Does implementation of benchmarking in quality circles improve quality of care of patients with asthma and reduce drug interaction? A cluster-randomised controlled trial.

Submission date	Recruitment status No longer recruiting	Prospectively registered		
03/07/2006		Protocol		
Registration date	Overall study status	Statistical analysis plan		
18/07/2006	Completed	[X] Results		
Last Edited 02/09/2021	Condition category Respiratory	[] Individual participant data		

Plain English summary of protocol

Not provided at time of registration

Study website

http://www.benchmarking-qm.de/FachThema/Projekte/Asthma

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

217-43794-6/8

Study information

Scientific Title

Does implementation of benchmarking in quality circles improve quality of care of patients with asthma and reduce drug interaction? A cluster-randomised controlled trial.

Acronym

BiQ

Study objectives

- 1. Benchmarking in quality circles leads to improvement of asthma management in general practices.
- 2. Benchmarking in quality circles leads to reduction of drug interaction.

Ethics approval required

Old ethics approval format

Ethics approval(s)

The study was approved by the Medical Ethics Committee of the Medical Faculty of the University of Heidelberg on 12/11/2004 (reference number 371/2004)

Study design

Cluster-randomised controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Not specified

Study type(s)

Treatment

Participant information sheet

Health condition(s) or problem(s) studied

Asthma

Interventions

The physicians will meet each other for two sessions in quality circles. At the first meeting, problems surrounding drug interactions in general practice will be discussed. The topic at the second meeting will be asthma care.

Traditional quality circles:

in these quality circles, an individual feedback report is given to each physician. The physicians handle their data without showing their practice results to each other. The general practitioners (GPs) receive the feedback report with additional information about the performance of the other physicians in the traditional arm. This allows them to compare their own results with the mean and quartiles of performance of the other physicians. The GPs discuss problems of care under the guidance of a moderator. The most important facts are underlined by the given quality indicators. For example, they discuss the feasibility of a new asthma guideline, management of asthma education or prescription management. In particular, prescribing behaviour will the main focus.

Quality circles with benchmarking:

individual feedback reports will be also given to the participating GPs in these quality circles. Additionally, they receive information about the GP who performed best in their quality circle. The GPs discuss with the identified GP under guidance of the moderator as to how the best practice score was achieved. Additionally, the overall best practice of the whole study arm will be given to enable a comparison with the best benchmark. This multifaceted benchmark intervention should allow learning from the best performer.

Intervention Type

Other

Phase

Not Specified

Primary outcome measure

Primary outcome measures asthma:

- 1. Amount of patients with inhaled steroids
- 2. Amount of patients with medication recommended by guidelines
- 3. Amount of patients with medication not recommended by guidelines (e.g. fixed combination of cromones $+ \beta$ -agonists, oral sympathomimetics)

Primary outcome measures drug interaction:

- 1. Amount of patients with potential clinically relevant drug-drug interactions, that have to be avoided
- 2. Amount of patients with potential clinically relevant drug-drug interactions
- 3. Association between hospital admission and drug-drug interaction

Secondary outcome measures

Secondary outcome measures asthma:

- 1. Asthma quality of life questionnaire (AQLQ)
- 2. Asthma step at day and night
- 3. Amount of patients with medication treatment according to guidelines
- 4. Amount of patients with asthma education
- 5. Amount of patients with a peak flow meter at home
- 6. Amount of patients with an asthma diary

- 7. Amount of patients with an individual emergency plan at home
- 8. Days of sick leave
- 9. Hospital admissions and unscheduled emergency visits

Secondary outcome measures drug interaction:

- 1. Patients' opinion on drug information, which they got from their general practitioner (regarding drug interactions, interaction with alcohol, dosage regimen, adverse drug reactions, etc.)
- 2. Amount of patients with a written medication treatment plan
- 3. Amount of patients with drug interactions (including all prescribed and over-the-counter drugs)
- 4. Amount of different active ingredients per medical practice
- 5. Amount of patients with polypharmacy
- 6. Amount of patients who exceeded the recommended dose of an interacting drug

Overall study start date

01/07/2004

Completion date

30/06/2007

Eligibility

Key inclusion criteria

- 1. Medication for airway obstruction
- 2. Medication regime with persistently more than two medications
- 3. Patients of 18 years and above
- 4. Able to read and speak German

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

27000 (routine data)

Key exclusion criteria

- 1. Younger than 18 years
- 2. Not able to read and speak German

Date of first enrolment

01/07/2004

Date of final enrolment

30/06/2007

Locations

Countries of recruitment

Germany

Study participating centre Department of General Practice and Health Services Research Heidelberg Germany 69115

Sponsor information

Organisation

Ministry of Health (BMG) (Germany)

Sponsor details

Am Probsthof 78a
Bonn
Germany
53121
+49 (0)1 888 441 2173
Helmut-Josef.Kuepper@bmg.bund.de

Sponsor type

Government

Website

http://www.bmg.bund.de/cln_041/nn_600110/EN/Home/homepage__node,param=. html__nnn=true

ROR

https://ror.org/05vp4ka74

Funder(s)

Funder type

Government

Funder Name

German Ministry of Health (Bundesministerium fur Gesundheit [BMG]) (Germany) (grant ref: 217-43794-6/8)

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?
Results article		16/06/2011	02/09/2021	Yes	No