# Educational intervention about inhalation techniques in health-care professionals.

Submission date	Recruitment status No longer recruiting	<ul><li>Prospectively registered</li></ul>		
08/07/2014		[X] Protocol		
Registration date 18/08/2014	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited	Condition category	Individual participant data		
02/11/2023	Respiratory			

#### Plain English summary of protocol

Background and study aims

Many patients with asthma or chronic obstructive pulmonary disease (COPD) do not use their inhalers correctly. This is of significant concern as it can lead to poorer control of symptoms and worsening of the condition. Health care professionals also often dont know the correct technique and are therefore unable to teach their patients how to use their inhalers properly. The aim of this study is to see whether showing health care professionals the correct way to use an inhaler (via an educational intervention) results in their patients doing the same.

#### Who can participate?

Health care professionals from one of the Basic Health Care Units (BHU) taking part in the trial and with at least 30 COPD patients being treated with inhalers.

#### What does the study involve?

Each health care professional is randomly allocated into one of two groups. Those in group 1 (experimental group) are shown to use an inhaler by a researcher using a training protocol. They then teach their patients the technique they have been taught. Those in group 2 (the control group) are not shown how to use an inhaler by a researcher but instead treat their COPD patients as usual. The inhalation technique of each patient in both groups is then tested. The health care professionals are tested on their knowledge about COPD patients and their treatment, age, sex and their education.

What are the possible benefits and risks of participating?

We are testing an educational and non-invasive intervention that does not pose a risk to the participants. The patients in the experimental group may benefit from learning to use their inhaler properly.

Where is the study run from?

The study is run from a total of 20 BHUs at 8 primary care centres in Málaga (Spain)

When is the study starting and how long is it expected to run for? January 2014 to December 2016

Who is funding the study?
Ministry of Health and Social Welfare of the Government of Andalusia [Consejeria de Salud, Junta de Andalucia] (Spain)

Who is the main contact?
Dr Jose Leiva-Fernández
mariap.barnestein.exts@juntadeandalucia.es

#### Contact information

#### Type(s)

Scientific

#### Contact name

Dr Jose Leiva-Fernández

#### Contact details

Calle del Doctor Fernando Vivar 0 Vélez Málaga (Málaga) Spain 29700

\_

mariap.barnestein.exts@juntadeandalucia.es

# Additional identifiers

#### **EudraCT/CTIS** number

Nil known

IRAS number

#### ClinicalTrials.gov number

Nil known

#### Secondary identifying numbers

PI-0170/13

# Study information

#### Scientific Title

A pragmatic cluster randomized controlled trial: PROF-EPOC Study. Efficacy of an educational intervention about inhalation techniques in health-care professionals.

#### Acronym

**PROF-EPOC** 

#### Study objectives

The application of an educational intervention on health-care professionals in Primary Attention will increase in at least 25% the performance of a correct inhalation technique in COPD patients in regards of a control cohort.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Ethical Committees of Málaga (CEI provincial de Málaga), 12/12/2013.

#### Study design

Pragmatic cluster randomized controlled trial.

#### Primary study design

Interventional

#### Secondary study design

Cluster randomised trial

#### Study setting(s)

Other

#### Study type(s)

Treatment

#### Participant information sheet

Not available in web format, please use the contact details to request a patient information sheet

#### Health condition(s) or problem(s) studied

COPD

#### **Interventions**

The cluster design (intervention) is based on two levels:

- 1. The higher or second level is represented by the BHU which have a health-care professional as the chief of the unit (over whom the educational intervention is conducted)
- 2. The lower or first level represented by the BHU patients which have accepted to participate and are going to receive the educational intervention from their general practitioner (GP). Each block will be form by 4 BHU among which the 2 study cohorts will be uniformly distributed.

#### Control group:

Cluster that complies with selection criteria but where the intervention is not applied.

#### Intervention Type

Other

#### Phase

Not Applicable

#### Primary outcome measure

Performance of correct inhalation technique by improving the knowledge of the health-care professionals. The correct inhalation technique will be measured by a researcher following the SEPAR guidelines.

#### Secondary outcome measures

- 1. Functional status (measured by forced spirometry)
- 2. Dyspnea index (measured by the basal dyspnea index (BDI))
- 3. Health-related quality of life (measured by the St. George Respiratory Questionnaire)

#### Timepoints for all outcome measures:

Study data will be recorded at initial visit and 1 year later, with the exception of the educational intervention for the first level intervention group, where the correct inhalation technique and a reminder of this occurs 3 and 6 months after initial intervention

#### Overall study start date

01/01/2014

#### Completion date

31/12/2016

# **Eligibility**

#### Key inclusion criteria

- 1. For health-care professionals: having an allocated BHU during the period of the trial, with at least 30 patients included in the COPD Andalusian Health Service Guidelines (COPD PAI) with inhaled therapy and sign the informed consent
- 2. For patients: COPD diagnosis, being treated in Primary Care Centres included in the trial, having inhaled therapy prescribed and accepting to participate in the trial with a signed informed consent

#### Participant type(s)

Patient

#### Age group

Adult

#### Sex

Both

#### Target number of participants

267

#### Total final enrolment

286

#### Key exclusion criteria

1. For health-care professionals: the negativity of health-care professionals chiefs to participate in the trial or that they have to leave the BHU during the trial.

2. For patients: having another respiratory process not included in the COPD definition and cognitive impairments which prevent them from responding in an adequate way the trials questionnaires and the educational intervention assimilation.

#### Date of first enrolment

01/01/2014

#### Date of final enrolment

31/12/2016

#### Locations

#### Countries of recruitment

Spain

# Study participating centre Calle del Doctor Fernando Vivar 0

Vélez Málaga (Málaga) Spain 29700

## Sponsor information

#### Organisation

Ministry of Health and Social Welfare of the Government of Andalusia [Consejeria de Salud, Junta de Andalucia] (Spain)

#### Sponsor details

Avenida de Hytasa nº 14 Sevilla Spain 41071 +34 955006300 informacion@juntadeandalucia.es

#### Sponsor type

Government

#### Website

http://www.juntadeandalucia.es/salud/sites/csalud/portal/index.jsp

#### **ROR**

https://ror.org/01jem9c82

# Funder(s)

#### Funder type

Government

#### Funder Name

Ministry of Health and Social Welfare of the Government of Andalusia [Consejeria de Salud, Junta de Andalucia] (Spain)

### **Results and Publications**

#### Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

#### IPD sharing plan summary

Not provided at time of registration

#### **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Protocol article</u>	protocol	17/03/2016		Yes	No
Results article		17/10/2023	02/11/2023	Yes	No