explicitly stated to affect reimbursement.

IV. DEFINITION OF TERMS

- A. **Asthma** – a chronic inflammation of the airways which contributes to airway hyper responsiveness that leads to recurrent episodes of wheezing, *shortness of breath*/breathlessness, chest tightness, and coughing particularly at night or in the early morning. These episodes are usually with airflow obstruction within the lung that is often reversible either spontaneously or with treatment.
- B. **Asthma control** – extent of asthma manifestations (symptom control) and future risk for adverse outcomes
- C. **Asthma exacerbation (flare-up) or asthma attack** – episodes of/changes in the patient's usual status such as progressive increase in asthma symptoms or a decrease in lung function.
- D. **Asthma severity** – a retrospective assessment of the asthma status based on the level of treatment required to control symptoms and exacerbations.

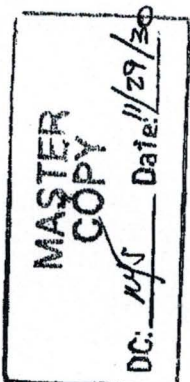
V. POLICY STATEMENTS

The Corporation shall adopt as standards the following statements in diagnosing and managing asthma which shall serve as guide to health care practitioners. However, specific provisions may be explicitly stated to affect reimbursement.

A. Clinical Diagnosis

To make a diagnosis of asthma, the following should be sought in the patient's history:

1. On and off cough; that gets worse at night or in the early morning
2. Wheezing;
3. *Dyspnea or shortness of breath;*
4. Chest tightness;
5. Symptoms are triggered by viral infections (*colds*); exercise; allergen or irritant exposure; changes in weather; *or irritants such as car exhaust fumes; smoke or strong smells*
6. A history of asthma; and atopic disease in the family; and
7. Improvement of condition with the use of anti-asthma medications.



B. Diagnostic Tests

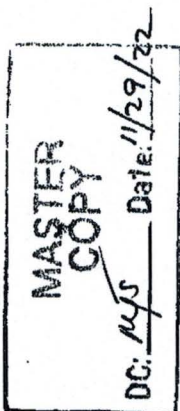
1. The following are two acceptable methods used in the diagnosis of asthma as they provide objective measures:
 - a. Spirometry; and
 - b. Peak Expiratory Flow (PEF)
2. *The use of spirometry and/or PEF device depends on their availability in the health facilities (e.g., Geographically Isolated and Disadvantaged Areas or GIDA). In lieu thereof, clinical manifestations suggestive of bronchial asthma may be considered but should be properly documented in the medical chart (or any equivalent) and Claim Form 4. For patients with known history of bronchial asthma, spirometry and/or PEF may no longer be performed.*
3. *Chest x-ray is used to rule out other causes but is not required.*

C. Hospital Admission

1. *Generally, patients who are not in exacerbation do not need to be admitted for work up or treatment.*
2. Patients with *life-threatening asthma* (status asthmaticus) and those who do not respond to treatment of acute asthmatic attacks in the emergency room should be admitted.
3. Long term treatment of asthma can be started while the patient is still admitted in the hospital.

D. Treatment of Adult Asthma

1. Classify all patients with asthma attacks (exacerbations) according to severity to help determine need for therapy.
2. *The following medications may be administered to patients as maintenance medication:*
 - a. Inhaled corticosteroid – long-acting beta2-agonist (ICS-LABA)
 - b. Inhaled corticosteroid
 - c. Leukotriene receptor antagonist
 - d. Tiotropium
 - e. Theophylline
3. *The following medications may be administered during acute exacerbation of asthma:*
 - a. Oxygen
 - b. SABA (short-acting beta2-agonist)
 - b.1. Intermittent nebulization
 - b.2. Continuous nebulization
 - b.3. Pressurized Metered-Dose Inhaler



c. SABA + Ipratropium bromide

d. Systemic steroids

d.1. Oral

d.2. Intravenous

e. Intravenous Magnesium sulfate

4. The recommended step-care approach in the management of asthma is as follow:

Step	Medication	
	Controller	Reliever
1	As-needed low-dose ICS-formoterol	As-needed low-dose ICS-formoterol* OR as-needed ICS-SABA ⁺
	Other options: Consider early low-dose ICS	Consider as-needed SABA [Ⓢ]
2	As-needed low-dose ICS-formoterol as MART** or daily low-dose ICS-LABA	As-needed low-dose ICS-formoterol or as-needed ICS-SABA
	Other options: Daily low-dose ICS or LTRA	As-needed SABA [Ⓢ]
3	Daily medium-dose ICS-LABA or medium-dose ICS-formoterol as MART**	As-needed low-dose ICS-formoterol or as-needed ICS-SABA
	Other options: Daily medium-dose ICS or low-dose ICS + LTRA	As-needed SABA [Ⓢ]
4	Daily high-dose ICS-LABA or high-dose ICS-formoterol as MART**	As-needed low-dose ICS-formoterol or as-needed ICS-SABA
	Other options: Daily high-dose ICS + tiotropium OR high-dose ICS + LTRA + theophylline	As-needed SABA [Ⓢ]
5	Step 4 regimen + specialist referral for add-on treatment, e.g., tiotropium (if not yet started), anti-IgE, anti-IL5 ⁺	As-needed low-dose ICS-formoterol or as-needed ICS-SABA
	Other options: Add to Step 4 treatment a course of low-dose OCS and seek specialist referral	As-needed SABA [Ⓢ]
Legend: *Off-label; **Maintenance and reliever therapy +Not available locally; ⓈShould not be used alone ICS: inhaled corticosteroid;		

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LABA: long-acting beta2-agonist;
 LTRA: leukotriene receptor antagonist;
 OCS: oral corticosteroid;
 SABA: short-acting beta2-agonist

Table 1: Step-care Approach in the Management of Adult Asthma

5. *Antibiotics should not be routinely prescribed for asthma exacerbations unless there is a strong evidence of lung infection (e.g. fever or purulent sputum or radiologic evidence of pneumonia).*
6. *Precautions when performing aerosol-generating procedures (AGPs) amid COVID-19 public health emergency July 1, 2021 Interim Update as prescribed by the PCCP's Council on Diagnostics and Therapeutics shall be observed. For reference, the practical recommendations is annexed to this circular (with permission from PCCP).*

E. Hospital Discharge

Patients with stable vital signs for *at least* 24 hours and have the ability to maintain oral intake may be discharged.

F. Monitoring and Evaluation

1. The health care provider shall be bound by the provisions of the Performance Commitment and subject to the rules on monitoring and evaluation of performance as provided in PhilHealth Circular No. 2018-0019 *Health Care Provider Performance Assessment System (HCP-PAS) rev.2.*
2. *Standards of care issued by authorized agencies/organizations shall be regularly monitored. As deemed necessary, a revision of the policy statements shall be made.*

VI. PENALTY CLAUSE

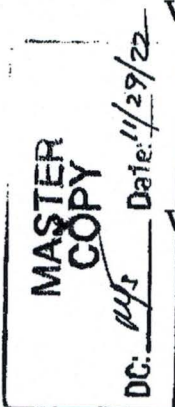
Any violation of this PhilHealth Circular shall be dealt with and penalized in accordance with pertinent provisions of R.A. No. 11223 and R.A. No. 10606, and their respective Implementing Rules and Regulations.

VII. REPEALING CLAUSE

PhilHealth Circular No. 2016-0004 Policy Statements on the Diagnosis and Management of Asthma in Adults as Reference by the Corporation in Ensuring Quality of Care is hereby amended, modified and repealed accordingly.

VIII. DATE OF EFFECTIVITY

This PhilHealth Circular shall take effect fifteen (15) days after its publication in the Official Gazette or in any newspaper of general circulation and shall be deposited thereafter with the Office of the National Administrative Register (ONAR) at the University of the Philippines Law Center.



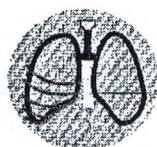
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ATTY. ELI DINO D. SANTOS
Officer-in-Charge, Office of the President and CEO

Date signed: 11/24/22

Quality Policy on the Diagnosis and Management of Asthma in Adults as Reference of the Corporation
(Revision 1)





COUNCIL ON
DIAGNOSTICS AND
THERAPEUTICS



PRECAUTIONS WHEN PERFORMING AEROSOL-GENERATING PROCEDURES (AGPs) AMID COVID-19 PUBLIC HEALTH EMERGENCY July 1, 2021 Interim Update

The members of the PCCP Council on Diagnostics and Therapeutics, has the following practical recommendations based on the available literature to date.

NEBULIZED MEDICATIONS AND OXYGEN SUPPORT

- Where possible, use of nebulized medications should still be avoided. If bronchodilators are warranted, the use of pMDI with spacer/mouthpiece or tightly fitting facemask is recommended¹.
 - The use of nebulizers carries risk of transmitting viral infections because they generate aerosols that can spread infectious droplets for several meters and remain airborne for more than 30 min.
 - If nebulized medication is warranted and unavoidable in the hospital, use of a negative-pressure room or tent is recommended. If this is not available, a single room with the door closed must be used.
 - If nebulized medication is warranted and unavoidable at home, the nebulizer should be used in a location that reduces exposure to non-infected members of the household. Ideally, nebulization should be done in an area where air is not recirculated into the home and dependent surfaces can be cleaned easier or may not need cleaning (ex. patio, garage, garden).
 - Should nebulization be used, decontaminate the apparatus after every use.
- Supplemental oxygen can be provided using the usual delivery devices for mild respiratory illness secondary to COVID-19.²⁻³
 - When using nasal prongs, it is recommended that a surgical mask should be worn by the patients over the prongs to reduce the possibility of droplet spread.
 - For patients with higher oxygen requirement, non-rebreather mask (ideally with an attached exhalation filter) should be used.
 - The use of high-flow nasal cannula (HFNC) may increase in the risk of possible viral spread due to aerosol generation. Hence, the use of HFNC should be limited in facilities capable of appropriate airborne isolation.
 - If equipment is unavailable and staff are not trained for HFNC, endotracheal intubation may be warranted to ensure adequate oxygenation.



- NIPPV may generate aerosol spread of SARS-CoV-2 and thus increase nosocomial transmission of the infection and must be avoided.
 - If patient has no consent for endotracheal intubation and NIPPV will be used, make sure that the NIPPV has a bacterial or viral filter between the patient and the expiratory port to reduce environmental contamination.
- For patients with persistent hypoxemia despite oxygen supplementation, consider trial of awake proning.

PERFORMING AEROSOL-GENERATING PROCEDURES⁴

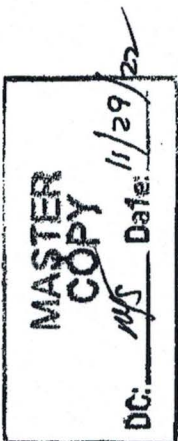
- Procedures performed on COVID suspects or COVID-19 positive patients may generate infectious aerosols.
- Procedures that are likely to induce coughing (sputum induction, open suctioning of airways) should be performed cautiously and avoided as much as possible.
- N95 respirators should be used by healthcare workers instead of a facemask when performing or present for an aerosol generating procedures.
- N95 respirators should be removed and discarded after exiting the care area then perform hand-hygiene.
- Other office procedures for the general pulmonary patient that are likely to induce coughing (peak flow determination, pulmonary function tests) should be deferred at the moment.

INTUBATION⁵

- If intubation becomes necessary, the procedure should be performed by an experienced practitioner in a controlled setting due to the enhanced risk of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) exposure to health care practitioners during intubation. Higher level of precautions should be in place.
 - All personnel in the room must be using appropriate airborne/droplet PPE, including a fit-tested N95 mask.
 - To optimize first attempt success, the procedure should be attempted by the most skilled person at intubation using a rapid sequence intubation technique. All necessary equipment and medications should be available in the room at the time of intubation attempt to prevent recurrent personnel foot traffic.
 - Bag-mask ventilation prior to intubation may generate aerosols, as the patient can possibly cough during laryngoscopy. Ideally, an exhalation filter should also be present attached to the resuscitation bag, typically between the mask or endotracheal tube and the bag.
- Neuromuscular blockade and sedation must be adequate to decrease risk of gagging and coughing, anxiety, as well as ventilator dysynchrony.

STRATEGIES FOR AEROSOL DRUG DELIVERY TO INTENSIVE-CARE PATIENTS⁶

Nebulizers may be needed in critically ill patients with COVID-19 receiving ventilatory support. In this case, it is vital to keep the circuit intact and prevent the transmission of the virus. Therefore, delivering aerosolized medications via jet nebulizer or pMDIs will not be appropriate due to the breakage of the circuits for the placement of the device on the ventilator circuit before aerosol therapy.



Below is a summary of practical strategies from Ari et. Al.:⁶

- Do not use a jet nebulizer or pMDIs for aerosol delivery to ventilator-dependent COVID-19 suspects or confirmed cases due to the breakage of the circuits for the placement of the device before aerosol therapy.
- Use mesh nebulizers in critically ill COVID-19 suspects or confirmed cases receiving ventilator support as they can stay in-line for up to 28 days. The reservoir design allows adding medication without requiring the ventilator circuit to be broken for aerosol drug delivery. Unlike jet nebulizer, the medication reservoir of mesh nebulizers is isolated from the breathing circuit that eliminates the nebulization of contaminated fluids.
- Placing the mesh nebulizer prior to the humidifier can improve the efficiency of the treatment and further reduce retrograde contamination from the patient.
- Attach a HEPA filter to the expiratory limb of the ventilator to reduce secondhand aerosol exposure and prevent the transmission of infectious droplet nuclei through the ventilators.
- Do not combine aerosol therapy with pulmonary clearance techniques such as chest physical therapy and suctioning.
- Wear personal protective equipment, including an N95 respirator, goggles/face shield, double gloves, gown or apron if the gown is not fluid resistant.

If the a COVID-19 suspect or confirmed case is intubated and needs endotracheal suctioning during mechanical ventilation, in-line, or closed system suction catheters should be preferred as they can be utilized up to 7 days without having to break the ventilator circuit.

PCCP Council on Diagnostics and Therapeutics

¹ Mario Cazzola et al. Guidance on Nebulization during current COVID-19 pandemic. *Respir Med.* 2021 Jan; 176: 106236

² Wax, R.S., Christian, M.D. Practical recommendations for critical care and anesthesiology teams caring for novel coronavirus patients. *Can J Anesth* (2020)

³ NIH COVID-19 Treatment Guidelines: Oxygenation and Ventilation, updated December 17, 2020

⁴ Interim Infection Prevention and Control Recommendations. Centers for Disease Control and Prevention

⁵ World Health Organization. Infection prevention and control during health care when nCoV is suspected Interim guidance.

⁶ Ari, Arzu. Practical strategies for a safe and effective delivery of aerosolized medications to patients with COVID-19. *Respir Med.* 2020 Jun; 167: 105987.

⁷ Chinese Medical Association Respiratory Branch Expert consensus on protective measures related to respiratory therapy in patients with severe and critical coronavirus infection. *Chin. J. Tuberc. Respir. Dis.* 2020;17:E020.

