Health interventions and the unseen impact on equality

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Background

- Socioeconomic inequalities in disability free life expectancy (DFLE) are a major and growing public health concern

- People living in the least deprived areas of England can expect to live longer in good health than their peers in the most deprived areas

- Long-term conditions are a key driver of disability, and many have a differential impact on people who are more disadvantaged

Scoping of evidence

- Limited the scoping to conditions that have a NICE guidelines

- 3 exemplar conditions - depression, osteoarthritis and type 2 diabetes

- Identified effective treatments for each condition from the appropriate NICE guidelines

- Focussed on secondary and tertiary prevention

Objectives

This study aimed to synthesise available evidence, to answer the following:

1. To identify effective interventions that prevent or postpone the development of disability associated with common, specified long-term conditions (depression, OA and T2D)

2. To describe how the impact of interventions varies by socio-economic status, and which interventions are effective for people of lower socio-economic status.
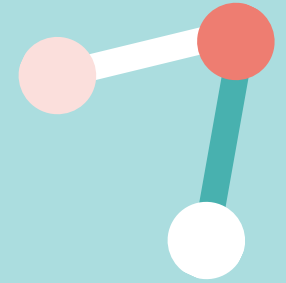
Methodology
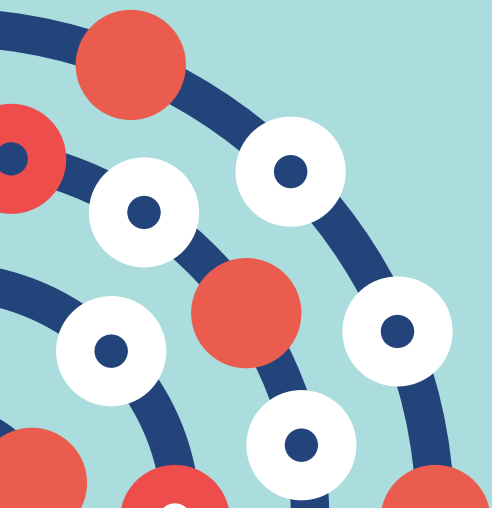
Inclusion criteria

| Population	Depression, type 2 diabetes or osteoarthritis; and no age restrictions
Intervention	Individual or population level intervention, recommended by NICE guidelines
Outcomes	All reported clinical outcomes stratified by a measure of SES and included a measure of the effect size
Study design	Systematic reviews in the first instance, then data from lower down the evidence hierarchy

Methods

- Review of evidence supporting NICE guidelines for each condition were updated: July 2008 (depression); January 2016 (osteoarthritis); and July 2012 (type 2 diabetes)

- Search extended to studies from key diabetes identified in the guidelines

- For reviews, we used the overall findings and conclusions of the reviews as our main data

- Risk of bias assessment was not conducted

Classification of outcomes

- Favours disadvantaged populations - the intervention favoured or improved outcomes for those in the lower SES group

- Favours advantaged population - the intervention favoured or improved outcomes for those in the higher SES group

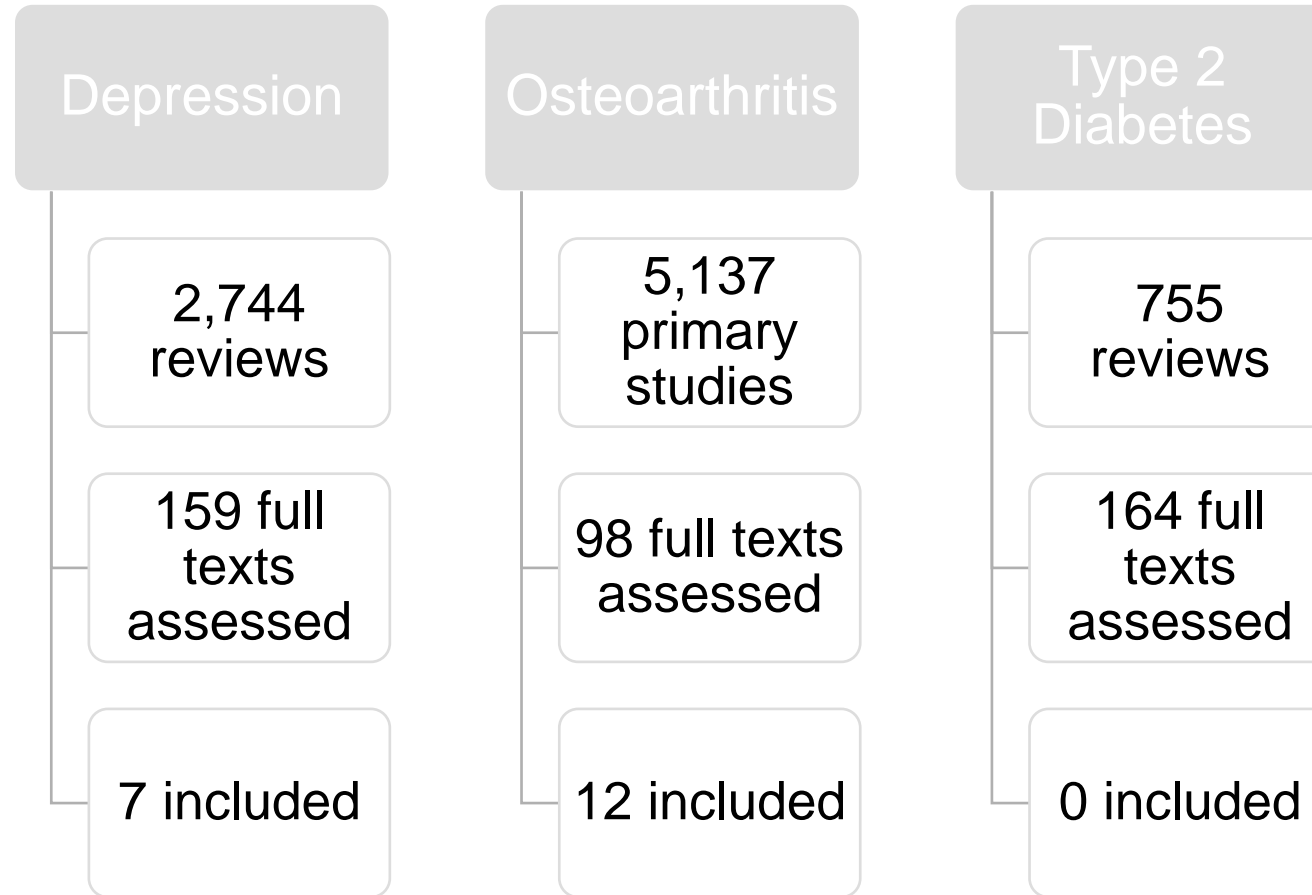- No evidence of differential impact - the intervention had no difference in effectiveness by level of SES
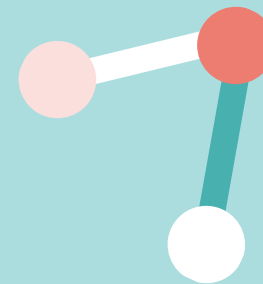
Results
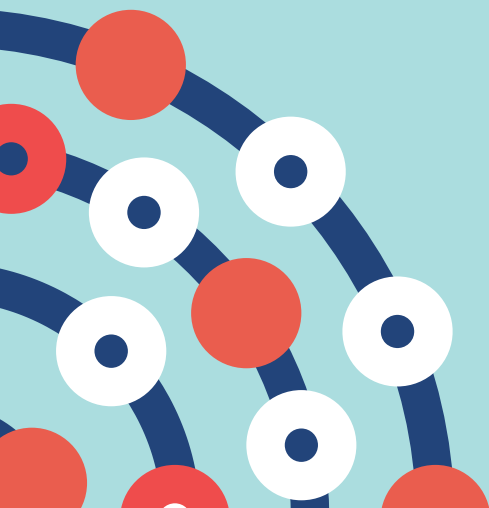
Results

Between 2008 and 2022, approximately 8,636 studies were published reporting evaluations of these NICE recommended interventions for each condition

| Depression	Osteoarthritis	Type 2 Diabetes
2,744 reviews	5,137 primary studies	755 reviews
159 full texts assessed	98 full texts assessed	164 full texts assessed
7 included	12 included	0 included

Evidence for interventions for depression:

- Community-based, mindfulness and mobile CBT produced similar outcomes across socioeconomic groups.
- School-based CBT may favour children from middle and higher SES backgrounds, although there was contrasting evidence in a review of studies with greater risk of bias.
- Two reviews offered contrasting evidence about the effectiveness of self-guided CBT across socioeconomic groups.
- Internet-guided CBT may offer worse outcomes for unemployed people, compared to usual care.

Evidence on interventions for osteoarthritis:

- Surgical, education and exercise interventions produced equivalent outcomes across socioeconomic groups or favoured more advantaged populations.

- Self-management interventions favoured more advantaged populations.

- Limited evidence on pharmacological interventions suggested that outcomes were similar across socioeconomic groups, but the study data were not formally analysed
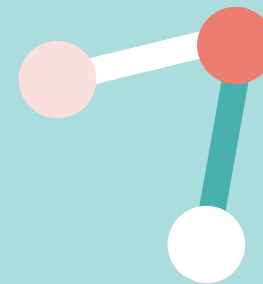
Research findings
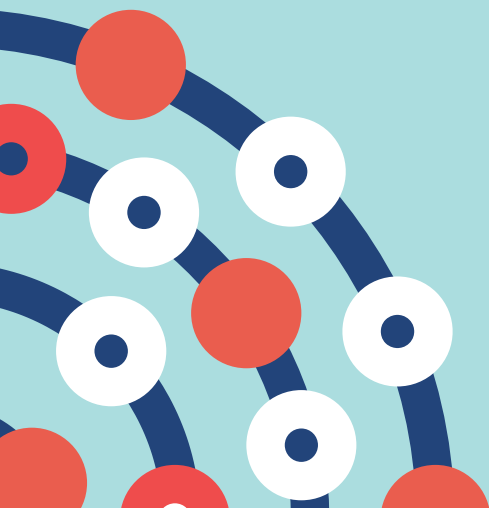
Key Findings

- No robust information on how outcomes may vary with social disadvantage

- Limited evidence for social patterning in outcomes of interventions for two of the exemplar conditions (depression and OA), and no evidence for T2D

- The limited evidence of social patterning was heterogeneous and tended to show better outcomes for less disadvantaged people

- Lack of consideration of SES within the evidence base generates uncertainty about the impact of interventions

Conclusion

- Gap in the evidence needed to inform policy

- Dearth of research on how the impacts of LTC interventions vary for people living in different socioeconomic circumstances

- Routine inclusion of measures of socioeconomic status/social disadvantage in intervention studies is needed

Questions?

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