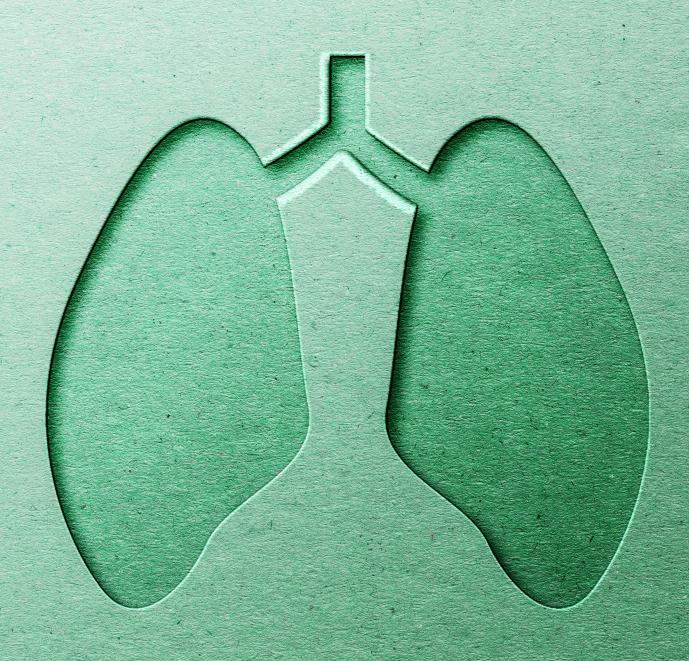


# Vietnam Pulmonology





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**MedCOI** 

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## **Disclaimer**

This report was written according to the EUAA COI Report Methodology (2023). The report is based on carefully selected sources of information. All sources used are referenced.

The information contained in this report has been researched, evaluated and analysed with utmost care. However, this document does not claim to be exhaustive. If a particular event, person or organisation is not mentioned in the report, this does not mean that the event has not taken place or that the person or organisation does not exist.

Furthermore, this report is not conclusive as to the determination or merit of any particular application for international protection. Terminology used should not be regarded as indicative of a particular legal position.

'Refugee', 'risk' and similar terminology are used as generic terminology and not in the legal sense as applied in the EU Asylum Acquis, the 1951 Refugee Convention and the 1967 Protocol relating to the Status of Refugees.

Neither the EUAA, nor any person acting on its behalf, may be held responsible for the use which may be made of the information contained in this report.

The drafting of this report was finalised on 31 May 2024. Any event taking place after this date is not included in this report. More information on the reference period for this report can be found in the methodology section of the Introduction.





## **Glossary and abbreviations**

Term	Definition		
ACOCU	Asthma and COPD Outpatient Care Unit		
ВМІ	Body Mass Index		
COPD	Chronic Obstructive Pulmonary Disease		
EUR	Euro		
Heroic Mothers of Vietnam	An honorary title which was granted to women "who had lost more than two children, their only child, their husband and two children or their own life and the ones of two children" in the battle for the reunification of the country. <sup>1</sup>		
IOS	Impulse Oscillometry		
IPCRG	International Primary Care Respiratory Group		
мон	Ministry of Health		
NGO	Non-Governmental Organisation		
NHI	National Health Insurance		
SAS	Sleep Apnoea Syndrome		
VND	Vietnamese Dong		

<sup>&</sup>lt;sup>1</sup> Bảo tàng Phụ nữ Việt Nam, Heroic Mothers of Vietnam, n.d., <u>url</u>





## Introduction

## Methodology

The purpose of the report is to provide information on access to pulmonology treatment in Vietnam. This information is relevant to the application of international protection status determination (refugee status and subsidiary protection) and migration legislation in EU+ countries.

#### **Terms of reference**

The terms of reference for this Medical Country of Origin Information Report were developed by EUAA.

The terms of reference for this Medical Country of Origin Information Report can be found in Annex 2: Terms of Reference (ToR). The initial drafting period finished on 10 October 2023, peer review occurred between 11 – 26 October 2023, and additional information was added to the report as a result of the quality review process up until 31 May 2024. The report was internally reviewed subsequently.

#### **Collecting information**

EUAA contracted International SOS (Intl.SOS) to manage the report delivery including data collection. Intl.SOS recruited and managed a local consultant to write the report, and a public health expert to edit the report. These were selected from Intl.SOS' existing pool of consultants. The consultant was selected based on their experience in leading comparable projects and their experience of working on public health issues in Vietnam.

#### **Quality control**

This report was written by Intl.SOS in line with the European Union Agency for Asylum (EUAA) COI Report Methodology (2023),<sup>2</sup> the EUAA Country of Origin Information (COI) Reports Writing and Referencing Guide (2023)<sup>3</sup> and the EUAA Writing Guide (2022).<sup>4</sup> Quality control of the report was carried out both on content and form. Form and content were reviewed by Intl.SOS and EUAA.

The accuracy of information included in the report was reviewed, to the extent possible, based on the quality of the sources and citations provided by the consultants. All the comments from reviewers were reviewed and were implemented to the extent possible, under time constraints.

<sup>&</sup>lt;sup>2</sup> EUAA, Country of Origin Information (COI) Report Methodology, February 2023, url

<sup>&</sup>lt;sup>3</sup> EUAA, Country of Origin Information (COI) Reports Writing and Referencing Guide, February 2023, url

<sup>&</sup>lt;sup>4</sup> EUAA, The EUAA Writing Guide, April 2022, url



### Sources

In accordance with EUAA COI methodology, a range of different published sources has been consulted on relevant topics for this report. These include governmental and academic publications, and reports by non-governmental and international organisations, as well as Vietnamese media. All sources that are used in this report are outlined in Annex 1. Bibliography.

In addition to publicly available sources of information, one oral source was contacted for this report. The oral source is an NHI staff in a public hospital of Ho Chi Minh City, known by the contractor and selected for reliability. All oral sources are described in Annex 1. Bibliography. Key informant interviews were carried out in November 2023.





## Prevalence and incidence of pulmonology diseases

The following chapter contains information on the prevalence and incidence of three common pulmonology diseases: chronic obstructive pulmonary disease (COPD), asthma and sleep apnoea syndrome (SAS).

## 1.1. Chronic obstructive pulmonary disease (COPD)

Reports from the Asia Pacific Respiratory Society estimated that the prevalence of moderate and severe COPD in Vietnamese people over 35 years old was 6.7 %.<sup>5</sup> Another study found that the percentage of COPD patients was increasing due to smoking, waterpipe tobacco and environmental pollution.<sup>6</sup> In 2022, it was reported that 4.2 % of the population over 40 years old suffered from COPD and that 37.5 % of adults had serious symptoms.<sup>7</sup> COPD patients usually occupy 25 % of beds in respiratory departments in hospitals and intensive care units typically have COPD patients on mechanical ventilators. In Vietnam, individuals aged 40 years and older with COPD account for 7.1 % of men and 1.9 % of women.<sup>8</sup>

Obstructive lung diseases often remain undiagnosed in Vietnam. A professor of respiratory medicine at Tam Anh Hospital writes that the actual incidence of COPD is higher than shown in the statistics, as many people do not undergo regular health check-ups and patients do not visit the doctor when symptoms of COPD appear. The Deputy Director of the Department of Health in Ho Chi Minh City has stated that early detection of asthma and COPD in the community is still limited and that many people do not have access to new diagnostic and treatment methods. This means that the disease is detected in its late stages with severe complications and a high mortality rate. In 2022, the Vietnam Respiratory Association stated that more than 25 000 deaths per annum were due to COPD and noted that this is higher

<sup>&</sup>lt;sup>11</sup> Ho Chi Minh City Party Committee, Quận 11: Triển khai khám, tầm soát hen phế quản - COPD tại Trạm y tế Phường 15 [District 11: Implement examination and screening for bronchial asthma - COPD at Ward 15 Medical Station], 13 November 2022, <u>url</u>



<sup>&</sup>lt;sup>5</sup> Vietnam Vaccine, Bệnh Phổi Tắc Nghẽn Mãn Tính Copd: Nguyên Nhân Và Triệu Chứng [Chronic Obstructive Pulmonary Disease COPD: Causes and Symptoms], 18 July 2022, <u>url</u>

 $<sup>^6</sup>$  Vietnam, MOH, Thông tin y tế 28 - 30/9/2020 [Medical information September 28 – 30 2020], 30 September 2020,  $\underline{\text{url}}$ 

<sup>&</sup>lt;sup>7</sup> Ha Tinh Newspaper, Gần 90% bệnh nhân bị bệnh phổi tắc nghẽn mãn tính có tiền sử liên quan đến thuốc lá [Nearly 90% of patients with chronic obstructive pulmonary disease have a tobacco-related history], 13 November 2022, <u>url</u>

<sup>&</sup>lt;sup>8</sup> Nguoi Lao Dong Newspaper, Bệnh phổi tắc nghẽn mạn tính: Mối đe dọa âm thầm [Chronic obstructive pulmonary disease: A silent threat], 17 November 2022, <u>url</u>

<sup>&</sup>lt;sup>9</sup> Nguyen, T.-A., et al., Factors affecting healthcare pathways for chronic lung disease management in Vietnam: a qualitative study on patients' perspectives, 2021, <u>url</u>, p. 2

Tâm Anh Hospital, Bệnh Phổi Tắc Nghẽn Mạn Tính Copd: Nguyên Nhân, Triệu Chứng [Chronic Obstructive Pulmonary Disease COPD: Causes and Symptoms], 8 December 2021, url



than the number of deaths from traffic accidents.<sup>12</sup> About 60 % of patients need long-term oxygen ventilation. In these cases, it is often necessary to lie down for 16 to 18 hours per day, which increases the risk of depression.<sup>13</sup>

The National Hospital No. 108 in Ha Noi reports the prevalence of COPD in male and female smokers to be 3.4 times higher than in non-smokers. Other risk factors for COPD are exposure to dust and occupational chemicals for a long time with high intensity. COPD symptoms worsen over time and for smokers this progression is more severe and faster.<sup>14</sup>

#### 1.2. Asthma

In 2022, asthma affected about 3.9 % of the Vietnamese population, or approximately 4 million people. Asthma is estimated to cause between 3 000 and 4 000 deaths each year in Vietnam. Children have the highest rates of asthma and it is more prevalent amongst 12- to 13-year-olds. According to experts in respiratory medicine, among the respiratory diseases from which children often suffer, the rate of bronchial asthma is 10 %. This is twice as high as the rate in adults and it has increased in the past five years. In Hanoi, around 8.1 % of children from inner cities and 6.7 % of children from suburban areas were found to have bronchial asthma. In Ho Chi Minh City, this percentage is higher with a total of 29.1 % of children under 18 years old having asthma. Environmental pollution is identified as the reason for high and increasing rates of asthma in big cities, as cities or urban areas have a concentration of industrial facilities and high volumes of traffic. All emissions have effects on human health, but in Ho Chi Minh City, up to 90 % of air test samples exceed the environmental limits, meaning that the air is polluted above levels considered acceptable.

Asthma is exacerbated by weather change, particularly high air humidity. An expert in immunology and allergies at the National Children Hospital said that 'erratic weather changes, rainy and humid weather' lead to high rates of hospitalisation in children. In March 2023, the department admitted 50 children for acute asthma attacks, most of whom were experiencing

<sup>&</sup>lt;sup>19</sup> benhhen.vn, Hen phế quản căn bệnh gây chết người chỉ đứng sau ung thư [Bronchial asthma is a deadly disease second only to cancer], n.d., <u>url</u>



<sup>&</sup>lt;sup>12</sup> Ha Tinh Newspaper, Gần 90% bệnh nhân bị bệnh phổi tắc nghẽn mãn tính có tiền sử liên quan đến thuốc lá [Nearly 90% of patients with chronic obstructive pulmonary disease have a tobacco-related history], 13 November 2022, url

 <sup>&</sup>lt;sup>13</sup> Hanoi Lung Hospital, Bệnh phổi tắc nghẽn mãn tính [Chronic obstructive pulmonary disease], 18 October 2018, <u>url</u>
 <sup>14</sup> Central Military Hospital 108, Bệnh phổi tắc nghẽn mạn tính những điều bạn cần biết [Chronic obstructive pulmonary disease: things you need to know], 10 May 2021, <u>url</u>

<sup>&</sup>lt;sup>15</sup> Vietnam, MOH, Khoảng 4 triệu người Việt mắc hen phế quản, cần nâng cao năng lực điều trị và chủ động kiểm soát bệnh [About 4 million Vietnamese people have bronchial asthma, it is necessary to improve treatment capacity and proactively control the disease], 18 October 2022, <u>url</u>

<sup>&</sup>lt;sup>16</sup> Trung Tâm Kiểm Soát Bệnh Tật Tỉnh Đồng Nai [Dong Nai Province Disease Control Center], 4 triệu người Việt mắc hen phế quản, cần làm gì để giảm đợt cấp trên bệnh nhân? [Four million Vietnamese people have bronchial asthma, what should be done to reduce exacerbations in patients?], 3 November 2022, <u>url</u>

<sup>&</sup>lt;sup>17</sup> Thu Cuc Health System, Hen phế quản ở trẻ em: Nguyên nhân, biểu hiện và cách điều trị [Bronchial asthma in children: Causes, symptoms and treatment], 24 July 2023, url

<sup>&</sup>lt;sup>18</sup> Vinmec, Dấu hiệu nhận biết cơn hen phế quản cấp tính [Signs of acute bronchial asthma], 2019, url



symptoms of moderate or high severity with breathing difficulties and requiring oxygen support.<sup>20</sup>

Asthma is a common disease in Vietnam but approximately 60 % of people with asthma are treated incorrectly. One study shows that 62 % of patients have never received preventive treatment to avoid attacks and this rises up to 81 % in children. There is a rapid increase in morbidity and mortality from asthma.<sup>21</sup>

## 1.3. Sleep apnoea syndrome (SAS)

There is a long list of factors that make SAS more likely, including: male gender, older age, family history, obesity, lifestyle (e.g. smoking and alcohol use) and pre-existing health conditions, e.g. COPD, hypertension, upper respiratory inflammation and people who have a large neck circumference or narrow posterior pharyngeal anatomy.<sup>22</sup> Since the main symptom of SAS is snoring, many people think it is a normal condition and do not consult a doctor.<sup>23</sup>

The most recent MOH guideline for obesity diagnosis and treatment used body mass index (BMI)  $\geq$ 23 as the lower limit for overweight and BMI  $\geq$ 25 as the lower limit for Grade I obesity. The City International Hospital in Ho Chi Minh City reports that 8.5 % of the population in Vietnam has SAS and that this percentage rises with obesity. A study conducted in Hai Phong city in 2020 of people with BMI  $\geq$ 23 concluded that the rate of SAS in overweight and obese people is 78.8 %; therefore, it is recommended to screen SAS in people who have BMI  $\geq$ 23 for appropriate and timely treatment and monitoring. Diabetes mellitus is also a significant risk factor of SAS. One study conducted in Bach Mai Hospital, one of the largest hospitals in the North of Vietnam, notes that the rate of SAS in patients with diabetes mellitus type 2 is 85.5 %.  $^{27}$ 

<sup>&</sup>lt;sup>27</sup> Hoàng, T.T.T. and Vũ, V.G., Đặc Điểm Lâm Sàng Và Cận Lâm Sàng Của Hội Chứng Ngừng Thở Khi Ngủ Ở Bệnh Nhân Đái Tháo Đường Type 2 [Clinical and Sub-Clinical Features of Sleep Apnoea Syndrome in Patients with Type 2 Diabetes], 2023, <u>url</u>, p. 27



<sup>&</sup>lt;sup>20</sup> National Children's Hospital, Cảnh báo gia tăng trẻ nhập viện do hen phế quản thời điểm giao mùa [Warning of increase in children being hospitalised due to bronchial asthma during the change of season], 12 April 2023, <u>url</u>
<sup>21</sup> benthen vn. Hen phố quản cặp bệnh gây chết người chỉ đứng sau ung thư [Bronchial asthma is a deadly disease

<sup>&</sup>lt;sup>21</sup> benhhen.vn, Hen phế quản căn bệnh gây chết người chỉ đứng sau ung thư [Bronchial asthma is a deadly disease second only to cancer], n.d., <u>url</u>

<sup>&</sup>lt;sup>22</sup> TuoiTre Online, Nguy hiểm ngưng thở khi ngủ, ai cũng có thể gặp phải? [Danger of sleep apnoea, can anyone experience it?], 7 June 2023, <u>url</u>

<sup>&</sup>lt;sup>23</sup> VnExpress, Phân biệt ngủ ngáy và ngưng thở khi ngủ [Distinguish between snoring and sleep apnoea], 17 June 2022, url

<sup>&</sup>lt;sup>24</sup> Vietnam, MOH, Về Việc Ban Hành Tài Liệu Chuyên Môn "Hướng Dẫn Chẩn Đoán Và Điều Trị Bệnh Béo Phì" Số: 2892/QĐ-BYT [On the Issuance of the Professional Document "Guidelines for Diagnosis and Treatment of Obesity" Number: 2892/QD-BYT], 22 October 2022, url, Section 4.1

<sup>&</sup>lt;sup>25</sup> City International Hospital, Ngưng thở khi ngủ: Triệu chứng, chẩn đoán và các phương pháp điều trị [Sleep apnoea: Symptoms, diagnosis, and treatments], 4 August 2022, <u>url</u>

<sup>&</sup>lt;sup>26</sup> Nguyen, T. H. L. and Pham, V. L., Tỷ Lệ, Biểu Hiện Lâm Sàng Của Hội Chứng Ngưng Thở Tắc Nghẽn Khi Ngủ Trên Các Đối Tượng Thừa Cân, Béo Phì Tại Bệnh Viện Đại Học Y Hải Phòng [Incidence and clinical manifestations of obstructive sleep apnoea syndrome in overweight and obese subjects at Hai Phong Medical University Hospital], June 2021, <u>url</u>, p. 106



## 2. Access to treatment

This chapter contains information on how the most common pulmonological diseases are detected, diagnosed and treated; an overview of available health facilities for treatment; and lastly a summary of available economic support and coverage for patients is provided.

## 2.1. Detection, diagnosis and treatment

Ward and commune medical stations are authorised to detect, examine, treat and manage chronic diseases, including COPD and asthma, according to MOH Decision No. 3756/QD-BYT of 2018.<sup>28</sup> However, some of the required medications for asthma and COPD are not on the list of medication at this level of health facility. At present, the Department of Health has proposed to the MOH to expand the list of drugs for this group of diseases so patients can be examined and treated in commune health stations. It is reported that this would reduce the overload in larger hospitals and patients' travel costs. This is an urgent need of the community; indeed, according to a survey by the Ho Chi Minh City Department of Health, over 80 % of people with non-communicable diseases want to be treated at their local health station provided that adequate medications are available.<sup>29</sup>

The COPD and asthma management system was built from central to district levels. By September 2020, there were 219 COPD and asthma patient management departments nationwide, of which 94 provincial offices, 125 district offices and 2 122 commune health stations have carried out preventive activities and early detection of COPD and asthma patients.<sup>30</sup>

## 2.1.1. Chronic obstructive pulmonary disease (COPD)

COPD is characterised by silent but steady progression. In its early stages, it does not cause any specific symptoms. Symptoms, such as shortness of breath, when stressed and when at rest become more apparent in the moderate or severe stages. Therefore, screening tests are recommended for high-risk groups to detect early stages. High-risk groups include smokers or people exposed to smoking for a long time, occupational exposure to dust and chemicals,

<sup>&</sup>lt;sup>30</sup> Vietnam, MOH, Thông tin y tế 28 - 30/9/2020 [Medical information September 28 – 30, 2020], 30 September 2020, <u>url</u>



13

<sup>&</sup>lt;sup>28</sup> Vietnam, MOH, Về Việc Ban Hành Hướng Dẫn Hoạt Động Dự Phòng, Phát Hiện Sớm, Chẩn Đoán, Điều Trị Và Quản Lý Một Số Bệnh Không Lây Nhiễm Phổ Biến Cho Tuyến Y Tế Cơ Sở, Số: 3756/QĐ-BYT [On the Issuance of Guidance on Prevention, Early Detection, Diagnosis, Treatment and Management of Some Common Non-Communicable Diseases for the Grassroot Health Line, No.: 3756/QD-BYT], 21 June 2018, <a href="https://dx.doi.org/line.com/url/">url</a>

<sup>&</sup>lt;sup>29</sup> VnExpress, Đề xuất đưa thuốc chữa hen, phổi vào danh mục BHYT tại trạm y tế [Proposal to include asthma and lung medications in the health insurance list at health stations], 4 April 2023, url



older people, people with recurrent respiratory inflammation and others.<sup>31</sup> Some hospitals offer screening packages for these groups.<sup>32</sup>

Spirometry refers to the basic lung function tests that quantify the volume of air exhaled and inhaled.<sup>33</sup> Spirometers are used for identifying COPD as well as for distinguishing COPD from other respiratory diseases.<sup>34</sup> Local health facilities face a shortage of spirometers, which are available only in some city hospitals, which makes it challenging to provide accurate diagnoses at local health facilities.<sup>35</sup>

At present, COPD is mostly treated in district health hospitals (Level III) and the levels above.<sup>36</sup>

The rate at which patients adhere to COPD treatment is lower than other chronic diseases, such as hypertension and diabetes.<sup>37</sup> A reason that has been identified for this is the limited involvement of pharmacists in the COPD and Asthma Prevention Project. Direct connection between pharmacists and patients is not common in Vietnam. A study in Bach Mai Hospital showed that pharmacist-led patient education, including counselling and training, improved adherence to medication.<sup>38</sup>

#### 2.1.2. **Asthma**

Asthma symptoms in adults can be confused with COPD.<sup>39</sup> In 2020, the MOH issued guidelines for the diagnosis and treatment of bronchial asthma in children aged over 12 and adults, which must be applied in all health facilities,<sup>40</sup> while in 2016, it issued guidelines to diagnose and treat children under five years of age.<sup>41</sup> For children aged 5 to 12, besides the clinical examination, a diagnosis is achieved through impulse oscillometry (IOS), which can be adapted for children over three years old. However, impulse oscillometers are not available in

<sup>&</sup>lt;sup>41</sup> benhhen.vn, Hướng Dẫn Chẩn Đoán Và Điều Trị Hen Trẻ Em Dưới 5 Tuổi (Bộ Y Tế) - Phần 1 [Guidelines for Diagnosis and Treatment of Asthma in Children Under 5 Years Old (Ministry of Health) - Part 1], n.d., <u>url</u>



<sup>&</sup>lt;sup>31</sup> Vietnam Vaccine, Bệnh Phổi Tắc Nghẽn Mãn Tính Copd: Nguyên Nhân Và Triệu Chứng [Chronic Obstructive Pulmonary Disease COPD: Causes and Symptoms], 18 July 2022, url

<sup>&</sup>lt;sup>32</sup> City International Hospital, Hút thuốc lá - thủ phạm của bệnh phổi tắc nghẽn mãn tính [Smoking - the culprit of chronic obstructive pulmonary disease], 11 October 2019, <u>url</u>

<sup>&</sup>lt;sup>33</sup> Moore, V.C., Spirometry: step by step, 2012, <u>url</u>, p. 233

<sup>&</sup>lt;sup>34</sup> Johns, D.P., Walters, J.A. and Walters, E.H., Diagnosis and early detection of COPD using spirometry, 2014, <u>url</u>, p. 1557

<sup>&</sup>lt;sup>35</sup> Nguoi Lao Dong Newspaper, Bệnh phổi tắc nghẽn mạn tính: Mối đe dọa âm thầm [Chronic obstructive pulmonary disease: A silent threat], 17 November 2022, <u>url</u>

<sup>&</sup>lt;sup>36</sup> VnExpress, Đề xuất đưa thuốc chữa hen, phổi vào danh mục BHYT tại trạm y tế [Proposal to include asthma and lung medications in the health insurance list at health stations], 4 April 2023, <u>url</u>

 $<sup>^{37}</sup>$  Nguyen, T.S., et al., Impact of pharmaceutical care in the improvement of medication adherence and quality of life for COPD patients in Vietnam, 2019,  $\underline{url}$ , p. 31

<sup>&</sup>lt;sup>38</sup> Nguyen, T.S., et al., Impact of pharmaceutical care in the improvement of medication adherence and quality of life for COPD patients in Vietnam, 2019, <u>url</u>, p. 34

<sup>&</sup>lt;sup>39</sup> Báo điện tử Sức khỏe và Đời sống [Health and Life Electronic Newspaper], Nhầm lẫn giữa bệnh hen và COPD nguy hiểm như thế nào? [How dangerous is confusion between asthma and COPD?], 18 April 2023, <u>url</u>

<sup>&</sup>lt;sup>40</sup> benhhen.vn, Hướng dẫn chẩn đoán và điều trị hen phế quản của Bộ Y tế năm 2020 (Kỳ 1) [Guidelines for diagnosis and treatment of bronchial asthma of the Ministry of Health in 2020 (Part 1)], n.d., url



all health facilities in Vietnam. <sup>42</sup> The media, Internet and health workers at all levels of the Vietnamese health system have promoted information about asthma in children to increase awareness of when a child may have it, and encourage early presentation in hospitals with paediatric departments. <sup>43</sup>

The essential medicines to treat asthma are not readily available in commune health stations; therefore, asthma patients are treated in Level II health facilities or speciality clinics.<sup>44</sup>

#### 2.1.3. Sleep apnoea syndrome (SAS)

SAS is not included in the guidelines for the prevention, early detection, diagnosis and treatment of non-communicable diseases at level of the local health facilities.<sup>45</sup>

Many hospitals have SAS screening packages available.<sup>46</sup> The gold standard for the diagnosis is based on the result from polysomnography.<sup>47</sup> However, since Vietnam has only 10 health facilities equipped with polysomnography, family doctors must screen patients to find out whether they have a high risk of obstructive SAS and refer them to specialised centres for polysomnography or even respiratory polygraphy.<sup>48</sup> In Vietnam, sleep apnoea is often examined and treated by ENT doctors.<sup>49</sup>

Apnoea Syndrome: Causes, Symptoms and Prevention], 14 April 2023, url



<sup>&</sup>lt;sup>42</sup> Vietnam, MOH, Department of Medical Examination and Treatment Administration, Hen Ở Trẻ Em – Những Điều Cần Biết Để Chăm Sóc Trẻ Tốt [Asthma in Children – Things You Need to Know to Take Good Care of Your Children], 1 June 2022, url

<sup>&</sup>lt;sup>43</sup> Thu Duc City Medical Center, Phuoc Binh Ward Medical Station, Truyền Thông Bệnh Hen Phế Quản [Communication of Bronchial Asthma], 20 May 2022, <u>url</u>; YouTube, Bệnh Lý Hô Hấp Và Hen Suyễn Ở Trẻ Em [Respiratory Diseases and Asthma in Children], August 2023, url

<sup>&</sup>lt;sup>44</sup> Nguoi Lao Dong Newspaper, Trạm y tế thiếu thuốc, người dân chê, Sở Y tế TP HCM đề xuất giải pháp [The medical station lacks medicine, people complain, the Ho Chi Minh City Department of Health proposes a solution], 23 September 2022, <u>url</u>

<sup>&</sup>lt;sup>45</sup> Vietnam, MOH, Về Việc Ban Hành Hướng Dẫn Hoạt Động Dự Phòng, Phát Hiện Sớm, Chẩn Đoán, Điều Trị Và Quản Lý Một Số Bệnh Không Lây Nhiễm Phổ Biến Cho Tuyến Y Tế Cơ Sở, Số: 3756/QĐ-BYT [On the Issuance of Guidance on Prevention, Early Detection, Diagnosis, Treatment and Management of Some Common Non-Communicable Diseases for the Grassroot Health Line, No.: 3756/QD-BYT], 21 June 2018, <u>url</u>

<sup>&</sup>lt;sup>46</sup> FV Hospital, Chương Trình Tầm Soát Chứng Ngưng Thở Khi Ngủ [Sleep Apnoea Screening Programme], n.d., url

<sup>&</sup>lt;sup>47</sup> Central Military Hospital 108, Ngừng thở khi ngủ và biện pháp điều trị [Sleep apnoea and treatment measures], 29 May 2023, url

Viet Nam News, 800,000 Vietnamese suffer from obstructive sleep apnea syndrome, 17 December 2018, <u>url</u>
 Tâm Anh Hospital, Hôi Chứng Ngưng Thở Khi Ngủ: Nguyên Nhân, Triêu Chứng Và Cách Phòng Ngừa [Sleep



#### 2.2. Facilities

In cities or urban areas with Level II health facilities or speciality clinics, people have good access to treatment for COPD, asthma, and SAS.<sup>50</sup> Patients suffering from COPD or asthma who live in one of the areas of the government's Prevention Project can be monitored and managed in their local health facility.<sup>51</sup> Essential medicines for COPD, asthma and sleep apnoea are however not on the list of medicines of the commune health stations.<sup>52</sup> To detect COPD, there are free screening possibilities in hospitals or paid screening packages in some hospitals to meet the needs of people.<sup>53</sup>

Since the year 2000, Vietnam has established more than 250 Asthma and COPD Outpatient Care Units (ACOCUs) across 51 provinces, helping patients access diagnostic machines and effective medicines without needing to attend higher level heath facilities. This reduces the severity of acute attacks and lowers the volume of patients attending larger hospitals. Such units could reduce the economic burden for patients, families, costs for insurance and society in general. An ACOCU has an adequate number of trained doctors and at least one technician trained in spirometry. An associate professor explains that spirometry, medication, and facilities for treatment are sufficiently provided in ACOCUs.<sup>54</sup>

However, as mentioned above, essential medicines are not available in health commune stations, so patients need to go to hospitals to get medication. Therefore, the control and preventive treatment of COPD and asthma in Vietnam is still a concern.<sup>55</sup>

<sup>&</sup>lt;sup>55</sup> benhhen.vn, Hen phế quản căn bệnh gây chết người chỉ đứng sau ung thư [Bronchial asthma is a deadly disease second only to cancer], n.d., <u>url;</u> Bach Mai Hospital, Chuyên gia chỉ rõ những sai lầm người bệnh phổi tắc nghẽn mạn tính hay mắc phải khiến bệnh trở nặng [Experts point out the mistakes people with chronic obstructive pulmonary disease often make that make the disease worse], 15 December 2018, <u>url</u>



Vietnam, MOH, Quyết Định Về Việc Ban Hành Tài Liệu Chuyên Môn "Hướng Dẫn Chẩn Đoán Và Điều Trị Bệnh Phổi Tắc Nghẽn Mạn Tính" Số: 2767/Qđ-Byt [Decision On The Issuance Of The Professional Document "Guidelines For Diagnosis And Treatment Of Chronic Obstruction Pulmonary Disease" No.: 2767/QD-BYT], 4 July 2023, url

<sup>&</sup>lt;sup>51</sup> Vietnam, MOH, Chiến Lược Quốc Gia Phòng Chống Bệnh Không Lây Nhiễm, Giai Đoạn 2015 - 2025 [National Strategy For The Prevention And Control Of Noncommunicable Diseases, Period 2015-2025], 2015, <u>url</u>; Cổng thông tin điện tử Bộ Y Tế (MOH) [Electronic information portal of the Ministry of Health (MOH)], Approve the national plan to prevent and control non-communicable diseases and mental health disorders, 8 February 2022, <u>url</u>

<sup>&</sup>lt;sup>52</sup> VOV2, Đưa thuốc chữa hen, phổi vào danh mục BHYT tại trạm y tế [Include asthma and lung medications in the health insurance list at medical stations], 4 April 2023, <u>url;</u> Nguyen, T.-A., et al., Factors affecting healthcare pathways for chronic lung disease management in Vietnam: a qualitative study on patients' perspectives, 2021, <u>url, p.</u> 8

<sup>&</sup>lt;sup>53</sup> Vietnam, MOH, Department of Medical Examination and Treatment Administration, Chương Trình "Vi Lá Phổi Khỏe" Tổ Chức Tầm Soát Miễn Phí Bệnh Hen, Phổi Tắc Nghẽn Mạn Tính Tại Huyện Gò Dầu, Tỉnh Tây Ninh [Program "For Healthy Lungs" Organises Free Screening for Asthma and Chronic Obstruction Lungs in go Dau District, Tay Ninh Province], 15 January 2020, <a href="https://line.ps./line.ps./line.ps./">url;</a>. Báo điện tử Sức khỏe và Đời sống [Health and Life Electronic Newspaper], Tầm soát bệnh hen, phổi tắc nghẽn mạn tính miễn phí cho hàng trăm người dân [Free screening for asthma and chronic obstructive pulmonary disease for hundreds of people], 20 July 2022, <a href="https://line.ps.//line.ps.//">url</a>

<sup>&</sup>lt;sup>54</sup> Vietnam, Tuy Hoa City Electronic Information Portal, PGS.TS.BS Lê Thị Tuyết Lan: Có Thể Kiểm Soát Tốt Các Bệnh Hô Hấp Mãn Tính [Associate Professor, Dr. Le Thi Tuyet Lan: Chronic Respiratory Diseases Can Be Well Controlled], 1 August 2023, url



## 2.3. Insurance and national programmes

This topical report describes the coverage provided by National Health Insurance (NHI). The EUAA MedCOI report Provision of healthcare in Vietnam (2023) uses the more generic term 'social health insurance' when describing the development of health insurance in Vietnam.<sup>56</sup>

#### 2.3.1. Insurance

COPD, asthma and sleep apnoea are on the list of the NHI coverage.<sup>57</sup> Depending on the different level of coverage, regulated in the Decree No. 146/ 2018 ND-CP, people having such disease pay at different levels: 80 % of coverage for the majority of insured people, and 95 % and 100 % for special groups (see section 3.2 for the groups that receive 100 % coverage).<sup>58</sup> NHI does not cover examination and treatment fees for outpatient visits at city level hospitals (or Level I health facilities) without referral.<sup>59</sup> Likewise, screening activities at the request of the patient, and without referral, are not covered by NHI and are an out-of-pocket expense.<sup>60</sup>

Notably, COPD essential medicine as well as all the medication needed for treatment in accordance with guidelines and instructions are not totally covered by the NHI. Some healthcare services for patients with chronic respiratory conditions are also not covered by NHI; therefore, this creates a financial burden making treatment and medication unaffordable for some patients. Moreover, 13 % of the population in Vietnam is still not covered by health insurance.<sup>61</sup>

#### 2.3.2. National programmes

#### (a) Chronic obstructive pulmonary disease (COPD)

COPD is one of the top health concerns in Vietnam due to its high mortality rate and there are many national programmes for preventing, detecting, treating and managing this disease.<sup>62</sup>

#### (b) National Strategy for Prevention of Non-Communicable Diseases

The National Strategy for Prevention of Non-Communicable Diseases in the period 2015 to 2025 is a major national strategy, which addresses cancers, cardiovascular diseases, and

<sup>&</sup>lt;sup>62</sup> Vietnam, MOH, Nỗ lực phòng chống bệnh phổi tắc nghẽn mạn tính [Efforts to prevent chronic obstructive pulmonary disease], 25 May 2019, <u>url;</u> Báo điện tử Sức khỏe và Đời sống [Health and Life Electronic Newspaper], Hỗ trợ người bệnh tại 50 bệnh viện và trung tâm y tế trong điều trị hen và COPD ở cộng đồng [Supporting patients at 50 hospitals and medical centers in treating asthma and COPD in the community], 22 February 2022, <u>url</u>



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<sup>&</sup>lt;sup>56</sup> EUAA, Provision of healthcare in Vietnam, 2023, <u>url</u>

<sup>&</sup>lt;sup>57</sup> IBH Insurance, Các trường hợp không được bảo hiểm y tế chi trả [Cases not covered by health insurance], n.d., <u>url</u>

<sup>&</sup>lt;sup>58</sup> Cổng Giao Dịch Bảo Hiểm Xã Hội Điện Tử [Electronic Social Insurance Transaction Portal], Mức hưởng bảo hiểm y tế theo từng nhóm đối tượng năm 2023 [Health insurance benefits by each group of subjects in 2023], 8 June 2023, url

<sup>&</sup>lt;sup>59</sup> Law Library Company, Mức hưởng BHYT khi điều trị nội trú và điều trị ngoại trú năm 2022 [Health insurance benefits for inpatient and outpatient treatment in 2022], n.d., url

<sup>&</sup>lt;sup>60</sup> Law Library Company, Khám sức khỏe định kỳ, khám tổng quát có được thanh toán BHYT? [Are periodic health checks and general check-ups covered by health insurance?], 27 May 2023, <u>url</u>

<sup>&</sup>lt;sup>61</sup> Nguyen, T.-A., et al., Factors affecting healthcare pathways for chronic lung disease management in Vietnam: a qualitative study on patients' perspectives, 2021, url, p. 11



diabetes, as well as COPD and asthma. It seeks to coordinate a wide range of organisations, branches of the government and the entire Vietnamese health system.<sup>63</sup>

#### (c) Vietnam Healthy Lung

The "Vietnam Healthy Lung" programme is a multinational initiative by the pharmaceutical company AstraZeneca to improve the quality of outpatient management of asthma, COPD and lung cancer in nine Asian countries. Vietnam was the first country to implement it in 2017. In the phase one period, from 2017 to 2020, this programme gained significant results. It supported the establishment of 110 asthma and COPD units, helping more than 100 000 patients to access better treatment. Additionally, more than 4 800 people in high-risk groups were screened and training was provided for 8 200 health workers. Phase two ran from 2020 to 2023 and focussed on increasing awareness of these lung diseases to raise screening and detection rate, increasing access to quality health services in terms of diagnosis, treatment, and management of asthma and COPD. <sup>64</sup>

## 2.4. Non-governmental organisations (NGOs)

For people and children living in remote areas, many hospitals have organised charity programmes to screen and examine health conditions, from which patients suffering from pulmonary diseases are detected and recommended to go to the proper hospital. For instance, every year the Youth Union of the Central Children hospital organises more than 20 volunteer activities for examining community health conditions in remote, hard to reach or disadvantaged areas. Free screenings for asthma or COPD are sometimes organised in urban settings so cases could be detected and treated in a timely manner.

To address sleep apnoea, which is relatively unknown in remote areas or among economically disadvantaged individuals, the Ear-Nose-Throat Hospital has initiated charity programmes to screen for this condition, therefore partially detecting people at high risk from developing sleep apnoea.<sup>67</sup>

<sup>&</sup>lt;sup>67</sup> Ho Chi Minh City Ear, Nose and Throat Hospital, Khám bệnh chữa bệnh và trao quà cho người dân nghèo vùng biên giới [Medical examination and treatment and giving gifts to poor people in border areas], 27 August 2019, <u>url</u>



<sup>&</sup>lt;sup>63</sup> Vietnam, MOH, Chiến Lược Quốc Gia Phòng Chống Bệnh Không Lây Nhiễm, Giai Đoạn 2015 - 2025 [National Strategy For The Prevention And Control Of Noncommunicable Diseases, Period 2015-2025], 2015, <u>url</u>

<sup>&</sup>lt;sup>64</sup> People's Army Newspaper, Chương trình "Lá phổi Việt Nam khỏe" được mở rộng thêm 3 năm ["Vietnam Healthy Lung" program to be expanded for three years], 17 November 2020, <u>url</u>

<sup>&</sup>lt;sup>65</sup> Báo điện tử Sức khỏe và Đời sống [Health and Life Electronic Newspaper], Khám, cấp phát thuốc miễn phí cho hơn 1.000 trẻ em vùng cao Mường Khương [Free examination and medicine distribution for more than 1,000 children in the highlands of Muong Khuong], 11 November 2018, <u>url;</u> National Children's Hospital, Bàn giao bác sĩ Bệnh viện Nhi Trung ương về hỗ trợ chuyên môn và khám bệnh miễn phí cho 320 trẻ em tại Bệnh viện Đa khoa thị xã Kỳ Anh nhân dịp ngày Quốc tế thiếu nhi 1/6 [Handing over to Central Children's Hospital doctors providing professional support and free medical examination for 320 children at Ky Anh Town General Hospital on the occasion of International Children's Day June 1], 1 June 2022, <u>url</u>

<sup>&</sup>lt;sup>66</sup> Vietnam, MOH, Bệnh viện Bạch Mai tổ chức khám và tư vấn miễn phí bệnh hen phế quản [Bach Mai Hospital organises free examination and consultation for bronchial asthma], 12 November 2019, url



### 3. Cost of treatment

The following chapter contains information on the associated costs for patients with COPD, asthma, or sleep apnoea. The coverage of health insurance, with particular focus on the five groups of people with full costs covered, is detailed. In the final section, costs for medical examination and treatment as well as the rules for insurance coverage is provided, with particular focus on specialists and diagnostic investigation within the field of pulmonology.

# 3.1. Treatment costs for COPD, asthma, and sleep apnoea

Due to some differences in the development of the diseases as well as in the treatment strategy, the summaries of the cost of treatment for COPD, asthma and sleep apnoea are separated.

#### 3.1.1. COPD

As a chronic disease needing long-term treatment, COPD is an economic burden for the individual and their family. In 2019, the President of the Asthma-Allergy-Clinical Immunology Association of Ho Chi Minh City explained that approximately 50 % of patients do not comply with treatment because they are unable to afford the medication and two out of five stated that the medication is not covered by health insurance. <sup>68</sup> It is estimated that 13 % of the Vietnamese population is not covered by health insurance. Even though patients have NHI, some essential medication and health services for patients with chronic respiratory conditions are not covered by it. <sup>69</sup>

A COPD patient with NHI who requires treatment and medication for two mild acute attacks, two moderate acute attacks and two severe acute attacks will incur annual costs of about 200 million VND [approximately 7 760 EUR]. If that same patient is stable and only needs treatment to prevent symptoms, the cost is estimated at 22 million VND per year [approximately 850 EUR] with most of the expenditure spent on medication.<sup>70</sup>

Patients admitted to the hospital many times due to acute attacks are more likely to get complications, such as tuberculosis, diabetes, pneumonia, stomach ulceration and haemorrhage, etc., because of the repeated use of strong antibiotics combined with systemic corticosteroids. This increases the cost of treatment significantly. According to one study

Vietnam, MOH, Bệnh phổi tắc nghẽn mạn tính: Cần một trần chi phí BHYT điều trị dự phòng riêng [Chronic obstructive pulmonary disease: Need a separate health insurance cost ceiling for preventive treatment], 20 November 2019, url



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<sup>&</sup>lt;sup>68</sup> Vietnam, MOH, Bệnh phổi tắc nghẽn mạn tính: Cần một trần chi phí BHYT điều trị dự phòng riêng [Chronic obstructive pulmonary disease: Need a separate health insurance cost ceiling for preventive treatment], 20 November 2019, <u>url</u>

<sup>&</sup>lt;sup>69</sup> Nguyen, T.-A., et al., Factors affecting healthcare pathways for chronic lung disease management in Vietnam: a qualitative study on patients' perspectives, 2021, url, p. 11



conducted in Ho Chi Minh City University Medical Centre, the cost of medication during an acute attack ranges from 420 000 to 1.8 million VND for seven days as an outpatient [approximately 16 to 70 EUR], and from 17.7 million to 93 million VND for seven days as an inpatient [approximately 690 to 3 600 EUR].<sup>71</sup>

Another study that evaluated the total cost of a patient hospitalised for an acute attack, reports that the overall cost was 18.3 million VND [approximately 698 EUR] and the hospitalisation cost per day was 2.5 million VND [approximately 95 EUR]. Among this total, medication cost accounted for the highest proportion of hospitalisation cost with 53.9 %, and the lower was for functional test with 1.3 % with differences among patients on different disease stages.<sup>72</sup>

#### 3.1.2. Asthma

Like COPD, asthma also carries the risk of acute attacks, so prevention is a key strategy. The President of the Asthma-Allergy-Clinical Immunology Association of Ho Chi Minh City asserts that the cost of treating acute asthma is ten times higher than the cost of treating it in a stable condition. One study about the cost of treating an acute attack in Can Tho Tuberculosis and Lung Disease Hospital shows that the average cost of treatment for inpatient was approximately 5 million VND [approximately 198 EUR], of which the NHI paid 85.11 % and the patient was required to pay 14.89 %.74

Due to the classification of asthma with five stages, based on the health insurance statistics, one study concluded that the approximate average cost at Global Initiative for Asthma (GINA) steps 1, 2, 3-4 and 5 was 1.2 million VND [42 EUR], 3.2 million VND [117 EUR], 4 7 million VND [170 EUR] and 9.2 million VND [335 EUR], respectively, in which the cost of medication accounts for the major expenses. Compared to patients without exacerbations, those with mild-moderate exacerbations and those with severe exacerbation had 3 times and 5 times higher cost, respectively.<sup>75</sup>

#### 3.1.3. Sleep apnoea syndrome (SAS)

SAS has many different aetiologies and therefore the cost of treatment varies.

<sup>&</sup>lt;sup>75</sup> Huy Tuấn Kiệt, P., et al., Chi Phí Y Tế Trực Tiếp Trong Điều Trị Hen Theo Phân Loại Gina Dựa Trên Phân Tích Dữ Liệu Lớn Từ Bảo Hiểm Y Tế Việt Nam Năm 2019 [Direct Medical Costs of Asthma Treatment According to Gina Classification Based on Big Data Analysis from Vietnam Health Insurance in 2019], 2021, <u>url</u>, p. 169



<sup>&</sup>lt;sup>71</sup> Vietnam, MOH, Bệnh phổi tắc nghẽn mạn tính: Cần một trần chi phí BHYT điều trị dự phòng riêng [Chronic obstructive pulmonary disease: Need a separate health insurance cost ceiling for preventive treatment], 20 November 2019, url

<sup>&</sup>lt;sup>72</sup> Ngo, C.Q, et al., Direct Hospitalization Cost of Patients with Acute Exacerbation of Chronic Obstructive Pulmonary Disease in Vietnam, 2019, url, p. 1

<sup>&</sup>lt;sup>73</sup> Vietnam, MOH, Department of Medical Examination and Treatment Administration, Tiết Kiệm 90% Chi Phí Điều Trị Nếu Quản Lý Hen Và Copd Tốt Ở Giai Đoạn Ổn Định [Save 90% of Treatment Costs if Asthma and Copd are Good in the Stable Stage], 15 January 2020, <u>url</u>

<sup>&</sup>lt;sup>74</sup> Nguyễn, P.H., et al., Nghiên Cứu Chi Phí Trực Tiếp Y Tế Ở Bệnh Nhân Hen Phế Quản Điều Trị Nội Trú Có Bảo Hiểm Y Tế Tại Bệnh Viện Lao Và Bệnh Phổi Thành Phố Cần Thơ Năm 2020 - 2021 [Study on Direct Medical Costs in Bronchial Asthma Patients with In-Patient Treatment with Health Insurance at Can Tho City Tubber and Pulmonary Disease Hospital in 2020 – 2021], 2023, url, p. 5



# 3.2. Health insurance and costs for medical examination and treatment

The MOH states that, under Article 14 of Decree No.: 146/2018, five groups have costs for medical examination and treatment covered in full by the health insurance:

- People with meritorious services to the revolution, veterans, people receiving monthly social insurance benefits, people from poor households, ethnic minorities residing in difficult or extremely difficult areas and people aged 80 or older who are receiving monthly death benefits.
- 2. Revolutionary activists before 1945; Heroic Mothers of Vietnam; people receiving policies, such as War Invalids or sick soldiers when treating recurring wounds or illnesses; resistance activists infected with toxic chemicals having a working capacity loss rate of 81 % or more; and children under six years old. [This group is entitled to full coverage of their medical examination and treatment costs, with no limitations on payments for drugs, chemicals, medical supplies and technical services according to regulations of the MOH].
- 3. People who receive medical examination and treatment at the commune level.
- 4. Cases where the cost of one medical examination and treatment is lower than 15 % of the base salary.
- 5. Individuals who have maintained continuous health insurance coverage for five consecutive years or more, and who have the amount of money to pay for medical examination and treatment costs in the year exceeding six months of base salary.<sup>76</sup>

The monthly base salary increased from 1 490 000 VND [58 EUR] to 1 800 000 VND [73 EUR] on 1 July 2023.<sup>77</sup> This is the common minimum wage, which is used to calculate salaries for employees in state-owned organisations and enterprises, as well as to calculate the social contribution for all enterprises.<sup>78</sup>

Table 1 shows how NHI and private insurance can each provide coverage for public and private healthcare and the implications for the fees that the patient must pay. Some private health providers have agreements with NHI. This enables people who hold NHI to access care with these providers. People with NHI who attend a private facility which has not signed a contract with NHI are required to pay the medical cost in advance, and they are only able to submit a claim to the NHI fund for nominal support: i.e. the insurer pays a set sum to the

<sup>&</sup>lt;sup>79</sup> BAC HA International General Hospital, Khám Bảo hiểm y tế bệnh viện tư hưởng quyền lợi như thế nào? [What are the benefits of private hospital health insurance?], n.d., <u>url</u>; LuatVietnam, Đi khám ở bệnh viện tư nhân có được hưởng BHYT? [Are you covered by health insurance if you go to a private hospital?], 5 January 2021, url



<sup>&</sup>lt;sup>76</sup> Vietnam, MOH, 5 nhóm đối tượng nào được quỹ BHYT chi trả 100 % chi phí khám chữa bệnh? [Which 5 groups of people have 100 % of medical examination and treatment costs covered by the health insurance fund?], 7 July 2023, url

Pênh Viện Bãi Cháy, 5 Nhóm Đối Tượng Được Bhyt Chi Trả 100% Từ Ngày 1/7/2023 - Khi Lương Cơ Sở Tăng [5 Groups of Subjects Covered 100% by Health Insurance From July 1, 2023 - When Base Salary Increases], 26 April 2023, url

<sup>&</sup>lt;sup>78</sup> Dezan Shira & Associates, Salary and Wages in Vietnam, 2023, url



claimant which may not cover the full price for the care, as charged by the provider, as no prior agreement exists, as specified in Circular No.22/2023/TT-BYT.<sup>80</sup>

However, this process is neither clear nor transparent and one respondent for this report has provided conflicting opinions on whether it is possible to submit a claim. People who hold private insurance are required to pay in advance for care at public or other health facilities that are not included in the contracted list of that particular insurance company. The patient submits the proof of payment provided by the health facility to their insurance company and is reimbursed. People with private insurance are guaranteed their hospital fees when they seek care in those private or public health facilities that have agreed a contract with their insurance provider. The details of the inpatient or outpatient guarantee depends on the insurance package.

<sup>&</sup>lt;sup>82</sup> ACC Group, Legal knowledge, Other Laws, Bảo hiểm y tế tư nhân là gì? [Cập nhật 2023] [What is private health insurance? [Updated 2023]], 2023, url



<sup>&</sup>lt;sup>80</sup> LuatVietnam, Đi khám ở bệnh viện tư nhân có được hưởng BHYT? [Are you covered by health insurance if you go to a private hospital?], 5 January 2021, <u>url</u>; Vietnam, MOH, Số: 22/2023/TT-BYT, Quy Định Thống Nhất Giá Dịch Vụ Khám Bệnh, Chữa Bệnh Bảo Hiểm Y Tế Giữa Các Bệnh Viện Cùng Hạng Trên Toàn Quốc Và Hướng Dẫn Áp Dụng Giá, Thanh Toán Chi Phí Khám Bệnh, Chữa Bệnh Trong Một Số Trường Hợp [No.: 22/2023/TT-BYT, Regulations on Uniform Prices for Health Insurance Medical Examination and Treatment Services Among Hospitals of the Same Class Nationwide and Guidance on Applying Prices and Payment of Medical Examination and Treatment Costs in Some Cases], 17 November 2023, url

<sup>81</sup> Source A, NHI staff in a public hospital, Ho Chi Minh City, Interview, November 2023



Table 1. Health insurance and requirement to pay<sup>83</sup>

Facility Contract in place		National Health Insurance	Private insurance	
Public	Yes	Care is free at point of use for the 5 groups of people mentioned above, with fees guaranteed. Costs for the rest of the population depend on their insurance plan.	Care is free at point of use. Fees guaranteed.	
Public No		Care is free at point of use for the 5 groups of people mentioned above, with fees guaranteed. Costs for the rest of the population depend on their insurance plan.	Patient pays fee in advance. Patient submits a claim.	
Private	Yes	Care is free at point of use. Fees guaranteed.	Care is free at point of use. Fees guaranteed.	
Private No		Patient pays fee in advance. Patient only able to submit a claim for nominal support.	Patient pays fee in advance. Patients submit a claim.	

*Note*: 'Fees guaranteed': the price for care is fully reimbursed to the claimant as the price has been set by prior agreement between insurer and provider. 'Nominal sum': the insurer pays a set sum to the claimant. This may not cover the full price of care as charged by the provider as no prior agreement exists.

### 3.3. Consultation and treatment costs

In Vietnam, public health facilities currently have financial autonomy. The cost for examination and treatment is determined by each health facility, but must adhere to the regulations outlined in Circular No.13/2023/TT-BYT. This circular applies only to "on-demand" examinations and treatments for individuals covered by NHI in public health facilities. While prices may vary from one hospital to another, they are strictly regulated according to the provisions of this circular. In particular, the range for the outpatient treatment price is from

<sup>83</sup> BAC HA International General Hospital, Khám Bảo hiểm y tế bệnh viện tư hưởng quyền lợi như thế nào? [What are the benefits of private hospital health insurance?], n.d., url; LuatVietnam, Đi khám ở bệnh viện tư nhân có được hưởng BHYT? [Are you covered by health insurance if you go to a private hospital?], 5 January 2021, url; VnExpress, Bảo hiểm y tế có chi trả khi tôi điều trị tại bệnh viện tư nhân? [Does health insurance cover my treatment at a private hospital?], 18 January 2021, url; ACC Group, Bảo hiểm y tế tư nhân là gì? [Cập nhật 2023] [What is private health insurance? [Updated 2023]], 2023, url



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100 000 VND to 500 000 VND for the Special or Grade I Health Facility, and from 30 500 VND to 300 000 VND for other health facilities.<sup>84</sup>

Table 2 and Table 3 below provide prices for inpatient and outpatient treatments in public and private facilities. Public prices columns in these tables follows Circular No.22/2023, and not Circular No.13/2023, due to standardised costs across public health facilities.<sup>85</sup>

Table 2 lists the private consultation prices from FV hospital;<sup>86</sup> the public prices column adheres to Circular No.22/2023.<sup>87</sup>

In Table 3, the private prices are cited from the University Medical Center price lists;<sup>88</sup> the public prices are cited from Circular No.22/2023.<sup>89</sup>

<sup>89</sup> Vietnam, MOH, Số: 22/2023/TT-BYT, Quy Định Thống Nhất Giá Dịch Vụ Khám Bệnh, Chữa Bệnh Bảo Hiểm Y Tế Giữa Các Bệnh Viện Cùng Hạng Trên Toàn Quốc Và Hướng Dẫn Áp Dụng Giá, Thanh Toán Chi Phí Khám Bệnh, Chữa Bệnh Trong Một Số Trường Hợp [No.: 22/2023/TT-BYT, Regulations on Uniform Prices for Health Insurance Medical Examination and Treatment Services Among Hospitals of the Same Class Nationwide and Guidance on Applying Prices and Payment of Medical Examination and Treatment Costs in Some Cases, 17 November 2023, url



<sup>&</sup>lt;sup>84</sup> Vietnam, MOH, Số: 13/2023/TT-BYT, Quy Định Khung Giá Và Phương Pháp Định Giá Dịch Vụ Khám Bệnh, Chữa Bệnh Theo Yêu Cầu Do Cơ Sở Khám Bệnh, Chữa Bệnh Của Nhà Nước Cung Cấp, [No: 13/2023/TT-BYT, Regulations on Price Frameworks and Price Methods for On-Demand Medical Examination and Treatment Services Provided by State Medical Examination and Treatment Facilities], 29 June 2023, url

<sup>85</sup> Vietnam, MOH, Số: 22/2023/TT-BYT, Quy Định Thống Nhất Giá Dịch Vụ Khám Bệnh, Chữa Bệnh Bảo Hiểm Y Tế Giữa Các Bệnh Viện Cùng Hạng Trên Toàn Quốc Và Hướng Dẫn Áp Dụng Giá, Thanh Toán Chi Phí Khám Bệnh, Chữa Bệnh Trong Một Số Trường Hợp [No.: 22/2023/TT-BYT, Regulations on Uniform Prices for Health Insurance Medical Examination and Treatment Services Among Hospitals of the Same Class Nationwide and Guidance on Applying Prices and Payment of Medical Examination and Treatment Costs in Some Cases, 17 November 2023, url

<sup>87</sup> Vietnam, MOH, Số: 22/2023/TT-BYT, Quy Định Thống Nhất Giá Dịch Vụ Khám Bệnh, Chữa Bệnh Bảo Hiểm Y Tế Giữa Các Bệnh Viện Cùng Hạng Trên Toàn Quốc Và Hướng Dẫn Áp Dụng Giá, Thanh Toán Chi Phí Khám Bệnh, Chữa Bệnh Trong Một Số Trường Hợp [No.: 22/2023/TT-BYT, Regulations on Uniform Prices for Health Insurance Medical Examination and Treatment Services Among Hospitals of the Same Class Nationwide and Guidance on Applying Prices and Payment of Medical Examination and Treatment Costs in Some Cases, 17 November 2023, url 88 University of Medicine and Pharmacy Hospital, Ho Chi Minh City, Medical Examination and Treatment Price List, n.d., url

**Table 2. Price for consultations** 

Specialist	Public outpatient treatment price in VND	Public inpatient treatment price in VND	Private outpatient treatment price in VND	Private inpatient treatment price in VND	Reimbursement/ special programme/ free/comments
Pulmonologist	30 100 – 42 100 depending on the level of the health facility	176 900 – 867 500 depending on the level of the health facility	1 200 000 – 1 800 000	5 500 000 - 15 000 000 per day	NHI covers 100 % of the costs in public facilities only for the five groups of people listed in Section 3.2. Insurance provisions for the remainder of the population are described in Table 1.
General practitioner	30 100 – 42 100 depending on the level of the health facility	Information not found	995 000 – 1800 000	Information not found	

*Note*: The treatment prices are for one time consultation; the inpatient prices do not include food or consumables.

Table 3. Price for treatments and diagnostic tests

	Public treatment price in VND	Private treatment price in VND	Reimbursement/ special programme/ free/comments	
Diagnostic research				
Diagnostic research, in the form of lung function tests (i.e. spirometry)	788 000	1165 000 – 2 065 000	The prices for public	
Diagnostic imaging: bronchoscopy	1 159 000 – 1 778 000	1300 000	treatments are set by the MOH. Depending on the insurance package coverage	
Diagnostic research: measuring arterial blood gas; arterial pH, pCO2, "base excess", arterial oxygen saturation	218 000	248 000	(from 80 % to 100 %), the patient will pay the remaining balance. For private treatments, the amount the patient pays out-of-pocket depends on the level of coverage and the type of insurance they have (NHI or private insurance).	
Diagnostic test: examination in a sleep laboratory (e.g. polysomnography)	2 322 000	4 000 000		





	Public treatment price in VND	Private treatment price in VND	Reimbursement/ special programme/ free/comments	
Medical devices pulmonolo	ogy			
BiPAP therapy for home use	Information not found	794 000	For private treatments, the amount the patient pays out-of-pocket depends on the level of coverage and the type of insurance they have (NHI or private insurance).	
Treatment				
Clinical admittance in pulmonology department (daily rates)	176 900 – 273 100 depending on the level of the health facility	600 000 – 1 800 000	The prices for public treatments are set by MOH. Depending on the insurance package coverage (from 80 % to 100 %), the patient will pay the remaining balance. For private treatments, the amount the patient pays out-of-pocket depends on the level of coverage and the type of insurance they have (NHI or private insurance).	

## 4. Cost of medication

For COPD and asthma, preventive treatment is important to avoid acute attacks with bronchodilators and steroids. In case patients get an attack, they must bear additional medication costs for intensive treatment to alleviate the attack as well as any associated complications.<sup>90</sup>

## 4.1. Pricing of medication

The 1989 Public Health Protection Law made medicines available through private medical and pharmaceutical companies, marking the end of the public sector as the exclusive supplier of

<sup>90</sup> Vietnam, MOH, Bệnh phổi tắc nghẽn mạn tính: Cần một trần chi phí BHYT điều trị dự phòng riêng [Chronic obstructive pulmonary disease: Need a separate health insurance cost ceiling for preventive treatment], 20 November 2019, url





medication.<sup>91</sup> The MOH takes a passive stance towards pricing, relying on market forces to regulate the cost of medication. Prices are set within commercial medical supply contracts which are agreed between individual hospitals and pharmaceutical providers. This has reduced transparency on medication pricing, which poses a challenge for patients and for the clinicians who provide care, leading to confusion and, in some cases, to non-standard pricing practices. This has also led to the unintended consequence of price anomalies, whereby private sector medicines can be cheaper than medicines obtained from the public sector and generic medication can be more expensive than trademarked or proprietary medication.<sup>92</sup>

There are also wide differences between those medicines available in the market and those approved by the MOH and the authors of this report note that this makes it challenging to identify the prices of any given medication in Vietnam. In addition to being available in the market, i.e. in private pharmacies, medicines can be found in the black market or from people who bring them into the country, a practice which is known as 'hand-carry'. According to the MedCOI guidelines, however, only legally available medications are considered to be available.

This leads to a confusing state of affairs. In some cases, medication is more expensive in non-hospital pharmacies: sources quote medication prices as being 10 % - 20 % higher than inside health facilities where prices cannot exceed the prices approved by authorised state organisations. However, there are also examples where medication is cheaper in non-hospital pharmacies. This is explained with reference to the bidding process that controls the price of medication in hospitals. However, there are also examples where medication is cheaper in non-hospital pharmacies. This is explained with reference to the bidding process that controls the price of medication in hospitals.

Medication prices in public hospitals can vary widely. Newspaper articles attribute this to violations and to an absence of transparency in the procurement process between hospitals and pharmaceutical companies for the management of medication. Between 2022 and 2023, there have been investigations and prosecutions of those responsible for pharmaceuticals and medical equipment. The director of a hospital in Ho Chi Minh City explained that hospitals are hesitating to enter into the procurement for medication, equipment and other supplies due to a fear of making mistakes in the procurement process. This leads to shortages of medication and equipment in public health facilities. The hospital leaders and National Assembly delegates have proposed amendments to the ways in which suppliers are

<sup>&</sup>lt;sup>96</sup> People's Army Newspaper, Bài 2: Bất cập trong đấu thầu và tâm lý sợ sai [Lesson 2: Inadequacies in bidding and fear of making mistakes], 1 September 2022, url



<sup>&</sup>lt;sup>91</sup> Vietnam, Socialist Republic of Vietnam, Luật Của Quốc Hội Số 21-LCT/HĐNN8 Ngày 30/06/1989 Về Bảo Vệ Sức Khoẻ Nhân Dân [Law of National Assembly No. 21-LCT/HDNN8, 30/06/1989 of People's Health], 30 June 1989, <u>url</u> <sup>92</sup> Nguyen, T. A., et al., Inflated medicine prices in Vietnam: a qualitative study, 2017, url, p. 648

<sup>&</sup>lt;sup>93</sup> Báo điện tử Kinh tế & Đô thị, [Economics & Urban Electronic Newspaper], [Loạn giá thuốc, lỗi tại ai?] Bài 2: Ai quản giá thuốc? [Drug price chaos, whose fault is it?] Lesson 2: Who controls drug prices?], 26 October 2022, <u>url;</u> Webbaohiem, Giá thuốc bệnh viện: Vì sao cao hơn giá trên thị trường? [Hospital drug prices: Why are they higher than market prices?], n.d., url

<sup>&</sup>lt;sup>94</sup> Báo điện tử Kinh tế & Đô thị, [Economics & Urban Electronic Newspaper], [Loạn giá thuốc, lỗi tại ai?] Bài 2: Ai quản giá thuốc? [Drug price chaos, whose fault is it?] Lesson 2: Who controls drug prices?], 26 October 2022, <u>url</u>
<sup>95</sup> VnEconomy, Tám đơn vị thuộc Bộ Y tế sai phạm nghiêm trọng trong mua sắm thiết bị, vật tư y tế [Eight units under the Ministry of Health committed serious violations in the procurement of medical equipment and supplies], 18 October 2022, <u>url</u>; Thanh Niên, Sai phạm trong đấu thầu thuốc, 16 bị cáo trong ngành y tế Đắk Lắk hầu tòa [Violations in drug bidding, 16 defendants in the Dak Lak health sector appeared in court], 15 February 2023, <u>url</u>; Saigon Liberation Newspaper, Hàng loạt các sai phạm tại gói thầu trang thiết bị y tế, thuốc chữa bệnh [A series of violations in medical equipment and medicine bidding packages], 30 January 2022, <u>url</u>



appointed and submitted proposals for centralising the procurement of medication and supplies. 97

From November 2020, a portal to disclose service prices of the health sector was opened by the MOH (<a href="https://congkhaiyte.moh.gov.vn/">https://congkhaiyte.moh.gov.vn/</a>). <sup>98</sup> However, enterprises argued that declaring and publishing drug retail prices is not feasible. They state that manufacturing and importing establishments only have wholesale cost information, making it impractical to disclose retail prices which apply to smaller quantities. <sup>99</sup>

#### 4.2. Medication costs

Concerning the prices provided in Table 4 below, in order to provide a more consistent pricing guideline for users of this document, and in view of the confidential nature of commercial medical supply contracts at individual hospital levels, the authors of this report have used pricing from private sector national pharmaceutical chains as a guideline to medication cost in Vietnam. Care must therefore be exercised in using stated medication price to determine treatment cost at an individual level.

Furthermore, the drafter International SOS explains that concerning the coverage and reimbursement of the medication prices in the table below, the following principle applies: reimbursement is paid to the patient according to the terms of the insurance cover. The medicines are available in those pharmacies and hospitals that secured the contract with the provider to supply it.

<sup>&</sup>lt;sup>99</sup> VnEconomy, Doanh nghiệp gặp khó với quy định kê khai, công bố giá bán lẻ thuốc [Businesses encounter difficulties with regulations on declaring and announcing retail prices of drugs], 9 September 2022, url



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<sup>&</sup>lt;sup>97</sup> Electronic Information Portal of the Vietnam National Assembly, Đề Xuất Các Giải Pháp Tháo Gỡ Bất Cập Trong Đấu Thầu Thuốc, Trang Thiết Bị Y Tế [Proposing Solutions to Resolve problems In Processing Medicines and Medical Equipment], 17 April 2023, <u>url</u>

<sup>&</sup>lt;sup>98</sup> Lao Dong Newspaper, Công khai giá thuốc, nhưng vẫn mỗi nơi một giá! [Publicise drug prices, but still each place has the same price!], 23 November 2020, url

**Table 4. Cost of medications** 

Generic Name	Brand name	Strength of unit	Form	Number of units in the container	Price per box in VND		
Combined anti-asthmatics and/or COPD medication							
Indacaterol + glycopyrrolate (combination)	Ultibro®	110/50 mcg	inhaler	Information not found	750 000		
Ipratropium + fenoterol (combination)	Berodual®	Information not found	inhaler	10 ml (200 doses)	165 000		
Salmeterol + fluticasone (propionate)	Seretide®	25 mcg/ 250 mcg	inhaler	Information not found	322 000		
Tiotropium + olodaterol	Spiolto Respimat®	2.5 mcg/ 2.5 mcg	inhaler	Information not found	1020 000		
Umeclidinium bromide + vilanterol (combination)	Anoro Ellipta™	62.5/25 mcg	inhaler	Information not found	820 000		
Sympathomimeti	cs						
Salbutamol	Pro Salbutamol Inhaler	Information not found	inhaler	200	80 000		
Parasympatholyt	ics						
Tiotropium	Spiriva Respimat®	2.5 mcg	inhaler	30 doses	1230 000		
Other agents							
Montelukast sodium	Montelukast 4	4 mg	tablet	30	138 000		
Theophylline	Theophylline Extended- Release	100 mg	tablet	200	250 000		





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## **Annex 2: Terms of Reference (ToR)**

## Pulmonology (asthma, COPD, sleep apnoea)

#### General information

- Briefly describe prevalence and incidence of pulmonary diseases (asthma, COPD, sleep apnoea) (epidemiologic data).
- How is the health care organised for these diseases?
- How are pulmonary diseases treated at specific centres, in primary health care centres, secondary care / hospitals, tertiary care etc.?
- Which kinds of facilities can treat pulmonary diseases [public, private not for profit (e.g., hospitals run by the church), private for-profit sector]? Include links to facilities' websites if possible.
- How are the resources organized in general to treat patients with these diseases? Are there sufficient resources available to treat all patients?
- Is there a particular type of pulmonary disease for which no (or only partial) treatment exists in the country?
- Is there a (national) institute specialised in treating pulmonary diseases?
- Are there any national or international plans or (donor) programmes for certain diseases; if yes, could you elaborate on such programme(s) and what it entails?

#### Access to treatment

- Are there specific treatment programmes for pulmonary diseases? If so, what are the eligibility criteria to gain access to it and what they contain?
- Are there specific government (e.g., insurance or tax) covered programmes for pulmonary diseases? If so, what are the eligibility criteria to gain access to it?
- Are there any factors limiting the access to healthcare for patients? If so, are they
  economic, cultural, geographical, etc.? Are there any policies to improve access to
  healthcare and/or to reduce the cost of treatments and/or medication? What is the number
  of people having access to treatment? Keep focus on e.g., waiting times rather than the
  exact number of specialists in the field.
- If different from information provided in the general section; is the treatment geographically accessible in all regions?





- What is the 'typical route' for a patient with this disease (after being diagnosed with the
  disease)? In other words: for any necessary treatment, where can the patient find help
  and/or specific information? Where can s/he receive follow-up treatment? Are there
  waiting times for treatments?
- What must the patient pay and when?
- Is it the same scenario for a citizen returning to the country after having spent a number of years abroad?
- What financial support can a patient expect from the government, social security or a
  public or private institution? Is treatment covered by social protection or an additional /
  communal health insurance? If not, how can the patient gain access to a treatment?
- Any occurrences of healthcare discrimination for people with these diseases?

### Insurance and national programmes

- National coverage (state insurance).
- Programmes funded by international donor programmes, e.g., Global Fund, UNAIDS, UNICEF, Clinton foundation etc.
- Include any insurance information that is specific for patients with this disease.

### Cost of treatment

Guidance / methodology on how to complete the tables related to treatments:

- Do not delete any treatments from the tables. Instead state that they could not be found if that is the case.
- In the table, indicate the price for inpatient and outpatient treatment in public and private facility and if the treatments are covered by any insurance or by the state.
- For inpatient, indicate what is included in the cost (bed / daily rate for admittance, investigations, consultations...). For outpatient treatment, indicate follow up or consultation cost.
- Is there a difference in respect to prices between the private and public facilities?
- Are there any geographical disparities?
- Are the official prices adhered to in practice?
- Include links to online resources used, if applicable (e.g., hospital websites).

Note: a standardised list of treatments was also included in the original ToR, as can be viewed in the report. Any treatment without a found price was removed at the editorial stage.





### Cost of medication

Guidance / methodology on how to complete the tables related to medications:

- Do not delete any medicines from the tables. Instead state that they/the prices could not be found if that is the case.
- Are the available medicines in general accessible in the whole country or are there limitations?
- Are the medicines registered in the country? If yes, what are the implications of it being registered?
- Indicate in the tables: generic name, brand name, dosage, form, pills per package, official prices, source, insurance coverage.
- Are (some of the) medicines mentioned on any drug lists like national lists, insurance lists, essential drug lists, hospital lists, pharmacy lists etc.? If so, what does such a list mean specifically in relation to coverage?
- Are there other kinds of coverage, e.g., from national donor programmes or other actors?
- Include links to online resources used, if applicable (e.g., online pharmacies).

Note: a standardised list of medication was also included in the original ToR, as can be viewed in the report. Any medication without a found price was removed at the editorial stage.

#### **NGOs**

- Are any NGOs or international organisations active for patients of pulmonary diseases?
   What are the conditions to obtain help from these organisations? What help or support can they offer?
- Which services are free of charge and which ones are at a cost? Is access provided to all
  patients or access is restricted for some (e.g., in case of faith-based institutions or in case
  of NGOs providing care only to children).



