



Working with Cochrane and Supporting Systematic Reviews

Rachel Steele

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University of York and Tees, Esk & Wear Valleys NHS Foundation Trust (TEWV) Knowledge Exchange Project

- Background: lack of translation from evidence to practice...

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Evidence in Practice challenges

- Taylor and Grey (2010, p. 7) cite a recent review which found that ‘among patients in the community and primary care settings, more than 50% of those with depression do not receive accurate diagnoses or any prescription of depression treatment. Of those who are prescribed treatment, more than 50% do not receive adequate dosages of antidepressants, and fewer than 10% receive evidence-based psychotherapy (Katon and Seelig 2008)...Similar low levels of adherence to evidence-based guidelines have been found for other disorders such as substance abuse.’

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Project objectives

- 1. To provide a catalyst for knowledge exchange between TEWV and University of York
- 2. To support the extension of knowledge resources, including developing existing Clinical Question & Answering service in TEWV
- 3. To co-design and co-produce funding proposals for joint projects based in the Trust

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Activities and themes

- 1. Increase engagement with healthcare practitioners (clinicians and managers) to facilitate improved research literacy and build capacity amongst TEWV staff
- 2. Enhance existing evidence resources to increase the impact of high quality research on decision-making across the Trust
- 3. Identification of evidence needs across the Trust
- 4. Co-design and co-production of new research proposals
- 5. Evaluation of knowledge exchange activities undertaken as part of the project
- 6. Draft of at least one journal article outlining the project and outcomes

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Cochrane Collaboration

<https://uk.cochrane.org/>

- An independent, global network of researchers, professionals, patient and carers collaborating to produce credible, accessible health information which is free from commercial sponsorship and other conflicts of interest
- Primarily achieved by producing Cochrane Systematic Reviews

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What is a systematic review?

- A systematic review uses explicit, transparent and reproducible methods to collate all empirical evidence (published and un-published) on a topic according to the inclusion, and exclusion, criteria in the pre-specified research protocol
 - <https://uk.cochrane.org/news/what-are-systematic-reviews-0>



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Why do we need systematic reviews?

- For information management
- To reduce bias/personal subjectivity
- To increase statistical power and precision
- To identify gaps in the primary research

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Cochrane Systematic Review

- Pharmacy-based management for depression in adults
 - Protocol is available at:
<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013299/full>

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Pharmacy management for depression in adults (1)

- Depression is a common condition affecting 300 million people worldwide, irrespective of age, social status and gender
- Antidepressants are the mainstay of treatment but non-adherence is very common
- In England, 89.2% of the population are a 20-minute walk away from a community pharmacy and this rises to 99.8% in the most deprived areas (Todd, 2014)
- Whilst pharmacy interventions have been shown to be effective in improving antidepressant adherence, more evidence is needed on broader outcomes where pharmacist services have increasing capacity to make a more involved contribution to patient mental health care, including providing hospital discharge and outpatient interventions

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Pharmacy management for depression in adults (2)

- Typically, pharmacist-based, -delivered, -managed, or -led, interventions are broad in scope and hard to define but can typically consist of educational programmes, patient counselling and general drug information delivered by a pharmacist or the wider pharmacy team via a variety of settings, relating to an individual's medication and general healthcare needs



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Inclusion and exclusion criteria (1)

- **All randomised controlled trials and cluster randomised controlled trials** will be included where a pharmacy-delivered intervention is compared to treatment as usual, waiting list or an alternative intervention. The intervention may be delivered within the pharmacy or external to the pharmacy (e.g. in a hospital, clinic, online, etc.) and/or in the community, provided that the pharmacist/wider pharmacy team is involved.



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Inclusion and exclusion criteria (2)

- We will include all adults (defined age 16 or over) treated in community or primary care settings, with a primary diagnosis of depression according to an international diagnostic classification, including for example the Diagnostic and Statistical Manual of Mental Disorders (DSM) or the International Classification of Diseases (ICD), as well as depressive symptoms diagnosed via self-reported scales or questionnaires. Participants will have been prescribed an antidepressant (any type) by their primary physician for the treatment of their diagnosed depression or depressive symptoms.
- We will also include people with any kind of physical or psychiatric comorbidity, provided the comorbidity is not the primary focus of the study.

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The (typical) systematic review team

- Multi-disciplinary, bringing together researchers with skills and expertise in:
 - Topic experts/clinicians
 - Project management
 - Systematic reviewing
 - Health economics
 - Statistics
 - Patients and carers
 - Information specialists!

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Information sources for searches

- Cochrane Specialised Register (CCMD-CTR)
- International trial registries
- Grey literature
- Additional bibliographic database searches
 - The Cochrane Library Central Register of Controlled Trials (CENTAL) (current issue);
 - Ovid MEDLINE (1946 onwards) (Appendix 2);
 - Ovid Embase (1974 onwards);
 - Ovid PsycINFO (1806 onwards);
 - CINAHL (1980 onwards);
 - AMED (1985 onwards).

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Methodological filters

- Search terms/strategies to identify an aspect of a study (usually study design), e.g. RCTs
 - Separate filters for different databases, e.g. MEDLINE, Embase etc.
 - (Critical appraisal of search filters...)

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PRISMA

- Set of minimum reporting standards for systematic reviews
 - PRISMA flow diagram
- <http://www.prisma-statement.org/>

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Cochrane software and programmes

- Archie account
- Literature search results should be outputted as a RIS file and ENDNOTE is used to de-duplicate results
- Covidence – used to screen titles and abstracts at the study selection stage
- *Sensitivity and specificity and the trade-off...*

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Thank you for listening

- Any questions?

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