

# Effectiveness of a pharmacist-driven intervention in chronic obstructive pulmonary disease

<b>Submission date</b> 02/03/2016	<b>Recruitment status</b> Stopped	<input checked="" type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 04/03/2016	<b>Overall study status</b> Stopped	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 29/04/2019	<b>Condition category</b> Respiratory	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Chronic obstructive pulmonary disease (COPD) is the name for a collection of lung diseases which cause breathing difficulties. Patients with COPD often don't take their medications exactly as prescribed and have difficulty using their inhalers properly. Community pharmacists can help improve quality of life and overall health in these patients. We will study the effect that pharmacists can have on the health of patients with COPD. We hope to show that pharmacists can help improve the use of medications, inhaler technique and quality of life, and decrease health care costs and how many times COPD makes the patients sick.

### Who can participate?

COPD patients, at least 40 years old

### What does the study involve?

Participating pharmacies are randomly allocated to either provide the care they would normally offer on a daily basis, or to deliver an improved form of care that focuses on COPD management.

### What are the possible benefits and risks of participating?

We hope to see an improvement in how well and how often people are remembering to take their medications, compared to before the study started. The only identified risks are the potential for the patient to feel overwhelmed during the data collection process.

### Where is the study run from?

This study will take place in pharmacies in Newfoundland and Labrador (NL), Canada.

### When is the study starting and how long is it expected to run for?

July 2015 to November 2017

### Who is funding the study?

Health Research Foundation (Canada)

Who is the main contact?

1. Dr Erin Davis (emdavis@mun.ca)
2. Dr John Hawboldt (hawboldt@mun.ca)

## Contact information

### Type(s)

Scientific

### Contact name

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## Additional identifiers

Protocol serial number

N/A

## Study information

Scientific Title

Effectiveness of a pharmacist-driven intervention in chronic obstructive pulmonary disease (EPIC): a pragmatic cluster randomized controlled trial

**Acronym**

EPIC

**Study objectives**

Community pharmacists can help improve health-related quality of life and overall outcomes in patients with chronic obstructive pulmonary disease (COPD) through a pharmacist-driven intervention on: medication adherence, inhaler technique, health-related quality of life, health care resource utilization, COPD exacerbations, and use of medications.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Newfoundland and Labrador Health Research Ethics Board, 14/05/2015, approval number: 15 091

**Study design**

Pragmatic cluster randomized controlled trial

**Primary study design**

Interventional

**Study type(s)**

Other

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

Chronic obstructive pulmonary disease

**Interventions**

We will compare pharmacies delivering an improved form of care that focuses on COPD management with pharmacies providing the care they would normally offer on a daily basis.

Multifactorial pharmacist-led intervention on medication adherence, inhaler technique, health-related quality of life, health care resource utilization, COPD exacerbations, and use of medications. The intervention involves 6 main strategies:

1. Medication review
2. Patient education
3. A written COPD action plan provided in collaboration with their family physician
4. Patient referral to pulmonary rehabilitation in collaboration with their family physician
5. Provision of, or referral to, smoking cessation counseling (where applicable)
6. Referral to a community-based chronic disease self-management program

**Intervention Type**

Other

**Primary outcome(s)**

Change from baseline to 6 months in medication adherence using the medication possession ratio (MPR) and the Morisky Medication Adherence Scale (MMAS-8)

**Key secondary outcome(s)**

1. Proportion of patients with a clinically significant change in adherence
  2. Proportion of patients defined as having 'good adherence'
  3. Mean MPR between groups
  4. Quality of life as measured by the St. George's Respiratory Questionnaire
  5. Medication inhalation technique using a pharmacist-scored checklist
  6. Healthcare resource utilization
  7. Antibiotic and oral corticosteroid use for COPD exacerbations
- Measured at baseline and 6 months.

**Completion date**

01/11/2017

**Reason abandoned (if study stopped)**

Participant recruitment issue

**Eligibility****Key inclusion criteria**

1. Physician-diagnosed COPD
2. Age  $\geq 40$  years at trial enrollment
3. Sufficient ability to answer questionnaires in English

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Sex**

All

**Key exclusion criteria**

1. A known Forced Expiratory Volume in 1 second (FEV1)/ Forced Vital Capacity (FVC) of  $< 30\%$
2. A diagnosis of dementia or a prescription for cholinesterase inhibitors
3. A terminal illness
4. Physician-diagnosed asthma
5. Participation in another clinical trial
6. If they do not provide consent

**Date of first enrolment**

01/05/2016

**Date of final enrolment**

01/05/2017

# Locations

## Countries of recruitment

Canada

## Study participating centre

**Memorial University of Newfoundland**

School of Pharmacy

Memorial University of Newfoundland

Health Sciences Centre

St. John's, Newfoundland

Canada

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# Sponsor information

## Organisation

Memorial University of Newfoundland (Canada)

## ROR

<https://ror.org/04haebc03>

# Funder(s)

## Funder type

Research organisation

## Funder Name

Health Research Foundation

## Alternative Name(s)

Fondation pour la Recherche en Santé, HRF, FRS

## Funding Body Type

Private sector organisation

## Funding Body Subtype

Trusts, charities, foundations (both public and private)

## Location

Canada

# Results and Publications

## Individual participant data (IPD) sharing plan

### IPD sharing plan summary

Not expected to be made available

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol article</a>	protocol	13/10/2016		Yes	No