

Admission and discharge care bundles for COPD

Submission date 08/01/2015	Recruitment status No longer recruiting	☐ Prospectively registered ☒ Protocol
Registration date 11/02/2015	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 07/03/2023	Condition category Respiratory	☐ Individual participant data

Plain English summary of protocol

Background and study aims

Avoiding unnecessary use of hospital services is one of the biggest challenges currently facing the NHS. Chronic obstructive pulmonary disease (COPD) is one of the most common lung diseases in the United Kingdom and accounts for 10% of hospital admissions each year. Nearly a third of these patients are readmitted to hospital within 28 days of discharge. COPD care bundles could play a key role in resolving the issue of unplanned admissions. Care bundles are a way of ensuring that staff provide a coordinated package of care to patients with COPD when they arrive at and are sent home from hospital. This study aims to evaluate the effectiveness of care bundles as a means of improving hospital care and reducing re-admissions for patients with COPD.

Who can participate?

This study will include a group of up to 20 hospitals in England and Wales who have already agreed to implement the COPD care bundles, and up to 20 'comparator' hospitals who will not be delivering them.

What does the study involve?

By comparing how many patients are readmitted to each type of hospital over a two-year period, and what happens to patients during their stay, we will be able to assess how successful COPD care bundles are. More specifically, we will look at the number of patients admitted with COPD, the number of deaths of COPD patients while in hospital, the number of days spent in hospital by patients with COPD, the proportion of patients with COPD who are readmitted, the number of COPD patients seen and discharged from A&E, levels of satisfaction in patients with COPD, how patients with COPD are managed in hospital, and how much it costs to care for a patient with COPD in hospital and after discharge. Most of the information needed for this study is routinely collected by hospitals in the course of their own management activity.

What are the possible benefits and risks of participating?

The benefit of taking part in the study for either NHS Trusts or individual patients is the opportunity to participate in a national high-quality evaluation of service delivery which will provide new evidence on the effectiveness of an aspect of NHS care provision. The risks of participation are minimal.

Where is the study run from?
University of Bristol (UK)

When is the study starting and how long is it expected to run for?
May 2014 to August 2017

Who is funding the study?
NIHR Health Services and Delivery Research (UK)

Who is the main contact?
Prof. Sarah Purdy
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Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
17828

Study information

Scientific Title
An evaluation of the effectiveness of 'care bundles' as a means of improving hospital care and reducing hospital readmission for patients with chronic obstructive pulmonary disease (COPD)

Study objectives
This research seeks to evaluate the effectiveness of care bundles (i.e., a co-ordinated package of care) as a means of improving hospital care and reducing re-admissions for patients with chronic obstructive pulmonary disease (COPD).

More details can be found at: <http://www.nets.nihr.ac.uk/projects/hsdr/1213053>
July 2014 V1 protocol can be found at: http://www.nets.nihr.ac.uk/__data/assets/pdf_file/0003

Ethics approval required

Old ethics approval format

Ethics approval(s)

Frenchay REC, 12/09/2014, ref: 14/SW/1057

Primary study design

Observational

Study design

Non-randomised; Observational: before-and-after, controlled; Design type: Mixed method - quantitative and qualitative

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Topic: Respiratory disorders; Subtopic: Respiratory (all Subtopics); Disease: Respiratory

Interventions

The intervention is the delivery of a COPD care bundle at either the point of admission to or discharge from hospital.

Intervention Type

Other

Primary outcome(s)

COPD re-admission rates; Timepoint(s): 28 days post-discharge

Key secondary outcome(s)

1. Compliance with delivery of COPD care bundles; Timepoint(s): 12 months pre- and post-
2. COPD re-admission rates; Timepoint(s): 90-days post-hospital discharge
3. Costs of in-patient medications and procedures; Timepoint(s): 12 months pre-and post-
4. In-hospital mortality; Timepoint(s): 12-months pre- and post-
5. Length of stay for patients with COPD; Timepoint(s): at end of 12-month data collection
6. Mortality; Timepoint(s): 90-day post-hospital discharge
7. Overall re-admission rates; Timepoint(s): 28-days post-hospital discharge
8. Time taken to deliver COPD care bundles; Timepoint(s): post-admission or pre-discharge
9. Total number of COPD admissions; Timepoint(s): monthly
10. Total number of patients for whom COPD care bundle used; Timepoint(s): 12-months post-hospital data collection

As with the primary outcome, the secondary outcomes of the study will be measured for a 12-month period pre-and post- a particular index date. This index date is the date upon which an individual implementation site i.e. NHS Trust began to deliver its COPD care bundle or, in the case of comparator sites, the date upon which an individual site's matched implementation site began to deliver its COPD care bundle. This approach will ensure that data are collected during the same 'before' and 'after' period for matched implementation and comparator sites.

12/12/2016: "Patient and carer experience; Timepoint(s): at end of 12-month data collection" outcome removed from April 2016 protocol.

Completion date

31/08/2017

Eligibility

Key inclusion criteria

1. People over 18 years of age admitted to an acute hospital with COPD
 2. Primary cause of admission is COPD (ICD10 diagnostic codes J41-44)
- Target Gender: Male & Female ; Lower Age Limit 18 years

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 Years

Sex

All

Total final enrolment

69

Key exclusion criteria

1. People admitted to hospital with COPD where this is not the primary cause of admission
2. Elective admissions for COPD

Date of first enrolment

01/02/2015

Date of final enrolment

31/07/2016

Locations

Countries of recruitment

United Kingdom

England

Study participating centre
University of Bristol
School of Social and Community Medicine
Canynges Hall
39 Whatley Road
Bristol
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BS8 2PS

Sponsor information

Organisation
University of Bristol

ROR
<https://ror.org/0524sp257>

Funder(s)

Funder type
Government

Funder Name
Health Services and Delivery Research Programme (Grant Codes: HS&DR/12/130/53)

Alternative Name(s)
Health Services and Delivery Research Programme, Health Services and Delivery Research, Health Services & Delivery Research, Health Services and Delivery Research (HS&DR) Programme, NIHR Health Services and Delivery Research (HS&DR) Programme, NIHR Health Services and Delivery Research Programme, HS&DR Programme, The Health and Social Care Delivery Research (HSDR), Health and Social Care Delivery Research (HSDR), HS&DR

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

Not provided at time of registration

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/06/2019	24/02/2020	Yes	No
Results article		25/03/2020	07/03/2023	Yes	No
Results article		30/05/2019	07/03/2023	Yes	No
Protocol article	protocol	25/02/2016		Yes	No
HRA research summary			28/06/2023	No	No
Protocol file	version v2.0	30/04/2016	02/03/2017	No	No