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Experiences with the implementation of pharmacist's medication reviews in community pharmacies: a systematic review using the consolidated framework for implementation research.

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2019







Experiences with the implementation of pharmacist's medication reviews in community pharmacies: a systematic review using the consolidated framework for implementation research

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### Review question

The aim of this systematic review is to critically appraise, synthesise and present the available evidence on experiences with the implementation of Medication Reviews (MR) in community pharmacies including potential facilitators and barriers, regardless of implementation status.

The CFIR (Consolidated Framework for Implementation Research) will be used to guide the review and to identify facilitators and barriers at all stages of the implementation process.

The specific review questions are

- 1. What are the experiences, perceptions, attitudes, views and beliefs stakeholders (e.g. pharmacists, health professionals, general public, patients, policy makers etc.) have gained with implementation of medication reviews in community pharmacies?
- 2. Which barriers and facilitators have been identified in the implementation of pharmacist's medication reviews in community pharmacies?

#### Searches

The systematic review will be carried out according to the PRISMA guidelines in the following databases: Cumulative Index to Nursing and Allied Health Literature (CINAHL), MEDLINE, International Pharmaceutical Abstracts (IPA), Scopus. The search will include publications in the German, Spanish and English language. We will apply a three-step search strategy: An orientating search will be conducted in MEDLINE and IPA using the key search terms: "implementation", "pharmac\*", ["medication review" OR "medication management"], "facilitat\*", "barrier\*". The titles, abstracts and index terms of the retrieved papers will be screened for additional search terms. These will be used in the third step, the search in all databases named above. Furthermore, manual searches of related studies listed in the reference, footnote and citations will be carried out to include more relevant papers.

Only peer reviewed papers and primary research items will be included. We will exclude opinion articles, editorials and narrative reports.

#### Types of study to be included

This review will consider studies with quantitative, qualitative and mixed methods.

# Condition or domain being studied

Implementation of Medication Reviews carried out by pharmacists in community pharmacies. We will understand the term "Medication Review" according to the PCNE 2017 definition: "Medication review is a structured evaluation of a patient's medicines with the aim of optimising medicines use and improving health outcomes. This entails detecting drug related problems and recommending interventions."

#### Participants/population

All stakeholders, including pharmacists, other health professionals, policy makers and patients, whose experiences, views, beliefs, attitudes are described in the studies included.



### Intervention(s), exposure(s)

Implementation of Medication Reviews (Medication Reviews according to the PCNE definition).

### Comparator(s)/control

Not applicable.

# Main outcome(s)

- experiences of stakeholders such as views, perceptions, opinions, attitudes, beliefs, thoughts, feelings, impressions, stances, viewpoints, standpoints and positions of the implementation process.
- facilitators and barriers to the implementation of pharmacist's medication reviews in community pharmacies.
- \* Measures of effect

Not applicable

Additional outcome(s)

None.

\* Measures of effect

Not applicable

# Data extraction (selection and coding)

The identification, screening, eligibility and inclusion of papers will be performed and presented according to the Prisma -P 2015 Checklist and the Prisma 2009 flow diagram.

The extraction tools will be designed according to the objectives in this systematic review. The CFIR domains will be used to sort the experiences and to guide the identification of differing types of barriers and facilitators.

# Risk of bias (quality) assessment

Quality assessment will be conducted on all included manuscripts by two independent reviewers using the NICE quality appraisal checklist for qualitative studies (https://www.nice.org.uk/process/pmg4/chapter/appen dix-h-quality-appraisal-checklist-qualitative-studies#checklist-2) and the BMJ's critical appraisal checklist for questionnaire studies (https://www.bmj.com/content/suppl/2004/05/27/328.7451.1312.DC1) . Disagreements will be resolved by consensus after discussion with the research team.

## Strategy for data synthesis

First all included papers will be tabulated, indicating also their quality and risk of bias. Where possible, quantitative data findings will be pooled for studies using similar outcome measures and population statistics and analysed using statistical meta-analysis. To judge the heterogeneity of the studies we will use the ?²-test, to assess the effect size of categorical data we will calculate the Odds Ratio and for continuous data weighted mean differences (IBM SPSS Statistic for Windows, Armonk, NY, USA). If heterogeneity of the studies does not allow statistical pooling, we will report the findings narratively supported by tables and figures, where appropriate.

Results from qualitative papers will be aggregated and assessed within their respective domain of the consolidated framework for implementation research (CFIR) (I: Intervention characteristics; II: Outer setting; III: Inner setting; IV: Characteristic of individuals; V: Process); this will be reported as narrative synthesis, also supported by tables and figures. The CFIR will provide the framework for grouping experiences with implementation as well as facilitators and barriers to implementation in the format of a "thematic analysis". The data synthesis will be performed by two researchers independently, discrepancies will be discussed and where necessary solved within the entire team.

#### Analysis of subgroups or subsets

None planned.

#### Contact details for further information

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Organisational affiliation of the review Robert Gordon University, Aberdeen, Scotland https://www.rgu.ac.uk/

# Review team members and their organisational affiliations

Ms Dorothee Michel. Robert Gordon University, Aberdeen Scotland Professor Derek Stewart. Robert Gordon University, Aberdeen Scotland Dr Anita Weidmann. Robert Gordon University, Aberdeen Scotland Dr Antonella Tonna. Robert Gordon University, Aberdeen Dr Dorothee Dartsch. Campus Pharmazie, Hamburg

# Type and method of review

Narrative synthesis, Systematic review

# Anticipated or actual start date 01 February 2019

Anticipated completion date 31 December 2019

# Funding sources/sponsors

None

## Conflicts of interest

# Language English

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### Country Scotland

Stage of review

# Review Ongoing

Subject index terms status Subject indexing assigned by CRD

#### Subject index terms

Ambulatory Care; Humans; Medication Therapy Management; Pharmacists; Research

# Date of registration in PROSPERO

06 February 2019

# Date of first submission 21 January 2019

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Stage of review at time of this submission



Stage	Started	Completed
Preliminary searches	Yes	Yes
Piloting of the study selection process	Yes	Yes
Formal screening of search results against eligibility criteria	Yes	Yes
Data extraction	Yes	Yes
Risk of bias (quality) assessment	Yes	Yes
Data analysis	Yes	No

#### Revision note

1) Setting refined to "community pharmacy" instead of "ambulatory care settings" as experiences with the implementation could not be explored with enough detail for several settings.2) Quality assessment tools changed from the rather generic MMAT to tools that allowed a more detailed assessment for the study types encountered in the review.3) Two new team members added.

The record owner confirms that the information they have supplied for this submission is accurate and complete and they understand that deliberate provision of inaccurate information or omission of data may be construed as scientific misconduct.

The record owner confirms that they will update the status of the review when it is completed and will add publication details in due course.

Versions 06 February 2019 13 July 2020

#### **PROSPERO**

This information has been provided by the named contact for this review. CRD has accepted this information in good faith and registered the review in PROSPERO. The registrant confirms that the information supplied for this submission is accurate and complete. CRD bears no responsibility or liability for the content of this registration record, any associated files or external websites.