

Community-based intervention project for the management of stable COPD: protocol for care coordination and patient referral between community pharmacies and Primary Health Care centres

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KEYWORDS

Chronic obstructive pulmonary disease, Community pharmacy, Diagnosis, Inhalers, Primary Health Care, Therapeutics

ABBREVIATIONS

ATI 10: Adherence Test with 10 items
 BMI: body mass index
 CAT: COPD Assessment Test
 COPD: chronic obstructive pulmonary disease
 COPD PS: Chronic Obstructive Pulmonary Disease–Population Screener
 COVID-19: Coronavirus disease 2019
 FEV₁: forced expiratory volume in the first second
 FEV₆: forced expiratory volume in six seconds
 FVC: forced vital capacity
 mMRC: Medical Research Council modified dyspnoea scale
 OCF: Official College of Pharmacists
 PREM: patient-reported experience measure
 PROM: patient-reported outcomes measure
 SOP: Standardized Operating Procedure

ABSTRACT

Chronic obstructive pulmonary disease (COPD) is a common and progressive disease, but it also is preventable and treatable. However, important areas of improvement in its diagnosis, treatment and follow-up have been detected, as well as therapeutic adherence. In order to enhance early detection of COPD and its appropriate management in Spain, a community intervention plan (CIP) for collaboration between community pharmacies (CP) and primary care health care centres (PHC) has been designed.

The CIP includes a standardized operating procedure (SOP), which has been devised by a group of professionals of CP, primary care medicine, pulmonology medicine and primary care nursing. The SOP reports the algorithm to guide the performance of the community pharmacists, comprising tests and devices for population-based triage of COPD, disease evaluation, adherence to inhalers, and detection of critical errors in inhaler use, among other aspects. The SOP also includes a form for patient referral to the pertinent PHC, where a series of actions, pre-established in the performance plan, will be carried out according to the clinical scenario. Furthermore, it is proposed to evaluate the intervention effectiveness using indicators collected at the PHC and CP office. Finally, it is recommended creating an education programme in COPD to achieve optimal CIP implementation, and to undertake a survey for patients to ascertain their satisfaction level with the intervention.

To conclude, the CIP implementation could reduce COPD under diagnosis and optimize the management of diagnosed patients in Spain, where community pharmacists would play a key role in the management of these patients.

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INTRODUCTION

Chronic obstructive pulmonary disease (COPD) is a common disease marked by persistent respiratory symptoms and limited air flow (1). COPD, together with other chronic respiratory diseases, are the third cause of death globally (2).

It is estimated that the prevalence of COPD in the population aged 40 or over in Spain is 11.8% (9.4% in women and 14.6% in men), and that gradually increases with age, with a prevalence of 26.1% and 34.7% in women and men aged over 80, respectively. The data reflect a high variability among autonomous communities, ranging from 7.1% in Asturias to 17.3% in Catalonia (3).

Although COPD cannot be fully reversed, it is a preventable and treatable disease whose clinical course can be modified with early diagnosis and optimal treatment adapted to the patient's profile.

The evidence still reveals that in managing COPD in Spain there are still very significant areas of improvement:

- The high and growing rate of under diagnosis in Spain. While more than 10 years ago the level of COPD under diagnosis in Spain was 73.1% (4), latest epidemiological data report 74.7% (3). This number is similar to other global data from the five continents (5).
- The high rate of under treatment, which is 54% (4).
- The low adherence to treatment. It is estimated that 50.5% of patients diagnosed with COPD in Spain are not adherent to treatment (6).
- Incorrect use of the inhalation device by the patient. It is essential to train patients and evaluate their limitations when selecting the inhaler (inspiratory flow, coordination, etc.) (7).
- The lack of knowledge of the patient with COPD, especially during the COVID-19 pandemic. In a survey performed in Spain, 64.2% of COPD patients reported that their dyspnoea had worsened, and 81.3% deemed that the quality of healthcare had decreased during the pandemic. Among health professionals, only 30.6% had undergone all or most reviews planned in COPD patients between September and December 2020. Moreover, 69.4% deemed that the pharmacy is a place for healthcare support (8).

Therefore, strategies should be devised to attain early detection and suitable management of the disease. Community pharmacists have a function of growing importance in the direct care of patients and contribute to the screening, diagnosis and optimization of follow up of stable COPD (9). They can act on various key points (10). One is primary prevention, informing and advising the population exposed to smoking. Another is the detection of cases with suspected COPD by means of opportunistic screening, identifying

users with smoking and symptoms compatible with the disease; favouring early diagnosis is sought. Furthermore, the COPD patient comes to the CP to collect medication or for other reasons. The pharmacist may perform a series of interventions such as offering brief advice and a cessation service, as well as health education, showing how to manage the inhaled device, checking the correct inhalation technique and the suitability of the patient's inhaler, detecting a lack of therapeutic compliance or following up the disease in terms of worsening of dyspnoea and/or onset of exacerbations (10). The intervention of community pharmacists may improve health outcomes, which includes therapeutic compliance (11) and optimized use of inhalers, which would be translated into better monitoring of the disease (12).

The Community Intervention Plan (CIP) for COPD is a project for coordination between community pharmacies and PHC in health areas in Spain to optimize management of this disease. Its aims are the following:

- improve care (detect the lack of adherence, a worsening in dyspnoea and/or exacerbations, etc.) for adult patients diagnosed with COPD seen in community pharmacies, as well as reducing under diagnosis of this disease by means of opportunistic screening of users in community pharmacies;
- setting out a standardized operating procedure (SOP) for coordination and referral of patients from the CP to PHC.

The CIP includes a training plan for successful implementation and a short patient survey on the degree of satisfaction with the intervention. This paper focuses on outlining the action of CP professionals and PHC according to the SOP set out.

STANDARDIZED WORK PROCEDURE (SOP)

The SOP is a document whose aim is to define in a detailed and coordinated way the mode and frequency of action of each one of the different health professionals who take part in the project, as well as communication tools among them, means and instruments to use, the necessary documentation and indicators for evaluation of the project's effectiveness.

This SOP has been devised and agreed by four health professionals with CP, family medicine, pneumology and primary care nursing, representation, in collaboration and coordination with the Directorate for Care Integration and Directorate and Subdirectorate of Nursing from the corresponding health area. Its final version was completed in September 2021. This document aims to be a general

outline, which should be adapted to the characteristics and needs of the health setting where it will be applied. Therefore, it is proposed that it comprises a SOP reviewer multidisciplinary group with the participation of representatives from CP, pneumology, medicine and primary care nursing, members of the team from the Directorate/Management of the Area or Directorate for Health care of the Autonomous Community, the Directorate for Integration (if there were one), the Directorate for Nursing, the primary care pharmacy and the Treatment Quality Unit of the health organization to which the PHC centre taking part in the project belongs. Moreover, the collaboration of members of the corresponding Directorate General for Pharmacy and COPD patient association representatives is suggested.

Participants

The SOP sets out that in the pilot project there will be participation from health professionals, both medicine and primary care nursing, from PHC who wish to sign up to the initiative, as well as community pharmacists from pharmacies in their area of influence who voluntarily agree to collaborate.

Target population

The intervention is targeted at all patients that comply with all the inclusion criteria:

- be smokers or former smokers, regardless of whether or not they are inhalers for COPD treatment;
- belonging to a family medicine allocation in PHC taking part;
- agreeing to take part in the CIP and signing the corresponding authorization in the Referral Form (Appendix 1).

Definitions

- Smoker: person who answers the question "Do you smoke?" in the affirmative.
- Former smoker: person who having been a mild smoker, has not smoked for at least one year.
- Passive or involuntary smoker: person who breathes in environmental tobacco smoke (13).

Action in the community pharmacy

In the CP, action will be guided by an algorithm that covers the steps to follow according to the patient profile and responses and the results of various questionnaires and tests (Figure 1).

After prior request for the relevant permissions, the Spanish versions of the questionnaires and instruments outlined below should be used.

- COPD-PS Test (Chronic Obstructive Pulmonary Disease Population Screener: validated instrument of suitable

psychometric properties for use as a COPD screening tool in the general population aged over 35 (14).

- CAT Test (COPD Assessment Test: questionnaire that measures the impact COPD is having on the patient's well-being and daily life (15).
- 10 IAT (10-item inhaler adherence test): questionnaire targeted at COPD or asthma patients to identify under therapeutic compliance the inhaled device, as well as to set out the intensity of the adherence (16).
- List of inhalation devices with the steps to perform with each inhaler available (17); with the aim of detecting and correcting the critical errors to ensure the devices are correctly used. Critical error is defined as that which can impact the amount of drug received and, therefore, the results (18).
- mMRC scale (Medical Research Council modified dyspnoea scale): scale to determine the degree of dyspnoea of COPD patients (19). Available at: https://www.avancesen-respiratorio.com/recursos_para_pacientes_na_escala_de_disnea;
- Morisky-Green therapeutic compliance test: test to ascertain the patient's conduct in regard to compliance with taking oral medication (20).

Other actions outlined below may also be performed from community pharmacies.

- Screening for possible air flow obstruction (this will require confirmation with forced spirometry with bronchodilator test) with the COPD-6 Vitalograph portable device® (21–23) to measure FEV₁, FEV₆ and FE_{V1}/FEV₆, as long as the epidemiological situation so permits and subject to the pharmacy's availability.
- Evaluation of the inhalation technique required for the inhaler used by the patient by means of the In-Check Dial device®. Health care professionals can train patients with this device on the correct inspiratory technique, bearing in mind the necessary strength and flow speed. In this way, patients better understand how to use the inhaler and, at the same time, this increases the pulmonary deposit of the medicine inhaled. The device also serves to detect whether or not the inhaler used is suitable according to the patient's inspiratory flow (24). There are tables with the inspiratory flows required for each kind of inhaler (25).
- Record of the number of exacerbations per year. Therefore, the definition of COPD exacerbation or aggravation syndrome from the Spanish Guide for COPD (GesEPOC 2021) will be considered: acute, maintained and significant worsening of respiratory symptoms (dyspnoea, cough and changes to sputum colour or volume) in regard to the patient's basal situation with a prior diagnosis of COPD (26). This information will be obtained from the patient himself or, when possible, from his primary care doctor by online consultation from the pharmacy.

- Short advice about smoking. Use of a professional pharmaceutical treatment service to help abandon smoking if this is available.
 - Health education material for patients. Some examples are shown below:
 - COPD information for patients Do you have COPD?, a small book that teaches in a simple and intuitive way, explanatory keys on what COPD is and how to live with and monitor the disease. The content was drawn up in collaboration with the Spanish Federation of Associations of Allergic and Respiratory Diseases Patients (FENAER) (27). Available at: https://www.avancesenrespiratorio.com/arxiu/imatgesbutlleti/P21-294-LibritoEPOC_v3-digital.pdf
 - Short advice to manage smoking with a highly visual and intuitive infographic with brief advice to stop smoking. The only proven measure that manages to slow the accelerated deterioration in lung function during COPD is stopping smoking. The content was drawn up by experts on techniques to stop smoking and in collaboration with the Spanish Association of COPD Patients (APEPOC) and the Spanish Federation of Associations of Allergic and Respiratory Diseases Patients (FENAER) (28). Available at: [https://www.avancesenrespiratorio.com/arxiu/imatgesbutlleti/P21-64_Tabaquismo_infografiaPACIENTE_v5-0\(1\).pdf](https://www.avancesenrespiratorio.com/arxiu/imatgesbutlleti/P21-64_Tabaquismo_infografiaPACIENTE_v5-0(1).pdf)
 - Recommendations for physical exercise. Physical exercise is a very important part of treating patients with COPD as it is associated with multiple health benefits (improved pulmonary function, strengthened musculature, reduced fatigue, psychological benefits, etc). The next infographic shows the benefits of exercise for people suffering from COPD (in terms of motivation) as well as recommendations for basic exercises adapted to their condition. The content was carefully drawn up by experts and in collaboration with the Spanish Association of COPD Patients (APEPOC) and the Spanish Federation of Associations of Allergic and Respiratory Diseases Patients (FENAER) (29). Available at: [https://www.avancesenrespiratorio.com/arxiu/imatgesbutlleti/P21-64_EJERCICIO_infografiaPACIENTE_v4-0\(1\).pdf](https://www.avancesenrespiratorio.com/arxiu/imatgesbutlleti/P21-64_EJERCICIO_infografiaPACIENTE_v4-0(1).pdf)
 - Recommendations on vaccination. Persons who suffer from COPD have the airways affected and their immune response reduced. Therefore, they have a greater risk of contracting respiratory infections such as flu, which may be severe and lead to complications. Therefore, anti-flu and anti-pneumococcal vaccination are the best protection against these diseases. The benefits of anti-flu vaccination and anti-pneumococcal vaccination, as well as other significant prevention measures (hand washing, use of masks, etc.) are shown as an infographic. The content was drawn up by experts and in collaboration with the Spanish Association of COPD Patients (APEPOC) and the Spanish Federation of Associations of Allergic and Respiratory Diseases Patients (FENAER) (30). Available at: [https://www.avancesenrespiratorio.com/arxiu/imatgesbutlleti/P21-64_Vacunacion_infografiaPACIENTE_v3-0\(1\).pdf](https://www.avancesenrespiratorio.com/arxiu/imatgesbutlleti/P21-64_Vacunacion_infografiaPACIENTE_v3-0(1).pdf)
 - Calculation of body mass index (BMI).
 - Review of electronic medication dispensing registries to analyze compliance with medication.
- In accordance with the SOP, the community pharmacist will refer to the PHC all patients from the target population who sign the informed consent and comply with some of the criteria set out in the Referral Form (**Appendix 1**). A form should be filled in for each patient that is sent to his corresponding primary care centre. The document covers the authorization by the patient, his identification, pharmacy data if COPD screening or follow up is involved, as well as the reason for the referral and interventions performed. It is suggested that each form have two copies and a registry number; the first copy will be for the patient to take to his PHC, whilst the second may be filed in the CP. Double identification of the patient is recommended by recording on the form the individual health card number (HIN) and the initials of his name and surnames. Once in the PHC, a series of actions will be performed; variables according to the patient profile, by doctors, primary care nurses or both. These actions are outlined in **Appendix 2**, with the relevant data collection (**Appendix 3**).
- If it is not necessary to refer the patient to his PHC, the community pharmacist will fill in a record form, which will outline the intervention performed (health education, brief anti-smoking advice or other) (**Appendix 4**).
- Finally, it is proposed evaluating the effectiveness of the intervention with some pre-set indicators collected from the PHC: percentage of patients intervened not referred to the PHC; percentage and type of patients referred who come to the PHC; percentage and type of patient referred who do not come; management of smoking; compliance with the treatment; results of the IAT; number of moderate and severe exacerbations of COPD and CAT results 12 months after the initial visit. Appendix 3 outlines for each indicator the calculation, periodicity and the data source. Moreover, it is recommended setting up a follow up group, comprised of references from PHC and community pharmacies taking part, which meets quarterly to measure the indicators and share information mutually.

COPD TRAINING PLAN

To ensure optimal implementation of the SOP, it is recommended that community pharmacists who wish to join

the initiative undergo a training plan in COPD, for example with the Official College of Pharmacists (or as appropriate, the COF General Council) of the region. This may comprise two training modules/sessions: one where general aspects of COPD are reported (such as for example diagnosis, treatment, health education and evaluation of COPD monitoring), and a second that sets out in more detail the protocol for this initiative (aims, participants, target population, action in the CP, referral of patients to PHC, action in the PHC, collection of data and indicators to evaluate the effectiveness of the intervention). It is also recommended making known the second training block to health professionals attached jointly with pneumology as a reference for COPD (if this exists), primary care medicine and nursing, and CP.

PATIENT SURVEY ON THEIR DEGREE OF SATISFACTION WITH THE INTERVENTION

There are various standardized instruments to measure PROM (*patient-reported outcomes measures*), based on health-related symptoms or quality of life (31). PREM (*patient-reported experience measures*) are also instruments to objectively evaluate patients' experience (32). It is recommended designing a survey that evaluates three care quality areas: effectiveness (such as symptoms and quality of life) and safety (such as mortality and complications) of the care received and the experience that care has entailed for the patient.

CONCLUSIONS

This CIP for COPD is based on promoting care coordination among community pharmacist from PHC to reduce the under diagnosis of COPD and to optimize the management of patients diagnosed. Its gradual implementation in the different health areas and/or autonomous communities could improve diagnosis and treatment of COPD patients in Spain, even those who are still undiagnosed. CP professionals, which are so closely positioned to patients, would play an essential role in managing these patients and integrate into the health system as a key agent. They also offer an added high value tool to their patients.

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Appendix 1. Community pharmacy referral form to the primary health care centre

All the information will be filled in and all those items for which the patient will be referred will be marked, as well as observations and other data of interest. Once filled in, a copy will be handed to the patient to give to the primary healthcare centre, and the other copy will be kept by the community pharmacy.

PATIENT AUTHORIZATION: Based on the information provided by you and the results of the tests we performed, we recommend that you go to your primary health care centre and contact your reference health team. To facilitate this contact, we hereby request that you authorize communication between the pharmacist and the primary health care centre of the data collected in this document being issued to you.

YES NO Date: Patient signature:

Patient identification

Pharmacy:

Address:

Phone: E-mail:

For the Attention of:

The patient attended the pharmacy on.

The following was performed:

- COPD screening
- COPD follow up

Once the situation is evaluated, I deem referral to the primary health care centre suitable for the following reason/s:

- Smoker patient willing to seriously try and stop smoking in the next month
- Smoker/former smoker/passive smoker patient without COPD diagnosis with COPD-SP ≥ 4
- Smoker/former smoker/passive smoker patient without COPD diagnosis with COPD-SP ≥ 4 and $FEV_1/FEV_6 < 0.70$ measured with Vitalograph COPD-6
- COPD patient:
 - BMI not reviewed in the last 3 months in the primary health care and/or pneumology consultation:
 - < 20
 - > 30
 - Worsening dyspnoea not reviewed in the last 3 months in the primary health care and/or pneumology consultation
 - COPD exacerbations last year not reviewed in the last 3 months in the primary healthcare and/or pneumology consultation:
 - ≥ 2 moderate
 - ≥ 1 hospitalization or hospital treatment in casualty ≥ 24 h

- Treatment:
 - Lack of adherence measured by IAT test 10:
 - Lack of adherence measured by Morisky-Green
 - Errors in the verification list for use of inhalers. COD:
 - Current inhalation device not suitable for the patient according to *In-Check*

Other data of interest tackled in the CP

- BAS:
- Brief anti-smoking advice
- Health education
- Dyspnoea scale (Medical Research Council modified dyspnoea scale [mMRC])
Degree:

OBSERVATIONS

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Kind regards

Signature:

College no:



Appendix 2. Plan of action in the primary health care centre

Nursing will make initial contact with the patient referred from the User Treatment Area by means of phone consultation. Action will be differentiated according to the clinical situation that led to the referral:

- Situation 1:** smokers <35 referred to manage smoking
- Situation 2:** smokers >35 with negative screening referred to manage smoking
- Situation 3:** COPD patients referred for active smoking management
- Situation 4:** Smokers/former smokers with positive opportunistic COPD screening referred to the primary health care centre
- Situation 5:** COPD patients referred for worsening dyspnoea and/or number of exacerbations in the last year
- Situation 6:** COPD patients referred for BMI <20 or >30
- Situation 7:** COPD patients referred for poor adherence to inhalers according to IAT test and/or critical errors in inhalation technique.
- Situation 8:** COPD patients referred for poor therapeutic adherence according to Morisky-Green test
- Situation 9:** COPD patients referred for current inhalation device not suitable for the patient

PLAN OF ACTION BY NURSING

For **situations 1, 2 and 3**, nursing will manage smoking, referring to medical consultation (in-person or not in-person, according to the site's organization) to commence anti-smoking pharmacological treatment if the patient so wishes and complies with the recommendation criteria.

For **situation 4**, nursing will refer the patient to medical consultation by phone for a preliminary evaluation and decision-making according to the epidemiological situation.

For the remaining **situations (5–9)** nursing will perform the following actions:

- A. Review of history and conditioning factors.
- B. Verification that the COPD diagnosis is present in the electronic clinical history and is well coded.
- C. Evaluation of the current situation:
 - Clinical situation: evaluation of the monitoring of symptoms, evaluation of adherence to IAT inhalers and/or oral treatment according to Morisky-Green, evaluation of the inhalation technique.
 - Educational needs.
- D. Educational procedure on knowledge of the disease, management of symptoms, therapeutic adherence, management of inhalers used and training of skills for the inhalation technique, advice for anti-flu and anti-pneumococcal vaccination, anti-smoking advice, general nutritional recommendations and specific recommendations for those with BMI <20 or >30.
- E. Review at 3 months for evaluation of the clinical situation and educational needs (content same as section C).
- F. Referral to medical consultation if:
 - F.1. The COPD diagnosis is not present in the current history or is poorly coded.
 - F.2. The patient presents
 - Acute clinical symptoms
 - The patient is in **situation 5**.
 - F.3. The patient has an unsuitable currently used inhalation device.

ACTION PLAN BY THE FAMILY DOCTOR

The family doctor will perform the following actions according to the reason for referral from the nursing consultation:

Situation 1, 2 and 3: evaluate indication of pharmacological treatment to stop smoking.

Situation 4: confirm COPD diagnosis.

Situation 5: evaluation of the degree of COPD monitoring and therapeutic suitability according to recommendations from clinical practice guidelines (GesEPOC/GOLD).

Situation 6, 7 and 8: when the educational procedure performed by nursing on therapeutic adherence, correction of critical errors in management of inhalers used, specific nutritional recommendations for those with BMI <20 or >30 have not been effective, the family doctor will analyze the reasons, strengthen the nursing educational procedure and will apply the appropriate measures to obtain an optimal outcome.

Situation 9: Suitability of the inhalation device.

All situations: Regardless of the patient's clinical situation, the family doctor will be responsible for:

- Treating the patient's acute symptoms.
- Confirmation and coding of the COPD diagnosis when this is not recorded or is poorly coded in the clinical history.

Both in nursing and in medical consultation, an initial online contact with the patient is first recommended with the threefold aim of clarifying the patient's epidemiological situation, achieving a high resolution approach if a subsequent face-to-face visit is required and more accurately meeting the patient's therapeutic needs, management of the inhalers used and skills training.

Appendix 3. Primary health care centre (PHC) referral form for patients referred from the community pharmacy (CP) (excel table)

Referral form "Community intervention plan for COPD"	Patient 1	Patient 2	Patient 3
CP referral date (DD/MM/YYYY)			
Patient Personal Id code			
Pharmacy code			
Age (years)			
Sex: 0: male; 1: female			
Smoking as pack years (number of cigarettes per pack/20)			
Former smoker (as of 1 year without smoking) 0: no; 1: yes			
COPD diagnosis: 0: no; 1: yes			
Diagnosed X years ago (specify years)			
Patient's therapeutic strategy; 1. SABA; 2. SAMA; 3. Long acting agonist (LABA); 4. Inhaled corticosteroid (IC); 5. Anticholinergic (LAMA); 6. Oral treatment			
Type/s of inhalers used: 1. ICP; 2. ICP with aerochamber; 3. Single dose dry powder; 4. Multidose dry powder 5. Soft Mist SMI Inhaler (RESPIMAT®), 6. Soft Mist (RESPIMAT®) with aerochamber			
Referral from the pharmacy: 0. Does not attend the primary health care centre; 1. Attends the primary health care centre			
Performed in CP: 0. COPD screening; 1. COPD follow-up			
Reason for referral to the primary health care centre: 1. Smoker <35 years; 2. Smoker >35 years with negative COPD screening; 3. Smoker >35 years with positive COPD screening; 4. COPD with worsening of dyspnoea; 5. COPD with exacerbations; 6. COPD with BMI <20; 7. COPD with BMI >30; 8. COPD with poor adherence according to IAT; 9. COPD with poor adherence according to Morisky-Green test; 10. Inhalation technique critical errors. 11. Inhaler not suitable. 12. COPD with stopping smoking in non-COPD patients 1 year from visit 0			
Stopping smoking in COPD patients 1 year from visit 0. 0: no; 1: yes			
% adherence with the inhaled treatment at e-prescription visit 0			
% adherence with the inhaled treatment 4 months after e-prescription visit 0 and every 4 months			
Number of COPD exacerbations during year prior to visit 0			
Number of COPD exacerbations during year subsequent to visit 0			
IAT score visit 0			
IAT score (every 4 months)			
BAS score (12 months from the first visit)			



Appendix 4. Case report form for patients not referred to the primary health care centre

It is recommended filling in this case report form from the community pharmacy (CP) for all patients who have undergone a CP procedure; but not referred to the primary health care centre as they do not comply with any of the criteria outlined in the referral algorithm.

Case Report Form "Community intervention plan for COPD" for patients not referred from the CP	Patient 1	Patient 2	Patient 3
Pharmacy code			
Date of the procedure (DD/MM/YYYY)			
Patient's age (years)			
Sex: male (0); female (1)			
Reason for the non-referral: Smoker patient who is not an inhaler user: <ul style="list-style-type: none"> • Under 35 unwilling to seriously try and stop smoking (1) • Over 35, COPD-SP <4 unwilling to try and stop smoking (2) • Over 35, COPD-SP ≥4 and Vitalograph >0.70 (3) Patient who is an inhaler user with COPD, emphysema or chronic bronchitis: <ul style="list-style-type: none"> • No review of the disease in the last 3 months: <ul style="list-style-type: none"> • no changes to his basal dyspnoea (4) • 20<BMI<30 (5) • No exacerbations in the last year or a moderate exacerbation (6) • With review of the disease in the last 3 months: <ul style="list-style-type: none"> • IAT test: adherent (7) • Verification of inhalers error free (8) • In-check: correct (9) • Morisky-Green test: adherent (10) 			
Action: <ul style="list-style-type: none"> • Brief advice (1) • Information on COPD (2) • Health education (3) 			